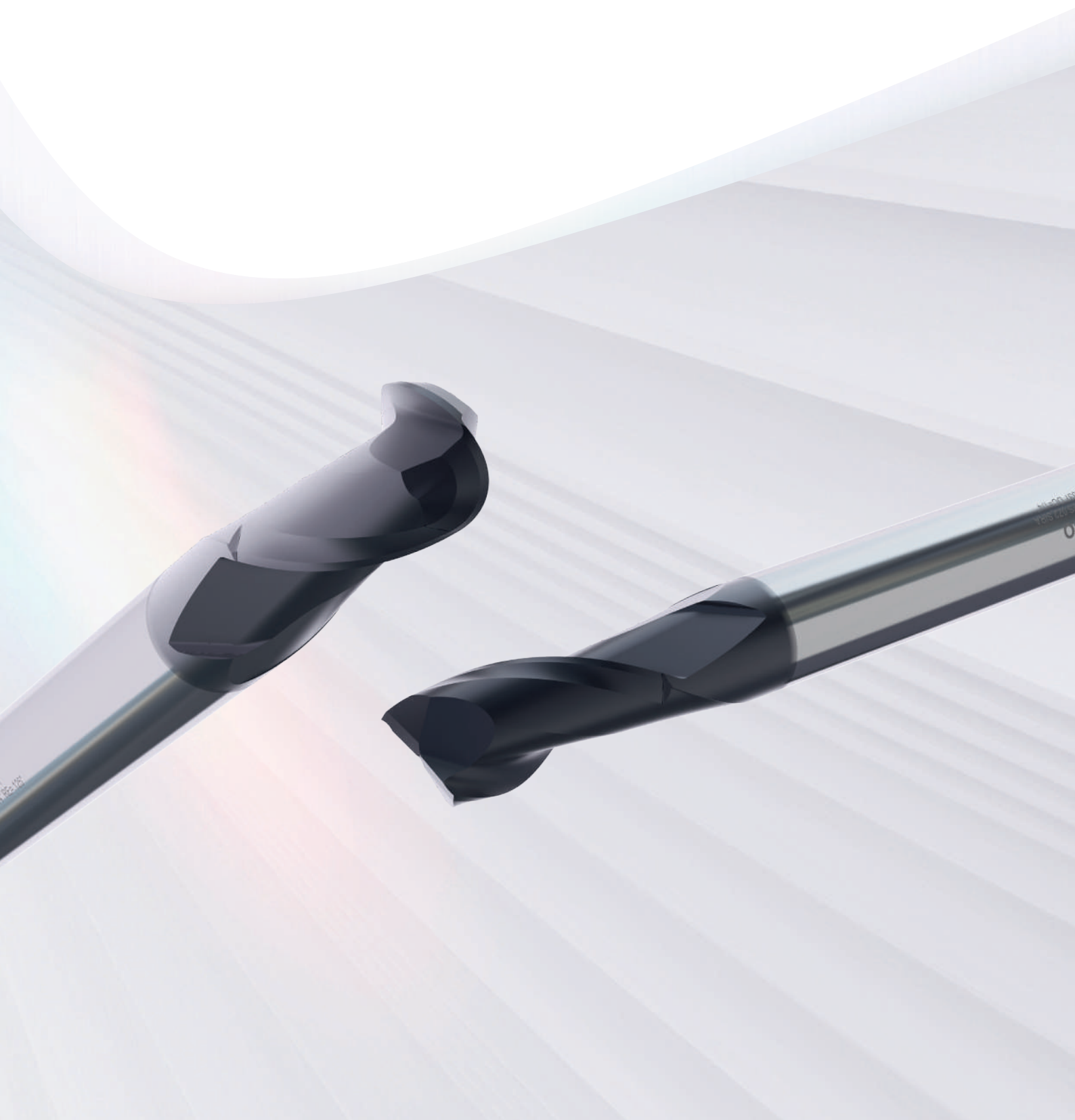




Catalog & technical guide

Solid End Mills 2025.1





At Seco, we make tools, tech, and solutions for the most advanced manufacturing challenges on Earth. From our founding in Fagersta Sweden, to today's global company, our business has always been made to measure, and built on trust.

Combining cutting-edge, precision tools with lasting, personal partnerships, we're a true people company helping our partners discover the future of the manufacturing industry.

We're proud to make for makers, invent for inventors, and partner with pioneers. Driving the future forward with our focus on innovation. In short - if the right tool for the job exists, we'll deliver it. If it doesn't, we'll create it.

We're proud to put sustainability at the heart of everything we do, challenging perceptions of our industry, changing the process of manufacturing, and playing our own small part in shaping a brighter looking future.

Welcome to Seco Solid milling



JABRO was founded in 1976 in Lottum, Netherlands.

JABRO is Seco's competence centre for solid milling solutions, and has the global responsibility for Research & Development, Manufacturing and Application Engineering.

Seco solid milling products provide the world market with a wide range of standard tools and custom tool solutions, including reconditioning, mainly for General Engineering, Aerospace, Energy, Medical and Mould & Die customers.

Advanced manufacturing technology and an environmental focus, ensures Seco's sustainable development and production of products that successfully respond to market demands in milling operations for both ferrous and non-ferrous materials.

- General Engineering
- Mould & Die
- Aerospace
- Medical
- Power energy
- 3C segment (Computer Customer Electronics and Communications)

Universal	General	
	Index	3-4
	Product introduction and technical information.....	5-29
	Universal	
	Product information and cutting data	30-271
	Steel and cast iron	
	Product information and cutting data	272-320
	Stainless steel and S-materials	
	(HRSA and Titanium alloys)	
	Product information and cutting data	321-438
	Non-ferrous	
	Product information and cutting data	339-493
	Hardened steels	
	Product information and cutting data	494-530
	Plastic and CFRPs	
	Product information and cutting data	531-583
	Graphite	
	Product information and cutting data	584-600
	X-Heads	
	Product information and cutting data	601-685
	Technical information	
	Recalculation.....	686-695
	Cutting calculations and definitions.....	696-697
	Minimaster	
	Product information and cutting data	698-787
	SMG	
	Workpiece Materials - SMG (Seco material group)	789-801
Steel and cast iron		
Stainless steel and S-materials		
Non ferrous		
Hardened steels		
Plastic and cfrp		
Graphite		
X-Heads		
Minimaster		
SMG		

C

C5021	209
C5041	211
C5121	37-44
C5131	49-50
C5141	55-67
C5231	72
C5241	72
C5321	180-185
C5341	188-192

H

HK/HKM	239-249

J

J28	582
J29	233
J36	236
J93	580
JC845	535
JC850	537
JC860	539
JC870	541-544
JC871	547-550
JC875	553-554
JC876	557-558
JC877	561-562
JC880	565
JC885	567
JC898	569
JC899	571-572
JCG790	399
JD620	587
JD630	589
JD640	591
JD660	593
JH112	313-314, 512-513
JH120	503
JH130	505
JH142	302-303, 509-510
JH150	317, 516
JH160	319, 518
JH40	470-471
JH410	477
JH421	473-475
JH440	479
JH450	484
JH460	486
JH710	417
JH721	429
JH722	431
JH724	401
JH726	403
JH730	421
JH734	405
JH736	407
JH740	415
JH744	409
JH746	411
JH770	413
JH780	425
JH790	419
JH910	221-222
JH930	225, 507
JHB720	427
JHB970	227, 311
JHF181	500
JHF980	229-230

JHP170	497-498
JHP490	466-468
JHP751	378-379
JHP760	381-383
JHP770	385-390
JHP780	392-395
JHP794	397
JHP951	298-299
JHP993	292-293
JHP994	423
JM403	490
JM404	490
JM406	490
JM413	492
JM416	492
JMB112	527-529
JMB542	263
JMB562	266-267
JMB563	270
JMB642	599
JMB662	599
JME142	520-523
JME144	525
JME542	253
JME562	256-257
JME564	260
JME642	597
JPD850	574
JPD880	576
JPD890	578
JS412	443-444
JS413	446
JS506	213-214
JS509	217-218
JS520	173-174
JS522	177
JS532	197-198
JS533	201-202
JS534	205-206
JS553	94-105
JS554	114-126
JS564	165-166
JS565	169-170
JS720	354-371
JS730	374-376
JS754	326-340
JS755	343-352
JSB512	195
JSE512	74-75
JSE513	78-81
JSE514	84-89

S

S4321	481-482
S4521	449-452
S4531	454-461
S4651	463-464
SHF712	433
SMB413/414/416	488
SMB614/616	595
SMB713/714/716	437
SME714/716	435
ST5341	305-308
ST5541	275-287
ST5551	139-156

V

V31	250

M

MM06	704-709
MM08	719-724
MM10	736-742
MM12	754-761
MM16	773-778

X

XE-DM	610
XE-E	608-609
XE-S	604-607
XHF580	649-650
XHF780	655-656

XHT740	647
XSB540	629
XSB720	637-638
XSE450	643-644
XSE550	612-613,618-620,625-626
XSE720	631-632
XVB510	676-677
XVC506	680
XVC509	680
XVC512	680
XVE510	673
XVE540	661-662,667-668
XVK310	684

Product family overview

C-series



This range of Seco solid carbide end mills covers basic end mills for basic machining operations. It includes universal coated and uncoated endmills. The wide range of products for universal machining. The Seco C-series are available in a wide range of chamfer, square end and ballnose geometries for roughing and finishing when side milling, face milling or slotting.

SOLID²



Seco Solid² is a range of solid carbide end mills for applications in general machining, offering flexibility, speed and cost efficiency. Seco Solid² is available in a diameter range of $\varnothing 1$ - $\varnothing 32$ mm and in *inch* $\varnothing 1/32$ - $1\ 1/4$. Seco Solid² also includes a group of dedicated advanced roughing tools (JS564 and JS565). The 564 and 565 offer excellent performance when applied in well defined tool paths with constant arc of contact with high cutting speed and high cutting depth applications (advanced roughing). For the complete range of JS500 series tools all chamfer ($c^{\circ}45^{\circ}$) have the following tolerances: $c = DC \leq 3 = +0,01$, $3 < DC \leq 6 = +0,02$, $6 < DC \leq 10 = +0,03$, $10 < DC \leq 14 = +0,04$, $14 < DC \leq 18 = +0,05$, $18 < DC \leq 24 = +0,06$. Please see page 10 for a grouped overview of Seco Solid² products.

Stabilizer



Seco Stabilizer series end mills use unique flute geometries for extremely aggressive metal removal rates in high-performance machining. The Seco stabilizer are available in a wide range of square end and ballnose geometries for roughing operations when side milling, slot milling and advanced roughing.

HSM/TORNADO



These tools are characterized by high precision tolerances, short cutting lengths, reduced necks and significant core diameters, maximizing rigidity. These tools have been developed to excel in peripheral milling and copy milling machining methods. Please see page 10 for a grouped overview of HSM/TORNADO (high speed machining) products.

Product family overview

HPM



Optimized endmills are dedicated for original equipment manufacturers and first-tier suppliers where large batches of a single component have to be machined and where processes need to be fully optimized to reduce cycle times, reducing costs per part.

Please see page 11 for a grouped overview of HPM (high performance machining) products.

HFM



High feed machining is the first choice for applications with deep and shallow workpiece features, 3D profiling for mold & die applications and machining in unstable conditions. High feed tools excel in plunge milling machine methods.

Please see page 11 for a grouped overview of HFM (high feed machining) products.

Product family overview

MINI



Seco's range of micro solid carbide end mills consists of square end mills and ballnose cutters with small cutting diameters. Universal tools are applicable for common workpiece materials and specific tools are dedicated for graphite and hardened-steel applications. All tools have a thin layered coating for optimal performance in small-sized applications.
Please see page 11 for a grouped overview of MINI (micro machining) products.

DIAMOND



Available in a variety of geometries and an extensive diameter range, these tools feature the best possible substrate to ensure the perfect adhesion of the diamond coating across a range of cutting parameters. Overall, these end mills significantly increase productivity and lower tooling costs by requiring fewer tool changes and being able to produce precision parts at high feed rates.
Please see page 11 for a grouped overview of DIAMOND (diamond coated) products.

COMPOSITE



It consists of diamond-coated and uncoated solid carbide and PCD end mills incorporating different geometries as well as with PCD-brazed cutting edges. This is a product range offering optimized tools for difficult cutting conditions on challenging workpiece materials.
Please see page 11 for a grouped overview of COMPOSITE (JC) products.

VHM



Includes universal coated and uncoated endmills, a range of products dedicated for machining plastics and aluminum, chamfer end mills and conical tools. These products consist of high-quality grades and coatings for predictable and premium tool life.
Please see page 12 for a grouped overview of VHM (general engineering) products.

Product family overview

CERAMIC



To cut the world's toughest heat-resistant superalloys (HRSA) quickly, you need a tool just as strong and advanced as the materials themselves. Streamline your processes and cut your HRSA parts considerably faster with these high-performance ceramic solid end mills. Please see page 12 for a grouped overview of CERAMIC products.

HSS-CO



High speed steel cobalt is a premium grade that offers higher performance compared to traditional high speed steels. Due to increased hardness, these end mills last longer in today's abrasive, heat resistant and exotic materials. The high-quality, low-cost production advantages of these end mills are a direct result of engineered flute designs, wear resistant coatings and optimized features like internal coolant channels for these challenging materials. Please see page 12 for a grouped overview of HSS-CO products.

X-Heads



With the Seco exchangeable head milling system, quickly and easily change between various solid carbide milling head profiles and types to optimize all your milling operations while you reduce manufacturing costs and tooling inventories. X-Heads end mills mount to a variety of available shank lengths for even greater versatility, with long-reach capability. End mill changes only require a simple turn of a wrench, and the shank could remain in the machine. Eliminate the need to reset tool lengths thanks to a secure and reliable connection that provides exchange accuracies within 50 microns. Please see page 602 for a grouped overview of X-heads (exchangeable heads) products.

Product family overview

Product family	Technology	Product	1xx	4xx	5xx	6xx	7xx	8xx	9xx
C-series	General machining	C			■				
Solid ²	General machining	JS		■	■		■		
Stabilizer	High performance machining	ST			■				
HPM	High performance machining	JHP	■	■			■		■
HFM	High feed machining	JHF	■						■
Mini	Micro machining	JM	■	■	■	■			■
HSM/Tornado	High speed machining	JH	■	■			■		■
Ceramic	High performance machining	JCG					■		
Diamond	Graphite machining	JD				■			
Composite	Composite machining	JC, JPD						■	
VHM	General machining	J		■					■
HSS-E	General machining	JCO					■		
X-Heads - Solid ²	High performance machining	XS		■	■		■		
X-Heads - HFM	High feed machining	XHF			■		■		
X-Heads - HSM/Tornado	High speed machining	XH			■		■		
X-Heads - VHM	General machining	XV			■		■		
SMG									
P1-8					■				■
P11-12					■				■
M1-3					■		■		
M4-5					■		■		
K1-7					■				■
S1-3					■		■		
S11-13					■		■		
H			■		■				
N1				■	■				
N2-3				■	■				
N11				■	■				
TS				■				■	
TP				■				■	
GR						■			
For further explanation on SMG (Seco material group) please see page 790									

Summary

	Page	Family name	Name	P1-8	P11-12	M1-3	M4-5	K1-7	N1	N2-3	N11	S1-3	S11-13	H3-31	TS1	TS2-3	TS4	TP1	TP2-3	TP4	Honeycomb	GR
	209	C-Series	C5021	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	211		C5041	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	37		C5121	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	49		C5131	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	55		C5141	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	72		C5231	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	72		C5241	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	180		C5321	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	188		C5341	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	74	SOLID²	JSE512	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	78		JSE513	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	84		JSE514	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	195		JSB512	●	○	●	○	●	○	○	○	○	○	○	○			○				○
	94		JS553	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	114		JS554	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	443		JS412	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	446		JS413	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	481		S4321	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	449		S4521	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	454		S4531	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	463		S4651	●	○	●	○	●	○	○	○	○	○	○	○			●				○
	173		JS520	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	177		JS522	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	197		JS532	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	201		JS533	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	205		JS534	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	213		JS506	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	217		JS509	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	165		JS564	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	169		JS565	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	354		JS720	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	374		JS730	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	326		JS754	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	343		JS755	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	470	HSM/TORNADO	JH40	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	313, 513		JH112	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	503		JH120	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	505		JH130	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	302, 510		JH142	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	516		JH150	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	518		JH160	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	477		JH410	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	473		JH421	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	479		JH440	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	484		JH450	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	486		JH460	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	417		JH710	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	427		JHB720	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	429		JH721	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	431		JH722	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	431		JH724	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	431		JH726	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	421		JH730	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	405		JH734	○	○	○	○	○	○	○	○	○	○	○	○			●				○
	407		JH736	○	○	○	○	○	○	○	○	○	○	○	○			●				○
	415		JH740	○	○	○	○	○	○	○	○	○	○	○	○			●				○
	409		JH744	○	○	○	○	○	○	○	○	○	○	○	○			●				○
	411		JH746	○	○	○	○	○	○	○	○	○	○	○	○			●				○
	413		JH770	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	425		JH780	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	419		JH790	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	221		JH910	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	225, 507		JH930	●	○	○	○	○	○	○	○	○	○	○	○			●				○
	227, 311		JHB970	●	○	○	○	○	○	○	○	○	○	○	○			●				○

● Preferred choice, ○ Alternative choice

Summary

	Page	Family name	Name	P1-8	P11-12	M1-3	M4-5	K1-7	N1	N2-3	N11	S1-3	S11-13	H3-31	TS1	TS2-3	TP1	TP2-3	TS2/TP2+N1	TS2/TP2+S12	Honeycomb	GR
	305	Stabilizer	ST5341	•	•			•														
	275		ST5541	•	•			•														
	139		ST5551	•	•	•	•	•	•	•	•	•	•	•	•	•	•					○
	497	HPM	JHP170												•							
	378		JHP751									•	•									
	381		JHP760			•	•															
	385		JHP770										•									
	392		JHP780									•										
	381		JHP794			•	•															
	466		JHP490						•	•												
	298		JHP951	•	○			•														
	292		JHP993	•	○			•														
	423		JHP994									•	•									
	500	HFM	JHF181	○	○			•				•	•	•								
	500		SHF712																			
	229		JHF980	•	○	•	•	•				•	•	○								
	527	MINI	JMB112												•							
	520		JME142												•							
	525		JME144												•							
	490		JM403/404/406						•	•												
	492		JM413/416						•	•	•					•	•					
	492		SMB413/414/416						•	•						•	•					
	263		JMB542	•	•	•	•		○	○	○		•	○								○
	266		JMB562	•	•	•	•		○	○	○		•	○								○
	270		JMB563	•	•	•	•		○	○	○		•	○								○
	253		JME542	•	•	•	•		○	○	○		•	○								○
	256		JME562	•	•	•	•		○	○	○		•	○								○
	260		JME564	•	•	•	•		○	○	○		•	○								○
	260		SMB713/714/416																			
	260		JME714/716									•	•									
	599	MINI DIAMOND	JMB642/JMB662																			•
	599		JMB662																			•
	597		JME642																			•
	597		SMB614/616																			•
	587	DIAMOND	JD620																			•
	589		JD630																			•
	591		JD640																			•
	593		JD660																			•
	535	COMPOSITE	JC845													•		•				
	537		JC850													•		•				
	539		JC860													•		•			•	
	541		JC870													•		•			•	
	547		JC871													•		•			•	
	553		JC875													•		•				
	557		JC876													•		•				
	561		JC877													•		•				
	565		JC880													•		•				
	567		JC885													•		•				
	569		JC898																•	•		
	571		JC899																•	•		
	574	PCD	JPD850													•		•				
	576		JPD880													•		•				
	578		JPD890													•		•				

Summary

	Page	Family name	Name	P1-8	P11-12	M1-3	M4-5	K1-7	N1	N2-3	N11	S1-3	S11-13	H3-31	TS1	TS2-3	TS4	TP1	TP2-3	TP4	Honeycomb	GR
	582	VHM	J28												•							
	236		J36	○	•	○	○	○	○	•	•	○	○		○			○				
	239		HK/HKM	•		•	•	•	•	○	•	•	•	•	•			•				
	250		V31	•	○	•	○	•	•	•	•	•	•	•	•			•				•
	233		J29	•	•	•	•	•	•	•	•	•	•	○	•			•				•
	580		J93F												•			•				
	399	Ceramic	JCG790									•										
	612-620	X-HEADS SOLID²	XSE550	•	•	•	•	•	•	•	•	•	•	•	•			•				○
	629		XSB540	•	○	•	•	•	•	•	•	○	•	○	•			•				○
	643-644		XSE450						•	•	•				•			•				
	631-632		XSE720	○	•	•	•	•				•	•									
	637		XSB720	○	•	•	•	•				•	•									
	409	X-HEADS HSM/TORNADO	XHT740	○	•	•						○	•									
	650	X-HEADS HFM	XHF580	•	•	•	•	•				○	○	○								
	655		XHF780	○	○	•	•					•	•	○								
	668	X-HEADS VHM	XVE540	•	•	•	•	•	•	•	•	○	○	○	•			•				○
	673		XVE510	•	•	•	•	•	○	○	○	○	○	○	•			•				○
	676-677		XVB510	•	•	•	•	•	○	○	○	○	○	○	•			•				○
	680		XVC506/509/512	•	•	•	•	•	○	○	○	○	○	○	•			•				○
	684		XVK310	•	•	•	•	•	•	•	•	○	○	○	•			•				○

• Preferred choice, ○ Alternative choice

Code keys

Solid end mills (new)

R	S	4321	-	100	D	2	R050	.0	Z3	C	, AXT
1	2	3		5	6	7	8	9	10	11	12

Solid end mills

R	JS	720	100	D	2	R050	.0	Z6	C	, HXT
1	2	3	5	6	7	8	9	10	11	12

X-Heads – Heads

R	XSE	550	E10	100	D	2	R050	Z4	A	, SIRA
1	2	3	4	5	6	7	8	10	11	12

1. Type of product

BLANK = Standard (catalogue) product
R = Reconditioned product (complete)
RK = Reconditioned product (frontal)

2. Product range

J = VHM
JC = Composites
JD = Diamond
JH = HSM/Tornado
JHF = HFM
JHP = HPM
JM = Mini
JS = SOLID²

JPD = PCD
JCO = HSS-Co
JCG = Ceramic
C = C-serie
ST = Stabilizer
XS* = X-Head SOLID²
XH* = X-Head HSM/Tornado
XV* = X-Head VHM
XHF = X-Head HFM

3. Geometry

A three-digit combination specifying the cutting geometry. Example: 111, 950, 553, 514, etc.

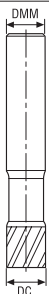
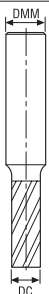
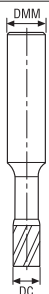
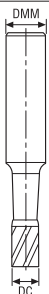
4. Connection size

This figure indicates the threading connection size between the head and adaptor
E10 = 10 mm
E12 = 12 mm
E16 = 16 mm
E20 = 20 mm
E25 = 25 mm

5. Cutting diameter

Metric = 3 digit code (in case of 4 digit code – xx,xx mm)
Imperial = a dot followed by a 3 digit code
Example: (050 = metric, 5 mm) / (.500 = imperial, ½ inch)

6. Tool shape

(DC = DMM)		(DC < DMM)			(DC > DMM)
					
D	E	F	G	J	P
Form shape					
					
N				X	T

7. Length of shape

A single digit that gives an indication of the length of the cutter compared to other products with the same cutting geometry.

9. Type of shank

.0 = Cylindrical
.3 = Weldon
.5 = Whistle Notch
.9 = Safe-Lock

10. Number of flutes

This figure indicates the number of flutes in the cutter.
Example: PCEDC2= 2 flutes, PCEDC6 = 6 flutes

11. Extension

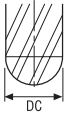
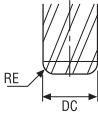
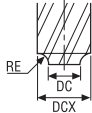
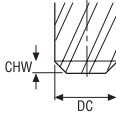
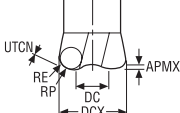
BLANK = Standard
A = Internal coolant channel(s)
C = Chip splitters
D = Double end
NC = Numerical Control tolerance

12. Grades

4 character code specifying the coating on the cutter.

MEGA =	MEGA	DURA =	DURA
MT =	MT	NXT =	NXT
M64 =	M64	HXT =	HXT
M64 T=	M64-T	STAX =	STAX
SIRA =	SIRA	TAN =	TAN
HEMI =	HEMI	M9 =	M9
DIA =	DIAMOND	AXT =	AXT

8. Tip shape

Sharp	Ball-nose	Corner radius	Concave radius	Chamfer	High feed
					
S	B	R...	K...	C	H

Size of radius for convex and concave radius tipped products

000 = For metric products the tip shape is shown by a three-digit figure.
By dividing this figure by 100 you will get the actual corner radius size in millimetres.

.000 = For imperial products the tip shape is shown by a dot, followed by a three-digit figure.
This figure actually shows the size of the corner radius in *inch* (e.g. R.100 would indicate a radius of 0.100 *inch*).

Code keys

X-Heads – Shanks

X	E10	100	E	2	-	055	-	00	.	0	S
1	2	3	4	5		6		7	8		9

1. Product range

X = X-Head Cylindrical shank

2. Connection size

This figure indicates the threading connection size between the head and adaptor

E10 = 10 mm
E12 = 12 mm
E16 = 16 mm
E20 = 20 mm
E25 = 25 mm

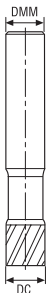
3. Shank diameter

Metric = 3 digit code

Imperial = a dot followed by a 3 digit code

Example: (050 = metric, 5 mm) / (.500 = imperial, 1/2 inch)

4. Tool shape

(DC = DMM)	(DC < DMM)	
		
E	G	J

5. Length of shape

A single digit that gives an indication of the length of the cutter compared to other products with the same cutting geometry.

6. Overall length

Metric = 3 digit code

Imperial = 3 digit code with a dot after the first digit

Example: (055 = metric, 55 mm) / (2.50 = imperial, 2 1/2 inch)

7. Taper angle

Indicates the body half taper angle.

Example: (00 = 0°; 05 = 5°; 10 = 10°)

8. Type of shank

.0 = Cylindrical
.3 = Weldon
.5 = Whistle Notch
.9 = Safe-Lock

9. Type of material

Indicates the different shank materials that are available.

S = Steel
DM = Densimet
E = Solid Carbide

How our solutions can benefit you

The individual solution - Custom and modified tools



If the requirements are very special, we have the right solution with our individual and customized tools - solutions that have been tailored specifically to your individual requirements. This will enable you to take your machining productivity to a whole new level. In addition to the standard solutions, our offer includes:

Custom tools

They are modified geometries or form shaped tools for customer specific demands as we can fully cooperate with the customer and design a specific tool which answers the needs. Examples can be:

- Modified tools within a standard geometry
- MEP (Mechanised edge Profiling)
- Firtree,
- Dovetail
- Tapered ballnose
- Condyle cutter
- Form shaped tools
- Barrel

Modified tools

Seco offers a quick delivery solution for standard tools requiring modification to meet specific dimensional requirements as this can be:

- (full) Radius/Facet/Chamfer/Concave
- OD reduction (neck reduction), including increased length
- Coating (application for uncoated tools)
- Reduced cutting diameter
- Chip breakers
- Adding Weldon / Safelock
- External coolant channels

Reconditioning cuts cost and tools inventory

Seco's modern carbide tools offer remarkable performance by utilizing the best combinations of carbide substrates with highly wear resistant coatings, optimized cutting geometry and controlled edge preparation.

However good a tool is, as part of its function, it will eventually show signs of wear on the cutting edge. Controlling this wear and the timely replacement of the tool will allow the used tool to be reconditioned, thus reducing tool investment costs. And we use the same advanced technology to recondition your solid carbide tools as we use to manufacture new products.

Your benefits from reconditioning

- Manufactured to Seco's high standards with the original Seco geometry, edge preparation and coating processes.
- Savings on tooling costs by repeated use of the same solid carbide tool.
- Our easy to use and free 'reconditioning box' includes a pre-prepared delivery note.
- Free, reliable collection on the following day when you call your Seco contact for pick up.
- An easy process due to the package service, reconditioning box and prepared delivery note.
- Delivery via the normal Seco channels.
- Safe transportation and storage of the reconditioned tools by packaging them in similar packaging as new tools.
- A new packaging label is included.
- Work towards greener and cleaner environment. -Seco's processes are globally certified with ISO14001.
- Guaranteed quality, as all processes are ISO9001 certified.

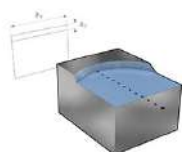
Basic operations:

Face milling:

Operation where the tool is in engagement with less than 180° arc of contact.

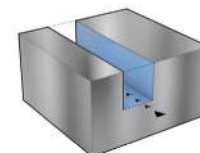
Tool engagement:

Small a_p and large a_e .



Slot milling:

Operation where the full diameter is in engagement, a_e is equal to DC and a_p up to 2 times DC depending on the machining strategy in use.



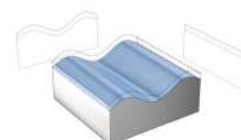
Side milling:

Operation where the side of the tool is in engagement, a_p is large and a_e is small.



Copy milling:

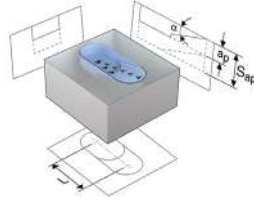
Operation where the radius is in engagement. a_p and a_e are both small.



Advanced machining methods:

Ramping:

Opening up a pocket by making a Z axis at an angle.



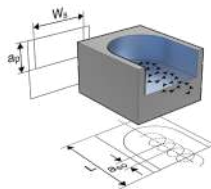
Helical interpolation ramping:

Opening a pocket by making a circular movement with the tool while ramping in Z axis.



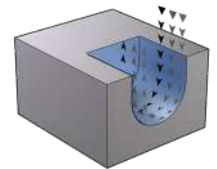
Trochoidal:

Opening a slot by using side milling, making a partial circular movement in X- or Y-axis. (changing slot milling into side milling).



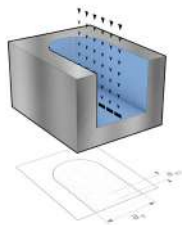
Push-pull:

Machining a 3D form by making a down and up copying movement following the profile of the form.



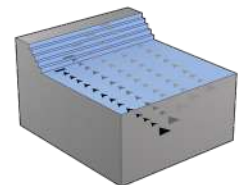
Plunge milling:

Opening up a deep slot by using drilling (Z) axis.



Z-leveling:

Machining a surface by making a small drilling or ramping in Z axis then opening the pocket with X and Y movements.



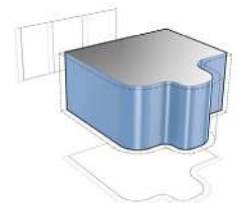
Drilling:

Making a hole with movement in Z axis.



Advanced roughing/ Optirough

Well defined tool paths with constant arc of contact for reliable roughing of simple & complex shapes. The large axial depths (a_p) & small radial depths (a_e) of cut combined with high feeds per tooth (f_z) and cutting speeds (V_c) results in high productivity.



Definitions, machining strategies:

General machining:

A machining strategy for general use. $a_e - a_p$ ratio can vary depending on the operation. Tool characteristics: Tools have relatively long cutting lengths and thin core diameters. There are no high requirements on the tolerances.

Machine requirements: There are no special machine requirements needed.

With basic CNC technology, difficult advanced machining methods are not possible.

Average results will be reached on metal removal rate Q (cm³/min).

The application area usually includes small batch sizes and a wide range of materials.

High Performance Machining:

Is a machining strategy where very high metal removal rates can be achieved. Typical for this strategy is that a_e is 1 times DC and a_p is 1 to 1½ times DC depending the workpiece material.

With HPM (High Performance Machining) you achieve an extremely high metal removal rate by using a much higher chip load than in general machining.

Tool characteristics: Specially developed chip formers in the flute of the tool, tip protection with a small 45° face or corner radius, special smooth formed chip space and coating, with or without Weldon shank.

Machine requirements: High stability, high power requirements, CNC control, rigid clamping system.

The application areas are: Operations in a mass production environment where production time/lead time is of great importance or on single products where a high metal removal rate Q (cm³/min.) is required.

High Feed Machining:

Is a machining strategy where high feed rates can be reached with large radial engagements (a_e) in combination with a small a_p .

With HFM (High Feed Machining) you achieve high metal removal rates and/or surface finish by using a much higher table feed compared to general machining.

Tool characteristics: Specially developed front teeth, very short cutting length and coating.

Machine requirements: Good stability, CNC, possibility for high table feed (v_f).

The big advantage of this technology is that it is very user friendly, easy, safe and quick to program in CAM. By using the so called Z-leveling strategy it is relatively easy to program complex forms without the necessity of having extensive experience in programming.

The application area is: From soft to hardened steel, titanium and stainless steel and it is very good as a pre operation before HSM is used.

It can also be applied in deep pocket machining.

Micro machining:

Is a machining strategy where extremely small tool diameters are used.

Tool characteristics: Diameter range Ø 0,1 to 2,0 mm, small cutting lengths, a wide range of OD reductions, high accuracy, coating.

Machine requirements: High spindle accuracy, high RPM, CNC, thermal stability against spindle growth.

Application area is: Production of cavities like slots, pockets, holes or engravings in many types of material.

High speed machining:

Is a machining strategy where a combination of a small radial depth of cut and high cutting speed and table feeds are used.

Depending on the method a high metal removal and a low R_a value can be reached.

Typical for this strategy are the low cutting forces, less heat build up in tool and workpiece, less burr formation and high dimensional accuracy on the workpiece.

With HSM (High Speed Machining) you achieve high metal removal rate and/or surface finish by using a much higher cutting speed compared to general machining.

Tool characteristics: Stable, (thick core diameter and a short cutting length) clear and well formed chip space for good chip evacuation, coating.

Machine requirements: Quick CNC control, high RPM, quick transmission to the axis.

The applications area is: Mould & Die industry on pre-finishing and finishing operations in hardened steel (48-62 HRc) in a short lead time.

This technique can also be applied in most other materials when using the right tool and advanced machining method.

Advanced roughing / Optirough:

Well defined tool paths with constant arc of contact for reliable roughing of simple & complex shapes. The large axial depths (a_p) & small radial depths (a_e) of cut combined with high feeds per tooth (f_z) and cutting speeds (V_c) results in high productivity.

These CAM-based rough-machining, or dynamic milling, strategies are ones that centre on a cutting tool's arc of contact and its average chip load.

When reducing the arc of contact, the amount of heat generated during roughing operations is reduced. As the radial depth of cut decreases, so does a cutter's arc of contact. A smaller amount of contact results in less friction and, therefore, less heat between the tool's cutting edges and the workpiece it is machining. These lower machining temperatures, in turn, allow for increased cutting speeds shorter cycle times.

Explanation of Advanced Roughing

Advanced Roughing, what does it mean?

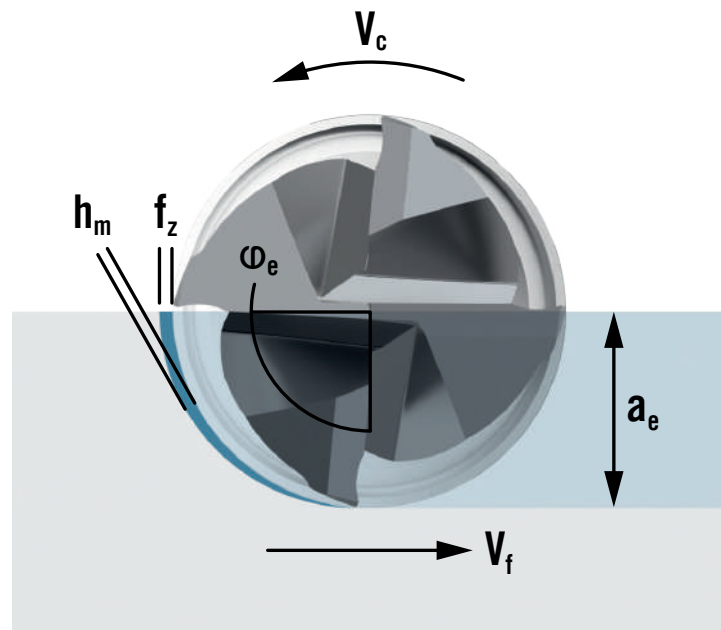
Today's CAM packages offer toolpath strategies specifically for inside/outside radii shapes where changing arcs of contact are common when using conventional toolpaths. These software packages automatically apply different feeds to control arc of contact and keep chip loads consistent.

These CAM-based rough-machining, or advanced roughing, focus on a cutting tool's arc of contact and its average chip load. When reducing the arc of contact, the amount of heat generated during roughing operations is reduced. As the radial depth of cut decreases, so does a cutter's arc of contact. A smaller amount of contact results in less friction and, therefore, less heat between the tool's cutting edges and the workpiece it is machining. These lower machining temperatures, in turn, allow for increased cutting speeds shorter cycle times. Also, the resulting cutting force is lower, allowing high APMXS, or cutting depth to be programmed.

In advanced roughing, to maintain arc of contact, CAM packages need to employ trochoidal machining-like techniques when entering a radius.

When using an optimized roughing toolpath and maintaining consistent arc of contact, the cutter's radius can match that of the inside radius being cut without risk of cutter overload. This capability allows our Advanced Roughing tools (JS554-3C, JS564, JS565, JS754, JS755, JSS720 and S4651) to remove more stock in the roughing pass, thus reducing the amount of stock the finish pass has to cut – all of which translates to faster machining cycle times and longer tool life. Also, while the remaining stock is constant the finishing tool can generate a better final surface quality and at the same time will have longer tool life.

Impact of arc of contact on cutting speed and feed per tooth



How our products can benefit you

Achieve Revolutionary speeds in superalloys with Seco Ceramic end mills

SiAlON ceramics, high-strength geometries and reinforced frontal teeth are some of the main features of these highly optimized tools and allow full utilization of high speed, high-performance machine tools. The tools can operate at cutting speeds of up to 1200M/min and can offer a significant productivity increase when compared to standard solid carbide solutions.

Since high temperatures are needed, also a significant amount of RPM is needed in order to achieve the high vc. The high temperatures are required in order to reach a level where the HRSA softens (850c +). With these tools, multiple strategies can be applied as long as a constant cut and constant contact with the workpiece is maximized.

The tool is designed for side milling, slot milling, high-feed milling and advanced roughing! All these are possible. To maintain the high cutting temperature in the cutting zone, coolant is compressed air. Because the tool operates at high speeds, also run out is of high importance.

You can find Seco ceramic tools on page 399.



Simplify aerospace hybrid materials holemaking with two-in-one-geometry

The JC899 has a patented two-in-one double geometry solution, designed for machining hybrid stacked material combinations such as CFRP-Ti and CFRP-Alu. Due to its left-hand helix, right-hand cut design, this tool is preventing delamination, fiber pull-out and chip marks from damaging the workpiece surface (this as chips will be pushed downwards out of the hole). As a result, the JC899 left-hand helix, right-hand cut STAX finisher gives a perfect surface finish and prevents chip pollution between the 2 stack layers.

This means post-machining, unstacking, cleaning and deburring, and re-stacking is not needed anymore which can boost process efficiency by as much as 200 to 300 percent and provide tool life three to six times longer than that of conventional reamers.

At the same time the drilling process is replaced by applying the JC898 high feed rougher. This tool helical interpolates and allows the JC899 to operate in continuous stock conditions, maximizing quality output while minimizing corellation in hole size and tolerance.

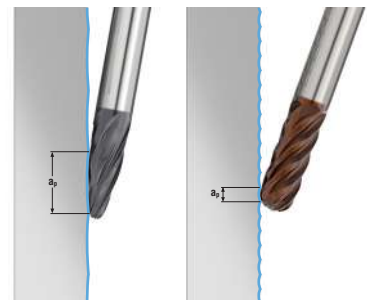
You can find Seco JC898/JC899 on pages 569 - 571.



Take bigger stepovers for faster finishing productivity

For the fastest, most reliable finishing operations, new barrel-shaped tools use an innovative "taper" or "drop" geometry to enable large increases in stepover. This is possible through the use of advanced CAD/CAM systems or new plugins built for the uses of these tools. Using 5-axis machine movement, the tool's cutting profile can remain engaged with the surface of the part at the proper angle at all times.

In addition to our standard barrel-style shapes, Seco can also offer all styles of barrel geometry's as custom products, such as lens shapes, ensuring you always have access to the ideal tools for your part-production needs.



Take the risk out of micro milling operations

Achieve accuracy, precision and high surface finish quality from the very start when machining small, micro-sized surfaces with our range of solid-carbide Seco end mills. SECO's new Mini ranges deliver longer tool life, stability and peace of mind for machining operations where it is typically impossible to actually see the workpiece and cutting tool as it works.

Precisely produced geometries, virtually zero runout, advanced coatings and true line-form radius tolerances give these mini ranges its incredibly long tool life and reliability. Key is to apply these tools in suitable conditions, in which the benefits can be maximized. Minimize run-out of the tool plus the tool holder is essential. Also the CAM program can be optimized with the Seco feed optimizer which calculates the ideal RPM and feed speed (vf) for every application. As a result, the tool and set-up help to eliminate any unforeseen problems during rough, pre-finish and final finish micro milling operations.

You can find an overview of Seco Mini tools on page 11.



JS522 long flute finisher

The JS522 long-flute finishing tool is capable of meeting the aerospace industry's stringent criteria for perpendicularity, fine surface finish, high metal removal rates and more effective machining.

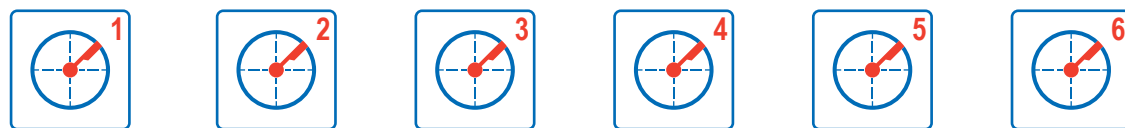
With a cutting length of $5 \times D_c$, an increased core diameter and a slightly negative taper to compensate deflection, the JS522 is specially designed to machine high shoulders in single-pass finishing operations. This single pass saves time (up to 80%) but most important, also delivers instant quality. This tool is often used in mass production areas.

Once in place and optimized, this has proven to be the number one cost saver in multiple applications!

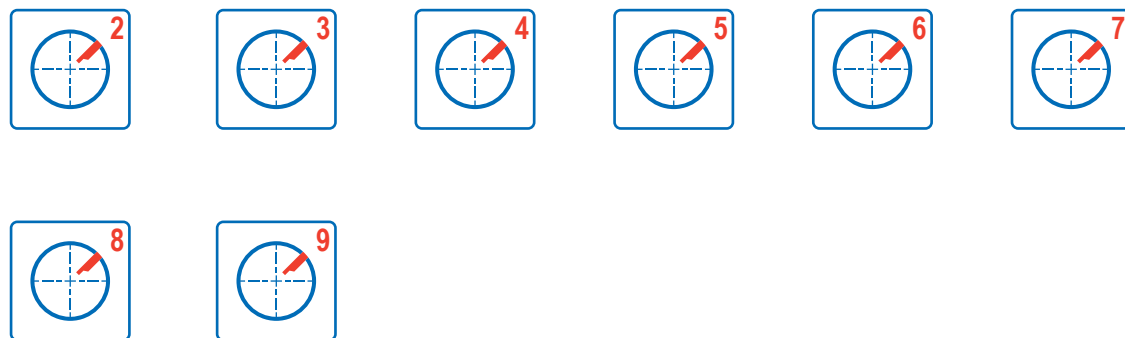
You can find Seco JS522 on page 177.



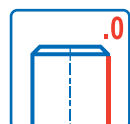
Center cut PCEDC



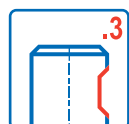
No center cut PCEDC



Cylindrical shank



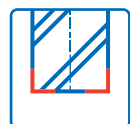
Weldon shank



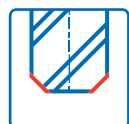
Safelock shank



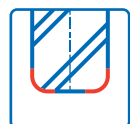
Sharp



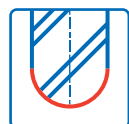
Chamfer



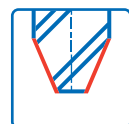
Corner radius



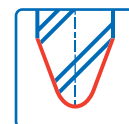
Ball nose



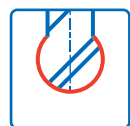
Tapered sharp



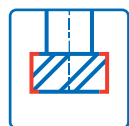
Tapered ball nose



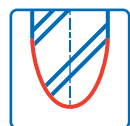
Cutter 250°



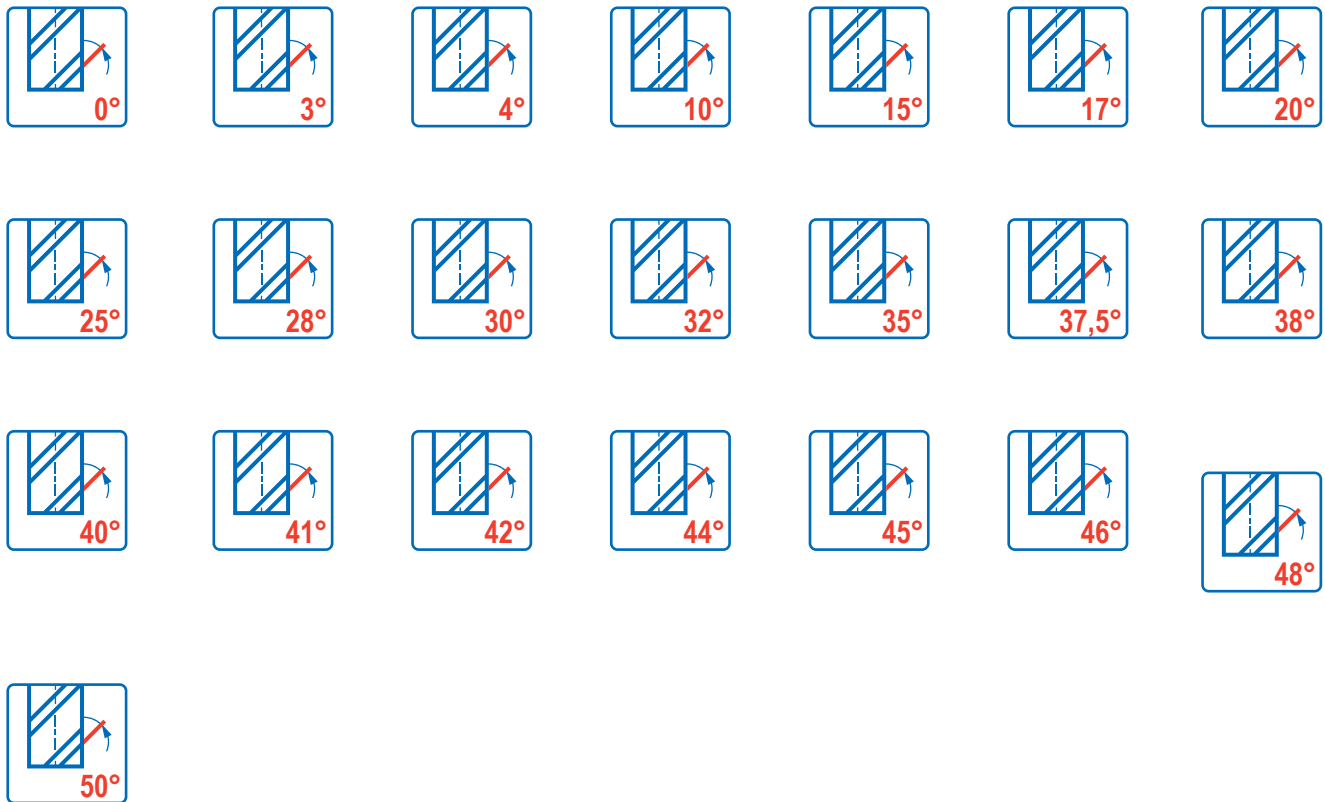
T-shape



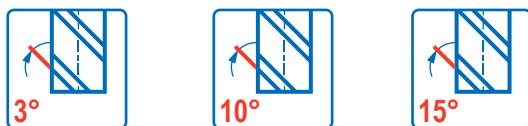
Barrel



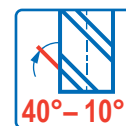
Helix angle



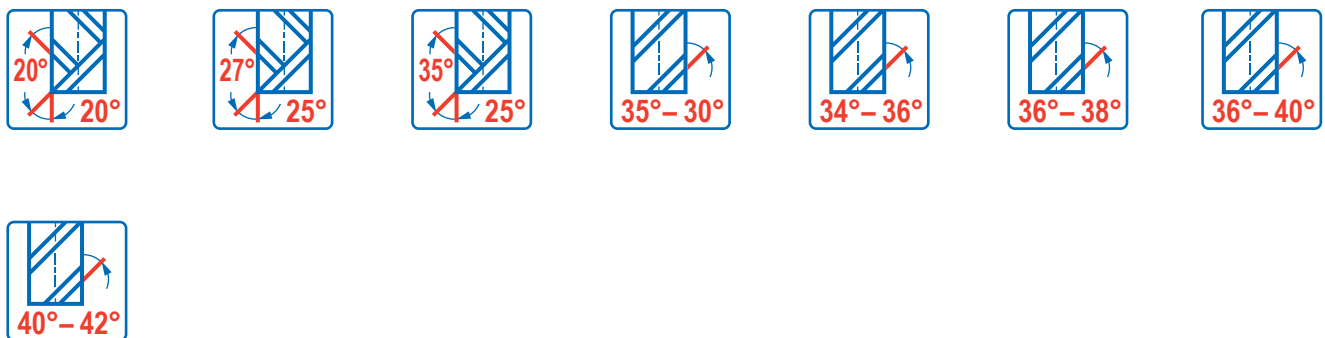
Helix angle Left



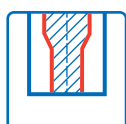
Double left hand helix



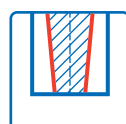
Double helix



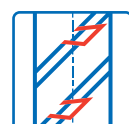
Double core



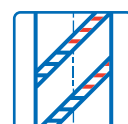
Tapered Core



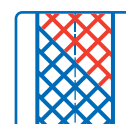
Chip splitters



Roughing profile



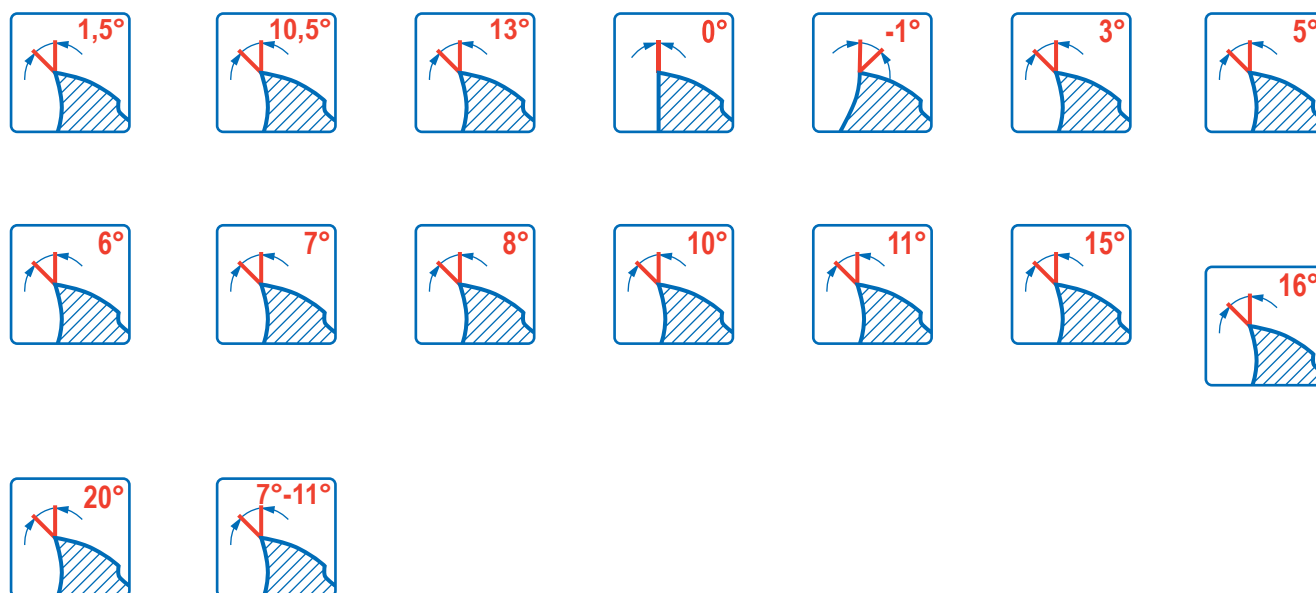
Router profile



Cutting rake Angular relief



Cutting rake Radial relief



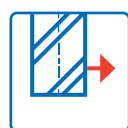
ICC straight



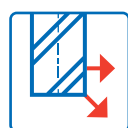
ICC and Y



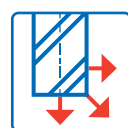
Radial



Radial/Ramping



Radial/Ramping/



Key symbols

DIAMOND



MEGA



STAX



PCD



Regrind possible



DURA



MEGA-T



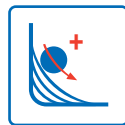
SIRA



M9



Advanced roughing



HEMI



MEGA-64



TAN



HSCO



MEGA-64-T



AXT



HXT



NXT



Ceramic



Attributes Solid Milling and X-Heads

Attribute	Explanation
AP1	depth of cut split
APMXS	depth of cut maximum in feed direction side
BHTA	body half taper angle
CA	collision angle
CHW	corner chamfer width
CSP	coolant supply property
CZCMS	connection size code machine side
CZCWS	connection size code workpiece side
DC	cutting diameter
DCSFMS	contact surface diameter machine side
DCSFWS	contact surface diameter workpiece side
DCX	cutting diameter maximum
DMM	shank diameter
DN	neck diameter
FCEDC	face cutting edge count
CSP	coolant supply property
L	cutting edge length
L2	cutting edge length 2
LF	functional length
LN	neck length
LN2	neck length 2
LSCN	clamping length minimum
NA	neck angle
OAL	overall length
PCEDC	peripheral cutting edge count
PRFA/2	profile angle divided by two
PRFRAD1	profile radius 1
PRFRAD2	profile radius 2
PRFRAD3	profile radius 3
PSIR	tool lead angle
RE	corner radius
RE2	corner radius 2
RP	programming radius
SA	sphere angle
SIG	point angle
SW	wrench size
TQ	torque
TQN	torque minimum
TQX	torque maximum
UTCN	uncut thickness

Attributes Minimaster

Attribute	Explanation
APMXE	depth of cut maximum in feed direction end
APMXS	depth of cut maximum in feed direction side
AZ	plunge depth maximum
BEC	back end chamfer angle
BHTA	body half taper angle
CCER	curved cutting edge radius
Cmax	helical interpolation hole diameter maximum
Cmin	helical interpolation hole diameter minimum
DC	cutting diameter
DCSFMS	contact surface diameter machine side
DCSFWS	contact surface diameter work piece side
DCX	cutting diameter maximum
DMM	shank diameter
DN	neck diameter
FCEDC	face cutting edge count
FHA	flute helix angle
KAPRS	tool cutting edge angle in feed direction side
LE	cutting edge effective length
LF	functional length
LPR	protruding length
OAL	overall length
RA	relief angle
RE	corner radius
RMPX	ramping angle maximum
RP	programming radius
RPMX	rotational speed maximum
SA	sphere angle
SIG	point angle
UTCN	uncut thickness
ZEFP	peripheral effective cutting edge count



UNIVERSAL

Seco offers a complete range of high performance solid carbide square shoulder end mills, ballnose cutters and finish end mills for high productivity and extended tool life. This range covers universal products and optimized end mills for specific workpiece materials.

Universal products offer full machining flexibility at an excellent price/performance ratio.

- C5121, C5131, C5141, C5231, C5241 and ST5551 for sharp corner type.
- JSE512, JSE513, JSE514, JS553, JS554, ST5551, JS564, JS565 and JS520 with 45° chamfer type.
- C5121, C5141, JS522, JS553, JS554, ST5551, JH910, JH930, JHF980, J36, V31, JME542, JME562 and JME564 for radius type.
- C5021, C5041, JS506, JS509, HK, HKM and J29 for conical type.
- C5321, C5341, JSB512, JS532, JS533, JS534, JHB970, JMB542, JMB562 and JMB563 for ball-nose type.

Tool Selection Universal

									
Name		C5121	C5131	C5141	C5231	C5241	JSE512	JSE513	JSE514
Page(s)		37	49	55	72	72	74	78	84
Family name		C-Series	C-Series	C-Series	C-Series	C-Series	SOLID ²	SOLID ²	SOLID ²
Type of mill									
Shank	Cylindrical	■	■	■	■	■	■	■	■
	Weldon	■		■			■	■	■
Number of Flutes		2	3	4	3	4	2	2	4
CSP									
Diameter range	Metric	1-12	1-12	1-20			2-12	2-20	2-25
	Inch	1/32-1	1/32-1	1/64-1 1/4	1/5-8	3/4			1/8-3/4
Length availability		1,2,3,4,5,6,7,8	1,2,3,4	1,2,3,4,5,6,7,8,9	2,3	3	2	2,3	2,3
Operation									
									
SMG									
P1-8		●	●	●	●	●	●	●	●
P11-12		○	○	○	○	○	○	○	○
M1-3		●	●	●	●	●	●	●	●
M4-5		○	○	○	○	○	○	○	○
K1-7		●	●	●	●	●	●	●	●
S1-3		○	○	○	○	○	○	○	○
S11-13		○	○	○	○	○	○	○	○
H3 H5 H8 H11 H12 H21 H31		○	○	○	○	○	○	○	○
N1		○	○	○	○	○	○	○	○
N2-3		○	○	○	○	○	○	○	○
N11		○	○	○	○	○	○	○	○
TS1		○	○	○	○	○	○	○	○
TP1		○	○	○	○	○	○	○	○
GR		○	○	○	○	○	○	○	○

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

*JS554 3C also available. Can be applied in advanced roughing.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Universal

										
Name		JS553	JS554	ST5551	JS564	JS565	JS520	JS522	C5321	C5341
Page(s)		94	114	139	165	169	173	177	180	188
Family name		SOLID ²	SOLID ²	Stabilizer	SOLID ²	SOLID ²	SOLID ²	SOLID ²	C-Series	C-Series
Type of mill										
Shank	Cylindrical									
	Weldon									
Number of Flutes		3	4	5	4	5	5,6,8	2	2	4
CSP										
Diameter range	Metric	2-25	3-25	6-25	3-20	4-20	4-25	6-32	1-12	1-20
	Inch	1/8 - 1/2	1/4-1	1/4-1					1/64-1	1/64-1
Length availability		1,2,3	1,2,3	1,2,3,4,5,6,8	2,3,4	2,3,4	2,3	4	1,2,3,4,5,6,7	1,2,3,4,5,6,7,8
Operation										
										
										
SMG										
P1-8		●	●	●	●	●	●	●	●	●
P11-12		●	●	●	○	○	○	●	○	○
M1-3		●	●	●	●	●	○	●	●	●
M4-5		●	●	●	●	●	○	●	○	○
K1-7		●	●	●	●	●	●	●	●	●
S1-3		●	●	●	●	●	○	○	○	○
S11-13		●	●	●	●	●	●	●	○	○
H3 H5 H8 H11 H12 H21 H31		●	●	●	●	●	○		○	○
N1		●	●	●	●	●	●	●	○	○
N2-3		●	●	●	●	●	●	●	○	○
N11		●	●	●	●	●	●	●	○	○
TS1		●	●	●			●	●	○	○
TP1		●	●	●			●	●	○	○
GR		○	○	○			○	○	○	○

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Tool Selection Universal

									
Name		JSB512	JS532	JS533	JS534	C5021	C5041	JS506	JS509
Page(s)		195	197	201	205	209	211	213	217
Family name		SOLID ²	SOLID ²	SOLID ²	SOLID ²	C-Series	C-Series	SOLID ²	SOLID ²
Type of mill									
Shank	Cylindrical	■	■	■	■	■	■	■	■
	Weldon		□	■	■			■	■
Number of Flutes		2	2	3	4	2	4	3-4	3-4
CSP									
Diameter range	Metric	2-12	1-20	1-20	2-20			3-12	3-12
	Inch					1/4-1/2	1/4-3/4		
Length availability		2	1,2,3	1,2	1,2,3	1	1	2	2
Operation									
SMG									
P1-8		●	●	●	●	●	●	●	●
P11-12		○	○	○	○	○	○	○	○
M1-3		●	●	●	●	●	●	●	●
M4-5		○	●	●	●	○	○	●	●
K1-7		●	●	●	●	●	●	●	●
S1-3		○	○	○	○	○	○	○	○
S11-13		○	●	●	●	○	○	●	●
H3 H5 H8 H11 H12 H21 H31		○				○	○	●	●
N1		○	●	●	●	○	○	●	●
N2-3		○	●	●	●	○	○	●	●
N11		○	●	●	●	○	○	●	●
TS1		○	●	●	●	○	○	●	●
TP1		○	●	●	●	○	○	●	●
GR		○	○	○	○	○	○	○	○

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Universal

					
Name		JH910	JH930	JHB970	JHF980
Page(s)		221	225, 507	227, 311	229
Family name		HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HFM
Type of mill					
Shank	Cylindrical	■	■	■	■
	Weldon				
Number of Flutes		3	5-6, 8	2	2,3,4,5
CSP					
Diameter range	Metric	2-20	6-20	2-16	1-12
	Inch				
Length availability		2,3,4	2	1,2,3	1,2,3,4
Operation					
					
					
SMG					
P1-8		●	●	●	●
P11-12		○	○	○	○
M1-3		●	●	●	●
M4-5		●	●	●	●
K1-7		●	●	●	●
S1-3		●	●	●	●
S11-13		●	●	●	●
H3 H5 H8 H11 H12 H21 H31			●		○
N1					
N2-3					
N11					
TS1					
TP1		●			
GR		●			

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Tool Selection Universal

					
Name		J29	J36	HK/HKM	V31
Page(s)		233	236	239	250
Family name		VHM	VHM	VHM	VHM
Type of mill					
Shank	Cylindrical	■	■	■	■
	Weldon				
Number of Flutes		1	3	2,3,4	4
CSP					
Diameter range	Metric	0,2-6	2-20	1-10	6-28
	Inch				
Length availability		2	2	2	2
Operation					
					
					
SMG					
P1-8		●	○	●	●
P11-12		●	●		○
M1-3		●	○	●	●
M4-5		●	○	●	○
K1-7		●	○	●	●
S1-3		●	○	●	●
S11-13		●	○	●	●
H3 H5 H8 H11 H12 H21 H31		○		●	●
N1		●	○	●	●
N2-3		●	●	○	●
N11		●	●		●
TS1		●	○	●	●
TP1		●	○	●	●
GR		●			●

■ Stock standard □ Weldon available, delivery time is 3 days.
● Preferred choice ○ Alternative choice

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Universal

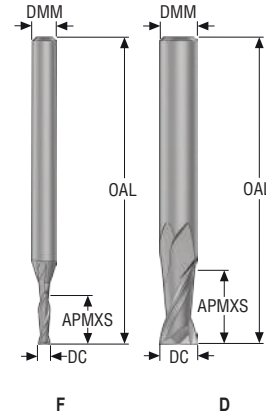
							
Name		JME542	JME562	JME564	JMB542	JMB562	JMB563
Page(s)		253	256	260	263	266	270
Family name		MINI	MINI	MINI	MINI	MINI	MINI
Type of mill							
Shank	Cylindrical	■	■	■	■	■	■
	Weldon						
Number of Flutes		2	2	4	2	2	3
CSP							
Diameter range	Metric	2-20	0,5-3,0	0,5-3,0	0,2-3,0	0,5-3,0	1,0-3,0
	Inch						
Length availability		1,3,4,5,6	2,4,5,6,7	2,4	1,3,4,5,6	1,2,3,4,5,6	2,4
Operation							
							
							
SMG							
P1-8		●	●	●	●	●	●
P11-12		●	●	●	●	●	●
M1-3		●	●	●	●	●	●
M4-5		●	●	●	●	●	●
K1-7							
S1-3							
S11-13		●	●	●	●	●	●
H3 H5 H8 H11 H12 H21 H31							
N1		○	○	○	○	○	○
N2-3		○	○	○	○	○	○
N11		○	○	○	○	○	○
TS1							
TP1							
GR		○	○	○	○	○	○

■ Stock standard □ Weldon available, delivery time is 3 days.

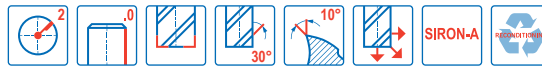
● Preferred choice ○ Alternative choice

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Sharp



- Tolerances:
- DMM=h5
- DC= h10
- Regrind possible if DC is $\geq \varnothing 10$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm			
C5121-060D1S.0Z2	SIRA	10269100	1	D	6,0	6,0	9,0	57,0	—	—	2	Cylindrical	■
C5121-020F2S.0Z2	SIRA	10269091	2	F	2,0	3,0	4,0	38,0	7,683	2,127	2	Cylindrical	■
C5121-030D2S.0Z2	SIRA	10269093	2	D	3,0	3,0	6,0	38,0	—	—	2	Cylindrical	■
C5121-040D2S.0Z2	SIRA	10269096	2	D	4,0	4,0	8,0	50,0	—	—	2	Cylindrical	■
C5121-050F2S.0Z2	SIRA	10269098	2	D	5,0	6,0	10,0	57,0	—	—	2	Cylindrical	■
C5121-060D2S.0Z2	SIRA	10269101	2	D	6,0	6,0	12,0	57,0	—	—	2	Cylindrical	■
C5121-080D2S.0Z2	SIRA	10269103	2	D	8,0	8,0	16,0	63,0	—	—	2	Cylindrical	■
C5121-090F2S.0Z2	SIRA	10269105	2	F	9,0	10,0	22,0	72,0	18,35	9,127	2	Cylindrical	■
C5121-100D2S.0Z2	SIRA	10269106	2	D	10,0	10,0	22,0	72,0	—	—	2	Cylindrical	■
C5121-120D2S.0Z2	SIRA	10269108	2	D	12,0	12,0	25,0	83,0	—	—	2	Cylindrical	■
C5121-015F3S.0Z2	SIRA	10269090	3	F	1,5	3,0	4,5	38,0	8,183	1,627	2	Cylindrical	■
C5121-020F3S.0Z2	SIRA	10269092	3	F	2,0	3,0	6,3	38,0	9,983	2,127	2	Cylindrical	■
C5121-035F3S.0Z2	SIRA	10269095	3	F	3,5	4,0	12,0	50,0	15,683	3,627	2	Cylindrical	■
C5121-050F3S.0Z2	SIRA	10269099	3	D	5,0	6,0	16,0	57,0	—	—	2	Cylindrical	■
C5121-060D3S.0Z2	SIRA	10269102	3	D	6,0	6,0	19,0	63,0	—	—	2	Cylindrical	■
C5121-080D3S.0Z2	SIRA	10269104	3	D	8,0	8,0	20,0	63,0	—	—	2	Cylindrical	■
C5121-010F4S.0Z2	SIRA	10269089	4	F	1,0	3,0	4,0	38,0	7,683	1,127	2	Cylindrical	■
C5121-030D4S.0Z2	SIRA	10269094	4	D	3,0	3,0	12,0	38,0	—	—	2	Cylindrical	■
C5121-040D4S.0Z2	SIRA	10269097	4	D	4,0	4,0	14,0	50,0	—	—	2	Cylindrical	■
C5121-100D4S.0Z2	SIRA	10269107	4	D	10,0	10,0	35,0	89,0	—	—	2	Cylindrical	■
C5121-120D4S.0Z2	SIRA	10269109	4	D	12,0	12,0	50,0	100,0	—	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

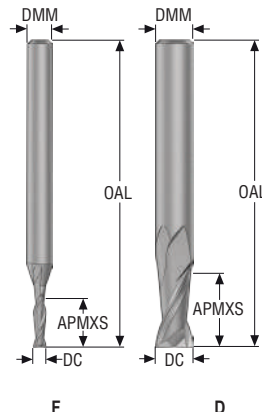
Graphite

X-Heads

Minimaster

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Sharp – Inch



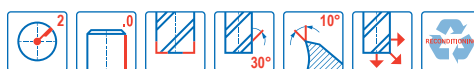
—Tolerances:

—DMM=+.0001"/-.0004"

—DC ≤ Ø7/64" = ±.0005"

—DC > Ø7/64" = +.000"/-.002"

—Regrind possible if DC is ≥ Ø.375

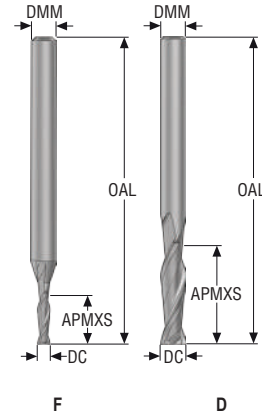


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch			
C5121-.375D1S.0Z2	10268850	1	D	0.375	0.375	0.625	2.000	—	—	2	Cylindrical	■
C5121-.500D1S.0Z2	10268858	1	D	0.500	0.500	0.625	2.500	—	—	2	Cylindrical	■
C5121-.750D1S.0Z2	10268868	1	D	0.750	0.750	1.000	3.000	—	—	2	Cylindrical	■
C5121-.047F2S.0Z2	10268818	2	F	0.047	0.125	0.109	1.500	0.109	0.052	2	Cylindrical	■
C5121-.063F2S.0Z2	10268820	2	F	0.063	0.125	0.125	1.500	0.125	0.068	2	Cylindrical	■
C5121-.094F2S.0Z2	10268824	2	F	0.094	0.125	0.188	1.500	0.188	0.099	2	Cylindrical	■
C5121-.125D2S.0Z2	10268828	2	D	0.125	0.125	0.250	1.500	—	—	2	Cylindrical	■
C5121-.156F2S.0Z2	10268833	2	F	0.156	0.188	0.313	2.000	0.313	0.161	2	Cylindrical	■
C5121-.188D2S.0Z2	10268835	2	D	0.188	0.188	0.375	2.000	—	—	2	Cylindrical	■
C5121-.250D2S.0Z2	10268841	2	D	0.250	0.250	0.500	2.000	—	—	2	Cylindrical	■
C5121-.313D2S.0Z2	10268846	2	D	0.313	0.313	0.500	2.000	—	—	2	Cylindrical	■
C5121-.375D2S.0Z2	10268851	2	D	0.375	0.375	1.000	2.500	—	—	2	Cylindrical	■
C5121-.438D2S.0Z2	10268856	2	D	0.438	0.438	1.000	2.750	—	—	2	Cylindrical	■
C5121-.500D2S.0Z2	10268859	2	D	0.500	0.500	1.000	3.000	—	—	2	Cylindrical	■
C5121-.563D2S.0Z2	10268864	2	D	0.563	0.563	1.125	3.500	—	—	2	Cylindrical	■
C5121-.625D2S.0Z2	10268865	2	D	0.625	0.625	1.250	3.500	—	—	2	Cylindrical	■
C5121-.750D2S.0Z2	10268869	2	D	0.750	0.750	1.500	4.000	—	—	2	Cylindrical	■
C5121-.875D2S.0Z2	10268872	2	D	0.875	0.875	1.500	4.000	—	—	2	Cylindrical	■
C5121-1.000D2S.0Z2	10268873	2	D	1.000	1.000	1.500	4.000	—	—	2	Cylindrical	■
C5121-.031F3S.0Z2	10268690	3	F	0.031	0.125	0.078	1.500	0.078	0.036	2	Cylindrical	■
C5121-.047F3S.0Z2	10268819	3	F	0.047	0.125	0.125	1.500	0.125	0.052	2	Cylindrical	■
C5121-.063F3S.0Z2	10268821	3	F	0.063	0.125	0.188	1.500	0.188	0.068	2	Cylindrical	■
C5121-.078F3S.0Z2	10268823	3	F	0.078	0.125	0.250	1.500	0.250	0.083	2	Cylindrical	■
C5121-.094F3S.0Z2	10268825	3	F	0.094	0.125	0.281	1.500	0.281	0.099	2	Cylindrical	■
C5121-.109F3S.0Z2	10268827	3	F	0.109	0.125	0.375	1.500	0.375	0.114	2	Cylindrical	■
C5121-.156F3S.0Z2	10268834	3	F	0.156	0.188	0.500	2.000	0.500	0.161	2	Cylindrical	■
C5121-.188D3S.0Z2	10268836	3	D	0.188	0.188	0.625	2.000	—	—	2	Cylindrical	■
C5121-.203F3S.0Z2	10268839	3	F	0.203	0.250	0.625	2.500	0.625	0.208	2	Cylindrical	■
C5121-.219F3S.0Z2	10268840	3	F	0.219	0.250	0.625	2.500	0.625	0.224	2	Cylindrical	■
C5121-.250D3S.0Z2	10268842	3	D	0.250	0.250	0.750	2.500	—	—	2	Cylindrical	■
C5121-.281F3S.0Z2	10268845	3	F	0.281	0.313	0.750	2.500	0.750	0.286	2	Cylindrical	■
C5121-.313D3S.0Z2	10268847	3	D	0.313	0.313	0.813	2.500	—	—	2	Cylindrical	■
C5121-.344F3S.0Z2	10268849	3	F	0.344	0.375	1.000	2.500	1.000	0.349	2	Cylindrical	■
C5121-.375D3S.0Z2	10268852	3	D	0.375	0.375	1.000	3.000	—	—	2	Cylindrical	■
C5121-.500D3S.0Z2	10268860	3	D	0.500	0.500	1.000	4.000	—	—	2	Cylindrical	■

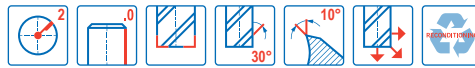
■ Stocked standard.

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +.000"/-0.002"$
—Regrind possible if DC is $\geq \varnothing .375$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch			
C5121-.031F4S.0Z2	10268817	4	F	0.031	0.125	0.094	1.500	0.094	0.036	2	Cylindrical	■
C5121-.063F4S.0Z2	10268822	4	F	0.063	0.125	0.250	1.500	0.250	0.068	2	Cylindrical	■
C5121-.094F4S.0Z2	10268826	4	F	0.094	0.125	0.375	1.500	0.375	0.099	2	Cylindrical	■
C5121-.125D4S.0Z2	10268829	4	D	0.125	0.125	0.500	1.500	—	—	2	Cylindrical	■
C5121-.188D4S.0Z2	10268837	4	D	0.188	0.188	0.750	2.500	—	—	2	Cylindrical	■
C5121-.250D4S.0Z2	10268843	4	D	0.250	0.250	1.000	3.000	—	—	2	Cylindrical	■
C5121-.313D4S.0Z2	10268848	4	D	0.313	0.313	1.000	3.000	—	—	2	Cylindrical	■
C5121-.375D4S.0Z2	10268853	4	D	0.375	0.375	1.000	4.000	—	—	2	Cylindrical	■
C5121-.500D4S.0Z2	10268861	4	D	0.500	0.500	1.500	6.000	—	—	2	Cylindrical	■
C5121-.625D4S.0Z2	10268866	4	D	0.625	0.625	2.250	5.000	—	—	2	Cylindrical	■
C5121-.750D4S.0Z2	10268870	4	D	0.750	0.750	2.250	5.000	—	—	2	Cylindrical	■
C5121-.125D5S.0Z2	10268830	5	D	0.125	0.125	0.625	2.000	—	—	2	Cylindrical	■
C5121-.375D5S.0Z2	10268854	5	D	0.375	0.375	1.125	3.000	—	—	2	Cylindrical	■
C5121-.438D5S.0Z2	10268857	5	D	0.438	0.438	2.000	4.000	—	—	2	Cylindrical	■
C5121-.500D5S.0Z2	10268862	5	D	0.500	0.500	2.000	4.000	—	—	2	Cylindrical	■
C5121-.625D5S.0Z2	10268867	5	D	0.625	0.625	3.000	6.000	—	—	2	Cylindrical	■
C5121-.750D5S.0Z2	10268871	5	D	0.750	0.750	3.000	6.000	—	—	2	Cylindrical	■
C5121-.125D6S.0Z2	10268831	6	D	0.125	0.125	0.750	3.000	—	—	2	Cylindrical	■
C5121-.188D6S.0Z2	10268838	6	D	0.188	0.188	1.000	4.000	—	—	2	Cylindrical	■
C5121-.375D6S.0Z2	10268855	6	D	0.375	0.375	1.500	6.000	—	—	2	Cylindrical	■
C5121-.250D7S.0Z2	10268844	7	D	0.250	0.250	1.500	4.000	—	—	2	Cylindrical	■
C5121-.500D7S.0Z2	10268863	7	D	0.500	0.500	3.000	6.000	—	—	2	Cylindrical	■
C5121-.125D8S.0Z2	10268832	8	D	0.125	0.125	1.000	3.000	—	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

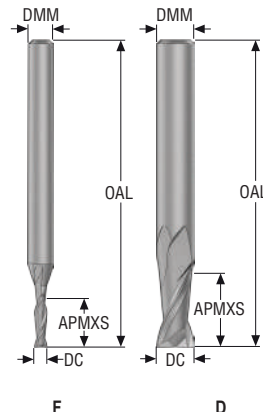
Graphite

X-Heads

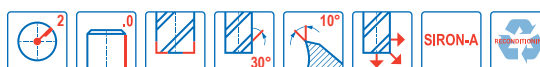
Minimaster

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM = $-.0001"/-.0004"$
—DC $\leq \varnothing 7/64" = \pm .0005"$
—DC $> \varnothing 7/64" = +.000"/-.002"$
—Regrind possible if DC is $\geq \varnothing .375$

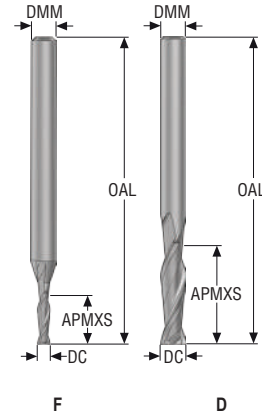


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch	inch			
Non ferrous	C5121-.375D1S.0Z2	SIRA	10268726	1	D	0.375	0.375	0.625	2.000	—	—	2	Cylindrical	■
	C5121-.500D1S.0Z2	SIRA	10268734	1	D	0.500	0.500	0.625	2.500	—	—	2	Cylindrical	■
	C5121-.750D1S.0Z2	SIRA	10268744	1	D	0.750	0.750	1.000	3.000	—	—	2	Cylindrical	■
Hard	C5121-.047F2S.0Z2	SIRA	10268693	2	F	0.047	0.125	0.109	1.500	0.109	0.052	2	Cylindrical	■
	C5121-.063F2S.0Z2	SIRA	10268695	2	F	0.063	0.125	0.125	1.500	0.125	0.068	2	Cylindrical	■
	C5121-.094F2S.0Z2	SIRA	10268699	2	F	0.094	0.125	0.188	1.500	0.188	0.099	2	Cylindrical	■
Plastic and cfrp	C5121-.125D2S.0Z2	SIRA	10268703	2	D	0.125	0.125	0.250	1.500	—	—	2	Cylindrical	■
	C5121-.156F2S.0Z2	SIRA	10268708	2	F	0.156	0.188	0.313	2.000	0.313	0.161	2	Cylindrical	■
	C5121-.188D2S.0Z2	SIRA	10268710	2	D	0.188	0.188	0.375	2.000	—	—	2	Cylindrical	■
Graphite	C5121-.250D2S.0Z2	SIRA	10268716	2	D	0.250	0.250	0.500	2.000	—	—	2	Cylindrical	■
	C5121-.313D2S.0Z2	SIRA	10268722	2	D	0.313	0.313	0.500	2.000	—	—	2	Cylindrical	■
	C5121-.375D2S.0Z2	SIRA	10268727	2	D	0.375	0.375	1.000	2.500	—	—	2	Cylindrical	■
X-Heads	C5121-.438D2S.0Z2	SIRA	10268732	2	D	0.438	0.438	1.000	2.750	—	—	2	Cylindrical	■
	C5121-.500D2S.0Z2	SIRA	10268735	2	D	0.500	0.500	1.000	3.000	—	—	2	Cylindrical	■
	C5121-.563D2S.0Z2	SIRA	10268740	2	D	0.563	0.563	1.125	3.500	—	—	2	Cylindrical	■
Minimaster	C5121-.625D2S.0Z2	SIRA	10268741	2	D	0.625	0.625	1.250	3.500	—	—	2	Cylindrical	■
	C5121-.750D2S.0Z2	SIRA	10268745	2	D	0.750	0.750	1.500	4.000	—	—	2	Cylindrical	■
	C5121-.875D2S.0Z2	SIRA	10268748	2	D	0.875	0.875	1.500	4.000	—	—	2	Cylindrical	■
	C5121-1.000D2S.0Z2	SIRA	10268749	2	D	1.000	1.000	1.500	4.000	—	—	2	Cylindrical	■
	C5121-.031F3S.0Z2	SIRA	10268691	3	F	0.031	0.125	0.078	1.500	0.078	0.036	2	Cylindrical	■
	C5121-.047F3S.0Z2	SIRA	10268694	3	F	0.047	0.125	0.125	1.500	0.125	0.052	2	Cylindrical	■
	C5121-.063F3S.0Z2	SIRA	10268696	3	F	0.063	0.125	0.188	1.500	0.188	0.068	2	Cylindrical	■
	C5121-.078F3S.0Z2	SIRA	10268698	3	F	0.078	0.125	0.250	1.500	0.250	0.083	2	Cylindrical	■
	C5121-.094F3S.0Z2	SIRA	10268700	3	F	0.094	0.125	0.281	1.500	0.281	0.099	2	Cylindrical	■
	C5121-.109F3S.0Z2	SIRA	10268702	3	F	0.109	0.125	0.375	1.500	0.375	0.114	2	Cylindrical	■
	C5121-.156F3S.0Z2	SIRA	10268709	3	F	0.156	0.188	0.500	2.000	0.500	0.161	2	Cylindrical	■
	C5121-.188D3S.0Z2	SIRA	10268711	3	D	0.188	0.188	0.625	2.000	—	—	2	Cylindrical	■
	C5121-.203F3S.0Z2	SIRA	10268714	3	F	0.203	0.250	0.625	2.500	0.625	0.208	2	Cylindrical	■
	C5121-.219F3S.0Z2	SIRA	10268715	3	F	0.219	0.250	0.625	2.500	0.625	0.224	2	Cylindrical	■
	C5121-.250D3S.0Z2	SIRA	10268717	3	D	0.250	0.250	0.750	2.500	—	—	2	Cylindrical	■
	C5121-.281F3S.0Z2	SIRA	10268721	3	F	0.281	0.313	0.750	2.500	0.750	0.286	2	Cylindrical	■
	C5121-.313D3S.0Z2	SIRA	10268723	3	D	0.313	0.313	0.813	2.500	—	—	2	Cylindrical	■
	C5121-.344F3S.0Z2	SIRA	10268725	3	F	0.344	0.375	1.000	2.500	1.000	0.349	2	Cylindrical	■
	C5121-.375D3S.0Z2	SIRA	10268728	3	D	0.375	0.375	1.000	3.000	—	—	2	Cylindrical	■
	C5121-.500D3S.0Z2	SIRA	10268736	3	D	0.500	0.500	1.000	4.000	—	—	2	Cylindrical	■

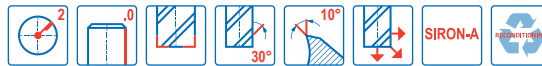
■ Stocked standard.

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM=+.0001"/-.0004"
—DC ≤ Ø7/64" = ±.0005"
—DC > Ø7/64" = +.000"/-.002"
—Regrind possible if DC is ≥ Ø.375



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5121-.031F4S.0Z2	SIRA	10268692	4	F	0.031	0.125	0.094	1.500	0.094	0.036	2	Cylindrical	■
C5121-.063F4S.0Z2	SIRA	10268697	4	F	0.063	0.125	0.250	1.500	0.250	0.068	2	Cylindrical	■
C5121-.094F4S.0Z2	SIRA	10268701	4	F	0.094	0.125	0.375	1.500	0.375	0.099	2	Cylindrical	■
C5121-.125D4S.0Z2	SIRA	10268704	4	D	0.125	0.125	0.500	1.500	—	—	2	Cylindrical	■
C5121-.188D4S.0Z2	SIRA	10268712	4	D	0.188	0.188	0.750	2.500	—	—	2	Cylindrical	■
C5121-.250D4S.0Z2	SIRA	10268718	4	D	0.250	0.250	1.000	3.000	—	—	2	Cylindrical	■
C5121-.313D4S.0Z2	SIRA	10268724	4	D	0.313	0.313	1.000	3.000	—	—	2	Cylindrical	■
C5121-.375D4S.0Z2	SIRA	10268729	4	D	0.375	0.375	1.000	4.000	—	—	2	Cylindrical	■
C5121-.500D4S.0Z2	SIRA	10268737	4	D	0.500	0.500	1.500	6.000	—	—	2	Cylindrical	■
C5121-.625D4S.0Z2	SIRA	10268742	4	D	0.625	0.625	2.250	5.000	—	—	2	Cylindrical	■
C5121-.750D4S.0Z2	SIRA	10268746	4	D	0.750	0.750	2.250	5.000	—	—	2	Cylindrical	■
C5121-.125D5S.0Z2	SIRA	10268705	5	D	0.125	0.125	0.625	2.000	—	—	2	Cylindrical	■
C5121-.375D5S.0Z2	SIRA	10268730	5	D	0.375	0.375	1.125	3.000	—	—	2	Cylindrical	■
C5121-.438D5S.0Z2	SIRA	10268733	5	D	0.438	0.438	2.000	4.000	—	—	2	Cylindrical	■
C5121-.500D5S.0Z2	SIRA	10268738	5	D	0.500	0.500	2.000	4.000	—	—	2	Cylindrical	■
C5121-.625D5S.0Z2	SIRA	10268743	5	D	0.625	0.625	3.000	6.000	—	—	2	Cylindrical	■
C5121-.750D5S.0Z2	SIRA	10268747	5	D	0.750	0.750	3.000	6.000	—	—	2	Cylindrical	■
C5121-.125D6S.0Z2	SIRA	10268706	6	D	0.125	0.125	0.750	3.000	—	—	2	Cylindrical	■
C5121-.188D6S.0Z2	SIRA	10268713	6	D	0.188	0.188	1.000	4.000	—	—	2	Cylindrical	■
C5121-.375D6S.0Z2	SIRA	10268731	6	D	0.375	0.375	1.500	6.000	—	—	2	Cylindrical	■
C5121-.250D7S.0Z2	SIRA	10268719	7	D	0.250	0.250	1.500	4.000	—	—	2	Cylindrical	■
C5121-.500D7S.0Z2	SIRA	10268739	7	D	0.500	0.500	3.000	6.000	—	—	2	Cylindrical	■
C5121-.125D8S.0Z2	SIRA	10268707	8	D	0.125	0.125	1.000	3.000	—	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

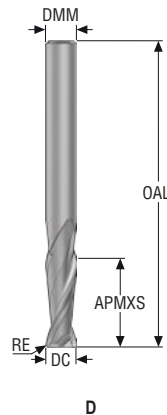
Graphite

X-Heads

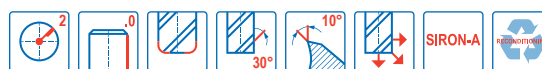
Minimaster

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM = ± 0.001 "/ ± 0.004 "
—DC $\leq \varnothing 7/64$ " = ± 0.005 "
—DC $> \varnothing 7/64$ " = ± 0.007 "/ ± 0.002 "
—RE = ± 0.01 "
—Reground possible if DC is $\geq \varnothing 3/32$

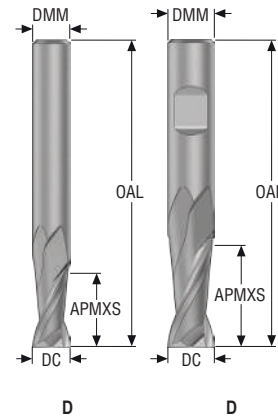


	Designation	Grade	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		RE		PCEDC	Shank	Stock standard
						inch		inch		inch		inch		inch				
Hard	C5121-500D2R015.0Z2	SIRA	10268755	2	D	0.500		0.500		1.000		3.000		0.015		2	Cylindrical	■
	C5121-500D2R030.0Z2	SIRA	10268756	2	D	0.500		0.500		1.000		3.000		0.030		2	Cylindrical	■
	C5121-500D2R060.0Z2	SIRA	10268757	2	D	0.500		0.500		1.000		3.000		0.060		2	Cylindrical	■
	C5121-500D2R125.0Z2	SIRA	10268758	2	D	0.500		0.500		1.000		3.000		0.125		2	Cylindrical	■
	C5121-625D2R015.0Z2	SIRA	10268759	2	D	0.625		0.625		1.250		3.500		0.015		2	Cylindrical	■
	C5121-625D2R030.0Z2	SIRA	10268760	2	D	0.625		0.625		1.250		3.500		0.030		2	Cylindrical	■
Plastic and cfrp	C5121-625D2R060.0Z2	SIRA	10268761	2	D	0.625		0.625		1.250		3.500		0.060		2	Cylindrical	■
	C5121-625D2R125.0Z2	SIRA	10268762	2	D	0.625		0.625		1.250		3.500		0.125		2	Cylindrical	■
	C5121-750D2R015.0Z2	SIRA	10268763	2	D	0.750		0.750		1.500		4.000		0.015		2	Cylindrical	■
	C5121-750D2R030.0Z2	SIRA	10268764	2	D	0.750		0.750		1.500		4.000		0.030		2	Cylindrical	■
	C5121-750D2R060.0Z2	SIRA	10268765	2	D	0.750		0.750		1.500		4.000		0.060		2	Cylindrical	■
	C5121-750D2R125.0Z2	SIRA	10268766	2	D	0.750		0.750		1.500		4.000		0.125		2	Cylindrical	■
Graphite	C5121-750D2R190.0Z2	SIRA	10268767	2	D	0.750		0.750		1.500		4.000		0.190		2	Cylindrical	■
	C5121-250D3R015.0Z2	SIRA	10268750	3	D	0.250		0.250		0.750		2.500		0.015		2	Cylindrical	■
	C5121-250D3R030.0Z2	SIRA	10268751	3	D	0.250		0.250		0.750		2.500		0.030		2	Cylindrical	■
	C5121-375D3R015.0Z2	SIRA	10268752	3	D	0.375		0.375		1.000		2.500		0.015		2	Cylindrical	■
	C5121-375D3R030.0Z2	SIRA	10268753	3	D	0.375		0.375		1.000		2.500		0.030		2	Cylindrical	■

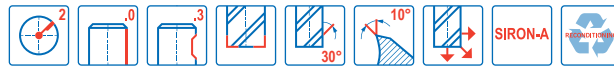
■ Stocked standard.

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical/Weldon – Sharp – Inch



- Tolerances:
- DMM=+.0001"/-.0004"
- DC ≤ Ø7/64" = ±.0005"
- DC > Ø7/64" = +.001"/-.000"
- NC tolerance
- Regrind possible if DC is ≥ Ø.375



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					inch	inch	inch	inch			
C5121-.375D2S.3Z2NC	SIRA	10269074	2	D	0.375	0.375	0.875	2.500	2	Weldon	■
C5121-.500D2S.3Z2NC	SIRA	10269075	2	D	0.500	0.500	1.000	3.000	2	Weldon	■
C5121-.625D2S.3Z2NC	SIRA	10269076	2	D	0.625	0.625	1.250	3.500	2	Weldon	■
C5121-.750D2S.3Z2NC	SIRA	10269077	2	D	0.750	0.750	1.500	4.000	2	Weldon	■
C5121-.250D3S.0Z2NC	SIRA	10269072	3	D	0.250	0.250	0.750	2.500	2	Cylindrical	■
C5121-.313D3S.0Z2NC	SIRA	10269073	3	D	0.313	0.313	0.813	2.500	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

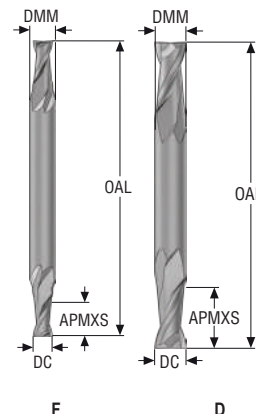
Graphite

X-Heads

Minimaster

C5121

General purpose – Universal – Square – 2 Flutes – Cylindrical – Sharp – Inch



—Tolerances:

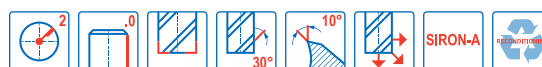
—DMM = ± 0.001 "/ ± 0.004 "

—DC $\leq \varnothing 7/64$ " = ± 0.005 "

—DC $> \varnothing 7/64$ " = ± 0.001 "/ ± 0.002 "

—Double end

—Reground possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5121-.500D1S.0Z2D	SIRA	10269088	1	D	0.500	0.500	0.625	3.000	—	—	2	Cylindrical	■
C5121-.031F2S.0Z2D	SIRA	10269078	2	F	0.031	0.125	0.063	1.500	0.063	0.036	2	Cylindrical	■
C5121-.047F2S.0Z2D	SIRA	10269079	2	F	0.047	0.125	0.094	1.500	0.094	0.052	2	Cylindrical	■
C5121-.063F2S.0Z2D	SIRA	10269080	2	F	0.063	0.125	0.125	1.500	0.125	0.068	2	Cylindrical	■
C5121-.078F2S.0Z2D	SIRA	10269081	2	F	0.078	0.125	0.125	1.500	0.125	0.083	2	Cylindrical	■
C5121-.094F2S.0Z2D	SIRA	10269082	2	F	0.094	0.125	0.188	1.500	0.188	0.099	2	Cylindrical	■
C5121-.125D2S.0Z2D	SIRA	10269083	2	D	0.125	0.125	0.250	1.500	—	—	2	Cylindrical	■
C5121-.188D2S.0Z2D	SIRA	10269084	2	D	0.188	0.188	0.375	2.000	—	—	2	Cylindrical	■
C5121-.250D2S.0Z2D	SIRA	10269085	2	D	0.250	0.250	0.500	2.500	—	—	2	Cylindrical	■
C5121-.313D2S.0Z2D	SIRA	10269086	2	D	0.313	0.313	0.500	2.500	—	—	2	Cylindrical	■
C5121-.375D2S.0Z2D	SIRA	10269087	2	D	0.375	0.375	0.563	2.500	—	—	2	Cylindrical	■

■ Stocked standard.

Cutting data – C5121 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				1	1,5	2	3	3,5	4	5	6	8	9	10	12	
P1	E	0,1 0.10	2 2.0	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	150 (135 — 165) 490 (440 — 540)
P2	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	58 (45 — 70) 190 (147 — 230)
P3	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	85 (70 — 95) 279 (246 — 312)
P4	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	100 (90 — 110) 330 (295 — 360)
P5	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	68 (50 — 75) 223 (165 — 245)
P6	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	87 (77 — 100) 285 (250 — 330)
P7	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	65 (55 — 75) 213 (180 — 245)
P8	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	65 (50 — 75) 213 (165 — 245)
P11	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	85 (70 — 95) 280 (230 — 310)
P12	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	55 (45 — 65) 180 (147 — 213)
M1	E	0,1 0.10	2 2.0	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	93 (83 — 100) 305 (270 — 360)
M2	E	0,1 0.10	2 2.0	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	60 (50 — 70) 200 (165 — 230)
M3	E	0,1 0.10	2 2.0	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	55 (45 — 65) 180 (147 — 213)
M4	E	0,1 0.10	2 2.0	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	45 (35 — 55) 147 (115 — 180)
M5	E	0,1 0.10	2 2.0	0,0044 0.00017	0,0065 0.00026	0,0085 0.00034	0,013 0.00050	0,015 0.00060	0,017 0.00065	0,022 0.00085	0,026 0.0010	0,034 0.0013	0,038 0.0015	0,042 0.0017	0,05 0.0020	35 (20 — 45) 114 (65 — 147)
K1	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	80 (70 — 90) 260 (230 — 290)
K2	E	0,1 0.10	2 2.0	0,0055 0.00022	0,0085 0.00034	0,011 0.00044	0,017 0.00065	0,02 0.00080	0,022 0.00085	0,028 0.0011	0,034 0.0013	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,065 0.0026	87 (75 — 100) 285 (245 — 330)
K3	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	65 (55 — 75) 213 (180 — 245)
K4	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	50 (35 — 65) 165 (115 — 213)
K5	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	45 (30 — 55) 147 (100 — 180)
K6	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	77 (65 — 85) 250 (210 — 280)
K7	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	77 (60 — 90) 250 (200 — 290)
S1	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	50 (35 — 60) 165 (115 — 200)
S2	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	25 (15 — 35) 82 (50 — 115)
S3	E	0,1 0.10	2 2.0	0,002 0.000080	0,0032 0.00013	0,0042 0.00017	0,0065 0.00026	0,0075 0.00030	0,0085 0.00034	0,01 0.00040	0,013 0.00050	0,017 0.00065	0,019 0.00075	0,02 0.00080	0,025 0.0010	11 (7,5 — 16) 35 (25 — 52)
S11	E	0,1 0.10	2 2.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	110 (95 — 120) 360 (311 — 390)
S12	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	77 (60 — 90) 250 (190 — 290)
S13	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	30 (20 — 40) 100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfpr
Graphite
X-Heads
Minimaster

Cutting data – C5121 Side milling – Inch

SMG		a _e /DC	a _p /DC	f _z														v _c
				1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1		
P1	E	0,1	2	0,0038	0,008	0,016	0,019	0,024	0,028	0,032	0,038	0,046	0,06	0,08	0,095	0,12	150 (135 — 165)	
		0.10	2.0	0.00015	0.00032	0.00065	0.00075	0.00095	0.0011	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0048	490 (440— 540)	
P2	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	58 (45— 70)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	190 (147 — 230)	
P3	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	85 (70 — 95)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	279 (246 — 312)	
P4	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	100 (90 — 110)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	330 (295 — 360)	
P5	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	68 (50 — 75)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	223 (165 — 245)	
P6	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	87 (77 — 100)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	285 (250 — 330)	
P7	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	65 (55 — 75)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	213 (180 — 245)	
P8	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	65 (50 — 75)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	213 (165 — 245)	
P11	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	85 (70 — 95)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	280 (230 — 310)	
P12	E	0,1	2	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,025	0,03	0,04	0,05	0,06	0,08	55 (45— 65)	
		0.10	2.0	0.00010	0.00020	0.00040	0.00050	0.00060	0.00070	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	180 (147 — 213)	
M1	E	0,1	2	0,0038	0,008	0,016	0,019	0,024	0,028	0,032	0,038	0,046	0,06	0,08	0,095	0,12	93 (83 — 100)	
		0.10	2.0	0.00015	0.00032	0.00065	0.00075	0.00095	0.0011	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0048	305 (270 — 360)	
M2	E	0,1	2	0,0038	0,008	0,016	0,019	0,024	0,028	0,032	0,038	0,046	0,06	0,08	0,095	0,12	60 (50 — 70)	
		0.10	2.0	0.00015	0.00032	0.00065	0.00075	0.00095	0.0011	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0048	200 (165 — 230)	
M3	E	0,1	2	0,0038	0,008	0,016	0,019	0,024	0,028	0,032	0,038	0,046	0,06	0,08	0,095	0,12	55 (45— 65)	
		0.10	2.0	0.00015	0.00032	0.00065	0.00075	0.00095	0.0011	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0048	180 (147 — 213)	
M4	E	0,1	2	0,0038	0,008	0,016	0,019	0,024	0,028	0,032	0,038	0,046	0,06	0,08	0,09	0,1	45 (35 — 55)	
		0.10	2.0	0.00015	0.00032	0.00065	0.00075	0.00095	0.0011	0.0013	0.0015	0.0018	0.0024	0.0032	0.0036	0.0040	147 (115 — 180)	
M5	E	0,1	2	0,0034	0,007	0,014	0,017	0,02	0,024	0,028	0,034	0,04	0,055	0,07	0,08	0,11	35 (20 — 45)	
		0.10	2.0	0.00013	0.00028	0.00055	0.00065	0.00080	0.00095	0.0011	0.0013	0.0016	0.0022	0.0028	0.0032	0.0044	114 (65 — 147)	
K1	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	80 (70 — 90)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	260 (230 — 290)	
K2	E	0,1	2	0,0044	0,009	0,018	0,022	0,026	0,032	0,036	0,044	0,055	0,07	0,09	0,11	0,14	87 (75 — 100)	
		0.10	2.0	0.00017	0.00036	0.00070	0.00085	0.0010	0.0013	0.0014	0.0017	0.0022	0.0028	0.0036	0.0044	0.0055	285 (245 — 330)	
K3	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	65 (55 — 75)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	213 (180 — 245)	
K4	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	50 (35 — 65)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	165 (115 — 213)	
K5	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	45 (30 — 55)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	147 (100 — 180)	
K6	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	77 (65 — 85)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	250 (210 — 280)	
K7	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	77 (60 — 90)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	250 (200 — 290)	
S1	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	50 (35 — 60)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	165 (115 — 200)	
S2	E	0,1	2	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,025	0,03	0,04	0,05	0,06	0,08	25 (15 — 35)	
		0.10	2.0	0.00010	0.00020	0.00040	0.00050	0.00060	0.00070	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	82 (50 — 115)	
S3	E	0,1	2	0,0017	0,0034	0,0065	0,0085	0,01	0,012	0,013	0,017	0,02	0,026	0,034	0,04	0,055	11 (7,5 — 16)	
		0.10	2.0	0.000065	0.00013	0.00026	0.00034	0.00040	0.00048	0.00050	0.00065	0.00080	0.0010	0.0013	0.0016	0.0022	35 (25 — 52)	
S11	E	0,1	2	0,0032	0,0065	0,013	0,016	0,02	0,022	0,026	0,032	0,04	0,05	0,065	0,08	0,1	110 (95 — 120)	
		0.10	2.0	0.00013	0.00026	0.00050	0.00065	0.00080	0.00085	0.0010	0.0013	0.0016	0.0020	0.0026	0.0032	0.0040	360 (311 — 390)	
S12	E	0,1	2	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,025	0,03	0,04	0,05	0,06	0,08	77 (60 — 90)	
		0.10	2.0	0.00010	0.00020	0.00040	0.00050	0.00060	0.00070	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	250 (190 — 290)	
S13	E	0,1	2	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,025	0,03	0,04	0,05	0,06	0,08	30 (20 — 40)	
		0.10	2.0	0.00010	0.00020	0.00040	0.00050	0.00060	0.00070	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	100 (65 — 130)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – C5121 Slot milling

SMG		a _p /DC	f _z												v _c
			1	1,5	2	3	3,5	4	5	6	8	9	10	12	
P1	E	1 1.0	0,0024 0.000095	0,0034 0.00013	0,0046 0.00018	0,007 0.00028	0,008 0.00032	0,009 0.00036	0,012 0.00048	0,014 0.00055	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,028 0.0011	75 (50 — 85) 245 (170 — 270)
P2	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (20 — 40) 100 (66 — 130)
P3	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	45 (30 — 60) 147 (98 — 196)
P4	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	55 (40 — 65) 180 (130 — 210)
P5	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 45) 115 (65 — 145)
P6	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	45 (30 — 60) 145 (100 — 195)
P7	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 50) 115 (65 — 165)
P8	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	25 (15 — 35) 80 (50 — 110)
P11	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (20 — 42) 105 (65 — 138)
P12	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	30 (20 — 40) 100 (65 — 130)
M1	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	42 (21 — 52) 138 (69 — 170)
M2	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (20 — 42) 105 (65 — 138)
M3	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	30 (15 — 40) 100 (50 — 130)
M4	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	22 (10 — 35) 72 (33 — 115)
M5	E	1 1.0	0,0013 0.000050	0,002 0.000080	0,0026 0.00010	0,004 0.00016	0,0046 0.00018	0,005 0.00020	0,0065 0.00026	0,008 0.00032	0,01 0.00040	0,012 0.00048	0,013 0.00050	0,016 0.00065	19 (16 — 30) 62 (52 — 100)
K1	E	1 1.0	0,0024 0.000095	0,0034 0.00013	0,0046 0.00018	0,007 0.00028	0,008 0.00032	0,009 0.00036	0,012 0.00048	0,014 0.00055	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,028 0.0011	30 (20 — 45) 100 (65 — 147)
K2	E	1 1.0	0,0024 0.000095	0,0034 0.00013	0,0046 0.00018	0,007 0.00028	0,008 0.00032	0,009 0.00036	0,012 0.00048	0,014 0.00055	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,028 0.0011	40 (30 — 50) 130 (100 — 165)
K3	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (26 — 45) 105 (85 — 148)
K4	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	22 (18 — 30) 72 (60 — 100)
K5	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	20 (15 — 30) 65 (50 — 100)
K6	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 50) 115 (65 — 165)
K7	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 50) 115 (65 — 165)
S1	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	25 (18 — 30) 80 (60 — 100)
S2	E	1 1.0	0,001 0.000040	0,0015 0.000060	0,002 0.000080	0,003 0.00012	0,0036 0.00014	0,004 0.00016	0,005 0.00020	0,006 0.00024	0,008 0.00032	0,009 0.00036	0,01 0.00040	0,012 0.00048	13 (9 — 18) 62 (30 — 60)
S3	E	1 1.0	0,001 0.000040	0,0015 0.000060	0,002 0.000080	0,003 0.00012	0,0036 0.00014	0,004 0.00016	0,005 0.00020	0,006 0.00024	0,008 0.00032	0,009 0.00036	0,01 0.00040	0,012 0.00048	7,0 (5 — 12) 23 (15 — 39)
S11	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (25 — 40) 114 (82 — 130)
S12	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (22 — 40) 105 (72 — 130)
S13	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	10 (8 — 15) 33 (26 — 50)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfrip
Graphite
X-Heads
Minimaster

Cutting data – C5121 Slot milling – Inch

SMG		a _p /DC	f _z													v _c
			1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1	
P1	E	1 1.0	0,0018 0.000070	0,0036 0.00014	0,0075 0.00030	0,009 0.00036	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,022 0.00085	0,03 0.0012	0,036 0.0014	0,044 0.0017	0,06 0.0024	75 (50 — 85) 245 (170 — 270)
	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	32 (20 — 40) 100 (66 — 130)
	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	45 (30 — 60) 147 (98 — 196)
	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	55 (40 — 65) 180 (130 — 210)
	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 45) 115 (65 — 145)
P2	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	45 (30 — 60) 147 (98 — 196)
P3	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	55 (40 — 65) 180 (130 — 210)
P4	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 45) 115 (65 — 145)
P5	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	45 (30 — 60) 147 (98 — 196)
P6	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	55 (40 — 65) 180 (130 — 210)
P7	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 45) 115 (65 — 145)
P8	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	45 (30 — 60) 147 (98 — 196)
P11	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	55 (40 — 65) 180 (130 — 210)
P12	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 45) 115 (65 — 145)
M1	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	45 (30 — 60) 147 (98 — 196)
M2	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	55 (40 — 65) 180 (130 — 210)
M3	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 45) 115 (65 — 145)
M4	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	45 (30 — 60) 147 (98 — 196)
M5	E	1 1.0	0,001 0.000040	0,002 0.000080	0,004 0.00017	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,012 0.00048	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,034 0.0013	19 (16 — 30) 62 (52 — 100)
K1	E	1 1.0	0,0018 0.000070	0,0036 0.00014	0,0075 0.00030	0,009 0.00036	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,022 0.00085	0,03 0.0012	0,036 0.0014	0,044 0.0017	0,06 0.0024	30 (20 — 45) 100 (65 — 147)
K2	E	1 1.0	0,0018 0.000070	0,0036 0.00014	0,0075 0.00030	0,009 0.00036	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,022 0.00085	0,03 0.0012	0,036 0.0014	0,044 0.0017	0,06 0.0024	40 (30 — 50) 130 (100 — 165)
K3	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	32 (26 — 45) 105 (85 — 148)
K4	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	22 (18 — 30) 72 (60 — 100)
K5	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	20 (15 — 30) 65 (50 — 100)
K6	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 50) 115 (65 — 165)
K7	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (20 — 50) 115 (65 — 165)
S1	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	25 (18 — 30) 80 (60 — 100)
S2	E	1 1.0	0,0008 0.000032	0,0016 0.000065	0,0032 0.00013	0,004 0.00016	0,0048 0.00019	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,025 0.0010	13 (9 — 18) 62 (30 — 60)
S3	E	1 1.0	0,0008 0.000032	0,0016 0.000065	0,0032 0.00013	0,004 0.00016	0,0048 0.00019	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,025 0.0010	7,0 (5 — 12) 23 (15 — 39)
S11	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	35 (25 — 40) 114 (82 — 130)
S12	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	32 (22 — 40) 105 (72 — 130)
S13	E	1 1.0	0,0013 0.000050	0,0028 0.00011	0,0055 0.00022	0,0065 0.00026	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,044 0.0017	10 (8 — 15) 33 (26 — 50)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

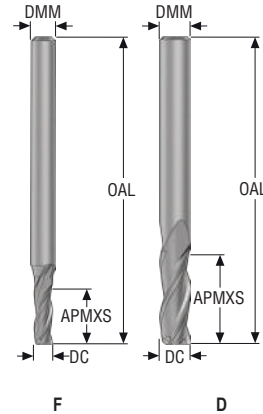
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

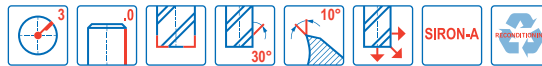
All cutting data are target values

C5131

General purpose – Universal – Square – 3 Flutes – Cylindrical – Sharp



- Tolerances:
- DMM=h5
- DC= h10
- Regrind possible if DC is $\geq \varnothing 10$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm			
C5131-060D1S.0Z3	SIRA	10268801	1	D	6,0	6,0	9,0	57,0	—	—	3	Cylindrical	■
C5131-020F2S.0Z3	SIRA	10268792	2	F	2,0	3,0	4,0	38,0	7,683	2,127	3	Cylindrical	■
C5131-030D2S.0Z3	SIRA	10268794	2	D	3,0	3,0	6,0	38,0	—	—	3	Cylindrical	■
C5131-040D2S.0Z3	SIRA	10268797	2	D	4,0	4,0	8,0	50,0	—	—	3	Cylindrical	■
C5131-050F2S.0Z3	SIRA	10268799	2	D	5,0	6,0	10,0	57,0	—	—	3	Cylindrical	■
C5131-060D2S.0Z3	SIRA	10268802	2	D	6,0	6,0	12,0	57,0	—	—	3	Cylindrical	■
C5131-080D2S.0Z3	SIRA	10268804	2	D	8,0	8,0	16,0	63,0	—	—	3	Cylindrical	■
C5131-090F2S.0Z3	SIRA	10268806	2	F	9,0	10,0	22,0	72,0	18,35	9,127	3	Cylindrical	■
C5131-100D2S.0Z3	SIRA	10268807	2	D	10,0	10,0	22,0	72,0	—	—	3	Cylindrical	■
C5131-120D2S.0Z3	SIRA	10268809	2	D	12,0	12,0	25,0	83,0	—	—	3	Cylindrical	■
C5131-015F3S.0Z3	SIRA	10268791	3	F	1,5	3,0	4,5	38,0	8,183	1,627	3	Cylindrical	■
C5131-020F3S.0Z3	SIRA	10268793	3	F	2,0	3,0	6,3	38,0	9,983	2,127	3	Cylindrical	■
C5131-035F3S.0Z3	SIRA	10268796	3	F	3,5	4,0	12,0	50,0	15,683	3,627	3	Cylindrical	■
C5131-050F3S.0Z3	SIRA	10268800	3	D	5,0	6,0	16,0	57,0	—	—	3	Cylindrical	■
C5131-060D3S.0Z3	SIRA	10268803	3	D	6,0	6,0	19,0	63,0	—	—	3	Cylindrical	■
C5131-080D3S.0Z3	SIRA	10268805	3	D	8,0	8,0	20,0	63,0	—	—	3	Cylindrical	■
C5131-010F4S.0Z3	SIRA	10268790	4	F	1,0	3,0	4,0	38,0	7,683	1,127	3	Cylindrical	■
C5131-030D4S.0Z3	SIRA	10268795	4	D	3,0	3,0	12,0	38,0	—	—	3	Cylindrical	■
C5131-040D4S.0Z3	SIRA	10268798	4	D	4,0	4,0	14,0	50,0	—	—	3	Cylindrical	■
C5131-100D4S.0Z3	SIRA	10268808	4	D	10,0	10,0	35,0	89,0	—	—	3	Cylindrical	■
C5131-120D4S.0Z3	SIRA	10268810	4	D	12,0	12,0	50,0	100,0	—	—	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

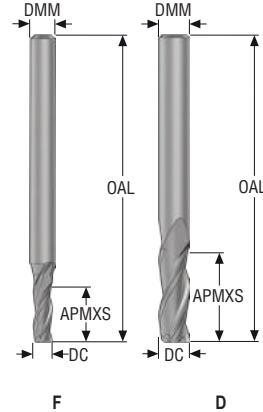
Graphite

X-Heads

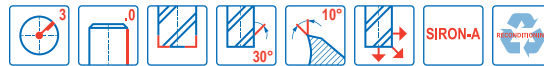
Minimaster

C5131

General purpose – Universal – Square – 3 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +0.000"/-0.002"$
—Reground possible if DC is $\geq \varnothing 0.375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5131-.047F2S.0Z3	SIRA	10268772	2	F	0.047	0.125	0.109	1.500	0.109	0.052	3	Cylindrical	■
C5131-.078F2S.0Z3	SIRA	10268774	2	F	0.078	0.125	0.188	1.500	0.188	0.083	3	Cylindrical	■
C5131-.438D2S.0Z3	SIRA	10268784	2	D	0.438	0.438	1.000	2.750	—	—	3	Cylindrical	■
C5131-.500D2S.0Z3	SIRA	10268785	2	D	0.500	0.500	1.000	3.000	—	—	3	Cylindrical	■
C5131-.563D2S.0Z3	SIRA	10268786	2	D	0.563	0.563	1.125	3.500	—	—	3	Cylindrical	■
C5131-.625D2S.0Z3	SIRA	10268787	2	D	0.625	0.625	1.250	3.500	—	—	3	Cylindrical	■
C5131-.750D2S.0Z3	SIRA	10268788	2	D	0.750	0.750	1.500	4.000	—	—	3	Cylindrical	■
C5131-1.000D2S.0Z3	SIRA	10268789	2	D	1.000	1.000	1.500	4.000	—	—	3	Cylindrical	■
C5131-.031F3S.0Z3	SIRA	10268771	3	F	0.031	0.125	0.078	1.500	0.078	0.036	3	Cylindrical	■
C5131-.063F3S.0Z3	SIRA	10268773	3	F	0.063	0.125	0.188	1.500	0.188	0.068	3	Cylindrical	■
C5131-.094F3S.0Z3	SIRA	10268775	3	F	0.094	0.125	0.281	1.500	0.281	0.099	3	Cylindrical	■
C5131-.109F3S.0Z3	SIRA	10268776	3	F	0.109	0.125	0.375	1.500	0.375	0.114	3	Cylindrical	■
C5131-.156F3S.0Z3	SIRA	10268778	3	F	0.156	0.188	0.500	2.000	0.500	0.161	3	Cylindrical	■
C5131-.188D3S.0Z3	SIRA	10268779	3	D	0.188	0.188	0.625	2.000	—	—	3	Cylindrical	■
C5131-.219F3S.0Z3	SIRA	10268780	3	F	0.219	0.250	0.625	2.500	0.625	0.224	3	Cylindrical	■
C5131-.250D3S.0Z3	SIRA	10268781	3	D	0.250	0.250	0.750	2.500	—	—	3	Cylindrical	■
C5131-.313D3S.0Z3	SIRA	10268782	3	D	0.313	0.313	0.813	2.500	—	—	3	Cylindrical	■
C5131-.375D3S.0Z3	SIRA	10268783	3	D	0.375	0.375	1.000	2.500	—	—	3	Cylindrical	■
C5131-.125D4S.0Z3	SIRA	10268777	4	D	0.125	0.125	0.500	1.500	—	—	3	Cylindrical	■

■ Stocked standard.

Cutting data – C5131 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				1	1,5	2	3	3,5	4	5	6	8	9	10	12	
P1	E	0,1 0.10	1,9 1.9	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	150 (135 — 165) 490 (440 — 540)
P2	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	58 (45 — 70) 190 (147 — 230)
P3	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	85 (70 — 95) 279 (246 — 312)
P4	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	100 (90 — 110) 330 (295 — 360)
P5	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	68 (50 — 75) 223 (165 — 245)
P6	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	87 (77 — 100) 285 (250 — 330)
P7	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	65 (55 — 75) 213 (180 — 245)
P8	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	65 (50 — 75) 213 (165 — 245)
P11	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	85 (70 — 95) 280 (230 — 310)
P12	E	0,1 0.10	1,9 1.9	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	55 (45 — 65) 180 (147 — 213)
M1	E	0,1 0.10	1,9 1.9	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	93 (83 — 100) 305 (270 — 360)
M2	E	0,1 0.10	1,9 1.9	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	60 (50 — 70) 200 (165 — 230)
M3	E	0,1 0.10	1,9 1.9	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	55 (45 — 65) 180 (147 — 213)
M4	E	0,1 0.10	1,9 1.9	0,0048 0.00019	0,0075 0.00030	0,01 0.00040	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,044 0.0017	0,048 0.0019	0,06 0.0024	45 (35 — 55) 147 (115 — 180)
M5	E	0,1 0.10	1,9 1.9	0,0044 0.00017	0,0065 0.00026	0,0085 0.00034	0,013 0.00050	0,015 0.00060	0,017 0.00065	0,022 0.00085	0,026 0.0010	0,034 0.0013	0,038 0.0015	0,042 0.0017	0,05 0.0020	35 (20 — 45) 114 (65 — 147)
K1	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	80 (70 — 90) 260 (230 — 290)
K2	E	0,1 0.10	1,9 1.9	0,0055 0.00022	0,0085 0.00034	0,011 0.00044	0,017 0.00065	0,02 0.00080	0,022 0.00085	0,028 0.0011	0,034 0.0013	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,065 0.0026	87 (75 — 100) 285 (245 — 330)
K3	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	65 (55 — 75) 213 (180 — 245)
K4	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	50 (35 — 65) 165 (115 — 213)
K5	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	45 (30 — 55) 147 (100 — 180)
K6	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	77 (65 — 85) 250 (210 — 280)
K7	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	77 (60 — 90) 250 (200 — 290)
S1	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	50 (35 — 60) 165 (115 — 200)
S2	E	0,1 0.10	1,9 1.9	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	25 (15 — 35) 82 (50 — 115)
S3	E	0,1 0.10	1,9 1.9	0,002 0.000080	0,0032 0.00013	0,0042 0.00017	0,0065 0.00026	0,0075 0.00030	0,0085 0.00034	0,01 0.00040	0,013 0.00050	0,017 0.00065	0,019 0.00075	0,02 0.00080	0,025 0.0010	11 (7,5 — 16) 35 (25 — 52)
S11	E	0,1 0.10	1,9 1.9	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,025 0.0010	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,05 0.0020	110 (95 — 120) 360 (311 — 390)
S12	E	0,1 0.10	1,9 1.9	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	77 (60 — 90) 250 (190 — 290)
S13	E	0,1 0.10	1,9 1.9	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	30 (20 — 40) 100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfpr
Graphite
X-Heads
Minimaster

Cutting data – C5131 Side milling – Inch

SMG		a _e /DC	a _p /DC	f _z														v _c
				1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1		
P1	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	150 (135 — 165) 490 (440 — 540)	
P2	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	58 (45 — 70) 190 (147 — 230)	
P3	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	85 (70 — 95) 279 (246 — 312)	
P4	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	100 (90 — 110) 330 (295 — 360)	
P5	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	68 (50 — 75) 223 (165 — 245)	
P6	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	87 (77 — 100) 285 (250 — 330)	
P7	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	65 (55 — 75) 213 (180 — 245)	
P8	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	65 (50 — 75) 213 (165 — 245)	
P11	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	85 (70 — 95) 280 (230 — 310)	
P12	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	55 (45 — 65) 180 (147 — 213)	
M1	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	93 (83 — 100) 305 (270 — 360)	
M2	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	60 (50 — 70) 200 (165 — 230)	
M3	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	55 (45 — 65) 180 (147 — 213)	
M4	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,09 0.0036	0,1 0.0040	45 (35 — 55) 147 (115 — 180)	
M5	E	0,1 0.10	2 2.0	0,0034 0.00013	0,007 0.00028	0,014 0.00055	0,017 0.00065	0,02 0.00080	0,024 0.00095	0,028 0.0011	0,034 0.0016	0,04 0.0016	0,055 0.0022	0,07 0.0028	0,08 0.0032	0,11 0.0044	35 (20 — 45) 114 (65 — 147)	
K1	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	80 (70 — 90) 260 (230 — 290)	
K2	E	0,1 0.10	2 2.0	0,0044 0.00017	0,009 0.00036	0,018 0.00070	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,036 0.0014	0,044 0.0017	0,055 0.0022	0,07 0.0028	0,09 0.0036	0,11 0.0044	0,14 0.0055	87 (75 — 100) 285 (245 — 330)	
K3	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	65 (55 — 75) 213 (180 — 245)	
K4	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	50 (35 — 65) 165 (115 — 213)	
K5	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	45 (30 — 55) 147 (100 — 180)	
K6	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	77 (65 — 85) 250 (210 — 280)	
K7	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	77 (60 — 90) 250 (200 — 290)	
S1	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	50 (35 — 60) 165 (115 — 200)	
S2	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	25 (15 — 35) 82 (50 — 115)	
S3	E	0,1 0.10	2 2.0	0,0017 0.000065	0,0034 0.00013	0,0065 0.00026	0,0085 0.00034	0,01 0.00040	0,012 0.00048	0,013 0.00050	0,017 0.00065	0,02 0.00080	0,026 0.0010	0,034 0.0013	0,04 0.0016	0,055 0.0022	11 (7,5 — 16) 35 (25 — 52)	
S11	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	110 (95 — 120) 360 (311 — 390)	
S12	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	77 (60 — 90) 250 (190 — 290)	
S13	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	30 (20 — 40) 100 (65 — 130)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – C5131 Slot milling

SMG		a _p /DC	f _z												v _c	
			1	1,5	2	3	3,5	4	5	6	8	9	10	12		
P1	E	1 1.0	0,0024 0.000095	0,0034 0.00013	0,0046 0.00018	0,007 0.00028	0,008 0.00032	0,009 0.00036	0,012 0.00048	0,014 0.00055	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,028 0.0011	75 (50 — 85) 245 (170 — 270)	Steel and cast iron
P2	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (20 — 40) 100 (66 — 130)	
P3	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	45 (30 — 60) 147 (98 — 196)	
P4	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	55 (40 — 65) 180 (130 — 210)	
P5	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 45) 115 (65 — 145)	
P6	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	45 (30 — 60) 145 (100 — 195)	
P7	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 50) 115 (65 — 165)	
P8	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	25 (15 — 35) 80 (50 — 110)	
P11	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (20 — 42) 105 (65 — 138)	
P12	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	30 (20 — 40) 100 (65 — 130)	
M1	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	42 (21 — 52) 138 (69 — 170)	Non ferrous
M2	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (20 — 42) 105 (65 — 138)	
M3	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	30 (15 — 40) 100 (50 — 130)	
M4	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	22 (10 — 35) 72 (33 — 115)	
M5	E	1 1.0	0,0013 0.000050	0,002 0.000080	0,0026 0.00010	0,004 0.00016	0,0046 0.00018	0,005 0.00020	0,0065 0.00026	0,008 0.00032	0,01 0.00040	0,012 0.00048	0,013 0.00050	0,016 0.00065	19 (16 — 30) 62 (52 — 100)	
K1	E	1 1.0	0,0024 0.000095	0,0034 0.00013	0,0046 0.00018	0,007 0.00028	0,008 0.00032	0,009 0.00036	0,012 0.00048	0,014 0.00055	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,028 0.0011	30 (20 — 45) 100 (65 — 147)	Hard
K2	E	1 1.0	0,0024 0.000095	0,0034 0.00013	0,0046 0.00018	0,007 0.00028	0,008 0.00032	0,009 0.00036	0,012 0.00048	0,014 0.00055	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,028 0.0011	40 (30 — 50) 130 (100 — 165)	
K3	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (26 — 45) 105 (85 — 148)	Plastic and cf/p
K4	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	22 (18 — 30) 72 (60 — 100)	
K5	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	20 (15 — 30) 65 (50 — 100)	
K6	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 50) 115 (65 — 165)	
K7	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (20 — 50) 115 (65 — 165)	
S1	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	25 (18 — 30) 80 (60 — 100)	Graphite
S2	E	1 1.0	0,001 0.000040	0,0015 0.000060	0,002 0.000080	0,003 0.00012	0,0036 0.00014	0,004 0.00016	0,005 0.00020	0,006 0.00024	0,008 0.00032	0,009 0.00036	0,01 0.00040	0,012 0.00048	13 (9 — 18) 62 (30 — 60)	
S3	E	1 1.0	0,001 0.000040	0,0015 0.000060	0,002 0.000080	0,003 0.00012	0,0036 0.00014	0,004 0.00016	0,005 0.00020	0,006 0.00024	0,008 0.00032	0,009 0.00036	0,01 0.00040	0,012 0.00048	7,0 (5 — 12) 23 (15 — 39)	
S11	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	35 (25 — 40) 114 (82 — 130)	X-Heads
S12	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	32 (22 — 40) 105 (72 — 130)	
S13	E	1 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	10 (8 — 15) 33 (26 — 50)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – C5131 Slot milling – Inch

SMG		a _p /DC	f _z													v _c
			1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1	
P1	E	1	0,0018	0,0036	0,0075	0,009	0,011	0,013	0,015	0,018	0,022	0,03	0,036	0,044	0,06	75 (50 — 85)
		1.0	0.000070	0.00014	0.00030	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0012	0.0014	0.0017	0.0024	245 (170 — 270)
P2	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	32 (20 — 40)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	100 (66 — 130)
P3	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	45 (30 — 60)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	147 (98 — 196)
P4	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	55 (40 — 65)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	180 (130 — 210)
P5	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	35 (20 — 45)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	115 (65 — 145)
P6	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	45 (30 — 60)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	145 (180 — 195)
P7	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	35 (20 — 50)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	115 (65 — 165)
P8	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	25 (15 — 35)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	80 (50 — 110)
P11	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	32 (20 — 42)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	105 (65 — 138)
P12	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	30 (20 — 40)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	100 (65 — 130)
M1	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	42 (21 — 52)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	138 (69 — 170)
M2	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	32 (20 — 42)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	105 (65 — 138)
M3	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	30 (15 — 40)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	100 (50 — 130)
M4	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	22 (10 — 35)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	72 (33 — 115)
M5	E	1	0,001	0,002	0,0042	0,005	0,006	0,007	0,0085	0,01	0,012	0,017	0,02	0,025	0,034	19 (16 — 30)
		1.0	0.000040	0.000080	0.00017	0.00020	0.00024	0.00028	0.00034	0.00040	0.00048	0.00065	0.00080	0.0010	0.0013	62 (52 — 100)
K1	E	1	0,0018	0,0036	0,0075	0,009	0,011	0,013	0,015	0,018	0,022	0,03	0,036	0,044	0,06	30 (20 — 45)
		1.0	0.000070	0.00014	0.00030	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0012	0.0014	0.0017	0.0024	100 (65 — 147)
K2	E	1	0,0018	0,0036	0,0075	0,009	0,011	0,013	0,015	0,018	0,022	0,03	0,036	0,044	0,06	40 (30 — 50)
		1.0	0.000070	0.00014	0.00030	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0012	0.0014	0.0017	0.0024	130 (100 — 165)
K3	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	32 (26 — 45)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	105 (85 — 148)
K4	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	22 (18 — 30)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	72 (60 — 100)
K5	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	20 (15 — 30)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	65 (50 — 100)
K6	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	35 (20 — 50)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	115 (65 — 165)
K7	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	35 (20 — 50)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	115 (65 — 165)
S1	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	25 (18 — 30)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	80 (60 — 100)
S2	E	1	0,0008	0,0016	0,0032	0,004	0,0048	0,0055	0,0065	0,008	0,0095	0,013	0,016	0,019	0,025	13 (9 — 18)
		1.0	0.000032	0.000065	0.00013	0.00016	0.00019	0.00022	0.00026	0.00032	0.00038	0.00050	0.00065	0.00075	0.0010	62 (30 — 60)
S3	E	1	0,0008	0,0016	0,0032	0,004	0,0048	0,0055	0,0065	0,008	0,0095	0,013	0,016	0,019	0,025	7,0 (5 — 12)
		1.0	0.000032	0.000065	0.00013	0.00016	0.00019	0.00022	0.00026	0.00032	0.00038	0.00050	0.00065	0.00075	0.0010	23 (15 — 39)
S11	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	35 (25 — 40)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	114 (82 — 130)
S12	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	32 (22 — 40)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	105 (72 — 130)
S13	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	10 (8 — 15)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	33 (26 — 50)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

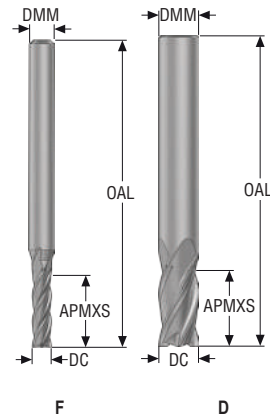
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

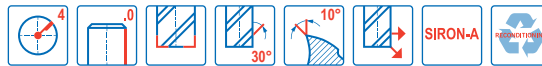
All cutting data are target values

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp



- Tolerances:
- DMM=h5
- DC= h10
- Regrind possible if DC is $\geq \varnothing 10$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm			
C5141-060D1S.0Z4	SIRA	10268459	1	D	6,0	6,0	9,0	57,0	—	—	4	Cylindrical	■
C5141-020F2S.0Z4	SIRA	10268450	2	F	2,0	3,0	4,0	39,0	7,683	2,127	4	Cylindrical	■
C5141-030D2S.0Z4	SIRA	10268452	2	D	3,0	3,0	6,0	38,0	—	—	4	Cylindrical	■
C5141-040D2S.0Z4	SIRA	10268455	2	D	4,0	4,0	8,0	50,0	—	—	4	Cylindrical	■
C5141-050F2S.0Z4	SIRA	10268457	2	F	5,0	5,0	10,0	57,0	—	—	4	Cylindrical	■
C5141-060D2S.0Z4	SIRA	10268460	2	D	6,0	6,0	12,0	57,0	—	—	4	Cylindrical	■
C5141-080D2S.0Z4	SIRA	10268462	2	D	8,0	8,0	16,0	63,0	—	—	4	Cylindrical	■
C5141-080D3S.0Z4	SIRA	10268463	2	D	8,0	8,0	20,0	64,0	—	—	4	Cylindrical	■
C5141-090F2S.0Z4	SIRA	10268464	2	F	9,0	10,0	22,0	73,0	18,35	9,127	4	Cylindrical	■
C5141-100D2S.0Z4	SIRA	10268465	2	D	10,0	10,0	22,0	73,0	—	—	4	Cylindrical	■
C5141-120D2S.0Z4	SIRA	10268467	2	D	12,0	12,0	25,0	74,0	—	—	4	Cylindrical	■
C5141-160D2S.0Z4	SIRA	10268469	2	D	16,0	16,0	32,0	92,0	—	—	4	Cylindrical	■
C5141-200D2S.0Z4	SIRA	10268471	2	D	20,0	20,0	35,0	104,0	—	—	4	Cylindrical	■
C5141-015F3S.0Z4	SIRA	10268449	3	F	1,5	3,0	4,5	39,0	8,183	1,627	4	Cylindrical	■
C5141-020F3S.0Z4	SIRA	10268451	3	F	2,0	3,0	6,3	39,0	9,983	2,127	4	Cylindrical	■
C5141-035F3S.0Z4	SIRA	10268454	3	F	3,5	4,0	12,0	51,0	15,683	3,627	4	Cylindrical	■
C5141-050F3S.0Z4	SIRA	10268458	3	F	5,0	6,0	16,0	51,0	—	—	4	Cylindrical	■
C5141-060D3S.0Z4	SIRA	10268461	3	D	6,0	6,0	19,0	51,0	—	—	4	Cylindrical	■
C5141-160D3S.0Z4	SIRA	10268470	3	D	16,0	16,0	50,0	115,0	—	—	4	Cylindrical	■
C5141-200D3S.0Z4	SIRA	10268472	3	D	20,0	20,0	60,0	125,0	—	—	4	Cylindrical	■
C5141-010F4S.0Z4	SIRA	10268448	4	F	1,0	3,0	4,0	39,0	7,683	1,127	4	Cylindrical	■
C5141-030D4S.0Z4	SIRA	10268453	4	D	3,0	3,0	12,0	39,0	—	—	4	Cylindrical	■
C5141-040D4S.0Z4	SIRA	10268456	4	D	4,0	4,0	14,0	51,0	—	—	4	Cylindrical	■
C5141-100D4S.0Z4	SIRA	10268466	4	D	10,0	10,0	35,0	89,0	—	—	4	Cylindrical	■
C5141-120D4S.0Z4	SIRA	10268468	4	D	12,0	12,0	50,0	100,0	—	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

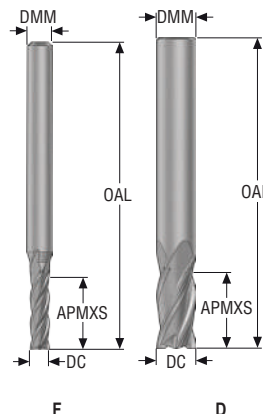
Graphite

X-Heads

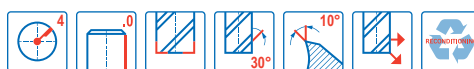
Minimaster

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +.000"/-0.002"$
—Reground possible if DC is $\geq \varnothing .375$

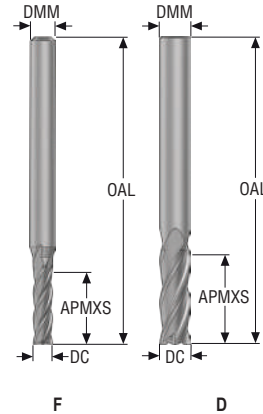


	Designation	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		LN		PCEDC	Shank	Stock standard
					inch		inch		inch		inch		inch				
Non ferrous	C5141-.375D1S.0Z4	10268208	1	D	0.375		0.375		0.625		2.000		—	—	4	Cylindrical	■
	C5141-.438D1S.0Z4	10268220	1	D	0.438		0.438		0.625		2.500		—	—	4	Cylindrical	■
	C5141-.500D1S.0Z4	10268228	1	D	0.500		0.500		0.625		2.500		—	—	4	Cylindrical	■
Hard	C5141-.625D1S.0Z4	10268236	1	D	0.625		0.625		0.750		3.000		—	—	4	Cylindrical	■
	C5141-.750D1S.0Z4	10268242	1	D	0.750		0.750		1.000		3.000		—	—	4	Cylindrical	■
	C5141-1.000D1S.0Z4	10268249	1	D	1.000		1.000		1.000		3.000		—	—	4	Cylindrical	■
Plastic and cfrp	C5141-.016F2S.0Z4	10268152	2	F	0.016		0.125		0.031		1.500		0.031	0.021	4	Cylindrical	■
	C5141-.047F2S.0Z4	10268155	2	F	0.047		0.125		0.109		1.500		0.109	0.052	4	Cylindrical	■
	C5141-.063F2S.0Z4	10268157	2	F	0.063		0.125		0.125		1.500		0.125	0.068	4	Cylindrical	■
Graphite	C5141-.078F2S.0Z4	10268161	2	F	0.078		0.125		0.188		1.500		0.188	0.083	4	Cylindrical	■
	C5141-.094F2S.0Z4	10268163	2	F	0.094		0.125		0.188		1.500		0.188	0.099	4	Cylindrical	■
	C5141-.125D2S.0Z4	10268168	2	D	0.125		0.125		0.250		1.500		—	—	4	Cylindrical	■
X-Heads	C5141-.156F2S.0Z4	10268175	2	F	0.156		0.188		0.313		2.000		0.313	0.161	4	Cylindrical	■
	C5141-.188D2S.0Z4	10268178	2	D	0.188		0.188		0.375		2.000		—	—	4	Cylindrical	■
	C5141-.219F2S.0Z4	10268185	2	F	0.219		0.250		0.438		2.000		0.438	0.224	4	Cylindrical	■
Minimaster	C5141-.250D2S.0Z4	10268188	2	D	0.250		0.250		0.500		2.000		—	—	4	Cylindrical	■
	C5141-.313D2S.0Z4	10268198	2	D	0.313		0.313		0.500		2.000		—	—	4	Cylindrical	■
	C5141-.375D2S.0Z4	10268209	2	D	0.375		0.375		1.000		2.500		—	—	4	Cylindrical	■
	C5141-.406F2S.0Z4	10268218	2	F	0.406		0.438		1.000		2.750		1.000	0.411	4	Cylindrical	■
	C5141-.422F2S.0Z4	10268219	2	F	0.422		0.438		1.000		2.750		1.000	0.427	4	Cylindrical	■
	C5141-.438D2S.0Z4	10268221	2	D	0.438		0.438		1.000		2.750		—	—	4	Cylindrical	■
	C5141-.469F2S.0Z4	10268227	2	F	0.469		0.500		1.000		3.000		1.000	0.474	4	Cylindrical	■
	C5141-.500D2S.0Z4	10268229	2	D	0.500		0.500		1.000		3.000		—	—	4	Cylindrical	■
	C5141-.563D2S.0Z4	10268235	2	D	0.563		0.563		1.125		3.500		—	—	4	Cylindrical	■
	C5141-.625D2S.0Z4	10268237	2	D	0.625		0.625		1.250		3.500		—	—	4	Cylindrical	■
	C5141-.688F2S.0Z4	10268241	2	F	0.688		0.750		1.375		4.000		1.375	0.693	4	Cylindrical	■
	C5141-.750D2S.0Z4	10268243	2	D	0.750		0.750		1.500		4.000		—	—	4	Cylindrical	■
	C5141-.875D2S.0Z4	10268248	2	D	0.875		0.875		1.500		4.000		—	—	4	Cylindrical	■
	C5141-1.000D2S.0Z4	10268250	2	D	1.000		1.000		1.500		4.000		—	—	4	Cylindrical	■
	C5141-1.250D2S.0Z4	10268255	2	D	1.250		1.250		2.000		4.500		—	—	4	Cylindrical	■
	C5141-.031F3S.0Z4	10268153	3	F	0.031		0.125		0.078		1.500		0.078	0.036	4	Cylindrical	■
	C5141-.047F3S.0Z4	10268156	3	F	0.047		0.125		0.125		1.500		0.125	0.052	4	Cylindrical	■
	C5141-.063F3S.0Z4	10268158	3	F	0.063		0.125		0.188		1.500		0.188	0.068	4	Cylindrical	■
	C5141-.078F3S.0Z4	10268162	3	F	0.078		0.125		0.250		1.500		0.250	0.083	4	Cylindrical	■
	C5141-.094F3S.0Z4	10268164	3	F	0.094		0.125		0.281		1.500		0.281	0.099	4	Cylindrical	■
	C5141-.109F3S.0Z4	10268167	3	F	0.109		0.125		0.375		1.500		0.375	0.114	4	Cylindrical	■

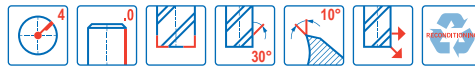
■ Stocked standard.

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC ≤ Ø7/64" = ±.0005"
—DC > Ø7/64" = +.000"/-.002"
—Regrind possible if DC is ≥ Ø.375



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch			
C5141-.156F3S.0Z4	10268176	3	F	0.156	0.188	0.500	2.000	0.500	0.161	4	Cylindrical	■
C5141-.188D3S.0Z4	10268179	3	D	0.188	0.188	0.625	2.000	—	—	4	Cylindrical	■
C5141-.203F3S.0Z4	10268184	3	F	0.203	0.250	0.625	2.500	0.625	0.208	4	Cylindrical	■
C5141-.219F3S.0Z4	10268186	3	F	0.219	0.250	0.625	2.500	0.625	0.224	4	Cylindrical	■
C5141-.234F3S.0Z4	10268187	3	F	0.234	0.250	0.750	2.500	0.750	0.239	4	Cylindrical	■
C5141-.250D3S.0Z4	10268189	3	D	0.250	0.250	0.750	2.500	—	—	4	Cylindrical	■
C5141-.266F3S.0Z4	10268195	3	F	0.266	0.313	0.750	2.500	0.750	0.271	4	Cylindrical	■
C5141-.281F3S.0Z4	10268196	3	F	0.281	0.313	0.750	2.500	0.750	0.286	4	Cylindrical	■
C5141-.297F3S.0Z4	10268197	3	F	0.297	0.313	0.813	2.500	0.813	0.302	4	Cylindrical	■
C5141-.313D3S.0Z4	10268199	3	D	0.313	0.313	0.813	2.500	—	—	4	Cylindrical	■
C5141-.328F3S.0Z4	10268205	3	F	0.328	0.375	1.000	2.500	1.000	0.333	4	Cylindrical	■
C5141-.344F3S.0Z4	10268206	3	F	0.344	0.375	1.000	2.500	1.000	0.349	4	Cylindrical	■
C5141-.359F3S.0Z4	10268207	3	F	0.359	0.375	1.000	2.500	1.000	0.364	4	Cylindrical	■
C5141-.375D3S.0Z4	10268210	3	D	0.375	0.375	1.000	3.000	—	—	4	Cylindrical	■
C5141-.391F3S.0Z4	10268217	3	F	0.391	0.438	1.000	2.750	1.000	0.396	4	Cylindrical	■
C5141-.438D3S.0Z4	10268222	3	D	0.438	0.438	1.000	4.000	—	—	4	Cylindrical	■
C5141-.500D3S.0Z4	10268230	3	D	0.500	0.500	1.000	4.000	—	—	4	Cylindrical	■
C5141-.625D3S.0Z4	10268238	3	D	0.625	0.625	2.000	6.000	—	—	4	Cylindrical	■
C5141-.750D3S.0Z4	10268244	3	D	0.750	0.750	2.000	6.000	—	—	4	Cylindrical	■
C5141-1.000D3S.0Z4	10268251	3	D	1.000	1.000	2.000	6.000	—	—	4	Cylindrical	■
C5141-.031F4S.0Z4	10268154	4	F	0.031	0.125	0.094	1.500	0.094	0.036	4	Cylindrical	■
C5141-.063F4S.0Z4	10268159	4	F	0.063	0.125	0.250	1.500	0.250	0.068	4	Cylindrical	■
C5141-.094F4S.0Z4	10268165	4	F	0.094	0.125	0.375	1.500	0.375	0.099	4	Cylindrical	■
C5141-.125D4S.0Z4	10268169	4	D	0.125	0.125	0.500	1.500	—	—	4	Cylindrical	■
C5141-.141F4S.0Z4	10268174	4	F	0.141	0.188	0.500	2.000	0.500	0.146	4	Cylindrical	■
C5141-.172F4S.0Z4	10268177	4	F	0.172	0.188	0.625	2.000	0.625	0.177	4	Cylindrical	■
C5141-.188D4S.0Z4	10268180	4	D	0.188	0.188	0.750	2.500	—	—	4	Cylindrical	■
C5141-.250D4S.0Z4	10268190	4	D	0.250	0.250	1.000	3.000	—	—	4	Cylindrical	■
C5141-.313D4S.0Z4	10268200	4	D	0.313	0.313	1.000	3.000	—	—	4	Cylindrical	■
C5141-.375D4S.0Z4	10268211	4	D	0.375	0.375	1.000	4.000	—	—	4	Cylindrical	■
C5141-.438D4S.0Z4	10268223	4	D	0.438	0.438	1.500	6.000	—	—	4	Cylindrical	■
C5141-.500D4S.0Z4	10268231	4	D	0.500	0.500	1.500	6.000	—	—	4	Cylindrical	■
C5141-.625D4S.0Z4	10268239	4	D	0.625	0.625	2.250	5.000	—	—	4	Cylindrical	■
C5141-.750D4S.0Z4	10268245	4	D	0.750	0.750	2.250	5.000	—	—	4	Cylindrical	■
C5141-1.000D4S.0Z4	10268252	4	D	1.000	1.000	2.250	5.000	—	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

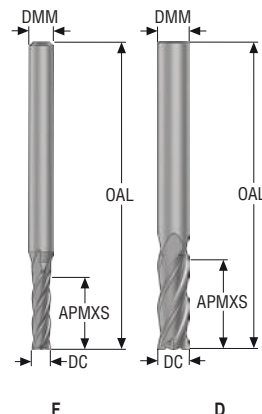
Graphite

X-Heads

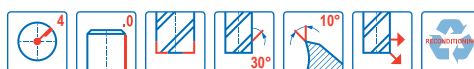
Minimaster

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +0.0007/-0.002"$
—Reground possible if DC is $\geq \varnothing .375$

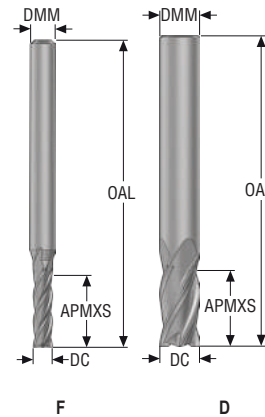


	Designation	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		LN		PCEDC	Shank	Stock standard
					inch		inch		inch		inch		inch				
Non ferrous	C5141-.125D5S.0Z4	10268170	5	D	0.125		0.125		0.625		2.000		—	—	4	Cylindrical	■
	C5141-.188D5S.0Z4	10268181	5	D	0.188		0.188		1.000		3.000		—	—	4	Cylindrical	■
	C5141-.250D5S.0Z4	10268191	5	D	0.250		0.250		1.000		4.000		—	—	4	Cylindrical	■
Hard	C5141-.313D5S.0Z4	10268201	5	D	0.313		0.313		1.000		4.000		—	—	4	Cylindrical	■
	C5141-.375D5S.0Z4	10268212	5	D	0.375		0.375		1.125		3.000		—	—	4	Cylindrical	■
	C5141-.438D5S.0Z4	10268224	5	D	0.438		0.438		2.000		4.000		—	—	4	Cylindrical	■
	C5141-.500D5S.0Z4	10268232	5	D	0.500		0.500		2.000		4.000		—	—	4	Cylindrical	■
	C5141-.625D5S.0Z4	10268240	5	D	0.625		0.625		3.000		6.000		—	—	4	Cylindrical	■
	C5141-.750D5S.0Z4	10268246	5	D	0.750		0.750		3.000		6.000		—	—	4	Cylindrical	■
Plastic and cfrp	C5141-1.000D5S.0Z4	10268253	5	D	1.000		1.000		3.000		6.000		—	—	4	Cylindrical	■
	C5141-.125D6S.0Z4	10268171	6	D	0.125		0.125		0.750		3.000		—	—	4	Cylindrical	■
	C5141-.188D6S.0Z4	10268182	6	D	0.188		0.188		1.000		4.000		—	—	4	Cylindrical	■
	C5141-.250D6S.0Z4	10268192	6	D	0.250		0.250		1.125		3.000		—	—	4	Cylindrical	■
	C5141-.313D6S.0Z4	10268202	6	D	0.313		0.313		1.125		3.000		—	—	4	Cylindrical	■
	C5141-.375D6S.0Z4	10268213	6	D	0.375		0.375		1.500		6.000		—	—	4	Cylindrical	■
Graphite	C5141-.438D6S.0Z4	10268225	6	D	0.438		0.438		2.000		4.500		—	—	4	Cylindrical	■
	C5141-.500D6S.0Z4	10268233	6	D	0.500		0.500		2.000		4.500		—	—	4	Cylindrical	■
	C5141-.750D6S.0Z4	10268247	6	D	0.750		0.750		4.000		6.000		—	—	4	Cylindrical	■
	C5141-1.000D6S.0Z4	10268254	6	D	1.000		1.000		4.000		7.000		—	—	4	Cylindrical	■
	C5141-.188D7S.0Z4	10268183	7	D	0.188		0.188		1.125		3.000		—	—	4	Cylindrical	■
	C5141-.250D7S.0Z4	10268193	7	D	0.250		0.250		1.500		4.000		—	—	4	Cylindrical	■
X-Heads	C5141-.313D7S.0Z4	10268203	7	D	0.313		0.313		1.500		6.000		—	—	4	Cylindrical	■
	C5141-.375D7S.0Z4	10268214	7	D	0.375		0.375		1.750		4.000		—	—	4	Cylindrical	■
	C5141-.438D7S.0Z4	10268226	7	D	0.438		0.438		3.000		6.000		—	—	4	Cylindrical	■
	C5141-.500D7S.0Z4	10268234	7	D	0.500		0.500		3.000		6.000		—	—	4	Cylindrical	■
	C5141-.063F8S.0Z4	10268160	8	F	0.063		0.125		1.000		3.000		1.000	0.068	4	Cylindrical	■
	C5141-.094F8S.0Z4	10268166	8	F	0.094		0.125		1.000		3.000		1.000	0.099	4	Cylindrical	■
Minimaster	C5141-.125D8S.0Z4	10268172	8	D	0.125		0.125		1.000		3.000		—	—	4	Cylindrical	■
	C5141-.250D8S.0Z4	10268194	8	D	0.250		0.250		1.500		6.000		—	—	4	Cylindrical	■
	C5141-.313D8S.0Z4	10268204	8	D	0.313		0.313		1.625		4.000		—	—	4	Cylindrical	■
	C5141-.375D8S.0Z4	10268215	8	D	0.375		0.375		2.000		4.000		—	—	4	Cylindrical	■
	C5141-.125D9S.0Z4	10268173	9	D	0.125		0.125		1.000		4.000		—	—	4	Cylindrical	■
	C5141-.375D9S.0Z4	10268216	9	D	0.375		0.375		3.000		6.000		—	—	4	Cylindrical	■

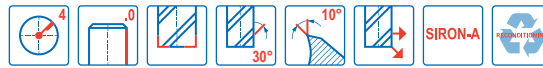
■ Stocked standard.

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM=+.0001"/-.0004"
—DC ≤ Ø7/64" = ±.0005"
—DC > Ø7/64" = +.000"/-.002"
—Regrind possible if DC is ≥ Ø.375



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5141-.375D1S.0Z4	SIRA	10268312	1	D	0.375	0.375	0.625	2.000	—	—	4	Cylindrical	■
C5141-.438D1S.0Z4	SIRA	10268324	1	D	0.438	0.438	0.625	2.500	—	—	4	Cylindrical	■
C5141-.500D1S.0Z4	SIRA	10268332	1	D	0.500	0.500	0.625	2.500	—	—	4	Cylindrical	■
C5141-.625D1S.0Z4	SIRA	10268340	1	D	0.625	0.625	0.750	3.000	—	—	4	Cylindrical	■
C5141-.750D1S.0Z4	SIRA	10268346	1	D	0.750	0.750	1.000	3.000	—	—	4	Cylindrical	■
C5141-1.000D1S.0Z4	SIRA	10268353	1	D	1.000	1.000	1.000	3.000	—	—	4	Cylindrical	■
C5141-.016F2S.0Z4	SIRA	10268256	2	F	0.016	0.125	0.031	1.500	0.031	0.021	4	Cylindrical	■
C5141-.047F2S.0Z4	SIRA	10268259	2	F	0.047	0.125	0.109	1.500	0.109	0.052	4	Cylindrical	■
C5141-.063F2S.0Z4	SIRA	10268261	2	F	0.063	0.125	0.125	1.500	0.125	0.068	4	Cylindrical	■
C5141-.078F2S.0Z4	SIRA	10268265	2	F	0.078	0.125	0.188	1.500	0.188	0.083	4	Cylindrical	■
C5141-.094F2S.0Z4	SIRA	10268267	2	F	0.094	0.125	0.188	1.500	0.188	0.099	4	Cylindrical	■
C5141-.125D2S.0Z4	SIRA	10268272	2	D	0.125	0.125	0.250	1.500	—	—	4	Cylindrical	■
C5141-.156F2S.0Z4	SIRA	10268279	2	F	0.156	0.188	0.313	2.000	0.313	0.161	4	Cylindrical	■
C5141-.188D2S.0Z4	SIRA	10268282	2	D	0.188	0.188	0.375	2.000	—	—	4	Cylindrical	■
C5141-.219F2S.0Z4	SIRA	10268289	2	F	0.219	0.250	0.438	2.000	0.438	0.224	4	Cylindrical	■
C5141-.250D2S.0Z4	SIRA	10268292	2	D	0.250	0.250	0.500	2.000	—	—	4	Cylindrical	■
C5141-.313D2S.0Z4	SIRA	10268302	2	D	0.313	0.313	0.500	2.000	—	—	4	Cylindrical	■
C5141-.375D2S.0Z4	SIRA	10268313	2	D	0.375	0.375	1.000	2.500	—	—	4	Cylindrical	■
C5141-.406F2S.0Z4	SIRA	10268322	2	F	0.406	0.438	1.000	2.750	1.000	0.411	4	Cylindrical	■
C5141-.422F2S.0Z4	SIRA	10268323	2	F	0.422	0.438	1.000	2.750	1.000	0.427	4	Cylindrical	■
C5141-.438D2S.0Z4	SIRA	10268325	2	D	0.438	0.438	1.000	2.750	—	—	4	Cylindrical	■
C5141-.469F2S.0Z4	SIRA	10268331	2	F	0.469	0.500	1.000	3.000	1.000	0.474	4	Cylindrical	■
C5141-.500D2S.0Z4	SIRA	10268333	2	D	0.500	0.500	1.000	3.000	—	—	4	Cylindrical	■
C5141-.563D2S.0Z4	SIRA	10268339	2	D	0.563	0.563	1.125	3.500	—	—	4	Cylindrical	■
C5141-.625D2S.0Z4	SIRA	10268341	2	D	0.625	0.625	1.250	3.500	—	—	4	Cylindrical	■
C5141-.688F2S.0Z4	SIRA	10268345	2	F	0.688	0.750	1.375	4.000	1.375	0.693	4	Cylindrical	■
C5141-.750D2S.0Z4	SIRA	10268347	2	D	0.750	0.750	1.500	4.000	—	—	4	Cylindrical	■
C5141-.875D2S.0Z4	SIRA	10268352	2	D	0.875	0.875	1.500	4.000	—	—	4	Cylindrical	■
C5141-1.000D2S.0Z4	SIRA	10268354	2	D	1.000	1.000	1.500	4.000	—	—	4	Cylindrical	■
C5141-1.250D2S.0Z4	SIRA	10268359	2	D	1.250	1.250	2.000	4.500	—	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

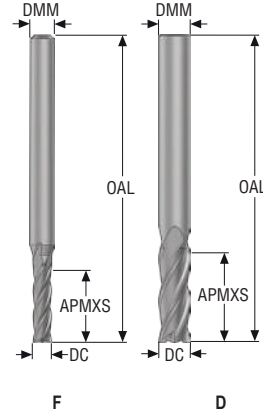
Graphite

X-Heads

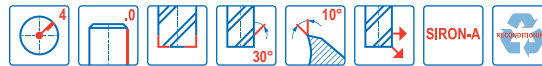
Minimaster

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +0.000"/-0.002"$
—Reground possible if DC is $\geq \varnothing 0.375$

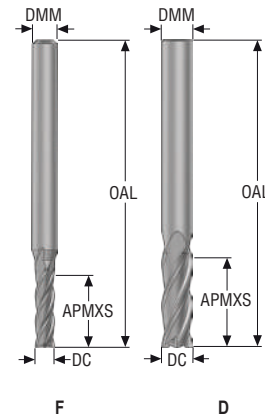


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5141-.031F3S.0Z4	SIRA	10268257	3	F	0.031	0.125	0.078	1.500	0.078	0.036	4	Cylindrical	■
C5141-.047F3S.0Z4	SIRA	10268260	3	F	0.047	0.125	0.125	1.500	0.125	0.052	4	Cylindrical	■
C5141-.063F3S.0Z4	SIRA	10268262	3	F	0.063	0.125	0.188	1.500	0.188	0.068	4	Cylindrical	■
C5141-.078F3S.0Z4	SIRA	10268266	3	F	0.078	0.125	0.250	1.500	0.250	0.083	4	Cylindrical	■
C5141-.094F3S.0Z4	SIRA	10268268	3	F	0.094	0.125	0.281	1.500	0.281	0.099	4	Cylindrical	■
C5141-.109F3S.0Z4	SIRA	10268271	3	F	0.109	0.125	0.375	1.500	0.375	0.114	4	Cylindrical	■
C5141-.156F3S.0Z4	SIRA	10268280	3	F	0.156	0.188	0.500	2.000	0.500	0.161	4	Cylindrical	■
C5141-.188D3S.0Z4	SIRA	10268283	3	D	0.188	0.188	0.625	2.000	—	—	4	Cylindrical	■
C5141-.203F3S.0Z4	SIRA	10268288	3	F	0.203	0.250	0.625	2.500	0.625	0.208	4	Cylindrical	■
C5141-.219F3S.0Z4	SIRA	10268290	3	F	0.219	0.250	0.625	2.500	0.625	0.224	4	Cylindrical	■
C5141-.234F3S.0Z4	SIRA	10268291	3	F	0.234	0.250	0.750	2.500	0.750	0.239	4	Cylindrical	■
C5141-.250D3S.0Z4	SIRA	10268293	3	D	0.250	0.250	0.750	2.500	—	—	4	Cylindrical	■
C5141-.266F3S.0Z4	SIRA	10268299	3	F	0.266	0.313	0.750	2.500	0.750	0.271	4	Cylindrical	■
C5141-.281F3S.0Z4	SIRA	10268300	3	F	0.281	0.313	0.750	2.500	0.750	0.286	4	Cylindrical	■
C5141-.297F3S.0Z4	SIRA	10268301	3	F	0.297	0.313	0.813	2.500	0.813	0.302	4	Cylindrical	■
C5141-.313D3S.0Z4	SIRA	10268303	3	D	0.313	0.313	0.813	2.500	—	—	4	Cylindrical	■
C5141-.328F3S.0Z4	SIRA	10268309	3	F	0.328	0.375	1.000	2.500	1.000	0.333	4	Cylindrical	■
C5141-.344F3S.0Z4	SIRA	10268310	3	F	0.344	0.375	1.000	2.500	1.000	0.349	4	Cylindrical	■
C5141-.359F3S.0Z4	SIRA	10268311	3	F	0.359	0.375	1.000	2.500	1.000	0.364	4	Cylindrical	■
C5141-.375D3S.0Z4	SIRA	10268314	3	D	0.375	0.375	1.000	3.000	—	—	4	Cylindrical	■
C5141-.391F3S.0Z4	SIRA	10268321	3	F	0.391	0.438	1.000	2.750	1.000	0.396	4	Cylindrical	■
C5141-.438D3S.0Z4	SIRA	10268326	3	D	0.438	0.438	1.000	4.000	—	—	4	Cylindrical	■
C5141-.500D3S.0Z4	SIRA	10268334	3	D	0.500	0.500	1.000	4.000	—	—	4	Cylindrical	■
C5141-.625D3S.0Z4	SIRA	10268342	3	D	0.625	0.625	2.000	6.000	—	—	4	Cylindrical	■
C5141-.750D3S.0Z4	SIRA	10268348	3	D	0.750	0.750	2.000	6.000	—	—	4	Cylindrical	■
C5141-1.000D3S.0Z4	SIRA	10268355	3	D	1.000	1.000	2.000	6.000	—	—	4	Cylindrical	■

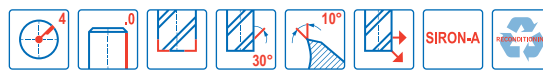
■ Stocked standard.

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM=+.0001"/-.0004"
—DC ≤ Ø7/64" = ±.0005"
—DC > Ø7/64" = +.000"/-.002"
—Regrind possible if DC is ≥ Ø.375



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5141-.031F4S.0Z4	SIRA	10268258	4	F	0.031	0.125	0.094	1.500	0.094	0.036	4	Cylindrical	■
C5141-.063F4S.0Z4	SIRA	10268263	4	F	0.063	0.125	0.250	1.500	0.250	0.068	4	Cylindrical	■
C5141-.094F4S.0Z4	SIRA	10268269	4	F	0.094	0.125	0.375	1.500	0.375	0.099	4	Cylindrical	■
C5141-.125D4S.0Z4	SIRA	10268273	4	D	0.125	0.125	0.500	1.500	—	—	4	Cylindrical	■
C5141-.141F4S.0Z4	SIRA	10268278	4	F	0.141	0.188	0.500	2.000	0.500	0.146	4	Cylindrical	■
C5141-.172F4S.0Z4	SIRA	10268281	4	F	0.172	0.188	0.625	2.000	0.625	0.177	4	Cylindrical	■
C5141-.188D4S.0Z4	SIRA	10268284	4	D	0.188	0.188	0.750	2.500	—	—	4	Cylindrical	■
C5141-.250D4S.0Z4	SIRA	10268294	4	D	0.250	0.250	1.000	3.000	—	—	4	Cylindrical	■
C5141-.313D4S.0Z4	SIRA	10268304	4	D	0.313	0.313	1.000	3.000	—	—	4	Cylindrical	■
C5141-.375D4S.0Z4	SIRA	10268315	4	D	0.375	0.375	1.000	4.000	—	—	4	Cylindrical	■
C5141-.438D4S.0Z4	SIRA	10268327	4	D	0.438	0.438	1.500	6.000	—	—	4	Cylindrical	■
C5141-.500D4S.0Z4	SIRA	10268335	4	D	0.500	0.500	1.500	6.000	—	—	4	Cylindrical	■
C5141-.625D4S.0Z4	SIRA	10268343	4	D	0.625	0.625	2.250	5.000	—	—	4	Cylindrical	■
C5141-.750D4S.0Z4	SIRA	10268349	4	D	0.750	0.750	2.250	5.000	—	—	4	Cylindrical	■
C5141-1.000D4S.0Z4	SIRA	10268356	4	D	1.000	1.000	2.250	5.000	—	—	4	Cylindrical	■
C5141-.125D5S.0Z4	SIRA	10268274	5	D	0.125	0.125	0.625	2.000	—	—	4	Cylindrical	■
C5141-.188D5S.0Z4	SIRA	10268285	5	D	0.188	0.188	1.000	3.000	—	—	4	Cylindrical	■
C5141-.250D5S.0Z4	SIRA	10268295	5	D	0.250	0.250	1.000	4.000	—	—	4	Cylindrical	■
C5141-.313D5S.0Z4	SIRA	10268305	5	D	0.313	0.313	1.000	4.000	—	—	4	Cylindrical	■
C5141-.375D5S.0Z4	SIRA	10268316	5	D	0.375	0.375	1.125	3.000	—	—	4	Cylindrical	■
C5141-.438D5S.0Z4	SIRA	10268328	5	D	0.438	0.438	2.000	4.000	—	—	4	Cylindrical	■
C5141-.500D5S.0Z4	SIRA	10268336	5	D	0.500	0.500	2.000	4.000	—	—	4	Cylindrical	■
C5141-.625D5S.0Z4	SIRA	10268344	5	D	0.625	0.625	3.000	6.000	—	—	4	Cylindrical	■
C5141-.750D5S.0Z4	SIRA	10268350	5	D	0.750	0.750	3.000	6.000	—	—	4	Cylindrical	■
C5141-1.000D5S.0Z4	SIRA	10268357	5	D	1.000	1.000	3.000	6.000	—	—	4	Cylindrical	■
C5141-1.000D6S.0Z4	SIRA	10268358	6	D	1.000	1.000	4.000	7.000	—	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

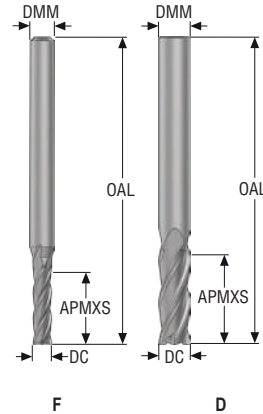
Graphite

X-Heads

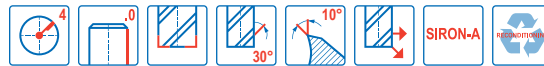
Minimaster

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +0.000"/-0.002"$
—Regrind possible if DC is $\geq \varnothing .375$

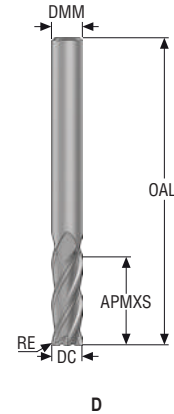


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5141-.125D6S.0Z4	SIRA	10268275	6	D	0.125	0.125	0.750	3.000	—	—	4	Cylindrical	■
C5141-.188D6S.0Z4	SIRA	10268286	6	D	0.188	0.188	1.000	4.000	—	—	4	Cylindrical	■
C5141-.250D6S.0Z4	SIRA	10268296	6	D	0.250	0.250	1.125	3.000	—	—	4	Cylindrical	■
C5141-.313D6S.0Z4	SIRA	10268306	6	D	0.313	0.313	1.125	3.000	—	—	4	Cylindrical	■
C5141-.375D6S.0Z4	SIRA	10268317	6	D	0.375	0.375	1.500	6.000	—	—	4	Cylindrical	■
C5141-.438D6S.0Z4	SIRA	10268329	6	D	0.438	0.438	2.000	4.500	—	—	4	Cylindrical	■
C5141-.500D6S.0Z4	SIRA	10268337	6	D	0.500	0.500	2.000	4.500	—	—	4	Cylindrical	■
C5141-.750D6S.0Z4	SIRA	10268351	6	D	0.750	0.750	4.000	6.000	—	—	4	Cylindrical	■
C5141-.188D7S.0Z4	SIRA	10268287	7	D	0.188	0.188	1.125	3.000	—	—	4	Cylindrical	■
C5141-.250D7S.0Z4	SIRA	10268297	7	D	0.250	0.250	1.500	4.000	—	—	4	Cylindrical	■
C5141-.313D7S.0Z4	SIRA	10268307	7	D	0.313	0.313	1.500	6.000	—	—	4	Cylindrical	■
C5141-.375D7S.0Z4	SIRA	10268318	7	D	0.375	0.375	1.750	4.000	—	—	4	Cylindrical	■
C5141-.438D7S.0Z4	SIRA	10268330	7	D	0.438	0.438	3.000	6.000	—	—	4	Cylindrical	■
C5141-.500D7S.0Z4	SIRA	10268338	7	D	0.500	0.500	3.000	6.000	—	—	4	Cylindrical	■
C5141-.063F8S.0Z4	SIRA	10268264	8	F	0.063	0.125	1.000	3.000	1.000	0.068	4	Cylindrical	■
C5141-.094F8S.0Z4	SIRA	10268270	8	F	0.094	0.125	1.000	3.000	1.000	0.099	4	Cylindrical	■
C5141-.125D8S.0Z4	SIRA	10268276	8	D	0.125	0.125	1.000	3.000	—	—	4	Cylindrical	■
C5141-.250D8S.0Z4	SIRA	10268298	8	D	0.250	0.250	1.500	6.000	—	—	4	Cylindrical	■
C5141-.313D8S.0Z4	SIRA	10268308	8	D	0.313	0.313	1.625	4.000	—	—	4	Cylindrical	■
C5141-.375D8S.0Z4	SIRA	10268319	8	D	0.375	0.375	2.000	4.000	—	—	4	Cylindrical	■
C5141-.125D9S.0Z4	SIRA	10268277	9	D	0.125	0.125	1.000	4.000	—	—	4	Cylindrical	■
C5141-.375D9S.0Z4	SIRA	10268320	9	D	0.375	0.375	3.000	6.000	—	—	4	Cylindrical	■

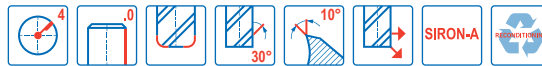
■ Stocked standard.

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Corner radius – Inch



- Tolerances:
- DMM= $-.0001"/-0.0004"$
- DC $\leq \varnothing 7/64" = \pm 0.0005"$
- DC $> \varnothing 7/64" = +0.000"/-0.002"$
- RE= $\pm 0.001"$
- Reground possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch			
C5141-.438D2R015.0Z4	SIRA	10268379	2	D	0.438	0.438	1.000	2.750	0.015	4	Cylindrical	■
C5141-.438D2R030.0Z4	SIRA	10268380	2	D	0.438	0.438	1.000	2.750	0.030	4	Cylindrical	■
C5141-.438D2R060.0Z4	SIRA	10268381	2	D	0.438	0.438	1.000	2.750	0.060	4	Cylindrical	■
C5141-.438D2R125.0Z4	SIRA	10268382	2	D	0.438	0.438	1.000	2.750	0.125	4	Cylindrical	■
C5141-.500D2R015.0Z4	SIRA	10268383	2	D	0.500	0.500	1.000	3.000	0.015	4	Cylindrical	■
C5141-.500D2R020.0Z4	SIRA	10268384	2	D	0.500	0.500	1.000	3.000	0.020	4	Cylindrical	■
C5141-.500D2R030.0Z4	SIRA	10268385	2	D	0.500	0.500	1.000	3.000	0.030	4	Cylindrical	■
C5141-.500D2R045.0Z4	SIRA	10268386	2	D	0.500	0.500	1.000	3.000	0.045	4	Cylindrical	■
C5141-.500D2R060.0Z4	SIRA	10268387	2	D	0.500	0.500	1.000	3.000	0.060	4	Cylindrical	■
C5141-.500D2R090.0Z4	SIRA	10268388	2	D	0.500	0.500	1.000	3.000	0.090	4	Cylindrical	■
C5141-.500D2R125.0Z4	SIRA	10268389	2	D	0.500	0.500	1.000	3.000	0.125	4	Cylindrical	■
C5141-.625D2R015.0Z4	SIRA	10268390	2	D	0.625	0.625	1.250	3.500	0.015	4	Cylindrical	■
C5141-.625D2R030.0Z4	SIRA	10268391	2	D	0.625	0.625	1.250	3.500	0.030	4	Cylindrical	■
C5141-.625D2R060.0Z4	SIRA	10268392	2	D	0.625	0.625	1.250	3.500	0.060	4	Cylindrical	■
C5141-.625D2R125.0Z4	SIRA	10268393	2	D	0.625	0.625	1.250	3.500	0.125	4	Cylindrical	■
C5141-.750D2R015.0Z4	SIRA	10268394	2	D	0.750	0.750	1.500	4.000	0.015	4	Cylindrical	■
C5141-.750D2R020.0Z4	SIRA	10268395	2	D	0.750	0.750	1.500	4.000	0.020	4	Cylindrical	■
C5141-.750D2R030.0Z4	SIRA	10268396	2	D	0.750	0.750	1.500	4.000	0.030	4	Cylindrical	■
C5141-.750D2R045.0Z4	SIRA	10268397	2	D	0.750	0.750	1.500	4.000	0.045	4	Cylindrical	■
C5141-.750D2R060.0Z4	SIRA	10268398	2	D	0.750	0.750	1.500	4.000	0.060	4	Cylindrical	■
C5141-.750D2R090.0Z4	SIRA	10268399	2	D	0.750	0.750	1.500	4.000	0.090	4	Cylindrical	■
C5141-.750D2R125.0Z4	SIRA	10268400	2	D	0.750	0.750	1.500	4.000	0.125	4	Cylindrical	■
C5141-.750D2R190.0Z4	SIRA	10268402	2	D	0.750	0.750	1.500	4.000	0.190	4	Cylindrical	■
C5141-1.000D2R015.0Z4	SIRA	10268403	2	D	1.000	1.000	1.500	4.000	0.015	4	Cylindrical	■
C5141-1.000D2R020.0Z4	SIRA	10268404	2	D	1.000	1.000	1.500	4.000	0.020	4	Cylindrical	■
C5141-1.000D2R030.0Z4	SIRA	10268405	2	D	1.000	1.000	1.500	4.000	0.030	4	Cylindrical	■
C5141-1.000D2R060.0Z4	SIRA	10268406	2	D	1.000	1.000	1.500	4.000	0.060	4	Cylindrical	■
C5141-1.000D2R090.0Z4	SIRA	10268407	2	D	1.000	1.000	1.500	4.000	0.090	4	Cylindrical	■
C5141-1.000D2R125.0Z4	SIRA	10268408	2	D	1.000	1.000	1.500	4.000	0.125	4	Cylindrical	■
C5141-1.000D2R190.0Z4	SIRA	10268409	2	D	1.000	1.000	1.500	4.000	0.190	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

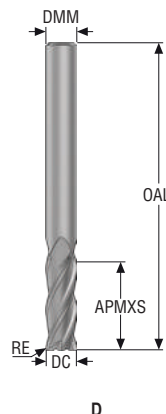
Graphite

X-Heads

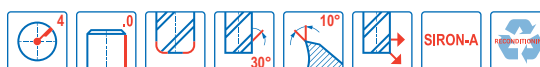
Minimaster

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM = $-.0001"/-.0004"$
—DC $\leq \varnothing 7/64" = \pm .0005"$
—DC $> \varnothing 7/64" = +.0007"/-.002"$
—RE = $\pm .001"$
—Regrind possible if DC is $\geq \varnothing .375$

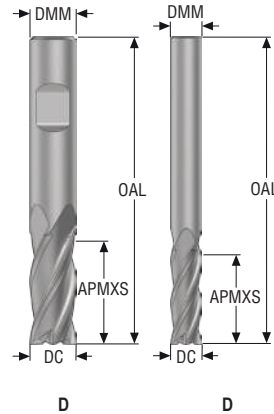


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch			
Hard	C5141-188D3R015.0Z4	SIRA	10268363	3	D	0.188	0.188	0.625	2.000	0.015	4	Cylindrical	■
	C5141-188D3R020.0Z4	SIRA	10268364	3	D	0.188	0.188	0.625	2.000	0.020	4	Cylindrical	■
	C5141-188D3R030.0Z4	SIRA	10268365	3	D	0.188	0.188	0.625	2.000	0.030	4	Cylindrical	■
	C5141-250D3R015.0Z4	SIRA	10268366	3	D	0.250	0.250	0.750	2.500	0.015	4	Cylindrical	■
	C5141-250D3R020.0Z4	SIRA	10268367	3	D	0.250	0.250	0.750	2.500	0.020	4	Cylindrical	■
	C5141-250D3R030.0Z4	SIRA	10268368	3	D	0.250	0.250	0.750	2.500	0.030	4	Cylindrical	■
Plastic and cfrp	C5141-250D3R045.0Z4	SIRA	10268369	3	D	0.250	0.250	0.750	2.500	0.045	4	Cylindrical	■
	C5141-313D3R015.0Z4	SIRA	10268370	3	D	0.313	0.313	0.813	2.500	0.015	4	Cylindrical	■
	C5141-313D3R020.0Z4	SIRA	10268371	3	D	0.313	0.313	0.813	2.500	0.020	4	Cylindrical	■
	C5141-313D3R030.0Z4	SIRA	10268372	3	D	0.313	0.313	0.813	2.500	0.030	4	Cylindrical	■
	C5141-313D3R045.0Z4	SIRA	10268373	3	D	0.313	0.313	0.813	2.500	0.045	4	Cylindrical	■
	C5141-375D3R015.0Z4	SIRA	10268374	3	D	0.375	0.375	1.000	2.500	0.015	4	Cylindrical	■
Graphite	C5141-375D3R020.0Z4	SIRA	10268375	3	D	0.375	0.375	1.000	2.500	0.020	4	Cylindrical	■
	C5141-375D3R030.0Z4	SIRA	10268376	3	D	0.375	0.375	1.000	2.500	0.030	4	Cylindrical	■
	C5141-375D3R045.0Z4	SIRA	10268377	3	D	0.375	0.375	1.000	2.500	0.045	4	Cylindrical	■
	C5141-125D4R015.0Z4	SIRA	10268360	4	D	0.125	0.125	0.500	1.500	0.015	4	Cylindrical	■
	C5141-125D4R020.0Z4	SIRA	10268361	4	D	0.125	0.125	0.500	1.500	0.020	4	Cylindrical	■
	C5141-125D4R030.0Z4	SIRA	10268362	4	D	0.125	0.125	0.500	1.500	0.030	4	Cylindrical	■

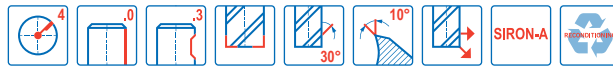
■ Stocked standard.

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical/Weldon – Sharp – Inch



- Tolerances:
- DMM = $-.0001"/-0.0004"$
- DC $\leq \varnothing 7/64" = \pm 0.0005"$
- DC $> \varnothing 7/64" = +0.001"/-0.000"$
- NC tolerance
- Regrind possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					inch	inch	inch	inch			
C5141-.375D2S.3Z4NC	SIRA	10268423	2	D	0.375	0.375	0.875	2.500	4	Weldon	■
C5141-.500D2S.3Z4NC	SIRA	10268424	2	D	0.500	0.500	1.000	3.000	4	Weldon	■
C5141-.625D2S.3Z4NC	SIRA	10268425	2	D	0.625	0.625	1.250	3.500	4	Weldon	■
C5141-.750D2S.3Z4NC	SIRA	10268426	2	D	0.750	0.750	1.500	4.000	4	Weldon	■
C5141-1.000D2S.3Z4NC	SIRA	10268427	2	D	1.000	1.000	1.500	4.000	4	Weldon	■
C5141-.250D3S.0Z4NC	SIRA	10268421	3	D	0.250	0.250	0.750	2.500	4	Cylindrical	■
C5141-.313D3S.0Z4NC	SIRA	10268422	3	D	0.313	0.313	0.813	2.500	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

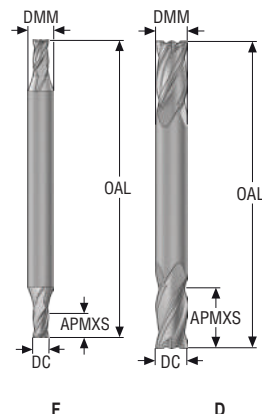
Graphite

X-Heads

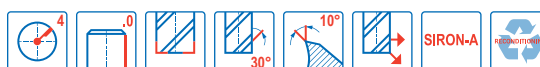
Minimaster

C5141

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp – Inch



- Tolerances:
 —DMM = $-.0001"/-0.0004"$
 —DC $\leq \varnothing 7/64" = \pm 0.0005"$
 —DC $> \varnothing 7/64" = +.0007/-0.002"$
 —Double end
 —Regrind possible if DC is $\geq \varnothing .375$

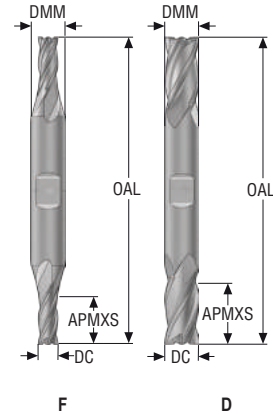


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch	inch			
Non ferrous	C5141-438D1S.0Z4D	SIRA	10268446	1	D	0.438	0.438	0.563	2.750	—	—	4	Cylindrical	■
	C5141-500D1S.0Z4D	SIRA	10268447	1	D	0.500	0.500	0.625	3.000	—	—	4	Cylindrical	■
Hard	C5141-.031F2S.0Z4D	SIRA	10268428	2	F	0.031	0.125	0.063	1.500	0.063	0.036	4	Cylindrical	■
	C5141-.047F2S.0Z4D	SIRA	10268429	2	F	0.047	0.125	0.094	1.500	0.094	0.052	4	Cylindrical	■
	C5141-.063F2S.0Z4D	SIRA	10268430	2	F	0.063	0.125	0.125	1.500	0.125	0.068	4	Cylindrical	■
	C5141-.078F2S.0Z4D	SIRA	10268431	2	F	0.078	0.125	0.125	1.500	0.125	0.083	4	Cylindrical	■
	C5141-.094F2S.0Z4D	SIRA	10268432	2	F	0.094	0.125	0.188	1.500	0.188	0.099	4	Cylindrical	■
	C5141-.109F2S.0Z4D	SIRA	10268433	2	F	0.109	0.125	0.188	1.500	0.188	0.114	4	Cylindrical	■
Plastic and cfrp	C5141-.125D2S.0Z4D	SIRA	10268434	2	D	0.125	0.125	0.250	1.500	—	—	4	Cylindrical	■
	C5141-.141F2S.0Z4D	SIRA	10268435	2	F	0.141	0.188	0.313	2.000	0.313	0.146	4	Cylindrical	■
	C5141-.156F2S.0Z4D	SIRA	10268436	2	F	0.156	0.188	0.313	2.000	0.313	0.161	4	Cylindrical	■
	C5141-.172F2S.0Z4D	SIRA	10268437	2	F	0.172	0.188	0.313	2.000	0.313	0.177	4	Cylindrical	■
	C5141-.188D2S.0Z4D	SIRA	10268438	2	D	0.188	0.188	0.375	2.000	—	—	4	Cylindrical	■
	C5141-.203F2S.0Z4D	SIRA	10268439	2	F	0.203	0.250	0.500	2.500	0.500	0.208	4	Cylindrical	■
Graphite	C5141-.219F2S.0Z4D	SIRA	10268440	2	F	0.219	0.250	0.500	2.500	0.500	0.224	4	Cylindrical	■
	C5141-.234F2S.0Z4D	SIRA	10268441	2	F	0.234	0.250	0.500	2.500	0.500	0.239	4	Cylindrical	■
	C5141-.250D2S.0Z4D	SIRA	10268442	2	D	0.250	0.250	0.500	2.500	—	—	4	Cylindrical	■
	C5141-.281F2S.0Z4D	SIRA	10268443	2	F	0.281	0.313	0.500	2.500	0.500	0.286	4	Cylindrical	■
	C5141-.313D2S.0Z4D	SIRA	10268444	2	D	0.313	0.313	0.500	2.500	—	—	4	Cylindrical	■
	C5141-.375D2S.0Z4D	SIRA	10268445	2	D	0.375	0.375	0.563	2.500	—	—	4	Cylindrical	■

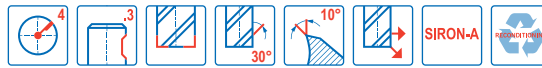
■ Stocked standard.

C5141

General purpose – Universal – Square – 4 Flutes – Weldon – Sharp – Inch



- Tolerances:
- DMM= $-.0001"/-0.0004"$
- DC $\leq \varnothing 7/64" = \pm 0.0005"$
- DC $> \varnothing 7/64" = +.000"/-0.002"$
- Double end
- Regrind possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
C5141-.281F2S.3Z4D	SIRA	10268415	2	F	0.281	0.375	0.688	3.500	0.688	0.286	4	Weldon	■
C5141-.313F2S.3Z4D	SIRA	10268416	2	F	0.313	0.375	0.750	3.500	0.750	0.318	4	Weldon	■
C5141-.344F2S.3Z4D	SIRA	10268417	2	F	0.344	0.375	0.750	3.500	0.750	0.349	4	Weldon	■
C5141-.375D2S.3Z4D	SIRA	10268418	2	D	0.375	0.375	0.750	3.500	—	—	4	Weldon	■
C5141-.438F2S.3Z4D	SIRA	10268419	2	F	0.438	0.500	0.875	4.000	0.875	0.443	4	Weldon	■
C5141-.500D2S.3Z4D	SIRA	10268420	2	D	0.500	0.500	1.000	4.000	—	—	4	Weldon	■
C5141-.125F3S.3Z4D	SIRA	10268410	3	F	0.125	0.375	0.375	3.063	0.375	0.130	4	Weldon	■
C5141-.156F3S.3Z4D	SIRA	10268411	3	F	0.156	0.375	0.438	3.125	0.438	0.161	4	Weldon	■
C5141-.188F3S.3Z4D	SIRA	10268412	3	F	0.188	0.375	0.500	3.250	0.500	0.193	4	Weldon	■
C5141-.219F3S.3Z4D	SIRA	10268413	3	F	0.219	0.375	0.563	3.375	0.563	0.224	4	Weldon	■
C5141-.250F3S.3Z4D	SIRA	10268414	3	F	0.250	0.375	0.625	3.375	0.625	0.255	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – C5141 Side milling

SMG		a _e /DC	a _p /DC	f _z														v _c
				1	1,5	2	3	3,5	4	5	6	8	9	10	12	16	20	
P1	E	0,1	2	0,0048	0,0075	0,01	0,015	0,017	0,02	0,025	0,03	0,04	0,044	0,048	0,06	0,08	0,1	150 (135 — 165)
		0.10	2.0	0.00019	0.00030	0.00040	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0017	0.0019	0.0024	0.0032	0.0040	490 (440 — 540)
P2	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	58 (45 — 70)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	190 (147 — 230)
P3	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	85 (70 — 95)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	279 (246 — 312)
P4	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	100 (90 — 110)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	330 (295 — 360)
P5	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	68 (50 — 75)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	223 (165 — 245)
P6	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	87 (77 — 100)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	285 (250 — 330)
P7	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	65 (55 — 75)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	213 (180 — 245)
P8	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	65 (50 — 75)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	213 (165 — 245)
P11	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	85 (70 — 95)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	280 (230 — 310)
P12	E	0,1	2	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	0,05	0,065	55 (45 — 65)
		0.10	2.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	0.0020	0.0026	180 (147 — 213)
M1	E	0,1	2	0,0048	0,0075	0,01	0,015	0,017	0,02	0,025	0,03	0,04	0,044	0,048	0,06	0,08	0,1	93 (83 — 100)
		0.10	2.0	0.00019	0.00030	0.00040	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0017	0.0019	0.0024	0.0032	0.0040	305 (270 — 360)
M2	E	0,1	2	0,0048	0,0075	0,01	0,015	0,017	0,02	0,025	0,03	0,04	0,044	0,048	0,06	0,08	0,1	60 (50 — 70)
		0.10	2.0	0.00019	0.00030	0.00040	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0017	0.0019	0.0024	0.0032	0.0040	200 (165 — 230)
M3	E	0,1	2	0,0048	0,0075	0,01	0,015	0,017	0,02	0,025	0,03	0,04	0,044	0,048	0,06	0,08	0,1	55 (45 — 65)
		0.10	2.0	0.00019	0.00030	0.00040	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0017	0.0019	0.0024	0.0032	0.0040	180 (147 — 213)
M4	E	0,1	2	0,0048	0,0075	0,01	0,015	0,017	0,02	0,025	0,03	0,04	0,044	0,048	0,06	0,08	0,09	45 (35 — 55)
		0.10	2.0	0.00019	0.00030	0.00040	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0017	0.0019	0.0024	0.0032	0.0036	147 (115 — 180)
M5	E	0,1	2	0,0044	0,0065	0,0085	0,013	0,015	0,017	0,022	0,026	0,034	0,038	0,042	0,05	0,07	0,085	35 (20 — 45)
		0.10	2.0	0.00017	0.00026	0.00034	0.00050	0.00060	0.00065	0.00085	0.0010	0.0013	0.0015	0.0017	0.0020	0.0028	0.0034	114 (65 — 147)
K1	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	80 (70 — 90)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	260 (230 — 290)
K2	E	0,1	2	0,0055	0,0085	0,011	0,017	0,02	0,022	0,028	0,034	0,044	0,05	0,055	0,065	0,09	0,11	87 (75 — 100)
		0.10	2.0	0.00022	0.00034	0.00044	0.00065	0.00080	0.00085	0.0011	0.0013	0.0017	0.0020	0.0022	0.0026	0.0036	0.0044	285 (245 — 330)
K3	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	65 (55 — 75)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	213 (180 — 245)
K4	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	50 (35 — 65)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	165 (115 — 213)
K5	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	45 (30 — 55)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	147 (100 — 180)
K6	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	77 (65 — 85)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	250 (210 — 280)
K7	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	77 (60 — 90)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	250 (200 — 290)
S1	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	50 (35 — 60)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	165 (115 — 200)
S2	E	0,1	2	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	0,05	0,065	25 (15 — 35)
		0.10	2.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	0.0020	0.0026	82 (50 — 115)
S3	E	0,1	2	0,002	0,0032	0,0042	0,0065	0,0075	0,0085	0,01	0,013	0,017	0,019	0,02	0,025	0,034	0,042	11 (7,5 — 16)
		0.10	2.0	0.000080	0.00013	0.00017	0.00026	0.00030	0.00034	0.00040	0.00050	0.00065	0.00075	0.00080	0.0010	0.0013	0.0017	35 (25 — 52)
S11	E	0,1	2	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,025	0,032	0,036	0,04	0,05	0,065	0,08	110 (95 — 120)
		0.10	2.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.0010	0.0013	0.0014	0.0016	0.0020	0.0026	0.0032	360 (311 — 390)
S12	E	0,1	2	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	0,05	0,065	77 (60 — 90)
		0.10	2.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	0.0020	0.0026	250 (190 — 290)
S13	E	0,1	2	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	0,05	0,065	30 (20 — 40)
		0.10	2.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	0.0020	0.0026	100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – C5141 Side milling – Inch

SMG		a _p /DC	f _z														v _c
			1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1	1 1/4	
P1	E	1	0,0018	0,0036	0,0075	0,009	0,011	0,013	0,015	0,018	0,022	0,03	0,036	0,044	0,06	0,075	150 (135 — 165)
		1.0	0.000070	0.00014	0.00030	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0012	0.0014	0.0017	0.0024	0.0030	490 (440 — 540)
P2	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	58 (45 — 70)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	190 (147 — 230)
P3	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	85 (70 — 95)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	279 (246 — 312)
P4	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	100 (90 — 110)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	330 (295 — 360)
P5	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	68 (50 — 75)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	223 (165 — 245)
P6	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	87 (77 — 100)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	285 (250 — 330)
P7	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	65 (55 — 75)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	213 (180 — 245)
P8	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	65 (55 — 75)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	213 (165 — 245)
P11	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	85 (70 — 95)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	280 (230 — 310)
P12	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	55 (45 — 65)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	180 (147 — 213)
M1	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	93 (83 — 100)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	305 (270 — 360)
M2	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	60 (50 — 70)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	200 (165 — 230)
M3	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	55 (45 — 65)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	180 (147 — 213)
M4	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	45 (35 — 55)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	147 (115 — 180)
M5	E	1	0,001	0,002	0,0042	0,005	0,006	0,007	0,0085	0,01	0,012	0,017	0,02	0,025	0,034	0,042	35 (20 — 45)
		1.0	0.000040	0.000080	0.00017	0.00020	0.00024	0.00028	0.00034	0.00040	0.00048	0.00065	0.00080	0.0010	0.0013	0.0017	114 (65 — 147)
K1	E	1	0,0018	0,0036	0,0075	0,009	0,011	0,013	0,015	0,018	0,022	0,03	0,036	0,044	0,06	0,075	80 (70 — 90)
		1.0	0.000070	0.00014	0.00030	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0012	0.0014	0.0017	0.0024	0.0030	260 (230 — 290)
K2	E	1	0,0018	0,0036	0,0075	0,009	0,011	0,013	0,015	0,018	0,022	0,03	0,036	0,044	0,06	0,075	87 (75 — 100)
		1.0	0.000070	0.00014	0.00030	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0012	0.0014	0.0017	0.0024	0.0030	285 (245 — 330)
K3	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	65 (55 — 75)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	213 (180 — 245)
K4	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	50 (35 — 65)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	165 (115 — 213)
K5	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	45 (30 — 55)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	147 (100 — 180)
K6	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	77 (65 — 85)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	250 (210 — 280)
K7	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	77 (60 — 90)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	250 (200 — 290)
S1	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	50 (35 — 60)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	165 (115 — 200)
S2	E	1	0,0008	0,0016	0,0032	0,004	0,0048	0,0055	0,0065	0,008	0,0095	0,013	0,016	0,019	0,025	0,032	25 (15 — 35)
		1.0	0.000032	0.000065	0.00013	0.00016	0.00019	0.00022	0.00026	0.00032	0.00038	0.00050	0.00065	0.00075	0.0010	0.0013	82 (50 — 115)
S3	E	1	0,0008	0,0016	0,0032	0,004	0,0048	0,0055	0,0065	0,008	0,0095	0,013	0,016	0,019	0,025	0,032	11 (7,5 — 16)
		1.0	0.000032	0.000065	0.00013	0.00016	0.00019	0.00022	0.00026	0.00032	0.00038	0.00050	0.00065	0.00075	0.0010	0.0013	35 (25 — 52)
S11	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	110 (95 — 120)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	360 (311 — 390)
S12	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	77 (60 — 90)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	250 (190 — 290)
S13	E	1	0,0013	0,0028	0,0055	0,0065	0,008	0,0095	0,011	0,014	0,016	0,022	0,026	0,032	0,044	0,055	30 (20 — 40)
		1.0	0.000050	0.00011	0.00022	0.00026	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

Cutting data – C5141 Slot milling

SMG		a _p /DC	f _z														v _c
			1	1,5	2	3	3,5	4	5	6	8	9	10	12	16	20	
P1	E	1	0,0024	0,0034	0,0046	0,007	0,008	0,009	0,012	0,014	0,018	0,02	0,024	0,028	0,036	0,046	75 (50 — 85)
		1.0	0.000095	0.00013	0.00018	0.00028	0.00032	0.00036	0.00048	0.00055	0.00070	0.00080	0.00095	0.0011	0.0014	0.0018	245 (170 — 270)
P2	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	32 (20 — 40)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	100 (66 — 130)
P3	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	45 (30 — 60)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	147 (98 — 196)
P4	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	55 (40 — 65)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	180 (130 — 210)
P5	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	35 (20 — 45)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	115 (65 — 145)
P6	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	45 (30 — 60)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	145 (100 — 195)
P7	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	35 (20 — 50)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	115 (65 — 165)
P8	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	25 (15 — 35)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	80 (50 — 110)
P11	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	32 (20 — 42)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	105 (65 — 138)
P12	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	30 (20 — 40)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	100 (65 — 130)
M1	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	42 (21 — 52)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	138 (69 — 170)
M2	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	32 (20 — 42)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	105 (65 — 138)
M3	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	30 (15 — 40)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	100 (50 — 130)
M4	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	22 (10 — 35)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	72 (33 — 115)
M5	E	1	0,0013	0,002	0,0026	0,004	0,0046	0,005	0,0065	0,008	0,01	0,012	0,013	0,016	0,02	0,026	19 (16 — 30)
		1.0	0.000050	0.000080	0.00010	0.00016	0.00018	0.00020	0.00026	0.00032	0.00040	0.00048	0.00050	0.00065	0.00080	0.0010	62 (52 — 100)
K1	E	1	0,0024	0,0034	0,0046	0,007	0,008	0,009	0,012	0,014	0,018	0,02	0,024	0,028	0,036	0,046	30 (20 — 45)
		1.0	0.000095	0.00013	0.00018	0.00028	0.00032	0.00036	0.00048	0.00055	0.00070	0.00080	0.00095	0.0011	0.0014	0.0018	100 (65 — 147)
K2	E	1	0,0024	0,0034	0,0046	0,007	0,008	0,009	0,012	0,014	0,018	0,02	0,024	0,028	0,036	0,046	40 (30 — 50)
		1.0	0.000095	0.00013	0.00018	0.00028	0.00032	0.00036	0.00048	0.00055	0.00070	0.00080	0.00095	0.0011	0.0014	0.0018	130 (100 — 165)
K3	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	32 (26 — 45)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	105 (85 — 148)
K4	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	22 (18 — 30)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	72 (60 — 100)
K5	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	20 (15 — 30)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	65 (50 — 100)
K6	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	35 (20 — 50)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	115 (65 — 165)
K7	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	35 (20 — 50)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	115 (65 — 165)
S1	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	25 (18 — 30)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	80 (60 — 100)
S2	E	1	0,001	0,0015	0,002	0,003	0,0036	0,004	0,005	0,006	0,008	0,009	0,01	0,012	0,016	0,02	13 (9 — 18)
		1.0	0.000040	0.000060	0.000080	0.00012	0.00014	0.00016	0.00020	0.00024	0.00032	0.00036	0.00040	0.00048	0.00065	0.00080	62 (30 — 60)
S3	E	1	0,001	0,0015	0,002	0,003	0,0036	0,004	0,005	0,006	0,008	0,009	0,01	0,012	0,016	0,02	7,0 (5 — 12)
		1.0	0.000040	0.000060	0.000080	0.00012	0.00014	0.00016	0.00020	0.00024	0.00032	0.00036	0.00040	0.00048	0.00065	0.00080	23 (15 — 39)
S11	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	35 (25 — 40)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	114 (82 — 130)
S12	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	32 (22 — 40)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	105 (72 — 130)
S13	E	1	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	0,028	0,034	10 (8 — 15)
		1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	0.0011	0.0013	33 (26 — 50)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – C5141 Slot milling – Inch

SMG		a _e /DC	a _p /DC	f _z															v _c	
				1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1	1 1/4			
P1	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	0,16 0.0065	75 (50 — 85) 245 (170 — 270)		
P2	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	32 (20 — 40) 100 (66 — 130)		
P3	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	45 (30 — 60) 147 (98 — 196)		
P4	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	55 (40 — 65) 180 (130 — 210)		
P5	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	35 (20 — 45) 115 (65 — 145)		
P6	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	45 (30 — 60) 145 (100 — 195)		
P7	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	35 (20 — 50) 115 (65 — 165)		
P8	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	25 (15 — 35) 80 (50 — 110)		
P11	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	32 (20 — 42) 105 (65 — 138)		
P12	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	0,1 0.0040	30 (20 — 40) 100 (65 — 130)		
M1	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	0,16 0.0065	42 (21 — 52) 138 (69 — 170)		
M2	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	0,16 0.0065	32 (20 — 42) 105 (65 — 138)		
M3	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,095 0.0038	0,12 0.0048	0,13 0.0050	30 (15 — 40) 100 (50 — 130)		
M4	E	0,1 0.10	2 2.0	0,0038 0.00015	0,008 0.00032	0,016 0.00065	0,019 0.00075	0,024 0.00095	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,046 0.0018	0,06 0.0024	0,08 0.0032	0,09 0.0036	0,1 0.0040	0,11 0.0044	22 (10 — 35) 72 (33 — 115)		
M5	E	0,1 0.10	2 2.0	0,0034 0.00013	0,007 0.00028	0,014 0.00055	0,017 0.00065	0,02 0.00080	0,024 0.00095	0,028 0.0011	0,034 0.0013	0,04 0.0016	0,055 0.0022	0,07 0.0028	0,08 0.0032	0,11 0.0044	0,14 0.0055	19 (16 — 30) 62 (52 — 100)		
K1	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	30 (20 — 45) 100 (65 — 147)		
K2	E	0,1 0.10	2 2.0	0,0044 0.00017	0,009 0.00036	0,018 0.00070	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,036 0.0014	0,044 0.0017	0,055 0.0022	0,07 0.0028	0,09 0.0036	0,11 0.0044	0,14 0.0055	0,18 0.0070	40 (30 — 50) 130 (100 — 165)		
K3	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	32 (26 — 45) 105 (85 — 148)		
K4	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	22 (18 — 30) 72 (60 — 100)		
K5	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	20 (15 — 30) 65 (50 — 100)		
K6	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	35 (20 — 50) 115 (65 — 165)		
K7	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	35 (20 — 50) 115 (65 — 165)		
S1	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	25 (18 — 30) 80 (60 — 100)		
S2	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	0,1 0.0040	13 (9 — 18) 62 (30 — 60)		
S3	E	0,1 0.10	2 2.0	0,0017 0.000065	0,0034 0.00013	0,0065 0.00026	0,0085 0.00034	0,01 0.00040	0,012 0.00048	0,013 0.00050	0,017 0.00065	0,02 0.00080	0,026 0.0010	0,034 0.0013	0,04 0.0016	0,055 0.0022	0,065 0.0026	7,0 (5 — 12) 23 (15 — 39)		
S11	E	0,1 0.10	2 2.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,02 0.00080	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,04 0.0016	0,05 0.0020	0,065 0.0026	0,08 0.0032	0,1 0.0040	0,13 0.0050	35 (25 — 40) 114 (82 — 130)		
S12	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	0,1 0.0040	32 (22 — 40) 105 (72 — 130)		
S13	E	0,1 0.10	2 2.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,025 0.0010	0,03 0.0012	0,04 0.0016	0,05 0.0020	0,06 0.0024	0,08 0.0032	0,1 0.0040	10 (8 — 15) 33 (26 — 50)		

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

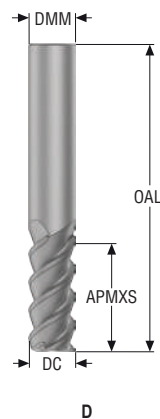
a_e = mm/DC (in/DC) = factor

All cutting data are target values

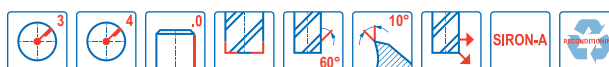
Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfpr
Graphite
X-Heads
Minimaster

C5231/C5241

General purpose – Universal – Chamfer – 3-4 Flutes – Cylindrical



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +.000"/-0.002"$
—Reground possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					inch	inch	inch	inch			
C5231-.375D2S.0Z3	SIRA	10268591	2	D	0.375	0.375	0.875	2.500	3	Cylindrical	■
C5231-.500D2S.0Z3	SIRA	10268592	2	D	0.500	0.500	1.000	3.000	3	Cylindrical	■
C5231-.625D2S.0Z3	SIRA	10268593	2	D	0.625	0.625	1.250	3.500	3	Cylindrical	■
C5231-.250D3S.0Z3	SIRA	10268590	3	D	0.250	0.250	0.750	2.500	3	Cylindrical	■
C5241-.750D3S.0Z4	SIRA	10268594	3	D	0.750	0.750	1.500	4.000	4	Cylindrical	■

■ Stocked standard.

Cutting data – C5231-C5241 Side milling – Inch

SMG		a _e /DC	a _p /DC	f _z						v _c
				1/4	3/8	1/2	5/8	3/4	1	
P1	E	0,1 0.10	2 2.0	0,04 0.0016	0,058 0.0023	0,075 0.003	0,1 0.004	0,12 0.0048	0,15 0.006	150 (135 — 165) 490 (440— 540)
P2	E	0,1 0.10	2 2.0	0,033 0.0013	0,05 0.002	0,063 0.0025	0,081 0.0033	0,1 0.004	0,13 0.005	58 (45— 70) 190 (147 — 230)
P3	E	0,1 0.10	2 2.0	0,033 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	85 (70 — 95) 279 (246 — 312)
P4	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	100 (90 — 110) 330 (295 — 360)
P5	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	68 (50 — 75) 223 (165 — 245)
P6	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	87 (77 — 100) 285 (250 — 330)
P7	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	65 (55 — 75) 213 (180 — 245)
P8	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	65 (50 — 75) 213 (165 — 245)
P11	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	85 (70 — 95) 280 (230 — 310)
P12	E	0,1 0.10	2 2.0	0,025 0.001	0,038 0.0015	0,05 0.002	0,063 0.0025	0,075 0.003	0,1 0.004	55 (45— 65) 180 (147 — 213)
M1	E	0,1 0.10	2 2.0	0,04 0.0016	0,0575 0.0023	0,075 0.003	0,1 0.004	0,12 0.0048	0,15 0.006	93 (83 — 100) 305 (270 — 360)
M2	E	0,1 0.10	2 2.0	0,04 0.0016	0,0023 0.0023	0,075 0.003	0,1 0.004	0,12 0.0048	0,15 0.006	60 (50 — 70) 200 (165 — 230)
M3	E	0,1 0.10	2 2.0	0,0016 0.0016	0,0023 0.0023	0,075 0.003	0,1 0.004	0,12 0.0048	0,15 0.006	55 (45 — 65) 180 (147 — 213)
M4	E	0,1 0.10	2 2.0	0,0016 0.0016	0,058 0.0023	0,075 0.003	0,1 0.004	0,12 0.0045	0,13 0.005	45 (35 — 55) 147 (115 — 180)
M5	E	0,1 0.10	2 2.0	0,035 0.0014	0,05 0.002	0,069 0.0028	0,088 0.0035	0,1 0.004	0,14 0.0055	35 (20 — 45) 114 (65 — 147)
K1	E	0,1 0.10	2 2.0	0,033 0.0013	0,05 0.002	0,063 0.0025	0,081 0.0033	0,1 0.004	0,13 0.005	80 (70 — 90) 260 (230 — 290)
K2	E	0,1 0.10	2 2.0	0,045 0.0018	0,069 0.0028	0,063 0.0035	0,11 0.0045	0,14 0.0055	0,18 0.0069	87 (75 — 100) 285 (245 — 330)
K3	E	0,1 0.10	2 2.0	0,033 0.0013	0,05 0.002	0,063 0.0025	0,081 0.0033	0,1 0.004	0,13 0.005	65 (55 — 75) 213 (180 — 245)
K4	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,081 0.0033	0,1 0.004	0,13 0.005	50 (35 — 65) 165 (115 — 213)
K5	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	45 (30 — 55) 147 (100 — 180)
K6	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	77 (65 — 85) 250 (210 — 280)
K7	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	77 (60 — 90) 250 (200 — 290)
S1	E	0,1 0.10	2 2.0	0,0013 0.0013	0,05 0.002	0,063 0.0025	0,0033 0.0033	0,1 0.004	0,13 0.005	50 (35 — 60) 165 (115 — 200)
S2	E	0,1 0.10	2 2.0	0,025 0.001	0,038 0.0015	0,05 0.002	0,063 0.0025	0,075 0.003	0,1 0.004	25 (15 — 35) 82 (50 — 115)
S3	E	0,1 0.10	2 2.0	0,016 0.00063	0,025 0.001	0,033 0.0013	0,043 0.0016	0,05 0.002	0,069 0.0028	11 (7,5 — 16) 35 (25 — 52)
S11	E	0,1 0.10	2 2.0	0,033 0.0013	0,05 0.002	0,063 0.0025	0,081 0.0033	0,1 0.004	0,13 0.005	110 (95 — 120) 360 (311 — 390)
S12	E	0,1 0.10	2 2.0	0,025 0.001	0,038 0.0015	0,05 0.002	0,063 0.0025	0,075 0.003	0,1 0.004	77 (60 — 90) 250 (190 — 290)
S13	E	0,1 0.10	2 2.0	0,025 0.001	0,038 0.0015	0,05 0.002	0,063 0.0025	0,075 0.003	0,1 0.004	30 (20 — 40) 100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

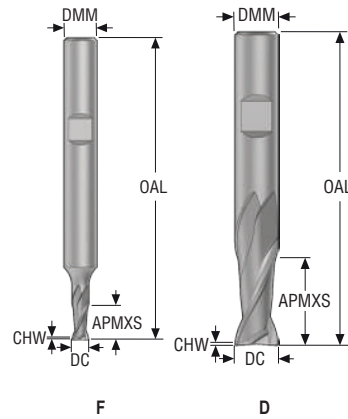
a_e = mm/DC (in/DC) = factor

All cutting data are target values

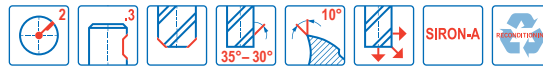
Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfpr
Graphite
X-Heads
Minimaster

JSE512

General purpose – Universal – Square – 2 Flutes – Weldon – chamfer



- Tolerances:
- DMM=h5
- DC=e8
- Regrind possible if DC is $\geq \varnothing 10$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JSE512020F2C.3Z2	SIRA	10053113	2	F	2,0	6,0	4,0	57,0	8,0	2,05	0,02	2	Weldon	■
JSE512030F2C.3Z2	SIRA	10053114	2	F	3,0	6,0	6,0	57,0	10,0	3,05	0,03	2	Weldon	■
JSE512040F2C.3Z2	SIRA	10053115	2	F	4,0	6,0	8,0	57,0	12,0	4,05	0,04	2	Weldon	■
JSE512060D2C.3Z2	SIRA	10053116	2	D	6,0	6,0	12,0	57,0	—	—	0,06	2	Weldon	■
JSE512080D2C.3Z2	SIRA	10053117	2	D	8,0	8,0	16,0	63,0	—	—	0,08	2	Weldon	■
JSE512100D2C.3Z2	SIRA	10053118	2	D	10,0	10,0	20,0	72,0	—	—	0,1	2	Weldon	■
JSE512120D2C.3Z2	SIRA	10053119	2	D	12,0	12,0	24,0	83,0	—	—	0,12	2	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JSE512 Side milling

SMG		a_e/DC	a_p/DC	f_z								v_c
				2	3	4	5	6	8	10	12	
P1	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P2	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P3	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P4	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P5	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P6	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P7	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P8	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
P11	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
P12	M/A/D/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
M1	E/M/A	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
M2	E/M/A	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
M3	E/M/A	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
M4	E/M/A	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
M5	E/M/A	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
K1	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K2	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K3	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K4	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K5	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K6	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K7	A/D/M/E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
N1	E/M/A	0.200 0,200	1.5 1,5	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	500 (380 — 630) 1650 (1300 — 2000)
N11	E/M/A	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	365 (250 — 480) 1200 (830 — 1500)
S11	E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
S12	E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)
S13	E	0.250 0,250	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (61 — 120) 280 (210 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JSE512 Slot milling

SMG		a _p /DC	f _z								v _c	
			2	3	4	5	6	8	10	12		
P1	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (51 — 150) 395 (170 — 490)	Universal
P2	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
P3	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (51 — 150) 395 (170 — 490)	Steel and cast iron
P4	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
P5	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	Stainless steel and S-materials
P6	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
P7	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (51 — 150) 395 (170 — 490)	Non ferrous
P8	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
P11	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (51 — 100) 230 (170 — 320)	Hard
P12	M/A/D/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	
M1	E/M/A	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	Plastic and cf/p
M2	E/M/A	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	
M3	E/M/A	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	Graphite
M4	E/M/A	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	
M5	E/M/A	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	X-Heads
K1	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
K2	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	Minimaster
K3	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
K4	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
K5	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
K6	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
K7	A/D/M/E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	120 (50 — 140) 395 (170 — 450)	
N1	E/M/A	0.40 0.40	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	400 (300 — 500) 1300 (990 — 1600)	
N11	E/M/A	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	300 (200 — 390) 980 (660 — 1200)	
S11	E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	
S12	E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	
S13	E	0.60 0.60	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	70 (50 — 99) 230 (170 — 320)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

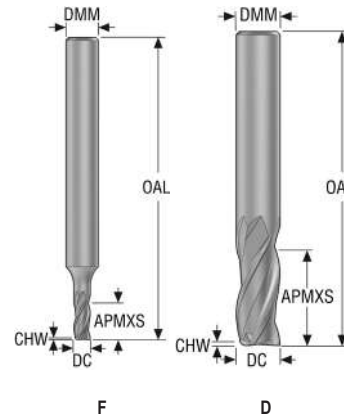
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

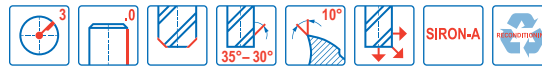
All cutting data are target values

JSE513

General purpose – Universal – Square – 3 Flutes – Cylindrical – chamfer



—Tolerances:
—DMM=h5
—DC=e8
—Reground possible if DC is ≥Ø10

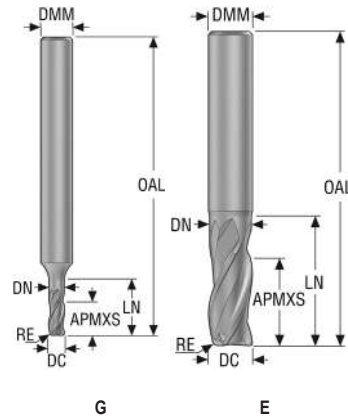


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
Non ferrous	JSE513020F2C.0Z3	SIRA	10053000	2	F	2,0	6,0	4,0	57,0	8,0	2,05	0,02	3	Cylindrical	■
	JSE513025F2C.0Z3	SIRA	10053001	2	F	2,5	6,0	5,0	57,0	9,0	2,55	0,025	3	Cylindrical	■
	JSE513030D2C.0Z3	SIRA	10052998	2	D	3,0	3,0	6,0	50,0	—	—	0,03	3	Cylindrical	■
Hard	JSE513030F2C.0Z3	SIRA	10053002	2	F	3,0	6,0	6,0	57,0	10,0	3,05	0,03	3	Cylindrical	■
	JSE513040D2C.0Z3	SIRA	10052999	2	D	4,0	4,0	8,0	50,0	—	—	0,04	3	Cylindrical	■
	JSE513040F2C.0Z3	SIRA	10053003	2	F	4,0	6,0	8,0	57,0	12,0	4,05	0,04	3	Cylindrical	■
Plastic and cfcp	JSE513050F2C.0Z3	SIRA	10053004	2	F	5,0	6,0	10,0	57,0	14,0	5,05	0,05	3	Cylindrical	■
	JSE513060D2C.0Z3	SIRA	10053005	2	D	6,0	6,0	12,0	57,0	—	—	0,06	3	Cylindrical	■
	JSE513070F2C.0Z3	SIRA	10053006	2	F	7,0	8,0	14,0	63,0	18,0	7,05	0,07	3	Cylindrical	■
Graphite	JSE513080D2C.0Z3	SIRA	10053007	2	D	8,0	8,0	16,0	63,0	—	—	0,08	3	Cylindrical	■
	JSE513090F2C.0Z3	SIRA	10053008	2	F	9,0	10,0	18,0	72,0	22,0	9,05	0,09	3	Cylindrical	■
	JSE513100D2C.0Z3	SIRA	10053009	2	D	10,0	10,0	20,0	72,0	—	—	0,1	3	Cylindrical	■
X-Heads	JSE513110F2C.0Z3	SIRA	10053010	2	F	11,0	12,0	22,0	83,0	26,0	11,05	0,11	3	Cylindrical	■
	JSE513120D2C.0Z3	SIRA	10053011	2	D	12,0	12,0	24,0	83,0	—	—	0,12	3	Cylindrical	■
	JSE513140D2C.0Z3	SIRA	10053012	2	D	14,0	14,0	28,0	80,0	—	—	0,14	3	Cylindrical	■
Minimaster	JSE513160D2C.0Z3	SIRA	10053013	2	D	16,0	16,0	32,0	92,0	—	—	0,16	3	Cylindrical	■
	JSE513180D2C.0Z3	SIRA	10053014	2	D	18,0	18,0	35,0	100,0	—	—	0,18	3	Cylindrical	■
	JSE513200D2C.0Z3	SIRA	10053015	2	D	20,0	20,0	35,0	104,0	—	—	0,2	3	Cylindrical	■
	JSE513030F3C.0Z3	SIRA	10053038	3	F	3,0	6,0	10,0	57,0	14,0	3,05	0,03	3	Cylindrical	■
	JSE513040F3C.0Z3	SIRA	10053039	3	F	4,0	6,0	14,0	57,0	18,0	4,05	0,04	3	Cylindrical	■
	JSE513050F3C.0Z3	SIRA	10053040	3	F	5,0	6,0	18,0	57,0	22,0	5,05	0,05	3	Cylindrical	■
	JSE513060D3C.0Z3	SIRA	10053046	3	D	6,0	6,0	20,0	63,0	—	—	0,06	3	Cylindrical	■
	JSE513080D3C.0Z3	SIRA	10053047	3	D	8,0	8,0	28,0	80,0	—	—	0,08	3	Cylindrical	■
	JSE513100D3C.0Z3	SIRA	10053048	3	D	10,0	10,0	35,0	89,0	—	—	0,1	3	Cylindrical	■
	JSE513120D3C.0Z3	SIRA	10053049	3	D	12,0	12,0	42,0	100,0	—	—	0,12	3	Cylindrical	■
	JSE513160D3C.0Z3	SIRA	10053050	3	D	16,0	16,0	50,0	115,0	—	—	0,16	3	Cylindrical	■
	JSE513200D3C.0Z3	SIRA	10053052	3	D	20,0	20,0	60,0	125,0	—	—	0,2	3	Cylindrical	■
	JSE513030F4C.0Z3	SIRA	10201454	4	F	3,0	6,0	15,0	57,0	19,0	3,05	0,03	3	Cylindrical	■
	JSE513040F4C.0Z3	SIRA	10201455	4	F	4,0	6,0	20,0	63,0	24,0	4,05	0,04	3	Cylindrical	■
	JSE513050F4C.0Z3	SIRA	10201456	4	F	5,0	6,0	25,0	75,0	29,0	5,05	0,05	3	Cylindrical	■
	JSE513060D4C.0Z3	SIRA	10201457	4	D	6,0	6,0	30,0	75,0	—	—	0,06	3	Cylindrical	■
	JSE513080D4C.0Z3	SIRA	10201458	4	D	8,0	8,0	40,0	87,0	—	—	0,08	3	Cylindrical	■
	JSE513100D4C.0Z3	SIRA	10201459	4	D	10,0	10,0	50,0	104,0	—	—	0,1	3	Cylindrical	■
	JSE513120D4C.0Z3	SIRA	10201460	4	D	12,0	12,0	60,0	125,0	—	—	0,12	3	Cylindrical	■
	JSE513160D4C.0Z3	SIRA	10201461	4	D	16,0	16,0	80,0	150,0	—	—	0,16	3	Cylindrical	■
	JSE513200D4C.0Z3	SIRA	10201462	4	D	20,0	20,0	100,0	170,0	—	—	0,2	3	Cylindrical	■

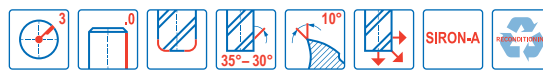
■ Stocked standard.

JSE513

General purpose – Universal – Square – 3 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø10



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JSE513030G2R050.0Z3	SIRA	10053023	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,5	3	Cylindrical	■
JSE513040G2R050.0Z3	SIRA	10053024	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,5	3	Cylindrical	■
JSE513050G2R050.0Z3	SIRA	10053025	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,5	3	Cylindrical	■
JSE513060E2R050.0Z3	SIRA	10053026	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	3	Cylindrical	■
JSE513060E2R100.0Z3	SIRA	10053032	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	3	Cylindrical	■
JSE513080E2R050.0Z3	SIRA	10053027	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	3	Cylindrical	■
JSE513080E2R100.0Z3	SIRA	10053033	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	3	Cylindrical	■
JSE513100E2R050.0Z3	SIRA	10053028	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	3	Cylindrical	■
JSE513100E2R100.0Z3	SIRA	10053034	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	3	Cylindrical	■
JSE513120E2R050.0Z3	SIRA	10053029	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	3	Cylindrical	■
JSE513120E2R100.0Z3	SIRA	10053035	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	3	Cylindrical	■
JSE513160E2R050.0Z3	SIRA	10053030	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	3	Cylindrical	■
JSE513160E2R100.0Z3	SIRA	10053036	2	E	16,0	16,0	28,0	92,0	42,0	15,2	1,0	3	Cylindrical	■
JSE513200E2R050.0Z3	SIRA	10053031	2	E	20,0	20,0	35,0	104,0	51,0	19,0	0,5	3	Cylindrical	■
JSE513200E2R100.0Z3	SIRA	10053037	2	E	20,0	20,0	35,0	104,0	51,0	19,0	1,0	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

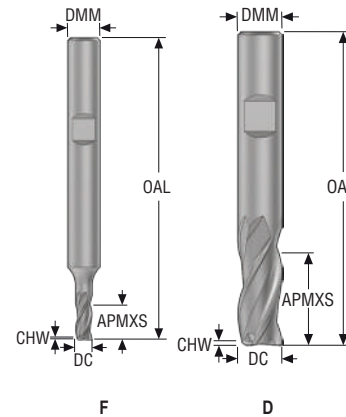
Graphite

X-Heads

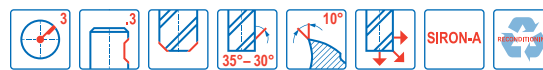
Minimaster

JSE513

General purpose – Universal – Square – 3 Flutes – Weldon – chamfer



—Tolerances:
—DMM=h5
—DC=e8
—Regrind possible if DC is $\geq \phi 10$

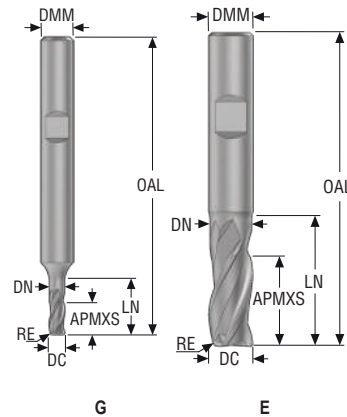


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
Non ferrous	JSE513020F2C.3Z3	SIRA	10053120	2	F	2,0	6,0	4,0	57,0	8,0	2,05	0,02	3	Weldon	■
	JSE513025F2C.3Z3	SIRA	10053121	2	F	2,5	6,0	5,0	57,0	9,0	2,55	0,025	3	Weldon	■
	JSE513030F2C.3Z3	SIRA	10053122	2	F	3,0	6,0	6,0	57,0	10,0	3,05	0,03	3	Weldon	■
Hard	JSE513040F2C.3Z3	SIRA	10053123	2	F	4,0	6,0	8,0	57,0	12,0	4,05	0,04	3	Weldon	■
	JSE513050F2C.3Z3	SIRA	10053124	2	F	5,0	6,0	10,0	57,0	14,0	5,05	0,05	3	Weldon	■
	JSE513060D2C.3Z3	SIRA	10053125	2	D	6,0	6,0	12,0	57,0	—	—	0,06	3	Weldon	■
Plastic and cfrp	JSE513070F2C.3Z3	SIRA	10053126	2	F	7,0	8,0	14,0	63,0	18,0	7,05	0,07	3	Weldon	■
	JSE513080D2C.3Z3	SIRA	10053127	2	D	8,0	8,0	16,0	63,0	—	—	0,08	3	Weldon	■
	JSE513090F2C.3Z3	SIRA	10053128	2	F	9,0	10,0	18,0	72,0	22,0	9,05	0,09	3	Weldon	■
Graphite	JSE513100D2C.3Z3	SIRA	10053129	2	D	10,0	10,0	20,0	72,0	—	—	0,1	3	Weldon	■
	JSE513110F2C.3Z3	SIRA	10053130	2	F	11,0	12,0	22,0	83,0	26,0	11,05	0,11	3	Weldon	■
	JSE513120D2C.3Z3	SIRA	10053131	2	D	12,0	12,0	24,0	83,0	—	—	0,12	3	Weldon	■
X-Heads	JSE513140D2C.3Z3	SIRA	10053132	2	D	14,0	14,0	28,0	80,0	—	—	0,14	3	Weldon	■
	JSE513160D2C.3Z3	SIRA	10053133	2	D	16,0	16,0	32,0	92,0	—	—	0,16	3	Weldon	■
	JSE513180D2C.3Z3	SIRA	10053258	2	D	18,0	18,0	35,0	100,0	—	—	0,18	3	Weldon	■
Minimaster	JSE513200D2C.3Z3	SIRA	10053259	2	D	20,0	20,0	35,0	104,0	—	—	0,2	3	Weldon	■
	JSE513030F3C.3Z3	SIRA	10053275	3	F	3,0	6,0	10,0	57,0	14,0	3,05	0,03	3	Weldon	■
	JSE513040F3C.3Z3	SIRA	10053276	3	F	4,0	6,0	14,0	57,0	18,0	4,05	0,04	3	Weldon	■
	JSE513050F3C.3Z3	SIRA	10053277	3	F	5,0	6,0	18,0	57,0	22,0	5,05	0,05	3	Weldon	■
	JSE513060D3C.3Z3	SIRA	10053283	3	D	6,0	6,0	20,0	63,0	—	—	0,06	3	Weldon	■
	JSE513080D3C.3Z3	SIRA	10053284	3	D	8,0	8,0	28,0	80,0	—	—	0,08	3	Weldon	■
	JSE513100D3C.3Z3	SIRA	10053285	3	D	10,0	10,0	35,0	89,0	—	—	0,1	3	Weldon	■
	JSE513120D3C.3Z3	SIRA	10053286	3	D	12,0	12,0	42,0	100,0	—	—	0,12	3	Weldon	■
	JSE513160D3C.3Z3	SIRA	10053287	3	D	16,0	16,0	50,0	115,0	—	—	0,16	3	Weldon	■
	JSE513200D3C.3Z3	SIRA	10053288	3	D	20,0	20,0	60,0	125,0	—	—	0,2	3	Weldon	■
	JSE513030F4C.3Z3	SIRA	10201463	4	F	3,0	6,0	15,0	57,0	19,0	3,05	0,03	3	Weldon	□
	JSE513040F4C.3Z3	SIRA	10201464	4	F	4,0	6,0	20,0	63,0	24,0	4,05	0,04	3	Weldon	□
	JSE513050F4C.3Z3	SIRA	10201465	4	F	5,0	6,0	25,0	75,0	29,0	5,05	0,05	3	Weldon	□
	JSE513060D4C.3Z3	SIRA	10201466	4	D	6,0	6,0	30,0	75,0	—	—	0,06	3	Weldon	□
	JSE513080D4C.3Z3	SIRA	10201467	4	D	8,0	8,0	40,0	87,0	—	—	0,08	3	Weldon	□
	JSE513100D4C.3Z3	SIRA	10201468	4	D	10,0	10,0	50,0	104,0	—	—	0,1	3	Weldon	□
	JSE513120D4C.3Z3	SIRA	10201469	4	D	12,0	12,0	60,0	125,0	—	—	0,12	3	Weldon	□
	JSE513160D4C.3Z3	SIRA	10201470	4	D	16,0	16,0	80,0	150,0	—	—	0,16	3	Weldon	□
	JSE513200D4C.3Z3	SIRA	10201471	4	D	20,0	20,0	100,0	170,0	—	—	0,2	3	Weldon	□

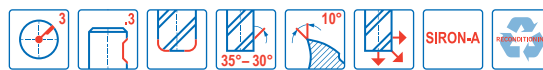
■ Stocked standard.

JSE513

General purpose – Universal – Square – 3 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø10



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JSE513030G2R050.3Z3	SIRA	10053260	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,5	3	Weldon	■
JSE513040G2R050.3Z3	SIRA	10053261	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,5	3	Weldon	■
JSE513050G2R050.3Z3	SIRA	10053262	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,5	3	Weldon	■
JSE513060E2R050.3Z3	SIRA	10053263	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	3	Weldon	■
JSE513060E2R100.3Z3	SIRA	10053269	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	3	Weldon	■
JSE513080E2R050.3Z3	SIRA	10053264	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	3	Weldon	■
JSE513080E2R100.3Z3	SIRA	10053270	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	3	Weldon	■
JSE513100E2R050.3Z3	SIRA	10053265	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	3	Weldon	■
JSE513100E2R100.3Z3	SIRA	10053271	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	3	Weldon	■
JSE513120E2R050.3Z3	SIRA	10053266	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	3	Weldon	■
JSE513120E2R100.3Z3	SIRA	10053272	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	3	Weldon	■
JSE513160E2R050.3Z3	SIRA	10053267	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	3	Weldon	■
JSE513160E2R100.3Z3	SIRA	10053273	2	E	16,0	16,0	28,0	92,0	42,0	15,2	1,0	3	Weldon	■
JSE513200E2R050.3Z3	SIRA	10053268	2	E	20,0	20,0	35,0	104,0	51,0	19,0	0,5	3	Weldon	■
JSE513200E2R100.3Z3	SIRA	10053274	2	E	20,0	20,0	35,0	104,0	51,0	19,0	1,0	3	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

SMG		a _g /DC	a _p /DC	f _z																v _c
				2	3	4	5	6	7	8	9	10	11	12	14	16	18	20		
P1	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P2	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P3	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P4	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P5	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P6	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P7	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P8	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
P11	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
P12	M/A/D/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (64 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (210 — 390)	
M1	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
M2	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
M3	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
M4	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
M5	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
K1	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
K2	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
K3	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
K4	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
K5	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
K6	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
K7	A/D/M/E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	155 (65 — 190)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	510 (220 — 620)	
N1	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	510 (390 — 630)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	1675 (1300 — 2000)	
N11	E/M/A	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	385 (260 — 510)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	1275 (860 — 1600)	
S11	E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
S12	E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	
S13	E	0.200	1.5	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.090	0.095	0.10	90 (65 — 120)	
		0.200	1.5	0.00048	0.00070	0.00095	0.0012	0.0014	0.0017	0.0019	0.0022	0.0024	0.0026	0.0028	0.0032	0.0036	0.0038	0.0040	295 (220 — 390)	

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Universal

and cast
iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

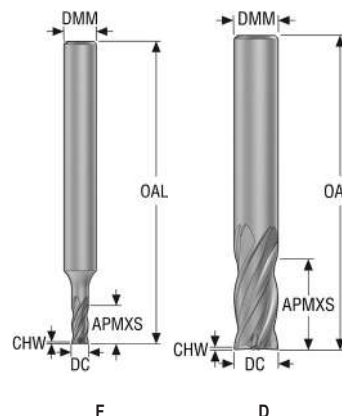
Graphite

X-Heads

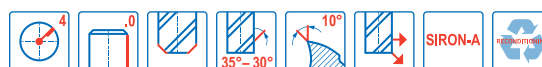
Minimaster

JSE514

General purpose – Universal – Square – 4 Flutes – Cylindrical – chamfer



—Tolerances:
—DMM=h5
—DC=e8
—Reground possible if DC is $\geq \varnothing 10$

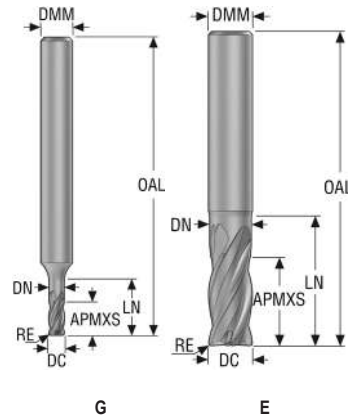


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
Non ferrous	JSE514021F2C.0Z4	SIRA	10053053	2	F	2,0	3,0	4,0	50,0	8,0	2,05	0,02	4	Cylindrical	■
	JSE514020F2C.0Z4	SIRA	10053057	2	F	2,0	6,0	4,0	57,0	8,0	2,05	0,02	4	Cylindrical	■
	JSE514030D2C.0Z4	SIRA	10053054	2	D	3,0	3,0	6,0	50,0	—	—	0,03	4	Cylindrical	■
	JSE514030F2C.0Z4	SIRA	10053058	2	F	3,0	6,0	6,0	57,0	10,0	3,05	0,03	4	Cylindrical	■
Hard	JSE514040D2C.0Z4	SIRA	10053055	2	D	4,0	4,0	8,0	50,0	—	—	0,04	4	Cylindrical	■
	JSE514040F2C.0Z4	SIRA	10053059	2	F	4,0	6,0	8,0	57,0	12,0	4,05	0,04	4	Cylindrical	■
	JSE514050D2C.0Z4	SIRA	10053056	2	D	5,0	5,0	10,0	50,0	—	—	0,05	4	Cylindrical	■
	JSE514050F2C.0Z4	SIRA	10053060	2	F	5,0	6,0	10,0	57,0	14,0	5,05	0,05	4	Cylindrical	■
Plastic and cfrrp	JSE514060D2C.0Z4	SIRA	10053061	2	D	6,0	6,0	12,0	57,0	—	—	0,06	4	Cylindrical	■
	JSE514080D2C.0Z4	SIRA	10053062	2	D	8,0	8,0	16,0	63,0	—	—	0,08	4	Cylindrical	■
	JSE514100D2C.0Z4	SIRA	10053063	2	D	10,0	10,0	20,0	72,0	—	—	0,1	4	Cylindrical	■
	JSE514120D2C.0Z4	SIRA	10053064	2	D	12,0	12,0	24,0	83,0	—	—	0,12	4	Cylindrical	■
Graphite	JSE514160D2C.0Z4	SIRA	10053067	2	D	16,0	16,0	32,0	92,0	—	—	0,16	4	Cylindrical	■
	JSE514180D2C.0Z4	SIRA	10053068	2	D	18,0	18,0	35,0	100,0	—	—	0,18	4	Cylindrical	■
	JSE514200D2C.0Z4	SIRA	10053069	2	D	20,0	20,0	35,0	104,0	—	—	0,2	4	Cylindrical	■
	JSE514250D2C.0Z4	SIRA	10053070	2	D	25,0	25,0	40,0	125,0	—	—	0,25	4	Cylindrical	■
X-Heads	JSE514030F3C.0Z4	SIRA	10053090	3	F	3,0	6,0	10,0	57,0	14,0	3,05	0,03	4	Cylindrical	■
	JSE514040F3C.0Z4	SIRA	10053091	3	F	4,0	6,0	14,0	57,0	18,0	4,05	0,04	4	Cylindrical	■
	JSE514050F3C.0Z4	SIRA	10053092	3	F	5,0	6,0	18,0	57,0	22,0	5,05	0,05	4	Cylindrical	■
	JSE514060D3C.0Z4	SIRA	10053093	3	D	6,0	6,0	20,0	63,0	—	—	0,06	4	Cylindrical	■
Minimaster	JSE514080D3C.0Z4	SIRA	10053094	3	D	8,0	8,0	28,0	80,0	—	—	0,08	4	Cylindrical	■
	JSE514100D3C.0Z4	SIRA	10053095	3	D	10,0	10,0	35,0	89,0	—	—	0,1	4	Cylindrical	■
	JSE514120D3C.0Z4	SIRA	10053096	3	D	12,0	12,0	42,0	100,0	—	—	0,12	4	Cylindrical	■
	JSE514160D3C.0Z4	SIRA	10053097	3	D	16,0	16,0	50,0	115,0	—	—	0,16	4	Cylindrical	■
	JSE514200D3C.0Z4	SIRA	10053098	3	D	20,0	20,0	60,0	125,0	—	—	0,2	4	Cylindrical	■
	JSE514030F4C.0Z4	SIRA	10201472	4	F	3,0	6,0	15,0	57,0	19,0	3,05	0,03	4	Cylindrical	■
	JSE514040F4C.0Z4	SIRA	10201473	4	F	4,0	6,0	20,0	63,0	24,0	4,05	0,04	4	Cylindrical	■
	JSE514050F4C.0Z4	SIRA	10201474	4	F	5,0	6,0	25,0	75,0	29,0	5,05	0,05	4	Cylindrical	■
	JSE514060D4C.0Z4	SIRA	10201475	4	D	6,0	6,0	30,0	75,0	—	—	0,06	4	Cylindrical	■
	JSE514080D4C.0Z4	SIRA	10201476	4	D	8,0	8,0	40,0	87,0	—	—	0,08	4	Cylindrical	■
	JSE514100D4C.0Z4	SIRA	10201477	4	D	10,0	10,0	50,0	104,0	—	—	0,1	4	Cylindrical	■
	JSE514120D4C.0Z4	SIRA	10201478	4	D	12,0	12,0	60,0	125,0	—	—	0,12	4	Cylindrical	■
	JSE514160D4C.0Z4	SIRA	10201479	4	D	16,0	16,0	80,0	150,0	—	—	0,16	4	Cylindrical	■
	JSE514200D4C.0Z4	SIRA	10201480	4	D	20,0	20,0	100,0	170,0	—	—	0,2	4	Cylindrical	■

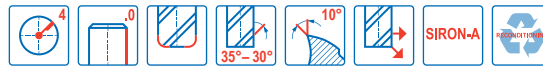
■ Stocked standard.

JSE514

General purpose – Universal – Square – 4 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø10



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JSE514030G2R050.0Z4	SIRA	10053071	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,5	4	Cylindrical	■
JSE514040G2R050.0Z4	SIRA	10053072	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,5	4	Cylindrical	■
JSE514050G2R050.0Z4	SIRA	10053073	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,5	4	Cylindrical	■
JSE514060E2R050.0Z4	SIRA	10053074	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	4	Cylindrical	■
JSE514060E2R100.0Z4	SIRA	10053081	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	4	Cylindrical	■
JSE514080E2R050.0Z4	SIRA	10053075	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	4	Cylindrical	■
JSE514080E2R100.0Z4	SIRA	10053082	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	4	Cylindrical	■
JSE514100E2R050.0Z4	SIRA	10053076	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	4	Cylindrical	■
JSE514100E2R100.0Z4	SIRA	10053083	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	4	Cylindrical	■
JSE514120E2R050.0Z4	SIRA	10053077	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	4	Cylindrical	■
JSE514120E2R100.0Z4	SIRA	10053084	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	4	Cylindrical	■
JSE514160E2R050.0Z4	SIRA	10053078	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	4	Cylindrical	■
JSE514160E2R100.0Z4	SIRA	10053087	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	4	Cylindrical	■
JSE514200E2R050.0Z4	SIRA	10053079	2	E	20,0	20,0	35,0	104,0	51,0	19,0	0,5	4	Cylindrical	■
JSE514200E2R100.0Z4	SIRA	10053088	2	E	20,0	20,0	35,0	104,0	51,0	19,0	1,0	4	Cylindrical	■
JSE514250E2R050.0Z4	SIRA	10053080	2	E	25,0	25,0	40,0	125,0	66,0	23,8	0,5	4	Cylindrical	■
JSE514250E2R100.0Z4	SIRA	10053089	2	E	25,0	25,0	40,0	125,0	66,0	23,8	1,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

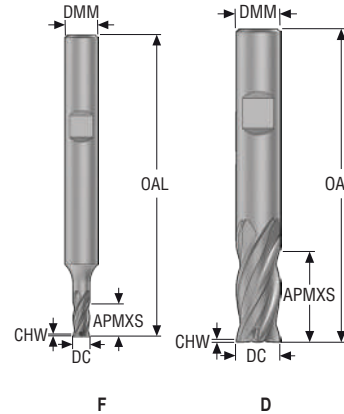
Graphite

X-Heads

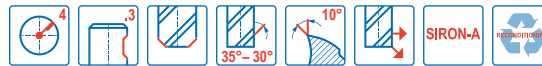
Minimaster

JSE514

General purpose – Universal – Square – 4 Flutes – Weldon – chamfer



—Tolerances:
—DMM=h5
—DC=e8
—Regrind possible if DC is $\geq \varnothing 10$

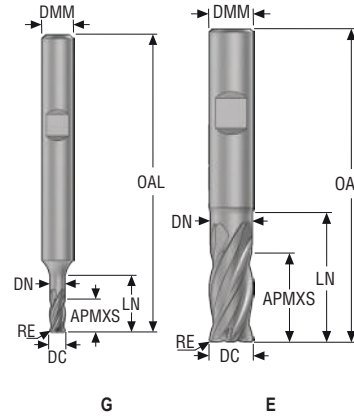


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JSE514020F2C.3Z4	SIRA	10053289	2	F	2,0	6,0	4,0	57,0	8,0	2,05	0,02	4	Weldon	■
JSE514030F2C.3Z4	SIRA	10053290	2	F	3,0	6,0	6,0	57,0	10,0	3,05	0,03	4	Weldon	■
JSE514040F2C.3Z4	SIRA	10053291	2	F	4,0	6,0	8,0	57,0	12,0	4,05	0,04	4	Weldon	■
JSE514050F2C.3Z4	SIRA	10053292	2	F	5,0	6,0	10,0	57,0	14,0	5,05	0,05	4	Weldon	■
JSE514060D2C.3Z4	SIRA	10053293	2	D	6,0	6,0	12,0	57,0	—	—	0,06	4	Weldon	■
JSE514080D2C.3Z4	SIRA	10053294	2	D	8,0	8,0	16,0	63,0	—	—	0,08	4	Weldon	■
JSE514100D2C.3Z4	SIRA	10053295	2	D	10,0	10,0	20,0	72,0	—	—	0,1	4	Weldon	■
JSE514120D2C.3Z4	SIRA	10053296	2	D	12,0	12,0	24,0	83,0	—	—	0,12	4	Weldon	■
JSE514160D2C.3Z4	SIRA	10053297	2	D	16,0	16,0	32,0	92,0	—	—	0,16	4	Weldon	■
JSE514180D2C.3Z4	SIRA	10053298	2	D	18,0	18,0	35,0	100,0	—	—	0,18	4	Weldon	■
JSE514200D2C.3Z4	SIRA	10053299	2	D	20,0	20,0	35,0	104,0	—	—	0,2	4	Weldon	■
JSE514250D2C.3Z4	SIRA	10053300	2	D	25,0	25,0	40,0	125,0	—	—	0,25	4	Weldon	■
JSE514030F3C.3Z4	SIRA	10053321	3	F	3,0	6,0	10,0	57,0	14,0	3,05	0,03	4	Weldon	■
JSE514040F3C.3Z4	SIRA	10053322	3	F	4,0	6,0	14,0	57,0	18,0	4,05	0,04	4	Weldon	■
JSE514050F3C.3Z4	SIRA	10053323	3	F	5,0	6,0	18,0	57,0	22,0	5,05	0,05	4	Weldon	■
JSE514060D3C.3Z4	SIRA	10053324	3	D	6,0	6,0	20,0	63,0	—	—	0,06	4	Weldon	■
JSE514080D3C.3Z4	SIRA	10053325	3	D	8,0	8,0	28,0	80,0	—	—	0,08	4	Weldon	■
JSE514100D3C.3Z4	SIRA	10053326	3	D	10,0	10,0	35,0	89,0	—	—	0,1	4	Weldon	■
JSE514120D3C.3Z4	SIRA	10053327	3	D	12,0	12,0	42,0	100,0	—	—	0,12	4	Weldon	■
JSE514160D3C.3Z4	SIRA	10053328	3	D	16,0	16,0	50,0	115,0	—	—	0,16	4	Weldon	■
JSE514200D3C.3Z4	SIRA	10053329	3	D	20,0	20,0	60,0	125,0	—	—	0,2	4	Weldon	■
JSE514030F4C.3Z4	SIRA	10201481	4	F	3,0	6,0	15,0	57,0	19,0	3,05	0,03	4	Weldon	□
JSE514040F4C.3Z4	SIRA	10201482	4	F	4,0	6,0	20,0	63,0	24,0	4,05	0,04	4	Weldon	□
JSE514050F4C.3Z4	SIRA	10201483	4	F	5,0	6,0	25,0	75,0	29,0	5,05	0,05	4	Weldon	□
JSE514060D4C.3Z4	SIRA	10201484	4	D	6,0	6,0	30,0	75,0	—	—	0,06	4	Weldon	□
JSE514080D4C.3Z4	SIRA	10201485	4	D	8,0	8,0	40,0	87,0	—	—	0,08	4	Weldon	□
JSE514100D4C.3Z4	SIRA	10201486	4	D	10,0	10,0	50,0	104,0	—	—	0,1	4	Weldon	□
JSE514120D4C.3Z4	SIRA	10201487	4	D	12,0	12,0	60,0	125,0	—	—	0,12	4	Weldon	□
JSE514160D4C.3Z4	SIRA	10201488	4	D	16,0	16,0	80,0	150,0	—	—	0,16	4	Weldon	□
JSE514200D4C.3Z4	SIRA	10201489	4	D	20,0	20,0	100,0	170,0	—	—	0,2	4	Weldon	□

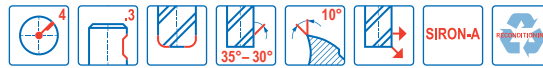
■ Stocked standard.

JSE514

General purpose – Universal – Square – 4 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø10



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JSE514030G2R050.3Z4	SIRA	10053301	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,5	4	Weldon	■
JSE514040G2R050.3Z4	SIRA	10053302	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,5	4	Weldon	■
JSE514050G2R050.3Z4	SIRA	10053306	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,5	4	Weldon	■
JSE514060E2R050.3Z4	SIRA	10053307	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	4	Weldon	■
JSE514060E2R100.3Z4	SIRA	10053314	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	4	Weldon	■
JSE514080E2R050.3Z4	SIRA	10053308	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	4	Weldon	■
JSE514080E2R100.3Z4	SIRA	10053315	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	4	Weldon	■
JSE514100E2R050.3Z4	SIRA	10053309	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	4	Weldon	■
JSE514100E2R100.3Z4	SIRA	10053316	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	4	Weldon	■
JSE514120E2R050.3Z4	SIRA	10053310	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	4	Weldon	■
JSE514120E2R100.3Z4	SIRA	10053317	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	4	Weldon	■
JSE514160E2R050.3Z4	SIRA	10053311	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	4	Weldon	■
JSE514160E2R100.3Z4	SIRA	10053318	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	4	Weldon	■
JSE514200E2R050.3Z4	SIRA	10053312	2	E	20,0	20,0	35,0	104,0	51,0	19,0	0,5	4	Weldon	■
JSE514200E2R100.3Z4	SIRA	10053319	2	E	20,0	20,0	35,0	104,0	51,0	19,0	1,0	4	Weldon	■
JSE514250E2R050.3Z4	SIRA	10053313	2	E	25,0	25,0	40,0	125,0	66,0	23,8	0,5	4	Weldon	■
JSE514250E2R100.3Z4	SIRA	10053320	2	E	25,0	25,0	40,0	125,0	66,0	23,8	1,0	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

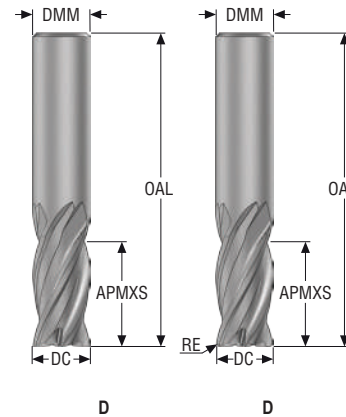
Graphite

X-Heads

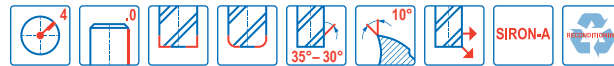
Minimaster

JSE514

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp or corner radius – Inch



—Tolerances:
—DMM=h5
—DC=e8
—RE= ±.002 Inch
—Grind possible if DC is ≥Ø.375

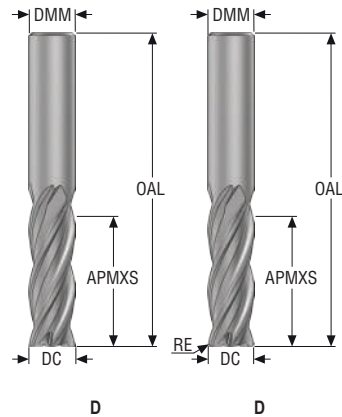


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch			
JSE514.250D1S.0Z4	SIRA	10201805	1	D	0.250	0.250	0.375	2.000	—	4	Cylindrical	■
JSE514.250D1R030.0Z4	SIRA	10201812	1	D	0.250	0.250	0.375	2.000	0.030	4	Cylindrical	■
JSE514.375D1S.0Z4	SIRA	10201806	1	D	0.375	0.375	0.500	2.000	—	4	Cylindrical	■
JSE514.375D1R030.0Z4	SIRA	10201813	1	D	0.375	0.375	0.500	2.000	0.030	4	Cylindrical	■
JSE514.500D1S.0Z4	SIRA	10201807	1	D	0.500	0.500	0.625	2.500	—	4	Cylindrical	■
JSE514.500D1R030.0Z4	SIRA	10201814	1	D	0.500	0.500	0.625	2.500	0.030	4	Cylindrical	■
JSE514.500D1R060.0Z4	SIRA	10201815	1	D	0.500	0.500	0.625	2.500	0.060	4	Cylindrical	■
JSE514.625D1S.0Z4	SIRA	10201808	1	D	0.625	0.625	0.750	3.000	—	4	Cylindrical	■
JSE514.625D1R030.0Z4	SIRA	10201816	1	D	0.625	0.625	0.750	3.000	0.030	4	Cylindrical	■
JSE514.625D1R060.0Z4	SIRA	10201817	1	D	0.625	0.625	0.750	3.000	0.060	4	Cylindrical	■
JSE514.750D1S.0Z4	SIRA	10201809	1	D	0.750	0.750	0.875	3.000	—	4	Cylindrical	■
JSE514.750D1R030.0Z4	SIRA	10201818	1	D	0.750	0.750	0.875	3.000	0.030	4	Cylindrical	■
JSE514.750D1R060.0Z4	SIRA	10201819	1	D	0.750	0.750	0.875	3.000	0.060	4	Cylindrical	■
JSE514.125D2S.0Z4	SIRA	10201803	2	D	0.125	0.125	0.250	1.500	—	4	Cylindrical	■
JSE514.125D2R015.0Z4	SIRA	10201810	2	D	0.125	0.125	0.250	1.500	0.015	4	Cylindrical	■
JSE514.188D2S.0Z4	SIRA	10201804	2	D	0.188	0.188	0.375	2.000	—	4	Cylindrical	■
JSE514.188D2R020.0Z4	SIRA	10201811	2	D	0.188	0.188	0.375	2.000	0.020	4	Cylindrical	■
JSE514.250D2S.0Z4	SIRA	10201822	2	D	0.250	0.250	0.500	2.000	—	4	Cylindrical	■
JSE514.250D2R030.0Z4	SIRA	10201829	2	D	0.250	0.250	0.500	2.000	0.030	4	Cylindrical	■
JSE514.375D2S.0Z4	SIRA	10201823	2	D	0.375	0.375	0.625	2.000	—	4	Cylindrical	■
JSE514.375D2R030.0Z4	SIRA	10201830	2	D	0.375	0.375	0.625	2.000	0.030	4	Cylindrical	■
JSE514.500D2S.0Z4	SIRA	10201824	2	D	0.500	0.500	1.000	3.000	—	4	Cylindrical	■
JSE514.500D2R030.0Z4	SIRA	10201831	2	D	0.500	0.500	1.000	3.000	0.030	4	Cylindrical	■
JSE514.500D2R060.0Z4	SIRA	10201832	2	D	0.500	0.500	1.000	3.000	0.060	4	Cylindrical	■
JSE514.625D2S.0Z4	SIRA	10201825	2	D	0.625	0.625	1.250	3.500	—	4	Cylindrical	■
JSE514.625D2R030.0Z4	SIRA	10201833	2	D	0.625	0.625	1.250	3.500	0.030	4	Cylindrical	■
JSE514.625D2R060.0Z4	SIRA	10201834	2	D	0.625	0.625	1.250	3.500	0.060	4	Cylindrical	■
JSE514.750D2S.0Z4	SIRA	10201826	2	D	0.750	0.750	1.500	4.000	—	4	Cylindrical	■
JSE514.750D2R030.0Z4	SIRA	10201835	2	D	0.750	0.750	1.500	4.000	0.030	4	Cylindrical	■
JSE514.750D2R060.0Z4	SIRA	10201836	2	D	0.750	0.750	1.500	4.000	0.060	4	Cylindrical	■

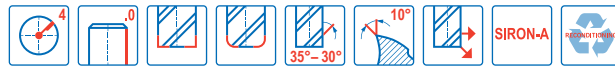
■ Stocked standard.

JSE514

General purpose – Universal – Square – 4 Flutes – Cylindrical – Sharp or corner radius – Inch



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±.002 Inch
- Regrind possible if DC is ≥Ø.375



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
JSE514.125D3S.0Z4	SIRA	10201820	3	D	inch	inch	inch	inch	inch	4	Cylindrical	■
JSE514.125D3R015.0Z4	SIRA	10201827	3	D	0.125	0.125	0.500	1.500	0.015	4	Cylindrical	■
JSE514.188D3S.0Z4	SIRA	10201821	3	D	0.188	0.188	0.625	2.000	—	4	Cylindrical	■
JSE514.188D3R020.0Z4	SIRA	10201828	3	D	0.188	0.188	0.625	2.000	0.020	4	Cylindrical	■
JSE514.250D3S.0Z4	SIRA	10201837	3	D	0.250	0.250	0.750	2.500	—	4	Cylindrical	■
JSE514.250D3R030.0Z4	SIRA	10201842	3	D	0.250	0.250	0.750	2.500	0.030	4	Cylindrical	■
JSE514.375D3S.0Z4	SIRA	10201838	3	D	0.375	0.375	1.000	2.500	—	4	Cylindrical	■
JSE514.375D3R030.0Z4	SIRA	10201843	3	D	0.375	0.375	1.000	2.500	0.030	4	Cylindrical	■
JSE514.500D3S.0Z4	SIRA	10201839	3	D	0.500	0.500	2.000	4.000	—	4	Cylindrical	■
JSE514.500D3R030.0Z4	SIRA	10201844	3	D	0.500	0.500	2.000	4.000	0.030	4	Cylindrical	■
JSE514.500D3R060.0Z4	SIRA	10201845	3	D	0.500	0.500	2.000	4.000	0.060	4	Cylindrical	■
JSE514.625D3S.0Z4	SIRA	10201840	3	D	0.625	0.625	2.250	5.000	—	4	Cylindrical	■
JSE514.625D3R030.0Z4	SIRA	10201846	3	D	0.625	0.625	2.250	5.000	0.030	4	Cylindrical	■
JSE514.625D3R060.0Z4	SIRA	10201847	3	D	0.625	0.625	2.250	5.000	0.060	4	Cylindrical	■
JSE514.750D3S.0Z4	SIRA	10201841	3	D	0.750	0.750	2.250	5.000	—	4	Cylindrical	■
JSE514.750D3R030.0Z4	SIRA	10201848	3	D	0.750	0.750	2.250	5.000	0.030	4	Cylindrical	■
JSE514.750D3R060.0Z4	SIRA	10201849	3	D	0.750	0.750	2.250	5.000	0.060	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JSE514 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				2	3	4	5	6	8	10	12	16	18	20	25	
P1	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P2	M/A/D/E	0.150 0,150	1.5 1,5	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.040 0,0016	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.11 0,0044	0.11 0,0044	0.13 0,0050	160 (67 — 190) 520 (220 — 620)
P3	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P4	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P5	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P6	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P7	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P8	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
P11	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
P12	M/A/D/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
M1	E/M/A	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
M2	E/M/A	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
M3	E/M/A	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
M4	E/M/A	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
M5	E/M/A	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
K1	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
K2	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
K3	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
K4	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
K5	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
K6	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
K7	A/D/M/E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	165 (69 — 200) 540 (230 — 650)
N1	E/M/A	0.150 0,150	1.5 1,5	0.015 0,00060	0.024 0,00095	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	520 (400 — 650) 1700 (1400 — 2100)
N11	E/M/A	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	410 (280 — 540) 1350 (920 — 1700)
S11	E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
S12	E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)
S13	E	0.150 0,150	1.5 1,5	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.12 0,0048	95 (69 — 130) 310 (230 — 420)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JSE514 Slot milling

SMG		a _p /DC	f _z												v _c	
			2	3	4	5	6	8	10	12	16	18	20	25		
P1	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (51 — 150) 395 (170 — 490)	Steel and cast iron
P2	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (51 — 150) 395 (170 — 490)	
P3	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (51 — 150) 395 (170 — 490)	
P4	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 140) 395 (170 — 450)	
P5	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (51 — 150) 395 (170 — 490)	
P6	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 140) 395 (170 — 450)	
P7	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (51 — 150) 395 (170 — 490)	
P8	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (51 — 150) 395 (170 — 490)	
P11	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (51 — 100) 230 (170 — 320)	
P12	M/A/D/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	
M1	E/M/A	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	Non ferrous
M2	E/M/A	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	
M3	E/M/A	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	
M4	E/M/A	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	
M5	E/M/A	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	
K1	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	Hard
K2	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	
K3	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	
K4	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	
K5	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	
K6	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	
K7	A/D/M/E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	120 (50 — 150) 395 (170 — 490)	
N1	E/M/A	0.30 0.30	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	400 (300 — 500) 1300 (990 — 1600)	Graphite
N11	E/M/A	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	300 (200 — 390) 980 (660 — 1200)	
S11	E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	X-Heads
S12	E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	
S13	E	0.40 0.40	0.0060 0.00024	0.0090 0.00036	0.012 0.00048	0.015 0.00060	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.055 0.0022	0.060 0.0024	0.075 0.0030	70 (50 — 99) 230 (170 — 320)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS514 Side milling – Inch

SMG		a _e /DC	a _p /DC	f _z							v _c
				1/8	3/16	1.4	3/8	1/2	5/8	3/4	
P1	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (69 — 200) 540 (230 — 650)
P2	M/A/D/E	0,15 0.15	1,2 1.2	0,022 0.00085	0,032 0.0013	0,042 0.0017	0,065 0.0026	0,085 0.0034	0,10 0.0040	0,11 0.0044	160 (67 — 200) 520 (220 — 650)
P3	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
P4	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
P5	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
P6	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
P7	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
P8	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
P11	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
P12	M/A/D/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
M1	E/M/A	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
M2	E/M/A	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
M3	E/M/A	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
M4	E/M/A	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
M5	E/M/A	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
K1	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
K2	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
K3	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
K4	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
K5	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
K6	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
K7	A/D/M/E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	165 (68 — 200) 540 (230 — 650)
N1	E/M/A	0,15 0.15	1,2 1.2	0,025 0.0010	0,036 0.0014	0,050 0.0020	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,13 0.0050	520 (400 — 650) 1700 (1400 — 2100)
N11	E/M/A	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	410 (280 — 540) 1350 (920 — 1700)
S11	E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
S12	E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)
S13	E	0,15 0.15	1,2 1.2	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (68 — 130) 310 (230 — 420)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JS514 Slot milling – Inch

SMG		a _p /DC	f _z							v _c	
			1/8	3/16	1/4	3/8	1/2	5/8	3/4		
P1	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	Steel and cast iron
P2	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P3	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P4	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P5	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P6	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P7	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P8	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
P11	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
P12	M/A/D/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
M1	E/M/A	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	Non ferrous
M2	E/M/A	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
M3	E/M/A	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
M4	E/M/A	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
M5	E/M/A	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
K1	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	Hard
K2	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
K3	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	Plastic and cfnp
K4	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
K5	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
K6	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
K7	A/D/M/E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	120 (51 — 150) 395 (170 — 490)	
N1	E/M/A	0,30 0.30	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	400 (310 — 500) 1300 (1100 — 1600)	Graphite
N11	E/M/A	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	300 (210 — 400) 980 (690 — 1300)	
S11	E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	X-Heads
S12	E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	
S13	E	0,40 0.40	0,0095 0.00038	0,014 0.00055	0,019 0.00075	0,028 0.0011	0,038 0.0015	0,048 0.0019	0,055 0.0022	70 (51 — 100) 230 (170 — 320)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

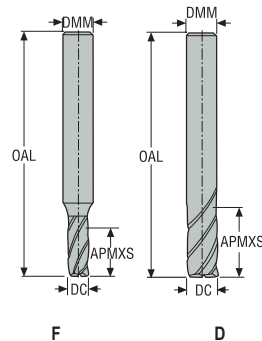
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JS553

High performance – Universal – Square – 3 Flutes – Cylindrical – Sharp

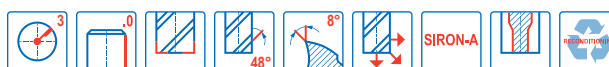


—Tolerances:

—DMM=h5

—DC=e7

—Regrind possible if DC is $\geq \varnothing 6$

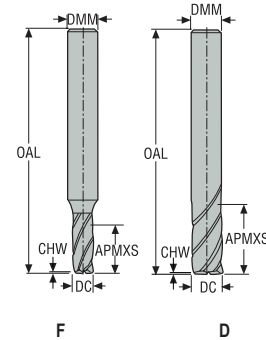


	Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm			
Non ferrous	553020SZ3.0-SIRON-A	02733903	2	F	2,0	6,0	5,0	50,0	6,0	2,0	3	Cylindrical	■
	553030SZ3.0-SIRON-A	02733906	2	F	3,0	6,0	7,0	50,0	8,5	3,0	3	Cylindrical	■
	553040SZ3.0-SIRON-A	02733910	2	F	4,0	6,0	10,0	55,0	11,7	4,0	3	Cylindrical	■
Hard	553050SZ3.0-SIRON-A	02733912	2	F	5,0	6,0	12,0	55,0	14,7	5,0	3	Cylindrical	■
	553060SZ3.0-SIRON-A	02733914	2	D	6,0	6,0	14,0	55,0	—	—	3	Cylindrical	■
	553080SZ3.0-SIRON-A	02733918	2	D	8,0	8,0	18,0	60,0	—	—	3	Cylindrical	■
	553100SZ3.0-SIRON-A	02733922	2	D	10,0	10,0	22,0	70,0	—	—	3	Cylindrical	■

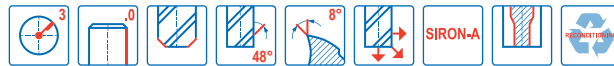
■ Stocked standard.

JS553

High performance – Universal – Square – 3 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS553020F1C.0Z3-SIRA	10041466	1	F	2,0	6,0	3,0	40,0	5,0	2,05	0,025	3	Cylindrical	■
JS553030F1C.0Z3-SIRA	10041467	1	F	3,0	6,0	4,0	40,0	6,0	3,05	0,035	3	Cylindrical	■
JS553040F1C.0Z3-SIRA	10041468	1	F	4,0	6,0	6,0	40,0	9,0	4,05	0,045	3	Cylindrical	■
JS553045F1C.0Z3-SIRA	10041469	1	F	4,5	6,0	6,0	40,0	9,0	4,55	0,045	3	Cylindrical	■
JS553050F1C.0Z3-SIRA	10041470	1	F	5,0	6,0	7,0	40,0	10,0	5,05	0,055	3	Cylindrical	■
JS553055F1C.0Z3-SIRA	10041472	1	F	5,5	6,0	8,0	40,0	11,0	5,55	0,055	3	Cylindrical	■
JS553060D1C.0Z3-SIRA	10041473	1	D	6,0	6,0	8,0	40,0	—	—	0,075	3	Cylindrical	■
JS553080D1C.0Z3-SIRA	10041474	1	D	8,0	8,0	11,0	50,0	—	—	0,1	3	Cylindrical	■
JS553100D1C.0Z3-SIRA	10041475	1	D	10,0	10,0	13,0	57,0	—	—	0,125	3	Cylindrical	■
JS553120D1C.0Z3-SIRA	10041476	1	D	12,0	12,0	15,0	65,0	—	—	0,15	3	Cylindrical	■
553020Z3.0-SIRON-A	02679241	2	F	2,0	6,0	5,0	50,0	6,0	2,0	0,025	3	Cylindrical	■
553025Z3.0-SIRON-A	02679352	2	F	2,5	6,0	7,0	50,0	8,0	2,5	0,025	3	Cylindrical	■
553030Z3.0-SIRON-A	02679353	2	F	3,0	6,0	7,0	50,0	8,5	3,0	0,035	3	Cylindrical	■
553035Z3.0-SIRON-A	02679359	2	F	3,5	6,0	9,0	55,0	10,5	3,5	0,035	3	Cylindrical	■
553040Z3.0-SIRON-A	02679360	2	F	4,0	6,0	10,0	55,0	11,7	4,0	0,045	3	Cylindrical	■
553045Z3.0-SIRON-A	02679361	2	F	4,5	6,0	12,0	55,0	14,0	4,5	0,045	3	Cylindrical	■
553050Z3.0-SIRON-A	02679364	2	F	5,0	6,0	12,0	55,0	14,7	5,0	0,055	3	Cylindrical	■
553055Z3.0-SIRON-A	02679365	2	F	5,5	6,0	14,0	55,0	17,0	5,5	0,055	3	Cylindrical	■
553060Z3.0-SIRON-A	02679368	2	D	6,0	6,0	14,0	55,0	—	—	0,075	3	Cylindrical	■
553075Z3.0-SIRON-A	02733916	2	F	7,5	8,0	18,0	60,0	22,2	7,5	0,1	3	Cylindrical	■
553080Z3.0-SIRON-A	02679371	2	D	8,0	8,0	18,0	60,0	—	—	0,1	3	Cylindrical	■
553095Z3.0-SIRON-A	02733920	2	F	9,5	10,0	22,0	70,0	26,2	9,5	0,125	3	Cylindrical	■
553100Z3.0-SIRON-A	02679374	2	D	10,0	10,0	22,0	70,0	—	—	0,125	3	Cylindrical	■
553115Z3.0-SIRON-A	02733925	2	F	11,5	12,0	26,0	80,0	32,2	11,5	0,15	3	Cylindrical	■
553120Z3.0-SIRON-A	02679380	2	D	12,0	12,0	26,0	80,0	—	—	0,15	3	Cylindrical	■
553140Z3.0-SIRON-A	02733932	2	D	14,0	14,0	30,0	85,0	—	—	0,175	3	Cylindrical	■
553160Z3.0-SIRON-A	02679384	2	D	16,0	16,0	34,0	90,0	—	—	0,2	3	Cylindrical	■
553200Z3.0-SIRON-A	02679389	2	D	20,0	20,0	42,0	110,0	—	—	0,25	3	Cylindrical	■
553250Z3.0-SIRON-A	02679393	2	D	25,0	25,0	52,0	125,0	—	—	0,3	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

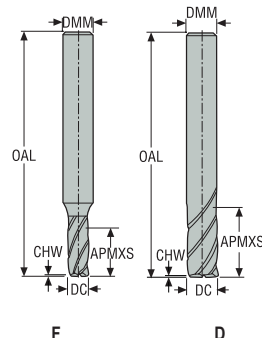
Graphite

X-Heads

Minimaster

JS553

High performance – Universal – Square – 3 Flutes – Cylindrical – Chamfer

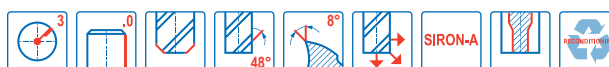


—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
553L020Z3.0-SIRON-A	02733962	3	F	2,0	6,0	7,0	50,0	8,2	2,0	0,025	3	Cylindrical	■
553L030Z3.0-SIRON-A	02733971	3	F	3,0	6,0	10,0	55,0	11,7	3,0	0,035	3	Cylindrical	■
553L040Z3.0-SIRON-A	02733972	3	F	4,0	6,0	14,0	60,0	15,7	4,0	0,045	3	Cylindrical	■
553L050Z3.0-SIRON-A	02733974	3	F	5,0	6,0	18,0	60,0	20,7	5,0	0,055	3	Cylindrical	■
553L060Z3.0-SIRON-A	02733982	3	D	6,0	6,0	20,0	65,0	—	—	0,075	3	Cylindrical	■
553L080Z3.0-SIRON-A	02733986	3	D	8,0	8,0	28,0	70,0	—	—	0,1	3	Cylindrical	■
553L100Z3.0-SIRON-A	02733992	3	D	10,0	10,0	35,0	85,0	—	—	0,125	3	Cylindrical	■
553L120Z3.0-SIRON-A	02733994	3	D	12,0	12,0	40,0	95,0	—	—	0,15	3	Cylindrical	■
553L160Z3.0-SIRON-A	02733996	3	D	16,0	16,0	50,0	110,0	—	—	0,2	3	Cylindrical	■
553L200Z3.0-SIRON-A	02733998	3	D	20,0	20,0	60,0	125,0	—	—	0,25	3	Cylindrical	■
553L250Z3.0-SIRON-A	02734000	3	D	25,0	25,0	75,0	150,0	—	—	0,3	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

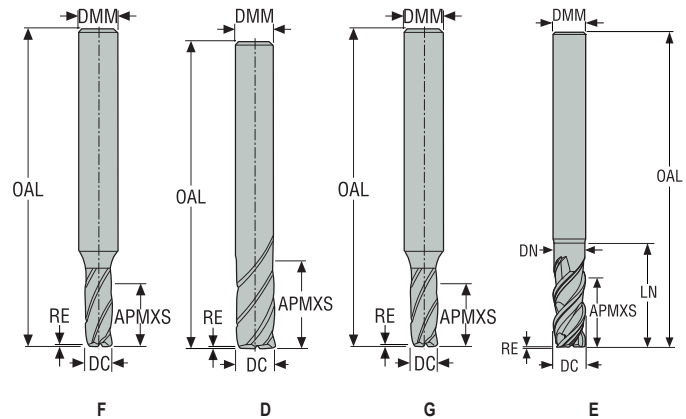
Graphite

X-Heads

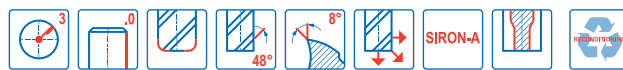
Minimaster

JS553

High performance – Universal – Square – 3 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS553020F1R020.0Z3-SIRA	10194458	1	F	2,0	6,0	3,0	40,0	5,0	2,05	0,2	3	Cylindrical	■
JS553030F1R020.0Z3-SIRA	10194459	1	F	3,0	6,0	4,0	40,0	6,0	3,05	0,2	3	Cylindrical	■
JS553040F1R020.0Z3-SIRA	10194460	1	F	4,0	6,0	6,0	40,0	9,0	4,05	0,2	3	Cylindrical	■
JS553050F1R020.0Z3-SIRA	10194461	1	F	5,0	6,0	7,0	40,0	10,0	5,05	0,2	3	Cylindrical	■
JS553060D1R020.0Z3-SIRA	10194462	1	D	6,0	6,0	8,0	40,0	—	—	0,2	3	Cylindrical	■
JS553060D1R050.0Z3-SIRA	10194463	1	D	6,0	6,0	8,0	40,0	—	—	0,5	3	Cylindrical	■
JS553080D1R050.0Z3-SIRA	10194464	1	D	8,0	8,0	11,0	50,0	—	—	0,5	3	Cylindrical	■
JS553100D1R050.0Z3-SIRA	10194465	1	D	10,0	10,0	13,0	57,0	—	—	0,5	3	Cylindrical	■
JS553100D1R100.0Z3-SIRA	10194466	1	D	10,0	10,0	13,0	57,0	—	—	1,0	3	Cylindrical	■
JS553120D1R050.0Z3-SIRA	10194467	1	D	12,0	12,0	15,0	65,0	—	—	0,5	3	Cylindrical	■
JS553120D1R100.0Z3-SIRA	10194468	1	D	12,0	12,0	15,0	65,0	—	—	1,0	3	Cylindrical	■
JS553020G2R050.0Z3-SIRA	02881683	2	G	2,0	6,0	5,0	57,0	8,0	1,9	0,5	3	Cylindrical	■
553030R15Z3.0-SIRON-A	02733908	2	F	3,0	6,0	7,0	50,0	8,5	3,0	0,15	3	Cylindrical	■
JS553030G2R050.0Z3-SIRA	02881684	2	G	3,0	6,0	7,0	57,0	11,0	2,85	0,5	3	Cylindrical	■
553040R020Z3.0-SIRON-A	02733911	2	F	4,0	6,0	10,0	55,0	11,7	4,0	0,2	3	Cylindrical	■
JS553040G2R050.0Z3-SIRA	02881685	2	G	4,0	6,0	10,0	57,0	13,0	3,8	0,5	3	Cylindrical	■
553050R020Z3.0-SIRON-A	02687282	2	F	5,0	6,0	12,0	55,0	14,7	5,0	0,2	3	Cylindrical	■
JS553050G2R050.0Z3-SIRA	02881686	2	G	5,0	6,0	10,0	57,0	15,0	4,75	0,5	3	Cylindrical	■
553060R020Z3.0-SIRON-A	02679369	2	D	6,0	6,0	14,0	55,0	—	—	0,2	3	Cylindrical	■
JS553060E2R050.0Z3-SIRA	02881687	2	E	6,0	6,0	14,0	57,0	19,0	5,7	0,5	3	Cylindrical	■
JS553060E2R100.0Z3-SIRA	02881688	2	E	6,0	6,0	14,0	57,0	19,0	5,7	1,0	3	Cylindrical	■
553080R050Z3.0-SIRON-A	02679372	2	D	8,0	8,0	18,0	60,0	—	—	0,5	3	Cylindrical	■
553100R050Z3.0-SIRON-A	02679375	2	D	10,0	10,0	22,0	70,0	—	—	0,5	3	Cylindrical	■
553100R100Z3.0-SIRON-A	02679376	2	D	10,0	10,0	22,0	70,0	—	—	1,0	3	Cylindrical	■
553100R200Z3.0-SIRON-A	02810364	2	D	10,0	10,0	22,0	70,0	—	—	2,0	3	Cylindrical	■
553100R250Z3.0-SIRON-A	02810365	2	D	10,0	10,0	22,0	70,0	—	—	2,5	3	Cylindrical	■
553100R310Z3.0-SIRON-A	02810366	2	D	10,0	10,0	22,0	70,0	—	—	3,1	3	Cylindrical	■
553120R050Z3.0-SIRON-A	02679381	2	D	12,0	12,0	26,0	80,0	—	—	0,5	3	Cylindrical	■
553120R100Z3.0-SIRON-A	02679382	2	D	12,0	12,0	26,0	80,0	—	—	1,0	3	Cylindrical	■
553120R200Z3.0-SIRON-A	02810367	2	D	12,0	12,0	26,0	80,0	—	—	2,0	3	Cylindrical	■
553120R250Z3.0-SIRON-A	02810368	2	D	12,0	12,0	26,0	80,0	—	—	2,5	3	Cylindrical	■
553120R310Z3.0-SIRON-A	02810369	2	D	12,0	12,0	26,0	80,0	—	—	3,1	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

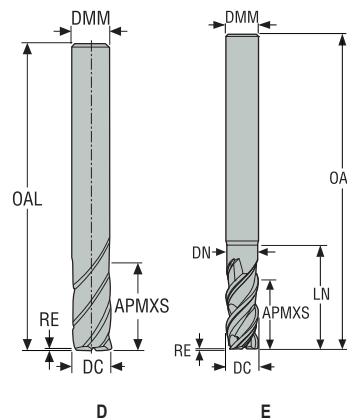
Graphite

X-Heads

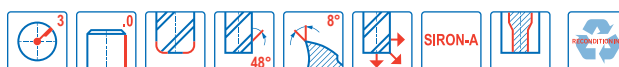
Minimaster

JS553

High performance – Universal – Square – 3 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC=e7
—RE= ±0,02 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
553160R050Z3.0-SIRON-A	02679385	2	D	16,0	16,0	34,0	90,0	—	—	0,5	3	Cylindrical	■
553160R100Z3.0-SIRON-A	02679386	2	D	16,0	16,0	34,0	90,0	—	—	1,0	3	Cylindrical	■
553160R200Z3.0-SIRON-A	02810370	2	D	16,0	16,0	34,0	90,0	—	—	2,0	3	Cylindrical	■
553160R250Z3.0-SIRON-A	02810371	2	D	16,0	16,0	34,0	90,0	—	—	2,5	3	Cylindrical	■
553160R310Z3.0-SIRON-A	02810372	2	D	16,0	16,0	34,0	90,0	—	—	3,1	3	Cylindrical	■
553160R400Z3.0-SIRON-A	02810373	2	D	16,0	16,0	34,0	90,0	—	—	4,0	3	Cylindrical	■
553200R050Z3.0-SIRON-A	02679390	2	D	20,0	20,0	42,0	110,0	—	—	0,5	3	Cylindrical	■
553200R100Z3.0-SIRON-A	02679391	2	D	20,0	20,0	42,0	110,0	—	—	1,0	3	Cylindrical	■
JS553200E2R200.0Z3-SIRA	02881689	2	E	20,0	20,0	42,0	110,0	54,0	19,0	2,0	3	Cylindrical	■
553250R050Z3.0-SIRON-A	02679395	2	D	25,0	25,0	52,0	125,0	—	—	0,5	3	Cylindrical	■
553250R100Z3.0-SIRON-A	02679396	2	D	25,0	25,0	52,0	125,0	—	—	1,0	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

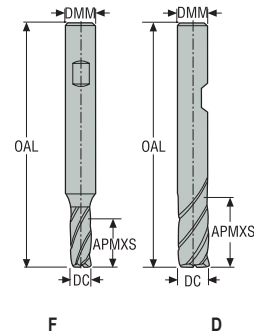
Graphite

X-Heads

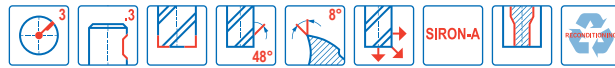
Minimaster

JS553

High performance – Universal – Square – 3 Flutes – Weldon – Sharp



- Tolerances:
- DMM=h5
- DC=e7
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm			
553020SZ3.0-SIRON-AW	02733936	2	F	2,0	6,0	5,0	50,0	6,0	2,0	3	Weldon	■
553030SZ3.0-SIRON-AW	02733939	2	F	3,0	6,0	7,0	50,0	8,5	3,0	3	Weldon	■
553040SZ3.0-SIRON-AW	02733943	2	F	4,0	6,0	10,0	55,0	11,7	4,0	3	Weldon	■
553050SZ3.0-SIRON-AW	02733945	2	F	5,0	6,0	12,0	55,0	14,7	5,0	3	Weldon	■
553060SZ3.0-SIRON-AW	02733946	2	D	6,0	6,0	14,0	55,0	—	—	3	Weldon	■
553080SZ3.0-SIRON-AW	02733950	2	D	8,0	8,0	18,0	60,0	—	—	3	Weldon	■
553100SZ3.0-SIRON-AW	02733952	2	D	10,0	10,0	22,0	70,0	—	—	3	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

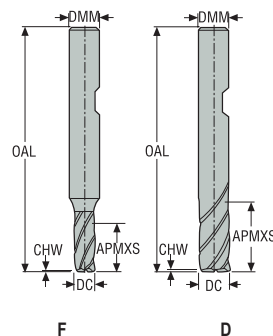
Graphite

X-Heads

Minimaster

JS553

High performance – Universal – Square – 3 Flutes – Weldon – Chamfer

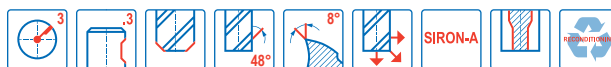


—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible if DC is ≥Ø6

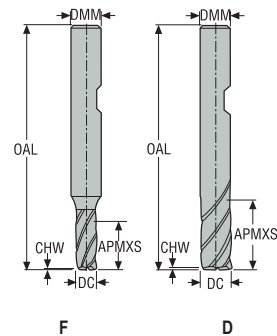


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS553020F1C.3Z3-SIRA	10041477	1	F	2,0	6,0	3,0	40,0	5,0	2,05	0,025	3	Weldon	■
JS553030F1C.3Z3-SIRA	10041478	1	F	3,0	6,0	4,0	40,0	6,0	3,05	0,035	3	Weldon	■
JS553040F1C.3Z3-SIRA	10041479	1	F	4,0	6,0	6,0	40,0	9,0	4,05	0,045	3	Weldon	■
JS553045F1C.3Z3-SIRA	10041480	1	F	4,5	6,0	6,0	40,0	9,0	4,55	0,045	3	Weldon	■
JS553050F1C.3Z3-SIRA	10041481	1	F	5,0	6,0	7,0	40,0	10,0	5,05	0,055	3	Weldon	■
JS553055F1C.3Z3-SIRA	10041482	1	F	5,5	6,0	8,0	40,0	11,0	5,55	0,055	3	Weldon	■
JS553060D1C.3Z3-SIRA	10041483	1	D	6,0	6,0	8,0	40,0	—	—	0,075	3	Weldon	■
JS553080D1C.3Z3-SIRA	10041484	1	D	8,0	8,0	11,0	50,0	—	—	0,1	3	Weldon	□
JS553100D1C.3Z3-SIRA	10041485	1	D	10,0	10,0	13,0	57,0	—	—	0,125	3	Weldon	□
JS553120D1C.3Z3-SIRA	10041486	1	D	12,0	12,0	15,0	65,0	—	—	0,15	3	Weldon	□
553020Z3.0-SIRON-AW	02697423	2	F	2,0	6,0	5,0	50,0	6,0	2,0	0,025	3	Weldon	□
553025Z3.0-SIRON-AW	02700354	2	F	2,5	6,0	7,0	50,0	8,0	2,5	0,025	3	Weldon	■
553030Z3.0-SIRON-AW	02700355	2	F	3,0	6,0	7,0	50,0	8,5	3,0	0,035	3	Weldon	■
553035Z3.0-SIRON-AW	02700357	2	F	3,5	6,0	9,0	55,0	10,5	3,5	0,035	3	Weldon	■
553040Z3.0-SIRON-AW	02700358	2	F	4,0	6,0	10,0	55,0	11,7	4,0	0,045	3	Weldon	■
553045Z3.0-SIRON-AW	02700359	2	F	4,5	6,0	12,0	55,0	14,0	4,5	0,045	3	Weldon	□
553050Z3.0-SIRON-AW	02700360	2	F	5,0	6,0	12,0	55,0	14,7	5,0	0,055	3	Weldon	■
553055Z3.0-SIRON-AW	02700361	2	F	5,5	6,0	14,0	55,0	17,0	5,5	0,055	3	Weldon	□
553060Z3.3-SIRON-A	02679367	2	D	6,0	6,0	14,0	55,0	—	—	0,075	3	Weldon	■
553075Z3.3-SIRON-A	02733915	2	F	7,5	8,0	18,0	60,0	22,2	7,5	0,1	3	Weldon	■
553080Z3.3-SIRON-A	02679370	2	D	8,0	8,0	18,0	60,0	—	—	0,1	3	Weldon	■
553095Z3.3-SIRON-A	02733919	2	F	9,5	10,0	22,0	70,0	26,2	9,5	0,125	3	Weldon	■
553100Z3.3-SIRON-A	02679373	2	D	10,0	10,0	22,0	70,0	—	—	0,125	3	Weldon	■
553115Z3.3-SIRON-A	02733923	2	F	11,5	12,0	26,0	80,0	32,2	11,5	0,15	3	Weldon	■
553120Z3.3-SIRON-A	02679379	2	D	12,0	12,0	26,0	80,0	—	—	0,15	3	Weldon	■
553140Z3.3-SIRON-A	02733929	2	D	14,0	14,0	30,0	85,0	—	—	0,175	3	Weldon	■
553160Z3.3-SIRON-A	02679383	2	D	16,0	16,0	34,0	90,0	—	—	0,2	3	Weldon	■
553200Z3.3-SIRON-A	02679388	2	D	20,0	20,0	42,0	110,0	—	—	0,25	3	Weldon	■
553250Z3.3-SIRON-A	02679392	2	D	25,0	25,0	52,0	125,0	—	—	0,3	3	Weldon	■

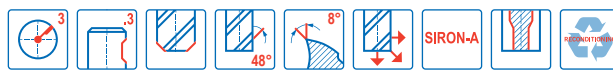
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JS553

High performance – Universal – Square – 3 Flutes – Weldon – Chamfer



- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
553L020Z3.0-SIRON-AW	02734001	3	F	2,0	6,0	7,0	50,0	8,2	2,0	0,025	3	Weldon	■
553L030Z3.0-SIRON-AW	02734006	3	F	3,0	6,0	10,0	55,0	11,7	3,0	0,035	3	Weldon	■
553L040Z3.0-SIRON-AW	02734007	3	F	4,0	6,0	14,0	60,0	15,7	4,0	0,045	3	Weldon	■
553L050Z3.0-SIRON-AW	02734008	3	F	5,0	6,0	18,0	60,0	20,7	5,0	0,055	3	Weldon	□
553L060Z3.3-SIRON-A	02733980	3	D	6,0	6,0	20,0	65,0	—	—	0,075	3	Weldon	■
553L080Z3.3-SIRON-A	02733984	3	D	8,0	8,0	28,0	70,0	—	—	0,1	3	Weldon	■
553L100Z3.3-SIRON-A	02733988	3	D	10,0	10,0	35,0	85,0	—	—	0,125	3	Weldon	■
553L120Z3.3-SIRON-A	02733993	3	D	12,0	12,0	40,0	95,0	—	—	0,15	3	Weldon	■
553L160Z3.3-SIRON-A	02733995	3	D	16,0	16,0	50,0	110,0	—	—	0,2	3	Weldon	■
553L200Z3.3-SIRON-A	02733997	3	D	20,0	20,0	60,0	125,0	—	—	0,25	3	Weldon	■
553L250Z3.3-SIRON-A	02733999	3	D	25,0	25,0	75,0	150,0	—	—	0,3	3	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

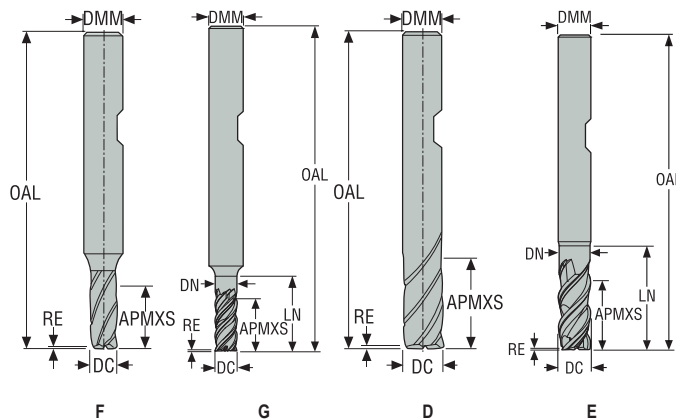
Graphite

X-Heads

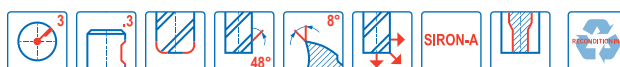
Minimaster

JS553

High performance – Universal – Square – 3 Flutes – Weldon – Corner radius



—Tolerances:
—DMM=h5
—DC=e7
—RE= ±0,02 mm
—Grind possible if DC is ≥Ø6

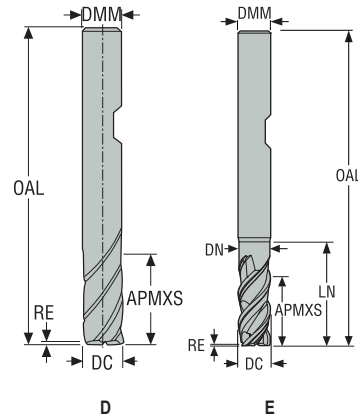


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JS553080D1R050.3Z3-SIRA	10194469	1	D	8,0	8,0	11,0	50,0	—	—	0,5	3	Weldon	☐
JS553100D1R050.3Z3-SIRA	10194470	1	D	10,0	10,0	13,0	57,0	—	—	0,5	3	Weldon	☐
JS553100D1R100.3Z3-SIRA	10194471	1	D	10,0	10,0	13,0	57,0	—	—	1,0	3	Weldon	☐
JS553120D1R050.3Z3-SIRA	10194472	1	D	12,0	12,0	15,0	65,0	—	—	0,5	3	Weldon	☐
JS553120D1R100.3Z3-SIRA	10194474	1	D	12,0	12,0	15,0	65,0	—	—	1,0	3	Weldon	☐
JS553020G2R050.3Z3-SIRA	02881690	2	G	2,0	6,0	5,0	57,0	8,0	1,9	0,5	3	Weldon	☐
553030R015Z3.0-SIRON-AW	02733941	2	F	3,0	6,0	7,0	50,0	8,5	3,0	0,15	3	Weldon	☐
JS553030G2R050.3Z3-SIRA	02881691	2	G	3,0	6,0	7,0	57,0	11,0	2,85	0,5	3	Weldon	☒
553040R020Z3.0-SIRON-AW	02733944	2	F	4,0	6,0	10,0	55,0	11,7	4,0	0,2	3	Weldon	☐
JS553040G2R050.3Z3-SIRA	02881692	2	G	4,0	6,0	10,0	57,0	13,0	3,8	0,5	3	Weldon	☐
553050R020Z3.0-SIRON-AW	02703763	2	F	5,0	6,0	12,0	55,0	14,7	5,0	0,2	3	Weldon	☐
JS553050G2R050.3Z3-SIRA	02881693	2	G	5,0	6,0	10,0	57,0	15,0	4,75	0,5	3	Weldon	☐
553060R020Z3.0-SIRON-AW	02700364	2	D	6,0	6,0	14,0	55,0	—	—	0,2	3	Weldon	☒
JS553060E2R050.3Z3-SIRA	02881694	2	E	6,0	6,0	14,0	57,0	19,0	5,7	0,5	3	Weldon	☐
JS553060E2R100.3Z3-SIRA	02881695	2	E	6,0	6,0	14,0	57,0	19,0	5,7	1,0	3	Weldon	☒
553080R050Z3.0-SIRON-AW	02700366	2	D	8,0	8,0	18,0	60,0	—	—	0,5	3	Weldon	☒
553100R050Z3.0-SIRON-AW	02700369	2	D	10,0	10,0	22,0	70,0	—	—	0,5	3	Weldon	☐
553100R100Z3.0-SIRON-AW	02700371	2	D	10,0	10,0	22,0	70,0	—	—	1,0	3	Weldon	☐
553100R200Z3.3-SIRON-A	02810422	2	D	10,0	10,0	22,0	70,0	—	—	2,0	3	Weldon	☐
553100R250Z3.3-SIRON-A	02810423	2	D	10,0	10,0	22,0	70,0	—	—	2,5	3	Weldon	☐
553100R310Z3.3-SIRON-A	02810424	2	D	10,0	10,0	22,0	70,0	—	—	3,1	3	Weldon	☐
553120R050Z3.0-SIRON-AW	02700373	2	D	12,0	12,0	26,0	80,0	—	—	0,5	3	Weldon	☒
553120R100Z3.0-SIRON-AW	02700374	2	D	12,0	12,0	26,0	80,0	—	—	1,0	3	Weldon	☐
553120R200Z3.3-SIRON-A	02810425	2	D	12,0	12,0	26,0	80,0	—	—	2,0	3	Weldon	☐
553120R250Z3.3-SIRON-A	02810426	2	D	12,0	12,0	26,0	80,0	—	—	2,5	3	Weldon	☐
553120R310Z3.3-SIRON-A	02810427	2	D	12,0	12,0	26,0	80,0	—	—	3,1	3	Weldon	☐

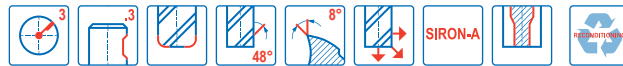
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JS553

High performance – Universal – Square – 3 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
553160R050Z3.0-SIRON-AW	02700378	2	D	16,0	16,0	34,0	90,0	—	—	0,5	3	Weldon	☐
553160R100Z3.0-SIRON-AW	02700381	2	D	16,0	16,0	34,0	90,0	—	—	1,0	3	Weldon	☐
553160R200Z3.3-SIRON-A	02810428	2	D	16,0	16,0	34,0	90,0	—	—	2,0	3	Weldon	☐
553160R250Z3.3-SIRON-A	02810429	2	D	16,0	16,0	34,0	90,0	—	—	2,5	3	Weldon	☐
553160R310Z3.3-SIRON-A	02810430	2	D	16,0	16,0	34,0	90,0	—	—	3,1	3	Weldon	☐
553160R400Z3.3-SIRON-A	02810431	2	D	16,0	16,0	34,0	90,0	—	—	4,0	3	Weldon	☐
553200R050Z3.0-SIRON-AW	02700383	2	D	20,0	20,0	42,0	110,0	—	—	0,5	3	Weldon	☒
553200R100Z3.0-SIRON-AW	02700384	2	D	20,0	20,0	42,0	110,0	—	—	1,0	3	Weldon	☐
JS553200E2R200.3Z3-SIRA	02881696	2	E	20,0	20,0	42,0	110,0	54,0	19,0	2,0	3	Weldon	☐
553250R050Z3.0-SIRON-AW	02700386	2	D	25,0	25,0	52,0	125,0	—	—	0,5	3	Weldon	☐
553250R100Z3.0-SIRON-AW	02700385	2	D	25,0	25,0	52,0	125,0	—	—	1,0	3	Weldon	☐

■ Stocked standard. ☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

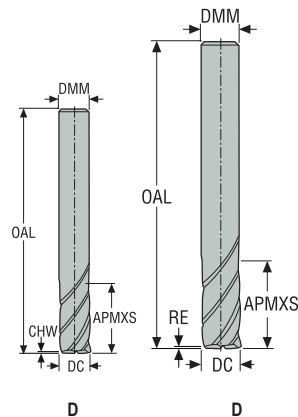
Plastic and CFRP

Graphite

X-Heads

Minimaster

High performance – Universal – Square – 3 Flutes – Cylindrical – Corner radius or chamfer – Inch

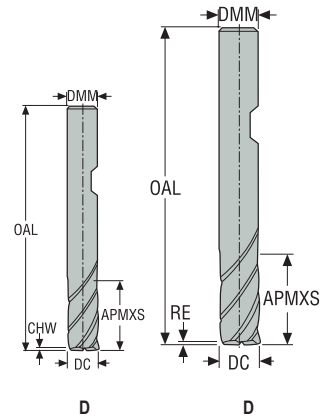


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	RE	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch			
5530125Z3.0-SIRON-A	02712684	2	D	0.125	0.125	0.250	2.000	0.001	–	3	Cylindrical	■
5530187Z3.0-SIRON-A	02712687	2	D	0.188	0.188	0.375	2.000	0.001	–	3	Cylindrical	■
5530250Z3.0-SIRON-A	02712688	2	D	0.250	0.250	0.500	2.500	0.003	–	3	Cylindrical	■
5530250R015Z3.0-SIRON-A	02712689	2	D	0.250	0.250	0.500	2.500	–	0.015	3	Cylindrical	■
5530312Z3.0-SIRON-A	02712690	2	D	0.313	0.313	0.625	2.500	0.004	–	3	Cylindrical	■
5530312R015Z3.0-SIRON-A	02712693	2	D	0.313	0.313	0.625	2.500	–	0.015	3	Cylindrical	■
5530375Z3.0-SIRON-A	02712694	2	D	0.375	0.375	0.750	3.000	0.005	–	3	Cylindrical	■
5530375R015Z3.0-SIRON-A	02712695	2	D	0.375	0.375	0.750	3.000	–	0.015	3	Cylindrical	■
5530375R030Z3.0-SIRON-A	02712696	2	D	0.375	0.375	0.750	3.000	–	0.030	3	Cylindrical	■
5530500Z3.0-SIRON-A	02712699	2	D	0.500	0.500	1.000	3.500	0.006	–	3	Cylindrical	■
5530500R015Z3.0-SIRON-A	02712701	2	D	0.500	0.500	1.000	3.500	–	0.015	3	Cylindrical	■
5530500R030Z3.0-SIRON-A	02712703	2	D	0.500	0.500	1.000	3.500	–	0.030	3	Cylindrical	■

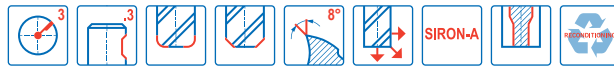
■ Stocked standard.

JS553

High performance – Universal – Square – 3 Flutes – Weldon – Corner radius or chamfer – Inch



— Tolerances:
— DMM=h5
— DC=e7



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	RE	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch			
5530500Z3.3-SIRON-A	02712697	2	D	0.500	0.500	1.000	3.500	0.006	—	3	Weldon	■
5530500R015Z3.3-SIRON-A	02712700	2	D	0.500	0.500	1.000	3.500	—	0.015	3	Weldon	■
5530500R030Z3.3-SIRON-A	02712702	2	D	0.500	0.500	1.000	3.500	—	0.030	3	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS553 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				2	3	4	5	6	8	10	12	14	16	20	25	
P1	M/A/D/E	0.400 0,400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	225 (200 — 250) 740 (660 — 820)
P2	M/A/D/E	0.400 0,400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	220 (190 — 240) 720 (630 — 780)
P3	M/A/D/E	0.400 0,400	1.0 1,0	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.16 0,0065	0.18 0,0070	190 (170 — 210) 620 (560 — 680)
P4	M/A/D/E	0.400 0,400	1.0 1,0	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.16 0,0065	0.18 0,0070	165 (150 — 190) 540 (500 — 620)
P5	M/A/D/E	0.400 0,400	1.0 1,0	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.18 0,0070	160 (140 — 180) 520 (460 — 590)
P6	M/A/D/E	0.400 0,400	1.0 1,0	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	180 (160 — 200) 590 (530 — 650)
P7	M/A/D/E	0.400 0,400	1.0 1,0	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	170 (150 — 190) 560 (500 — 620)
P8	M/A/D/E	0.400 0,400	1.0 1,0	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.16 0,0065	0.18 0,0070	160 (140 — 180) 520 (460 — 590)
P11	M/A/D/E	0.400 0,400	1.0 1,0	0.018 0,00070	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	145 (130 — 160) 475 (430 — 520)
P12	M/A/D/E	0.400 0,400	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.12 0,0048	95 (82 — 100) 310 (270 — 320)
M1	E	0.400 0,400	1.0 1,0	0.013 0,00050	0.020 0,00080	0.026 0,0010	0.034 0,0013	0.040 0,0016	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.13 0,0050	115 (100 — 120) 375 (330 — 390)
M2	E	0.400 0,400	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.12 0,0048	95 (82 — 100) 310 (270 — 320)
M3	E	0.400 0,400	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.075 0,0030	0.085 0,0034	0.10 0,0040	60 (47 — 69) 195 (160 — 220)
M4	E	0.400 0,400	1.0 1,0	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	45 (36 — 53) 150 (120 — 170)
M5	E	0.400 0,400	1.0 1,0	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	37 (30 — 44) 120 (99 — 140)
K1	E	0.400 0,400	1.2 1,2	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	165 (160 — 190) 540 (530 — 620)
K2	E	0.400 0,400	1.2 1,2	0.015 0,00060	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0044	0.11 0,0050	0.13 0,0055	0.14 0,0065	145 (140 — 170) 475 (460 — 550)
K3	E	0.400 0,400	1.2 1,2	0.015 0,00060	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0044	0.11 0,0050	0.13 0,0055	0.14 0,0065	125 (120 — 140) 410 (400 — 450)
K4	E	0.400 0,400	1.2 1,2	0.015 0,00060	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0044	0.11 0,0050	0.13 0,0055	0.14 0,0065	120 (110 — 140) 395 (370 — 450)
K5	E	0.400 0,400	1.1 1,1	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	155 (140 — 170) 510 (460 — 550)
K6	E	0.400 0,400	1.1 1,1	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	220 (190 — 250) 720 (630 — 820)
K7	E	0.400 0,400	1.1 1,1	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	195 (170 — 220) 640 (560 — 720)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS553 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				2	3	4	5	6	8	10	12	14	16	20	25	
N1	E	0.500 0,500	1.0 1,0	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	620 (520 — 720) 2025 (1800 — 2300)
N2	E	0.500 0,500	1.0 1,0	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	400 (340 — 460) 1300 (1200 — 1500)
N3	E	0.500 0,500	1.0 1,0	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	265 (230 — 300) 870 (760 — 980)
N11	E	0.500 0,500	1.1 1,1	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	310 (260 — 350) 1025 (860 — 1100)
S1	E	0.150 0,150	0.50 0,50	0.017 0,00065	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	43 (26 — 60) 140 (86 — 190)
S2	E	0.150 0,150	0.50 0,50	0.017 0,00065	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	35 (21 — 48) 115 (69 — 150)
S3	E	0.150 0,150	0.50 0,50	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	30 (19 — 42) 100 (63 — 130)
S11	E	0.400 0,400	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.12 0,0048	110 (78 — 130) 360 (260 — 420)
S12	E	0.400 0,400	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.12 0,0048	85 (60 — 100) 280 (200 — 320)
S13	E	0.400 0,400	1.0 1,0	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	65 (48 — 84) 215 (160 — 270)
H5	M/A/D	0.200 0,200	0.90 0,90	0.013 0,00050	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	0.11 0,0044	0.12 0,0048	75 (62 — 91) 245 (210 — 290)
H8	M/A/D	0.200 0,200	0.90 0,90	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	80 (65 — 96) 260 (220 — 310)
H21	M/A/D	0.200 0,200	0.90 0,90	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	80 (65 — 96) 260 (220 — 310)
H31	M/A/D	0.200 0,200	0.90 0,90	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	60 (49 — 72) 195 (170 — 230)
TS1	A	0.500 0,500	1.2 1,2	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	290 (180 — 400) 950 (600 — 1300)
TP1	A	0.500 0,500	1.2 1,2	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	300 (180 — 410) 980 (600 — 1300)
GR1	A	0.500 0,500	1.2 1,2	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	580 (470 — 690) 1900 (1600 — 2200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS553 Slot milling

SMG		a _p /DC	f _z												v _c
			2	3	4	5	6	8	10	12	14	16	20	25	
P1	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	195 (170 — 220) 640 (560 — 720)
P2	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	190 (170 — 210) 620 (560 — 680)
P3	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	165 (140 — 180) 540 (460 — 590)
P4	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	145 (130 — 160) 475 (430 — 520)
P5	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	135 (120 — 150) 445 (400 — 490)
P6	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	155 (140 — 170) 510 (460 — 550)
P7	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	145 (130 — 160) 475 (430 — 520)
P8	M/A/D/E	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.17 0,0065	135 (120 — 150) 445 (400 — 490)
P11	M/A/D/E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	130 (120 — 140) 425 (400 — 450)
P12	M/A/D/E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.11 0,0044	80 (69 — 87) 260 (230 — 280)
M1	E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	95 (85 — 100) 310 (280 — 320)
M2	E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.11 0,0044	80 (69 — 87) 260 (230 — 280)
M3	E	0.70 0,70	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.040 0,0016	0.050 0,0020	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.095 0,0038	48 (39 — 58) 155 (130 — 190)
M4	E	0.70 0,70	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.040 0,0016	0.050 0,0020	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	36 (30 — 43) 120 (99 — 140)
M5	E	0.70 0,70	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.040 0,0016	0.050 0,0020	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	30 (25 — 36) 100 (83 — 110)
K1	E	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	145 (140 — 170) 475 (460 — 550)
K2	E	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	125 (120 — 150) 410 (400 — 490)
K3	E	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	110 (110 — 120) 360 (370 — 390)
K4	E	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	105 (96 — 120) 345 (320 — 390)
K5	E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	135 (120 — 150) 445 (400 — 490)
K6	E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	200 (180 — 230) 660 (600 — 750)
K7	E	0.80 0,80	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	175 (150 — 190) 570 (500 — 620)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm/tooth (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JS553 Slot milling

SMG		a _p /DC	f _z												v _c	
			2	3	4	5	6	8	10	12	14	16	20	25		
N1	E	0.70 0.70	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.10 0.0040	0.13 0.0050	580 (490 — 670) 1900 (1700 — 2100)	Steel and cast iron
N2	E	0.70 0.70	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.10 0.0040	0.13 0.0050	375 (320 — 430) 1225 (1100 — 1400)	
N3	E	0.70 0.70	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.10 0.0040	0.13 0.0050	250 (210 — 290) 820 (690 — 950)	
N11	E	0.60 0.60	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.10 0.0040	0.13 0.0050	290 (250 — 330) 950 (830 — 1000)	
S1	E	0.30 0.30	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.025 0.0010	0.032 0.0013	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.065 0.0026	0.080 0.0032	34 (21 — 47) 110 (69 — 150)	Stainless steel and S-materials
S2	E	0.30 0.30	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.025 0.0010	0.032 0.0013	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.065 0.0026	0.080 0.0032	27 (17 — 38) 90 (56 — 120)	
S3	E	0.30 0.30	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.025 0.0010	0.032 0.0013	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.065 0.0026	0.080 0.0032	23 (15 — 32) 75 (50 — 100)	
S11	E	0.50 0.50	0.012 0.00048	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.090 0.0036	0.10 0.0040	0.11 0.0044	85 (63 — 110) 280 (210 — 360)	
S12	E	0.50 0.50	0.012 0.00048	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.090 0.0036	0.10 0.0040	0.11 0.0044	65 (48 — 86) 215 (160 — 280)	Non ferrous
S13	E	0.50 0.50	0.010 0.00040	0.016 0.00065	0.020 0.00080	0.026 0.0010	0.032 0.0013	0.042 0.0017	0.050 0.0020	0.060 0.0024	0.070 0.0028	0.075 0.0030	0.090 0.0036	0.10 0.0040	55 (39 — 69) 180 (130 — 220)	
H5	M/A/D	0.50 0.50	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.028 0.0011	0.032 0.0013	0.040 0.0016	0.050 0.0020	65 (52 — 77) 215 (180 — 250)	
H8	M/A/D	0.50 0.50	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.028 0.0011	0.032 0.0013	0.040 0.0016	0.050 0.0020	65 (52 — 77) 215 (180 — 250)	Hard
H11	M/A/D	0.50 0.50	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.028 0.0011	0.032 0.0013	0.040 0.0016	0.050 0.0020	80 (66 — 98) 260 (220 — 320)	
H12	M/A/D	1.0 1.0	0.0095 0.00038	0.014 0.00055	0.019 0.00075	0.024 0.00095	0.028 0.0011	0.038 0.0015	0.046 0.0018	0.055 0.0022	0.060 0.0024	0.070 0.0028	0.080 0.0032	0.090 0.0036	65 (52 — 77) 215 (180 — 250)	
H21	M/A/D	0.50 0.50	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.028 0.0011	0.032 0.0013	0.040 0.0016	0.050 0.0020	65 (52 — 77) 215 (180 — 250)	Plastic and cf/p
TS1	A	1.0 1.0	0.020 0.00080	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.13 0.0050	0.15 0.0060	0.17 0.0065	0.19 0.0075	245 (150 — 340) 800 (500 — 1100)	
TP1	A	1.0 1.0	0.020 0.00080	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.13 0.0050	0.15 0.0060	0.17 0.0065	0.19 0.0075	250 (160 — 350) 820 (530 — 1100)	
GR1	A	1.0 1.0	0.020 0.00080	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.13 0.0050	0.15 0.0060	0.17 0.0065	0.19 0.0075	490 (400 — 580) 1600 (1400 — 1900)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS553 Side milling – Inch

SMG		a_e /DC	a_p /DC	f_z						v_c
				1/8	3/16	1/4	5/16	3/8	1/2	
P1	M/A/D/E	0.400 0,400	1.0 1,0	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	225 (200 — 250) 740 (660 — 820)
P2	M/A/D/E	0.400 0,400	1.0 1,0	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	220 (190 — 240) 720 (630 — 780)
P3	M/A/D/E	0.400 0,400	1.0 1,0	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	190 (170 — 210) 620 (560 — 680)
P4	M/A/D/E	0.400 0,400	1.0 1,0	0.030 0,0012	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	165 (150 — 190) 540 (500 — 620)
P5	M/A/D/E	0.400 0,400	1.0 1,0	0.030 0,0012	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.11 0,0044	160 (140 — 180) 520 (460 — 590)
P6	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.044 0,0017	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.11 0,0044	180 (160 — 200) 590 (530 — 650)
P7	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.044 0,0017	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.11 0,0044	170 (150 — 190) 560 (500 — 620)
P8	M/A/D/E	0.400 0,400	1.0 1,0	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	160 (140 — 180) 520 (460 — 590)
P11	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	145 (130 — 160) 475 (430 — 520)
P12	M/A/D/E	0.400 0,400	1.0 1,0	0.019 0,00075	0.030 0,0012	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	95 (82 — 100) 310 (270 — 320)
M1	E	0.400 0,400	1.0 1,0	0.022 0,00085	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	115 (100 — 120) 375 (330 — 390)
M2	E	0.400 0,400	1.0 1,0	0.019 0,00075	0.030 0,0012	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	95 (82 — 100) 310 (270 — 320)
M3	E	0.400 0,400	1.0 1,0	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	60 (47 — 69) 195 (160 — 220)
M4	E	0.400 0,400	1.0 1,0	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	45 (36 — 53) 150 (120 — 170)
M5	E	0.400 0,400	1.0 1,0	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	37 (30 — 44) 120 (99 — 140)
K1	E	0.400 0,400	1.2 1,2	0.026 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	165 (160 — 190) 540 (530 — 620)
K2	E	0.400 0,400	1.2 1,2	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	145 (140 — 170) 475 (460 — 550)
K3	E	0.400 0,400	1.2 1,2	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	125 (120 — 140) 410 (400 — 450)
K4	E	0.400 0,400	1.2 1,2	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	120 (110 — 140) 395 (370 — 450)
K5	E	0.400 0,400	1.1 1,1	0.026 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	155 (140 — 170) 510 (460 — 550)
K6	E	0.400 0,400	1.1 1,1	0.028 0,0011	0.044 0,0017	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.11 0,0044	220 (190 — 250) 720 (630 — 820)
K7	E	0.400 0,400	1.1 1,1	0.026 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	195 (170 — 220) 640 (560 — 720)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JS553 Side milling – Inch

SMG		a _e /DC	a _p /DC	f _z						v _c
				1/8	3/16	1/4	5/16	3/8	1/2	
N1	E	0.500 0,500	1.0 1,0	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	620 (520 – 720) 2025 (1800 – 2300)
N2	E	0.500 0,500	1.0 1,0	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	400 (340 – 460) 1300 (1200 – 1500)
N3	E	0.500 0,500	1.0 1,0	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	265 (230 – 300) 870 (760 – 980)
N11	E	0.500 0,500	1.1 1,1	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	310 (260 – 350) 1025 (860 – 1100)
S1	E	0.150 0,150	0.50 0,50	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	43 (26 – 60) 140 (86 – 190)
S2	E	0.150 0,150	0.50 0,50	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	35 (21 – 48) 115 (69 – 150)
S3	E	0.150 0,150	0.50 0,50	0.026 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	30 (19 – 42) 100 (63 – 130)
S11	E	0.400 0,400	1.0 1,0	0.019 0,00075	0.030 0,0012	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	110 (78 – 130) 360 (260 – 420)
S12	E	0.400 0,400	1.0 1,0	0.019 0,00075	0.030 0,0012	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	85 (60 – 100) 280 (200 – 320)
S13	E	0.400 0,400	1.0 1,0	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	65 (48 – 84) 215 (160 – 270)
H5	M/A/D	0.200 0,200	0.90 0,90	0.020 0,00080	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.080 0,0032	75 (62 – 91) 245 (210 – 290)
H8	M/A/D	0.200 0,200	0.90 0,90	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	80 (65 – 96) 260 (220 – 310)
H21	M/A/D	0.200 0,200	0.90 0,90	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	80 (65 – 96) 260 (220 – 310)
H31	M/A/D	0.200 0,200	0.90 0,90	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	60 (49 – 72) 195 (170 – 230)
TS1	A	0.500 0,500	1.2 1,2	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	290 (180 – 400) 950 (600 – 1300)
TP1	A	0.500 0,500	1.2 1,2	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	300 (180 – 410) 980 (600 – 1300)
GR1	A	0.500 0,500	1.2 1,2	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	580 (470 – 690) 1900 (1600 – 2200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm/tooth (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS553 Slot milling – Inch

SMG		a_p /DC	f_z						v_c
			1/8	3/16	1/4	5/16	3/8	1/2	
P1	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	195 (170 — 220)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	640 (560 — 720)
P2	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	190 (170 — 210)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	620 (560 — 680)
P3	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	165 (140 — 180)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	540 (460 — 590)
P4	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	145 (130 — 160)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	475 (430 — 520)
P5	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	135 (120 — 150)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	445 (400 — 490)
P6	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	155 (140 — 170)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	510 (460 — 550)
P7	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	145 (130 — 160)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	475 (430 — 520)
P8	M/A/D/E	1.0	0.022	0.034	0.044	0.055	0.065	0.090	135 (120 — 150)
		1,0	0,00085	0,0013	0,0017	0,0022	0,0026	0,0036	445 (400 — 490)
P11	M/A/D/E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	130 (120 — 140)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	425 (400 — 450)
P12	M/A/D/E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	80 (69 — 87)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	260 (230 — 280)
M1	E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	95 (85 — 100)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	310 (280 — 320)
M2	E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	80 (69 — 87)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	260 (230 — 280)
M3	E	0.70	0.013	0.019	0.026	0.032	0.038	0.050	48 (39 — 58)
		0,70	0,00050	0,00075	0,0010	0,0013	0,0015	0,0020	155 (130 — 190)
M4	E	0.70	0.013	0.019	0.026	0.032	0.038	0.050	36 (30 — 43)
		0,70	0,00050	0,00075	0,0010	0,0013	0,0015	0,0020	120 (99 — 140)
M5	E	0.70	0.013	0.019	0.026	0.032	0.038	0.050	30 (25 — 36)
		0,70	0,00050	0,00075	0,0010	0,0013	0,0015	0,0020	100 (83 — 110)
K1	E	1.0	0.016	0.024	0.032	0.040	0.048	0.065	145 (140 — 170)
		1,0	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	475 (460 — 550)
K2	E	1.0	0.016	0.024	0.032	0.040	0.048	0.065	125 (120 — 150)
		1,0	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	410 (400 — 490)
K3	E	1.0	0.016	0.024	0.032	0.040	0.048	0.065	110 (110 — 120)
		1,0	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	360 (370 — 390)
K4	E	1.0	0.016	0.024	0.032	0.040	0.048	0.065	105 (96 — 120)
		1,0	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	345 (320 — 390)
K5	E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	135 (120 — 150)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	445 (400 — 490)
K6	E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	200 (180 — 230)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	660 (600 — 750)
K7	E	0.80	0.016	0.024	0.032	0.040	0.048	0.065	175 (150 — 190)
		0,80	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	570 (500 — 620)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JS553 Slot milling – Inch

SMG		a_p /DC	f_z						v_c	
			1/8	3/16	1/4	5/16	3/8	1/2		
N1	E	0.70 0.70	0.016 0.00065	0.024 0.00095	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	580 (490 — 670) 1900 (1700 — 2100)	Steel and cast iron
N2	E	0.70 0.70	0.016 0.00065	0.024 0.00095	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	375 (320 — 430) 1225 (1100 — 1400)	
N3	E	0.70 0.70	0.016 0.00065	0.024 0.00095	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	250 (210 — 290) 820 (690 — 950)	
N11	E	0.60 0.60	0.016 0.00065	0.024 0.00095	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	290 (250 — 330) 950 (830 — 1000)	
S1	E	0.30 0.30	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	34 (21 — 47) 110 (69 — 150)	Stainless steel and S-materials
S2	E	0.30 0.30	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	27 (17 — 38) 90 (56 — 120)	
S3	E	0.30 0.30	0.010 0.00040	0.015 0.00060	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	23 (15 — 32) 75 (50 — 100)	
S11	E	0.50 0.50	0.019 0.00075	0.028 0.0011	0.038 0.0015	0.048 0.0019	0.055 0.0022	0.075 0.0030	85 (63 — 110) 280 (210 — 360)	
S12	E	0.50 0.50	0.019 0.00075	0.028 0.0011	0.038 0.0015	0.048 0.0019	0.055 0.0022	0.075 0.0030	65 (48 — 86) 215 (160 — 280)	Non ferrous
S13	E	0.50 0.50	0.017 0.00065	0.025 0.0010	0.034 0.0013	0.042 0.0017	0.050 0.0020	0.065 0.0026	55 (39 — 69) 180 (130 — 220)	
H5	M/A/D	0.50 0.50	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	65 (52 — 77) 215 (180 — 250)	
H8	M/A/D	0.50 0.50	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	65 (52 — 77) 215 (180 — 250)	
H21	M/A/D	0.50 0.50	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	65 (52 — 77) 215 (180 — 250)	Hard
H31	M/A/D	0.50 0.50	0.0065 0.00026	0.0095 0.00038	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	49 (39 — 58) 160 (130 — 190)	
TS1	A	1.0 1.0	0.032 0.0013	0.048 0.0019	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.12 0.0048	245 (150 — 340) 800 (500 — 1100)	
TP1	A	1.0 1.0	0.032 0.0013	0.048 0.0019	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.12 0.0048	250 (160 — 350) 820 (530 — 1100)	
GR1	A	1.0 1.0	0.032 0.0013	0.048 0.0019	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.12 0.0048	490 (400 — 580) 1600 (1400 — 1900)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

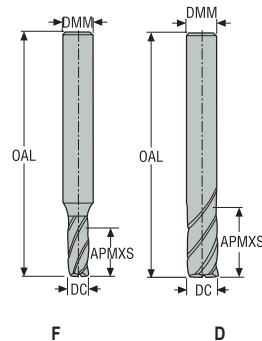
a_e = mm/DC (in/DC) = factor

All cutting data are target values

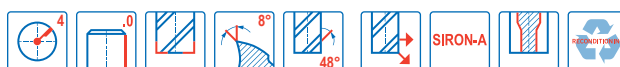
Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and CFRP
Graphite
X-Heads
Minimaster

JS554

High performance – Universal – Square – 4 Flutes – Cylindrical – Sharp



—Tolerances:
—DMM=h5
—DC=h10
—Regrind possible if DC is $\geq \varnothing 6$

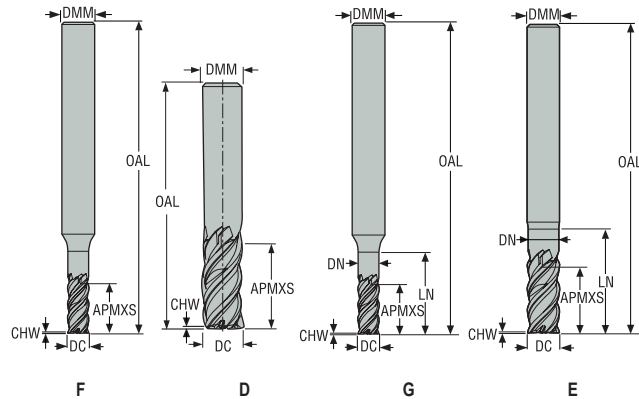


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm			
554030SZ4.0-SIRON-A	02733453	2	F	3,0	6,0	7,0	50,0	8,7	3,0	4	Cylindrical	■
554040SZ4.0-SIRON-A	02733458	2	F	4,0	6,0	10,0	55,0	11,7	4,0	4	Cylindrical	■
554050SZ4.0-SIRON-A	02733812	2	F	5,0	6,0	12,0	55,0	13,7	5,0	4	Cylindrical	■
554060SZ4.0-SIRON-A	02733814	2	D	6,0	6,0	14,0	55,0	—	—	4	Cylindrical	■
554080SZ4.0-SIRON-A	02733815	2	D	8,0	8,0	18,0	60,0	—	—	4	Cylindrical	■
554100SZ4.0-SIRON-A	02733816	2	D	10,0	10,0	22,0	70,0	—	—	4	Cylindrical	■

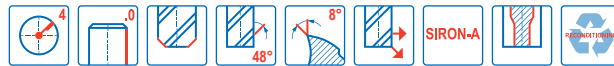
■ Stocked standard.

JS554

High performance – Universal – Square – 4 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC=e7
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS554030F1C.0Z4-SIRA	10194615	1	F	3,0	6,0	4,0	40,0	6,0	3,05	0,035	4	Cylindrical	■
JS554040F1C.0Z4-SIRA	10041454	1	F	4,0	6,0	6,0	40,0	9,0	4,05	0,045	4	Cylindrical	■
JS554050F1C.0Z4-SIRA	10194616	1	F	5,0	6,0	7,0	40,0	10,0	5,05	0,055	4	Cylindrical	■
JS554060D1C.0Z4-SIRA	10041455	1	D	6,0	6,0	8,0	40,0	—	—	0,075	4	Cylindrical	■
JS554080D1C.0Z4-SIRA	10041456	1	D	8,0	8,0	11,0	50,0	—	—	0,1	4	Cylindrical	■
JS554100D1C.0Z4-SIRA	10041457	1	D	10,0	10,0	13,0	57,0	—	—	0,125	4	Cylindrical	■
JS554120D1C.0Z4-SIRA	10041458	1	D	12,0	12,0	15,0	65,0	—	—	0,15	4	Cylindrical	■
JS554160D1C.0Z4-SIRA	10041459	1	D	16,0	16,0	19,0	75,0	—	—	0,2	4	Cylindrical	■
554030Z4.0-SIRON-A	02733455	2	F	3,0	6,0	7,0	50,0	8,7	3,0	0,035	4	Cylindrical	■
JS554030G2C.0Z4-SIRA	03029956	2	G	3,0	6,0	8,0	57,0	10,0	2,85	0,035	4	Cylindrical	■
554040Z4.0-SIRON-A	02733459	2	F	4,0	6,0	10,0	55,0	11,7	4,0	0,045	4	Cylindrical	■
JS554040G2C.0Z4-SIRA	03029957	2	G	4,0	6,0	10,0	57,0	13,0	3,8	0,045	4	Cylindrical	■
554050Z4.0-SIRON-A	02733813	2	F	5,0	6,0	12,0	55,0	13,7	5,0	0,055	4	Cylindrical	■
JS554050G2C.0Z4-SIRA	03029958	2	G	5,0	6,0	12,0	57,0	16,0	4,75	0,055	4	Cylindrical	■
554060Z4.0-SIRON-A	02679503	2	D	6,0	6,0	14,0	55,0	—	—	0,075	4	Cylindrical	■
JS554060E2C.0Z4-SIRA	03029959	2	E	6,0	6,0	14,0	57,0	18,0	5,7	0,075	4	Cylindrical	■
554080Z4.0-SIRON-A	02679512	2	D	8,0	8,0	18,0	60,0	—	—	0,1	4	Cylindrical	■
JS554080E2C.0Z4-SIRA	03029961	2	E	8,0	8,0	18,0	63,0	25,0	7,6	0,1	4	Cylindrical	■
554100Z4.0-SIRON-A	02679537	2	D	10,0	10,0	22,0	70,0	—	—	0,125	4	Cylindrical	■
JS554100E2C.0Z4-SIRA	03029963	2	E	10,0	10,0	22,0	72,0	29,0	9,5	0,125	4	Cylindrical	■
554120Z4.0-SIRON-A	02679548	2	D	12,0	12,0	26,0	80,0	—	—	0,15	4	Cylindrical	■
JS554120E2C.0Z4-SIRA	03029966	2	E	12,0	12,0	26,0	83,0	35,0	11,4	0,15	4	Cylindrical	■
554160Z4.0-SIRON-A	02679560	2	D	16,0	16,0	34,0	90,0	—	—	0,2	4	Cylindrical	■
JS554160E2C.0Z4-SIRA	03029970	2	E	16,0	16,0	34,0	92,0	42,0	15,2	0,2	4	Cylindrical	■
554200Z4.0-SIRON-A	02679566	2	D	20,0	20,0	42,0	100,0	—	—	0,25	4	Cylindrical	■
JS554200E2C.0Z4-SIRA	03029972	2	E	20,0	20,0	42,0	109,0	54,0	19,0	0,25	4	Cylindrical	■
554250Z4.0-SIRON-A	02679573	2	D	25,0	25,0	52,0	125,0	—	—	0,3	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

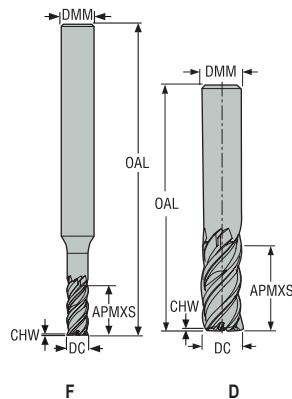
Graphite

X-Heads

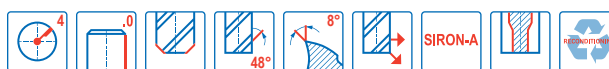
Minimaster

JS554

High performance – Universal – Square – 4 Flutes – Cylindrical – Chamfer



—Tolerances:
—DMM=h5
—DC=e7
—Regrind possible if DC is ≥Ø6

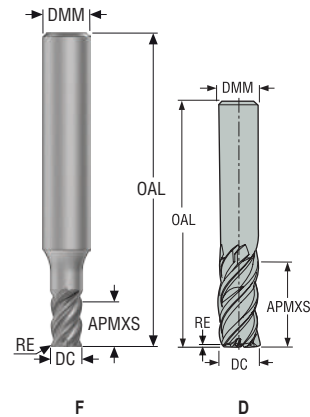


	Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
Non ferrous	554L030Z4.0-SIRON-A	02733818	3	F	3,0	6,0	12,0	55,0	13,7	3,0	0,035	4	Cylindrical	■
	554L040Z4.0-SIRON-A	02733823	3	F	4,0	6,0	16,0	60,0	17,7	4,0	0,045	4	Cylindrical	■
	554L050Z4.0-SIRON-A	02733825	3	F	5,0	6,0	20,0	65,0	21,7	5,0	0,055	4	Cylindrical	■
Hard	554L060Z4.0-SIRON-A	02733828	3	D	6,0	6,0	23,0	65,0	—	—	0,075	4	Cylindrical	■
	554L080Z4.0-SIRON-A	02733830	3	D	8,0	8,0	32,0	75,0	—	—	0,1	4	Cylindrical	■
	554L100Z4.0-SIRON-A	02733832	3	D	10,0	10,0	40,0	85,0	—	—	0,125	4	Cylindrical	■
	554L120Z4.0-SIRON-A	02733834	3	D	12,0	12,0	45,0	100,0	—	—	0,15	4	Cylindrical	■
	554L160Z4.0-SIRON-A	02733836	3	D	16,0	16,0	55,0	115,0	—	—	0,2	4	Cylindrical	■
Plastic and cfrp	554L200Z4.0-SIRON-A	02733838	3	D	20,0	20,0	65,0	125,0	—	—	0,25	4	Cylindrical	■
	554L250Z4.0-SIRON-A	02733841	3	D	25,0	25,0	85,0	150,0	—	—	0,3	4	Cylindrical	■

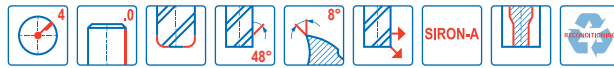
■ Stocked standard.

JS554

High performance – Universal – Square – 4 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS554030F1R020.0Z4-SIRA	10194617	1	F	3,0	6,0	4,0	40,0	6,0	3,05	0,2	4	Cylindrical	■
JS554040F1R020.0Z4-SIRA	10194618	1	F	4,0	6,0	6,0	40,0	9,0	4,05	0,2	4	Cylindrical	■
JS554050F1R020.0Z4-SIRA	10194619	1	F	5,0	6,0	7,0	40,0	10,0	5,05	0,2	4	Cylindrical	■
JS554060D1R020.0Z4-SIRA	10194620	1	D	6,0	6,0	8,0	40,0	—	—	0,2	4	Cylindrical	■
JS554060D1R050.0Z4-SIRA	10194621	1	D	6,0	6,0	8,0	40,0	—	—	0,5	4	Cylindrical	■
JS554080D1R050.0Z4-SIRA	10194622	1	D	8,0	8,0	11,0	50,0	—	—	0,5	4	Cylindrical	■
JS554100D1R050.0Z4-SIRA	10194623	1	D	10,0	10,0	13,0	57,0	—	—	0,5	4	Cylindrical	■
JS554100D1R100.0Z4-SIRA	10194624	1	D	10,0	10,0	13,0	57,0	—	—	1,0	4	Cylindrical	■
JS554120D1R050.0Z4-SIRA	10194625	1	D	12,0	12,0	15,0	65,0	—	—	0,5	4	Cylindrical	■
JS554120D1R100.0Z4-SIRA	10194626	1	D	12,0	12,0	15,0	65,0	—	—	1,0	4	Cylindrical	■
JS554160D1R050.0Z4-SIRA	10194627	1	D	16,0	16,0	19,0	75,0	—	—	0,5	4	Cylindrical	■
JS554160D1R100.0Z4-SIRA	10194628	1	D	16,0	16,0	19,0	75,0	—	—	1,0	4	Cylindrical	■
554060R020Z4.0-SIRON-A	02679507	2	D	6,0	6,0	14,0	55,0	—	—	0,2	4	Cylindrical	■
554080R050Z4.0-SIRON-A	02679514	2	D	8,0	8,0	18,0	60,0	—	—	0,5	4	Cylindrical	■
554100R050Z4.0-SIRON-A	02679540	2	D	10,0	10,0	22,0	70,0	—	—	0,5	4	Cylindrical	■
554100R100Z4.0-SIRON-A	02679544	2	D	10,0	10,0	22,0	70,0	—	—	1,0	4	Cylindrical	■
554120R050Z4.0-SIRON-A	02679552	2	D	12,0	12,0	26,0	80,0	—	—	0,5	4	Cylindrical	■
554120R100Z4.0-SIRON-A	02679557	2	D	12,0	12,0	26,0	80,0	—	—	1,0	4	Cylindrical	■
554160R050Z4.0-SIRON-A	02679562	2	D	16,0	16,0	34,0	90,0	—	—	0,5	4	Cylindrical	■
554160R100Z4.0-SIRON-A	02679564	2	D	16,0	16,0	34,0	90,0	—	—	1,0	4	Cylindrical	■
554160R200Z4.0-SIRON-A	02810437	2	D	16,0	16,0	34,0	90,0	—	—	2,0	4	Cylindrical	■
554160R310Z4.0-SIRON-A	02810439	2	D	16,0	16,0	34,0	90,0	—	—	3,1	4	Cylindrical	■
554160R400Z4.0-SIRON-A	02810441	2	D	16,0	16,0	34,0	90,0	—	—	4,0	4	Cylindrical	■
554200R050Z4.0-SIRON-A	02679568	2	D	20,0	20,0	42,0	100,0	—	—	0,5	4	Cylindrical	■
554200R100Z4.0-SIRON-A	02679571	2	D	20,0	20,0	42,0	100,0	—	—	1,0	4	Cylindrical	■
554200R250Z4.0-SIRON-A	02810443	2	D	20,0	20,0	42,0	100,0	—	—	2,5	4	Cylindrical	■
554200R310Z4.0-SIRON-A	02810445	2	D	20,0	20,0	42,0	100,0	—	—	3,1	4	Cylindrical	■
554200R400Z4.0-SIRON-A	02810447	2	D	20,0	20,0	42,0	100,0	—	—	4,0	4	Cylindrical	■
554250R050Z4.0-SIRON-A	02679575	2	D	25,0	25,0	52,0	125,0	—	—	0,5	4	Cylindrical	■
554250R100Z4.0-SIRON-A	02679577	2	D	25,0	25,0	52,0	125,0	—	—	1,0	4	Cylindrical	■
554250R310Z4.0-SIRON-A	02810449	2	D	25,0	25,0	52,0	125,0	—	—	3,1	4	Cylindrical	■
554250R400Z4.0-SIRON-A	02810452	2	D	25,0	25,0	52,0	125,0	—	—	4,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfcp

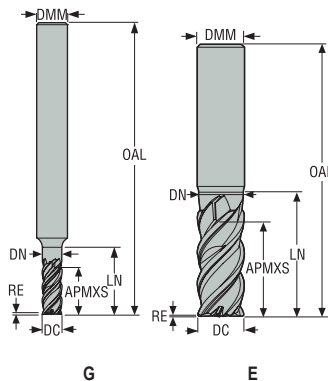
Graphite

X-Heads

Minimaster

JS554

High performance– Universal – Square – 4 Flutes – Cylindrical – Corner radius



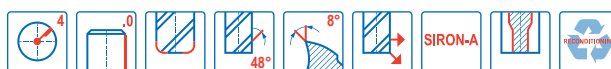
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

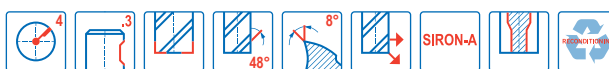
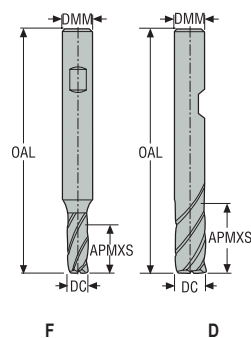
—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS554030G2R015.0Z4-SIRA	02881697	2	G	3,0	6,0	7,0	57,0	10,0	2,85	0,15	4	Cylindrical	■
JS554040G2R020.0Z4-SIRA	02881698	2	G	4,0	6,0	10,0	57,0	13,0	3,8	0,2	4	Cylindrical	■
JS554050G2R020.0Z4-SIRA	02881699	2	G	5,0	6,0	12,0	57,0	16,0	4,75	0,2	4	Cylindrical	■
JS554060E2R020.0Z4-SIRA	03029960	2	E	6,0	6,0	14,0	57,0	18,0	5,7	0,2	4	Cylindrical	■
JS554060E2R050.0Z4-SIRA	02881700	2	E	6,0	6,0	14,0	57,0	18,0	5,7	0,5	4	Cylindrical	■
JS554060E2R100.0Z4-SIRA	03029948	2	E	6,0	6,0	14,0	57,0	18,0	5,7	1,0	4	Cylindrical	■
JS554080E2R050.0Z4-SIRA	03029962	2	E	8,0	8,0	18,0	63,0	25,0	7,6	0,5	4	Cylindrical	■
JS554080E2R100.0Z4-SIRA	02881701	2	E	8,0	8,0	18,0	63,0	25,0	7,6	1,0	4	Cylindrical	■
JS554100E2R050.0Z4-SIRA	03029964	2	E	10,0	10,0	22,0	72,0	29,0	9,5	0,5	4	Cylindrical	■
JS554100E2R100.0Z4-SIRA	03029965	2	E	10,0	10,0	22,0	72,0	29,0	9,5	1,0	4	Cylindrical	■
JS554100E2R200.0Z4-SIRA	02881702	2	E	10,0	10,0	22,0	72,0	29,0	9,5	2,0	4	Cylindrical	■
JS554100E2R250.0Z4-SIRA	03029949	2	E	10,0	10,0	22,0	72,0	29,0	9,5	2,5	4	Cylindrical	■
JS554120E2R050.0Z4-SIRA	03029968	2	E	12,0	12,0	26,0	83,0	35,0	11,4	0,5	4	Cylindrical	■
JS554120E2R100.0Z4-SIRA	03029969	2	E	12,0	12,0	26,0	83,0	35,0	11,4	1,0	4	Cylindrical	■
JS554120E2R200.0Z4-SIRA	02881703	2	E	12,0	12,0	26,0	83,0	35,0	11,4	2,0	4	Cylindrical	■
JS554120E2R250.0Z4-SIRA	02881704	2	E	12,0	12,0	26,0	83,0	35,0	11,4	2,5	4	Cylindrical	■
JS554120E2R300.0Z4-SIRA	03029950	2	E	12,0	12,0	26,0	83,0	35,0	11,4	3,0	4	Cylindrical	■
JS554160E2R050.0Z4-SIRA	03029971	2	E	16,0	16,0	34,0	92,0	42,0	15,2	0,5	4	Cylindrical	■
JS554160E2R600.0Z4-SIRA	03093685	2	E	16,0	16,0	34,0	92,0	42,0	15,2	6,0	4	Cylindrical	■
JS554200E2R200.0Z4-SIRA	02881705	2	E	20,0	20,0	42,0	110,0	54,0	19,0	2,0	4	Cylindrical	■
JS554200E2R600.0Z4-SIRA	03029951	2	E	20,0	20,0	42,0	109,0	54,0	19,0	6,0	4	Cylindrical	■
JS554250E2R600.0Z4-SIRA	03093686	2	E	25,0	25,0	52,0	125,0	65,0	23,8	6,0	4	Cylindrical	■

■ Stocked standard.

High performance – Universal – Square – 4 Flutes – Weldon – Sharp

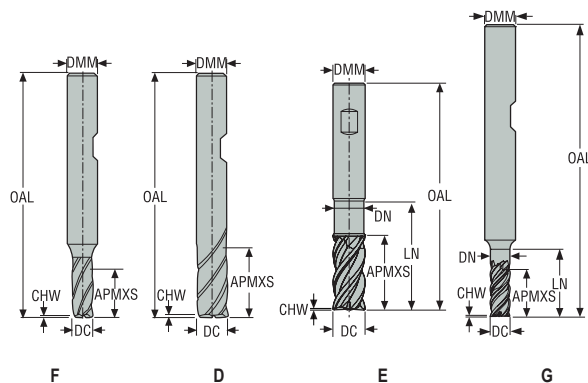


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm			
554030SZ4.0-SIRON-AW	02733844	2	F	3,0	6,0	7,0	50,0	8,7	3,0	4	Weldon	□
554040SZ4.0-SIRON-AW	02733846	2	F	4,0	6,0	10,0	55,0	11,7	4,0	4	Weldon	□
554050SZ4.0-SIRON-AW	02733847	2	F	5,0	6,0	12,0	55,0	13,7	5,0	4	Weldon	□
554060SZ4.0-SIRON-AW	02733848	2	D	6,0	6,0	14,0	55,0	–	–	4	Weldon	□
554080SZ4.0-SIRON-AW	02733849	2	D	8,0	8,0	18,0	60,0	–	–	4	Weldon	□
554100SZ4.0-SIRON-AW	02733850	2	D	10,0	10,0	22,0	70,0	–	–	4	Weldon	□

☐ Weldon available. Delivery time is 3 days.

JS554

High performance – Universal – Square – 4 Flutes – Weldon – Chamfer

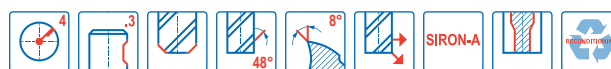


—Tolerances:

—DMM=h5

—DC=e7

—Regrind possible if DC is ≥Ø6

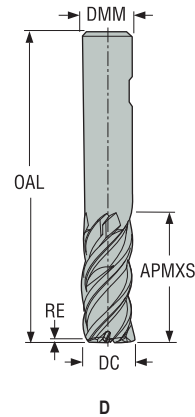


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS554040F1C.3Z4-SIRA	10041460	1	F	4,0	6,0	6,0	40,0	9,0	4,05	0,045	4	Weldon	■
JS554060D1C.3Z4-SIRA	10041461	1	D	6,0	6,0	8,0	40,0	—	—	0,075	4	Weldon	■
JS554080D1C.3Z4-SIRA	10041462	1	D	8,0	8,0	11,0	50,0	—	—	0,1	4	Weldon	□
JS554100D1C.3Z4-SIRA	10041463	1	D	10,0	10,0	13,0	57,0	—	—	0,125	4	Weldon	□
JS554120D1C.3Z4-SIRA	10041464	1	D	12,0	12,0	15,0	65,0	—	—	0,15	4	Weldon	□
JS554160D1C.3Z4-SIRA	10041465	1	D	16,0	16,0	19,0	75,0	—	—	0,2	4	Weldon	□
554030Z4.3-SIRON-A	02733450	2	F	3,0	6,0	7,0	50,0	8,7	3,0	0,035	4	Weldon	■
JS554030G2C.3Z4-SIRA	03029973	2	G	3,0	6,0	8,0	57,0	10,0	2,85	0,035	4	Weldon	□
554040Z4.3-SIRON-A	02733456	2	F	4,0	6,0	10,0	55,0	11,7	4,0	0,045	4	Weldon	■
JS554040G2C.3Z4-SIRA	03029974	2	G	4,0	6,0	10,0	57,0	13,0	3,8	0,045	4	Weldon	■
554050Z4.3-SIRON-A	02733461	2	F	5,0	6,0	12,0	55,0	13,7	5,0	0,055	4	Weldon	■
JS554050G2C.3Z4-SIRA	03029975	2	G	5,0	6,0	12,0	57,0	16,0	4,75	0,055	4	Weldon	□
554060Z4.3-SIRON-A	02679502	2	D	6,0	6,0	14,0	55,0	—	—	0,075	4	Weldon	■
JS554060E2C.3Z4-SIRA	03029976	2	E	6,0	6,0	14,0	57,0	18,0	5,7	0,075	4	Weldon	■
554080Z4.3-SIRON-A	02679511	2	D	8,0	8,0	18,0	60,0	—	—	0,1	4	Weldon	■
JS554080E2C.3Z4-SIRA	03029978	2	E	8,0	8,0	18,0	63,0	25,0	7,6	0,1	4	Weldon	■
JS554100E2C.3Z4-SIRA	03029980	2	E	10,0	10,0	22,0	72,0	29,0	9,5	0,125	4	Weldon	■
554100Z4.3-SIRON-A	02679535	2	D	10,0	10,0	22,0	70,0	—	—	0,125	4	Weldon	■
JS554120E2C.3Z4-SIRA	03029983	2	E	12,0	12,0	26,0	83,0	35,0	11,4	0,15	4	Weldon	■
554120Z4.3-SIRON-A	02679547	2	D	12,0	12,0	26,0	80,0	—	—	0,15	4	Weldon	■
JS554160E2C.3Z4-SIRA	03029986	2	E	16,0	16,0	34,0	92,0	42,0	15,2	0,2	4	Weldon	■
554160Z4.3-SIRON-A	02679559	2	D	16,0	16,0	34,0	90,0	—	—	0,2	4	Weldon	■
JS554200E2C.3Z4-SIRA	03029988	2	E	20,0	20,0	42,0	109,0	54,0	19,0	0,25	4	Weldon	■
554200Z4.3-SIRON-A	02679565	2	D	20,0	20,0	42,0	100,0	—	—	0,25	4	Weldon	■
554250Z4.3-SIRON-A	02679572	2	D	25,0	25,0	52,0	125,0	—	—	0,3	4	Weldon	■
554L030Z4.3-SIRON-A	02733817	3	F	3,0	6,0	12,0	55,0	13,7	3,0	0,035	4	Weldon	■
554L040Z4.3-SIRON-A	02733820	3	F	4,0	6,0	16,0	60,0	17,7	4,0	0,045	4	Weldon	■
554L050Z4.3-SIRON-A	02733824	3	F	5,0	6,0	20,0	65,0	21,7	5,0	0,055	4	Weldon	■
554L060Z4.3-SIRON-A	02733827	3	D	6,0	6,0	23,0	65,0	—	—	0,075	4	Weldon	■
554L080Z4.3-SIRON-A	02733829	3	D	8,0	8,0	32,0	75,0	—	—	0,1	4	Weldon	■
554L100Z4.3-SIRON-A	02733831	3	D	10,0	10,0	40,0	85,0	—	—	0,125	4	Weldon	■
554L120Z4.3-SIRON-A	02733833	3	D	12,0	12,0	45,0	100,0	—	—	0,15	4	Weldon	■
554L160Z4.3-SIRON-A	02733835	3	D	16,0	16,0	55,0	115,0	—	—	0,2	4	Weldon	■
554L200Z4.3-SIRON-A	02733837	3	D	20,0	20,0	65,0	125,0	—	—	0,25	4	Weldon	■
554L250Z4.3-SIRON-A	02733839	3	D	25,0	25,0	85,0	150,0	—	—	0,3	4	Weldon	■

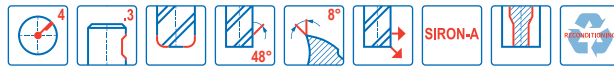
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JS554

High performance – Universal – Square – 4 Flutes – Weldon – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS554080D1R050.3Z4-SIRA	10194629	1	D	8,0	8,0	11,0	50,0	0,5	4	Weldon	□
JS554100D1R050.3Z4-SIRA	10194630	1	D	10,0	10,0	13,0	57,0	0,5	4	Weldon	□
JS554100D1R100.3Z4-SIRA	10194631	1	D	10,0	10,0	13,0	57,0	1,0	4	Weldon	□
JS554120D1R050.3Z4-SIRA	10194632	1	D	12,0	12,0	15,0	65,0	0,5	4	Weldon	□
JS554120D1R100.3Z4-SIRA	10194633	1	D	12,0	12,0	15,0	65,0	1,0	4	Weldon	□
JS554160D1R050.3Z4-SIRA	10194634	1	D	16,0	16,0	19,0	75,0	0,5	4	Weldon	□
JS554160D1R100.3Z4-SIRA	10194635	1	D	16,0	16,0	19,0	75,0	1,0	4	Weldon	□
554060R020Z4.3-SIRON-A	02679506	2	D	6,0	6,0	14,0	55,0	0,2	4	Weldon	■
554080R050Z4.3-SIRON-A	02679513	2	D	8,0	8,0	18,0	60,0	0,5	4	Weldon	■
554100R050Z4.3-SIRON-A	02679539	2	D	10,0	10,0	22,0	70,0	0,5	4	Weldon	■
554100R100Z4.3-SIRON-A	02679542	2	D	10,0	10,0	22,0	70,0	1,0	4	Weldon	■
554120R050Z4.3-SIRON-A	02679549	2	D	12,0	12,0	26,0	80,0	0,5	4	Weldon	■
554120R100Z4.3-SIRON-A	02679554	2	D	12,0	12,0	26,0	80,0	1,0	4	Weldon	■
554160R050Z4.3-SIRON-A	02679561	2	D	16,0	16,0	34,0	90,0	0,5	4	Weldon	■
554160R100Z4.3-SIRON-A	02679563	2	D	16,0	16,0	34,0	90,0	1,0	4	Weldon	■
554160R200Z4.3-SIRON-A	02810436	2	D	16,0	16,0	34,0	90,0	2,0	4	Weldon	■
554160R310Z4.3-SIRON-A	02810438	2	D	16,0	16,0	34,0	90,0	3,1	4	Weldon	■
554160R400Z4.3-SIRON-A	02810440	2	D	16,0	16,0	34,0	90,0	4,0	4	Weldon	■
554200R050Z4.3-SIRON-A	02679567	2	D	20,0	20,0	42,0	100,0	0,5	4	Weldon	■
554200R100Z4.3-SIRON-A	02679570	2	D	20,0	20,0	42,0	100,0	1,0	4	Weldon	■
554200R250Z4.3-SIRON-A	02810442	2	D	20,0	20,0	42,0	100,0	2,5	4	Weldon	■
554200R310Z4.3-SIRON-A	02810444	2	D	20,0	20,0	42,0	100,0	3,1	4	Weldon	■
554200R400Z4.3-SIRON-A	02810446	2	D	20,0	20,0	42,0	100,0	4,0	4	Weldon	■
554250R050Z4.3-SIRON-A	02679574	2	D	25,0	25,0	52,0	125,0	0,5	4	Weldon	■
554250R100Z4.3-SIRON-A	02679576	2	D	25,0	25,0	52,0	125,0	1,0	4	Weldon	■
554250R310Z4.3-SIRON-A	02810448	2	D	25,0	25,0	52,0	125,0	3,1	4	Weldon	■
554250R400Z4.3-SIRON-A	02810451	2	D	25,0	25,0	52,0	125,0	4,0	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

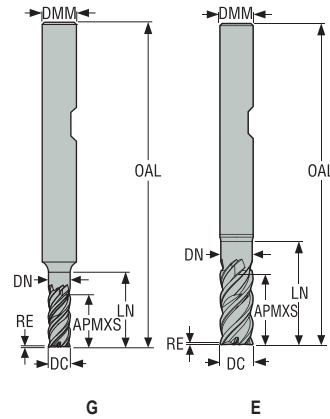
Graphite

X-Heads

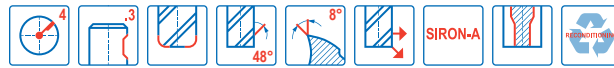
Minimaster

JS554

High performance – Universal – Square – 4 Flutes – Weldon – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6

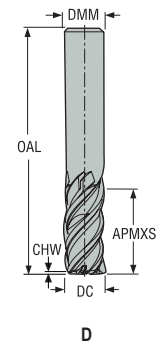


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS554030G2R015.3Z4-SIRA	02881706	2	G	3,0	6,0	7,0	57,0	10,0	2,85	0,15	4	Weldon	☐
JS554040G2R020.3Z4-SIRA	02881946	2	G	4,0	6,0	10,0	57,0	13,0	3,8	0,2	4	Weldon	☒
JS554050G2R020.3Z4-SIRA	02881708	2	G	5,0	6,0	12,0	57,0	16,0	4,75	0,2	4	Weldon	☐
JS554060E2R020.3Z4-SIRA	03029977	2	E	6,0	6,0	14,0	57,0	18,0	5,7	0,2	4	Weldon	☒
JS554060E2R050.3Z4-SIRA	02881709	2	E	6,0	6,0	14,0	57,0	18,0	5,7	0,5	4	Weldon	☐
JS554060E2R100.3Z4-SIRA	03029952	2	E	6,0	6,0	14,0	57,0	18,0	5,7	1,0	4	Weldon	☐
JS554080E2R050.3Z4-SIRA	03029979	2	E	8,0	8,0	18,0	63,0	25,0	7,6	0,5	4	Weldon	☐
JS554080E2R100.3Z4-SIRA	02881710	2	E	8,0	8,0	18,0	63,0	25,0	7,6	1,0	4	Weldon	☐
JS554100E2R050.3Z4-SIRA	03029981	2	E	10,0	10,0	22,0	72,0	29,0	9,5	0,5	4	Weldon	☒
JS554100E2R100.3Z4-SIRA	03029982	2	E	10,0	10,0	22,0	72,0	29,0	9,5	1,0	4	Weldon	☐
JS554100E2R200.3Z4-SIRA	02881711	2	E	10,0	10,0	22,0	72,0	29,0	9,5	2,0	4	Weldon	☒
JS554100E2R250.3Z4-SIRA	03029953	2	E	10,0	10,0	22,0	72,0	29,0	9,5	2,5	4	Weldon	☐
JS554120E2R050.3Z4-SIRA	03029984	2	E	12,0	12,0	26,0	83,0	35,0	11,4	0,5	4	Weldon	☒
JS554120E2R100.3Z4-SIRA	03029985	2	E	12,0	12,0	26,0	83,0	35,0	11,4	1,0	4	Weldon	☐
JS554120E2R200.3Z4-SIRA	02881712	2	E	12,0	12,0	26,0	83,0	35,0	11,4	2,0	4	Weldon	☐
JS554120E2R250.3Z4-SIRA	02881713	2	E	12,0	12,0	26,0	83,0	35,0	11,4	2,5	4	Weldon	☐
JS554120E2R300.3Z4-SIRA	03029954	2	E	12,0	12,0	26,0	83,0	35,0	11,4	3,0	4	Weldon	☐
JS554160E2R050.3Z4-SIRA	03029987	2	E	16,0	16,0	34,0	92,0	42,0	15,2	0,5	4	Weldon	☒
JS554160E2R600.3Z4-SIRA	03093687	2	E	16,0	16,0	34,0	92,0	42,0	15,2	6,0	4	Weldon	☐
JS554200E2R200.3Z4-SIRA	02881714	2	E	20,0	20,0	42,0	110,0	54,0	19,0	2,0	4	Weldon	☐
JS554200E2R600.3Z4-SIRA	03029955	2	E	20,0	20,0	42,0	109,0	54,0	19,0	6,0	4	Weldon	☐
JS554250E2R600.3Z4-SIRA	03093688	2	E	25,0	25,0	52,0	125,0	65,0	23,8	6,0	4	Weldon	☐

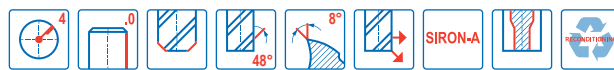
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JS554

High performance – Universal – Square – 4 Flutes – Cylindrical – Chamfer – Inch



- Tolerances:
- DMM=h5
- DC=e7
- Regrind possible if DC is $\geq \varnothing.375$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch			
5540250Z4.0-SIRON-A	02711329	2	D	0.250	0.250	0.500	2.500	0.003	4	Cylindrical	■
5540312Z4.0-SIRON-A	02711340	2	D	0.313	0.313	0.625	2.500	0.004	4	Cylindrical	■
5540375Z4.0-SIRON-A	02711344	2	D	0.375	0.375	0.750	3.000	0.005	4	Cylindrical	■
5540500Z4.0-SIRON-A	02711611	2	D	0.500	0.500	1.000	3.500	0.006	4	Cylindrical	■
5540625Z4.0-SIRON-A	02711626	2	D	0.625	0.625	1.250	3.750	0.008	4	Cylindrical	■
5540750Z4.0-SIRON-A	02711643	2	D	0.750	0.750	1.500	4.000	0.010	4	Cylindrical	■
5541000Z4.0-SIRON-A	02711660	2	D	1.000	1.000	2.000	5.000	0.012	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

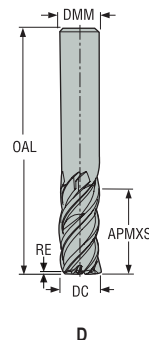
Graphite

X-Heads

Minimaster

JS554

High performance – Universal – Square – 4 Flutes – Cylindrical – Corner radius – Inch



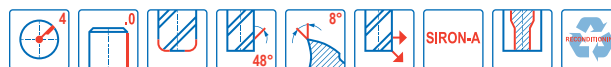
—Tolerances:

—DMM=h5

—DC=e7

—RE= ±0.0008 inch

—Reground possible if DC is ≥Ø.375

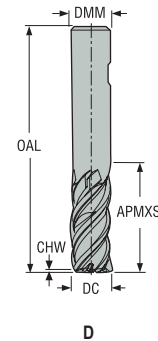


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch			
5540250R015Z4.0-SIRON-A	02711335	2	D	0.250	0.250	0.500	2.500	0.015	4	Cylindrical	■
5540312R015Z4.0-SIRON-A	02711341	2	D	0.313	0.313	0.625	2.500	0.015	4	Cylindrical	■
5540375R015Z4.0-SIRON-A	02711588	2	D	0.375	0.375	0.750	3.000	0.015	4	Cylindrical	■
5540375R030Z4.0-SIRON-A	02711589	2	D	0.375	0.375	0.750	3.000	0.030	4	Cylindrical	■
5540500R015Z4.0-SIRON-A	02711614	2	D	0.500	0.500	1.000	3.500	0.015	4	Cylindrical	■
5540500R030Z4.0-SIRON-A	02711616	2	D	0.500	0.500	1.000	3.500	0.030	4	Cylindrical	■
5540500R125Z4.0-SIRON-A	02842370	2	D	0.500	0.500	1.000	3.500	0.125	4	Cylindrical	■
5540625R015Z4.0-SIRON-A	02711629	2	D	0.625	0.625	1.250	3.750	0.015	4	Cylindrical	■
5540625R030Z4.0-SIRON-A	02711631	2	D	0.625	0.625	1.250	3.750	0.030	4	Cylindrical	■
5540625R125Z4.0-SIRON-A	02842371	2	D	0.625	0.625	1.250	3.750	0.125	4	Cylindrical	■
5540750R030Z4.0-SIRON-A	02711647	2	D	0.750	0.750	1.500	4.000	0.030	4	Cylindrical	■
5540750R060Z4.0-SIRON-A	02711655	2	D	0.750	0.750	1.500	4.000	0.060	4	Cylindrical	■

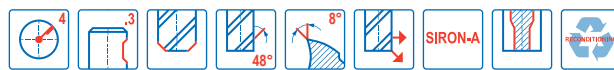
■ Stocked standard.

JS554

High performance – Universal – Square – 4 Flutes – Weldon – Chamfer – inch



- Tolerances:
- DMM=h5
- DC=e7
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch			
5540500Z4.3-SIRON-A	02711608	2	D	0.500	0.500	1.000	3.500	0.006	4	Weldon	■
5540750Z4.3-SIRON-A	02711632	2	D	0.750	0.750	1.500	4.000	0.010	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

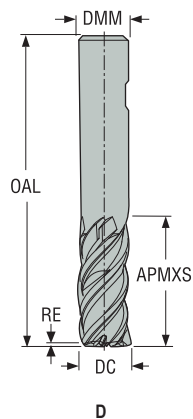
Graphite

X-Heads

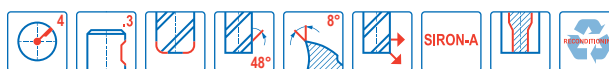
Minimaster

JS554

High performance – Universal – Square – 4 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM=h5
—DC=e7
—RE= ±.0008 inch
—Reground possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch			
5540500R015Z4.3-SIRON-A	02711613	2	D	0.500	0.500	1.000	3.500	0.015	4	Weldon	■
5540500R030Z4.3-SIRON-A	02711615	2	D	0.500	0.500	1.000	3.500	0.030	4	Weldon	■
5540500R125Z4.3-SIRON-A	02856456	2	D	0.500	0.500	1.000	3.500	0.125	4	Weldon	□
5540625R125Z4.3-SIRON-A	02856457	2	D	0.625	0.625	1.250	3.750	0.125	4	Weldon	□
5541000R060Z4.3-SIRON-A	02711663	2	D	1.000	1.000	2.000	5.000	0.060	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Cutting data – JS554 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z										v _c
				3	4	5	6	8	10	12	16	20	25	
P1	M/A/D/E	0.400 0,400	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	215 (190 — 240) 710 (630 — 780)
P2	M/A/D/E	0.400 0,400	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	210 (190 — 240) 690 (630 — 780)
P3	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	0.16 0,0065	0.18 0,0070	185 (160 — 200) 610 (530 — 650)
P4	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.038 0,0015	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	0.16 0,0065	0.18 0,0070	160 (140 — 180) 520 (460 — 590)
P5	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	155 (140 — 170) 510 (460 — 550)
P6	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	175 (160 — 200) 570 (530 — 650)
P7	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	165 (150 — 180) 540 (500 — 590)
P8	M/A/D/E	0.400 0,400	1.0 1,0	0.028 0,0011	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	0.16 0,0065	0.18 0,0070	155 (140 — 170) 510 (460 — 550)
P11	M/A/D/E	0.400 0,400	1.0 1,0	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	140 (130 — 150) 460 (430 — 490)
P12	M/A/D/E	0.400 0,400	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	90 (79 — 100) 295 (260 — 320)
M1	E	0.400 0,400	1.0 1,0	0.020 0,00080	0.026 0,0010	0.034 0,0013	0.040 0,0016	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.11 0,0044	0.13 0,0050	110 (96 — 120) 360 (320 — 390)
M2	E	0.400 0,400	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	90 (79 — 100) 295 (260 — 320)
M3	E	0.400 0,400	0.90 0,90	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	55 (45 — 66) 180 (150 — 210)
M4	E	0.400 0,400	0.90 0,90	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	43 (35 — 51) 140 (120 — 160)
M5	E	0.400 0,400	0.90 0,90	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	36 (29 — 42) 120 (96 — 130)
K1	E	0.400 0,400	1.2 1,2	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.16 0,0065	175 (160 — 190) 570 (530 — 620)
K2	E	0.400 0,400	1.2 1,2	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	155 (140 — 170) 510 (460 — 550)
K3	E	0.400 0,400	1.2 1,2	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	130 (120 — 140) 425 (400 — 450)
K4	E	0.400 0,400	1.2 1,2	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	125 (110 — 140) 410 (370 — 450)
K5	E	0.400 0,400	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.16 0,0065	155 (140 — 170) 510 (460 — 550)
K6	E	0.400 0,400	1.0 1,0	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	220 (190 — 250) 720 (630 — 820)
K7	E	0.400 0,400	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.16 0,0065	195 (170 — 220) 640 (560 — 720)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfrip
Graphite
X-Heads
Minimaster

Cutting data – JS554 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z										v _c
				3	4	5	6	8	10	12	16	20	25	
N1	E	0.500 0,500	0.90 0,90	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.13 0,0050	0.15 0,0060	610 (510 — 710) 2000 (1700 — 2300)
N2	E	0.500 0,500	0.90 0,90	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.13 0,0050	0.15 0,0060	390 (330 — 450) 1275 (1100 — 1400)
N11	E	0.500 0,500	1.1 1,1	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.13 0,0050	0.15 0,0060	320 (270 — 370) 1050 (890 — 1200)
S11	E	0.400 0,400	0.70 0,70	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	100 (72 — 120) 330 (240 — 390)
S12	E	0.400 0,400	0.70 0,70	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	75 (56 — 99) 245 (190 — 320)
S13	E	0.400 0,400	0.70 0,70	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	0.10 0,0040	60 (44 — 78) 195 (150 — 250)
H5	M/A/D	0.200 0,200	0.90 0,90	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	75 (59 — 88) 245 (200 — 280)
H8	M/A/D	0.200 0,200	0.90 0,90	0.017 0,00065	0.022 0,00085	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	80 (63 — 93) 260 (210 — 300)
H11	M/A/D	0.200 0,200	0.90 0,90	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	95 (75 — 110) 310 (250 — 360)
H12	M/A/D	0.200 0,200	0.90 0,90	0.017 0,00065	0.022 0,00085	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	90 (73 — 100) 295 (240 — 320)
H21	M/A/D	0.200 0,200	0.90 0,90	0.017 0,00065	0.022 0,00085	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	155 (110 — 190) 510 (370 — 620)
TS1	A	0.500 0,500	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	285 (180 — 400) 940 (600 — 1300)
TP1	A	0.500 0,500	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	295 (180 — 410) 970 (600 — 1300)
GR1	A	0.500 0,500	1.1 1,1	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	580 (470 — 690) 1900 (1600 — 2200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
 Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
 All cutting data are target values

Cutting data – JS554 Slot milling

SMG		a _p /DC	f _z										v _c
			3	4	5	6	8	10	12	16	20	25	
P1	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	195 (170 — 220) 640 (560 — 720)
P2	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	190 (170 — 210) 620 (560 — 680)
P3	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	165 (140 — 180) 540 (460 — 590)
P4	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	145 (130 — 160) 475 (430 — 520)
P5	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	135 (120 — 150) 445 (400 — 490)
P6	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	155 (140 — 170) 510 (460 — 550)
P7	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	145 (130 — 160) 475 (430 — 520)
P8	M/A/D/E	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.15 0,0060	135 (120 — 150) 445 (400 — 490)
P11	M/A/D/E	0.80 0,80	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	130 (120 — 140) 425 (400 — 450)
P12	M/A/D/E	0.80 0,80	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	80 (69 — 87) 260 (230 — 280)
M1	E	0.80 0,80	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	95 (85 — 100) 310 (280 — 320)
M2	E	0.80 0,80	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	80 (69 — 87) 260 (230 — 280)
M3	E	0.60 0,60	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	48 (39 — 57) 155 (130 — 180)
M4	E	0.60 0,60	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	36 (29 — 43) 120 (96 — 140)
M5	E	0.60 0,60	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	30 (25 — 36) 100 (83 — 110)
K1	E	1.0 1,0	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	155 (140 — 170) 510 (460 — 550)
K2	E	1.0 1,0	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	135 (120 — 150) 445 (400 — 490)
K3	E	1.0 1,0	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	115 (110 — 120) 375 (370 — 390)
K4	E	1.0 1,0	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	110 (96 — 120) 360 (320 — 390)
K5	E	0.70 0,70	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	135 (120 — 150) 445 (400 — 490)
K6	E	0.70 0,70	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	200 (180 — 220) 660 (600 — 720)
K7	E	0.70 0,70	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	175 (150 — 190) 570 (500 — 620)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS554 Slot milling

SMG		a _p /DC	f _z										v _c
			3	4	5	6	8	10	12	16	20	25	
N1	E	0.50	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.10	0.13	570 (480 — 670)
		0.50	0,00060	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0050	1875 (1600 — 2100)
N2	E	0.50	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.10	0.13	370 (310 — 430)
		0.50	0,00060	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0050	1225 (1100 — 1400)
N3	E	0.50	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.10	0.13	245 (210 — 280)
		0.50	0,00060	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0050	800 (690 — 910)
N11	E	0.60	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.12	0.15	290 (250 — 330)
		0.60	0,00070	0,00095	0,0012	0,0014	0,0019	0,0024	0,0028	0,0038	0,0048	0,0060	950 (830 — 1000)
S1	E	0.30	0.0095	0.013	0.016	0.019	0.025	0.032	0.038	0.050	0.065	0.080	30 (25 — 34)
		0.30	0,00038	0,00050	0,00065	0,00075	0,0010	0,0013	0,0015	0,0020	0,0026	0,0032	100 (83 — 110)
S2	E	0.30	0.0095	0.013	0.016	0.019	0.025	0.032	0.038	0.050	0.065	0.080	27 (17 — 38)
		0.30	0,00038	0,00050	0,00065	0,00075	0,0010	0,0013	0,0015	0,0020	0,0026	0,0032	90 (56 — 120)
S3	E	0.30	0.0095	0.013	0.016	0.019	0.025	0.032	0.038	0.050	0.065	0.080	23 (15 — 32)
		0.30	0,00038	0,00050	0,00065	0,00075	0,0010	0,0013	0,0015	0,0020	0,0026	0,0032	75 (50 — 100)
S11	E	0.50	0.012	0.016	0.020	0.025	0.032	0.040	0.050	0.065	0.080	0.10	85 (63 — 110)
		0.50	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	0,0026	0,0032	0,0040	280 (210 — 360)
S12	E	0.50	0.012	0.016	0.020	0.025	0.032	0.040	0.050	0.065	0.080	0.10	65 (48 — 86)
		0.50	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	0,0026	0,0032	0,0040	215 (160 — 280)
S13	E	0.50	0.012	0.016	0.020	0.025	0.032	0.040	0.050	0.065	0.080	0.10	50 (38 — 66)
		0.50	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	0,0026	0,0032	0,0040	165 (130 — 210)
H5	M/A/D	0.40	0.0060	0.0080	0.010	0.012	0.016	0.020	0.025	0.032	0.040	0.050	65 (52 — 76)
		0.40	0,00024	0,00032	0,00040	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	215 (180 — 240)
H8	M/A/D	0.40	0.0060	0.0080	0.010	0.012	0.016	0.020	0.025	0.032	0.040	0.050	65 (52 — 76)
		0.40	0,00024	0,00032	0,00040	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	215 (180 — 240)
H11	M/A/D	0.40	0.0060	0.0080	0.010	0.012	0.016	0.020	0.025	0.032	0.040	0.050	80 (66 — 97)
		0.40	0,00024	0,00032	0,00040	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	260 (220 — 310)
H12	M/A/D	0.40	0.0060	0.0080	0.010	0.012	0.016	0.020	0.025	0.032	0.040	0.050	75 (60 — 89)
		0.40	0,00024	0,00032	0,00040	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	245 (200 — 290)
H21	M/A/D	0.40	0.0060	0.0080	0.010	0.012	0.016	0.020	0.025	0.032	0.040	0.050	125 (90 — 160)
		0.40	0,00024	0,00032	0,00040	0,00048	0,00065	0,00080	0,0010	0,0013	0,0016	0,0020	410 (300 — 520)
TS1	A	0.70	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	0.19	240 (150 — 330)
		0.70	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0048	0,0060	0,0065	0,0075	790 (500 — 1000)
TP1	A	0.70	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	0.19	250 (150 — 340)
		0.70	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0048	0,0060	0,0065	0,0075	820 (500 — 1100)
GR1	A	0.80	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	0.19	485 (390 — 580)
		0.80	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0048	0,0060	0,0065	0,0075	1600 (1300 — 1900)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS554 Side milling roughing – Inch

SMG		a _e /DC	a _p /DC	f _z							v _c
				1/4	5/16	3/8	1/2	5/8	3/4	1	
P1	M/A/D/E	0.400 0,400	1.0 1,0	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.19 0,0075	215 (190 — 240) 710 (630 — 780)
P2	M/A/D/E	0.400 0,400	1.0 1,0	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.20 0,0080	210 (190 — 240) 690 (630 — 780)
P3	M/A/D/E	0.400 0,400	1.0 1,0	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.18 0,0070	185 (160 — 200) 610 (530 — 650)
P4	M/A/D/E	0.400 0,400	1.0 1,0	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.18 0,0070	160 (140 — 180) 520 (460 — 590)
P5	M/A/D/E	0.400 0,400	1.0 1,0	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.18 0,0070	155 (140 — 170) 510 (460 — 550)
P6	M/A/D/E	0.400 0,400	1.0 1,0	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.18 0,0070	175 (160 — 200) 570 (530 — 650)
P7	M/A/D/E	0.400 0,400	1.0 1,0	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.18 0,0070	165 (150 — 180) 540 (500 — 590)
P8	M/A/D/E	0.400 0,400	1.0 1,0	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.18 0,0070	155 (140 — 170) 510 (460 — 550)
P11	M/A/D/E	0.400 0,400	1.0 1,0	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	140 (130 — 150) 460 (430 — 490)
P12	M/A/D/E	0.400 0,400	1.0 1,0	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	0.12 0,0048	90 (79 — 100) 295 (260 — 320)
M1	E	0.400 0,400	1.0 1,0	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.13 0,0050	110 (96 — 120) 360 (320 — 390)
M2	E	0.400 0,400	1.0 1,0	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	0.12 0,0048	90 (79 — 100) 295 (260 — 320)
M3	E	0.400 0,400	0.90 0,90	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.10 0,0040	55 (45 — 66) 180 (150 — 210)
M4	E	0.400 0,400	0.90 0,90	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	43 (35 — 51) 140 (120 — 160)
M5	E	0.400 0,400	0.90 0,90	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	36 (29 — 42) 120 (96 — 130)
K1	E	0.400 0,400	1.2 1,2	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.16 0,0065	175 (160 — 190) 570 (530 — 620)
K2	E	0.400 0,400	1.2 1,2	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	155 (140 — 170) 510 (460 — 550)
K3	E	0.400 0,400	1.2 1,2	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	130 (120 — 140) 425 (400 — 450)
K4	E	0.400 0,400	1.2 1,2	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	125 (110 — 140) 410 (370 — 450)
K5	E	0.400 0,400	1.0 1,0	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.16 0,0065	155 (140 — 170) 510 (460 — 550)
K6	E	0.400 0,400	1.0 1,0	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	220 (190 — 250) 720 (630 — 820)
K7	E	0.400 0,400	1.0 1,0	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.16 0,0065	195 (170 — 220) 640 (560 — 720)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

Cutting data – JS554 Side milling roughing – Inch

SMG		a_e/DC	a_p/DC	f_z							v_c
				1/4	5/16	3/8	1/2	5/8	3/4	1	
N1	E	0.500 0,500	0.90 0,90	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	610 (510 — 710) 2000 (1700 — 2300)
N2	E	0.500 0,500	0.90 0,90	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	390 (330 — 450) 1275 (1100 — 1400)
N3	E	0.500 0,500	0.90 0,90	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	260 (220 — 300) 850 (730 — 980)
N11	E	0.500 0,500	1.1 1,1	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	320 (270 — 370) 1050 (890 — 1200)
S1	E	0.150 0,150	0.50 0,50	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.17 0,0065	38 (32 — 44) 125 (110 — 140)
S2	E	0.150 0,150	0.50 0,50	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.17 0,0065	35 (21 — 48) 115 (69 — 150)
S3	E	0.150 0,150	0.50 0,50	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.16 0,0065	30 (19 — 42) 100 (63 — 130)
S11	E	0.400 0,400	0.70 0,70	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	0.12 0,0048	100 (72 — 120) 330 (240 — 390)
S12	E	0.400 0,400	0.70 0,70	0.038 0,0015	0.048 0,0019	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	0.12 0,0048	75 (56 — 99) 245 (190 — 320)
S13	E	0.400 0,400	0.70 0,70	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.090 0,0036	0.10 0,0040	60 (44 — 78) 195 (150 — 250)
H5	M/A/D	0.200 0,200	0.90 0,90	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.15 0,0060	75 (59 — 88) 245 (200 — 280)
H8	M/A/D	0.200 0,200	0.90 0,90	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	80 (63 — 93) 260 (210 — 300)
H21	M/A/D	0.200 0,200	0.90 0,90	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	155 (110 — 190) 510 (370 — 620)
H31	M/A/D	0.200 0,200	0.90 0,90	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.075 0,0030	0.080 0,0032	0.095 0,0038	60 (48 — 71) 195 (160 — 230)
TS1	A	0.500 0,500	1.0 1,0	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.15 0,0060	0.16 0,0065	0.19 0,0075	285 (180 — 400) 940 (600 — 1300)
TP1	A	0.500 0,500	1.0 1,0	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.15 0,0060	0.16 0,0065	0.19 0,0075	295 (180 — 410) 970 (600 — 1300)
GR1	A	0.500 0,500	1.1 1,1	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.15 0,0060	0.16 0,0065	0.19 0,0075	580 (470 — 690) 1900 (1600 — 2200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JS554 Slot milling – Inch

SMG		a_p /DC	f_z							v_c
			1/4	5/16	3/8	1/2	5/8	3/4	1	
P1	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	195 (170 — 220) 640 (560 — 720)
P2	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	190 (170 — 210) 620 (560 — 680)
P3	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	165 (140 — 180) 540 (460 — 590)
P4	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	145 (130 — 160) 475 (430 — 520)
P5	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	135 (120 — 150) 445 (400 — 490)
P6	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	155 (140 — 170) 510 (460 — 550)
P7	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	145 (130 — 160) 475 (430 — 520)
P8	M/A/D/E	1.0 1,0	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.15 0,0060	135 (120 — 150) 445 (400 — 490)
P11	M/A/D/E	0.80 0,80	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	130 (120 — 140) 425 (400 — 450)
P12	M/A/D/E	0.80 0,80	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	80 (69 — 87) 260 (230 — 280)
M1	E	0.80 0,80	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	95 (85 — 100) 310 (280 — 320)
M2	E	0.80 0,80	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	80 (69 — 87) 260 (230 — 280)
M3	E	0.60 0,60	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	48 (39 — 57) 155 (130 — 180)
M4	E	0.60 0,60	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	36 (29 — 43) 120 (96 — 140)
M5	E	0.60 0,60	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	30 (25 — 36) 100 (83 — 110)
K1	E	1.0 1,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	155 (140 — 170) 510 (460 — 550)
K2	E	1.0 1,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	135 (120 — 150) 445 (400 — 490)
K3	E	1.0 1,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	115 (110 — 120) 375 (370 — 390)
K4	E	1.0 1,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	110 (96 — 120) 360 (320 — 390)
K5	E	0.70 0,70	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	135 (120 — 150) 445 (400 — 490)
K6	E	0.70 0,70	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	200 (180 — 220) 660 (600 — 720)
K7	E	0.70 0,70	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	175 (150 — 190) 570 (500 — 620)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS554 Slot milling – Inch

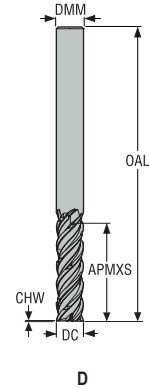
SMG		a _p /DC	f _z							v _c
			1/4	5/16	3/8	1/2	5/8	3/4	1	
N1	E	0.50 0.50	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.13 0.0050	570 (480 — 670) 1875 (1600 — 2100)
N2	E	0.50 0.50	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.13 0.0050	370 (310 — 430) 1225 (1100 — 1400)
N3	E	0.50 0.50	0.032 0.0013	0.040 0.0016	0.048 0.0019	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.13 0.0050	245 (210 — 280) 800 (690 — 910)
N11	E	0.60 0.60	0.038 0.0015	0.048 0.0019	0.055 0.0022	0.075 0.0030	0.095 0.0038	0.11 0.0044	0.15 0.0060	290 (250 — 330) 950 (830 — 1000)
S1	E	0.30 0.30	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.080 0.0032	30 (25 — 34) 100 (83 — 110)
S2	E	0.30 0.30	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.080 0.0032	27 (17 — 38) 90 (56 — 120)
S3	E	0.30 0.30	0.020 0.00080	0.025 0.0010	0.030 0.0012	0.040 0.0016	0.050 0.0020	0.060 0.0024	0.080 0.0032	23 (15 — 32) 75 (50 — 100)
S11	E	0.50 0.50	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	0.065 0.0026	0.080 0.0032	0.10 0.0040	85 (63 — 110) 280 (210 — 360)
S12	E	0.50 0.50	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	0.065 0.0026	0.080 0.0032	0.10 0.0040	65 (48 — 86) 215 (160 — 280)
S13	E	0.50 0.50	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	0.065 0.0026	0.080 0.0032	0.10 0.0040	50 (38 — 66) 165 (130 — 210)
H5	M/A/D	0.40 0.40	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	65 (52 — 76) 215 (180 — 240)
H8	M/A/D	0.40 0.40	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	65 (52 — 76) 215 (180 — 240)
H21	M/A/D	0.40 0.40	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	125 (90 — 160) 410 (300 — 520)
H31	M/A/D	0.40 0.40	0.013 0.00050	0.016 0.00065	0.019 0.00075	0.026 0.0010	0.032 0.0013	0.038 0.0015	0.050 0.0020	48 (39 — 57) 155 (130 — 180)
TS1	A	0.70 0.70	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.12 0.0048	0.15 0.0060	0.16 0.0065	0.19 0.0075	240 (150 — 330) 790 (500 — 1000)
TP1	A	0.70 0.70	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.12 0.0048	0.15 0.0060	0.16 0.0065	0.19 0.0075	250 (150 — 340) 820 (500 — 1100)
GR1	A	0.80 0.80	0.065 0.0026	0.080 0.0032	0.095 0.0038	0.12 0.0048	0.15 0.0060	0.16 0.0065	0.19 0.0075	485 (390 — 580) 1600 (1300 — 1900)

For cutting data recalculations, see pages 687 – 695

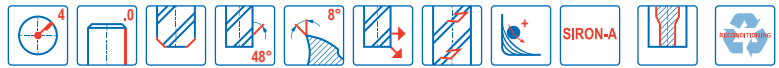
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm/tooth (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JS554-3C

Advanced roughing – Universal – Square – 4 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS554060D3C.0Z4C-SIRA	02810475	3	D	■	6,0	6,0	23,0	65,0	0,075	4	Cylindrical	■
JS554080D3C.0Z4C-SIRA	02810477	3	D	■	8,0	8,0	32,0	75,0	0,1	4	Cylindrical	■
JS554100D3C.0Z4C-SIRA	02810479	3	D	■	10,0	10,0	40,0	85,0	0,125	4	Cylindrical	■
JS554120D3C.0Z4C-SIRA	02810481	3	D	■	12,0	12,0	45,0	100,0	0,15	4	Cylindrical	■
JS554160D3C.0Z4C-SIRA	02810483	3	D	■	16,0	16,0	55,0	115,0	0,2	4	Cylindrical	■
JS554200D3C.0Z4C-SIRA	02810485	3	D	■	20,0	20,0	65,0	125,0	0,25	4	Cylindrical	■
JS554250D3C.0Z4C-SIRA	02810486	3	D	■	25,0	25,0	85,0	150,0	0,3	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

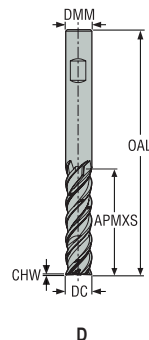
Graphite

X-Heads

Minimaster

JS554-3C

Advanced roughing – Universal – Square – 4 Flutes – Weldon – Chamfer



—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS554060D3C.3Z4C-SIRA	02810474	3	D	■	6,0	6,0	23,0	65,0	0,075	4	Weldon	■
JS554080D3C.3Z4C-SIRA	02810476	3	D	■	8,0	8,0	32,0	75,0	0,1	4	Weldon	■
JS554100D3C.3Z4C-SIRA	02810478	3	D	■	10,0	10,0	40,0	85,0	0,125	4	Weldon	■
JS554120D3C.3Z4C-SIRA	02810480	3	D	■	12,0	12,0	45,0	100,0	0,15	4	Weldon	■
JS554160D3C.3Z4C-SIRA	02810482	3	D	■	16,0	16,0	55,0	115,0	0,2	4	Weldon	■
JS554200D3C.3Z4C-SIRA	02810484	3	D	■	20,0	20,0	65,0	125,0	0,25	4	Weldon	■
JS554250D3C.3Z4C-SIRA	02810487	3	D	■	25,0	25,0	85,0	150,0	0,3	4	Weldon	■

■ Stocked standard.

Cutting data – JS554-3C Advanced roughing

SMG		a_e/DC	a_p/DC	f_z							v_c
				6	8	10	12	16	20	25	
P1	M/A/D/E	0.100 0,100	3.6 3,6	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	0.20 0,0080	350 (320 — 380) 1150 (1100 — 1200)
P2	M/A/D/E	0.100 0,100	3.6 3,6	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	0.22 0,0085	340 (310 — 370) 1125 (1100 — 1200)
P3	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.20 0,0080	295 (270 — 320) 970 (890 — 1000)
P4	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	260 (240 — 280) 850 (790 — 910)
P5	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	250 (230 — 270) 820 (760 — 880)
P6	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	280 (260 — 300) 920 (860 — 980)
P7	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	265 (240 — 290) 870 (790 — 950)
P8	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.20 0,0080	250 (230 — 270) 820 (760 — 880)
P11	M/A/D/E	0.100 0,100	3.6 3,6	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.19 0,0075	0.24 0,0095	0.28 0,011	245 (230 — 270) 800 (760 — 880)
P12	M/A/D/E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	150 (140 — 160) 490 (460 — 520)
M1	E	0.100 0,100	3.6 3,6	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	0.22 0,0085	180 (160 — 210) 590 (530 — 680)
M2	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	150 (130 — 170) 490 (430 — 550)
M3	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	100 (90 — 100) 330 (300 — 320)
M4	E	0.100 0,100	3.6 3,6	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.17 0,0065	75 (70 — 85) 245 (230 — 270)
M5	E	0.100 0,100	3.6 3,6	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.17 0,0065	65 (59 — 71) 215 (200 — 230)
K1	E	0.100 0,100	3.6 3,6	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	0.22 0,0085	340 (310 — 370) 1125 (1100 — 1200)
K2	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	185 (160 — 210) 610 (530 — 680)
K3	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	255 (240 — 280) 840 (790 — 910)
K4	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	245 (220 — 260) 800 (730 — 850)
K5	E	0.100 0,100	3.6 3,6	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	150 (140 — 160) 490 (460 — 520)
K6	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	215 (200 — 230) 710 (660 — 750)
K7	E	0.100 0,100	3.6 3,6	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	190 (180 — 200) 620 (600 — 650)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf rp

Graphite

X-Heads

Minimaster

Cutting data – JS554-3C Advanced roughing

SMG		a _e /DC	a _p /DC	f _z							v _c
				6	8	10	12	16	20	25	
N1	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	750 (650 — 840) 2450 (2200 — 2700)
N2	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	480 (420 — 540) 1575 (1400 — 1700)
N3	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	320 (280 — 360) 1050 (920 — 1100)
N11	E	0.100 0,100	3.6 3,6	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	375 (330 — 420) 1225 (1100 — 1300)
S1	E	0.0500 0,0500	3.6 3,6	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	50 (40 — 60) 165 (140 — 190)
S2	E	0.0500 0,0500	3.6 3,6	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	40 (33 — 48) 130 (110 — 150)
S3	E	0.0500 0,0500	3.6 3,6	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	25 (20 — 29) 80 (66 — 95)
S11	E	0.100 0,100	3.6 3,6	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	195 (130 — 220) 640 (430 — 720)
S12	E	0.100 0,100	3.6 3,6	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	150 (100 — 160) 490 (330 — 520)
S13	E	0.100 0,100	3.6 3,6	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	120 (80 — 130) 395 (270 — 420)
H5	M/A/D	0.0500 0,0500	3.6 3,6	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	200 (190 — 220) 660 (630 — 720)
H8	M/A/D	0.0500 0,0500	3.6 3,6	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.055 0,0022	0.065 0,0026	0.075 0,0030	210 (190 — 220) 690 (630 — 720)
H11	M/A/D	0.0500 0,0500	3.6 3,6	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	255 (240 — 280) 840 (790 — 910)
H12	M/A/D	0.100 0,100	3.6 3,6	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	205 (190 — 220) 670 (630 — 720)
H21	M/A/D	0.0500 0,0500	3.6 3,6	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.055 0,0022	0.065 0,0026	0.075 0,0030	210 (190 — 220) 690 (630 — 720)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

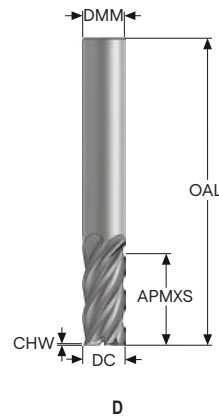
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

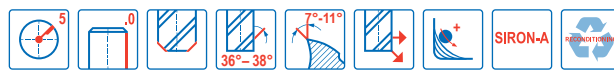
All cutting data are target values

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Chamfer



— Tolerances:
— DMM=h5
— DC=e7
— Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
ST5551-060D2C.0Z5	SIRA	10303332	2	D	6,0	6,0	14,0	58,0	0,075	5	Cylindrical	■
ST5551-080D2C.0Z5	SIRA	10303333	2	D	8,0	8,0	18,0	64,0	0,1	5	Cylindrical	■
ST5551-100D2C.0Z5	SIRA	10303334	2	D	10,0	10,0	22,0	73,0	0,125	5	Cylindrical	■
ST5551-120D2C.0Z5	SIRA	10303335	2	D	12,0	12,0	26,0	84,0	0,15	5	Cylindrical	■
ST5551-160D2C.0Z5	SIRA	10303336	2	D	16,0	16,0	34,0	95,0	0,2	5	Cylindrical	■
ST5551-200D2C.0Z5	SIRA	10303337	2	D	20,0	20,0	42,0	109,0	0,25	5	Cylindrical	■
ST5551-250D2C.0Z5	SIRA	10303338	2	D	25,0	25,0	52,0	125,0	0,3	5	Cylindrical	■
ST5551-060D3C.0Z5	SIRA	10303339	3	D	6,0	6,0	23,0	64,0	0,075	5	Cylindrical	■
ST5551-080D3C.0Z5	SIRA	10303340	3	D	8,0	8,0	32,0	73,0	0,1	5	Cylindrical	■
ST5551-100D3C.0Z5	SIRA	10303341	3	D	10,0	10,0	40,0	85,0	0,125	5	Cylindrical	■
ST5551-120D3C.0Z5	SIRA	10303342	3	D	12,0	12,0	45,0	100,0	0,15	5	Cylindrical	■
ST5551-160D3C.0Z5	SIRA	10303343	3	D	16,0	16,0	55,0	115,0	0,2	5	Cylindrical	■
ST5551-200D3C.0Z5	SIRA	10303344	3	D	20,0	20,0	65,0	125,0	0,25	5	Cylindrical	■
ST5551-250D3C.0Z5	SIRA	10303345	3	D	25,0	25,0	85,0	155,0	0,3	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

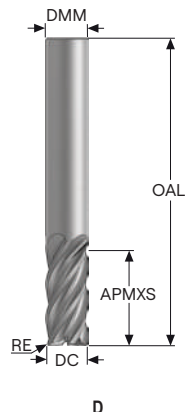
Graphite

X-Heads

Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Corner radius



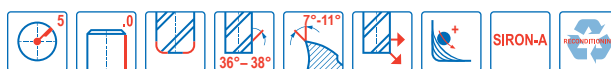
—Tolerances:

—DMM=h5

—DC=e7

—RE= ±0,02 mm

—Regrind possible

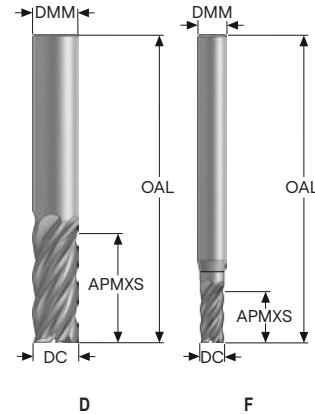


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
ST5551-060D2R050.0Z5	SIRA	10303346	2	D	6,0	6,0	14,0	58,0	0,5	5	Cylindrical	■
ST5551-080D2R050.0Z5	SIRA	10303347	2	D	8,0	8,0	18,0	64,0	0,5	5	Cylindrical	■
ST5551-100D2R050.0Z5	SIRA	10303348	2	D	10,0	10,0	22,0	73,0	0,5	5	Cylindrical	■
ST5551-120D2R050.0Z5	SIRA	10303349	2	D	12,0	12,0	26,0	84,0	0,5	5	Cylindrical	■
ST5551-120D2R100.0Z5	SIRA	10303350	2	D	12,0	12,0	26,0	84,0	1,0	5	Cylindrical	■
ST5551-160D2R050.0Z5	SIRA	10303351	2	D	16,0	16,0	34,0	95,0	0,5	5	Cylindrical	■
ST5551-160D2R100.0Z5	SIRA	10303352	2	D	16,0	16,0	34,0	95,0	1,0	5	Cylindrical	■
ST5551-200D2R050.0Z5	SIRA	10303353	2	D	20,0	20,0	42,0	109,0	0,5	5	Cylindrical	■
ST5551-200D2R100.0Z5	SIRA	10303354	2	D	20,0	20,0	42,0	109,0	1,0	5	Cylindrical	■
ST5551-250D2R050.0Z5	SIRA	10303355	2	D	25,0	25,0	52,0	125,0	0,5	5	Cylindrical	■
ST5551-250D2R100.0Z5	SIRA	10303356	2	D	25,0	25,0	52,0	125,0	1,0	5	Cylindrical	■
ST5551-060D3R050.0Z5	SIRA	10303357	3	D	6,0	6,0	23,0	64,0	0,5	5	Cylindrical	■
ST5551-080D3R050.0Z5	SIRA	10303358	3	D	8,0	8,0	32,0	73,0	0,5	5	Cylindrical	■
ST5551-100D3R050.0Z5	SIRA	10303359	3	D	10,0	10,0	40,0	85,0	0,5	5	Cylindrical	■
ST5551-120D3R050.0Z5	SIRA	10303360	3	D	12,0	12,0	45,0	100,0	0,5	5	Cylindrical	■
ST5551-120D3R100.0Z5	SIRA	10303361	3	D	12,0	12,0	45,0	100,0	1,0	5	Cylindrical	■
ST5551-160D3R050.0Z5	SIRA	10303362	3	D	16,0	16,0	55,0	115,0	0,5	5	Cylindrical	■
ST5551-160D3R100.0Z5	SIRA	10303363	3	D	16,0	16,0	55,0	115,0	1,0	5	Cylindrical	■
ST5551-200D3R050.0Z5	SIRA	10303364	3	D	20,0	20,0	65,0	125,0	0,5	5	Cylindrical	■
ST5551-200D3R100.0Z5	SIRA	10303365	3	D	20,0	20,0	65,0	125,0	1,0	5	Cylindrical	■
ST5551-250D3R050.0Z5	SIRA	10303366	3	D	25,0	25,0	85,0	155,0	0,5	5	Cylindrical	■
ST5551-250D3R100.0Z5	SIRA	10303367	3	D	25,0	25,0	85,0	155,0	1,0	5	Cylindrical	■

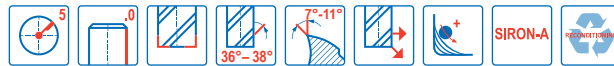
■ Stocked standard.

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Sharp – Inch



- Tolerances:
- DMM= -.0001"/-.0004"
- DC= +.000"/-.002"
- Regrind possible if DC is $\geq \varnothing.250$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
ST5551-.250D1S.0Z5	SIRA	10303040	1	D	0.250	0.250	0.375	2.000	—	—	5	Cylindrical	■
ST5551-.375D1S.0Z5	SIRA	10303041	1	D	0.375	0.375	0.500	2.500	—	—	5	Cylindrical	■
ST5551-.500D1S.0Z5	SIRA	10303042	1	D	0.500	0.500	0.625	3.000	—	—	5	Cylindrical	■
ST5551-.625D1S.0Z5	SIRA	10303043	1	D	0.625	0.625	0.750	3.000	—	—	5	Cylindrical	■
ST5551-.750D1S.0Z5	SIRA	10303044	1	D	0.750	0.750	0.875	3.000	—	—	5	Cylindrical	■
ST5551-.125D2S.0Z5	SIRA	10303045	2	D	0.125	0.125	0.250	1.500	—	—	5	Cylindrical	■
ST5551-.156F2S.0Z5	SIRA	10303046	2	F	0.156	0.188	0.313	2.000	0.313	0.161	5	Cylindrical	■
ST5551-.188D2S.0Z5	SIRA	10303047	2	D	0.188	0.188	0.313	2.000	—	—	5	Cylindrical	■
ST5551-.219F2S.0Z5	SIRA	10303048	2	F	0.219	0.250	0.375	2.000	0.375	0.224	5	Cylindrical	■
ST5551-.313D2S.0Z5	SIRA	10303049	2	D	0.313	0.313	0.750	2.500	—	—	5	Cylindrical	■
ST5551-.375D2S.0Z5	SIRA	10303050	2	D	0.375	0.375	0.875	2.500	—	—	5	Cylindrical	■
ST5551-.500D2S.0Z5	SIRA	10303051	2	D	0.500	0.500	1.000	3.000	—	—	5	Cylindrical	■
ST5551-.625D2S.0Z5	SIRA	10303052	2	D	0.625	0.625	1.250	3.500	—	—	5	Cylindrical	■
ST5551-.750D2S.0Z5	SIRA	10303053	2	D	0.750	0.750	1.500	4.000	—	—	5	Cylindrical	■
ST5551-.188D3S.0Z5	SIRA	10303054	3	D	0.188	0.188	0.563	2.000	—	—	5	Cylindrical	■
ST5551-.219F3S.0Z5	SIRA	10303055	3	F	0.219	0.250	0.750	2.500	0.750	0.224	5	Cylindrical	■
ST5551-.250D3S.0Z5	SIRA	10303056	3	D	0.250	0.250	0.750	2.500	—	—	5	Cylindrical	■
ST5551-.500D3S.0Z5	SIRA	10303057	3	D	0.500	0.500	1.250	3.000	—	—	5	Cylindrical	■
ST5551-.125D4S.0Z5	SIRA	10303059	4	D	0.125	0.125	0.500	1.500	—	—	5	Cylindrical	■
ST5551-.156F4S.0Z5	SIRA	10303060	4	F	0.156	0.188	0.563	2.000	0.563	0.161	5	Cylindrical	■
ST5551-.625D4S.0Z5	SIRA	10303065	4	D	0.625	0.625	1.625	3.500	—	—	5	Cylindrical	■
ST5551-.625D5S.0Z5	SIRA	10303070	5	D	0.625	0.625	2.125	4.000	—	—	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

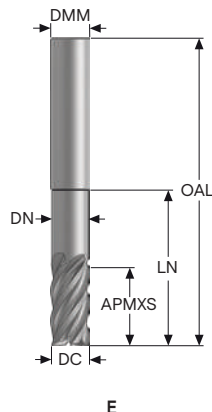
Graphite

X-Heads

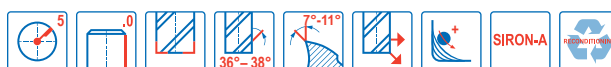
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—Reground possible

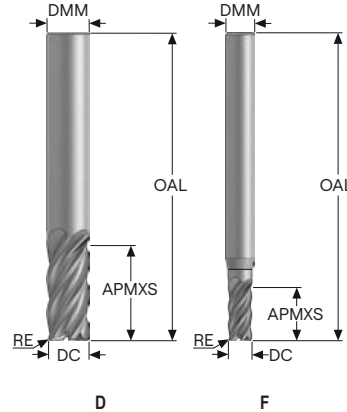


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
ST5551-.750E3S.0Z5	SIRA	10303058	3	E	0.750	0.750	1.125	5.000	2.500	0.720	5	Cylindrical	■
ST5551-.250E4S.0Z5	SIRA	10303061	4	E	0.250	0.250	0.500	3.000	1.000	0.240	5	Cylindrical	■
ST5551-.375E4S.0Z5	SIRA	10303062	4	E	0.375	0.375	0.750	3.000	1.500	0.360	5	Cylindrical	■
ST5551-.500E4S.0Z5	SIRA	10303063	4	E	0.500	0.500	1.000	4.000	2.000	0.480	5	Cylindrical	■
ST5551-.625E4S.0Z5	SIRA	10303064	4	E	0.625	0.625	1.250	5.000	2.500	0.600	5	Cylindrical	■
ST5551-.750E4S.0Z5	SIRA	10303066	4	E	0.750	0.750	1.500	5.000	3.000	0.720	5	Cylindrical	■
ST5551-.250E5S.0Z5	SIRA	10303067	5	E	0.250	0.250	0.500	4.000	1.250	0.240	5	Cylindrical	■
ST5551-.375E5S.0Z5	SIRA	10303068	5	E	0.375	0.375	0.500	4.000	2.125	0.360	5	Cylindrical	■
ST5551-.625E5S.0Z5	SIRA	10303069	5	E	0.625	0.625	0.750	6.000	3.375	0.600	5	Cylindrical	■
ST5551-.750E5S.0Z5	SIRA	10303071	5	E	0.750	0.750	1.125	6.000	4.125	0.720	5	Cylindrical	■
ST5551-.500E6S.0Z5	SIRA	10303072	6	E	0.500	0.500	0.625	5.000	3.125	0.480	5	Cylindrical	■
ST5551-.250E8S.0Z5	SIRA	10303073	8	E	0.250	0.250	0.500	4.000	2.125	0.240	5	Cylindrical	■
ST5551-.375E8S.0Z5	SIRA	10303074	8	E	0.375	0.375	0.500	6.000	3.125	0.360	5	Cylindrical	■
ST5551-.500E8S.0Z5	SIRA	10303075	8	E	0.500	0.500	0.625	6.000	4.125	0.480	5	Cylindrical	■

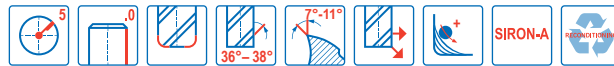
■ Stocked standard.

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0008"
—Regrind possible if DC is ≥Ø.250



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5551-.250D1R015.0Z5	SIRA	10303076	1	D	0.250	0.250	0.375	2.000	—	—	0.015	5	Cylindrical	■
ST5551-.250D1R030.0Z5	SIRA	10303077	1	D	0.250	0.250	0.375	2.000	—	—	0.030	5	Cylindrical	■
ST5551-.250D1R045.0Z5	SIRA	10303078	1	D	0.250	0.250	0.375	2.000	—	—	0.045	5	Cylindrical	■
ST5551-.375D1R015.0Z5	SIRA	10303079	1	D	0.375	0.375	0.500	2.500	—	—	0.015	5	Cylindrical	■
ST5551-.375D1R030.0Z5	SIRA	10303080	1	D	0.375	0.375	0.500	2.500	—	—	0.030	5	Cylindrical	■
ST5551-.375D1R045.0Z5	SIRA	10303081	1	D	0.375	0.375	0.500	2.500	—	—	0.045	5	Cylindrical	■
ST5551-.500D1R015.0Z5	SIRA	10303082	1	D	0.500	0.500	0.625	3.000	—	—	0.015	5	Cylindrical	■
ST5551-.500D1R030.0Z5	SIRA	10303083	1	D	0.500	0.500	0.625	3.000	—	—	0.030	5	Cylindrical	■
ST5551-.500D1R045.0Z5	SIRA	10303084	1	D	0.500	0.500	0.625	3.000	—	—	0.045	5	Cylindrical	■
ST5551-.500D1R060.0Z5	SIRA	10303085	1	D	0.500	0.500	0.625	3.000	—	—	0.060	5	Cylindrical	■
ST5551-.500D1R120.0Z5	SIRA	10303086	1	D	0.500	0.500	0.625	3.000	—	—	0.120	5	Cylindrical	■
ST5551-.625D1R015.0Z5	SIRA	10303087	1	D	0.625	0.625	0.750	3.000	—	—	0.015	5	Cylindrical	■
ST5551-.625D1R030.0Z5	SIRA	10303088	1	D	0.625	0.625	0.750	3.000	—	—	0.030	5	Cylindrical	■
ST5551-.625D1R060.0Z5	SIRA	10303089	1	D	0.625	0.625	0.750	3.000	—	—	0.060	5	Cylindrical	■
ST5551-.625D1R120.0Z5	SIRA	10303090	1	D	0.625	0.625	0.750	3.000	—	—	0.120	5	Cylindrical	■
ST5551-.750D1R030.0Z5	SIRA	10303091	1	D	0.750	0.750	0.875	3.000	—	—	0.030	5	Cylindrical	■
ST5551-.750D1R060.0Z5	SIRA	10303092	1	D	0.750	0.750	0.875	3.000	—	—	0.060	5	Cylindrical	■
ST5551-.750D1R120.0Z5	SIRA	10303093	1	D	0.750	0.750	0.875	3.000	—	—	0.120	5	Cylindrical	■
ST5551-.125D2R010.0Z5	SIRA	10303094	2	D	0.125	0.125	0.250	1.500	—	—	0.010	5	Cylindrical	■
ST5551-.156F2R010.0Z5	SIRA	10303095	2	F	0.156	0.188	0.313	2.000	0.313	0.161	0.010	5	Cylindrical	■
ST5551-.188D2R010.0Z5	SIRA	10303096	2	D	0.188	0.188	0.313	2.000	—	—	0.010	5	Cylindrical	■
ST5551-.219F2R010.0Z5	SIRA	10303097	2	F	0.219	0.250	0.375	2.000	0.375	0.224	0.010	5	Cylindrical	■
ST5551-.313D2R015.0Z5	SIRA	10303098	2	D	0.313	0.313	0.750	2.500	—	—	0.015	5	Cylindrical	■
ST5551-.375D2R015.0Z5	SIRA	10303099	2	D	0.375	0.375	0.875	2.500	—	—	0.015	5	Cylindrical	■
ST5551-.375D2R030.0Z5	SIRA	10303100	2	D	0.375	0.375	0.875	2.500	—	—	0.030	5	Cylindrical	■
ST5551-.375D2R045.0Z5	SIRA	10303101	2	D	0.375	0.375	0.875	2.500	—	—	0.045	5	Cylindrical	■
ST5551-.375D2R060.0Z5	SIRA	10303102	2	D	0.375	0.375	0.875	2.500	—	—	0.060	5	Cylindrical	■
ST5551-.500D2R015.0Z5	SIRA	10303103	2	D	0.500	0.500	1.000	3.000	—	—	0.015	5	Cylindrical	■
ST5551-.500D2R030.0Z5	SIRA	10303104	2	D	0.500	0.500	1.000	3.000	—	—	0.030	5	Cylindrical	■
ST5551-.500D2R060.0Z5	SIRA	10303105	2	D	0.500	0.500	1.000	3.000	—	—	0.060	5	Cylindrical	■
ST5551-.625D2R015.0Z5	SIRA	10303106	2	D	0.625	0.625	1.250	3.500	—	—	0.015	5	Cylindrical	■
ST5551-.625D2R030.0Z5	SIRA	10303107	2	D	0.625	0.625	1.250	3.500	—	—	0.030	5	Cylindrical	■
ST5551-.625D2R045.0Z5	SIRA	10303108	2	D	0.625	0.625	1.250	3.500	—	—	0.045	5	Cylindrical	■
ST5551-.625D2R060.0Z5	SIRA	10303109	2	D	0.625	0.625	1.250	3.500	—	—	0.060	5	Cylindrical	■
ST5551-.625D2R090.0Z5	SIRA	10303110	2	D	0.625	0.625	1.250	3.500	—	—	0.090	5	Cylindrical	■
ST5551-.625D2R125.0Z5	SIRA	10303111	2	D	0.625	0.625	1.250	3.500	—	—	0.125	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

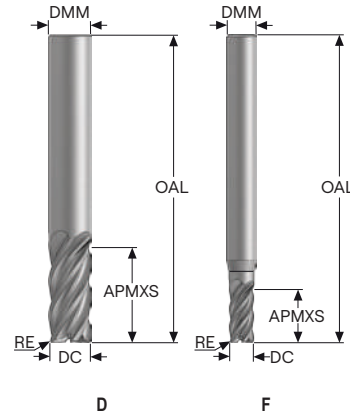
Graphite

X-Heads

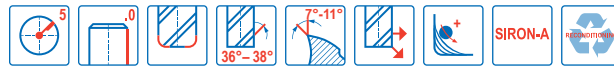
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0008"
—Regind possible if DC is ≥Ø.250

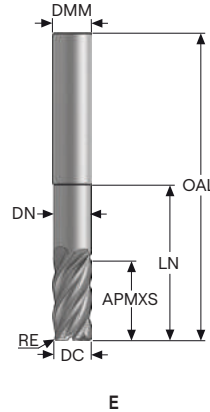


	Designation	Grade	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		LN		DN		RE		PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch			
Non ferrous	ST5551-.750D2R030.0Z5	SIRA	10303112	2	D	0.750	0.750	1.500	4.000	—	—	0.030	5	Cylindrical	■							
	ST5551-.750D2R060.0Z5	SIRA	10303113	2	D	0.750	0.750	1.500	4.000	—	—	0.060	5	Cylindrical	■							
	ST5551-.750D2R090.0Z5	SIRA	10303114	2	D	0.750	0.750	1.500	4.000	—	—	0.090	5	Cylindrical	■							
Hard	ST5551-.750D2R125.0Z5	SIRA	10303115	2	D	0.750	0.750	1.500	4.000	—	—	0.125	5	Cylindrical	■							
	ST5551-1.00D2R015.0Z5	SIRA	10303116	2	D	1.000	1.000	1.750	4.000	—	—	0.015	5	Cylindrical	■							
	ST5551-1.00D2R030.0Z5	SIRA	10303117	2	D	1.000	1.000	1.750	4.000	—	—	0.030	5	Cylindrical	■							
Plastic and cfrp	ST5551-1.00D2R060.0Z5	SIRA	10303118	2	D	1.000	1.000	1.750	4.000	—	—	0.060	5	Cylindrical	■							
	ST5551-1.88D3R010.0Z5	SIRA	10303119	3	D	0.188	0.188	0.563	2.000	—	—	0.010	5	Cylindrical	■							
	ST5551-2.19F3R010.0Z5	SIRA	10303120	3	F	0.219	0.250	0.750	2.500	0.750	0.224	0.010	5	Cylindrical	■							
Graphite	ST5551-2.50D3R015.0Z5	SIRA	10303121	3	D	0.250	0.250	0.750	2.500	—	—	0.015	5	Cylindrical	■							
	ST5551-2.50D3R030.0Z5	SIRA	10303122	3	D	0.250	0.250	0.750	2.500	—	—	0.030	5	Cylindrical	■							
	ST5551-2.50D3R045.0Z5	SIRA	10303123	3	D	0.250	0.250	0.750	2.500	—	—	0.045	5	Cylindrical	■							
X-Heads	ST5551-3.75D3R030.0Z5	SIRA	10303124	3	D	0.375	0.375	1.250	3.000	—	—	0.030	5	Cylindrical	■							
	ST5551-5.00D3R015.0Z5	SIRA	10303125	3	D	0.500	0.500	1.250	3.000	—	—	0.015	5	Cylindrical	■							
	ST5551-5.00D3R030.0Z5	SIRA	10303126	3	D	0.500	0.500	1.250	3.000	—	—	0.030	5	Cylindrical	■							
Minimaster	ST5551-5.00D3R045.0Z5	SIRA	10303127	3	D	0.500	0.500	1.250	3.000	—	—	0.045	5	Cylindrical	■							
	ST5551-5.00D3R060.0Z5	SIRA	10303128	3	D	0.500	0.500	1.250	3.000	—	—	0.060	5	Cylindrical	■							
	ST5551-5.00D3R090.0Z5	SIRA	10303129	3	D	0.500	0.500	1.250	3.000	—	—	0.090	5	Cylindrical	■							
	ST5551-5.00D3R125.0Z5	SIRA	10303130	3	D	0.500	0.500	1.250	3.000	—	—	0.125	5	Cylindrical	■							
	ST5551-7.50D3R030.0Z5	SIRA	10303134	3	D	0.750	0.750	1.625	4.000	—	—	0.030	5	Cylindrical	■							
	ST5551-1.25D4R010.0Z5	SIRA	10303138	4	D	0.125	0.125	0.500	1.500	—	—	0.010	5	Cylindrical	■							
	ST5551-1.56F4R010.0Z5	SIRA	10303139	4	F	0.156	0.188	0.563	2.000	0.563	0.161	0.010	5	Cylindrical	■							
	ST5551-2.50D4R015.0Z5	SIRA	10303142	4	D	0.250	0.250	1.000	3.000	—	—	0.015	5	Cylindrical	■							
	ST5551-3.75D4R030.0Z5	SIRA	10303147	4	D	0.375	0.375	1.500	4.000	—	—	0.030	5	Cylindrical	■							
	ST5551-5.00D4R030.0Z5	SIRA	10303152	4	D	0.500	0.500	1.625	4.000	—	—	0.030	5	Cylindrical	■							
	ST5551-7.50D4R030.0Z5	SIRA	10303158	4	D	0.750	0.750	2.250	5.000	—	—	0.030	5	Cylindrical	■							
	ST5551-5.00D5R030.0Z5	SIRA	10303165	5	D	0.500	0.500	2.000	4.000	—	—	0.030	5	Cylindrical	■							
	ST5551-7.50D5R030.0Z5	SIRA	10303171	5	D	0.750	0.750	2.750	5.000	—	—	0.030	5	Cylindrical	■							

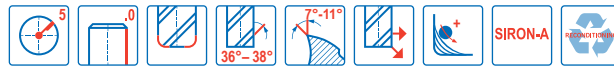
■ Stocked standard.

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= $-.0001"/-.0004"$
—DC= $+.000"/-.002"$
—RE= $\pm .0008"$
—Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5551-.250E4R015.0Z5	SIRA	10303140	4	E	0.250	0.250	0.500	3.000	1.000	0.240	0.015	5	Cylindrical	■
ST5551-.250E4R030.0Z5	SIRA	10303141	4	E	0.250	0.250	0.500	3.000	1.000	0.240	0.030	5	Cylindrical	■
ST5551-.375E4R015.0Z5	SIRA	10303143	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.015	5	Cylindrical	■
ST5551-.375E4R030.0Z5	SIRA	10303144	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.030	5	Cylindrical	■
ST5551-.375E4R045.0Z5	SIRA	10303145	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.045	5	Cylindrical	■
ST5551-.375E4R060.0Z5	SIRA	10303146	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.060	5	Cylindrical	■
ST5551-.500E4R015.0Z5	SIRA	10303148	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.015	5	Cylindrical	■
ST5551-.500E4R030.0Z5	SIRA	10303149	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.030	5	Cylindrical	■
ST5551-.500E4R060.0Z5	SIRA	10303150	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.060	5	Cylindrical	■
ST5551-.500E4R120.0Z5	SIRA	10303151	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.120	5	Cylindrical	■
ST5551-.625E4R030.0Z5	SIRA	10303153	4	E	0.625	0.625	1.250	5.000	2.500	0.600	0.030	5	Cylindrical	■
ST5551-.625E4R060.0Z5	SIRA	10303154	4	E	0.625	0.625	1.250	5.000	2.500	0.600	0.060	5	Cylindrical	■
ST5551-.250E5R015.0Z5	SIRA	10303159	5	E	0.250	0.250	0.500	4.000	1.250	0.240	0.015	5	Cylindrical	■
ST5551-.250E5R030.0Z5	SIRA	10303160	5	E	0.250	0.250	0.500	4.000	1.250	0.240	0.030	5	Cylindrical	■
ST5551-.375E5R015.0Z5	SIRA	10303161	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.015	5	Cylindrical	■
ST5551-.375E5R030.0Z5	SIRA	10303162	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.030	5	Cylindrical	■
ST5551-.375E5R045.0Z5	SIRA	10303163	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.045	5	Cylindrical	■
ST5551-.375E5R060.0Z5	SIRA	10303164	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.060	5	Cylindrical	■
ST5551-.625E5R030.0Z5	SIRA	10303166	5	E	0.625	0.625	0.750	6.000	3.375	0.600	0.030	5	Cylindrical	■
ST5551-.625E5R060.0Z5	SIRA	10303167	5	E	0.625	0.625	0.750	6.000	3.375	0.600	0.060	5	Cylindrical	■
ST5551-.500E6R015.0Z5	SIRA	10303172	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.015	5	Cylindrical	■
ST5551-.500E6R030.0Z5	SIRA	10303173	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.030	5	Cylindrical	■
ST5551-.500E6R060.0Z5	SIRA	10303174	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.060	5	Cylindrical	■
ST5551-.500E6R120.0Z5	SIRA	10303175	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.120	5	Cylindrical	■
ST5551-.250E8R015.0Z5	SIRA	10303176	8	E	0.250	0.250	0.500	4.000	2.125	0.240	0.015	5	Cylindrical	■
ST5551-.250E8R030.0Z5	SIRA	10303177	8	E	0.250	0.250	0.500	4.000	2.125	0.240	0.030	5	Cylindrical	■
ST5551-.375E8R015.0Z5	SIRA	10303178	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.015	5	Cylindrical	■
ST5551-.375E8R030.0Z5	SIRA	10303179	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.030	5	Cylindrical	■
ST5551-.375E8R045.0Z5	SIRA	10303180	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.045	5	Cylindrical	■
ST5551-.375E8R060.0Z5	SIRA	10303181	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.060	5	Cylindrical	■
ST5551-.500E8R015.0Z5	SIRA	10303182	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.015	5	Cylindrical	■
ST5551-.500E8R030.0Z5	SIRA	10303183	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.030	5	Cylindrical	■
ST5551-.500E8R060.0Z5	SIRA	10303184	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.060	5	Cylindrical	■
ST5551-.500E8R120.0Z5	SIRA	10303185	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.120	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

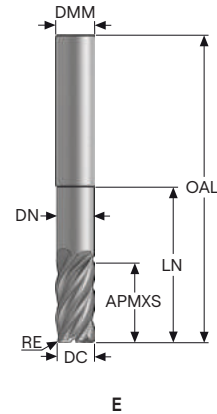
Graphite

X-Heads

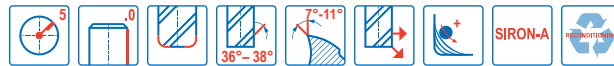
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0008"
—Regrind possible

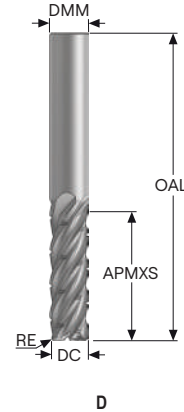


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch	inch	inch			
Non ferrous	ST5551-.750E3R030.0Z5	SIRA	10303131	3	E	0.750	0.750	1.125	5.000	2.500	0.720	0.030	5	Cylindrical	■
	ST5551-.750E3R060.0Z5	SIRA	10303132	3	E	0.750	0.750	1.125	5.000	2.500	0.720	0.060	5	Cylindrical	■
	ST5551-.750E3R120.0Z5	SIRA	10303133	3	E	0.750	0.750	1.125	5.000	2.500	0.720	0.120	5	Cylindrical	■
Hard	ST5551-1.00E3R030.0Z5	SIRA	10303135	3	E	1.000	1.000	1.250	6.000	3.500	0.960	0.030	5	Cylindrical	■
	ST5551-1.00E3R060.0Z5	SIRA	10303136	3	E	1.000	1.000	1.250	6.000	3.500	0.960	0.060	5	Cylindrical	■
	ST5551-1.00E3R120.0Z5	SIRA	10303137	3	E	1.000	1.000	1.250	6.000	3.500	0.960	0.120	5	Cylindrical	■
Plastic and cfrp	ST5551-.750E4R030.0Z5	SIRA	10303155	4	E	0.750	0.750	1.500	5.000	3.000	0.720	0.030	5	Cylindrical	■
	ST5551-.750E4R060.0Z5	SIRA	10303156	4	E	0.750	0.750	1.500	5.000	3.000	0.720	0.060	5	Cylindrical	■
	ST5551-.750E4R120.0Z5	SIRA	10303157	4	E	0.750	0.750	1.500	5.000	3.000	0.720	0.120	5	Cylindrical	■
	ST5551-.750E5R030.0Z5	SIRA	10303168	5	E	0.750	0.750	1.125	6.000	4.125	0.720	0.030	5	Cylindrical	■
	ST5551-.750E5R060.0Z5	SIRA	10303169	5	E	0.750	0.750	1.125	6.000	4.125	0.720	0.060	5	Cylindrical	■
	ST5551-.750E5R120.0Z5	SIRA	10303170	5	E	0.750	0.750	1.132	6.000	4.125	0.720	0.120	5	Cylindrical	■

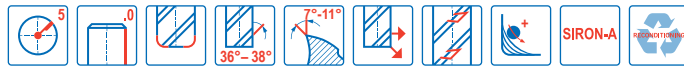
■ Stocked standard.

ST5551

High performance – Universal – Square – 5 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= $-.0001"/-.0004"$
—DC= $+.000"/-.002"$
—RE= $\pm .0008"$
—Regrind possible



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch			
ST5551-.250D3R015.0Z5C	SIRA	10303186	3	D	■	0.250	0.250	0.750	2.500	0.015	5	Cylindrical	■
ST5551-.375D3R030.0Z5C	SIRA	10303187	3	D	■	0.375	0.375	1.250	3.000	0.030	5	Cylindrical	■
ST5551-.500D3R030.0Z5C	SIRA	10303188	3	D	■	0.500	0.500	1.250	3.000	0.030	5	Cylindrical	■
ST5551-.625D3R030.0Z5C	SIRA	10303189	3	D	■	0.625	0.625	1.375	3.500	0.030	5	Cylindrical	■
ST5551-.750D3R030.0Z5C	SIRA	10303190	3	D	■	0.750	0.750	1.625	4.000	0.030	5	Cylindrical	■
ST5551-.500D4R030.0Z5C	SIRA	10303191	4	D	■	0.500	0.500	1.625	4.000	0.030	5	Cylindrical	■
ST5551-.750D4R030.0Z5C	SIRA	10303192	4	D	■	0.750	0.750	2.250	5.000	0.030	5	Cylindrical	■
ST5551-.625D5R030.0Z5C	SIRA	10303193	5	D	■	0.625	0.625	2.125	4.000	0.030	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

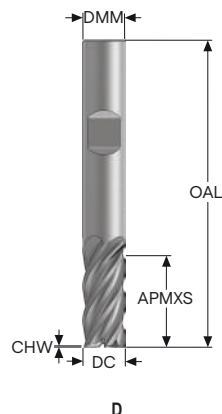
Graphite

X-Heads

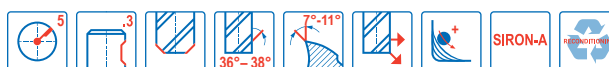
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Chamfer



—Tolerances:
—DMM=h5
—DC=e7
—Reground possible

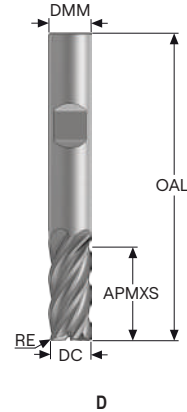


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
ST5551-060D2C.3Z5	SIRA	10303368	2	D	6,0	6,0	14,0	58,0	0,075	5	Weldon	☐
ST5551-080D2C.3Z5	SIRA	10303369	2	D	8,0	8,0	18,0	64,0	0,1	5	Weldon	☐
ST5551-100D2C.3Z5	SIRA	10303370	2	D	10,0	10,0	22,0	73,0	0,125	5	Weldon	☐
ST5551-120D2C.3Z5	SIRA	10303371	2	D	12,0	12,0	26,0	84,0	0,15	5	Weldon	☐
ST5551-160D2C.3Z5	SIRA	10303372	2	D	16,0	16,0	34,0	95,0	0,2	5	Weldon	☐
ST5551-200D2C.3Z5	SIRA	10303373	2	D	20,0	20,0	42,0	109,0	0,25	5	Weldon	☐
ST5551-250D2C.3Z5	SIRA	10303374	2	D	25,0	25,0	52,0	125,0	0,3	5	Weldon	☐
ST5551-060D3C.3Z5	SIRA	10303375	3	D	6,0	6,0	23,0	64,0	0,075	5	Weldon	☐
ST5551-080D3C.3Z5	SIRA	10303376	3	D	8,0	8,0	32,0	73,0	0,1	5	Weldon	☐
ST5551-100D3C.3Z5	SIRA	10303377	3	D	10,0	10,0	40,0	85,0	0,125	5	Weldon	☐
ST5551-120D3C.3Z5	SIRA	10303378	3	D	12,0	12,0	45,0	100,0	0,15	5	Weldon	☐
ST5551-160D3C.3Z5	SIRA	10303379	3	D	16,0	16,0	55,0	115,0	0,2	5	Weldon	☐
ST5551-200D3C.3Z5	SIRA	10303380	3	D	20,0	20,0	65,0	125,0	0,25	5	Weldon	☐
ST5551-250D3C.3Z5	SIRA	10303381	3	D	25,0	25,0	85,0	155,0	0,3	5	Weldon	☐

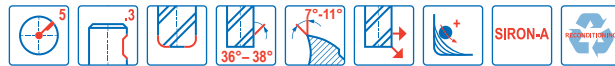
☐ Weldon available. Delivery time is 3 days.

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
ST5551-060D2R050.3Z5	SIRA	10303382	2	D	6,0	6,0	14,0	58,0	0,5	5	Weldon	☐
ST5551-080D2R050.3Z5	SIRA	10303383	2	D	8,0	8,0	18,0	64,0	0,5	5	Weldon	☐
ST5551-100D2R050.3Z5	SIRA	10303384	2	D	10,0	10,0	22,0	73,0	0,5	5	Weldon	☐
ST5551-120D2R050.3Z5	SIRA	10303385	2	D	12,0	12,0	26,0	84,0	0,5	5	Weldon	☐
ST5551-120D2R100.3Z5	SIRA	10303386	2	D	12,0	12,0	26,0	84,0	1,0	5	Weldon	☐
ST5551-160D2R050.3Z5	SIRA	10303387	2	D	16,0	16,0	34,0	95,0	0,5	5	Weldon	☐
ST5551-160D2R100.3Z5	SIRA	10303388	2	D	16,0	16,0	34,0	95,0	1,0	5	Weldon	☐
ST5551-200D2R050.3Z5	SIRA	10303389	2	D	20,0	20,0	42,0	109,0	0,5	5	Weldon	☐
ST5551-200D2R100.3Z5	SIRA	10303390	2	D	20,0	20,0	42,0	109,0	1,0	5	Weldon	☐
ST5551-250D2R050.3Z5	SIRA	10303391	2	D	25,0	25,0	52,0	125,0	0,5	5	Weldon	☐
ST5551-250D2R100.3Z5	SIRA	10303392	2	D	25,0	25,0	52,0	125,0	1,0	5	Weldon	☐
ST5551-060D3R050.3Z5	SIRA	10303393	3	D	6,0	6,0	23,0	64,0	0,5	5	Weldon	☐
ST5551-080D3R050.3Z5	SIRA	10303394	3	D	8,0	8,0	32,0	73,0	0,5	5	Weldon	☐
ST5551-100D3R050.3Z5	SIRA	10303395	3	D	10,0	10,0	40,0	85,0	0,5	5	Weldon	☐
ST5551-120D3R050.3Z5	SIRA	10303396	3	D	12,0	12,0	45,0	100,0	0,5	5	Weldon	☐
ST5551-120D3R100.3Z5	SIRA	10303397	3	D	12,0	12,0	45,0	100,0	1,0	5	Weldon	☐
ST5551-160D3R050.3Z5	SIRA	10303398	3	D	16,0	16,0	55,0	115,0	0,5	5	Weldon	☐
ST5551-160D3R100.3Z5	SIRA	10303399	3	D	16,0	16,0	55,0	115,0	1,0	5	Weldon	☐
ST5551-200D3R050.3Z5	SIRA	10303400	3	D	20,0	20,0	65,0	125,0	0,5	5	Weldon	☐
ST5551-200D3R100.3Z5	SIRA	10303401	3	D	20,0	20,0	65,0	125,0	1,0	5	Weldon	☐
ST5551-250D3R050.3Z5	SIRA	10303402	3	D	25,0	25,0	85,0	155,0	0,5	5	Weldon	☐
ST5551-250D3R100.3Z5	SIRA	10303403	3	D	25,0	25,0	85,0	155,0	1,0	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

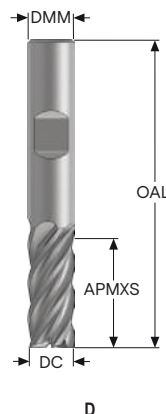
Graphite

X-Heads

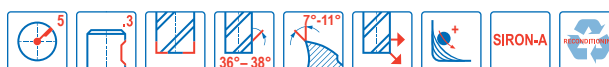
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Sharp – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—Reground possible

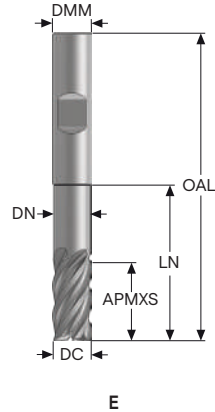


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					inch	inch	inch	inch			
ST5551-.250D1S.3Z5	SIRA	10303194	1	D	0.250	0.250	0.375	2.000	5	Weldon	☐
ST5551-.375D1S.3Z5	SIRA	10303195	1	D	0.375	0.375	0.500	2.500	5	Weldon	☐
ST5551-.500D1S.3Z5	SIRA	10303196	1	D	0.500	0.500	0.625	3.000	5	Weldon	☐
ST5551-.625D1S.3Z5	SIRA	10303197	1	D	0.625	0.625	0.750	3.000	5	Weldon	☐
ST5551-.750D1S.3Z5	SIRA	10303198	1	D	0.750	0.750	0.875	3.000	5	Weldon	☐
ST5551-.313D2S.3Z5	SIRA	10303199	2	D	0.313	0.313	0.750	2.500	5	Weldon	☐
ST5551-.375D2S.3Z5	SIRA	10303200	2	D	0.375	0.375	0.875	2.500	5	Weldon	☐
ST5551-.500D2S.3Z5	SIRA	10303201	2	D	0.500	0.500	1.000	3.000	5	Weldon	☐
ST5551-.625D2S.3Z5	SIRA	10303202	2	D	0.625	0.625	1.250	3.500	5	Weldon	☐
ST5551-.750D2S.3Z5	SIRA	10303203	2	D	0.750	0.750	1.500	4.000	5	Weldon	☐
ST5551-.250D3S.3Z5	SIRA	10303204	3	D	0.250	0.250	0.750	2.500	5	Weldon	☐
ST5551-.500D3S.3Z5	SIRA	10303205	3	D	0.500	0.500	1.250	3.000	5	Weldon	☐
ST5551-.625D4S.3Z5	SIRA	10303211	4	D	0.625	0.625	1.625	3.500	5	Weldon	☐
ST5551-.625D5S.3Z5	SIRA	10303216	5	D	0.625	0.625	2.125	4.000	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

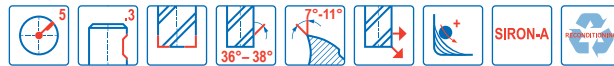
ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Sharp – Inch



E

- Tolerances:
- DMM= $-0.001"/-0.0004"$
- DC= $+0.000"/-0.002"$
- Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
ST5551-.750E3S.3Z5	SIRA	10303206	3	E	0.750	0.750	1.125	5.000	2.500	0.720	5	Weldon	☐
ST5551-.250E4S.3Z5	SIRA	10303207	4	E	0.250	0.250	0.500	3.000	1.000	0.240	5	Weldon	☐
ST5551-.375E4S.3Z5	SIRA	10303208	4	E	0.375	0.375	0.750	3.000	1.500	0.360	5	Weldon	☐
ST5551-.500E4S.3Z5	SIRA	10303209	4	E	0.500	0.500	1.000	4.000	2.000	0.480	5	Weldon	☐
ST5551-.625E4S.3Z5	SIRA	10303210	4	E	0.625	0.625	1.250	5.000	2.500	0.600	5	Weldon	☐
ST5551-.750E4S.3Z5	SIRA	10303212	4	E	0.750	0.750	1.500	5.000	3.000	0.720	5	Weldon	☐
ST5551-.250E5S.3Z5	SIRA	10303213	5	E	0.250	0.250	0.500	4.000	1.250	0.240	5	Weldon	☐
ST5551-.375E5S.3Z5	SIRA	10303214	5	E	0.375	0.375	0.500	4.000	2.125	0.360	5	Weldon	☐
ST5551-.625E5S.3Z5	SIRA	10303215	5	E	0.625	0.625	0.750	6.000	3.375	0.600	5	Weldon	☐
ST5551-.750E5S.3Z5	SIRA	10303217	5	E	0.750	0.750	1.125	6.000	4.125	0.720	5	Weldon	☐
ST5551-.500E6S.3Z5	SIRA	10303218	6	E	0.500	0.500	0.625	5.000	3.125	0.480	5	Weldon	☐
ST5551-.250E8S.3Z5	SIRA	10303219	8	E	0.250	0.250	0.500	4.000	2.125	0.240	5	Weldon	☐
ST5551-.375E8S.3Z5	SIRA	10303220	8	E	0.375	0.375	0.500	6.000	3.125	0.360	5	Weldon	☐
ST5551-.500E8S.3Z5	SIRA	10303221	8	E	0.500	0.500	0.625	6.000	4.109	0.480	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

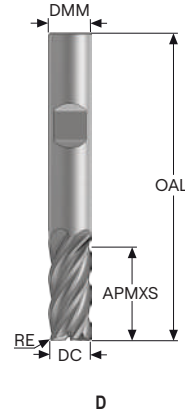
Graphite

X-Heads

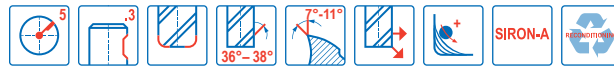
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0008"
—Regind possible

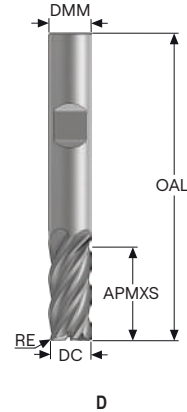


	Designation	Grade	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		RE		PCEDC	Shank	Stock standard
						inch		inch		inch		inch		inch				
Non ferrous	ST5551-.250D1R015.3Z5	SIRA	10303222	1	D	0.250		0.250		0.375		2.000		0.015		5	Weldon	☐
	ST5551-.250D1R030.3Z5	SIRA	10303223	1	D	0.250		0.250		0.375		2.000		0.030		5	Weldon	☐
	ST5551-.250D1R045.3Z5	SIRA	10303224	1	D	0.250		0.250		0.375		2.000		0.045		5	Weldon	☐
Hard	ST5551-.375D1R015.3Z5	SIRA	10303225	1	D	0.375		0.375		0.500		2.500		0.015		5	Weldon	☐
	ST5551-.375D1R030.3Z5	SIRA	10303226	1	D	0.375		0.375		0.500		2.500		0.030		5	Weldon	☐
	ST5551-.375D1R045.3Z5	SIRA	10303227	1	D	0.375		0.375		0.500		2.500		0.045		5	Weldon	☐
Plastic and cfrp	ST5551-.500D1R015.3Z5	SIRA	10303228	1	D	0.500		0.500		0.625		3.000		0.015		5	Weldon	☐
	ST5551-.500D1R030.3Z5	SIRA	10303231	1	D	0.500		0.500		0.625		3.000		0.030		5	Weldon	☐
	ST5551-.500D1R045.3Z5	SIRA	10303229	1	D	0.500		0.500		0.625		3.000		0.045		5	Weldon	☐
Graphite	ST5551-.500D1R060.3Z5	SIRA	10303232	1	D	0.500		0.500		0.625		3.000		0.060		5	Weldon	☐
	ST5551-.500D1R120.3Z5	SIRA	10303230	1	D	0.500		0.500		0.625		3.000		0.120		5	Weldon	☐
	ST5551-.625D1R015.3Z5	SIRA	10303233	1	D	0.625		0.625		0.750		3.000		0.015		5	Weldon	☐
X-Heads	ST5551-.625D1R030.3Z5	SIRA	10303235	1	D	0.625		0.625		0.750		3.000		0.030		5	Weldon	☐
	ST5551-.625D1R060.3Z5	SIRA	10303236	1	D	0.625		0.625		0.750		3.000		0.060		5	Weldon	☐
	ST5551-.625D1R120.3Z5	SIRA	10303234	1	D	0.625		0.625		0.750		3.000		0.120		5	Weldon	☐
Minimaster	ST5551-.750D1R030.3Z5	SIRA	10303237	1	D	0.750		0.750		0.875		3.000		0.030		5	Weldon	☐
	ST5551-.750D1R060.3Z5	SIRA	10303238	1	D	0.750		0.750		0.875		3.000		0.060		5	Weldon	☐
	ST5551-.750D1R120.3Z5	SIRA	10303239	1	D	0.750		0.750		0.875		3.000		0.120		5	Weldon	☐
	ST5551-.313D2R015.3Z5	SIRA	10303240	2	D	0.313		0.313		0.750		2.500		0.015		5	Weldon	☐
	ST5551-.375D2R015.3Z5	SIRA	10303241	2	D	0.375		0.375		0.875		2.500		0.015		5	Weldon	☐
	ST5551-.375D2R030.3Z5	SIRA	10303242	2	D	0.375		0.375		0.875		2.500		0.030		5	Weldon	☐
	ST5551-.375D2R045.3Z5	SIRA	10303243	2	D	0.375		0.375		0.875		2.500		0.045		5	Weldon	☐
	ST5551-.375D2R060.3Z5	SIRA	10303244	2	D	0.375		0.375		0.875		2.500		0.060		5	Weldon	☐
	ST5551-.500D2R015.3Z5	SIRA	10303245	2	D	0.500		0.500		1.000		3.000		0.015		5	Weldon	☐
	ST5551-.500D2R030.3Z5	SIRA	10303246	2	D	0.500		0.500		1.000		3.000		0.030		5	Weldon	☐
	ST5551-.500D2R060.3Z5	SIRA	10303247	2	D	0.500		0.500		1.000		3.000		0.060		5	Weldon	☐
	ST5551-.625D2R015.3Z5	SIRA	10303248	2	D	0.625		0.625		1.250		3.500		0.015		5	Weldon	☐
	ST5551-.625D2R030.3Z5	SIRA	10303249	2	D	0.625		0.625		1.250		3.500		0.030		5	Weldon	☐
	ST5551-.625D2R045.3Z5	SIRA	10303250	2	D	0.625		0.625		1.250		3.500		0.045		5	Weldon	☐
	ST5551-.625D2R060.3Z5	SIRA	10303251	2	D	0.625		0.625		1.250		3.500		0.060		5	Weldon	☐
	ST5551-.625D2R090.3Z5	SIRA	10303252	2	D	0.625		0.625		1.250		3.500		0.090		5	Weldon	☐
	ST5551-.625D2R125.3Z5	SIRA	10303253	2	D	0.625		0.625		1.250		3.500		0.125		5	Weldon	☐
	ST5551-.750D2R030.3Z5	SIRA	10303254	2	D	0.750		0.750		1.500		4.000		0.030		5	Weldon	☐
	ST5551-.750D2R060.3Z5	SIRA	10303255	2	D	0.750		0.750		1.500		4.000		0.060		5	Weldon	☐
	ST5551-.750D2R090.3Z5	SIRA	10303256	2	D	0.750		0.750		1.500		4.000		0.090		5	Weldon	☐
	ST5551-.750D2R125.3Z5	SIRA	10303257	2	D	0.750		0.750		1.500		4.000		0.125		5	Weldon	☐

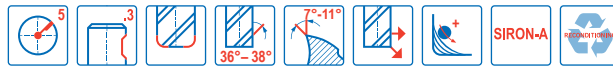
☐ Weldon available. Delivery time is 3 days.

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM= $-0.001"/-0.0004"$
—DC= $+0.000"/-0.002"$
—RE= $\pm 0.0008"$
—Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch			
ST5551-1.00D2R015.3Z5	SIRA	10303258	2	D	1.000	1.000	1.750	4.000	0.015	5	Weldon	☐
ST5551-1.00D2R030.3Z5	SIRA	10303259	2	D	1.000	1.000	1.750	4.000	0.030	5	Weldon	☐
ST5551-1.00D2R060.3Z5	SIRA	10303260	2	D	1.000	1.000	1.750	4.000	0.060	5	Weldon	☐
ST5551-.250D3R015.3Z5	SIRA	10303261	3	D	0.250	0.250	0.750	2.500	0.015	5	Weldon	☐
ST5551-.250D3R030.3Z5	SIRA	10303262	3	D	0.250	0.250	0.750	2.500	0.030	5	Weldon	☐
ST5551-.250D3R045.3Z5	SIRA	10303263	3	D	0.250	0.250	0.750	2.500	0.045	5	Weldon	☐
ST5551-.375D3R030.3Z5	SIRA	10303264	3	D	0.375	0.375	1.250	3.000	0.030	5	Weldon	☐
ST5551-.500D3R015.3Z5	SIRA	10303265	3	D	0.500	0.500	1.250	3.000	0.015	5	Weldon	☐
ST5551-.500D3R030.3Z5	SIRA	10303266	3	D	0.500	0.500	1.250	3.000	0.030	5	Weldon	☐
ST5551-.500D3R045.3Z5	SIRA	10303267	3	D	0.500	0.500	1.250	3.000	0.045	5	Weldon	☐
ST5551-.500D3R060.3Z5	SIRA	10303268	3	D	0.500	0.500	1.250	3.000	0.060	5	Weldon	☐
ST5551-.500D3R090.3Z5	SIRA	10303269	3	D	0.500	0.500	1.250	3.000	0.090	5	Weldon	☐
ST5551-.500D3R125.3Z5	SIRA	10303270	3	D	0.500	0.500	1.250	3.000	0.125	5	Weldon	☐
ST5551-.750D3R030.3Z5	SIRA	10303274	3	D	0.750	0.750	1.625	4.000	0.030	5	Weldon	☐
ST5551-.250D4R015.3Z5	SIRA	10303280	4	D	0.250	0.250	1.000	3.000	0.015	5	Weldon	☐
ST5551-.375D4R030.3Z5	SIRA	10303285	4	D	0.375	0.375	1.500	4.000	0.030	5	Weldon	☐
ST5551-.500D4R030.3Z5	SIRA	10303290	4	D	0.500	0.500	1.625	4.000	0.030	5	Weldon	☐
ST5551-.750D4R030.3Z5	SIRA	10303296	4	D	0.750	0.750	2.250	5.000	0.030	5	Weldon	☐
ST5551-.500D5R030.3Z5	SIRA	10303303	5	D	0.500	0.500	2.000	4.000	0.030	5	Weldon	☐
ST5551-.750D5R030.3Z5	SIRA	10303309	5	D	0.750	0.750	2.750	5.000	0.030	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

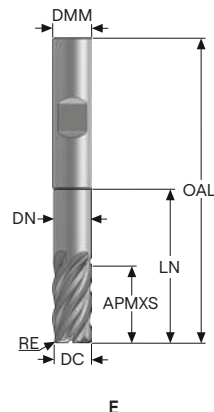
Graphite

X-Heads

Minimaster

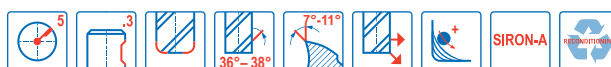
ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—RE= ±.0008"

—Regrind possible

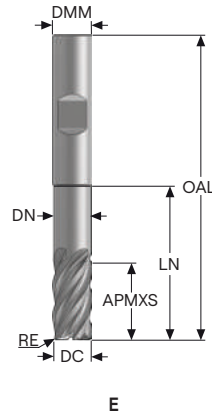


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5551-.750E3R030.3Z5	SIRA	10303271	3	E	0.750	0.750	1.125	5.000	2.500	0.720	0.030	5	Weldon	☐
ST5551-.750E3R060.3Z5	SIRA	10303272	3	E	0.750	0.750	1.125	5.000	2.500	0.720	0.060	5	Weldon	☐
ST5551-.750E3R120.3Z5	SIRA	10303273	3	E	0.750	0.750	1.125	5.000	2.500	0.720	0.120	5	Weldon	☐
ST5551-1.00E3R030.3Z5	SIRA	10303275	3	E	1.000	1.000	1.250	6.000	3.500	0.960	0.030	5	Weldon	☐
ST5551-1.00E3R060.3Z5	SIRA	10303276	3	E	1.000	1.000	1.250	6.000	3.500	0.960	0.060	5	Weldon	☐
ST5551-1.00E3R120.3Z5	SIRA	10303277	3	E	1.000	1.000	1.250	6.000	3.500	0.960	0.120	5	Weldon	☐
ST5551-.250E4R015.3Z5	SIRA	10303278	4	E	0.250	0.250	0.500	3.000	1.000	0.240	0.015	5	Weldon	☐
ST5551-.250E4R030.3Z5	SIRA	10303279	4	E	0.250	0.250	0.500	3.000	1.000	0.240	0.030	5	Weldon	☐
ST5551-.375E4R015.3Z5	SIRA	10303281	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.015	5	Weldon	☐
ST5551-.375E4R030.3Z5	SIRA	10303282	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.030	5	Weldon	☐
ST5551-.375E4R045.3Z5	SIRA	10303283	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.045	5	Weldon	☐
ST5551-.375E4R060.3Z5	SIRA	10303284	4	E	0.375	0.375	0.750	3.000	1.500	0.360	0.060	5	Weldon	☐
ST5551-.500E4R015.3Z5	SIRA	10303286	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.015	5	Weldon	☐
ST5551-.500E4R030.3Z5	SIRA	10303287	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.030	5	Weldon	☐
ST5551-.500E4R060.3Z5	SIRA	10303288	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.060	5	Weldon	☐
ST5551-.500E4R120.3Z5	SIRA	10303289	4	E	0.500	0.500	1.000	4.000	2.000	0.480	0.120	5	Weldon	☐
ST5551-.625E4R030.3Z5	SIRA	10303291	4	E	0.625	0.625	1.250	5.000	2.500	0.600	0.030	5	Weldon	☐
ST5551-.625E4R060.3Z5	SIRA	10303292	4	E	0.625	0.625	1.250	5.000	2.500	0.600	0.060	5	Weldon	☐
ST5551-.750E4R030.3Z5	SIRA	10303293	4	E	0.750	0.750	1.500	5.000	3.000	0.720	0.030	5	Weldon	☐
ST5551-.750E4R060.3Z5	SIRA	10303294	4	E	0.750	0.750	1.500	5.000	3.000	0.720	0.060	5	Weldon	☐
ST5551-.750E4R120.3Z5	SIRA	10303295	4	E	0.750	0.750	1.500	5.000	3.000	0.720	0.120	5	Weldon	☐

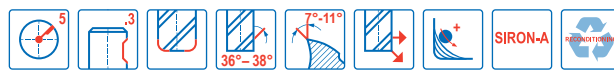
☐ Weldon available. Delivery time is 3 days.

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM= $-.0001" / -.0004"$
—DC= $+.000" / -.002"$
—RE= $\pm .0008"$
—Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5551-.250E5R015.3Z5	SIRA	10303297	5	E	0.250	0.250	0.500	4.000	1.250	0.240	0.015	5	Weldon	☐
ST5551-.250E5R030.3Z5	SIRA	10303298	5	E	0.250	0.250	0.500	4.000	1.250	0.240	0.030	5	Weldon	☐
ST5551-.375E5R015.3Z5	SIRA	10303299	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.015	5	Weldon	☐
ST5551-.375E5R030.3Z5	SIRA	10303300	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.030	5	Weldon	☐
ST5551-.375E5R045.3Z5	SIRA	10303301	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.045	5	Weldon	☐
ST5551-.375E5R060.3Z5	SIRA	10303302	5	E	0.375	0.375	0.500	4.000	2.125	0.360	0.060	5	Weldon	☐
ST5551-.625E5R030.3Z5	SIRA	10303304	5	E	0.625	0.625	0.750	6.000	3.375	0.600	0.030	5	Weldon	☐
ST5551-.625E5R060.3Z5	SIRA	10303305	5	E	0.625	0.625	0.750	6.000	3.375	0.600	0.060	5	Weldon	☐
ST5551-.750E5R030.3Z5	SIRA	10303306	5	E	0.750	0.750	1.125	6.000	4.125	0.720	0.030	5	Weldon	☐
ST5551-.750E5R060.3Z5	SIRA	10303307	5	E	0.750	0.750	1.125	6.000	4.125	0.720	0.060	5	Weldon	☐
ST5551-.750E5R120.3Z5	SIRA	10303308	5	E	0.750	0.750	1.125	6.000	4.125	0.720	0.120	5	Weldon	☐
ST5551-.500E6R015.3Z5	SIRA	10303310	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.015	5	Weldon	☐
ST5551-.500E6R030.3Z5	SIRA	10303311	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.030	5	Weldon	☐
ST5551-.500E6R060.3Z5	SIRA	10303312	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.060	5	Weldon	☐
ST5551-.500E6R120.3Z5	SIRA	10303313	6	E	0.500	0.500	0.625	5.000	3.125	0.480	0.120	5	Weldon	☐
ST5551-.250E8R015.3Z5	SIRA	10303314	8	E	0.250	0.250	0.500	4.000	2.125	0.240	0.015	5	Weldon	☐
ST5551-.250E8R030.3Z5	SIRA	10303315	8	E	0.250	0.250	0.500	4.000	2.125	0.240	0.030	5	Weldon	☐
ST5551-.375E8R015.3Z5	SIRA	10303316	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.015	5	Weldon	☐
ST5551-.375E8R030.3Z5	SIRA	10303317	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.030	5	Weldon	☐
ST5551-.375E8R045.3Z5	SIRA	10303318	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.045	5	Weldon	☐
ST5551-.375E8R060.3Z5	SIRA	10303319	8	E	0.375	0.375	0.500	6.000	3.125	0.360	0.060	5	Weldon	☐
ST5551-.500E8R015.3Z5	SIRA	10303320	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.015	5	Weldon	☐
ST5551-.500E8R030.3Z5	SIRA	10303321	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.030	5	Weldon	☐
ST5551-.500E8R060.3Z5	SIRA	10303322	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.060	5	Weldon	☐
ST5551-.500E8R120.3Z5	SIRA	10303323	8	E	0.500	0.500	0.625	6.000	4.125	0.480	0.120	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfpr

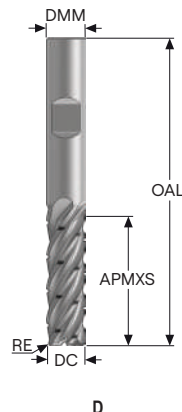
Graphite

X-Heads

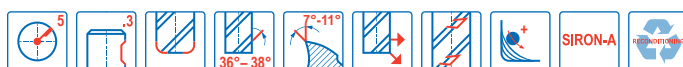
Minimaster

ST5551

High performance – Universal – Square – 5 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0008"
—Regrind possible



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
ST5551-.250D3R015.3Z5C	SIRA	10303324	3	D	■	inch 0.250	inch 0.250	inch 0.750	inch 2.500	inch 0.015	5	Weldon	☐
ST5551-.375D3R030.3Z5C	SIRA	10303325	3	D	■	0.375	0.375	1.250	3.000	0.030	5	Weldon	☐
ST5551-.500D3R030.3Z5C	SIRA	10303326	3	D	■	0.500	0.500	1.250	3.000	0.030	5	Weldon	☐
ST5551-.625D3R030.3Z5C	SIRA	10303327	3	D	■	0.625	0.625	1.375	3.500	0.030	5	Weldon	☐
ST5551-.750D3R030.3Z5C	SIRA	10303328	3	D	■	0.750	0.750	1.625	4.000	0.030	5	Weldon	☐
ST5551-.500D4R030.3Z5C	SIRA	10303329	4	D	■	0.500	0.500	1.625	4.000	0.030	5	Weldon	☐
ST5551-.750D4R030.3Z5C	SIRA	10303330	4	D	■	0.750	0.750	2.250	5.000	0.030	5	Weldon	☐
ST5551-.625D5R030.3Z5C	SIRA	10303331	5	D	■	0.625	0.625	2.125	4.000	0.030	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – ST5551 Side milling

SMG		a_e/DC	a_p/DC	f_z							v_c
				6	8	10	12	16	20	25	
P1	M/A/D/E	0,30 0.30	2,0 2.0	0,038 0.0015	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	175 (140 — 210) 570 (460 — 680)
P2	M/A/D/E	0,30 0.30	2,0 2.0	0,040 0.0016	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,11 0.0044	0,13 0.0050	170 (140 — 210) 560 (460 — 680)
P3	M/A/D/E	0,30 0.30	2,0 2.0	0,038 0.0015	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,12 0.0048	150 (120 — 180) 490 (400 — 590)
P4	M/A/D/E	0,30 0.30	2,0 2.0	0,036 0.0014	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	130 (110 — 160) 425 (370 — 520)
P5	M/A/D/E	0,30 0.30	2,0 2.0	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	125 (97 — 150) 410 (320 — 490)
P6	M/A/D/E	0,30 0.30	2,0 2.0	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	140 (110 — 170) 460 (370 — 550)
P7	M/A/D/E	0,30 0.30	2,0 2.0	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	135 (110 — 160) 445 (370 — 520)
P8	M/A/D/E	0,30 0.30	2,0 2.0	0,038 0.0015	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,12 0.0048	125 (97 — 150) 410 (320 — 490)
P11	M/A/D/E	0,30 0.30	2,0 2.0	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	0,095 0.0038	120 (110 — 140) 395 (370 — 450)
P12	M/A/D/E	0,30 0.30	2,0 2.0	0,020 0.00080	0,028 0.0011	0,034 0.0013	0,040 0.0016	0,050 0.0020	0,060 0.0024	0,065 0.0026	75 (66 — 88) 245 (220 — 280)
M1	E	0,30 0.30	2,0 2.0	0,034 0.0013	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,11 0.0044	140 (120 — 160) 460 (400 — 520)
M2	E	0,30 0.30	2,0 2.0	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	0,095 0.0038	115 (99 — 130) 375 (330 — 420)
M3	E	0,30 0.30	2,0 2.0	0,024 0.00095	0,032 0.0013	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	90 (79 — 100) 295 (260 — 320)
M4	E	0,30 0.30	2,0 2.0	0,022 0.00085	0,028 0.0011	0,036 0.0014	0,042 0.0017	0,050 0.0020	0,060 0.0024	0,065 0.0026	70 (60 — 80) 230 (200 — 260)
M5	E	0,30 0.30	2,0 2.0	0,022 0.00085	0,028 0.0011	0,036 0.0014	0,042 0.0017	0,050 0.0020	0,060 0.0024	0,065 0.0026	60 (50 — 67) 195 (170 — 210)
K1	E	0,30 0.30	2,0 2.0	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	150 (120 — 180) 490 (400 — 590)
K2	E	0,30 0.30	2,0 2.0	0,034 0.0013	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,11 0.0044	130 (110 — 160) 425 (370 — 520)
K3	E	0,30 0.30	2,0 2.0	0,034 0.0013	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,11 0.0044	110 (85 — 140) 360 (280 — 450)
K4	E	0,30 0.30	2,0 2.0	0,034 0.0013	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,11 0.0044	105 (81 — 130) 345 (270 — 420)
K5	E	0,30 0.30	2,0 2.0	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	0,095 0.0038	65 (50 — 81) 215 (170 — 260)
K6	E	0,30 0.30	2,0 2.0	0,034 0.0013	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,11 0.0044	110 (85 — 130) 360 (280 — 420)
K7	E	0,30 0.30	2,0 2.0	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	0,095 0.0038	95 (75 — 120) 310 (250 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfzp

Graphite

X-Heads

Minimaster

Cutting data – ST5551 Side milling

SMG		a _e /DC	a _p /DC	f _z							v _c
				6	8	10	12	16	20	25	
N1	E	0,30 0.30	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	385 (300 — 470) 1275 (990 — 1500)
N2	E	0,30 0.30	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	250 (190 — 300) 820 (630 — 980)
N3	E	0,30 0.30	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	165 (130 — 200) 540 (430 — 650)
N11	E	0,30 0.30	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	220 (170 — 270) 720 (560 — 880)
S1	E	0,24 0.24	2,0 2.0	0,024 0.00095	0,032 0.0013	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	47 (36 — 76) 155 (120 — 240)
S2	E	0,24 0.24	2,0 2.0	0,024 0.00095	0,032 0.0013	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	38 (29 — 61) 125 (96 — 200)
S3	E	0,24 0.24	2,0 2.0	0,022 0.00085	0,030 0.0012	0,038 0.0015	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,070 0.0028	33 (25 — 53) 110 (83 — 170)
S11	E	0,24 0.24	2,0 2.0	0,028 0.0011	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	0,090 0.0036	65 (50 — 100) 215 (170 — 320)
S12	E	0,24 0.24	2,0 2.0	0,028 0.0011	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	0,090 0.0036	50 (39 — 82) 165 (130 — 260)
S13	E	0,24 0.24	2,0 2.0	0,024 0.00095	0,032 0.0013	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	40 (31 — 65) 130 (110 — 210)
H5	M/A/D	0,15 0.15	2,0 2.0	0,022 0.00085	0,028 0.0011	0,036 0.0014	0,042 0.0017	0,050 0.0020	0,060 0.0024	0,065 0.0026	115 (86 — 140) 375 (290 — 450)
H8	M/A/D	0,15 0.15	2,0 2.0	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,044 0.0017	0,050 0.0020	120 (89 — 140) 395 (300 — 450)
H11	M/A/D	0,15 0.15	2,0 2.0	0,022 0.00085	0,028 0.0011	0,036 0.0014	0,042 0.0017	0,050 0.0020	0,060 0.0024	0,065 0.0026	145 (110 — 180) 475 (370 — 590)
H12	M/A/D	0,15 0.15	2,0 2.0	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,044 0.0017	0,050 0.0020	140 (110 — 170) 460 (370 — 550)
H21	M/A/D	0,15 0.15	2,0 2.0	0,016 0.00065	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,044 0.0017	0,050 0.0020	120 (89 — 140) 395 (300 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – ST5551 Side milling advanced roughing $a_e/DC = 0,10$

SMG		a_p/DC	f_z							v_c	
			6	8	10	12	16	20	25		
P1	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,19	215 (170 — 260)	Universal
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0075	710 (560 — 850)	
P2	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,19	210 (170 — 260)	Steel and cast iron
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0075	690 (560 — 850)	
P3	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,18	180 (140 — 220)	Steel and cast iron
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0070	590 (460 — 720)	
P4	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,18	160 (130 — 190)	Steel and cast iron
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0070	520 (430 — 620)	
P5	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,18	155 (120 — 180)	Steel and cast iron
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0070	510 (400 — 590)	
P6	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,15	0,18	170 (140 — 210)	Stainless steel and S-materials
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0060	0,0070	560 (460 — 680)	
P7	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,15	0,18	160 (130 — 200)	Stainless steel and S-materials
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0060	0,0070	520 (430 — 650)	
P8	M/A/D/E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,18	155 (120 — 180)	Stainless steel and S-materials
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0070	510 (400 — 590)	
P11	M/A/D/E	2,0	0,042	0,055	0,070	0,085	0,11	0,13	0,15	145 (130 — 160)	Stainless steel and S-materials
		2,0	0,0017	0,0022	0,0028	0,0034	0,0044	0,0050	0,0060	475 (430 — 520)	
P12	M/A/D/E	2,0	0,032	0,042	0,050	0,060	0,075	0,090	0,10	90 (78 — 100)	Non ferrous
		2,0	0,0013	0,0017	0,0020	0,0024	0,0030	0,0036	0,0040	295 (260 — 320)	
M1	E	2,0	0,042	0,055	0,070	0,085	0,11	0,14	0,16	170 (150 — 190)	Non ferrous
		2,0	0,0017	0,0022	0,0028	0,0034	0,0044	0,0055	0,0065	560 (500 — 620)	
M2	E	2,0	0,042	0,055	0,070	0,085	0,11	0,13	0,15	140 (120 — 150)	Non ferrous
		2,0	0,0017	0,0022	0,0028	0,0034	0,0044	0,0050	0,0060	460 (400 — 490)	
M3	E	2,0	0,038	0,050	0,060	0,075	0,090	0,10	0,12	110 (93 — 120)	Non ferrous
		2,0	0,0015	0,0020	0,0024	0,0030	0,0036	0,0040	0,0048	360 (310 — 390)	
M4	E	2,0	0,032	0,044	0,055	0,065	0,080	0,090	0,10	80 (71 — 94)	Non ferrous
		2,0	0,0013	0,0017	0,0022	0,0026	0,0032	0,0036	0,0040	260 (240 — 300)	
M5	E	2,0	0,032	0,044	0,055	0,065	0,080	0,090	0,10	70 (59 — 79)	Hard
		2,0	0,0013	0,0017	0,0022	0,0026	0,0032	0,0036	0,0040	230 (200 — 250)	
K1	E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,18	180 (140 — 220)	Hard
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0070	590 (460 — 720)	
K2	E	2,0	0,048	0,065	0,080	0,095	0,13	0,14	0,16	155 (120 — 190)	Hard
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0055	0,0065	510 (400 — 620)	
K3	E	2,0	0,048	0,065	0,080	0,095	0,13	0,14	0,16	135 (110 — 160)	Hard
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0055	0,0065	445 (370 — 520)	
K4	E	2,0	0,048	0,065	0,080	0,095	0,13	0,14	0,16	125 (97 — 160)	Plastic and cf rp
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0055	0,0065	410 (320 — 520)	
K5	E	2,0	0,046	0,060	0,075	0,090	0,11	0,13	0,15	75 (58 — 96)	Plastic and cf rp
		2,0	0,0018	0,0024	0,0030	0,0036	0,0044	0,0050	0,0060	245 (200 — 310)	
K6	E	2,0	0,048	0,065	0,080	0,095	0,13	0,14	0,16	130 (110 — 160)	Plastic and cf rp
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0055	0,0065	425 (370 — 520)	
K7	E	2,0	0,046	0,060	0,075	0,090	0,11	0,13	0,15	115 (88 — 140)	Plastic and cf rp
		2,0	0,0018	0,0024	0,0030	0,0036	0,0044	0,0050	0,0060	375 (290 — 450)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – ST5551 Side milling advanced roughing $a_e/DC = 0,10$

SMG		a_p/DC	f_z							v_c
			6	8	10	12	16	20	25	
N1	E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,20	495 (380 — 610)
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0080	1625 (1300 — 2000)
N2	E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,20	320 (250 — 390)
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0080	1050 (830 — 1200)
N3	E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,20	215 (170 — 260)
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0080	710 (560 — 850)
N11	E	2,0	0,048	0,065	0,080	0,095	0,13	0,16	0,20	285 (220 — 350)
		2,0	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	0,0080	940 (730 — 1100)
S1	E	2,0	0,032	0,044	0,055	0,065	0,085	0,095	0,11	55 (41 — 86)
		2,0	0,0013	0,0017	0,0022	0,0026	0,0034	0,0038	0,0044	180 (140 — 280)
S2	E	2,0	0,032	0,044	0,055	0,065	0,085	0,095	0,11	43 (33 — 70)
		2,0	0,0013	0,0017	0,0022	0,0026	0,0034	0,0038	0,0044	140 (110 — 220)
S3	E	2,0	0,032	0,042	0,055	0,065	0,080	0,090	0,10	37 (28 — 60)
		2,0	0,0013	0,0017	0,0022	0,0026	0,0032	0,0036	0,0040	120 (92 — 190)
S11	E	2,0	0,032	0,044	0,055	0,065	0,090	0,11	0,13	75 (58 — 120)
		2,0	0,0013	0,0017	0,0022	0,0026	0,0036	0,0044	0,0050	245 (200 — 390)
S12	E	2,0	0,032	0,044	0,055	0,065	0,090	0,11	0,13	60 (45 — 96)
		2,0	0,0013	0,0017	0,0022	0,0026	0,0036	0,0044	0,0050	195 (150 — 310)
S13	E	2,0	0,032	0,044	0,055	0,065	0,085	0,095	0,11	46 (35 — 74)
		2,0	0,0013	0,0017	0,0022	0,0026	0,0034	0,0038	0,0044	150 (120 — 240)
H5	M/A/D	2,0	0,025	0,034	0,042	0,050	0,060	0,070	0,080	120 (91 — 150)
		2,0	0,0010	0,0013	0,0017	0,0020	0,0024	0,0028	0,0032	395 (300 — 490)
H8	M/A/D	2,0	0,019	0,026	0,032	0,038	0,046	0,055	0,060	125 (94 — 150)
		2,0	0,00075	0,0010	0,0013	0,0015	0,0018	0,0022	0,0024	410 (310 — 490)
H11	M/A/D	2,0	0,025	0,034	0,042	0,050	0,060	0,070	0,080	155 (120 — 190)
		2,0	0,0010	0,0013	0,0017	0,0020	0,0024	0,0028	0,0032	510 (400 — 620)
H12	M/A/D	2,0	0,019	0,026	0,032	0,038	0,046	0,055	0,060	145 (110 — 180)
		2,0	0,00075	0,0010	0,0013	0,0015	0,0018	0,0022	0,0024	475 (370 — 590)
H21	M/A/D	2,0	0,019	0,026	0,032	0,038	0,046	0,055	0,060	125 (94 — 150)
		2,0	0,00075	0,0010	0,0013	0,0015	0,0018	0,0022	0,0024	410 (310 — 490)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – ST5551 Side milling – Inch

SMG		a_e/DC	a_p/DC	f_z											v_c
				1/8	5/32	3/16	7/32	1/4	5/16	3/8	1/2	5/8	3/4	1	
P1	M/A/D/E	0,30 0,30	2,0 2,0	0,020 0,00080	0,026 0,0010	0,030 0,0012	0,036 0,0014	0,042 0,0017	0,050 0,0020	0,060 0,0024	0,080 0,0032	0,095 0,0038	0,11 0,0044	0,13 0,0050	175 (140 — 210) 570 (460 — 680)
P2	M/A/D/E	0,30 0,30	2,0 2,0	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,036 0,0014	0,042 0,0017	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,095 0,0038	0,11 0,0044	0,13 0,0050	170 (140 — 210) 560 (460 — 680)
P3	M/A/D/E	0,30 0,30	2,0 2,0	0,020 0,00080	0,025 0,0010	0,030 0,0012	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	150 (120 — 180) 490 (400 — 590)
P4	M/A/D/E	0,30 0,30	2,0 2,0	0,019 0,00075	0,024 0,00095	0,030 0,0012	0,034 0,0013	0,038 0,0015	0,048 0,0019	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	130 (110 — 160) 425 (370 — 520)
P5	M/A/D/E	0,30 0,30	2,0 2,0	0,019 0,00075	0,024 0,00095	0,028 0,0011	0,034 0,0013	0,038 0,0015	0,048 0,0019	0,055 0,0022	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	125 (97 — 150) 410 (320 — 490)
P6	M/A/D/E	0,30 0,30	2,0 2,0	0,019 0,00075	0,024 0,00095	0,028 0,0011	0,034 0,0013	0,038 0,0015	0,048 0,0019	0,055 0,0022	0,075 0,0030	0,085 0,0034	0,10 0,0040	0,11 0,0044	140 (110 — 170) 460 (370 — 550)
P7	M/A/D/E	0,30 0,30	2,0 2,0	0,019 0,00075	0,024 0,00095	0,028 0,0011	0,034 0,0013	0,038 0,0015	0,048 0,0019	0,055 0,0022	0,075 0,0030	0,085 0,0034	0,10 0,0040	0,11 0,0044	135 (110 — 160) 445 (370 — 520)
P8	M/A/D/E	0,30 0,30	2,0 2,0	0,020 0,00080	0,025 0,0010	0,030 0,0012	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	125 (97 — 150) 410 (320 — 490)
P11	M/A/D/E	0,30 0,30	2,0 2,0	0,016 0,00065	0,020 0,00080	0,024 0,00095	0,028 0,0011	0,032 0,0013	0,040 0,0016	0,048 0,0019	0,060 0,0024	0,075 0,0030	0,080 0,0032	0,095 0,0038	120 (110 — 140) 395 (370 — 450)
P12	M/A/D/E	0,30 0,30	2,0 2,0	0,011 0,00044	0,014 0,00055	0,016 0,00065	0,019 0,00075	0,022 0,00085	0,028 0,0011	0,032 0,0013	0,042 0,0017	0,050 0,0020	0,055 0,0022	0,065 0,0026	75 (66 — 88) 245 (220 — 280)
M1	E	0,30 0,30	2,0 2,0	0,018 0,00070	0,022 0,00085	0,026 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	0,11 0,0044	140 (120 — 160) 460 (400 — 520)
M2	E	0,30 0,30	2,0 2,0	0,016 0,00065	0,020 0,00080	0,024 0,00095	0,028 0,0011	0,032 0,0013	0,040 0,0016	0,048 0,0019	0,060 0,0024	0,075 0,0030	0,085 0,0034	0,095 0,0038	115 (99 — 130) 375 (330 — 420)
M3	E	0,30 0,30	2,0 2,0	0,013 0,00050	0,016 0,00065	0,019 0,00075	0,022 0,00085	0,026 0,0010	0,032 0,0013	0,038 0,0015	0,050 0,0020	0,060 0,0024	0,065 0,0026	0,080 0,0032	90 (79 — 100) 295 (260 — 320)
M4	E	0,30 0,30	2,0 2,0	0,011 0,00044	0,014 0,00055	0,017 0,00065	0,020 0,00080	0,022 0,00085	0,028 0,0011	0,034 0,0013	0,044 0,0017	0,050 0,0020	0,060 0,0024	0,070 0,0028	70 (60 — 80) 230 (200 — 260)
M5	E	0,30 0,30	2,0 2,0	0,011 0,00044	0,014 0,00055	0,017 0,00065	0,020 0,00080	0,022 0,00085	0,028 0,0011	0,034 0,0013	0,044 0,0017	0,050 0,0020	0,060 0,0024	0,070 0,0028	60 (50 — 67) 195 (170 — 210)
K1	E	0,30 0,30	2,0 2,0	0,019 0,00075	0,024 0,00095	0,030 0,0012	0,034 0,0013	0,038 0,0015	0,048 0,0019	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	150 (120 — 180) 490 (400 — 590)
K2	E	0,30 0,30	2,0 2,0	0,018 0,00070	0,022 0,00085	0,026 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	0,11 0,0044	130 (110 — 160) 425 (370 — 520)
K3	E	0,30 0,30	2,0 2,0	0,018 0,00070	0,022 0,00085	0,026 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	0,11 0,0044	110 (85 — 140) 360 (280 — 450)
K4	E	0,30 0,30	2,0 2,0	0,018 0,00070	0,022 0,00085	0,026 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	0,11 0,0044	105 (81 — 130) 345 (270 — 420)
K5	E	0,30 0,30	2,0 2,0	0,016 0,00065	0,020 0,00080	0,024 0,00095	0,028 0,0011	0,032 0,0013	0,040 0,0016	0,048 0,0019	0,060 0,0024	0,075 0,0030	0,080 0,0032	0,095 0,0038	65 (50 — 81) 215 (170 — 260)
K6	E	0,30 0,30	2,0 2,0	0,018 0,00070	0,022 0,00085	0,026 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	0,11 0,0044	110 (85 — 130) 360 (280 — 420)
K7	E	0,30 0,30	2,0 2,0	0,016 0,00065	0,020 0,00080	0,024 0,00095	0,028 0,0011	0,032 0,0013	0,040 0,0016	0,048 0,0019	0,060 0,0024	0,075 0,0030	0,080 0,0032	0,095 0,0038	95 (75 — 120) 310 (250 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – ST5551 Side milling – Inch

SMG		a_e/DC	a_p/DC	f_z											v_c
				1/8	5/32	3/16	7/32	1/4	5/16	3/8	1/2	5/8	3/4	1	
N1	E	0,30 0,30	2,0 2,0	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	385 (300 — 470) 1275 (990 — 1500)
N2	E	0,30 0,30	2,0 2,0	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	250 (190 — 300) 820 (630 — 980)
N3	E	0,30 0,30	2,0 2,0	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	165 (130 — 200) 540 (430 — 650)
N11	E	0,30 0,30	2,0 2,0	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	220 (170 — 270) 720 (560 — 880)
S1	E	0,24 0,24	2,0 2,0	0,013 0,00050	0,016 0,00065	0,019 0,00075	0,022 0,00085	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,050 0,0020	0,060 0,0024	0,065 0,0026	0,075 0,0030	47 (36 — 76) 155 (120 — 240)
S2	E	0,24 0,24	2,0 2,0	0,013 0,00050	0,016 0,00065	0,019 0,00075	0,022 0,00085	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,050 0,0020	0,060 0,0024	0,065 0,0026	0,075 0,0030	38 (29 — 61) 125 (96 — 200)
S3	E	0,24 0,24	2,0 2,0	0,012 0,00048	0,015 0,00060	0,018 0,00070	0,020 0,00080	0,024 0,00095	0,030 0,0012	0,036 0,0014	0,046 0,0018	0,055 0,0022	0,060 0,0024	0,070 0,0028	33 (25 — 53) 110 (83 — 170)
S11	E	0,24 0,24	2,0 2,0	0,015 0,00060	0,018 0,00070	0,022 0,00085	0,025 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,065 0,0026	0,075 0,0030	0,090 0,0036	65 (50 — 100) 215 (170 — 320)
S12	E	0,24 0,24	2,0 2,0	0,015 0,00060	0,018 0,00070	0,022 0,00085	0,025 0,0010	0,030 0,0012	0,036 0,0014	0,044 0,0017	0,055 0,0022	0,065 0,0026	0,075 0,0030	0,090 0,0036	50 (39 — 82) 165 (130 — 260)
S13	E	0,24 0,24	2,0 2,0	0,013 0,00050	0,016 0,00065	0,019 0,00075	0,022 0,00085	0,025 0,0010	0,032 0,0013	0,038 0,0015	0,050 0,0020	0,060 0,0024	0,065 0,0026	0,075 0,0030	40 (31 — 65) 130 (110 — 210)
H5	M/A/D	0,15 0,15	2,0 2,0	0,011 0,00044	0,014 0,00055	0,017 0,00065	0,020 0,00080	0,022 0,00085	0,028 0,0011	0,034 0,0013	0,044 0,0017	0,050 0,0020	0,055 0,0022	0,065 0,0026	115 (86 — 140) 375 (290 — 450)
H8	M/A/D	0,15 0,15	2,0 2,0	0,0085 0,00034	0,011 0,00044	0,013 0,00050	0,015 0,00060	0,017 0,00065	0,022 0,00085	0,026 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	120 (89 — 140) 395 (300 — 450)
H11	M/A/D	0,15 0,15	2,0 2,0	0,011 0,00044	0,014 0,00055	0,017 0,00065	0,020 0,00080	0,022 0,00085	0,028 0,0011	0,034 0,0013	0,044 0,0017	0,050 0,0020	0,055 0,0022	0,065 0,0026	145 (110 — 180) 475 (370 — 590)
H12	M/A/D	0,15 0,15	2,0 2,0	0,0085 0,00034	0,011 0,00044	0,013 0,00050	0,015 0,00060	0,017 0,00065	0,022 0,00085	0,026 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	140 (110 — 170) 460 (370 — 550)
H21	M/A/D	0,15 0,15	2,0 2,0	0,0085 0,00034	0,011 0,00044	0,013 0,00050	0,015 0,00060	0,017 0,00065	0,022 0,00085	0,026 0,0010	0,032 0,0013	0,038 0,0015	0,044 0,0017	0,050 0,0020	120 (89 — 140) 395 (300 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – ST5551 Side milling advanced roughing $a_p/DC = 0,10$ – Inch

SMG		a_p/DC	f_z											v_c	
			1/8	5/32	3/16	7/32	1/4	5/16	3/8	1/2	5/8	3/4	1		
P1	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,19	215 (170 — 260)	Universal
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0075	710 (560 — 850)	
P2	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,20	210 (170 — 260)	Steel and cast iron
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0080	690 (560 — 850)	
P3	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,19	180 (140 — 220)	Steel and cast iron
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0075	590 (460 — 720)	
P4	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,18	160 (130 — 190)	Steel and cast iron
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0070	520 (430 — 620)	
P5	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,18	155 (120 — 180)	Steel and cast iron
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0070	510 (400 — 590)	
P6	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,18	170 (140 — 210)	Stainless steel and S-materials
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0070	560 (460 — 680)	
P7	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,18	160 (130 — 200)	Stainless steel and S-materials
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0070	520 (430 — 650)	
P8	M/A/D/E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,19	155 (120 — 180)	Stainless steel and S-materials
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0075	510 (400 — 590)	
P11	M/A/D/E	2,0	0,022	0,028	0,034	0,038	0,044	0,055	0,065	0,090	0,11	0,13	0,15	145 (130 — 160)	Stainless steel and S-materials
		2,0	0,00085	0,0011	0,0013	0,0015	0,0017	0,0022	0,0026	0,0036	0,0044	0,0050	0,0060	475 (430 — 520)	
P12	M/A/D/E	2,0	0,017	0,020	0,025	0,030	0,034	0,042	0,050	0,065	0,075	0,085	0,10	90 (78 — 100)	Non ferrous
		2,0	0,00065	0,00080	0,0010	0,0012	0,0013	0,0017	0,0020	0,0026	0,0030	0,0034	0,0040	295 (260 — 320)	
M1	E	2,0	0,022	0,028	0,034	0,038	0,044	0,055	0,065	0,090	0,11	0,13	0,16	170 (150 — 190)	Non ferrous
		2,0	0,00085	0,0011	0,0013	0,0015	0,0017	0,0022	0,0026	0,0036	0,0044	0,0050	0,0065	560 (500 — 620)	
M2	E	2,0	0,022	0,028	0,034	0,038	0,044	0,055	0,065	0,090	0,11	0,13	0,15	140 (120 — 150)	Non ferrous
		2,0	0,00085	0,0011	0,0013	0,0015	0,0017	0,0022	0,0026	0,0036	0,0044	0,0050	0,0060	460 (400 — 490)	
M3	E	2,0	0,020	0,024	0,030	0,034	0,040	0,048	0,060	0,075	0,090	0,10	0,12	110 (93 — 120)	Non ferrous
		2,0	0,00080	0,00095	0,0012	0,0013	0,0016	0,0019	0,0024	0,0030	0,0036	0,0040	0,0048	360 (310 — 390)	
M4	E	2,0	0,017	0,022	0,026	0,030	0,034	0,042	0,050	0,065	0,080	0,090	0,10	80 (71 — 94)	Non ferrous
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0026	0,0032	0,0036	0,0040	260 (240 — 300)	
M5	E	2,0	0,017	0,022	0,026	0,030	0,034	0,042	0,050	0,065	0,080	0,090	0,10	70 (59 — 79)	Non ferrous
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0026	0,0032	0,0036	0,0040	230 (200 — 250)	
K1	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,18	180 (140 — 220)	Hard
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0070	590 (460 — 720)	
K2	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,14	0,17	155 (120 — 190)	Hard
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0055	0,0065	510 (400 — 620)	
K3	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,14	0,17	135 (110 — 160)	Hard
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0055	0,0065	445 (370 — 520)	
K4	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,14	0,17	125 (97 — 160)	Plastic and cf/p
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0055	0,0065	410 (320 — 520)	
K5	E	2,0	0,024	0,030	0,036	0,042	0,048	0,060	0,075	0,095	0,11	0,13	0,15	75 (58 — 96)	Plastic and cf/p
		2,0	0,00095	0,0012	0,0014	0,0017	0,0019	0,0024	0,0030	0,0038	0,0044	0,0050	0,0060	245 (200 — 310)	
K6	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,14	0,17	130 (110 — 160)	Plastic and cf/p
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0055	0,0065	425 (370 — 520)	
K7	E	2,0	0,024	0,030	0,036	0,042	0,048	0,060	0,075	0,095	0,11	0,13	0,15	115 (88 — 140)	Plastic and cf/p
		2,0	0,00095	0,0012	0,0014	0,0017	0,0019	0,0024	0,0030	0,0038	0,0044	0,0050	0,0060	375 (290 — 450)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – ST5551 Side milling advanced roughing $a_e/DC = 0,10$ – Inch

SMG		a_p/DC	f_z											v_c
			1/8	5/32	3/16	7/32	1/4	5/16	3/8	1/2	5/8	3/4	1	
N1	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,20	495 (380 — 610)
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0080	1625 (1300 — 2000)
N2	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,20	320 (250 — 390)
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0080	1050 (830 — 1200)
N3	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,20	215 (170 — 260)
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0080	710 (560 — 850)
N11	E	2,0	0,025	0,032	0,038	0,044	0,050	0,065	0,075	0,10	0,13	0,15	0,20	285 (220 — 350)
		2,0	0,0010	0,0013	0,0015	0,0017	0,0020	0,0026	0,0030	0,0040	0,0050	0,0060	0,0080	940 (730 — 1100)
S1	E	2,0	0,017	0,022	0,026	0,030	0,034	0,044	0,050	0,070	0,085	0,095	0,11	55 (41 — 86)
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0028	0,0034	0,0038	0,0044	180 (140 — 280)
S2	E	2,0	0,017	0,022	0,026	0,030	0,034	0,044	0,050	0,070	0,085	0,095	0,11	43 (33 — 70)
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0028	0,0034	0,0038	0,0044	140 (110 — 220)
S3	E	2,0	0,017	0,022	0,025	0,030	0,034	0,042	0,050	0,065	0,080	0,085	0,10	37 (28 — 60)
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0026	0,0032	0,0034	0,0040	120 (92 — 190)
S11	E	2,0	0,017	0,022	0,026	0,030	0,034	0,044	0,050	0,070	0,085	0,10	0,13	75 (58 — 120)
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0028	0,0034	0,0040	0,0050	245 (200 — 390)
S12	E	2,0	0,017	0,022	0,026	0,030	0,034	0,044	0,050	0,070	0,085	0,10	0,13	60 (45 — 96)
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0028	0,0034	0,0040	0,0050	195 (150 — 310)
S13	E	2,0	0,017	0,022	0,026	0,030	0,034	0,044	0,050	0,070	0,085	0,095	0,11	46 (35 — 74)
		2,0	0,00065	0,00085	0,0010	0,0012	0,0013	0,0017	0,0020	0,0028	0,0034	0,0038	0,0044	150 (120 — 240)
H5	M/A/D	2,0	0,013	0,017	0,020	0,024	0,026	0,034	0,040	0,050	0,060	0,070	0,080	120 (91 — 150)
		2,0	0,00050	0,00065	0,00080	0,00095	0,0010	0,0013	0,0016	0,0020	0,0024	0,0028	0,0032	395 (300 — 490)
H8	M/A/D	2,0	0,010	0,013	0,015	0,018	0,020	0,025	0,030	0,040	0,046	0,050	0,060	125 (94 — 150)
		2,0	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0020	0,0024	410 (310 — 490)
H11	M/A/D	2,0	0,013	0,017	0,020	0,024	0,026	0,034	0,040	0,050	0,060	0,070	0,080	155 (120 — 190)
		2,0	0,00050	0,00065	0,00080	0,00095	0,0010	0,0013	0,0016	0,0020	0,0024	0,0028	0,0032	510 (400 — 620)
H12	M/A/D	2,0	0,010	0,013	0,015	0,018	0,020	0,025	0,030	0,040	0,046	0,050	0,060	145 (110 — 180)
		2,0	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0020	0,0024	475 (370 — 590)
H21	M/A/D	2,0	0,010	0,013	0,015	0,018	0,020	0,025	0,030	0,040	0,046	0,050	0,060	125 (94 — 150)
		2,0	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0020	0,0024	410 (310 — 490)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

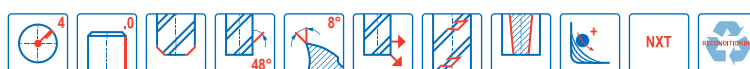
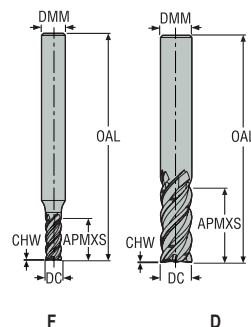
 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

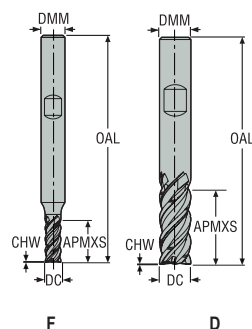
All cutting data are target values

Advanced roughing – Universal – Square – 4 Flutes – Cylindrical – Chamfer



■ Stocked standard.

Advanced roughing – Universal – Square – 4 Flutes – Weldon – Chamfer



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS564030F2C.3Z4C-NXT	03067353	2	F	■	3,0	6,0	7,0	57,0	10,2	3,0	0,04	4	Weldon	■
JS564040F2C.3Z4C-NXT	03067354	2	F	■	4,0	6,0	10,0	57,0	13,2	4,0	0,05	4	Weldon	■
JS564050F2C.3Z4C-NXT	03067355	2	F	■	5,0	6,0	12,5	57,0	15,7	5,0	0,06	4	Weldon	■
JS564060D2C.3Z4C-NXT	03067356	2	D	■	6,0	6,0	15,0	57,0	–	–	0,075	4	Weldon	■
JS564080D2C.3Z4C-NXT	03067357	2	D	■	8,0	8,0	20,0	63,0	–	–	0,1	4	Weldon	■
JS564100D2C.3Z4C-NXT	03067358	2	D	■	10,0	10,0	25,0	72,0	–	–	0,125	4	Weldon	■
JS564120D2C.3Z4C-NXT	03067359	2	D	■	12,0	12,0	30,0	83,0	–	–	0,15	4	Weldon	■
JS564160D2C.3Z4C-NXT	03067360	2	D	■	16,0	16,0	40,0	99,0	–	–	0,2	4	Weldon	■
JS564200D2C.3Z4C-NXT	03067361	2	D	■	20,0	20,0	50,0	114,0	–	–	0,25	4	Weldon	■
JS564060D3C.3Z4C-NXT	03067362	3	D	■	6,0	6,0	23,0	64,0	–	–	0,075	4	Weldon	■
JS564080D3C.3Z4C-NXT	03067363	3	D	■	8,0	8,0	32,0	74,0	–	–	0,1	4	Weldon	■
JS564100D3C.3Z4C-NXT	03067364	3	D	■	10,0	10,0	40,0	88,0	–	–	0,125	4	Weldon	■
JS564120D3C.3Z4C-NXT	03067365	3	D	■	12,0	12,0	45,0	99,0	–	–	0,15	4	Weldon	■
JS564160D3C.3Z4C-NXT	03067366	3	D	■	16,0	16,0	55,0	114,0	–	–	0,2	4	Weldon	■
JS564200D3C.3Z4C-NXT	03067367	3	D	■	20,0	20,0	65,0	126,0	–	–	0,25	4	Weldon	■
JS564060D4C.3Z4C-NXT	10273186	4	D	■	6,0	6,0	30,0	80,0	–	–	0,075	4	Weldon	□
JS564080D4C.3Z4C-NXT	10273187	4	D	■	8,0	8,0	40,0	85,0	–	–	0,1	4	Weldon	□
JS564100D4C.3Z4C-NXT	10273188	4	D	■	10,0	10,0	50,0	100,0	–	–	0,125	4	Weldon	□
JS564120D4C.3Z4C-NXT	10273189	4	D	■	12,0	12,0	60,0	115,0	–	–	0,15	4	Weldon	□
JS564160D4C.3Z4C-NXT	10273190	4	D	■	16,0	16,0	80,0	150,0	–	–	0,2	4	Weldon	□
JS564200D4C.3Z4C-NXT	10273191	4	D	■	20,0	20,0	100,0	175,0	–	–	0,25	4	Weldon	□
JS564250D4C.3Z4C-NXT	10273192	4	D	■	25,0	25,0	125,0	205,0	–	–	0,3	4	Weldon	□

■ Stocked standard.

Cutting data – JS564 Side milling advanced roughing

SMG		a_p /DC	a_e /DC	f_z								v_c
				4	5	6	8	10	12	16	20	
P1	E/M/A/D	0.150 0,150	2.4 2,4	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	305 (270 — 340) 1000 (890 — 1100)
P2	E/M/A/D	0.150 0,150	2.4 2,4	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	295 (260 — 330) 970 (860 — 1000)
P3	E/M/A/D	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	260 (230 — 290) 850 (760 — 950)
P4	E/M/A/D	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	230 (200 — 250) 750 (660 — 820)
P5	E/M/A/D	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	215 (190 — 240) 710 (630 — 780)
P6	E/M/A/D	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	240 (210 — 270) 790 (690 — 880)
P7	E/M/A/D	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	230 (200 — 250) 750 (660 — 820)
P8	E/M/A/D	0.150 0,150	2.4 2,4	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	215 (190 — 240) 710 (630 — 780)
P11	E/M/A/D	0.150 0,150	2.4 2,4	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.22 0,0085	0.25 0,010	200 (180 — 220) 660 (600 — 720)
P12	E/M/A/D	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (120 — 140) 425 (400 — 450)
M1	E	0.150 0,150	2.4 2,4	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	195 (170 — 210) 640 (560 — 680)
M2	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	160 (140 — 170) 520 (460 — 550)
M3	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (110 — 140) 425 (370 — 450)
M4	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (110 — 140) 425 (370 — 450)
M5	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	110 (92 — 120) 360 (310 — 390)
K1	E	0.150 0,150	2.4 2,4	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	260 (230 — 290) 850 (760 — 950)
K2	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	230 (200 — 250) 750 (660 — 820)
K3	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	195 (170 — 210) 640 (560 — 680)
K4	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	185 (170 — 200) 610 (560 — 650)
K5	E	0.150 0,150	2.4 2,4	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	115 (99 — 120) 375 (330 — 390)
K6	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	165 (150 — 180) 540 (500 — 590)
K7	E	0.150 0,150	2.4 2,4	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	145 (130 — 160) 475 (430 — 520)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – JS564 Side milling advanced roughing

SMG		a _e /DC	a _p /DC	f _z								v _c
				4	5	6	8	10	12	16	20	
N1	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	700 (600 — 790) 2300 (2000 — 2500)
N2	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	450 (390 — 510) 1475 (1300 — 1600)
N3	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	500 (400 — 590) 1650 (1400 — 1900)
N11	E	0.150 0,150	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	350 (300 — 390) 1150 (990 — 1200)
S1	E	0.0300 0,0300	2.4 2,4	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	60 (37 — 86) 195 (130 — 280)
S2	E	0.0300 0,0300	2.4 2,4	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	50 (30 — 69) 165 (99 — 220)
S3	E	0.0300 0,0300	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	43 (26 — 60) 140 (86 — 190)
S11	E	0.0800 0,0800	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	160 (140 — 180) 520 (460 — 590)
S12	E	0.0800 0,0800	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	125 (110 — 140) 410 (370 — 450)
S13	E	0.0800 0,0800	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	125 (110 — 140) 410 (370 — 450)
H8	M/A/D	0.0500 0,0500	2.4 2,4	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	160 (140 — 180) 520 (460 — 590)
H21	M/A/D	0.0500 0,0500	2.4 2,4	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	160 (140 — 180) 520 (460 — 590)
H31	M/A/D	0.0500 0,0500	2.4 2,4	0.018 0,00070	0.024 0,00095	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.080 0,0032	125 (110 — 140) 410 (370 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

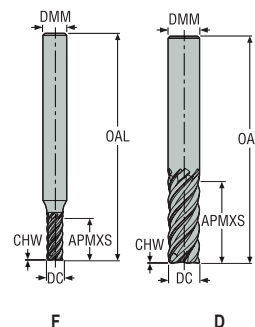
f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Advanced roughing – Universal – Square – 5 Flutes – Cylindrical – Chamfer

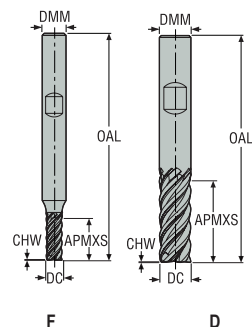


Technical drawing symbols for various types of lines and features, including dimensions, angles, and material properties.

Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
JS565040F2C.0Z5-NXT	03067369	2	F	—	4,0	6,0	10,0	57,0	13,2	4,0	0,05	5	Cylindrical	■
JS565040F2C.0Z5C-NXT	03067378	2	F	■	4,0	6,0	10,0	57,0	13,2	4,0	0,05	5	Cylindrical	■
JS565050F2C.0Z5-NXT	03067370	2	F	—	5,0	6,0	12,5	57,0	15,7	5,0	0,06	5	Cylindrical	■
JS565050F2C.0Z5C-NXT	03067379	2	F	■	5,0	6,0	12,5	57,0	15,7	5,0	0,06	5	Cylindrical	■
JS565060D2C.0Z5-NXT	03067371	2	D	—	6,0	6,0	15,0	57,0	—	—	0,075	5	Cylindrical	■
JS565060D2C.0Z5C-NXT	03067380	2	D	■	6,0	6,0	15,0	57,0	—	—	0,075	5	Cylindrical	■
JS565080D2C.0Z5-NXT	03067372	2	D	—	8,0	8,0	20,0	63,0	—	—	0,1	5	Cylindrical	■
JS565080D2C.0Z5C-NXT	03067381	2	D	■	8,0	8,0	20,0	63,0	—	—	0,1	5	Cylindrical	■
JS565100D2C.0Z5-NXT	03067373	2	D	—	10,0	10,0	25,0	72,0	—	—	0,125	5	Cylindrical	■
JS565100D2C.0Z5C-NXT	03067382	2	D	■	10,0	10,0	25,0	72,0	—	—	0,125	5	Cylindrical	■
JS565120D2C.0Z5-NXT	03067374	2	D	—	12,0	12,0	30,0	83,0	—	—	0,15	5	Cylindrical	■
JS565120D2C.0Z5C-NXT	03067383	2	D	■	12,0	12,0	30,0	83,0	—	—	0,15	5	Cylindrical	■
JS565160D2C.0Z5-NXT	03067375	2	D	—	16,0	16,0	40,0	99,0	—	—	0,2	5	Cylindrical	■
JS565160D2C.0Z5C-NXT	03067384	2	D	■	16,0	16,0	40,0	99,0	—	—	0,2	5	Cylindrical	■
JS565200D2C.0Z5-NXT	03067376	2	D	—	20,0	20,0	50,0	114,0	—	—	0,25	5	Cylindrical	■
JS565200D2C.0Z5C-NXT	03067385	2	D	■	20,0	20,0	50,0	114,0	—	—	0,25	5	Cylindrical	■
JS565060D3C.0Z5C-NXT	03067386	3	D	■	6,0	6,0	23,0	64,0	—	—	0,075	5	Cylindrical	■
JS565080D3C.0Z5C-NXT	03067387	3	D	■	8,0	8,0	32,0	74,0	—	—	0,1	5	Cylindrical	■
JS565100D3C.0Z5C-NXT	03067388	3	D	■	10,0	10,0	40,0	88,0	—	—	0,125	5	Cylindrical	■
JS565120D3C.0Z5C-NXT	03067389	3	D	■	12,0	12,0	45,0	99,0	—	—	0,15	5	Cylindrical	■
JS565160D3C.0Z5C-NXT	03067390	3	D	■	16,0	16,0	55,0	114,0	—	—	0,2	5	Cylindrical	■
JS565200D3C.0Z5C-NXT	03067391	3	D	■	20,0	20,0	65,0	126,0	—	—	0,25	5	Cylindrical	■
JS565060D4C.0Z5C-NXT	10273193	4	D	■	6,0	6,0	30,0	80,0	—	—	0,075	5	Cylindrical	■
JS565080D4C.0Z5C-NXT	10273194	4	D	■	8,0	8,0	40,0	85,0	—	—	0,1	5	Cylindrical	■
JS565100D4C.0Z5C-NXT	10273195	4	D	■	10,0	10,0	50,0	100,0	—	—	0,125	5	Cylindrical	■
JS565120D4C.0Z5C-NXT	10273196	4	D	■	12,0	12,0	60,0	115,0	—	—	0,15	5	Cylindrical	■
JS565160D4C.0Z5C-NXT	10273197	4	D	■	16,0	16,0	80,0	150,0	—	—	0,2	5	Cylindrical	■
JS565200D4C.0Z5C-NXT	10273198	4	D	■	20,0	20,0	100,0	175,0	—	—	0,25	5	Cylindrical	■
JS565250D4C.0Z5C-NXT	10273199	4	D	■	25,0	25,0	125,0	205,0	—	—	0,3	5	Cylindrical	■

■ Stocked standard.

Advanced roughing – Universal – Square – 5 Flutes – Weldon – Chamfer



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
JS565040F2C.3Z5-NXT	03067393	2	F	—	4,0	6,0	10,0	57,0	13,2	4,0	0,05	5	Weldon	■
JS565040F2C.3Z5C-NXT	03067402	2	F	■	4,0	6,0	10,0	57,0	13,2	4,0	0,05	5	Weldon	■
JS565050F2C.3Z5-NXT	03067394	2	F	—	5,0	6,0	12,5	57,0	15,7	5,0	0,06	5	Weldon	■
JS565050F2C.3Z5C-NXT	03067403	2	F	■	5,0	6,0	12,5	57,0	15,7	5,0	0,06	5	Weldon	■
JS565060D2C.3Z5-NXT	03067395	2	D	—	6,0	6,0	15,0	57,0	—	—	0,075	5	Weldon	■
JS565060D2C.3Z5C-NXT	03067404	2	D	■	6,0	6,0	15,0	57,0	—	—	0,075	5	Weldon	■
JS565080D2C.3Z5-NXT	03067396	2	D	—	8,0	8,0	20,0	63,0	—	—	0,1	5	Weldon	■
JS565080D2C.3Z5C-NXT	03067405	2	D	■	8,0	8,0	20,0	63,0	—	—	0,1	5	Weldon	■
JS565100D2C.3Z5-NXT	03067397	2	D	—	10,0	10,0	25,0	72,0	—	—	0,125	5	Weldon	■
JS565100D2C.3Z5C-NXT	03067406	2	D	■	10,0	10,0	25,0	72,0	—	—	0,125	5	Weldon	■
JS565120D2C.3Z5-NXT	03067398	2	D	—	12,0	12,0	30,0	83,0	—	—	0,15	5	Weldon	■
JS565120D2C.3Z5C-NXT	03067407	2	D	■	12,0	12,0	30,0	83,0	—	—	0,15	5	Weldon	■
JS565160D2C.3Z5-NXT	03067399	2	D	—	16,0	16,0	40,0	99,0	—	—	0,2	5	Weldon	■
JS565160D2C.3Z5C-NXT	03067408	2	D	■	16,0	16,0	40,0	99,0	—	—	0,2	5	Weldon	■
JS565200D2C.3Z5-NXT	03067400	2	D	—	20,0	20,0	50,0	114,0	—	—	0,25	5	Weldon	■
JS565200D2C.3Z5C-NXT	03067409	2	D	■	20,0	20,0	50,0	114,0	—	—	0,25	5	Weldon	■
JS565060D3C.3Z5C-NXT	03067410	3	D	■	6,0	6,0	23,0	64,0	—	—	0,075	5	Weldon	■
JS565080D3C.3Z5C-NXT	03067411	3	D	■	8,0	8,0	32,0	74,0	—	—	0,1	5	Weldon	■
JS565100D3C.3Z5C-NXT	03067412	3	D	■	10,0	10,0	40,0	88,0	—	—	0,125	5	Weldon	■
JS565120D3C.3Z5C-NXT	03067413	3	D	■	12,0	12,0	45,0	99,0	—	—	0,15	5	Weldon	■
JS565160D3C.3Z5C-NXT	03067414	3	D	■	16,0	16,0	55,0	114,0	—	—	0,2	5	Weldon	■
JS565200D3C.3Z5C-NXT	03067415	3	D	■	20,0	20,0	65,0	126,0	—	—	0,25	5	Weldon	■
JS565060D4C.3Z5C-NXT	10273200	4	D	■	6,0	6,0	30,0	80,0	—	—	0,075	5	Weldon	□
JS565080D4C.3Z5C-NXT	10273201	4	D	■	8,0	8,0	40,0	85,0	—	—	0,1	5	Weldon	□
JS565100D4C.3Z5C-NXT	10273202	4	D	■	10,0	10,0	50,0	100,0	—	—	0,125	5	Weldon	□
JS565120D4C.3Z5C-NXT	10273203	4	D	■	12,0	12,0	60,0	115,0	—	—	0,15	5	Weldon	□
JS565160D4C.3Z5C-NXT	10273204	4	D	■	16,0	16,0	80,0	150,0	—	—	0,2	5	Weldon	□
JS565200D4C.3Z5C-NXT	10273205	4	D	■	20,0	20,0	100,0	175,0	—	—	0,25	5	Weldon	□
JS565250D4C.3Z5C-NXT	10273206	4	D	■	25,0	25,0	125,0	205,0	—	—	0,3	5	Weldon	□

■ Stocked standard.

Cutting data – JS565 Side milling advanced roughing

SMG		a_p /DC	a_e /DC	f_z								v_c
				4	5	6	8	10	12	16	20	
P1	E/M/A/D	0.100 0,100	2.4 2,4	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.19 0,0075	0.22 0,0085	325 (270 — 340) 1075 (890 — 1100)
P2	E/M/A/D	0.100 0,100	2.4 2,4	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.19 0,0075	0.22 0,0085	315 (260 — 330) 1025 (860 — 1000)
P3	E/M/A/D	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	280 (230 — 290) 920 (760 — 950)
P4	E/M/A/D	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	245 (200 — 250) 800 (660 — 820)
P5	E/M/A/D	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	230 (190 — 240) 750 (630 — 780)
P6	E/M/A/D	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.17 0,0065	0.20 0,0080	260 (210 — 270) 850 (690 — 880)
P7	E/M/A/D	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.17 0,0065	0.20 0,0080	245 (200 — 250) 800 (660 — 820)
P8	E/M/A/D	0.100 0,100	2.4 2,4	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.22 0,0085	230 (190 — 240) 750 (630 — 780)
P11	E/M/A/D	0.100 0,100	2.4 2,4	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.24 0,0095	0.30 0,012	225 (190 — 230) 740 (630 — 750)
P12	E/M/A/D	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	140 (120 — 140) 460 (400 — 450)
M1	E	0.100 0,100	2.4 2,4	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	0.22 0,0085	205 (180 — 210) 670 (600 — 680)
M2	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	170 (140 — 170) 560 (460 — 550)
M3	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (110 — 140) 425 (370 — 450)
M4	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (110 — 140) 425 (370 — 450)
M5	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	110 (92 — 120) 360 (310 — 390)
K1	E	0.100 0,100	2.4 2,4	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	0.22 0,0085	275 (230 — 290) 900 (760 — 950)
K2	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	245 (200 — 250) 800 (660 — 820)
K3	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	205 (170 — 210) 670 (560 — 680)
K4	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	200 (170 — 200) 660 (560 — 650)
K5	E	0.100 0,100	2.4 2,4	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	120 (98 — 120) 395 (330 — 390)
K6	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	175 (150 — 180) 570 (500 — 590)
K7	E	0.100 0,100	2.4 2,4	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	155 (130 — 160) 510 (430 — 520)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – JS565 Side milling advanced roughing

SMG		a _e /DC	a _p /DC	f _z								v _c
				4	5	6	8	10	12	16	20	
N1	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	740 (600 — 790) 2425 (2000 — 2500)
N2	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	475 (390 — 510) 1550 (1300 — 1600)
N3	E	0.100 0,100	2.4 2,4	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	500 (400 — 590) 1650 (1400 — 1900)
N11	E	0.100 0,100	2.4 2,4	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	370 (300 — 390) 1225 (990 — 1200)
S1	E	0.0300 0,0300	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	60 (38 — 86) 195 (130 — 280)
S2	E	0.0300 0,0300	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	50 (30 — 70) 165 (99 — 220)
S3	E	0.0300 0,0300	2.4 2,4	0.026 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.095 0,0038	0.11 0,0044	43 (27 — 60) 140 (89 — 190)
S11	E	0.0800 0,0800	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	160 (140 — 180) 520 (460 — 590)
S12	E	0.0800 0,0800	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	125 (110 — 140) 410 (370 — 450)
S13	E	0.0800 0,0800	2.4 2,4	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	125 (110 — 140) 410 (370 — 450)
H8	M/A/D	0.0500 0,0500	2.4 2,4	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	160 (140 — 180) 520 (460 — 590)
H21	M/A/D	0.0500 0,0500	2.4 2,4	0.024 0,00095	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.10 0,0040	155 (140 — 180) 510 (460 — 590)
H31	M/A/D	0.0500 0,0500	2.4 2,4	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	120 (110 — 140) 395 (370 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

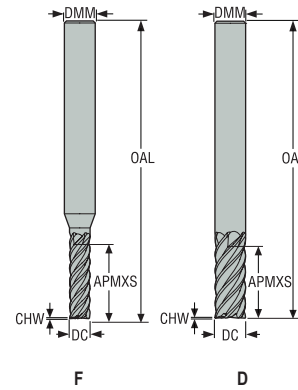
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JS520

High performance – Universal – Square – 5-8 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC=e7
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS520040F2C.0Z5-NXT	02927474	2	F	4,0	6,0	10,0	57,0	12,0	4,0	0,04	5	Cylindrical	■
JS520050F2C.0Z5-NXT	02927476	2	F	5,0	6,0	12,0	57,0	14,0	5,0	0,05	5	Cylindrical	■
JS520060D2C.0Z5-NXT	02927478	2	D	6,0	6,0	15,0	57,0	—	—	0,06	5	Cylindrical	■
JS520060D2C.0Z6-NXT	02927479	2	D	6,0	6,0	15,0	57,0	—	—	0,06	6	Cylindrical	■
JS520080D2C.0Z5-NXT	02927482	2	D	8,0	8,0	20,0	63,0	—	—	0,08	5	Cylindrical	■
JS520080D2C.0Z6-NXT	02927483	2	D	8,0	8,0	20,0	63,0	—	—	0,08	6	Cylindrical	■
JS520100D2C.0Z6-NXT	02927486	2	D	10,0	10,0	25,0	72,0	—	—	0,1	6	Cylindrical	■
JS520120D2C.0Z6-NXT	02927488	2	D	12,0	12,0	25,0	83,0	—	—	0,12	6	Cylindrical	■
JS520140D2C.0Z6-NXT	02927490	2	D	14,0	14,0	30,0	83,0	—	—	0,14	6	Cylindrical	■
JS520160D2C.0Z6-NXT	02927491	2	D	16,0	16,0	30,0	92,0	—	—	0,16	6	Cylindrical	■
JS520160D2C.0Z8-NXT	02927492	2	D	16,0	16,0	30,0	92,0	—	—	0,16	8	Cylindrical	■
JS520200D2C.0Z8-NXT	02927495	2	D	20,0	20,0	35,0	104,0	—	—	0,2	8	Cylindrical	■
JS520250D2C.0Z8-NXT	02927497	2	D	25,0	25,0	50,0	125,0	—	—	0,25	8	Cylindrical	■
JS520040F3C.0Z5-NXT	02927475	3	F	4,0	6,0	15,0	57,0	17,0	4,0	0,04	5	Cylindrical	■
JS520050F3C.0Z5-NXT	02927477	3	F	5,0	6,0	19,0	57,0	21,0	5,0	0,05	5	Cylindrical	■
JS520060D3C.0Z5-NXT	02927480	3	D	6,0	6,0	20,0	63,0	—	—	0,06	5	Cylindrical	■
JS520060D3C.0Z6-NXT	02927481	3	D	6,0	6,0	20,0	63,0	—	—	0,06	6	Cylindrical	■
JS520080D3C.0Z5-NXT	02927484	3	D	8,0	8,0	30,0	80,0	—	—	0,08	5	Cylindrical	■
JS520080D3C.0Z6-NXT	02927485	3	D	8,0	8,0	30,0	80,0	—	—	0,08	6	Cylindrical	■
JS520100D3C.0Z6-NXT	02927487	3	D	10,0	10,0	40,0	89,0	—	—	0,1	6	Cylindrical	■
JS520120D3C.0Z6-NXT	02927489	3	D	12,0	12,0	45,0	100,0	—	—	0,12	6	Cylindrical	■
JS520160D3C.0Z6-NXT	02927493	3	D	16,0	16,0	65,0	125,0	—	—	0,16	6	Cylindrical	■
JS520160D3C.0Z8-NXT	02927494	3	D	16,0	16,0	65,0	125,0	—	—	0,16	8	Cylindrical	■
JS520200D3C.0Z8-NXT	02927496	3	D	20,0	20,0	65,0	125,0	—	—	0,2	8	Cylindrical	■
JS520250D3C.0Z8-NXT	02927498	3	D	25,0	25,0	75,0	150,0	—	—	0,25	8	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

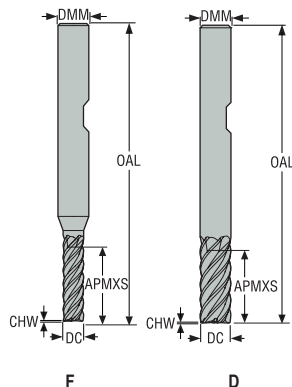
Graphite

X-Heads

Minimaster

JS520

High performance – Universal – Square – 5-8 Flutes – Weldon – Chamfer



—Tolerances:
—DMM=h5
—DC=e7
—Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS520040F2C.3Z5-NXT	02927499	2	F	4,0	6,0	10,0	57,0	12,0	4,0	0,04	5	Weldon	☐
JS520050F2C.3Z5-NXT	02927501	2	F	5,0	6,0	12,0	57,0	14,0	5,0	0,05	5	Weldon	☐
JS520060D2C.3Z5-NXT	02927503	2	D	6,0	6,0	15,0	57,0	—	—	0,06	5	Weldon	☐
JS520060D2C.3Z6-NXT	02927504	2	D	6,0	6,0	15,0	57,0	—	—	0,06	6	Weldon	☐
JS520080D2C.3Z5-NXT	02927507	2	D	8,0	8,0	20,0	63,0	—	—	0,08	5	Weldon	☐
JS520080D2C.3Z6-NXT	02927508	2	D	8,0	8,0	20,0	63,0	—	—	0,08	6	Weldon	☒
JS520100D2C.3Z6-NXT	02927511	2	D	10,0	10,0	25,0	72,0	—	—	0,1	6	Weldon	☒
JS520120D2C.3Z6-NXT	02927513	2	D	12,0	12,0	25,0	83,0	—	—	0,12	6	Weldon	☒
JS520140D2C.3Z6-NXT	02927515	2	D	14,0	14,0	30,0	83,0	—	—	0,14	6	Weldon	☐
JS520160D2C.3Z6-NXT	02927516	2	D	16,0	16,0	30,0	92,0	—	—	0,16	6	Weldon	☐
JS520160D2C.3Z8-NXT	02927517	2	D	16,0	16,0	30,0	92,0	—	—	0,16	8	Weldon	☒
JS520200D2C.3Z8-NXT	02927520	2	D	20,0	20,0	35,0	104,0	—	—	0,2	8	Weldon	☒
JS520250D2C.3Z8-NXT	02927522	2	D	25,0	25,0	50,0	125,0	—	—	0,25	8	Weldon	☒
JS520040F3C.3Z5-NXT	02927500	3	F	4,0	6,0	15,0	57,0	17,0	4,0	0,04	5	Weldon	☐
JS520050F3C.3Z5-NXT	02927502	3	F	5,0	6,0	19,0	57,0	21,0	5,0	0,05	5	Weldon	☐
JS520060D3C.3Z5-NXT	02927505	3	D	6,0	6,0	20,0	63,0	—	—	0,06	5	Weldon	☐
JS520060D3C.3Z6-NXT	02927506	3	D	6,0	6,0	20,0	63,0	—	—	0,06	6	Weldon	☐
JS520080D3C.3Z5-NXT	02927509	3	D	8,0	8,0	30,0	80,0	—	—	0,08	5	Weldon	☐
JS520080D3C.3Z6-NXT	02927510	3	D	8,0	8,0	30,0	80,0	—	—	0,08	6	Weldon	☐
JS520100D3C.3Z6-NXT	02927512	3	D	10,0	10,0	40,0	89,0	—	—	0,1	6	Weldon	☐
JS520120D3C.3Z6-NXT	02927514	3	D	12,0	12,0	45,0	100,0	—	—	0,12	6	Weldon	☐
JS520160D3C.3Z6-NXT	02927518	3	D	16,0	16,0	65,0	125,0	—	—	0,16	6	Weldon	☐
JS520160D3C.3Z8-NXT	02927519	3	D	16,0	16,0	65,0	125,0	—	—	0,16	8	Weldon	☐
JS520200D3C.3Z8-NXT	02927521	3	D	20,0	20,0	65,0	125,0	—	—	0,2	8	Weldon	☒
JS520250D3C.3Z8-NXT	02927523	3	D	25,0	25,0	75,0	150,0	—	—	0,25	8	Weldon	☒

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Cutting data – JS520 Side milling

SMG		a_e/DC	a_p/DC	f_z										v_c	
				4	5	6	8	10	12	14	16	20	25		
P1	E/M/A	0.100 0,100	2.0 2,0	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	180 (120 — 250) 590 (400 — 820)	Steel and cast iron
P2	E/M/A	0.100 0,100	2.0 2,0	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	175 (110 — 240) 570 (370 — 780)	
P3	E/M/A	0.100 0,100	2.0 2,0	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	155 (95 — 210) 510 (320 — 680)	
P4	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	135 (84 — 180) 445 (280 — 590)	
P5	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	130 (81 — 180) 425 (270 — 590)	
P6	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	145 (90 — 200) 475 (300 — 650)	
P7	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	140 (85 — 190) 460 (280 — 620)	
P8	E/M/A	0.100 0,100	2.0 2,0	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	130 (80 — 170) 425 (270 — 550)	
P11	E/M/A	0.100 0,100	2.0 2,0	0.046 0,0018	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.17 0,0065	0.20 0,0080	0.22 0,0085	195 (160 — 230) 640 (530 — 750)	
P12	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	125 (100 — 140) 410 (330 — 450)	
M1	E/M/A	0.100 0,100	2.0 2,0	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	150 (130 — 180) 490 (430 — 590)	Non ferrous
M2	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	125 (100 — 150) 410 (330 — 490)	
M3	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	100 (75 — 120) 330 (250 — 390)	
M4	E/M/A	0.100 0,100	2.0 2,0	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.10 0,0040	0.12 0,0048	0.13 0,0050	75 (58 — 96) 245 (200 — 310)	
M5	E/M/A	0.100 0,100	2.0 2,0	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.10 0,0040	0.12 0,0048	0.13 0,0050	65 (49 — 80) 215 (170 — 260)	
K1	E/M/A	0.100 0,100	2.0 2,0	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	175 (110 — 240) 570 (370 — 780)	Hard
K2	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	155 (97 — 210) 510 (320 — 680)	
K3	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	135 (82 — 180) 445 (270 — 590)	Plastic and cf/p
K4	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	125 (79 — 170) 410 (260 — 550)	
K5	E/M/A	0.100 0,100	2.0 2,0	0.028 0,0011	0.036 0,0014	0.044 0,0017	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	75 (48 — 100) 245 (160 — 320)	
K6	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	110 (69 — 150) 360 (230 — 490)	
K7	E/M/A	0.100 0,100	2.0 2,0	0.028 0,0011	0.036 0,0014	0.044 0,0017	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	100 (62 — 130) 330 (210 — 420)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – JS520 Side milling

SMG		a _e /DC	a _p /DC	f _z										v _c
				4	5	6	8	10	12	14	16	20	25	
N1	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	500 (450 — 550) 1650 (1500 — 1800)
N2	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	320 (290 — 350) 1050 (960 — 1100)
N3	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	215 (200 — 230) 710 (660 — 750)
N11	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	400 (350 — 450) 1300 (1200 — 1400)
S1	E/M/A	0.0600 0,0600	2.0 2,0	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	75 (63 — 86) 245 (210 — 280)
S2	E/M/A	0.0600 0,0600	2.0 2,0	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	60 (50 — 70) 195 (170 — 220)
S3	E/M/A	0.0600 0,0600	2.0 2,0	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	40 (30 — 49) 130 (99 — 160)
S11	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	105 (92 — 110) 345 (310 — 360)
S12	E/M/A	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	80 (71 — 90) 260 (240 — 290)
S13	E/M/A	0.100 0,100	2.0 2,0	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.10 0,0040	0.12 0,0048	0.13 0,0050	65 (56 — 71) 215 (190 — 230)
H5	M/A	0.0600 0,0600	2.0 2,0	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.13 0,0050	0.14 0,0055	125 (64 — 180) 410 (210 — 590)
H8	M/A	0.0600 0,0600	2.0 2,0	0.024 0,00095	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.060 0,0024	0.070 0,0028	0.075 0,0030	0.085 0,0034	0.10 0,0040	0.11 0,0044	130 (66 — 190) 425 (220 — 620)
H11	M/A	0.0600 0,0600	2.0 2,0	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.13 0,0050	0.14 0,0055	160 (81 — 240) 520 (270 — 780)
H12	M/A	0.0600 0,0600	2.0 2,0	0.024 0,00095	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.060 0,0024	0.070 0,0028	0.075 0,0030	0.085 0,0034	0.10 0,0040	0.11 0,0044	150 (76 — 220) 490 (250 — 720)
H21	M/A	0.0600 0,0600	2.0 2,0	0.024 0,00095	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.060 0,0024	0.070 0,0028	0.075 0,0030	0.085 0,0034	0.10 0,0040	0.11 0,0044	130 (66 — 190) 425 (220 — 620)
H31	M/A	0.0600 0,0600	2.0 2,0	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.065 0,0026	0.075 0,0030	0.085 0,0034	0.095 0,0038	100 (51 — 150) 330 (170 — 490)
TS1	A/D	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	500 (450 — 550) 1650 (1500 — 1800)
TP1	A/D	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	395 (350 — 440) 1300 (1200 — 1400)
GR1	A/D	0.100 0,100	2.0 2,0	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.15 0,0060	500 (450 — 550) 1650 (1500 — 1800)

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

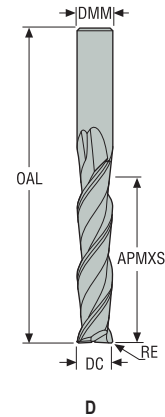
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

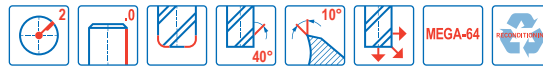
All cutting data are target values

JS522

High performance – Universal – Square – 2 Flutes – High shoulder – Cylindrical – Corner radius



- Tolerances:
- Run-out= Ø6-Ø8 <0,01, Ø10-Ø12 <0,015, Ø16-Ø32 <0,02
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= 0,1+0,1 mm, RE= 0,5 ±0,03 mm
- RE= 3,1 ±0,05 mm, RE= 4 ±0,05 mm
- RE= 6 ±0,05 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
522060R010Z2.0-MEGA-64	02747756	4	D	6,0	6,0	30,0	80,0	0,1	2	Cylindrical	■
522080R010Z2.0-MEGA-64	02747763	4	D	8,0	8,0	40,0	85,0	0,1	2	Cylindrical	■
522100R010Z2.0-MEGA-64	02747765	4	D	10,0	10,0	50,0	100,0	0,1	2	Cylindrical	■
522120R010Z2.0-MEGA-64	02747766	4	D	12,0	12,0	60,0	115,0	0,1	2	Cylindrical	■
522160R050Z2.0-MEGA-64	02747767	4	D	16,0	16,0	80,0	150,0	0,5	2	Cylindrical	■
522160R310Z2.0-MEGA-64	02747768	4	D	16,0	16,0	80,0	150,0	3,1	2	Cylindrical	■
JS522160D4R600.0Z2-M64	03093681	4	D	16,0	16,0	80,0	150,0	6,0	2	Cylindrical	■
522200R050Z2.0-MEGA-64	02747769	4	D	20,0	20,0	100,0	175,0	0,5	2	Cylindrical	■
522200R310Z2.0-MEGA-64	02747770	4	D	20,0	20,0	100,0	175,0	3,1	2	Cylindrical	■
JS522200D4R600.0Z2-M64	03093682	4	D	20,0	20,0	100,0	175,0	6,0	2	Cylindrical	■
522250R050Z2.0-MEGA-64	02747771	4	D	25,0	25,0	125,0	205,0	0,5	2	Cylindrical	■
522250R310Z2.0-MEGA-64	02747772	4	D	25,0	25,0	125,0	205,0	3,1	2	Cylindrical	■
522250R400Z2.0-MEGA-64	02747773	4	D	25,0	25,0	125,0	205,0	4,0	2	Cylindrical	■
JS522250D4R600.0Z2-M64	03093683	4	D	25,0	25,0	125,0	205,0	6,0	2	Cylindrical	■
522320R050Z2.0-MEGA-64	02747774	4	D	32,0	32,0	160,0	245,0	0,5	2	Cylindrical	■
522320R400Z2.0-MEGA-64	02747775	4	D	32,0	32,0	160,0	245,0	4,0	2	Cylindrical	■
JS522320D4R600.0Z2-M64	03093684	4	D	32,0	32,0	160,0	245,0	6,0	2	Cylindrical	■

■ Stocked standard.

*JS522 long flute finisher, with its special geometry designed to machine high shoulders with excellent surface finish and perpendicularity.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS522 Side milling semi finishing

SMG		a _e /DC	a _p /DC	f _z								v _c
				6	8	10	12	16	20	25	32	
P1	E/M/A	0.0500 0,0500	4.0 4,0	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.16 0,0065	160 (140 — 170) 520 (460 — 550)
P2	E/M/A	0.0500 0,0500	4.0 4,0	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	155 (140 — 170) 510 (460 — 550)
P3	E/M/A	0.0500 0,0500	4.0 4,0	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	165 (150 — 180) 540 (500 — 590)
P4	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	145 (130 — 160) 475 (430 — 520)
P5	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	140 (130 — 160) 460 (430 — 520)
P6	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	120 (110 — 140) 395 (370 — 450)
P7	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	115 (95 — 130) 375 (320 — 420)
P8	E/M/A	0.0500 0,0500	4.0 4,0	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	105 (89 — 120) 345 (300 — 390)
P11	E/M/A	0.0500 0,0500	4.0 4,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.20 0,0080	0.22 0,0085	105 (87 — 120) 345 (290 — 390)
P12	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	65 (55 — 75) 215 (190 — 240)
M1	E/M/A	0.0500 0,0500	4.0 4,0	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	110 (86 — 130) 360 (290 — 420)
M2	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	90 (71 — 110) 295 (240 — 360)
M3	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	80 (61 — 100) 260 (210 — 320)
M4	E/M/A	0.0500 0,0500	4.0 4,0	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	0.13 0,0050	60 (47 — 76) 195 (160 — 240)
M5	E/M/A	0.0500 0,0500	4.0 4,0	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	0.13 0,0050	50 (39 — 63) 165 (130 — 200)
K1	E/M/A	0.0500 0,0500	4.0 4,0	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	120 (100 — 130) 395 (330 — 420)
K2	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	105 (87 — 120) 345 (290 — 390)
K3	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	90 (74 — 100) 295 (250 — 320)
K4	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	85 (71 — 98) 280 (240 — 320)
K5	E/M/A	0.0500 0,0500	4.0 4,0	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	100 (81 — 120) 330 (270 — 390)
K6	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	150 (120 — 170) 490 (400 — 550)
K7	E/M/A	0.0500 0,0500	4.0 4,0	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	130 (110 — 150) 425 (370 — 490)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS522 Side milling semi finishing

SMG		a_e/DC	a_p/DC	f_z								v_c
				6	8	10	12	16	20	25	32	
N1	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	400 (310 — 500) 1300 (1100 — 1600)
N2	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	300 (210 — 400) 980 (690 — 1300)
N3	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	200 (140 — 260) 660 (460 — 850)
N11	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	300 (260 — 350) 980 (860 — 1100)
S1	E/M/A	0.0500 0,0500	4.0 4,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	0.055 0,0022	0.065 0,0026	48 (39 — 57) 155 (130 — 180)
S2	E/M/A	0.0500 0,0500	4.0 4,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	0.055 0,0022	0.065 0,0026	39 (31 — 46) 130 (110 — 150)
S3	E/M/A	0.0300 0,0300	4.0 4,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	0.055 0,0022	0.065 0,0026	42 (32 — 51) 140 (110 — 160)
S11	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	125 (100 — 140) 410 (330 — 450)
S12	E/M/A	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	95 (77 — 110) 310 (260 — 360)
S13	E/M/A	0.0500 0,0500	4.0 4,0	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	0.13 0,0050	75 (61 — 90) 245 (210 — 290)
TS1	A/D	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	500 (410 — 600) 1650 (1400 — 1900)
TP1	A/D	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	400 (310 — 500) 1300 (1100 — 1600)
GR1	A/D	0.0500 0,0500	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	500 (410 — 600) 1650 (1400 — 1900)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

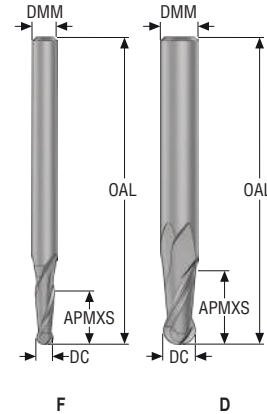
Graphite

X-Heads

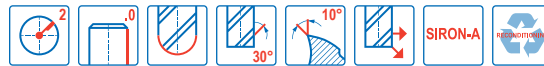
Minimaster

C5321

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical



—Tolerances:
—DMM=h5
—DC= h10
—RE= ±0,01 mm
—Reground possible if DC is ≥Ø10

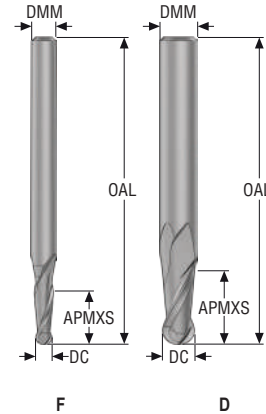


	Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
Non ferrous	C5321-060D1B.0Z2	SIRA	10268679	1	D	6,0	6,0	9,0	57,0	—	—	3,0	2	Cylindrical	■
	C5321-020F2B.0Z2	SIRA	10268669	2	F	2,0	3,0	4,0	38,0	7,683	2,127	1,0	2	Cylindrical	■
	C5321-030D2B.0Z2	SIRA	10268672	2	D	3,0	3,0	6,0	38,0	—	—	1,5	2	Cylindrical	■
Hard	C5321-040D2B.0Z2	SIRA	10268675	2	D	4,0	4,0	8,0	50,0	—	—	2,0	2	Cylindrical	■
	C5321-050F2B.0Z2	SIRA	10268677	2	D	5,0	6,0	10,0	57,0	—	—	2,5	2	Cylindrical	■
	C5321-060D2B.0Z2	SIRA	10268680	2	D	6,0	6,0	12,0	57,0	—	—	3,0	2	Cylindrical	■
	C5321-080D2B.0Z2	SIRA	10268682	2	D	8,0	8,0	16,0	63,0	—	—	4,0	2	Cylindrical	■
	C5321-090F2B.0Z2	SIRA	10268684	2	F	9,0	10,0	22,0	72,0	18,35	9,127	4,5	2	Cylindrical	■
Plastic and cfrp	C5321-100D2B.0Z2	SIRA	10268685	2	D	10,0	10,0	22,0	72,0	—	—	5,0	2	Cylindrical	■
	C5321-120D2B.0Z2	SIRA	10268687	2	D	12,0	12,0	25,0	83,0	—	—	6,0	2	Cylindrical	■
	C5321-015F3B.0Z2	SIRA	10268668	3	F	1,5	3,0	4,5	38,0	8,183	1,627	0,75	2	Cylindrical	■
	C5321-020F3B.0Z2	SIRA	10268670	3	F	2,0	3,0	6,3	38,0	9,983	2,127	1,0	2	Cylindrical	■
	C5321-035F3B.0Z2	SIRA	10268674	3	F	3,5	4,0	12,0	50,0	15,683	3,627	1,75	2	Cylindrical	■
Graphite	C5321-050F3B.0Z2	SIRA	10268678	3	D	5,0	6,0	16,0	57,0	—	—	2,5	2	Cylindrical	■
	C5321-060D3B.0Z2	SIRA	10268681	3	D	6,0	6,0	19,0	63,0	—	—	3,0	2	Cylindrical	■
	C5321-080D3B.0Z2	SIRA	10268683	3	D	8,0	8,0	20,0	63,0	—	—	4,0	2	Cylindrical	■
	C5321-010F4B.0Z2	SIRA	10268667	4	F	1,0	3,0	4,0	38,0	7,683	1,127	0,5	2	Cylindrical	■
	C5321-030D4B.0Z2	SIRA	10268673	4	D	3,0	3,0	12,0	38,0	—	—	1,5	2	Cylindrical	■
	C5321-040D4B.0Z2	SIRA	10268676	4	D	4,0	4,0	14,0	50,0	—	—	2,0	2	Cylindrical	■
	C5321-100D4B.0Z2	SIRA	10268686	4	D	10,0	10,0	35,0	89,0	—	—	5,0	2	Cylindrical	■
	C5321-120D4B.0Z2	SIRA	10268688	4	D	12,0	12,0	50,0	100,0	—	—	6,0	2	Cylindrical	■

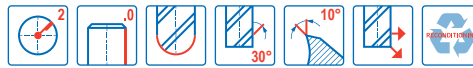
■ Stocked standard.

C5321

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical – Inch



- Tolerances:
- DMM= .0001"/-.0004"
- DC ≤ Ø7/64" = ±.0005"
- DC > Ø7/64" = +.000"/-.002"
- RE= ±.0005"
- Reground possible if DC is ≥ Ø.375



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch	inch			
C5321-.500D1B.0Z2	10268913	1	D	0.500	0.500	0.625	2.500	—	—	0.250	2	Cylindrical	■
C5321-.750D1B.0Z2	10268920	1	D	0.750	0.750	1.000	3.000	—	—	0.375	2	Cylindrical	■
C5321-1.000D1B.0Z2	10268923	1	D	1.000	1.000	1.500	4.000	—	—	0.500	2	Cylindrical	■
C5321-.016F2B.0Z2	10268878	2	F	0.016	0.125	0.031	1.500	0.031	0.021	0.008	2	Cylindrical	■
C5321-.047F2B.0Z2	10268881	2	F	0.047	0.125	0.109	1.500	0.109	0.052	0.023	2	Cylindrical	■
C5321-.063F2B.0Z2	10268883	2	F	0.063	0.125	0.125	1.500	0.125	0.068	0.031	2	Cylindrical	■
C5321-.078F2B.0Z2	10268886	2	F	0.078	0.125	0.188	1.500	0.188	0.083	0.039	2	Cylindrical	■
C5321-.094F2B.0Z2	10268888	2	F	0.094	0.125	0.188	1.500	0.188	0.099	0.047	2	Cylindrical	■
C5321-.125D2B.0Z2	10268891	2	D	0.125	0.125	0.250	1.500	—	—	0.063	2	Cylindrical	■
C5321-.188D2B.0Z2	10268896	2	D	0.188	0.188	0.375	2.000	—	—	0.094	2	Cylindrical	■
C5321-.250D2B.0Z2	10268899	2	D	0.250	0.250	0.500	2.000	—	—	0.125	2	Cylindrical	■
C5321-.375D2B.0Z2	10268908	2	D	0.375	0.375	0.625	2.000	—	—	0.188	2	Cylindrical	■
C5321-.500D2B.0Z2	10268914	2	D	0.500	0.500	1.000	3.000	—	—	0.250	2	Cylindrical	■
C5321-.625D2B.0Z2	10268919	2	D	0.625	0.625	1.250	3.500	—	—	0.313	2	Cylindrical	■
C5321-.750D2B.0Z2	10268921	2	D	0.750	0.750	1.500	4.000	—	—	0.375	2	Cylindrical	■
C5321-.031F3B.0Z2	10268879	3	F	0.031	0.125	0.078	1.500	0.078	0.036	0.016	2	Cylindrical	■
C5321-.047F3B.0Z2	10268882	3	F	0.047	0.125	0.125	1.500	0.125	0.052	0.023	2	Cylindrical	■
C5321-.063F3B.0Z2	10268884	3	F	0.063	0.125	0.188	1.500	0.188	0.068	0.031	2	Cylindrical	■
C5321-.078F3B.0Z2	10268887	3	F	0.078	0.125	0.250	1.500	0.250	0.083	0.039	2	Cylindrical	■
C5321-.094F3B.0Z2	10268889	3	F	0.094	0.125	0.281	1.500	0.281	0.099	0.047	2	Cylindrical	■
C5321-.156F3B.0Z2	10268895	3	F	0.156	0.188	0.500	2.000	0.500	0.161	0.078	2	Cylindrical	■
C5321-.188D3B.0Z2	10268897	3	D	0.188	0.188	0.625	2.000	—	—	0.094	2	Cylindrical	■
C5321-.250D3B.0Z2	10268900	3	D	0.250	0.250	0.750	2.500	—	—	0.125	2	Cylindrical	■
C5321-.281F3B.0Z2	10268904	3	F	0.281	0.313	0.750	2.500	0.750	0.286	0.141	2	Cylindrical	■
C5321-.313D3B.0Z2	10268905	3	D	0.313	0.313	0.813	2.500	—	—	0.156	2	Cylindrical	■
C5321-.375D3B.0Z2	10268909	3	D	0.375	0.375	1.000	2.500	—	—	0.188	2	Cylindrical	■
C5321-.500D3B.0Z2	10268915	3	D	0.500	0.500	1.000	4.000	—	—	0.250	2	Cylindrical	■
C5321-.750D3B.0Z2	10268922	3	D	0.750	0.750	2.000	6.000	—	—	0.375	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

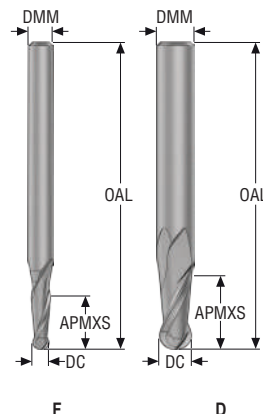
Graphite

X-Heads

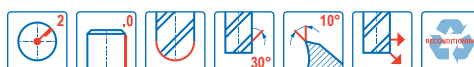
Minimaster

C5321

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical – Inch



—Tolerances:
—DMM = ± 0.001 "/ ± 0.004 "
—DC $\leq \varnothing 7/64$ " = ± 0.005 "
—DC $> \varnothing 7/64$ " = ± 0.007 "/ ± 0.002 "
—RE = ± 0.005 "
—Reground possible if DC is $\geq \varnothing 0.375$

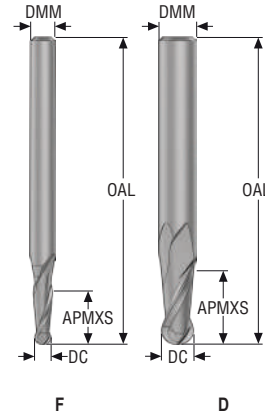


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				inch	inch	inch	inch	inch	inch	inch			
C5321-031F4B.0Z2	10268880	4	F	0.031	0.125	0.094	1.500	0.094	0.036	0.016	2	Cylindrical	■
C5321-063F4B.0Z2	10268885	4	F	0.063	0.125	0.250	1.500	0.250	0.068	0.031	2	Cylindrical	■
C5321-094F4B.0Z2	10268890	4	F	0.094	0.125	0.375	1.500	0.375	0.099	0.047	2	Cylindrical	■
C5321-125D4B.0Z2	10268892	4	D	0.125	0.125	0.500	1.500	—	—	0.063	2	Cylindrical	■
C5321-188D4B.0Z2	10268898	4	D	0.188	0.188	1.000	3.000	—	—	0.094	2	Cylindrical	■
C5321-250D4B.0Z2	10268901	4	D	0.250	0.250	1.000	3.000	—	—	0.125	2	Cylindrical	■
C5321-375D4B.0Z2	10268910	4	D	0.375	0.375	1.000	3.000	—	—	0.188	2	Cylindrical	■
C5321-500D4B.0Z2	10268916	4	D	0.500	0.500	1.500	6.000	—	—	0.250	2	Cylindrical	■
C5321-125D5B.0Z2	10268893	5	D	0.125	0.125	0.625	2.000	—	—	0.063	2	Cylindrical	■
C5321-250D5B.0Z2	10268902	5	D	0.250	0.250	1.000	4.000	—	—	0.125	2	Cylindrical	■
C5321-313D5B.0Z2	10268906	5	D	0.313	0.313	1.000	4.000	—	—	0.156	2	Cylindrical	■
C5321-500D5B.0Z2	10268917	5	D	0.500	0.500	2.000	4.000	—	—	0.250	2	Cylindrical	■
C5321-125D6B.0Z2	10268894	6	D	0.125	0.125	0.750	3.000	—	—	0.063	2	Cylindrical	■
C5321-250D6B.0Z2	10268903	6	D	0.250	0.250	1.500	4.000	—	—	0.125	2	Cylindrical	■
C5321-375D6B.0Z2	10268911	6	D	0.375	0.375	1.500	6.000	—	—	0.188	2	Cylindrical	■
C5321-500D6B.0Z2	10268918	6	D	0.500	0.500	3.000	6.000	—	—	0.250	2	Cylindrical	■
C5321-313D7B.0Z2	10268907	7	D	0.313	0.313	1.625	4.000	—	—	0.156	2	Cylindrical	■
C5321-375D7B.0Z2	10268912	7	D	0.375	0.375	2.000	4.000	—	—	0.188	2	Cylindrical	■

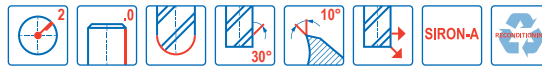
■ Stocked standard.

C5321

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical – Inch



- Tolerances:
- DMM= -.0001"/-.0004"
- DC ≤ Ø7/64" = ±.0005"
- DC > Ø7/64" = +.000"/-.002"
- RE= ±.0005"
- Regrind possible if DC is ≥ Ø.375



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
C5321-.500D1B.0Z2	SIRA	10268630	1	D	0.500	0.500	0.625	2.500	—	—	0.250	2	Cylindrical	■
C5321-.750D1B.0Z2	SIRA	10268637	1	D	0.750	0.750	1.000	3.000	—	—	0.375	2	Cylindrical	■
C5321-1.000D1B.0Z2	SIRA	10268640	1	D	1.000	1.000	1.500	4.000	—	—	0.500	2	Cylindrical	■
C5321-.016F2B.0Z2	SIRA	10268595	2	F	0.016	0.125	0.031	1.500	0.031	0.021	0.008	2	Cylindrical	■
C5321-.047F2B.0Z2	SIRA	10268598	2	F	0.047	0.125	0.109	1.500	0.109	0.052	0.023	2	Cylindrical	■
C5321-.063F2B.0Z2	SIRA	10268600	2	F	0.063	0.125	0.125	1.500	0.125	0.068	0.031	2	Cylindrical	■
C5321-.078F2B.0Z2	SIRA	10268603	2	F	0.078	0.125	0.188	1.500	0.188	0.083	0.039	2	Cylindrical	■
C5321-.094F2B.0Z2	SIRA	10268605	2	F	0.094	0.125	0.188	1.500	0.188	0.099	0.047	2	Cylindrical	■
C5321-.125D2B.0Z2	SIRA	10268608	2	D	0.125	0.125	0.250	1.500	—	—	0.063	2	Cylindrical	■
C5321-.188D2B.0Z2	SIRA	10268613	2	D	0.188	0.188	0.375	2.000	—	—	0.094	2	Cylindrical	■
C5321-.250D2B.0Z2	SIRA	10268616	2	D	0.250	0.250	0.500	2.000	—	—	0.125	2	Cylindrical	■
C5321-.375D2B.0Z2	SIRA	10268625	2	D	0.375	0.375	0.625	2.000	—	—	0.188	2	Cylindrical	■
C5321-.500D2B.0Z2	SIRA	10268631	2	D	0.500	0.500	1.000	3.000	—	—	0.250	2	Cylindrical	■
C5321-.625D2B.0Z2	SIRA	10268636	2	D	0.625	0.625	1.250	3.500	—	—	0.313	2	Cylindrical	■
C5321-.750D2B.0Z2	SIRA	10268638	2	D	0.750	0.750	1.500	4.000	—	—	0.375	2	Cylindrical	■
C5321-.031F3B.0Z2	SIRA	10268596	3	F	0.031	0.125	0.078	1.500	0.078	0.036	0.016	2	Cylindrical	■
C5321-.047F3B.0Z2	SIRA	10268599	3	F	0.047	0.125	0.125	1.500	0.125	0.052	0.023	2	Cylindrical	■
C5321-.063F3B.0Z2	SIRA	10268601	3	F	0.063	0.125	0.188	1.500	0.188	0.068	0.031	2	Cylindrical	■
C5321-.078F3B.0Z2	SIRA	10268604	3	F	0.078	0.125	0.250	1.500	0.250	0.083	0.039	2	Cylindrical	■
C5321-.094F3B.0Z2	SIRA	10268606	3	F	0.094	0.125	0.281	1.500	0.281	0.099	0.047	2	Cylindrical	■
C5321-.156F3B.0Z2	SIRA	10268612	3	F	0.156	0.188	0.500	2.000	0.500	0.161	0.078	2	Cylindrical	■
C5321-.188D3B.0Z2	SIRA	10268614	3	D	0.188	0.188	0.625	2.000	—	—	0.094	2	Cylindrical	■
C5321-.250D3B.0Z2	SIRA	10268617	3	D	0.250	0.250	0.750	2.500	—	—	0.125	2	Cylindrical	■
C5321-.281F3B.0Z2	SIRA	10268621	3	F	0.281	0.313	0.750	2.500	0.750	0.286	0.141	2	Cylindrical	■
C5321-.313D3B.0Z2	SIRA	10268622	3	D	0.313	0.313	0.813	2.500	—	—	0.156	2	Cylindrical	■
C5321-.375D3B.0Z2	SIRA	10268626	3	D	0.375	0.375	1.000	2.500	—	—	0.188	2	Cylindrical	■
C5321-.500D3B.0Z2	SIRA	10268632	3	D	0.500	0.500	1.000	4.000	—	—	0.250	2	Cylindrical	■
C5321-.750D3B.0Z2	SIRA	10268639	3	D	0.750	0.750	2.000	6.000	—	—	0.375	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfzp

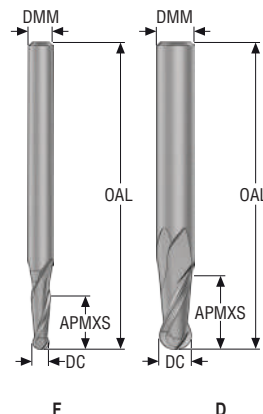
Graphite

X-Heads

Minimaster

C5321

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical – Inch



—Tolerances:

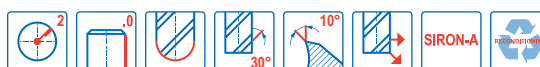
—DMM= -.0001"/-.0004"

—DC ≤ Ø7/64" = ±.0005"

—DC > Ø7/64" = ±.0007"/-.002"

—RE= ±.0005"

—Regrind possible if DC is ≥ Ø.375

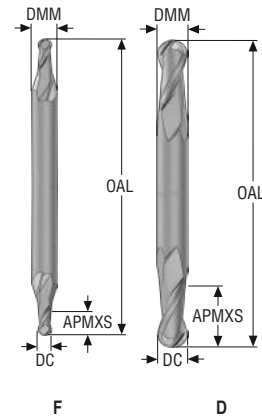


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
C5321-.031F4B.0Z2	SIRA	10268597	4	F	0.031	0.125	0.094	1.500	0.094	0.036	0.016	2	Cylindrical	■
C5321-.063F4B.0Z2	SIRA	10268602	4	F	0.063	0.125	0.250	1.500	0.250	0.068	0.031	2	Cylindrical	■
C5321-.094F4B.0Z2	SIRA	10268607	4	F	0.094	0.125	0.375	1.500	0.375	0.099	0.047	2	Cylindrical	■
C5321-.125D4B.0Z2	SIRA	10268609	4	D	0.125	0.125	0.500	1.500	—	—	0.063	2	Cylindrical	■
C5321-.188D4B.0Z2	SIRA	10268615	4	D	0.188	0.188	1.000	3.000	—	—	0.094	2	Cylindrical	■
C5321-.250D4B.0Z2	SIRA	10268618	4	D	0.250	0.250	1.000	3.000	—	—	0.125	2	Cylindrical	■
C5321-.375D4B.0Z2	SIRA	10268627	4	D	0.375	0.375	1.000	3.000	—	—	0.188	2	Cylindrical	■
C5321-.500D4B.0Z2	SIRA	10268633	4	D	0.500	0.500	1.500	6.000	—	—	0.250	2	Cylindrical	■
C5321-.125D5B.0Z2	SIRA	10268610	5	D	0.125	0.125	0.625	2.000	—	—	0.063	2	Cylindrical	■
C5321-.250D5B.0Z2	SIRA	10268619	5	D	0.250	0.250	1.000	4.000	—	—	0.125	2	Cylindrical	■
C5321-.313D5B.0Z2	SIRA	10268623	5	D	0.313	0.313	1.000	4.000	—	—	0.156	2	Cylindrical	■
C5321-.500D5B.0Z2	SIRA	10268634	5	D	0.500	0.500	2.000	4.000	—	—	0.250	2	Cylindrical	■
C5321-.125D6B.0Z2	SIRA	10268611	6	D	0.125	0.125	0.750	3.000	—	—	0.063	2	Cylindrical	■
C5321-.250D6B.0Z2	SIRA	10268620	6	D	0.250	0.250	1.500	4.000	—	—	0.125	2	Cylindrical	■
C5321-.375D6B.0Z2	SIRA	10268628	6	D	0.375	0.375	1.500	6.000	—	—	0.188	2	Cylindrical	■
C5321-.500D6B.0Z2	SIRA	10268635	6	D	0.500	0.500	3.000	6.000	—	—	0.250	2	Cylindrical	■
C5321-.313D7B.0Z2	SIRA	10268624	7	D	0.313	0.313	1.625	4.000	—	—	0.156	2	Cylindrical	■
C5321-.375D7B.0Z2	SIRA	10268629	7	D	0.375	0.375	2.000	4.000	—	—	0.188	2	Cylindrical	■

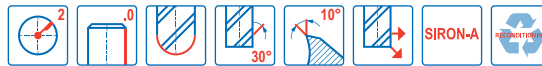
■ Stocked standard.

C5321

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical – Inch



- Tolerances:
- DMM= $-.0001"/-0.0004"$
- DC $\leq \varnothing 7/64" = \pm 0.0005"$
- DC $> \varnothing 7/64" = +0.000"/-0.002"$
- RE= $\pm 0.0005"$
- Double end
- Regrind possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
C5321-.500D1B.0Z2D	SIRA	10268666	1	D	0.500	0.500	0.625	3.000	—	—	0.250	2	Cylindrical	■
C5321-.031F2B.0Z2D	SIRA	10268656	2	F	0.031	0.125	0.063	1.500	0.063	0.036	0.016	2	Cylindrical	■
C5321-.047F2B.0Z2D	SIRA	10268657	2	F	0.047	0.125	0.094	1.500	0.094	0.052	0.023	2	Cylindrical	■
C5321-.063F2B.0Z2D	SIRA	10268658	2	F	0.063	0.125	0.125	1.500	0.125	0.068	0.031	2	Cylindrical	■
C5321-.078F2B.0Z2D	SIRA	10268659	2	F	0.078	0.125	0.125	1.500	0.125	0.083	0.039	2	Cylindrical	■
C5321-.094F2B.0Z2D	SIRA	10268660	2	F	0.094	0.125	0.188	1.500	0.188	0.099	0.047	2	Cylindrical	■
C5321-.125D2B.0Z2D	SIRA	10268661	2	D	0.125	0.125	0.250	1.500	—	—	0.063	2	Cylindrical	■
C5321-.188D2B.0Z2D	SIRA	10268662	2	D	0.188	0.188	0.375	2.000	—	—	0.094	2	Cylindrical	■
C5321-.250D2B.0Z2D	SIRA	10268663	2	D	0.250	0.250	0.500	2.500	—	—	0.125	2	Cylindrical	■
C5321-.313D2B.0Z2D	SIRA	10268664	2	D	0.313	0.313	0.500	2.500	—	—	0.156	2	Cylindrical	■
C5321-.375D2B.0Z2D	SIRA	10268665	2	D	0.375	0.375	0.563	2.500	—	—	0.188	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – C5321 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z												v _c
				1	1,5	2	3	3,5	4	5	6	8	9	10	12	
P1	E	0,10	1,0	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,024	0,032	0,036	0,04	0,048	150 (135 — 165)
		0.10	1.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.00095	0.0013	0.0014	0.0016	0.0019	490 (440— 540)
P2	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	58 (45— 70)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	190 (147 — 230)
P3	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	85 (70 — 95)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	279 (246 — 312)
P4	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	100 (90 — 110)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	330 (295 — 360)
P5	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	68 (50 — 75)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	223 (165 — 245)
P6	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	87 (77 — 100)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	285 (250 — 330)
P7	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	65 (55 — 75)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	213 (180 — 245)
P8	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	65 (50 — 75)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	213 (165 — 245)
P11	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	85 (70 — 95)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	280 (230 — 310)
P12	E	0,10	1,0	0,0025	0,0038	0,005	0,0075	0,009	0,01	0,013	0,015	0,02	0,022	0,025	0,03	55 (45— 65)
		0.10	1.0	0.00010	0.00015	0.00020	0.00030	0.00036	0.00040	0.00050	0.00060	0.00080	0.00085	0.0010	0.0012	180 (147 — 213)
M1	E	0,10	1,0	0,0038	0,0055	0,0075	0,011	0,013	0,015	0,019	0,022	0,03	0,034	0,038	0,044	93 (83 — 100)
		0.10	1.0	0.00015	0.00022	0.00030	0.00044	0.00050	0.00060	0.00075	0.00085	0.0012	0.0013	0.0015	0.0017	305 (270 — 360)
M2	E	0,10	1,0	0,0038	0,0055	0,0075	0,011	0,013	0,015	0,019	0,022	0,03	0,034	0,038	0,044	60 (50 — 70)
		0.10	1.0	0.00015	0.00022	0.00030	0.00044	0.00050	0.00060	0.00075	0.00085	0.0012	0.0013	0.0015	0.0017	200 (165 — 230)
M3	E	0,10	1,0	0,0038	0,0055	0,0075	0,011	0,013	0,015	0,019	0,022	0,03	0,034	0,038	0,044	55 (45— 65)
		0.10	1.0	0.00015	0.00022	0.00030	0.00044	0.00050	0.00060	0.00075	0.00085	0.0012	0.0013	0.0015	0.0017	180 (147 — 213)
M4	E	0,10	1,0	0,0038	0,0055	0,0075	0,011	0,013	0,015	0,019	0,022	0,03	0,034	0,038	0,044	45 (35 — 55)
		0.10	1.0	0.00015	0.00022	0.00030	0.00044	0.00050	0.00060	0.00075	0.00085	0.0012	0.0013	0.0015	0.0017	147 (115 — 180)
M5	E	0,10	1,0	0,0034	0,005	0,0065	0,01	0,012	0,013	0,017	0,02	0,026	0,03	0,034	0,04	35 (20 — 45)
		0.10	1.0	0.00013	0.00020	0.00026	0.0004	0.00048	0.00050	0.00065	0.00080	0.0010	0.0012	0.0013	0.0016	114 (65 — 147)
K1	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	80 (70 — 90)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	260 (230 — 290)
K2	E	0,10	1,0	0,0044	0,0065	0,0085	0,013	0,015	0,017	0,022	0,026	0,034	0,04	0,044	0,05	87 (75 — 100)
		0.10	1.0	0.00017	0.00026	0.00034	0.00050	0.00060	0.00065	0.00085	0.0010	0.0013	0.0016	0.0017	0.0020	285 (245 — 330)
K3	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	65 (55 — 75)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	213 (180 — 245)
K4	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	50 (35 — 65)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	165 (115 — 213)
K5	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	45 (30 — 55)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	147 (100 — 180)
K6	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	77 (65 — 85)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	250 (210 — 280)
K7	E	0,10	1,0	0,0032	0,0048	0,0065	0,0095	0,011	0,013	0,016	0,019	0,026	0,028	0,032	0,038	77 (60 — 90)
		0.10	1.0	0.00013	0.00019	0.00026	0.00038	0.00044	0.00050	0.00065	0.00075	0.0010	0.0011	0.0013	0.0015	250 (200 — 290)
S1	E	0,10	1,0	0,004	0,006	0,008	0,012	0,014	0,016	0,02	0,024	0,032	0,036	0,04	0,048	50 (35 — 60)
		0.10	1.0	0.00016	0.00024	0.00032	0.00048	0.00055	0.00065	0.00080	0.00095	0.0013	0.0014	0.0016	0.0019	165 (115 — 200)
S2	E	0,10	1,0	0,0028	0,004	0,0055	0,008	0,0095	0,011	0,014	0,016	0,022	0,025	0,028	0,032	25 (15 — 35)
		0.10	1.0	0.00011	0.00016	0.00022	0.00032	0.00038	0.00044	0.00055	0.00065	0.00085	0.0010	0.0011	0.0013	82 (50 — 115)
S3	E	0,10	1,0	0,0017	0,0026	0,0034	0,005	0,006	0,007	0,0085	0,01	0,014	0,015	0,017	0,02	11 (7,5 — 16)
		0.10	1.0	0.000065	0.00010	0.00013	0.00020	0.00024	0.00028	0.00034	0.00040	0.00055	0.00060	0.00065	0.00080	35 (25 — 52)
S11	E	0,10	1,0	0,0038	0,0055	0,0075	0,011	0,013	0,015	0,019	0,022	0,03	0,034	0,038	0,044	110 (95 — 120)
		0.10	1.0	0.00015	0.00022	0.00030	0.00044	0.00050	0.00060	0.00075	0.00085	0.0012	0.0013	0.0015	0.0017	360 (311 — 390)
S12	E	0,10	1,0	0,0025	0,0038	0,005	0,0075	0,009	0,01	0,013	0,015	0,02	0,022	0,025	0,03	77 (60 — 90)
		0.10	1.0	0.00010	0.00015	0.00020	0.00030	0.00036	0.00040	0.00050	0.00060	0.00080	0.00085	0.0010	0.0012	250 (190 — 290)
S13	E	0,10	1,0	0,0025	0,0038	0,005	0,0075	0,009	0,01	0,013	0,015	0,02	0,022	0,025	0,03	30 (20 — 40)
		0.10	1.0	0.00010	0.00015	0.00020	0.00030	0.00036	0.00040	0.00050	0.00060	0.00080	0.00085	0.0010	0.0012	100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – C5321 Side milling roughing – Inch

SMG		a _e /DC	a _p /DC	f _z													v _c
				1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1	
P1	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,05 0.0020	0,06 0.0024	0,065 0.0026	0,08 0.0032	150 (135 — 165) 490 (440 — 540)
P2	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	58 (45 — 70) 190 (147 — 230)
P3	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	85 (70 — 95) 279 (246 — 312)
P4	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	100 (90 — 110) 330 (295 — 360)
P5	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	68 (50 — 75) 223 (165 — 245)
P6	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	87 (77 — 100) 285 (250 — 330)
P7	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	65 (55 — 75) 213 (180 — 245)
P8	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	65 (55 — 75) 213 (165 — 245)
P11	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	85 (70 — 95) 280 (230 — 310)
P12	E	0,10 0.10	1,0 1.0	0,002 0.000080	0,004 0.00016	0,008 0.00032	0,01 0.00040	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,024 0.00095	0,03 0.0013	0,032 0.0015	0,038 0.0017	0,042 0.0020	55 (45 — 65) 180 (147 — 213)
M1	E	0,10 0.10	1,0 1.0	0,003 0.00012	0,006 0.00024	0,012 0.00048	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,03 0.0012	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,06 0.0024	0,07 0.0028	93 (83 — 100) 305 (270 — 360)
M2	E	0,10 0.10	1,0 1.0	0,003 0.00012	0,006 0.00024	0,012 0.00048	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,03 0.0012	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,06 0.0024	0,07 0.0028	60 (50 — 70) 200 (165 — 230)
M3	E	0,10 0.10	1,0 1.0	0,003 0.00012	0,006 0.00024	0,012 0.00048	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,03 0.0012	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,06 0.0024	0,07 0.0028	55 (45 — 65) 180 (147 — 213)
M4	E	0,10 0.10	1,0 1.0	0,003 0.00012	0,006 0.00024	0,012 0.00048	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,03 0.0012	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,06 0.0024	0,07 0.0028	45 (35 — 55) 147 (115 — 180)
M5	E	0,10 0.10	1,0 1.0	0,0026 0.00010	0,0055 0.00022	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,042 0.0017	0,048 0.0019	0,055 0.0022	0,065 0.0026	35 (20 — 45) 114 (65 — 147)
K1	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	80 (70 — 90) 260 (230 — 290)
K2	E	0,10 0.10	1,0 1.0	0,0034 0.00013	0,007 0.00028	0,014 0.00055	0,017 0.00065	0,02 0.00080	0,024 0.00095	0,028 0.0011	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,065 0.0026	0,07 0.0028	0,085 0.0034	87 (75 — 100) 285 (245 — 330)
K3	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	65 (55 — 75) 213 (180 — 245)
K4	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	50 (35 — 65) 165 (115 — 213)
K5	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	45 (30 — 55) 147 (100 — 180)
K6	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	77 (65 — 85) 250 (210 — 280)
K7	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,005 0.00020	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,04 0.0016	0,046 0.0018	0,055 0.0022	0,06 0.0024	77 (60 — 90) 250 (200 — 290)
S1	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0065 0.00026	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,022 0.00085	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,05 0.0020	0,06 0.0024	0,065 0.0026	0,08 0.0032	50 (35 — 60) 165 (115 — 200)
S2	E	0,10 0.10	1,0 1.0	0,0022 0.000085	0,0044 0.00017	0,009 0.00036	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,018 0.00070	0,022 0.00085	0,026 0.0010	0,034 0.0013	0,04 0.0016	0,044 0.0017	0,055 0.0022	25 (15 — 35) 82 (50 — 115)
S3	E	0,10 0.10	1,0 1.0	0,0014 0.000055	0,0028 0.00011	0,0055 0.00022	0,007 0.00028	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,025 0.0010	0,028 0.0011	0,034 0.0013	11 (7,5 — 16) 35 (25 — 52)
S11	E	0,10 0.10	1,0 1.0	0,003 0.00012	0,006 0.00024	0,012 0.00048	0,015 0.00060	0,018 0.00070	0,02 0.00080	0,024 0.00095	0,03 0.0012	0,036 0.0014	0,046 0.0018	0,055 0.0022	0,06 0.0024	0,07 0.0028	110 (95 — 120) 360 (311 — 390)
S12	E	0,10 0.10	1,0 1.0	0,002 0.000080	0,004 0.00016	0,008 0.00032	0,01 0.00040	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,024 0.00095	0,032 0.0013	0,038 0.0015	0,042 0.0017	0,05 0.0020	77 (60 — 90) 250 (190 — 290)
S13	E	0,10 0.10	1,0 1.0	0,002 0.000080	0,004 0.00016	0,008 0.00032	0,01 0.00040	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,024 0.00095	0,032 0.0013	0,038 0.0015	0,042 0.0017	0,05 0.0020	30 (20 — 40) 100 (65 — 130)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

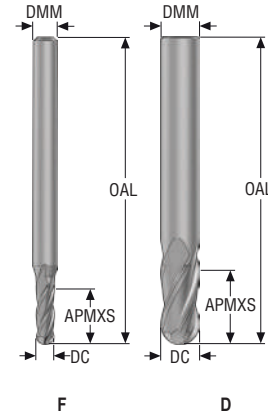
a_e = mm/DC (in/DC) = factor

All cutting data are target values

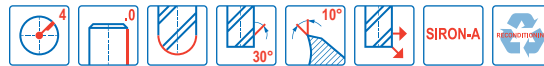
Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cfpr
Graphite
X-Heads
Minimaster

C5341

General purpose – Universal – Ball nose – 4 Flutes – Cylindrical



—Tolerances:
—DMM=h5
—DC= h10
—RE= ±0,01 mm
—Regrind possible if DC is ≥Ø10

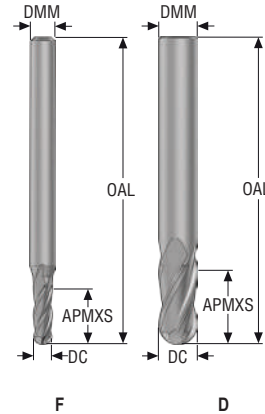


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
C5341-020F2B.0Z4	SIRA	10268568	2	F	2,0	3,0	4,0	39,0	7,683	2,127	1,0	4	Cylindrical	■
C5341-030D2B.0Z4	SIRA	10268570	2	D	3,0	3,0	6,0	39,0	—	—	1,5	4	Cylindrical	■
C5341-040D2B.0Z4	SIRA	10268573	2	D	4,0	4,0	8,0	50,0	—	—	2,0	4	Cylindrical	■
C5341-050F2B.0Z4	SIRA	10268575	2	D	5,0	6,0	10,0	57,0	—	—	2,5	4	Cylindrical	■
C5341-060D1B.0Z4	SIRA	10268577	2	D	6,0	6,0	9,0	51,0	—	—	3,0	4	Cylindrical	■
C5341-060D2B.0Z4	SIRA	10268578	2	D	6,0	6,0	12,0	57,0	—	—	3,0	4	Cylindrical	■
C5341-080D2B.0Z4	SIRA	10268580	2	D	8,0	8,0	16,0	63,0	—	—	4,0	4	Cylindrical	■
C5341-090F2B.0Z4	SIRA	10268581	2	F	9,0	10,0	22,0	72,0	18,35	9,127	4,5	4	Cylindrical	■
C5341-100D2B.0Z4	SIRA	10268582	2	D	10,0	10,0	22,0	73,0	—	—	5,0	4	Cylindrical	■
C5341-120D2B.0Z4	SIRA	10268584	2	D	12,0	12,0	25,0	74,0	—	—	6,0	4	Cylindrical	■
C5341-160D2B.0Z4	SIRA	10268586	2	D	16,0	16,0	32,0	92,0	—	—	8,0	4	Cylindrical	■
C5341-200D2B.0Z4	SIRA	10268588	2	D	20,0	20,0	35,0	104,0	—	—	10,0	4	Cylindrical	■
C5341-015F3B.0Z4	SIRA	10268567	3	F	1,5	3,0	4,5	38,0	8,183	1,627	0,75	4	Cylindrical	■
C5341-020F3B.0Z4	SIRA	10268569	3	F	2,0	3,0	6,3	38,0	9,983	2,127	1,0	4	Cylindrical	■
C5341-035F3B.0Z4	SIRA	10268572	3	F	3,5	4,0	12,0	50,0	15,683	3,627	1,5	4	Cylindrical	■
C5341-050F3B.0Z4	SIRA	10268576	3	F	5,0	6,0	16,0	51,0	—	—	2,5	4	Cylindrical	■
C5341-060D3B.0Z4	SIRA	10268579	3	D	6,0	6,0	19,0	51,0	—	—	3,0	4	Cylindrical	■
C5341-160D3B.0Z4	SIRA	10268587	3	D	16,0	16,0	50,0	115,0	—	—	8,0	4	Cylindrical	■
C5341-200D3B.0Z4	SIRA	10268589	3	D	20,0	20,0	60,0	125,0	—	—	10,0	4	Cylindrical	■
C5341-010F4B.0Z4	SIRA	10268566	4	F	1,0	3,0	4,0	39,0	7,683	1,127	0,5	4	Cylindrical	■
C5341-030D4B.0Z4	SIRA	10268571	4	D	3,0	3,0	12,0	39,0	—	—	1,5	4	Cylindrical	■
C5341-040D4B.0Z4	SIRA	10268574	4	D	4,0	4,0	14,0	51,0	—	—	2,0	4	Cylindrical	■
C5341-100D4B.0Z4	SIRA	10268583	4	D	10,0	10,0	35,0	89,0	—	—	5,0	4	Cylindrical	■
C5341-120D4B.0Z4	SIRA	10268585	4	D	12,0	12,0	50,0	100,0	—	—	6,0	4	Cylindrical	■

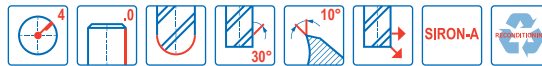
■ Stocked standard.

C5341

General purpose – Universal – Ball nose – 4 Flutes – Cylindrical – Inch



—Tolerances:
—DMM= $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +0.000"/-0.002"$
—RE= $\pm 0.0005"$
—Regrind possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
C5341-.500D1B.0Z4	SIRA	10268532	1	D	0.500	0.500	0.625	2.500	—	—	0.250	4	Cylindrical	■
C5341-.625D1B.0Z4	SIRA	10268539	1	D	0.625	0.625	0.750	3.000	—	—	0.313	4	Cylindrical	■
C5341-.750D1B.0Z4	SIRA	10268543	1	D	0.750	0.750	1.000	3.000	—	—	0.375	4	Cylindrical	■
C5341-.016F2B.0Z4	SIRA	10268474	2	F	0.016	0.125	0.031	1.500	0.031	0.021	0.008	4	Cylindrical	■
C5341-.047F2B.0Z4	SIRA	10268477	2	F	0.047	0.125	0.109	1.500	0.109	0.052	0.023	4	Cylindrical	■
C5341-.063F2B.0Z4	SIRA	10268479	2	F	0.063	0.125	0.125	1.500	0.125	0.068	0.031	4	Cylindrical	■
C5341-.078F2B.0Z4	SIRA	10268483	2	F	0.078	0.125	0.188	1.500	0.188	0.083	0.039	4	Cylindrical	■
C5341-.094F2B.0Z4	SIRA	10268485	2	F	0.094	0.125	0.188	1.500	0.188	0.099	0.047	4	Cylindrical	■
C5341-.125D2B.0Z4	SIRA	10268490	2	D	0.125	0.125	0.250	1.500	—	—	0.063	4	Cylindrical	■
C5341-.156F2B.0Z4	SIRA	10268497	2	F	0.156	0.188	0.313	2.000	0.313	0.161	0.078	4	Cylindrical	■
C5341-.188D2B.0Z4	SIRA	10268500	2	D	0.188	0.188	0.375	2.000	—	—	0.094	4	Cylindrical	■
C5341-.250D2B.0Z4	SIRA	10268508	2	D	0.250	0.250	0.500	2.000	—	—	0.125	4	Cylindrical	■
C5341-.313D2B.0Z4	SIRA	10268515	2	D	0.313	0.313	0.500	2.000	—	—	0.156	4	Cylindrical	■
C5341-.375D2B.0Z4	SIRA	10268521	2	D	0.375	0.375	0.625	2.000	—	—	0.188	4	Cylindrical	■
C5341-.406F2B.0Z4	SIRA	10268528	2	F	0.406	0.438	1.000	2.750	1.000	0.411	0.203	4	Cylindrical	■
C5341-.438D2B.0Z4	SIRA	10268529	2	D	0.438	0.438	1.000	2.750	—	—	0.219	4	Cylindrical	■
C5341-.469F2B.0Z4	SIRA	10268531	2	F	0.469	0.500	1.000	3.000	1.000	0.474	0.234	4	Cylindrical	■
C5341-.500D2B.0Z4	SIRA	10268533	2	D	0.500	0.500	1.000	3.000	—	—	0.250	4	Cylindrical	■
C5341-.563D2B.0Z4	SIRA	10268538	2	D	0.563	0.563	1.125	3.500	—	—	0.281	4	Cylindrical	■
C5341-.625D2B.0Z4	SIRA	10268540	2	D	0.625	0.625	1.250	3.500	—	—	0.313	4	Cylindrical	■
C5341-.750D2B.0Z4	SIRA	10268544	2	D	0.750	0.750	1.500	4.000	—	—	0.375	4	Cylindrical	■
C5341-.875D2B.0Z4	SIRA	10268548	2	D	0.875	0.875	1.500	4.000	—	—	0.438	4	Cylindrical	■
C5341-1.000D2B.0Z4	SIRA	10268549	2	D	1.000	1.000	1.500	4.000	—	—	0.500	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

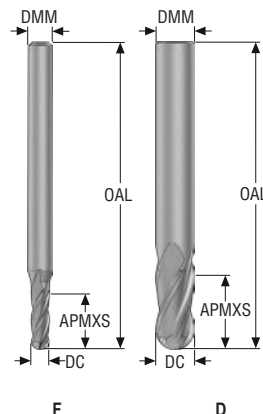
Graphite

X-Heads

Minimaster

C5341

General purpose – Universal – Ball nose – 4 Flutes – Cylindrical – Inch



—Tolerances:

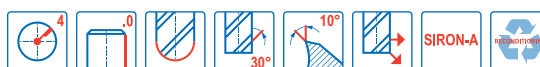
—DMM= -.0001"/-.0004"

—DC ≤ Ø7/64" = ±.0005"

—DC > Ø7/64" = +.000"/-.002"

—RE= ±.0005"

—Regrind possible if DC is ≥ Ø.375

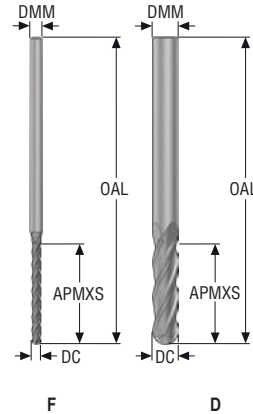


	Designation	Grade	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		LN		DN		RE		PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch	inch			
Universal	C5341-.031F3B.0Z4	SIRA	10268475	3	F	0.031	0.125	0.078	1.500	0.078	0.036	0.016	4	Cylindrical	■							
	C5341-.047F3B.0Z4	SIRA	10268478	3	F	0.047	0.125	0.125	1.500	0.125	0.052	0.023	4	Cylindrical	■							
	C5341-.063F3B.0Z4	SIRA	10268480	3	F	0.063	0.125	0.188	1.500	0.188	0.068	0.031	4	Cylindrical	■							
	C5341-.078F3B.0Z4	SIRA	10268484	3	F	0.078	0.125	0.250	1.500	0.250	0.083	0.039	4	Cylindrical	■							
Steel and cast iron	C5341-.094F3B.0Z4	SIRA	10268486	3	F	0.094	0.125	0.281	1.500	0.281	0.099	0.047	4	Cylindrical	■							
	C5341-.109F3B.0Z4	SIRA	10268489	3	F	0.109	0.125	0.375	1.500	0.375	0.114	0.055	4	Cylindrical	■							
	C5341-.156F3B.0Z4	SIRA	10268498	3	F	0.156	0.188	0.500	2.000	0.500	0.161	0.078	4	Cylindrical	■							
	C5341-.188D3B.0Z4	SIRA	10268501	3	D	0.188	0.188	0.625	2.000	—	—	0.094	4	Cylindrical	■							
Stainless steel and S-materials	C5341-.203F3B.0Z4	SIRA	10268505	3	F	0.203	0.250	0.625	2.500	0.625	0.208	0.102	4	Cylindrical	■							
	C5341-.219F3B.0Z4	SIRA	10268506	3	F	0.219	0.250	0.625	2.500	0.625	0.224	0.109	4	Cylindrical	■							
	C5341-.234F3B.0Z4	SIRA	10268507	3	F	0.234	0.250	0.750	2.500	0.750	0.239	0.117	4	Cylindrical	■							
	C5341-.250D3B.0Z4	SIRA	10268509	3	D	0.250	0.250	0.750	2.500	—	—	0.125	4	Cylindrical	■							
Non ferrous	C5341-.281F3B.0Z4	SIRA	10268514	3	F	0.281	0.313	0.750	2.500	0.750	0.286	0.141	4	Cylindrical	■							
	C5341-.313D3B.0Z4	SIRA	10268516	3	D	0.313	0.313	0.813	2.500	—	—	0.156	4	Cylindrical	■							
	C5341-.328F3B.0Z4	SIRA	10268519	3	F	0.328	0.375	1.000	2.500	1.000	0.333	0.164	4	Cylindrical	■							
	C5341-.344F3B.0Z4	SIRA	10268520	3	F	0.344	0.375	1.000	2.500	1.000	0.349	0.172	4	Cylindrical	■							
Hard	C5341-.375D3B.0Z4	SIRA	10268522	3	D	0.375	0.375	1.000	2.500	—	—	0.188	4	Cylindrical	■							
	C5341-.438D3B.0Z4	SIRA	10268530	3	D	0.438	0.438	1.000	4.000	—	—	0.219	4	Cylindrical	■							
	C5341-.500D3B.0Z4	SIRA	10268534	3	D	0.500	0.500	1.000	4.000	—	—	0.250	4	Cylindrical	■							
	C5341-.625D3B.0Z4	SIRA	10268541	3	D	0.625	0.625	2.000	6.000	—	—	0.313	4	Cylindrical	■							
Plastic and cfrp	C5341-.750D3B.0Z4	SIRA	10268545	3	D	0.750	0.750	2.000	6.000	—	—	0.375	4	Cylindrical	■							
	C5341-1.000D3B.0Z4	SIRA	10268550	3	D	1.000	1.000	2.000	6.000	—	—	0.500	4	Cylindrical	■							
	C5341-.031F4B.0Z4	SIRA	10268476	4	F	0.031	0.125	0.094	1.500	0.094	0.036	0.016	4	Cylindrical	■							
	C5341-.063F4B.0Z4	SIRA	10268481	4	F	0.063	0.125	0.250	1.500	0.250	0.068	0.031	4	Cylindrical	■							
Graphite	C5341-.094F4B.0Z4	SIRA	10268487	4	F	0.094	0.125	0.375	1.500	0.375	0.099	0.047	4	Cylindrical	■							
	C5341-.125D4B.0Z4	SIRA	10268491	4	D	0.125	0.125	0.500	1.500	—	—	0.063	4	Cylindrical	■							
	C5341-.141F4B.0Z4	SIRA	10268496	4	F	0.141	0.188	0.500	2.000	0.500	0.146	0.070	4	Cylindrical	■							
	C5341-.172F4B.0Z4	SIRA	10268499	4	F	0.172	0.188	0.625	2.000	0.625	0.177	0.086	4	Cylindrical	■							
X-Heads	C5341-.188D4B.0Z4	SIRA	10268502	4	D	0.188	0.188	1.000	3.000	—	—	0.094	4	Cylindrical	■							
	C5341-.250D4B.0Z4	SIRA	10268510	4	D	0.250	0.250	1.000	3.000	—	—	0.125	4	Cylindrical	■							
	C5341-.313D4B.0Z4	SIRA	10268517	4	D	0.313	0.313	1.000	3.000	—	—	0.156	4	Cylindrical	■							
	C5341-.375D4B.0Z4	SIRA	10268523	4	D	0.375	0.375	1.000	3.000	—	—	0.188	4	Cylindrical	■							
Minimaster	C5341-.500D4B.0Z4	SIRA	10268535	4	D	0.500	0.500	1.500	6.000	—	—	0.250	4	Cylindrical	■							
	C5341-.750D4B.0Z4	SIRA	10268546	4	D	0.750	0.750	3.000	6.000	—	—	0.375	4	Cylindrical	■							
	C5341-1.000D4B.0Z4	SIRA	10268551	4	D	1.000	1.000	3.000	6.000	—	—	0.500	4	Cylindrical	■							

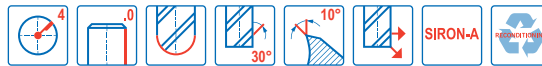
■ Stocked standard.

C5341

General purpose – Universal – Ball nose – 4 Flutes – Cylindrical – Inch



- Tolerances:
- DMM= $-.0001"/-0.0004"$
- DC $\leq \varnothing 7/64" = \pm 0.0005"$
- DC $> \varnothing 7/64" = +0.000"/-0.002"$
- RE= $\pm 0.0005"$
- Regrind possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
C5341-.125D5B.0Z4	SIRA	10268492	5	D	0.125	0.125	0.625	2.000	—	—	0.063	4	Cylindrical	■
C5341-.188D5B.0Z4	SIRA	10268503	5	D	0.188	0.188	1.000	4.000	—	—	0.094	4	Cylindrical	■
C5341-.250D5B.0Z4	SIRA	10268511	5	D	0.250	0.250	1.000	4.000	—	—	0.125	4	Cylindrical	■
C5341-.375D5B.0Z4	SIRA	10268524	5	D	0.375	0.375	1.000	4.000	—	—	0.188	4	Cylindrical	■
C5341-.500D5B.0Z4	SIRA	10268536	5	D	0.500	0.500	2.000	4.000	—	—	0.250	4	Cylindrical	■
C5341-.625D5B.0Z4	SIRA	10268542	5	D	0.625	0.625	3.000	6.000	—	—	0.313	4	Cylindrical	■
C5341-.750D5B.0Z4	SIRA	10268547	5	D	0.750	0.750	4.000	6.000	—	—	0.375	4	Cylindrical	■
C5341-1.000D5B.0Z4	SIRA	10268552	5	D	1.000	1.000	4.000	7.000	—	—	0.500	4	Cylindrical	■
C5341-.125D6B.0Z4	SIRA	10268493	6	D	0.125	0.125	0.750	3.000	—	—	0.063	4	Cylindrical	■
C5341-.188D6B.0Z4	SIRA	10268504	6	D	0.188	0.188	1.125	3.000	—	—	0.094	4	Cylindrical	■
C5341-.250D6B.0Z4	SIRA	10268512	6	D	0.250	0.250	1.500	4.000	—	—	0.125	4	Cylindrical	■
C5341-.313D6B.0Z4	SIRA	10268518	6	D	0.313	0.313	1.500	6.000	—	—	0.156	4	Cylindrical	■
C5341-.375D6B.0Z4	SIRA	10268525	6	D	0.375	0.375	1.500	6.000	—	—	0.188	4	Cylindrical	■
C5341-.500D6B.0Z4	SIRA	10268537	6	D	0.500	0.500	3.000	6.000	—	—	0.250	4	Cylindrical	■
C5341-.125D7B.0Z4	SIRA	10268494	7	D	0.125	0.125	1.000	3.000	—	—	0.063	4	Cylindrical	■
C5341-.250D7B.0Z4	SIRA	10268513	7	D	0.250	0.250	1.500	6.000	—	—	0.125	4	Cylindrical	■
C5341-.375D7B.0Z4	SIRA	10268526	7	D	0.375	0.375	2.000	4.000	—	—	0.188	4	Cylindrical	■
C5341-.063F8B.0Z4	SIRA	10268482	8	F	0.063	0.125	1.000	3.000	1.000	0.068	0.031	4	Cylindrical	■
C5341-.094F8B.0Z4	SIRA	10268488	8	F	0.094	0.125	1.000	3.000	1.000	0.099	0.047	4	Cylindrical	■
C5341-.125D8B.0Z4	SIRA	10268495	8	D	0.125	0.125	1.000	4.000	—	—	0.063	4	Cylindrical	■
C5341-.375D8B.0Z4	SIRA	10268527	8	D	0.375	0.375	3.000	6.000	—	—	0.188	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

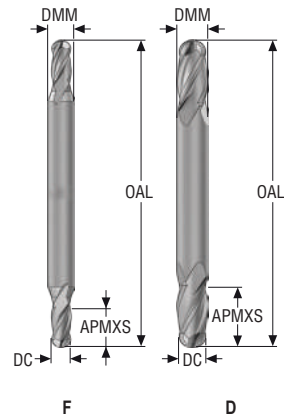
Graphite

X-Heads

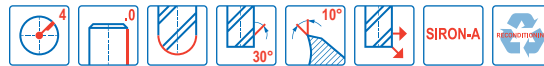
Minimaster

C5341

General purpose – Universal – Ball nose – 4 Flutes – Cylindrical – Inch



—Tolerances:
—DMM = $-.0001"/-0.0004"$
—DC $\leq \varnothing 7/64" = \pm 0.0005"$
—DC $> \varnothing 7/64" = +0.0007/-0.002"$
—RE = $\pm 0.0005"$
—Double end
—Regrind possible if DC is $\geq \varnothing .375$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
C5341-.500D1B.0Z4D	SIRA	10268565	1	D	0.500	0.500	0.625	3.000	—	—	0.250	4	Cylindrical	■
C5341-.031F2B.0Z4D	SIRA	10268553	2	F	0.031	0.125	0.063	1.500	0.063	0.036	0.016	4	Cylindrical	■
C5341-.047F2B.0Z4D	SIRA	10268554	2	F	0.047	0.125	0.094	1.500	0.094	0.052	0.023	4	Cylindrical	■
C5341-.063F2B.0Z4D	SIRA	10268555	2	F	0.063	0.125	0.125	1.500	0.125	0.068	0.031	4	Cylindrical	■
C5341-.078F2B.0Z4D	SIRA	10268556	2	F	0.078	0.125	0.125	1.500	0.125	0.083	0.039	4	Cylindrical	■
C5341-.094F2B.0Z4D	SIRA	10268557	2	F	0.094	0.125	0.188	1.500	0.188	0.099	0.047	4	Cylindrical	■
C5341-.125D2B.0Z4D	SIRA	10268558	2	D	0.125	0.125	0.250	1.500	—	—	0.063	4	Cylindrical	■
C5341-.156F2B.0Z4D	SIRA	10268559	2	F	0.156	0.188	0.313	2.000	0.313	0.161	0.078	4	Cylindrical	■
C5341-.172F2B.0Z4D	SIRA	10268560	2	F	0.172	0.188	0.313	2.000	0.313	0.177	0.086	4	Cylindrical	■
C5341-.188D2B.0Z4D	SIRA	10268561	2	D	0.188	0.188	0.375	2.000	—	—	0.094	4	Cylindrical	■
C5341-.250D2B.0Z4D	SIRA	10268562	2	D	0.250	0.250	0.500	2.500	—	—	0.125	4	Cylindrical	■
C5341-.313D2B.0Z4D	SIRA	10268563	2	D	0.313	0.313	0.500	2.500	—	—	0.156	4	Cylindrical	■
C5341-.375D2B.0Z4D	SIRA	10268564	2	D	0.375	0.375	0.563	2.500	—	—	0.188	4	Cylindrical	■

■ Stocked standard.

Cutting data – C5341 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z														v _c
				1	1,5	2	3	3,5	4	5	6	8	9	10	12	16	20	
P1	E	0,10 0.10	1,0 1.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,024 0.00095	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,048 0.0019	0,06 0.0024	0,07 0.0028	150 (135 — 165) 490 (440 — 540)
P2	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	58 (45—70) 190 (147 — 230)
P3	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	85 (70 — 95) 279 (246 — 312)
P4	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	100 (90 — 110) 330 (295 — 360)
P5	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	68 (50 — 75) 223 (165 — 245)
P6	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	87 (77 — 100) 285 (250 — 330)
P7	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	65 (55 — 75) 213 (180 — 245)
P8	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	65 (50 — 75) 213 (165 — 245)
P11	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	85 (70 — 95) 280 (230 — 310)
P12	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,0038 0.00015	0,005 0.00020	0,0075 0.00030	0,009 0.00036	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,02 0.00080	0,022 0.00085	0,025 0.0010	0,03 0.0012	0,038 0.0015	0,044 0.0017	55 (45—65) 180 (147 — 213)
M1	E	0,10 0.10	1,0 1.0	0,0038 0.00015	0,0055 0.00022	0,0075 0.00030	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,019 0.00075	0,022 0.00085	0,03 0.0012	0,034 0.0013	0,038 0.0015	0,044 0.0017	0,055 0.0022	0,065 0.0026	93 (83 — 100) 305 (270 — 360)
M2	E	0,10 0.10	1,0 1.0	0,0038 0.00015	0,0055 0.00022	0,0075 0.00030	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,019 0.00075	0,022 0.00085	0,03 0.0012	0,034 0.0013	0,038 0.0015	0,044 0.0017	0,055 0.0022	0,065 0.0026	60 (50 — 70) 200 (165 — 230)
M3	E	0,10 0.10	1,0 1.0	0,0038 0.00015	0,0055 0.00022	0,0075 0.00030	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,019 0.00075	0,022 0.00085	0,03 0.0012	0,034 0.0013	0,038 0.0015	0,044 0.0017	0,055 0.0022	0,065 0.0026	55 (45—65) 180 (147 — 213)
M4	E	0,10 0.10	1,0 1.0	0,0038 0.00015	0,0055 0.00022	0,0075 0.00030	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,019 0.00075	0,022 0.00085	0,03 0.0012	0,034 0.0013	0,038 0.0015	0,044 0.0017	0,055 0.0022	0,065 0.0026	45 (35 — 55) 147 (115 — 180)
M5	E	0,10 0.10	1,0 1.0	0,0034 0.00013	0,005 0.00020	0,0065 0.00026	0,01 0.00040	0,012 0.00048	0,013 0.00050	0,017 0.00065	0,02 0.00080	0,026 0.0010	0,03 0.0012	0,034 0.0013	0,04 0.0016	0,05 0.0020	0,055 0.0022	35 (20 — 45) 114 (65 — 147)
K1	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	80 (70 — 90) 260 (230 — 290)
K2	E	0,10 0.10	1,0 1.0	0,0044 0.00017	0,0065 0.00026	0,0085 0.00034	0,013 0.00050	0,015 0.00060	0,017 0.00065	0,022 0.00085	0,026 0.0010	0,034 0.0013	0,04 0.0016	0,044 0.0017	0,05 0.0020	0,065 0.0026	0,075 0.0030	87 (75 — 100) 285 (245 — 330)
K3	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	65 (55 — 75) 213 (180 — 245)
K4	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	50 (35 — 65) 165 (115 — 213)
K5	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	45 (30 — 55) 147 (100 — 180)
K6	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	77 (65 — 85) 250 (210 — 280)
K7	E	0,10 0.10	1,0 1.0	0,0032 0.00013	0,0048 0.00019	0,0065 0.00026	0,0095 0.00038	0,011 0.00044	0,013 0.00050	0,016 0.00065	0,019 0.00075	0,026 0.0010	0,028 0.0011	0,032 0.0013	0,038 0.0015	0,048 0.0019	0,055 0.0022	77 (60 — 90) 250 (200 — 290)
S1	E	0,10 0.10	1,0 1.0	0,004 0.00016	0,006 0.00024	0,008 0.00032	0,012 0.00048	0,014 0.00055	0,016 0.00065	0,02 0.00080	0,024 0.00095	0,032 0.0013	0,036 0.0014	0,04 0.0016	0,048 0.0019	0,06 0.0024	0,07 0.0028	50 (35 — 60) 165 (115 — 200)
S2	E	0,10 0.10	1,0 1.0	0,0028 0.00011	0,004 0.00016	0,0055 0.00022	0,008 0.00032	0,0095 0.00038	0,011 0.00044	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,025 0.0010	0,028 0.0011	0,032 0.0013	0,04 0.0016	0,046 0.0018	25 (15 — 35) 82 (50 — 115)
S3	E	0,10 0.10	1,0 1.0	0,0017 0.000065	0,0026 0.00010	0,0034 0.00013	0,005 0.00020	0,006 0.00024	0,007 0.00028	0,0085 0.00034	0,01 0.00040	0,014 0.00055	0,015 0.00060	0,017 0.00065	0,02 0.00080	0,025 0.0010	0,03 0.0012	11 (7,5 — 16) 35 (25 — 52)
S11	E	0,10 0.10	1,0 1.0	0,0038 0.00015	0,0055 0.00022	0,0075 0.00030	0,011 0.00044	0,013 0.00050	0,015 0.00060	0,019 0.00075	0,022 0.00085	0,03 0.0012	0,034 0.0013	0,038 0.0015	0,044 0.0017	0,055 0.0022	0,065 0.0026	110 (95—120) 360 (311 — 390)
S12	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,0038 0.00015	0,005 0.00020	0,0075 0.00030	0,009 0.00036	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,02 0.00080	0,022 0.00085	0,025 0.0010	0,03 0.0012	0,038 0.0015	0,044 0.0017	77 (60 — 90) 250 (190 — 290)
S13	E	0,10 0.10	1,0 1.0	0,0025 0.00010	0,0038 0.00015	0,005 0.00020	0,0075 0.00030	0,009 0.00036	0,01 0.00040	0,013 0.00050	0,015 0.00060	0,02 0.00080	0,022 0.00085	0,025 0.0010	0,03 0.0012	0,038 0.0015	0,044 0.0017	30 (20 — 40) 100 (65 — 130)

Cutting data – C5341 Side milling roughing – Inch

SMG		a _e /DC	a _p /DC	f _z														v _c
				1/32	1/16	1/8	1/6	1/5	2/9	1/4	1/3	3/8	1/2	5/8	3/4	1		
P1	E	0,10	1,0	0,0032	0,0065	0,013	0,016	0,019	0,022	0,026	0,032	0,038	0,05	0,06	0,065	0,08	150 (135 — 165)	
		0,10	1,0	0,00013	0,00026	0,00050	0,00065	0,00075	0,00085	0,0010	0,0013	0,0015	0,0020	0,0024	0,0026	0,0032	490 (440— 540)	
P2	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	58 (45— 70)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	190 (147 — 230)	
P3	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	85 (70 — 95)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	279 (246 — 312)	
P4	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	100 (90 — 110)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	330 (295 — 360)	
P5	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	68 (50 — 75)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	223 (165 — 245)	
P6	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	87 (77 — 100)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	285 (250 — 330)	
P7	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	65 (55 — 75)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	213 (180 — 245)	
P8	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	65 (50 — 75)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	213 (165 — 245)	
P11	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	85 (70 — 95)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	280 (230 — 310)	
P12	E	0,10	1,0	0,002	0,004	0,008	0,01	0,012	0,014	0,016	0,02	0,024	0,032	0,038	0,042	0,05	55 (45 — 65)	
		0,10	1,0	0,000080	0,00016	0,00032	0,00040	0,00048	0,00055	0,00065	0,00080	0,00095	0,0013	0,0015	0,0017	0,0020	180 (147 — 213)	
M1	E	0,10	1,0	0,003	0,006	0,012	0,015	0,018	0,02	0,024	0,03	0,036	0,046	0,055	0,06	0,07	93 (83 — 100)	
		0,10	1,0	0,00012	0,00024	0,00048	0,00060	0,00070	0,00080	0,00095	0,0012	0,0014	0,0018	0,0022	0,0024	0,0028	305 (270 — 360)	
M2	E	0,10	1,0	0,003	0,006	0,012	0,015	0,018	0,02	0,024	0,03	0,036	0,046	0,055	0,06	0,07	60 (50 — 70)	
		0,10	1,0	0,00012	0,00024	0,00048	0,00060	0,00070	0,00080	0,00095	0,0012	0,0014	0,0018	0,0022	0,0024	0,0028	200 (165 — 230)	
M3	E	0,10	1,0	0,003	0,006	0,012	0,015	0,018	0,02	0,024	0,03	0,036	0,046	0,055	0,06	0,07	55 (45 — 65)	
		0,10	1,0	0,00012	0,00024	0,00048	0,00060	0,00070	0,00080	0,00095	0,0012	0,0014	0,0018	0,0022	0,0024	0,0028	180 (147 — 213)	
M4	E	0,10	1,0	0,003	0,006	0,012	0,015	0,018	0,02	0,024	0,03	0,036	0,046	0,055	0,06	0,07	45 (35 — 55)	
		0,10	1,0	0,00012	0,00024	0,00048	0,00060	0,00070	0,00080	0,00095	0,0012	0,0014	0,0018	0,0022	0,0024	0,0028	147 (115 — 180)	
M5	E	0,10	1,0	0,0026	0,0055	0,011	0,013	0,016	0,019	0,022	0,026	0,032	0,042	0,048	0,055	0,065	35 (20 — 45)	
		0,10	1,0	0,00010	0,00022	0,00044	0,00050	0,00065	0,00075	0,00085	0,0010	0,0013	0,0017	0,0019	0,0022	0,0026	114 (65 — 147)	
K1	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	80 (70 — 90)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	260 (230 — 290)	
K2	E	0,10	1,0	0,0034	0,007	0,014	0,017	0,02	0,024	0,028	0,034	0,042	0,055	0,065	0,07	0,085	87 (75 — 100)	
		0,10	1,0	0,00013	0,00028	0,00055	0,00065	0,00080	0,00095	0,0011	0,0013	0,0017	0,0022	0,0026	0,0028	0,0034	285 (245 — 330)	
K3	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	65 (55 — 75)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	213 (180 — 245)	
K4	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	50 (35 — 65)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	165 (115 — 213)	
K5	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	45 (30 — 55)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	147 (100 — 180)	
K6	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	77 (65 — 85)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	250 (210 — 280)	
K7	E	0,10	1,0	0,0025	0,005	0,01	0,013	0,015	0,018	0,02	0,026	0,03	0,04	0,046	0,055	0,06	77 (60 — 90)	
		0,10	1,0	0,00010	0,00020	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0018	0,0022	0,0024	250 (200 — 290)	
S1	E	0,10	1,0	0,0032	0,0065	0,013	0,016	0,019	0,022	0,026	0,032	0,038	0,05	0,06	0,065	0,08	50 (35 — 60)	
		0,10	1,0	0,00013	0,00026	0,00050	0,00065	0,00075	0,00085	0,0010	0,0013	0,0015	0,0020	0,0024	0,0026	0,0032	165 (115 — 200)	
S2	E	0,10	1,0	0,0022	0,0044	0,009	0,011	0,013	0,015	0,018	0,022	0,026	0,034	0,04	0,044	0,055	25 (15 — 35)	
		0,10	1,0	0,000085	0,00017	0,00036	0,00044	0,00050	0,00060	0,00070	0,00085	0,0010	0,0013	0,0016	0,0017	0,0022	82 (50 — 115)	
S3	E	0,10	1,0	0,0014	0,0028	0,0055	0,007	0,008	0,0095	0,011	0,014	0,016	0,022	0,025	0,028	0,034	11 (7,5 — 16)	
		0,10	1,0	0,000055	0,00011	0,00022	0,00028	0,00032	0,00038	0,00044	0,00055	0,00065	0,00085	0,0010	0,0011	0,0013	35 (25 — 52)	
S11	E	0,10	1,0	0,003	0,006	0,012	0,015	0,018	0,02	0,024	0,03	0,036	0,046	0,055	0,06	0,07	110 (95 — 120)	
		0,10	1,0	0,00012	0,00024	0,00048	0,00060	0,00070	0,00080	0,00095	0,0012	0,0014	0,0018	0,0022	0,0024	0,0028	360 (311 — 390)	
S12	E	0,10	1,0	0,002	0,004	0,008	0,01	0,012	0,014	0,016	0,02	0,024	0,032	0,038	0,042	0,05	77 (60 — 90)	
		0,10	1,0	0,000080	0,00016	0,00032	0,00040	0,00048	0,00055	0,00065	0,00080	0,00095	0,0013	0,0015	0,0017	0,0020	250 (190 — 290)	
S13	E	0,10	1,0	0,002	0,004	0,008	0,01	0,012	0,014	0,016	0,02	0,024	0,032	0,038	0,042	0,05	30 (20 — 40)	
		0,10	1,0	0,000080	0,00016	0,00032	0,00040	0,00048	0,00055	0,00065	0,00080	0,00095	0,0013	0,0015	0,0017	0,0020	100 (65 — 130)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

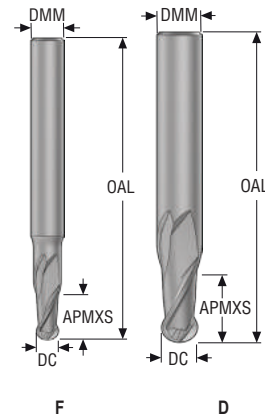
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

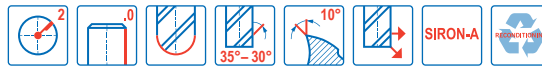
All cutting data are target values

JSB512

General purpose – Universal – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø10



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JSB512020F2B.0Z2	SIRA	10053561	2	F	2,0	3,0	3,0	40,0	10,0	2,05	1,0	2	Cylindrical	■
JSB512030D2B.0Z2	SIRA	10053562	2	D	3,0	3,0	5,0	40,0	—	—	1,5	2	Cylindrical	■
JSB512040D2B.0Z2	SIRA	10053563	2	D	4,0	4,0	6,0	50,0	—	—	2,0	2	Cylindrical	■
JSB512050F2B.0Z2	SIRA	10053564	2	F	5,0	6,0	8,0	57,0	16,0	5,05	2,5	2	Cylindrical	■
JSB512060D2B.0Z2	SIRA	10053565	2	D	6,0	6,0	9,0	57,0	—	—	3,0	2	Cylindrical	■
JSB512080D2B.0Z2	SIRA	10053566	2	D	8,0	8,0	12,0	63,0	—	—	4,0	2	Cylindrical	■
JSB512100D2B.0Z2	SIRA	10053567	2	D	10,0	10,0	15,0	72,0	—	—	5,0	2	Cylindrical	■
JSB512120D2B.0Z2	SIRA	10053568	2	D	12,0	12,0	18,0	83,0	—	—	6,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JSB512 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z								v _c
				2	3	4	5	6	8	10	12	
P1	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P2	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P3	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P4	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P5	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P6	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P7	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P8	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
P11	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
P12	M/A/D/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
M1	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
M2	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
M3	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
M4	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
M5	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
K1	A/D/M/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
K2	A/D/M/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
K3	A/D/M/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
K4	A/D/M/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
K5	A/D/M/E	0.150 0,150	1.2 1,2	0.012 0,00048	0.018 0,00070	0.025 0,0010	0.030 0,0012	0.036 0,0014	0.050 0,0020	0.060 0,0024	0.070 0,0028	145 (61 — 180) 475 (210 — 590)
K6	A/D/M/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
K7	A/D/M/E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	150 (63 — 180) 490 (210 — 590)
N1	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.042 0,0017	0.050 0,0020	0.060 0,0024	500 (380 — 620) 1650 (1300 — 2000)
N11	E/M/A	0.150 0,150	1.2 1,2	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.042 0,0017	0.050 0,0020	0.060 0,0024	375 (260 — 500) 1225 (860 — 1600)
S11	E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (66 — 130) 295 (220 — 420)
S12	E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)
S13	E	0.150 0,150	1.2 1,2	0.010 0,00040	0.016 0,00065	0.020 0,00080	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	90 (63 — 120) 295 (210 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

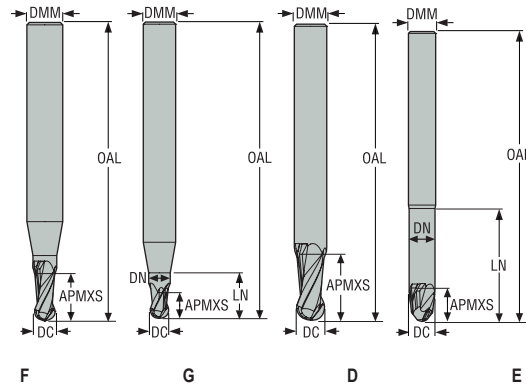
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JS532

High performance – Universal – Ball nose – 2 Flutes – Cylindrical



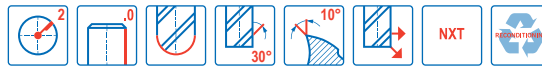
— Tolerances:

— DMM=h5

— DC=e8

— RE= ±0,01 mm

— Regrind possible if DC is ≥ Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS532010F1B.0Z2-NXT	02928193	1	F	1,0	3,0	2,0	38,0	3,1	1,0	0,5	2	Cylindrical	■
JS532015F1B.0Z2-NXT	02928194	1	F	1,5	3,0	3,0	38,0	4,6	1,5	0,75	2	Cylindrical	■
JS532020F1B.0Z2-NXT	02928195	1	F	2,0	3,0	4,0	38,0	6,1	2,0	1,0	2	Cylindrical	■
JS532025F1B.0Z2-NXT	02928197	1	F	2,5	3,0	5,0	38,0	7,1	2,5	1,25	2	Cylindrical	■
JS532030D1B.0Z2-NXT	02928199	1	D	3,0	3,0	6,0	38,0	—	—	1,5	2	Cylindrical	■
JS532035F1B.0Z2-NXT	02928202	1	F	3,5	6,0	7,0	57,0	9,6	3,5	1,75	2	Cylindrical	■
JS532040F1B.0Z2-NXT	02928203	1	F	4,0	6,0	8,0	57,0	10,75	4,0	2,0	2	Cylindrical	■
JS532045F1B.0Z2-NXT	02928206	1	F	4,5	6,0	9,0	57,0	11,75	4,5	2,25	2	Cylindrical	■
JS532050F1B.0Z2-NXT	02928207	1	F	5,0	6,0	10,0	57,0	12,75	5,0	2,5	2	Cylindrical	■
JS532060D1B.0Z2-NXT	02928210	1	D	6,0	6,0	12,0	57,0	—	—	3,0	2	Cylindrical	■
JS532080D1B.0Z2-NXT	02928213	1	D	8,0	8,0	16,0	63,0	—	—	4,0	2	Cylindrical	■
JS532100D1B.0Z2-NXT	02928216	1	D	10,0	10,0	20,0	72,0	—	—	5,0	2	Cylindrical	■
JS532120D1B.0Z2-NXT	02928219	1	D	12,0	12,0	24,0	83,0	—	—	6,0	2	Cylindrical	■
JS532160D1B.0Z2-NXT	02928222	1	D	16,0	16,0	32,0	92,0	—	—	8,0	2	Cylindrical	■
JS532200D1B.0Z2-NXT	02928225	1	D	20,0	20,0	40,0	104,0	—	—	10,0	2	Cylindrical	■
JS532020G2B.0Z2-NXT	02928196	2	G	2,0	3,0	2,0	38,0	8,0	1,9	1,0	2	Cylindrical	■
JS532030E2B.0Z2-NXT	02928200	2	E	3,0	3,0	3,0	38,0	10,0	2,85	1,5	2	Cylindrical	■
JS532040G2B.0Z2-NXT	02928204	2	G	4,0	6,0	4,0	57,0	15,0	3,8	2,0	2	Cylindrical	■
JS532050G2B.0Z2-NXT	02928208	2	G	5,0	6,0	5,0	57,0	20,0	4,8	2,5	2	Cylindrical	■
JS532060E2B.0Z2-NXT	02928211	2	E	6,0	6,0	6,0	63,0	25,0	5,7	3,0	2	Cylindrical	■
JS532080E2B.0Z2-NXT	02928214	2	E	8,0	8,0	8,0	80,0	35,0	7,6	4,0	2	Cylindrical	■
JS532100E2B.0Z2-NXT	02928217	2	E	10,0	10,0	10,0	82,0	40,0	9,5	5,0	2	Cylindrical	■
JS532120E2B.0Z2-NXT	02928220	2	E	12,0	12,0	12,0	100,0	50,0	11,4	6,0	2	Cylindrical	■
JS532160E2B.0Z2-NXT	02928223	2	E	16,0	16,0	16,0	125,0	72,0	15,2	8,0	2	Cylindrical	■
JS532030E3B.0Z2-NXT	02928201	3	E	3,0	3,0	3,0	52,0	20,0	2,85	1,5	2	Cylindrical	■
JS532040G3B.0Z2-NXT	02928205	3	G	4,0	6,0	4,0	63,0	24,0	3,8	2,0	2	Cylindrical	■
JS532050G3B.0Z2-NXT	02928209	3	G	5,0	6,0	5,0	75,0	35,0	4,8	2,5	2	Cylindrical	■
JS532060E3B.0Z2-NXT	02928212	3	E	6,0	6,0	6,0	80,0	42,0	5,7	3,0	2	Cylindrical	■
JS532080E3B.0Z2-NXT	02928215	3	E	8,0	8,0	8,0	100,0	60,0	7,6	4,0	2	Cylindrical	■
JS532100E3B.0Z2-NXT	02928218	3	E	10,0	10,0	10,0	125,0	80,0	9,5	5,0	2	Cylindrical	■
JS532120E3B.0Z2-NXT	02928221	3	E	12,0	12,0	12,0	125,0	75,0	11,4	6,0	2	Cylindrical	■
JS532160E3B.0Z2-NXT	02928224	3	E	16,0	16,0	16,0	150,0	100,0	15,2	8,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

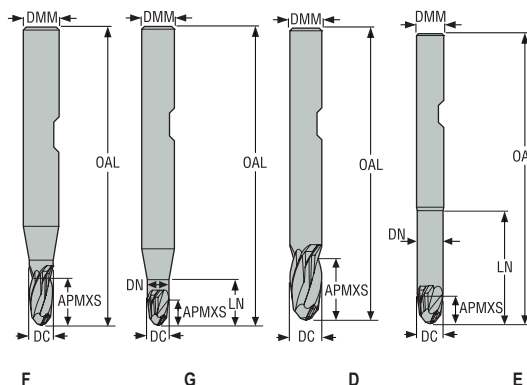
Graphite

X-Heads

Minimaster

JS532

High performance – Universal – Ball nose – 2 Flutes – Weldon



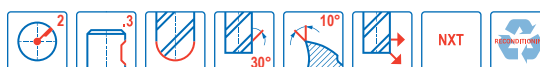
—Tolerances:

—DMM=h5

—DC=e8

—RE= ±0,01 mm

—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS532035F1B.3Z2-NXT	02928254	1	F	3,5	6,0	7,0	57,0	9,6	3,5	1,75	2	Weldon	■
JS532040F1B.3Z2-NXT	02928255	1	F	4,0	6,0	8,0	57,0	10,75	4,0	2,0	2	Weldon	□
JS532045F1B.3Z2-NXT	02928258	1	F	4,5	6,0	9,0	57,0	11,75	4,5	2,25	2	Weldon	□
JS532050F1B.3Z2-NXT	02928259	1	F	5,0	6,0	10,0	57,0	12,75	5,0	2,5	2	Weldon	□
JS532060D1B.3Z2-NXT	02928263	1	D	6,0	6,0	12,0	57,0	—	—	3,0	2	Weldon	□
JS532080D1B.3Z2-NXT	02928266	1	D	8,0	8,0	16,0	63,0	—	—	4,0	2	Weldon	□
JS532100D1B.3Z2-NXT	02928269	1	D	10,0	10,0	20,0	72,0	—	—	5,0	2	Weldon	□
JS532120D1B.3Z2-NXT	02928272	1	D	12,0	12,0	24,0	83,0	—	—	6,0	2	Weldon	□
JS532160D1B.3Z2-NXT	02928275	1	D	16,0	16,0	32,0	92,0	—	—	8,0	2	Weldon	□
JS532200D1B.3Z2-NXT	02928278	1	D	20,0	20,0	40,0	104,0	—	—	10,0	2	Weldon	□
JS532040G2B.3Z2-NXT	02928256	2	G	4,0	6,0	4,0	57,0	18,0	3,8	2,0	2	Weldon	□
JS532050G2B.3Z2-NXT	02928260	2	G	5,0	6,0	5,0	57,0	18,0	4,8	2,5	2	Weldon	□
JS532060E2B.3Z2-NXT	02928264	2	E	6,0	6,0	6,0	63,0	25,0	5,7	3,0	2	Weldon	□
JS532080E2B.3Z2-NXT	02928267	2	E	8,0	8,0	8,0	80,0	35,0	7,6	4,0	2	Weldon	□
JS532100E2B.3Z2-NXT	02928270	2	E	10,0	10,0	10,0	82,0	40,0	9,5	5,0	2	Weldon	□
JS532120E2B.3Z2-NXT	02928273	2	E	12,0	12,0	12,0	100,0	50,0	11,4	6,0	2	Weldon	□
JS532160E2B.3Z2-NXT	02928276	2	E	16,0	16,0	16,0	125,0	70,0	15,2	8,0	2	Weldon	□
JS532040G3B.3Z2-NXT	02928257	3	G	4,0	6,0	4,0	63,0	24,0	3,8	2,0	2	Weldon	□
JS532050G3B.3Z2-NXT	02928261	3	G	5,0	6,0	5,0	75,0	35,0	4,8	2,5	2	Weldon	□
JS532060E3B.3Z2-NXT	02928265	3	E	6,0	6,0	6,0	80,0	42,0	5,7	3,0	2	Weldon	□
JS532080E3B.3Z2-NXT	02928268	3	E	8,0	8,0	8,0	100,0	60,0	7,6	4,0	2	Weldon	□
JS532100E3B.3Z2-NXT	02928271	3	E	10,0	10,0	10,0	125,0	80,0	9,5	5,0	2	Weldon	□
JS532120E3B.3Z2-NXT	02928274	3	E	12,0	12,0	12,0	125,0	75,0	11,4	6,0	2	Weldon	□
JS532160E3B.3Z2-NXT	02928277	3	E	16,0	16,0	16,0	150,0	100,0	15,2	8,0	2	Weldon	□

□ Weldon available. Delivery time is 3 days.

Cutting data – JS532 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z												v _c
				1	2	3	4	5	6	8	10	12	16	20		
P1	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.11	205 (140 — 180)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0044	670 (460 — 590)	
P2	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.11	200 (130 — 180)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0044	660 (430 — 590)	
P3	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.11	170 (110 — 150)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0044	560 (370 — 490)	
P4	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.10	150 (97 — 130)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0040	490 (320 — 420)	
P5	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	145 (93 — 130)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0036	0.0040	475 (310 — 420)	
P6	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	160 (110 — 140)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0036	0.0040	520 (370 — 450)	
P7	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	150 (98 — 140)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0036	0.0040	490 (330 — 450)	
P8	M/A/D/E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.11	145 (93 — 130)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0044	475 (310 — 420)	
P11	M/A/D/E	0.100	0.10	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.12	170 (110 — 150)	
		0.100	0.10	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0048	560 (370 — 490)	
P12	M/A/D/E	0.100	0.10	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.12	100 (64 — 92)	
		0.100	0.10	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0048	330 (210 — 300)	
M1	E	0.100	0.10	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.12	195 (170 — 220)	
		0.100	0.10	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0048	640 (560 — 720)	
M2	E	0.100	0.10	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.095	0.12	115 (93 — 130)	
		0.100	0.10	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0038	0.0048	375 (310 — 420)	
M3	E	0.100	0.10	0.0050	0.010	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.095	95 (73 — 110)	
		0.100	0.10	0.00020	0.00040	0.00060	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	0.0038	310 (240 — 360)	
M4	E	0.100	0.10	0.0048	0.0095	0.014	0.019	0.024	0.028	0.038	0.048	0.055	0.070	0.080	70 (55 — 85)	
		0.100	0.10	0.00019	0.00038	0.00055	0.00075	0.00095	0.0011	0.0015	0.0019	0.0022	0.0028	0.0032	230 (190 — 270)	
M5	E	0.100	0.10	0.0048	0.0095	0.014	0.019	0.024	0.028	0.038	0.048	0.055	0.070	0.080	60 (46 — 71)	
		0.100	0.10	0.00019	0.00038	0.00055	0.00075	0.00095	0.0011	0.0015	0.0019	0.0022	0.0028	0.0032	195 (160 — 230)	
K1	E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	195 (180 — 210)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0036	0.0040	640 (600 — 680)	
K2	E	0.200	0.20	0.0055	0.011	0.016	0.022	0.028	0.032	0.044	0.055	0.065	0.085	0.095	170 (160 — 180)	
		0.200	0.20	0.00022	0.00044	0.00065	0.00085	0.0011	0.0013	0.0017	0.0022	0.0026	0.0034	0.0038	560 (530 — 590)	
K3	E	0.200	0.20	0.0055	0.011	0.016	0.022	0.028	0.032	0.044	0.055	0.065	0.085	0.095	145 (130 — 150)	
		0.200	0.20	0.00022	0.00044	0.00065	0.00085	0.0011	0.0013	0.0017	0.0022	0.0026	0.0034	0.0038	475 (430 — 490)	
K4	E	0.200	0.20	0.0055	0.011	0.016	0.022	0.028	0.032	0.044	0.055	0.065	0.085	0.095	140 (130 — 150)	
		0.200	0.20	0.00022	0.00044	0.00065	0.00085	0.0011	0.0013	0.0017	0.0022	0.0026	0.0034	0.0038	460 (430 — 490)	
K5	E	0.100	0.10	0.0050	0.010	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.095	165 (150 — 180)	
		0.100	0.10	0.00020	0.00040	0.00060	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	0.0038	540 (500 — 590)	
K6	E	0.100	0.10	0.0050	0.010	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.10	245 (220 — 270)	
		0.100	0.10	0.00020	0.00040	0.00060	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	0.0040	800 (730 — 880)	
K7	E	0.100	0.10	0.0050	0.010	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.080	0.095	210 (190 — 230)	
		0.100	0.10	0.00020	0.00040	0.00060	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0032	0.0038	690 (630 — 750)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS532 Copy milling roughing

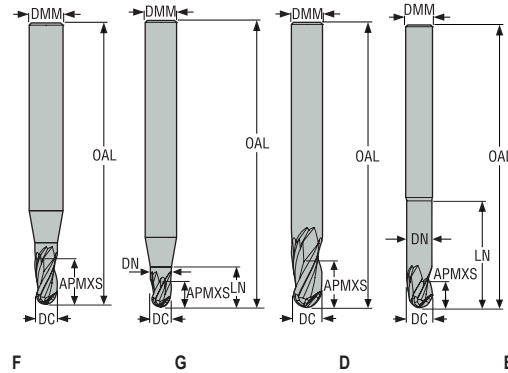
SMG		a _e /DC	a _p /DC	f _z												v _c	
				1	2	3	4	5	6	8	10	12	16	20			
N1	E	0.200	0.30	0.0080	0.016	0.024	0.032	0.038	0.046	0.060	0.080	0.095	0.11	0.13	610	(520 — 710)	
		0.200	0.30	0.00032	0.00065	0.00095	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0044	0.0050	2000	(1800 — 2300)	
N2	E	0.200	0.30	0.0080	0.016	0.024	0.032	0.038	0.046	0.060	0.080	0.095	0.11	0.13	395	(330 — 450)	
		0.200	0.30	0.00032	0.00065	0.00095	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0044	0.0050	1300	(1100 — 1400)	
N3	E	0.200	0.30	0.0080	0.016	0.024	0.032	0.038	0.046	0.060	0.080	0.095	0.11	0.13	260	(220 — 300)	
		0.200	0.30	0.00032	0.00065	0.00095	0.0013	0.0015	0.0018	0.0024	0.0032	0.0038	0.0044	0.0050	850	(730 — 980)	
N11	E	0.200	0.30	0.0050	0.010	0.016	0.020	0.026	0.032	0.040	0.050	0.060	0.075	0.090	415	(370 — 460)	
		0.200	0.30	0.00020	0.00040	0.00065	0.00080	0.0010	0.0013	0.0016	0.0020	0.0024	0.0030	0.0036	1350	(1300 — 1500)	
S1	E	0.150	0.10	0.0040	0.0080	0.012	0.016	0.020	0.024	0.032	0.040	0.048	0.065	0.080	60	(52 — 72)	
		0.150	0.10	0.00016	0.00032	0.00048	0.00065	0.00080	0.00095	0.0013	0.0016	0.0019	0.0026	0.0032	195	(180 — 230)	
S2	E	0.150	0.10	0.0040	0.0080	0.012	0.016	0.020	0.024	0.032	0.040	0.048	0.065	0.080	50	(42 — 58)	
		0.150	0.10	0.00016	0.00032	0.00048	0.00065	0.00080	0.00095	0.0013	0.0016	0.0019	0.0026	0.0032	165	(140 — 190)	
S3	E	0.100	0.10	0.0036	0.0070	0.010	0.014	0.018	0.020	0.028	0.036	0.042	0.055	0.060	32	(22 — 42)	
		0.100	0.10	0.00014	0.00028	0.00040	0.00055	0.00070	0.00080	0.0011	0.0014	0.0017	0.0022	0.0024	105	(73 — 130)	
S11	E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	105	(94 — 110)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0036	0.0040	345	(310 — 360)	
S12	E	0.200	0.20	0.0060	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	80	(72 — 92)	
		0.200	0.20	0.00024	0.00048	0.00070	0.00095	0.0012	0.0014	0.0019	0.0024	0.0028	0.0036	0.0040	260	(240 — 300)	
S13	E	0.200	0.20	0.0055	0.011	0.016	0.022	0.026	0.032	0.042	0.055	0.060	0.080	0.090	65	(57 — 72)	
		0.200	0.20	0.00022	0.00044	0.00065	0.00085	0.0010	0.0013	0.0017	0.0022	0.0024	0.0032	0.0036	215	(190 — 230)	
TS1	A	0.200	0.40	0.0075	0.015	0.024	0.030	0.038	0.046	0.065	0.075	0.090	0.12	0.13	610	(570 — 660)	
		0.200	0.40	0.00030	0.00060	0.00095	0.0012	0.0015	0.0018	0.0026	0.0030	0.0036	0.0048	0.0050	2000	(1900 — 2100)	
TP1	A	0.200	0.40	0.0075	0.015	0.024	0.030	0.038	0.046	0.065	0.075	0.090	0.12	0.13	610	(570 — 660)	
		0.200	0.40	0.00030	0.00060	0.00095	0.0012	0.0015	0.0018	0.0026	0.0030	0.0036	0.0048	0.0050	2000	(1900 — 2100)	
GR1	A	0.200	0.40	0.0075	0.015	0.024	0.030	0.038	0.046	0.065	0.075	0.090	0.12	0.13	610	(570 — 660)	
		0.200	0.40	0.00030	0.00060	0.00095	0.0012	0.0015	0.0018	0.0026	0.0030	0.0036	0.0048	0.0050	2000	(1900 — 2100)	

For cutting data recalculations, see pages 687 – 695

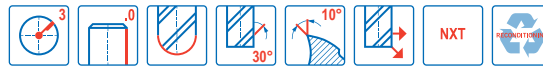
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JS533

High performance – Universal – Ball nose – 3 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS533010F1B.0Z3-NXT	02928284	1	F	1,0	3,0	2,0	38,0	3,0	1,05	0,5	3	Cylindrical	■
JS533015F1B.0Z3-NXT	02928286	1	F	1,5	3,0	3,0	38,0	4,6	1,55	0,75	3	Cylindrical	■
JS533020F1B.0Z3-NXT	02928287	1	F	2,0	3,0	4,0	38,0	5,6	2,05	1,0	3	Cylindrical	■
JS533030D1B.0Z3-NXT	02928289	1	D	3,0	3,0	6,0	38,0	—	—	1,5	3	Cylindrical	■
JS533040F1B.0Z3-NXT	02928291	1	F	4,0	6,0	8,0	57,0	10,75	4,05	2,0	3	Cylindrical	■
JS533050F1B.0Z3-NXT	02928293	1	F	5,0	6,0	10,0	57,0	13,75	5,05	2,5	3	Cylindrical	■
JS533060D1B.0Z3-NXT	02928295	1	D	6,0	6,0	12,0	57,0	—	—	3,0	3	Cylindrical	■
JS533080D1B.0Z3-NXT	02928297	1	D	8,0	8,0	16,0	63,0	—	—	4,0	3	Cylindrical	■
JS533100D1B.0Z3-NXT	02928299	1	D	10,0	10,0	20,0	72,0	—	—	5,0	3	Cylindrical	■
JS533120D1B.0Z3-NXT	02928301	1	D	12,0	12,0	24,0	83,0	—	—	6,0	3	Cylindrical	■
JS533160D1B.0Z3-NXT	02928303	1	D	16,0	16,0	32,0	110,0	—	—	8,0	3	Cylindrical	■
JS533200D1B.0Z3-NXT	02928305	1	D	20,0	20,0	40,0	125,0	—	—	10,0	3	Cylindrical	■
JS533020G2B.0Z3-NXT	02928288	2	G	2,0	3,0	2,0	38,0	7,0	1,9	1,0	3	Cylindrical	■
JS533030E2B.0Z3-NXT	02928290	2	E	3,0	3,0	3,0	38,0	9,0	2,85	1,5	3	Cylindrical	■
JS533040G2B.0Z3-NXT	02928292	2	G	4,0	6,0	4,0	57,0	15,0	3,8	2,0	3	Cylindrical	■
JS533050G2B.0Z3-NXT	02928294	2	G	5,0	6,0	5,0	57,0	15,0	4,8	2,5	3	Cylindrical	■
JS533060E2B.0Z3-NXT	02928296	2	E	6,0	6,0	6,0	63,0	25,0	5,7	3,0	3	Cylindrical	■
JS533080E2B.0Z3-NXT	02928298	2	E	8,0	8,0	8,0	80,0	35,0	7,6	4,0	3	Cylindrical	■
JS533100E2B.0Z3-NXT	02928300	2	E	10,0	10,0	10,0	89,0	40,0	9,5	5,0	3	Cylindrical	■
JS533120E2B.0Z3-NXT	02928302	2	E	12,0	12,0	12,0	100,0	50,0	11,4	6,0	3	Cylindrical	■
JS533160E2B.0Z3-NXT	02928304	2	E	16,0	16,0	16,0	125,0	70,0	15,2	8,0	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

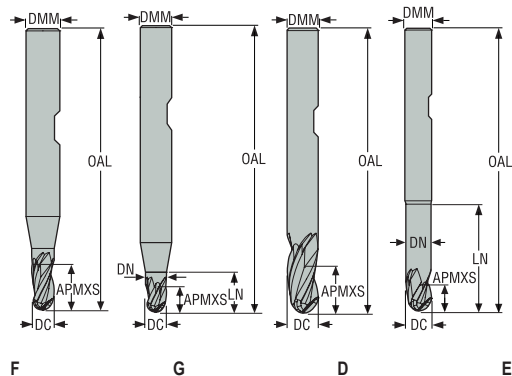
Graphite

X-Heads

Minimaster

JS533

High performance – Universal – Ball nose – 3 Flutes – Weldon



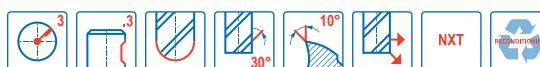
—Tolerances:

—DMM=h5

—DC=e8

—RE= ±0,01 mm

—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS533040F1B.3Z3-NXT	02928323	1	F	4,0	6,0	8,0	57,0	10,75	4,05	2,0	3	Weldon	☐
JS533050F1B.3Z3-NXT	02928325	1	F	5,0	6,0	10,0	57,0	13,75	5,05	2,5	3	Weldon	☐
JS533060D1B.3Z3-NXT	02928326	1	D	6,0	6,0	12,0	57,0	—	—	3,0	3	Weldon	☐
JS533080D1B.3Z3-NXT	02928328	1	D	8,0	8,0	16,0	63,0	—	—	4,0	3	Weldon	☐
JS533100D1B.3Z3-NXT	02928330	1	D	10,0	10,0	20,0	72,0	—	—	5,0	3	Weldon	☐
JS533120D1B.3Z3-NXT	02928332	1	D	12,0	12,0	24,0	83,0	—	—	6,0	3	Weldon	☐
JS533160D1B.3Z3-NXT	02928334	1	D	16,0	16,0	32,0	109,0	—	—	8,0	3	Weldon	☐
JS533200D1B.3Z3-NXT	02928336	1	D	20,0	20,0	40,0	125,0	—	—	10,0	3	Weldon	☐
JS533040G2B.3Z3-NXT	02928324	2	G	4,0	6,0	4,0	57,0	15,0	3,8	2,0	3	Weldon	☐
JS533050G2B.3Z3-NXT	02928341	2	G	5,0	6,0	5,0	57,0	15,0	4,8	2,5	3	Weldon	☐
JS533060E2B.3Z3-NXT	02928327	2	E	6,0	6,0	6,0	63,0	25,0	5,7	3,0	3	Weldon	☐
JS533080E2B.3Z3-NXT	02928329	2	E	8,0	8,0	8,0	80,0	35,0	7,6	4,0	3	Weldon	☐
JS533100E2B.3Z3-NXT	02928331	2	E	10,0	10,0	10,0	89,0	40,0	9,5	5,0	3	Weldon	☐
JS533120E2B.3Z3-NXT	02928333	2	E	12,0	12,0	12,0	100,0	50,0	11,4	6,0	3	Weldon	☐
JS533160E2B.3Z3-NXT	02928335	2	E	16,0	16,0	16,0	122,0	70,0	15,2	8,0	3	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – JS533 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z												v _c
				1	2	3	4	5	6	8	10	12	16	20		
P1	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0032 0,00013	0.0065 0,00026	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.026 0,0010	0.032 0,0013	0.038 0,0015	0.048 0,0019	0.055 0,0022	200 (180 — 220) 660 (600 — 720)	
P2	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0034 0,00013	0.0065 0,00026	0.010 0,00040	0.013 0,00050	0.017 0,00065	0.020 0,00080	0.026 0,0010	0.034 0,0013	0.038 0,0015	0.048 0,0019	0.055 0,0022	195 (170 — 220) 640 (560 — 720)	
P3	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0032 0,00013	0.0060 0,00024	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.036 0,0014	0.046 0,0018	0.055 0,0022	165 (150 — 180) 540 (500 — 590)	
P4	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.025 0,0010	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	145 (130 — 160) 475 (430 — 520)	
P5	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	140 (130 — 160) 460 (430 — 520)	
P6	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.034 0,0013	0.044 0,0017	0.050 0,0020	155 (140 — 170) 510 (460 — 550)	
P7	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.034 0,0013	0.044 0,0017	0.050 0,0020	150 (130 — 160) 490 (430 — 520)	
P8	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0032 0,00013	0.0060 0,00024	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.036 0,0014	0.046 0,0018	0.055 0,0022	140 (120 — 150) 460 (400 — 490)	
P11	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0044 0,00017	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	140 (130 — 160) 460 (430 — 520)	
P12	M/A/D/E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	85 (73 — 97) 280 (240 — 310)	
M1	E	0.0300 0,0300	0.80 0,80	0.0034 0,00013	0.0065 0,00026	0.010 0,00040	0.013 0,00050	0.017 0,00065	0.020 0,00080	0.026 0,0010	0.034 0,0013	0.038 0,0015	0.048 0,0019	0.055 0,0022	125 (99 — 140) 410 (330 — 450)	
M2	E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	100 (80 — 120) 330 (270 — 390)	
M3	E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	70 (50 — 90) 230 (170 — 290)	
M4	E	0.0300 0,0300	0.80 0,80	0.0026 0,00010	0.0050 0,00020	0.0080 0,00032	0.011 0,00044	0.013 0,00050	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.030 0,0012	0.038 0,0015	0.044 0,0017	55 (38 — 67) 180 (130 — 210)	
M5	E	0.0300 0,0300	0.80 0,80	0.0026 0,00010	0.0050 0,00020	0.0080 0,00032	0.011 0,00044	0.013 0,00050	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.030 0,0012	0.038 0,0015	0.044 0,0017	44 (32 — 56) 145 (110 — 180)	
K1	E	0.0300 0,0300	0.80 0,80	0.0040 0,00016	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.070 0,0028	145 (130 — 160) 475 (430 — 520)	
K2	E	0.0300 0,0300	0.80 0,80	0.0036 0,00014	0.0075 0,00030	0.011 0,00044	0.015 0,00060	0.018 0,00070	0.022 0,00085	0.030 0,0012	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.060 0,0024	125 (110 — 140) 410 (370 — 450)	
K3	E	0.0300 0,0300	0.80 0,80	0.0050 0,00020	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	105 (91 — 110) 345 (300 — 360)	
K4	E	0.0300 0,0300	0.80 0,80	0.0050 0,00020	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	120 (100 — 140) 395 (330 — 450)	
K5	E	0.0300 0,0300	0.80 0,80	0.0044 0,00017	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	70 (61 — 84) 230 (210 — 270)	
K6	E	0.0300 0,0300	0.80 0,80	0.0050 0,00020	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	105 (89 — 120) 345 (300 — 390)	
K7	E	0.0300 0,0300	0.80 0,80	0.0044 0,00017	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	155 (130 — 180) 510 (430 — 590)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
Steel and cast iron
Stainless steel and S-materials
Non ferrous
Hard
Plastic and cf/p
Graphite
X-Heads
Minimaster

Cutting data – JS533 Copy milling roughing

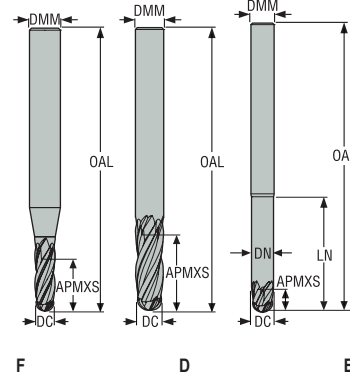
SMG		a _e /DC	a _p /DC	f _z												v _c
				1	2	3	4	5	6	8	10	12	16	20		
N1	E	0.0300 0,0300	0.80 0,80	0.0050 0,00020	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	800 (700 — 900) 2625 (2300 — 2900)	
N2	E	0.0300 0,0300	0.80 0,80	0.0050 0,00020	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	510 (450 — 570) 1675 (1500 — 1800)	
N3	E	0.0300 0,0300	0.80 0,80	0.0050 0,00020	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	345 (300 — 380) 1125 (990 — 1200)	
N11	E	0.0300 0,0300	0.80 0,80	0.0040 0,00016	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.070 0,0028	400 (350 — 450) 1300 (1200 — 1400)	
S1	E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	100 (90 — 110) 330 (300 — 360)	
		0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	80 (73 — 88) 260 (240 — 280)	
S11	E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	130 (120 — 140) 425 (400 — 450)	
		0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	100 (91 — 110) 330 (300 — 360)	
S12	E	0.0300 0,0300	0.80 0,80	0.0030 0,00012	0.0060 0,00024	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	100 (91 — 110) 330 (300 — 360)	
S13	E	0.0300 0,0300	0.80 0,80	0.0026 0,00010	0.0050 0,00020	0.0080 0,00032	0.011 0,00044	0.013 0,00050	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.030 0,0012	0.038 0,0015	0.044 0,0017	80 (70 — 85) 260 (230 — 270)	
		0.0300 0,0300	0.80 0,80	0.0026 0,00010	0.0050 0,00020	0.0080 0,00032	0.011 0,00044	0.013 0,00050	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.030 0,0012	0.038 0,0015	0.044 0,0017	800 (760 — 850) 2625 (2500 — 2700)	
TS1	A	0.0300 0,0300	0.80 0,80	0.0040 0,00016	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.070 0,0028	800 (760 — 850) 2625 (2500 — 2700)	
TP1	A	0.0300 0,0300	0.80 0,80	0.0040 0,00016	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.070 0,0028	800 (760 — 850) 2625 (2500 — 2700)	
		0.0300 0,0300	0.80 0,80	0.0040 0,00016	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.070 0,0028	800 (760 — 850) 2625 (2500 — 2700)	
GR1	A	0.0300 0,0300	0.80 0,80	0.0040 0,00016	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.070 0,0028	800 (760 — 850) 2625 (2500 — 2700)	

For cutting data recalculations, see pages 687 – 695

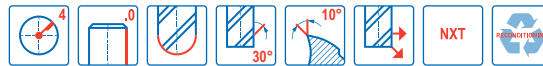
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JS534

High performance – Universal – Ball nose – 4 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=e8
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS534020F1B.0Z4-NXT	02928366	1	F	2,0	3,0	6,0	38,0	6,7	2,05	1,0	4	Cylindrical	■
JS534030D1B.0Z4-NXT	02928367	1	D	3,0	3,0	9,0	38,0	—	—	1,5	4	Cylindrical	■
JS534040F1B.0Z4-NXT	02928368	1	F	4,0	6,0	12,0	57,0	14,0	4,05	2,0	4	Cylindrical	■
JS534050F1B.0Z4-NXT	02928370	1	F	5,0	6,0	15,0	57,0	17,0	5,05	2,5	4	Cylindrical	■
JS534060D1B.0Z4-NXT	02928372	1	D	6,0	6,0	18,0	57,0	—	—	3,0	4	Cylindrical	■
JS534080D1B.0Z4-NXT	02928375	1	D	8,0	8,0	24,0	69,0	—	—	4,0	4	Cylindrical	■
JS534100D1B.0Z4-NXT	02928378	1	D	10,0	10,0	30,0	82,0	—	—	5,0	4	Cylindrical	■
JS534120D1B.0Z4-NXT	02928381	1	D	12,0	12,0	36,0	100,0	—	—	6,0	4	Cylindrical	■
JS534160D1B.0Z4-NXT	02928384	1	D	16,0	16,0	48,0	110,0	—	—	8,0	4	Cylindrical	■
JS534200D1B.0Z4-NXT	02928387	1	D	20,0	20,0	60,0	125,0	—	—	10,0	4	Cylindrical	■
JS534040F2B.0Z4-NXT	02928369	2	F	4,0	6,0	20,0	63,0	22,0	4,05	2,0	4	Cylindrical	■
JS534050F2B.0Z4-NXT	02928371	2	F	5,0	6,0	25,0	75,0	27,0	5,05	2,5	4	Cylindrical	■
JS534060D2B.0Z4-NXT	02928373	2	D	6,0	6,0	30,0	75,0	—	—	3,0	4	Cylindrical	■
JS534080D2B.0Z4-NXT	02928376	2	D	8,0	8,0	40,0	80,0	—	—	4,0	4	Cylindrical	■
JS534100D2B.0Z4-NXT	02928379	2	D	10,0	10,0	50,0	100,0	—	—	5,0	4	Cylindrical	■
JS534120D2B.0Z4-NXT	02928382	2	D	12,0	12,0	60,0	125,0	—	—	6,0	4	Cylindrical	■
JS534160D2B.0Z4-NXT	02928385	2	D	16,0	16,0	80,0	130,0	—	—	8,0	4	Cylindrical	■
JS534060E3B.0Z4-NXT	02928374	3	E	6,0	6,0	6,0	75,0	30,0	5,7	3,0	4	Cylindrical	■
JS534080E3B.0Z4-NXT	02928377	3	E	8,0	8,0	8,0	80,0	40,0	7,6	4,0	4	Cylindrical	■
JS534100E3B.0Z4-NXT	02928380	3	E	10,0	10,0	10,0	100,0	50,0	9,7	5,0	4	Cylindrical	■
JS534120E3B.0Z4-NXT	02928383	3	E	12,0	12,0	12,0	125,0	60,0	11,4	6,0	4	Cylindrical	■
JS534160E3B.0Z4-NXT	02928386	3	E	16,0	16,0	16,0	130,0	80,0	15,2	8,0	4	Cylindrical	■
JS534200E3B.0Z4-NXT	02928388	3	E	20,0	20,0	20,0	150,0	100,0	19,0	10,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

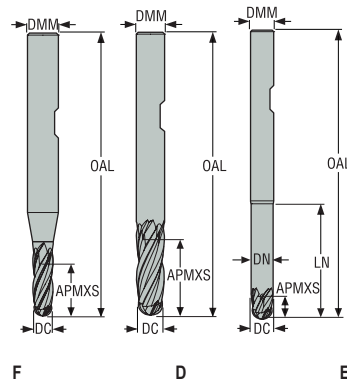
Graphite

X-Heads

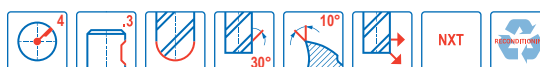
Minimaster

JS534

High performance – Universal – Ball nose – 4 Flutes – Weldon



—Tolerances:
—DMM=h5
—DC=e8
—RE= ±0,01 mm
—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS534040F1B.3Z4-NXT	02928390	1	F	4,0	6,0	12,0	57,0	14,0	4,05	2,0	4	Weldon	☐
JS534050F1B.3Z4-NXT	02928392	1	F	5,0	6,0	15,0	57,0	17,0	5,05	2,5	4	Weldon	☐
JS534060D1B.3Z4-NXT	02928394	1	D	6,0	6,0	18,0	57,0	—	—	3,0	4	Weldon	☐
JS534080D1B.3Z4-NXT	02928397	1	D	8,0	8,0	24,0	69,0	—	—	4,0	4	Weldon	☐
JS534100D1B.3Z4-NXT	02928400	1	D	10,0	10,0	30,0	82,0	—	—	5,0	4	Weldon	☐
JS534120D1B.3Z4-NXT	02928403	1	D	12,0	12,0	36,0	100,0	—	—	6,0	4	Weldon	☐
JS534160D1B.3Z4-NXT	02928406	1	D	16,0	16,0	48,0	110,0	—	—	8,0	4	Weldon	☐
JS534200D1B.3Z4-NXT	02928409	1	D	20,0	20,0	60,0	125,0	—	—	10,0	4	Weldon	☐
JS534040F2B.3Z4-NXT	02928391	2	F	4,0	6,0	20,0	63,0	22,0	4,05	2,0	4	Weldon	☐
JS534050F2B.3Z4-NXT	02928393	2	F	5,0	6,0	25,0	75,0	27,0	5,05	2,5	4	Weldon	☐
JS534060D2B.3Z4-NXT	02928395	2	D	6,0	6,0	30,0	75,0	—	—	3,0	4	Weldon	☐
JS534080D2B.3Z4-NXT	02928398	2	D	8,0	8,0	40,0	80,0	—	—	4,0	4	Weldon	☐
JS534100D2B.3Z4-NXT	02928401	2	D	10,0	10,0	50,0	100,0	—	—	5,0	4	Weldon	☐
JS534120D2B.3Z4-NXT	02928404	2	D	12,0	12,0	60,0	125,0	—	—	6,0	4	Weldon	☐
JS534160D2B.3Z4-NXT	02928407	2	D	16,0	16,0	80,0	130,0	—	—	8,0	4	Weldon	☐
JS534060E3B.3Z4-NXT	02928396	3	E	6,0	6,0	6,0	75,0	30,0	5,7	3,0	4	Weldon	☐
JS534080E3B.3Z4-NXT	02928399	3	E	8,0	8,0	8,0	80,0	40,0	7,6	4,0	4	Weldon	☐
JS534100E3B.3Z4-NXT	02928402	3	E	10,0	10,0	10,0	100,0	50,0	9,7	5,0	4	Weldon	☐
JS534120E3B.3Z4-NXT	02928405	3	E	12,0	12,0	12,0	125,0	60,0	11,4	6,0	4	Weldon	☐
JS534160E3B.3Z4-NXT	02928408	3	E	16,0	16,0	16,0	130,0	80,0	15,2	8,0	4	Weldon	☐
JS534200E3B.3Z4-NXT	02928410	3	E	20,0	20,0	20,0	150,0	100,0	19,0	10,0	4	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – JS534 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z										v _c	
				2	3	4	5	6	8	10	12	16	20		
P1	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0085 0,00034	0.013 0,00050	0.017 0,00065	0.022 0,00085	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	345 (310 — 370) 1125 (1100 — 1200)	Steel and cast iron
P2	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	335 (300 — 360) 1100 (990 — 1100)	
P3	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0085 0,00034	0.012 0,00048	0.017 0,00065	0.020 0,00080	0.025 0,0010	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.070 0,0028	290 (260 — 310) 950 (860 — 1000)	
P4	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	255 (230 — 280) 840 (760 — 910)	
P5	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	245 (220 — 260) 800 (730 — 850)	
P6	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	230 (210 — 250) 750 (690 — 820)	
P7	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	220 (200 — 240) 720 (660 — 780)	
P8	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0085 0,00034	0.012 0,00048	0.017 0,00065	0.020 0,00080	0.025 0,0010	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.070 0,0028	205 (190 — 220) 670 (630 — 720)	
P11	M/A/D/E	0.0300 0,0300	4.0 4,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	210 (190 — 230) 690 (630 — 750)	
P12	M/A/D/E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	125 (120 — 130) 410 (400 — 420)	
M1	E	0.0300 0,0300	4.0 4,0	0.0090 0,00036	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	180 (160 — 200) 590 (530 — 650)	Non ferrous
M2	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	145 (130 — 160) 475 (430 — 520)	
M3	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	155 (140 — 180) 510 (460 — 590)	
M4	E	0.0300 0,0300	4.0 4,0	0.0070 0,00028	0.010 0,00040	0.014 0,00055	0.017 0,00065	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	120 (100 — 130) 395 (330 — 420)	
M5	E	0.0300 0,0300	4.0 4,0	0.0070 0,00028	0.010 0,00040	0.014 0,00055	0.017 0,00065	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	100 (83 — 110) 330 (280 — 360)	
K1	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	245 (220 — 260) 800 (730 — 850)	Hard
K2	E	0.0300 0,0300	4.0 4,0	0.0075 0,00030	0.011 0,00044	0.015 0,00060	0.018 0,00070	0.022 0,00085	0.030 0,0012	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.060 0,0024	215 (200 — 230) 710 (660 — 750)	
K3	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	180 (160 — 190) 590 (530 — 620)	Plastic and cf/p
K4	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	170 (160 — 180) 560 (530 — 590)	
K5	E	0.0300 0,0300	4.0 4,0	0.0070 0,00028	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.060 0,0024	200 (180 — 220) 660 (600 — 720)	
K6	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	295 (260 — 330) 970 (860 — 1000)	
K7	E	0.0300 0,0300	4.0 4,0	0.0070 0,00028	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.060 0,0024	260 (230 — 280) 850 (760 — 910)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
Steel and cast
iron
Stainless steel
and S-materials
Non ferrous
Hard
Plastic and cf/p
Graphite
X-Heads
Minimaster

Cutting data – JS534 Copy milling roughing

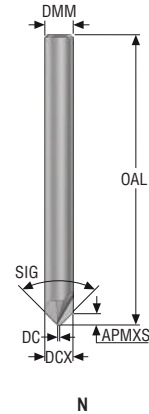
SMG		a _e /DC	a _p /DC	f _z										v _c
				2	3	4	5	6	8	10	12	16	20	
N1	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	1025 (910 — 1100) 3375 (3000 — 3600)
N2	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	910 (780 — 1000) 2975 (2600 — 3200)
N3	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	600 (520 — 690) 1975 (1800 — 2200)
N11	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	500 (440 — 560) 1650 (1500 — 1800)
S1	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	110 (88 — 110) 360 (290 — 360)
S2	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	90 (71 — 90) 295 (240 — 290)
S3	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	85 (63 — 87) 280 (210 — 280)
S11	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	185 (150 — 180) 610 (500 — 590)
S12	E	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	140 (120 — 140) 460 (400 — 450)
S13	E	0.0300 0,0300	4.0 4,0	0.0070 0,00028	0.010 0,00040	0.014 0,00055	0.017 0,00065	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	110 (91 — 110) 360 (300 — 360)
TS1	A	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	900 (840 — 960) 2950 (2800 — 3100)
TP1	A	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	900 (840 — 960) 2950 (2800 — 3100)
GR1	A	0.0300 0,0300	4.0 4,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	900 (840 — 960) 2950 (2800 — 3100)

For cutting data recalculations, see pages 687 – 695

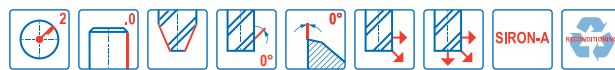
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (*sf/min*)
f_z = mm (*in/tooth*)
a_p = mm/DC (*in/DC*) = factor
a_e = mm/DC (*in/DC*) = factor
All cutting data are target values

C5021

General purpose – Universal – Chamfer – 2 Flutes – Cylindrical – Inch



—Tolerances:
—DMM=−.0001"/−.0004"
—SIG= ±1°
—Regrind possible if DC is ≥Ø.375



Designation	Grade	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch					
C5021-.250N1S.0Z2T30	SIRA	10268641	1	N	0.250	0.035	0.250	0.186	2.500	30,0	60,0	2	Cylindrical	■
C5021-.250N1S.0Z2T45	SIRA	10268644	1	N	0.250	0.035	0.250	0.108	2.500	45,0	90,0	2	Cylindrical	■
C5021-.375N1S.0Z2T30	SIRA	10268642	1	N	0.375	0.040	0.375	0.290	2.500	30,0	60,0	2	Cylindrical	■
C5021-.375N1S.0Z2T45	SIRA	10268645	1	N	0.375	0.040	0.375	0.168	2.500	45,0	90,0	2	Cylindrical	■
C5021-.500N1S.0Z2T30	SIRA	10268643	1	N	0.500	0.045	0.500	0.186	3.000	30,0	60,0	2	Cylindrical	■
C5021-.500N1S.0Z2T45	SIRA	10268646	1	N	0.500	0.045	0.500	0.228	3.000	45,0	90,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – C5021 Chamfering – Inch

SMG		a_e/DCX	a_p/DCX	f_z			v_c
				1/4	3/8	1/2	
P1	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,055 0.0022	0,065 0.0026	205 (160 — 230) 670 (530 — 750)
P2	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	195 (160 — 230) 640 (530 — 750)
P3	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	165 (130 — 180) 540 (430 — 590)
P4	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	140 (120 — 160) 460 (400 — 520)
P5	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	135 (120 — 170) 445 (400 — 550)
P6	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	160 (120 — 170) 520 (400 — 550)
P7	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	145 (120 — 180) 475 (400 — 590)
P8	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	135 (120 — 150) 445 (400 — 490)
P11	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	85 (69 — 110) 280 (230 — 360)
P12	E	0,02 0.02	0,3 0.3	0,032 0.0013	0,038 0.0015	0,042 0.0017	60 (49 — 91) 195 (170 — 290)
M1	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,06 0.0024	0,065 0.0026	120 (110 — 150) 395 (370 — 490)
M2	E	0,02 0.02	0,3 0.3	0,042 0.0017	0,05 0.0020	0,055 0.0022	80 (65 — 100) 260 (220 — 320)
M3	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,055 0.0022	0,065 0.0026	75 (59 — 100) 245 (200 — 320)
M4	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,055 0.0022	0,065 0.0026	43 (30 — 59) 140 (99 — 190)
M5	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,06 0.0024	36 (19 — 55) 120 (63 — 180)
K1	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	195 (160 — 240) 640 (530 — 780)
K2	E	0,02 0.02	0,3 0.3	0,055 0.0022	0,065 0.0026	0,075 0.0030	170 (150 — 200) 560 (500 — 650)
K3	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	145 (130 — 160) 475 (430 — 520)
K4	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	130 (110 — 150) 425 (370 — 490)
K5	E	0,02 0.02	0,3 0.3	0,042 0.0017	0,048 0.0019	0,055 0.0022	85 (65 — 110) 280 (220 — 360)
K6	E	0,02 0.02	0,3 0.3	0,04 0.0016	0,048 0.0019	0,055 0.0022	130 (120 — 160) 425 (400 — 520)
K7	E	0,02 0.02	0,3 0.3	0,04 0.0016	0,048 0.0019	0,055 0.0022	110 (94 — 140) 360 (310 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

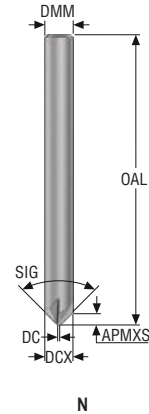
 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

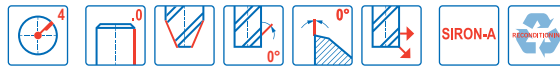
All cutting data are target values

C5041

General purpose – Universal – Chamfer – 4 Flutes – Cylindrical – Inch



- Tolerances:
- DMM=−.0001"/−.0004"
- SIG= ±1°
- Regrind possible if DMM is ≥Ø.375"



Designation	Grade	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch					
C5041-.250N1S.0Z4T30	SIRA	10268647	1	N	0.250	0.035	0.250	0.186	2.500	30,0	60,0	4	Cylindrical	■
C5041-.250N1S.0Z4T45	SIRA	10268652	1	N	0.250	0.035	0.250	0.108	2.500	45,0	90,0	4	Cylindrical	■
C5041-.375N1S.0Z4T30	SIRA	10268648	1	N	0.375	0.040	0.375	0.290	2.500	30,0	60,0	4	Cylindrical	■
C5041-.375N1S.0Z4T45	SIRA	10268653	1	N	0.375	0.040	0.375	0.168	2.500	45,0	90,0	4	Cylindrical	■
C5041-.500N1S.0Z4T30	SIRA	10268649	1	N	0.500	0.045	0.500	0.394	3.000	30,0	60,0	4	Cylindrical	■
C5041-.500N1S.0Z4T45	SIRA	10268654	1	N	0.500	0.045	0.500	0.228	3.000	45,0	90,0	4	Cylindrical	■
C5041-.750N1S.0Z4T30	SIRA	10268651	1	N	0.750	0.055	0.750	0.602	3.000	30,0	60,0	4	Cylindrical	■
C5041-.750N1S.0Z4T45	SIRA	10268655	1	N	0.750	0.055	0.750	0.348	3.000	45,0	90,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – C5041 Chamfering – Inch

SMG		a_e/DCX	a_p/DCX	f_z				v_c
				1/4	3/8	1/2	3/4	
P1	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,055 0.0022	0,065 0.0026	0,08 0.0032	205 (160 — 230) 670 (530 — 750)
P2	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	195 (160 — 230) 640 (530 — 750)
P3	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	165 (130 — 180) 540 (430 — 590)
P4	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	140 (120 — 160) 460 (400 — 520)
P5	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	135 (120 — 170) 445 (400 — 550)
P6	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	160 (120 — 170) 520 (400 — 550)
P7	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	145 (120 — 180) 475 (400 — 590)
P8	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	135 (120 — 150) 445 (400 — 490)
P11	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	85 (69 — 110) 280 (230 — 360)
P12	E	0,02 0.02	0,3 0.3	0,032 0.0013	0,038 0.0015	0,042 0.0017	0,05 0.0020	60 (49 — 91) 195 (170 — 290)
M1	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,06 0.0024	0,065 0.0026	0,08 0.0032	120 (110 — 150) 395 (370 — 490)
M2	E	0,02 0.02	0,3 0.3	0,042 0.0017	0,05 0.0020	0,055 0.0022	0,065 0.0026	80 (65 — 100) 260 (220 — 320)
M3	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,055 0.0022	0,065 0.0026	0,08 0.0032	75 (59 — 100) 245 (200 — 320)
M4	E	0,02 0.02	0,3 0.3	0,05 0.0020	0,055 0.0022	0,065 0.0026	0,08 0.0032	43 (30 — 59) 140 (99 — 190)
M5	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,06 0.0024	0,07 0.0028	36 (19 — 55) 120 (63 — 180)
K1	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	195 (160 — 240) 640 (530 — 780)
K2	E	0,02 0.02	0,3 0.3	0,055 0.0022	0,065 0.0026	0,075 0.0030	0,085 0.0034	170 (150 — 200) 560 (500 — 650)
K3	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	145 (130 — 160) 475 (430 — 520)
K4	E	0,02 0.02	0,3 0.3	0,044 0.0017	0,05 0.0020	0,055 0.0022	0,07 0.0028	130 (110 — 150) 425 (370 — 490)
K5	E	0,02 0.02	0,3 0.3	0,042 0.0017	0,048 0.0019	0,055 0.0022	0,065 0.0026	85 (65 — 110) 280 (220 — 360)
K6	E	0,02 0.02	0,3 0.3	0,04 0.0016	0,048 0.0019	0,055 0.0022	0,06 0.0024	130 (120 — 160) 425 (400 — 520)
K7	E	0,02 0.02	0,3 0.3	0,04 0.0016	0,048 0.0019	0,055 0.0022	0,06 0.0024	110 (94 — 140) 360 (310 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

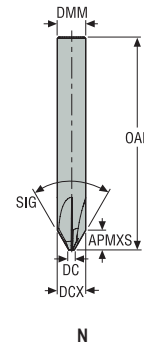
 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

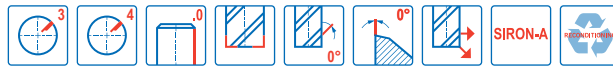
All cutting data are target values

JS506

General purpose – Universal – Chamfer – 3-4 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- SIG= $\pm 0,5^\circ$
- Regrind possible if DMM is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
JS506030N2CZ3.0-SIRA	02881622	2	N	3,0	0,6	3,0	2,0	50,0	30,0	60,0	3	Cylindrical	■
JS506040N2CZ3.0-SIRA	02881623	2	N	4,0	0,8	4,0	2,7	50,0	30,0	60,0	3	Cylindrical	■
JS506060N2CZ4.0-SIRA	02881624	2	N	6,0	1,2	6,0	4,1	57,0	30,0	60,0	4	Cylindrical	■
JS506080N2CZ4.0-SIRA	02881626	2	N	8,0	1,6	8,0	5,5	63,0	30,0	60,0	4	Cylindrical	■
JS506100N2CZ4.0-SIRA	02881628	2	N	10,0	2,0	10,0	6,9	72,0	30,0	60,0	4	Cylindrical	■
JS506120N2CZ4.0-SIRA	02881630	2	N	12,0	2,4	12,0	8,3	83,0	30,0	60,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

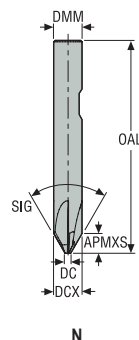
Graphite

X-Heads

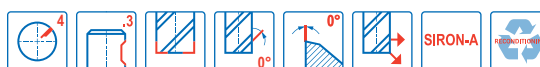
Minimaster

JS506

General purpose – Universal – Chamfer – 3-4 Flutes – Weldon



—Tolerances:
—DMM=h5
—SIG= $\pm 0,5^\circ$
—Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
JS506060N2CZ4.3-SIRA	02881625	2	N	6,0	1,2	6,0	4,1	57,0	30,0	60,0	4	Weldon	■
JS506080N2CZ4.3-SIRA	02881627	2	N	8,0	1,6	8,0	5,5	63,0	30,0	60,0	4	Weldon	■
JS506100N2CZ4.3-SIRA	02881629	2	N	10,0	2,0	10,0	6,9	72,0	30,0	60,0	4	Weldon	■
JS506120N2CZ4.3-SIRA	02881631	2	N	12,0	2,4	12,0	8,3	83,0	30,0	60,0	4	Weldon	■

■ Stocked standard.

Cutting data – JS506 Chamfering

SMG		a _e /DCX	a _p /DCX	f _z						v _c	
				3	4	6	8	10	12		
P1	M/A/D/E	0,02 0,02	0,3 0,3	0,026 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	190 (170 — 210) 620 (560 — 680)	Universal
P2	M/A/D/E	0,02 0,02	0,3 0,3	0,026 0,0010	0,036 0,0014	0,055 0,0022	0,07 0,0028	0,09 0,0036	0,1 0,0040	180 (160 — 200) 590 (530 — 650)	
P3	M/A/D/E	0,02 0,02	0,3 0,3	0,025 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	155 (140 — 170) 510 (460 — 550)	Steel and cast iron
P4	M/A/D/E	0,02 0,02	0,3 0,3	0,025 0,0010	0,032 0,0013	0,05 0,0020	0,065 0,0026	0,08 0,0032	0,095 0,0038	140 (130 — 150) 460 (430 — 490)	
P5	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	135 (120 — 150) 445 (400 — 490)	Stainless steel and S-materials
P6	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	150 (130 — 160) 490 (430 — 520)	
P7	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	140 (130 — 160) 460 (430 — 520)	Non ferrous
P8	M/A/D/E	0,02 0,02	0,3 0,3	0,025 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	130 (120 — 140) 425 (400 — 450)	
P11	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	95 (76 — 110) 310 (250 — 360)	Hard
P12	M/A/D/E	0,02 0,02	0,3 0,3	0,016 0,00065	0,022 0,00085	0,032 0,0013	0,044 0,0017	0,055 0,0022	0,065 0,0026	60 (47 — 69) 195 (160 — 220)	
M1	E/M/A	0,02 0,02	0,3 0,3	0,026 0,0010	0,036 0,0014	0,055 0,0022	0,07 0,0028	0,09 0,0036	0,1 0,0040	110 (87 — 120) 360 (290 — 390)	Plastic and cfrrp
M2	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	90 (72 — 100) 295 (240 — 320)	
M3	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	60 (41 — 75) 195 (140 — 240)	Graphite
M4	E/M/A	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,042 0,0017	0,055 0,0022	0,07 0,0028	0,08 0,0032	44 (31 — 57) 145 (110 — 180)	
M5	E/M/A	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,042 0,0017	0,055 0,0022	0,07 0,0028	0,08 0,0032	37 (26 — 48) 120 (86 — 150)	X-Heads
K1	A/D/M/E	0,02 0,02	0,3 0,3	0,026 0,0010	0,036 0,0014	0,055 0,0022	0,07 0,0028	0,09 0,0036	0,1 0,0040	185 (160 — 200) 610 (530 — 650)	
K2	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	160 (140 — 180) 520 (460 — 590)	Minimaster
K3	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	135 (120 — 150) 445 (400 — 490)	
K4	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	130 (120 — 140) 425 (400 — 450)	
K5	A/D/M/E	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,044 0,0017	0,06 0,0024	0,07 0,0028	0,085 0,0034	80 (69 — 89) 260 (230 — 290)	
K6	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	115 (100 — 130) 375 (330 — 420)	
K7	A/D/M/E	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,044 0,0017	0,06 0,0024	0,07 0,0028	0,085 0,0034	100 (88 — 110) 330 (290 — 360)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS506 Chamfering

SMG		a _e /DCX	a _p /DCX	f _z						v _c
				3	4	6	8	10	12	
N1	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	445 (410 — 480) 1450 (1400 — 1500)
N2	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	285 (260 — 310) 940 (860 — 1000)
N3	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	190 (180 — 200) 620 (600 — 650)
N11	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	255 (230 — 270) 840 (760 — 880)
S1	E	0,02 0,02	0,3 0,3	0,013 0,00050	0,017 0,00065	0,026 0,0010	0,034 0,0013	0,044 0,0017	0,05 0,0020	42 (14 — 69) 140 (46 — 220)
S2	E	0,02 0,02	0,3 0,3	0,013 0,00050	0,017 0,00065	0,026 0,0010	0,034 0,0013	0,044 0,0017	0,05 0,0020	34 (12 — 56) 110 (40 — 180)
S3	E	0,02 0,02	0,3 0,3	0,012 0,00048	0,016 0,00065	0,024 0,00095	0,032 0,0013	0,04 0,0016	0,048 0,0019	29 (9,8 — 48) 95 (33 — 150)
S11	E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	85 (64 — 100) 280 (210 — 320)
S12	E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	65 (49 — 84) 215 (170 — 270)
S13	E	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,042 0,0017	0,055 0,0022	0,07 0,0028	0,08 0,0032	55 (39 — 66) 180 (130 — 210)
H5	M/A/D	0,02 0,02	0,3 0,3	0,012 0,00048	0,016 0,00065	0,024 0,00095	0,032 0,0013	0,04 0,0016	0,048 0,0019	65 (47 — 87) 215 (160 — 280)
H8	M/A/D	0,02 0,02	0,3 0,3	0,0095 0,00038	0,012 0,00048	0,019 0,00075	0,025 0,0010	0,03 0,0012	0,036 0,0014	70 (47 — 88) 230 (160 — 280)
H11	M/A/D	0,02 0,02	0,3 0,3	0,012 0,00048	0,016 0,00065	0,024 0,00095	0,032 0,0013	0,04 0,0016	0,048 0,0019	85 (60 — 110) 280 (200 — 360)
H12	M/A/D	0,02 0,02	0,3 0,3	0,0095 0,00038	0,012 0,00048	0,019 0,00075	0,025 0,0010	0,03 0,0012	0,036 0,0014	80 (55 — 100) 260 (190 — 320)
H21	M/A/D	0,02 0,02	0,3 0,3	0,0095 0,00038	0,012 0,00048	0,019 0,00075	0,025 0,0010	0,03 0,0012	0,036 0,0014	70 (47 — 88) 230 (160 — 280)
TS1	A/D	0,02 0,02	0,3 0,3	0,03 0,0012	0,04 0,0016	0,06 0,0024	0,08 0,0032	0,1 0,0040	0,12 0,0048	550 (500 — 600) 1800 (1700 — 1900)
TP1	A/D	0,02 0,02	0,3 0,3	0,03 0,0012	0,04 0,0016	0,06 0,0024	0,08 0,0032	0,1 0,0040	0,12 0,0048	550 (500 — 600) 1800 (1700 — 1900)
GR1	A/D	0,02 0,02	0,3 0,3	0,03 0,0012	0,04 0,0016	0,06 0,0024	0,08 0,0032	0,1 0,0040	0,12 0,0048	550 (500 — 600) 1800 (1700 — 1900)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

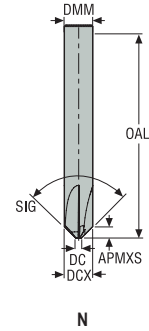
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

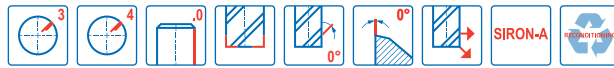
All cutting data are target values

JS509

General purpose – Universal – Chamfer – 3-4 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- SIG= $\pm 0,5^\circ$
- Regrind possible if DMM is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
JS509030N2CZ3.0-SIRA	02881634	2	N	3,0	0,6	3,0	1,2	50,0	45,0	90,0	3	Cylindrical	■
JS509040N2CZ3.0-SIRA	02881635	2	N	4,0	0,8	4,0	1,6	50,0	45,0	90,0	3	Cylindrical	■
JS509060N2CZ4.0-SIRA	02881636	2	N	6,0	1,2	6,0	2,4	57,0	45,0	90,0	4	Cylindrical	■
JS509080N2CZ4.0-SIRA	02881638	2	N	8,0	1,6	8,0	3,2	63,0	45,0	90,0	4	Cylindrical	■
JS509100N2CZ4.0-SIRA	02881640	2	N	10,0	2,0	10,0	4,0	72,0	45,0	90,0	4	Cylindrical	■
JS509120N2CZ4.0-SIRA	02881642	2	N	12,0	2,4	12,0	4,8	83,0	45,0	90,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

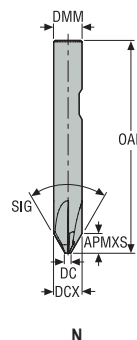
Graphite

X-Heads

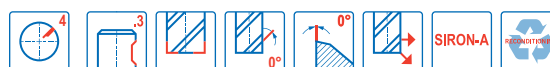
Minimaster

JS509

General purpose – Universal – Chamfer – 3-4 Flutes – Weldon



—Tolerances:
—DMM=h5
—SIG= $\pm 0,5^\circ$
—Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
JS509060N2CZ4.3-SIRA	02881637	2	N	6,0	1,2	6,0	2,4	57,0	45,0	90,0	4	Weldon	■
JS509080N2CZ4.3-SIRA	02881639	2	N	8,0	1,6	8,0	3,2	63,0	45,0	90,0	4	Weldon	■
JS509100N2CZ4.3-SIRA	02881641	2	N	10,0	2,0	10,0	4,0	72,0	45,0	90,0	4	Weldon	■
JS509120N2CZ4.3-SIRA	02881643	2	N	12,0	2,4	12,0	4,8	83,0	45,0	90,0	4	Weldon	■

■ Stocked standard.

Cutting data – JS509 Chamfering

SMG		a _e /DCX	a _p /DCX	f _z						v _c
				3	4	6	8	10	12	
P1	M/A/D/E	0,02 0,02	0,3 0,3	0,026 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	200 (180 — 220) 660 (600 — 720)
P2	M/A/D/E	0,02 0,02	0,3 0,3	0,026 0,0010	0,036 0,0014	0,055 0,0022	0,07 0,0028	0,09 0,0036	0,1 0,0040	190 (170 — 210) 620 (560 — 680)
P3	M/A/D/E	0,02 0,02	0,3 0,3	0,025 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	165 (150 — 180) 540 (500 — 590)
P4	M/A/D/E	0,02 0,02	0,3 0,3	0,025 0,0010	0,032 0,0013	0,05 0,0020	0,065 0,0026	0,08 0,0032	0,095 0,0038	145 (130 — 160) 475 (430 — 520)
P5	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	140 (130 — 150) 460 (430 — 490)
P6	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	160 (140 — 170) 520 (460 — 550)
P7	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	150 (130 — 160) 490 (430 — 520)
P8	M/A/D/E	0,02 0,02	0,3 0,3	0,025 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	140 (130 — 150) 460 (430 — 490)
P11	M/A/D/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	100 (79 — 110) 330 (260 — 360)
P12	M/A/D/E	0,02 0,02	0,3 0,3	0,016 0,00065	0,022 0,00085	0,032 0,0013	0,044 0,0017	0,055 0,0022	0,065 0,0026	60 (49 — 72) 195 (170 — 230)
M1	E/M/A	0,02 0,02	0,3 0,3	0,026 0,0010	0,036 0,0014	0,055 0,0022	0,07 0,0028	0,09 0,0036	0,1 0,0040	115 (92 — 130) 375 (310 — 420)
M2	E/M/A	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	95 (75 — 110) 310 (250 — 360)
M3	E/M/A	0,02 0,02	0,3 0,3	0,026 0,0010	0,034 0,0013	0,05 0,0020	0,07 0,0028	0,085 0,0034	0,1 0,0040	60 (43 — 79) 195 (150 — 250)
M4	E/M/A	0,02 0,02	0,3 0,3	0,022 0,00085	0,03 0,0012	0,044 0,0017	0,06 0,0024	0,075 0,0030	0,09 0,0036	46 (32 — 60) 150 (110 — 190)
M5	E/M/A	0,02 0,02	0,3 0,3	0,022 0,00085	0,03 0,0012	0,044 0,0017	0,06 0,0024	0,075 0,0030	0,09 0,0036	39 (27 — 50) 130 (89 — 160)
K1	A/D/M/E	0,02 0,02	0,3 0,3	0,026 0,0010	0,036 0,0014	0,055 0,0022	0,07 0,0028	0,09 0,0036	0,1 0,0040	195 (170 — 210) 640 (560 — 680)
K2	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	170 (150 — 190) 560 (500 — 620)
K3	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	145 (130 — 160) 475 (430 — 520)
K4	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	135 (120 — 150) 445 (400 — 490)
K5	A/D/M/E	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,044 0,0017	0,06 0,0024	0,07 0,0028	0,085 0,0034	85 (72 — 93) 280 (240 — 300)
K6	A/D/M/E	0,02 0,02	0,3 0,3	0,024 0,00095	0,032 0,0013	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	120 (110 — 130) 395 (370 — 420)
K7	A/D/M/E	0,02 0,02	0,3 0,3	0,022 0,00085	0,028 0,0011	0,044 0,0017	0,06 0,0024	0,07 0,0028	0,085 0,0034	105 (92 — 120) 345 (310 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfprp

Graphite

X-Heads

Minimaster

Cutting data – JS509 Chamfering

SMG		a _e /DCX	a _p /DCX	f _z						v _c
				3	4	6	8	10	12	
N1	E/M/A	0,02	0,3	0,026	0,034	0,05	0,07	0,085	0,1	470 (430 — 510)
		0,02	0,3	0,0010	0,0013	0,0020	0,0028	0,0034	0,0040	1550 (1500 — 1600)
N2	E/M/A	0,02	0,3	0,026	0,034	0,05	0,07	0,085	0,1	300 (280 — 330)
		0,02	0,3	0,0010	0,0013	0,0020	0,0028	0,0034	0,0040	980 (920 — 1000)
N3	E/M/A	0,02	0,3	0,026	0,034	0,05	0,07	0,085	0,1	200 (190 — 220)
		0,02	0,3	0,0010	0,0013	0,0020	0,0028	0,0034	0,0040	660 (630 — 720)
N11	E/M/A	0,02	0,3	0,026	0,034	0,05	0,07	0,085	0,1	265 (250 — 290)
		0,02	0,3	0,0010	0,0013	0,0020	0,0028	0,0034	0,0040	870 (830 — 950)
S1	E	0,02	0,3	0,013	0,017	0,026	0,036	0,044	0,05	45 (15 — 74)
		0,02	0,3	0,00050	0,00065	0,0010	0,0014	0,0017	0,0020	150 (50 — 240)
S2	E	0,02	0,3	0,013	0,017	0,026	0,036	0,044	0,05	36 (12 — 59)
		0,02	0,3	0,00050	0,00065	0,0010	0,0014	0,0017	0,0020	120 (40 — 190)
S3	E	0,02	0,3	0,012	0,016	0,024	0,032	0,04	0,048	31 (11 — 51)
		0,02	0,3	0,00048	0,00065	0,00095	0,0013	0,0016	0,0019	100 (37 — 160)
S11	E	0,02	0,3	0,024	0,032	0,048	0,065	0,08	0,095	90 (67 — 110)
		0,02	0,3	0,00095	0,0013	0,0019	0,0026	0,0032	0,0038	295 (220 — 360)
S12	E	0,02	0,3	0,024	0,032	0,048	0,065	0,08	0,095	70 (52 — 88)
		0,02	0,3	0,00095	0,0013	0,0019	0,0026	0,0032	0,0038	230 (180 — 280)
S13	E	0,02	0,3	0,022	0,028	0,042	0,055	0,07	0,085	55 (41 — 69)
		0,02	0,3	0,00085	0,0011	0,0017	0,0022	0,0028	0,0034	180 (140 — 220)
H5	M/A/D	0,02	0,3	0,012	0,016	0,025	0,034	0,042	0,048	70 (49 — 92)
		0,02	0,3	0,00048	0,00065	0,0010	0,0013	0,0017	0,0019	230 (170 — 300)
H8	M/A/D	0,02	0,3	0,0095	0,012	0,019	0,025	0,032	0,036	70 (49 — 92)
		0,02	0,3	0,00038	0,00048	0,00075	0,0010	0,0013	0,0014	230 (170 — 300)
H11	M/A/D	0,02	0,3	0,012	0,016	0,025	0,034	0,042	0,048	90 (63 — 110)
		0,02	0,3	0,00048	0,00065	0,0010	0,0013	0,0017	0,0019	295 (210 — 360)
H12	M/A/D	0,02	0,3	0,0095	0,012	0,019	0,025	0,032	0,036	80 (57 — 100)
		0,02	0,3	0,00038	0,00048	0,00075	0,0010	0,0013	0,0014	260 (190 — 320)
H21	M/A/D	0,02	0,3	0,0095	0,012	0,019	0,025	0,032	0,036	70 (49 — 92)
		0,02	0,3	0,00038	0,00048	0,00075	0,0010	0,0013	0,0014	230 (170 — 300)
TS1	A/D	0,02	0,3	0,024	0,032	0,048	0,065	0,08	0,095	470 (430 — 510)
		0,02	0,3	0,00095	0,0013	0,0019	0,0026	0,0032	0,0038	1550 (1500 — 1600)
TP1	A/D	0,02	0,3	0,024	0,032	0,048	0,065	0,08	0,095	470 (430 — 510)
		0,02	0,3	0,00095	0,0013	0,0019	0,0026	0,0032	0,0038	1550 (1500 — 1600)
GR1	A/D	0,02	0,3	0,024	0,032	0,048	0,065	0,08	0,095	470 (430 — 510)
		0,02	0,3	0,00095	0,0013	0,0019	0,0026	0,0032	0,0038	1550 (1500 — 1600)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

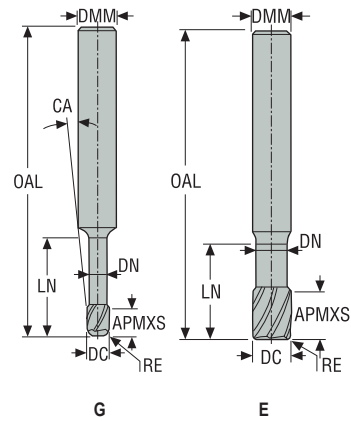
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

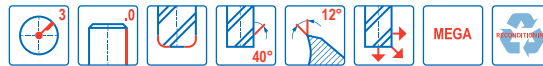
All cutting data are target values

JH910

High speed – Universal – Square – 3 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= -0,02/-0,03 mm
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
910020R020-MEGA	00020058	2	G	2,0	3,0	3,0	40,0	6,0	1,9	0,2	3,5	3	Cylindrical	■
910025R020-MEGA	00020065	2	G	2,5	3,0	4,0	40,0	6,0	2,4	0,2	2,0	3	Cylindrical	■
910030R010-MEGA	00020073	2	E	3,0	3,0	4,0	40,0	7,0	2,8	0,1	–	3	Cylindrical	■
910030R020-MEGA	00020142	2	E	3,0	3,0	4,0	40,0	7,0	2,8	0,2	–	3	Cylindrical	■
910035R020-MEGA	00020144	2	G	3,5	6,0	5,0	50,0	9,0	3,2	0,2	6,0	3	Cylindrical	■
910040R020-MEGA	00020151	2	G	4,0	6,0	5,0	50,0	9,0	3,7	0,2	5,0	3	Cylindrical	■
910040R030-MEGA	00020152	2	G	4,0	6,0	5,0	50,0	9,0	3,7	0,3	5,0	3	Cylindrical	■
910040R050-MEGA	00020155	2	G	4,0	6,0	5,0	50,0	9,0	3,7	0,5	5,0	3	Cylindrical	■
910050R020-MEGA	00020159	2	G	5,0	6,0	6,0	50,0	11,0	4,6	0,2	2,5	3	Cylindrical	■
910060R020-MEGA	00020160	2	E	6,0	6,0	7,0	60,0	14,0	5,6	0,2	–	3	Cylindrical	■
910060R030-MEGA	00020161	2	E	6,0	6,0	7,0	60,0	14,0	5,6	0,3	–	3	Cylindrical	■
910060R050-MEGA	00020162	2	E	6,0	6,0	7,0	60,0	14,0	5,6	0,5	–	3	Cylindrical	■
910080R020-MEGA	00020163	2	E	8,0	8,0	9,0	60,0	18,0	7,4	0,2	–	3	Cylindrical	■
910080R050-MEGA	00020164	2	E	8,0	8,0	9,0	60,0	18,0	7,4	0,5	–	3	Cylindrical	■
910100R020-MEGA	00020165	2	E	10,0	10,0	12,0	70,0	25,0	9,4	0,2	–	3	Cylindrical	■
910100R050-MEGA	00020166	2	E	10,0	10,0	12,0	70,0	25,0	9,4	0,5	–	3	Cylindrical	■
910100R100-MEGA	00020167	2	E	10,0	10,0	12,0	70,0	25,0	9,4	1,0	–	3	Cylindrical	■
910120R050-MEGA	00020168	2	E	12,0	12,0	15,0	80,0	30,0	11,4	0,5	–	3	Cylindrical	■
910120R100-MEGA	00020169	2	E	12,0	12,0	15,0	80,0	30,0	11,4	1,0	–	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

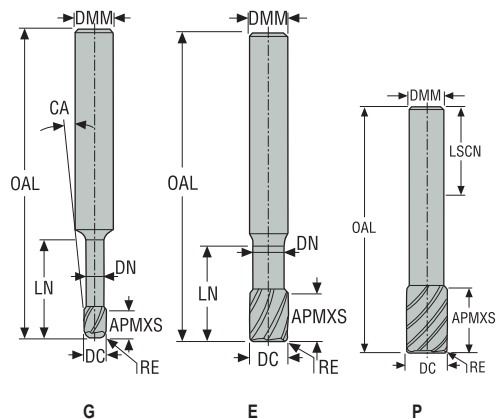
Graphite

X-Heads

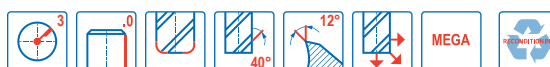
Minimaster

JH910

High speed – Universal – Square – 3 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= -0,02/-0,03 mm
—RE= ±0,01 mm
—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
910L020-MEGA	00022002	3	G	2,0	3,0	3,0	60,0	10,0	1,9	0,2	2,5	3	Cylindrical	■
910L030-MEGA	00022003	3	E	3,0	3,0	4,0	60,0	14,0	2,8	0,2	—	3	Cylindrical	■
910L040-MEGA	00022004	3	G	4,0	6,0	5,0	65,0	18,0	3,7	0,2	3,0	3	Cylindrical	■
910L050-MEGA	00022005	3	G	5,0	6,0	6,0	65,0	22,0	4,6	0,2	1,5	3	Cylindrical	■
910L060-MEGA	00022006	3	E	6,0	6,0	7,0	80,0	26,0	5,6	0,3	—	3	Cylindrical	■
910L080-MEGA	00022007	3	E	8,0	8,0	9,0	85,0	36,0	7,4	0,5	—	3	Cylindrical	■
910L100-MEGA	00022009	3	E	10,0	10,0	12,0	100,0	45,0	9,4	0,5	—	3	Cylindrical	■
910L120-MEGA	00022011	3	E	12,0	12,0	15,0	125,0	54,0	11,4	0,5	—	3	Cylindrical	■
910L160-MEGA	00022013	3	E	16,0	16,0	18,0	125,0	65,0	15,4	1,0	—	3	Cylindrical	■
910RS070-MEGA	00021772	4	P	7,0	6,0	8,0	100,0	—	—	0,3	—	3	Cylindrical	■
910RS090-MEGA	00021781	4	P	9,0	8,0	11,0	100,0	—	—	0,5	—	3	Cylindrical	■
910RS110-MEGA	00021782	4	P	11,0	10,0	13,0	125,0	—	—	0,5	—	3	Cylindrical	■
910RS130-MEGA	00021784	4	P	13,0	12,0	16,0	150,0	—	—	0,6	—	3	Cylindrical	■
910RS170-MEGA	00021800	4	P	17,0	16,0	20,0	150,0	—	—	0,6	—	3	Cylindrical	■

■ Stocked standard.

Cutting data – JH910 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z														v _c
				2	3	4	5	6	7	8	9	10	11	12	13	16	17	
P1	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	455 (410 — 500) 1500 (1400 — 1600)
P2	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	445 (400 — 490) 1450 (1400 — 1600)
P3	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	385 (350 — 420) 1275 (1200 — 1300)
P4	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	335 (300 — 370) 1100 (990 — 1200)
P5	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	320 (290 — 350) 1050 (960 — 1100)
P6	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	360 (330 — 400) 1175 (1100 — 1300)
P7	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	340 (310 — 370) 1125 (1100 — 1200)
P8	M/E/A	0.0400 0,0400	1.1 1,1	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	320 (290 — 350) 1050 (960 — 1100)
P11	M/E/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	330 (300 — 360) 1075 (990 — 1100)
P12	M/E/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	195 (180 — 210) 640 (600 — 680)
M1	M/E/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	200 (180 — 220) 660 (600 — 720)
M2	M/E/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	160 (150 — 170) 520 (500 — 550)
M3	M/E/A	0.0300 0,0300	0.80 0,80	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	110 (91 — 120) 360 (300 — 390)
M4	M/E/A	0.0300 0,0300	0.80 0,80	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	80 (68 — 94) 260 (230 — 300)
M5	M/E/A	0.0300 0,0300	0.80 0,80	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	70 (57 — 78) 230 (190 — 250)
K1	A/E	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	315 (270 — 350) 1025 (890 — 1100)
K2	A/E	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	270 (240 — 310) 890 (790 — 1000)
K3	A/E	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	230 (200 — 260) 750 (660 — 850)
K4	A/E	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	220 (190 — 250) 720 (630 — 820)
K5	A/E	0.0300 0,0300	0.80 0,80	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	280 (240 — 320) 920 (790 — 1000)
K6	A/E	0.0300 0,0300	0.80 0,80	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	415 (350 — 480) 1350 (1200 — 1500)
K7	A/E	0.0300 0,0300	0.80 0,80	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	355 (300 — 410) 1175 (990 — 1300)
S1	E/M/A	0.0300 0,0300	0.70 0,70	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	115 (93 — 130) 375 (310 — 420)
S2	E/M/A	0.0300 0,0300	0.70 0,70	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	95 (75 — 110) 310 (250 — 360)
S3	E/M/A	0.0200 0,0200	0.50 0,50	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.055 0,0022	0.065 0,0026	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.095 0,0038	0.10 0,0040	0.13 0,0050	0.14 0,0055	50 (40 — 59) 165 (140 — 190)
S11	E/M/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	175 (160 — 190) 570 (530 — 620)
S12	E/M/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	135 (120 — 150) 445 (400 — 490)
S13	E/M/A	0.0400 0,0400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.16 0,0065	0.17 0,0065	105 (90 — 110) 345 (300 — 360)
TP1	A	0.150 0,150	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.090 0,0036	0.10 0,0040	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.15 0,0060	205 (180 — 240) 670 (600 — 780)
GR1	A	0.500 0,500	1.0 1,0	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.13 0,0050	0.14 0,0055	0.15 0,0060	0.18 0,0070	0.18 0,0070	610 (510 — 710) 2000 (1700 — 2300)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c= m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JH910 Slot milling

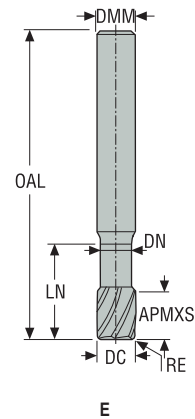
SMG		a _p /DC	f _z														v _c
			2	3	4	5	6	7	8	9	10	11	12	13	16	17	
P1	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	255 (230 — 280)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	840 (760 — 910)
P2	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	250 (230 — 270)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	820 (760 — 880)
P3	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	215 (200 — 230)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	710 (660 — 750)
P4	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	190 (170 — 200)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	620 (560 — 650)
P5	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	180 (170 — 190)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	590 (560 — 620)
P6	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	200 (180 — 220)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	660 (600 — 720)
P7	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	190 (170 — 210)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	620 (560 — 680)
P8	M/E/A	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	180 (170 — 190)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	590 (560 — 620)
P11	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	195 (180 — 210)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	640 (600 — 680)
P12	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	115 (110 — 120)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	375 (370 — 390)
M1	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	120 (110 — 130)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	395 (370 — 420)
M2	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	95 (86 — 100)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	310 (290 — 320)
M3	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	60 (51 — 70)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	195 (170 — 220)
M4	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	45 (38 — 52)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	150 (130 — 170)
M5	M/E/A	0.10	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	38 (32 — 43)
		0,10	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	125 (110 — 140)
K1	A/E	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	175 (160 — 200)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	570 (530 — 650)
K2	A/E	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	150 (140 — 170)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	490 (460 — 550)
K3	A/E	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	130 (120 — 140)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	425 (400 — 450)
K4	A/E	0.30	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	125 (110 — 140)
		0,30	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	410 (370 — 450)
K5	A/E	0.16	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	150 (130 — 170)
		0,16	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	490 (430 — 550)
K6	A/E	0.16	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	220 (190 — 250)
		0,16	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	720 (630 — 820)
K7	A/E	0.16	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	190 (170 — 220)
		0,16	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	620 (560 — 720)
S1	E/M/A	0.15	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	60 (50 — 74)
		0,15	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	195 (170 — 240)
S2	E/M/A	0.15	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	50 (41 — 60)
		0,15	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	165 (140 — 190)
S3	E/M/A	0.080	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	25 (21 — 30)
		0,080	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	80 (69 — 98)
S11	E/M/A	0.24	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	100 (85 — 110)
		0,24	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	330 (280 — 360)
S12	E/M/A	0.24	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	75 (65 — 84)
		0,24	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	245 (220 — 270)
S13	E/M/A	0.24	0.010	0.015	0.020	0.025	0.030	0.036	0.040	0.046	0.050	0.055	0.060	0.065	0.080	0.085	60 (51 — 65)
		0,24	0,00040	0,00060	0,00080	0,0010	0,0012	0,0014	0,0016	0,0018	0,0020	0,0022	0,0024	0,0026	0,0032	0,0034	195 (170 — 210)
TP1	A	0.24	0.012	0.018	0.024	0.030	0.036	0.042	0.048	0.055	0.060	0.065	0.070	0.080	0.095	0.10	150 (130 — 170)
		0,24	0,00048	0,00070	0,00095	0,0012	0,0014	0,0017	0,0019	0,0022	0,0024	0,0026	0,0028	0,0032	0,0038	0,0040	490 (430 — 550)
GR1	A	0.36	0.014	0.022	0.028	0.036	0.042	0.050	0.055	0.065	0.070	0.075	0.085	0.090	0.11	0.12	600 (510 — 700)
		0,36	0,00055	0,00085	0,0011	0,0014	0,0017	0,0020	0,0022	0,0026	0,0028	0,0030	0,0034	0,0036	0,0044	0,0048	1975 (1700 — 2200)

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm/tooth (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH930

High speed – Universal – Square – 5-8 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,05 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
930060R020-MEGA	00022026	2	E	6,0	6,0	9,0	55,0	15,0	5,6	0,2	5	Cylindrical	■
930060R050-MEGA	00022027	2	E	6,0	6,0	9,0	55,0	15,0	5,6	0,5	5	Cylindrical	■
930080R020-MEGA	00022028	2	E	8,0	8,0	12,0	60,0	18,0	7,4	0,2	5	Cylindrical	■
930080R050-MEGA	00022029	2	E	8,0	8,0	12,0	60,0	18,0	7,4	0,5	5	Cylindrical	■
930100R030-MEGA	00022030	2	E	10,0	10,0	15,0	70,0	25,0	9,4	0,3	6	Cylindrical	■
930100R100-MEGA	00022031	2	E	10,0	10,0	15,0	70,0	25,0	9,4	1,0	6	Cylindrical	■
930120R050-MEGA	00022033	2	E	12,0	12,0	18,0	80,0	30,0	11,4	0,5	6	Cylindrical	■
930120R100-MEGA	00022034	2	E	12,0	12,0	18,0	80,0	30,0	11,4	1,0	6	Cylindrical	■
930160R050-MEGA	00022035	2	E	16,0	16,0	24,0	90,0	35,0	15,4	0,5	8	Cylindrical	■
930160R100-MEGA	00022040	2	E	16,0	16,0	24,0	90,0	35,0	15,4	1,0	8	Cylindrical	■
930200R050-MEGA	00022044	2	E	20,0	20,0	30,0	100,0	38,0	19,2	0,5	8	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH930 Side milling

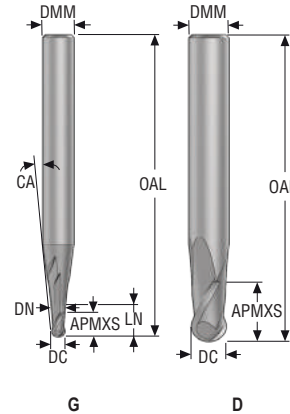
SMG		a _e /DC	a _p /DC	f _z						v _c
				6	8	10	12	16	20	
P1	M/E/A	0.0400 0,0400	0.70 0,70	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	440 (370 — 490) 1450 (1300 — 1600)
P2	M/E/A	0.0400 0,0400	0.70 0,70	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	430 (360 — 480) 1400 (1200 — 1500)
P3	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	375 (320 — 420) 1225 (1100 — 1300)
P4	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	330 (280 — 370) 1075 (920 — 1200)
P5	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	315 (270 — 350) 1025 (890 — 1100)
P6	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	355 (300 — 390) 1175 (990 — 1200)
P7	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	335 (280 — 370) 1100 (920 — 1200)
P8	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	315 (270 — 350) 1025 (890 — 1100)
P11	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	325 (280 — 360) 1075 (920 — 1100)
P12	M/E/A	0.0400 0,0400	0.70 0,70	0.040 0,0016	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.11 0,0044	200 (170 — 220) 660 (560 — 720)
K1	E/M/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	255 (210 — 300) 840 (690 — 980)
K2	E/M/A	0.0400 0,0400	0.70 0,70	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	225 (180 — 260) 740 (600 — 850)
K3	E/M/A	0.0400 0,0400	0.70 0,70	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	190 (160 — 220) 620 (530 — 720)
K4	E/M/A	0.0400 0,0400	0.70 0,70	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	180 (150 — 210) 590 (500 — 680)
K5	E/M/A	0.0300 0,0300	0.50 0,50	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	205 (160 — 250) 670 (530 — 820)
K6	E/M/A	0.0300 0,0300	0.50 0,50	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	300 (230 — 370) 980 (760 — 1200)
K7	E/M/A	0.0300 0,0300	0.50 0,50	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	260 (200 — 320) 850 (660 — 1000)
S1	E/M/A	0.0300 0,0300	0.44 0,44	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	80 (62 — 100) 260 (210 — 320)
S2	E/M/A	0.0300 0,0300	0.44 0,44	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	65 (50 — 82) 215 (170 — 260)
S3	E/M/A	0.0200 0,0200	0.70 0,70	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	41 (31 — 50) 135 (110 — 160)
S11	E/M/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	160 (140 — 180) 520 (460 — 590)
S12	E/M/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	120 (110 — 140) 395 (370 — 450)
S13	E/M/A	0.0400 0,0400	0.70 0,70	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	95 (81 — 110) 310 (270 — 360)
H3	M/A	0.0200 0,0200	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	55 (41 — 71) 180 (140 — 230)
H5	M/A	0.0300 0,0300	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	250 (210 — 300) 820 (690 — 980)
H7	M/A	0.0200 0,0200	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	55 (41 — 71) 180 (140 — 230)
H8	M/A	0.0300 0,0300	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	255 (210 — 300) 840 (690 — 980)
H11	M/A	0.0300 0,0300	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	320 (260 — 380) 1050 (860 — 1200)
H12	M/A	0.0400 0,0400	0.70 0,70	0.030 0,0012	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	270 (220 — 320) 890 (730 — 1000)
H21	M/A	0.0300 0,0300	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	255 (210 — 300) 840 (690 — 980)
H31	M/A	0.0300 0,0300	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	155 (130 — 180) 510 (430 — 590)

For cutting data recalculations, see pages 687 – 695

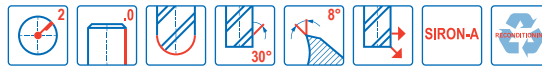
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JHB970

High speed – Universal – Ball nose – 2 Flutes – Cylindrical



— Tolerances:
— DMM= h5
— DC= -0,02/-0,04 mm
— RE= ±0,01 mm
— Regrind possible if DC is ≥ Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
JHB970020G1B.0Z2	SIRA	10072058	1	G	mm	mm	mm	mm	mm	mm	mm	mm	mm		
JHB970030D1B.0Z2	SIRA	10072059	1	D	2,0	3,0	3,0	50,0	10,0	1,9	1,0	2,5	2	Cylindrical	■
JHB970040D1B.0Z2	SIRA	10072060	1	D	3,0	3,0	4,5	50,0	—	—	1,5	—	2	Cylindrical	■
JHB970050D1B.0Z2	SIRA	10072061	1	D	4,0	4,0	6,0	60,0	—	—	2,0	—	2	Cylindrical	■
JHB970060D1B.0Z2	SIRA	10072062	1	D	5,0	5,0	7,5	60,0	—	—	2,5	—	2	Cylindrical	■
JHB970020G2B.0Z2	SIRA	10072063	2	G	6,0	6,0	9,0	75,0	—	—	3,0	—	2	Cylindrical	■
JHB970025G2B.0Z2	SIRA	10072064	2	G	2,0	6,0	3,0	60,0	4,0	1,9	1,0	8,0	2	Cylindrical	■
JHB970030G2B.0Z2	SIRA	10072065	2	G	2,5	6,0	4,0	60,0	5,0	2,4	1,25	7,5	2	Cylindrical	■
JHB970035G2B.0Z2	SIRA	10072066	2	G	3,0	6,0	4,5	60,0	6,0	2,8	1,5	5,5	2	Cylindrical	■
JHB970040G2B.0Z2	SIRA	10072067	2	G	3,5	6,0	5,0	60,0	7,0	3,2	1,75	4,5	2	Cylindrical	■
JHB970050G2B.0Z2	SIRA	10072068	2	G	4,0	6,0	6,0	60,0	8,0	3,7	2,0	3,0	2	Cylindrical	■
JHB970060G2B.0Z2	SIRA	10072069	2	G	5,0	6,0	7,5	60,0	10,0	4,6	2,5	2,0	2	Cylindrical	■
JHB970080D2B.0Z2	SIRA	10072070	2	G	6,0	8,0	9,0	75,0	12,0	5,6	3,0	2,5	2	Cylindrical	■
JHB970100D2B.0Z2	SIRA	10072071	2	D	8,0	8,0	12,0	75,0	—	—	4,0	—	2	Cylindrical	■
JHB970120D2B.0Z2	SIRA	10072072	2	D	10,0	10,0	15,0	80,0	—	—	5,0	—	2	Cylindrical	■
JHB970160D2B.0Z2	SIRA	10072073	2	D	12,0	12,0	18,0	90,0	—	—	6,0	—	2	Cylindrical	■
JHB97020G3B.0Z2	SIRA	10072074	3	G	16,0	16,0	24,0	100,0	—	—	8,0	—	2	Cylindrical	■
JHB970030G3B.0Z2	SIRA	10072075	3	G	2,0	6,0	3,0	80,0	4,0	1,9	1,0	8,0	2	Cylindrical	■
JHB970040G3B.0Z2	SIRA	10072076	3	G	3,0	6,0	4,5	80,0	6,0	2,8	1,5	5,5	2	Cylindrical	■
JHB970060G3B.0Z2	SIRA	10072077	3	G	4,0	6,0	6,0	80,0	8,0	3,7	2,0	3,0	2	Cylindrical	■
JHB970080D3B.0Z2	SIRA	10072078	3	G	6,0	8,0	9,0	100,0	12,0	5,6	3,0	2,5	2	Cylindrical	■
JHB970100D3B.0Z2	SIRA	10072079	3	D	8,0	8,0	12,0	108,0	—	—	4,0	—	2	Cylindrical	■
JHB970120D3B.0Z2	SIRA	10072080	3	D	10,0	10,0	15,0	125,0	—	—	5,0	—	2	Cylindrical	■
JHB970120D3B.0Z2	SIRA	10072080	3	D	12,0	12,0	18,0	125,0	—	—	6,0	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

Graphite

X-Heads

Minimaster

Cutting data – JHB970 Copy milling roughing

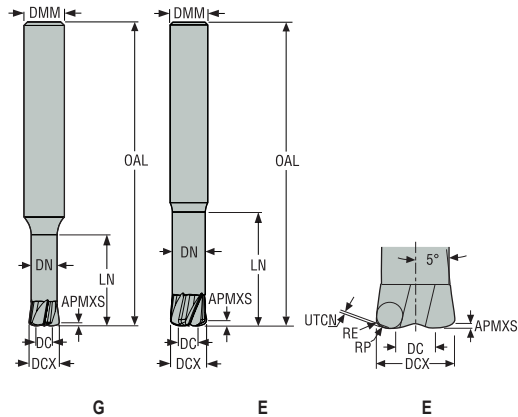
SMG		a _e /DC	a _p /DC	f _z												v _c
				2	2.5	3	3.5	4	5	6	8	10	12	16		
P1	M	0.200	1.0	0.011	0.014	0.016	0.019	0.022	0.028	0.032	0.044	0.055	0.065	0.080	210 (190 — 230)	
		0,200	1,0	0,00044	0,00055	0,00065	0,00075	0,00085	0,0011	0,0013	0,0017	0,0022	0,0026	0,0032	690 (630 — 750)	
P2	M	0.200	1.0	0.011	0.014	0.017	0.019	0.022	0.028	0.034	0.044	0.055	0.065	0.080	205 (180 — 230)	
		0,200	1,0	0,00044	0,00055	0,00065	0,00075	0,00085	0,0011	0,0013	0,0017	0,0022	0,0026	0,0032	670 (600 — 750)	
P3	M	0.200	1.0	0.010	0.013	0.016	0.018	0.020	0.026	0.032	0.042	0.050	0.060	0.075	180 (160 — 200)	
		0,200	1,0	0,00040	0,00050	0,00065	0,00070	0,00080	0,0010	0,0013	0,0017	0,0020	0,0024	0,0030	590 (530 — 650)	
P4	M	0.200	1.0	0.010	0.013	0.015	0.018	0.020	0.026	0.030	0.040	0.050	0.060	0.075	155 (140 — 170)	
		0,200	1,0	0,00040	0,00050	0,00060	0,00070	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	510 (460 — 550)	
P5	M	0.200	1.0	0.010	0.012	0.015	0.018	0.020	0.025	0.030	0.040	0.050	0.060	0.075	150 (140 — 170)	
		0,200	1,0	0,00040	0,00048	0,00060	0,00065	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	490 (460 — 550)	
P6	M	0.200	1.0	0.010	0.012	0.015	0.017	0.020	0.025	0.030	0.040	0.050	0.060	0.075	170 (150 — 190)	
		0,200	1,0	0,00040	0,00048	0,00060	0,00065	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	560 (500 — 620)	
P7	M	0.200	1.0	0.010	0.012	0.015	0.017	0.020	0.025	0.030	0.040	0.050	0.060	0.075	160 (140 — 180)	
		0,200	1,0	0,00040	0,00048	0,00060	0,00065	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	520 (460 — 590)	
P8	M	0.200	1.0	0.010	0.013	0.016	0.018	0.020	0.026	0.032	0.042	0.050	0.060	0.075	150 (140 — 170)	
		0,200	1,0	0,00040	0,00050	0,00065	0,00070	0,00080	0,0010	0,0013	0,0017	0,0020	0,0024	0,0030	490 (460 — 550)	
P11	M	0.200	1.0	0.010	0.012	0.015	0.017	0.020	0.025	0.030	0.040	0.050	0.060	0.075	75 (67 — 86)	
		0,200	1,0	0,00040	0,00048	0,00060	0,00065	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	245 (220 — 280)	
P12	M	0.200	1.0	0.0070	0.0085	0.010	0.012	0.014	0.017	0.020	0.028	0.034	0.040	0.050	48 (42 — 53)	
		0,200	1,0	0,00028	0,00034	0,00040	0,00048	0,00055	0,00065	0,00080	0,0011	0,0013	0,0016	0,0020	155 (140 — 170)	
M1	E	0.200	1.0	0.0090	0.011	0.013	0.015	0.018	0.022	0.026	0.036	0.044	0.050	0.065	90 (80 — 100)	
		0,200	1,0	0,00036	0,00044	0,00050	0,00060	0,00070	0,00085	0,0010	0,0014	0,0017	0,0020	0,0026	295 (270 — 320)	
M2	E	0.200	1.0	0.0080	0.010	0.012	0.014	0.016	0.020	0.024	0.032	0.040	0.048	0.060	75 (65 — 85)	
		0,200	1,0	0,00032	0,00040	0,00048	0,00055	0,00065	0,00080	0,00095	0,0013	0,0016	0,0019	0,0024	245 (220 — 270)	
M3	E	0.150	1.0	0.0060	0.0075	0.0090	0.010	0.012	0.015	0.018	0.024	0.030	0.036	0.044	65 (55 — 75)	
		0,150	1,0	0,00024	0,00030	0,00036	0,00040	0,00048	0,00060	0,00070	0,00095	0,0012	0,0014	0,0017	215 (190 — 240)	
M4	E	0.150	1.0	0.0050	0.0065	0.0080	0.0090	0.010	0.013	0.016	0.020	0.026	0.032	0.038	49 (42 — 56)	
		0,150	1,0	0,00020	0,00026	0,00032	0,00036	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0015	160 (140 — 180)	
M5	E	0.150	1.0	0.0050	0.0065	0.0080	0.0090	0.010	0.013	0.016	0.020	0.026	0.032	0.038	41 (35 — 47)	
		0,150	1,0	0,00020	0,00026	0,00032	0,00036	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0015	135 (120 — 150)	
S1	E	0.100	0.80	0.0060	0.0075	0.0090	0.010	0.012	0.015	0.018	0.024	0.030	0.036	0.044	50 (40 — 59)	
		0,100	0,80	0,00024	0,00030	0,00036	0,00040	0,00048	0,00060	0,00070	0,00095	0,0012	0,0014	0,0017	165 (140 — 190)	
S2	E	0.100	0.80	0.0060	0.0075	0.0090	0.010	0.012	0.015	0.018	0.024	0.030	0.036	0.044	40 (33 — 48)	
		0,100	0,80	0,00024	0,00030	0,00036	0,00040	0,00048	0,00060	0,00070	0,00095	0,0012	0,0014	0,0017	130 (110 — 150)	
S3	E	0.100	0.60	0.0040	0.0050	0.0060	0.0070	0.0080	0.010	0.012	0.016	0.020	0.024	0.028	30 (20 — 39)	
		0,100	0,60	0,00016	0,00020	0,00024	0,00028	0,00032	0,00040	0,00048	0,00065	0,00080	0,00095	0,0011	100 (66 — 120)	
S11	E	0.200	1.0	0.010	0.012	0.015	0.018	0.020	0.025	0.030	0.040	0.050	0.060	0.075	90 (79 — 100)	
		0,200	1,0	0,00040	0,00048	0,00060	0,00065	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	295 (260 — 320)	
S12	E	0.200	1.0	0.010	0.012	0.015	0.018	0.020	0.025	0.030	0.040	0.050	0.060	0.075	70 (61 — 80)	
		0,200	1,0	0,00040	0,00048	0,00060	0,00065	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	230 (210 — 260)	
S13	E	0.200	1.0	0.0085	0.011	0.013	0.015	0.017	0.022	0.026	0.034	0.044	0.050	0.065	55 (48 — 63)	
		0,200	1,0	0,00034	0,00044	0,00050	0,00060	0,00065	0,00085	0,0010	0,0013	0,0017	0,0020	0,0026	180 (160 — 200)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JHF980

High feed – Universal – 2-5 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= -0,02/-0,05 mm
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	LN	DN	RE	RP	UTCN	CA°	PSIR°	PCEDC	Shank	Stock standard
980K080Z3-MEGA	02587115	1	E	8,0	4,0	8,0	0,4	70,0	12,0	3,0	0,6	0,935	0,198	—	-5,0	3	Cylindrical	■
JHF980080E1H.0Z5-MEGA	03003384	1	E	8,0	4,0	8,0	0,4	70,0	12,0	7,0	0,6	0,935	0,198	—	-5,0	5	Cylindrical	■
980K100Z3-MEGA	02587117	1	E	10,0	5,0	10,0	0,45	80,0	15,0	3,8	0,8	1,176	0,232	—	-5,0	3	Cylindrical	■
JHF980100E1H.0Z5-MEGA	03003385	1	E	10,0	5,0	10,0	0,45	80,0	15,0	8,8	0,8	1,176	0,232	—	-5,0	5	Cylindrical	■
980K120Z3-MEGA	02587118	1	E	12,0	6,0	12,0	0,5	80,0	18,0	4,6	1,0	1,417	0,265	—	-5,0	3	Cylindrical	■
JHF980120E1H.0Z5-MEGA	03003386	1	E	12,0	6,0	12,0	0,5	80,0	18,0	10,6	1,0	1,417	0,265	—	-5,0	5	Cylindrical	■
980010-MEGA	02587111	2	G	1,0	0,5	6,0	0,07	40,0	3,0	0,7	0,07	0,127	0,028	19,5	-5,0	2	Cylindrical	■
980015-MEGA	02511199	2	G	1,5	0,75	6,0	0,1	40,0	4,5	1,2	0,1	0,183	0,043	14,0	-5,0	2	Cylindrical	■
980020-MEGA	02511221	2	G	2,0	1,0	6,0	0,15	40,0	6,0	1,7	0,15	0,269	0,055	11,0	-5,0	2	Cylindrical	■
980030-MEGA	02511224	2	G	3,0	1,5	6,0	0,2	50,0	9,0	2,6	0,2	0,366	0,085	7,0	-5,0	2	Cylindrical	■
JHF980030G2H.0Z4-MEGA	03003387	2	G	3,0	1,5	6,0	0,2	50,0	9,0	2,6	0,2	0,366	0,085	7,12	-5,0	4	Cylindrical	■
980040-MEGA	02511229	2	G	4,0	2,0	6,0	0,25	60,0	12,0	3,5	0,3	0,503	0,107	4,0	-5,0	2	Cylindrical	■
JHF980040G2H.0Z4-MEGA	03003388	2	G	4,0	2,0	6,0	0,25	60,0	12,0	3,5	0,3	0,503	0,107	4,0	-5,0	4	Cylindrical	■
980050-MEGA	02511233	2	G	5,0	2,5	6,0	0,3	60,0	15,0	4,4	0,4	0,641	0,128	2,0	-5,0	2	Cylindrical	■
JHF980050G2H.0Z4-MEGA	03003389	2	G	5,0	2,5	6,0	0,3	60,0	15,0	4,4	0,4	0,641	0,128	1,77	-5,0	4	Cylindrical	■
980060-MEGA	02511314	2	G	6,0	3,0	8,0	0,35	60,0	18,0	5,2	0,5	0,778	0,15	3,0	-5,0	2	Cylindrical	■
JHF980060G2H.0Z4-MEGA	03003390	2	G	6,0	3,0	8,0	0,35	60,0	18,0	5,2	0,5	0,778	0,15	2,86	-5,0	4	Cylindrical	■
980080-MEGA	02511322	2	E	8,0	4,0	8,0	0,4	70,0	24,0	7,0	0,6	0,935	0,198	—	-5,0	2	Cylindrical	■
JHF980080E2H.0Z5-MEGA	03003391	2	E	8,0	4,0	8,0	0,4	70,0	24,0	7,0	0,6	0,935	0,198	—	-5,0	5	Cylindrical	■
980100-MEGA	02511341	2	E	10,0	5,0	10,0	0,45	80,0	30,0	8,8	0,8	1,176	0,232	—	-5,0	2	Cylindrical	■
980100Z3-MEGA	02511342	2	E	10,0	5,0	10,0	0,45	80,0	30,0	8,8	0,8	1,176	0,232	—	-5,0	3	Cylindrical	■
JHF980100E2H.0Z5-MEGA	03003392	2	E	10,0	5,0	10,0	0,45	80,0	30,0	8,8	0,8	1,176	0,232	—	-5,0	5	Cylindrical	■
980120-MEGA	02511346	2	E	12,0	6,0	12,0	0,5	80,0	36,0	10,6	1,0	1,417	0,265	—	-5,0	2	Cylindrical	■
980120Z3-MEGA	02511347	2	E	12,0	6,0	12,0	0,5	80,0	36,0	10,6	1,0	1,417	0,265	—	-5,0	3	Cylindrical	■
JHF980120E2H.0Z5-MEGA	03003393	2	E	12,0	6,0	12,0	0,5	80,0	36,0	10,6	1,0	1,417	0,265	—	-5,0	5	Cylindrical	■

■ Stocked standard.

*UTCN=uncut-thickness

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

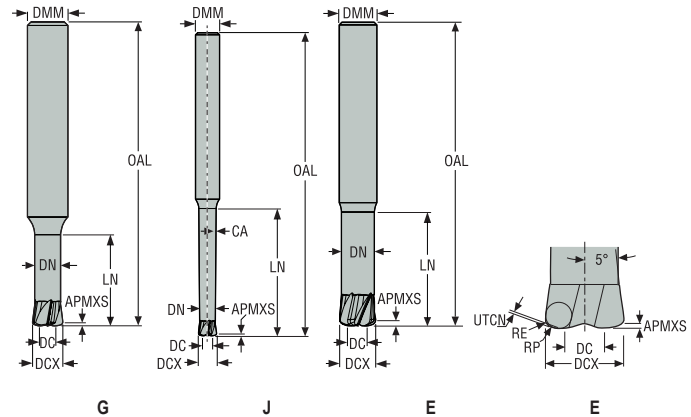
Graphite

X-Heads

Minimaster

JHF980

High feed – Universal – 2-5 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= -0,02/-0,05 mm
—RE= ±0,05 mm
—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	AP-MXS	OAL	LN	DN	RE	RP	UTCN	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
980ML010-MEGA	02587113	3	G	1,0	0,5	6,0	0,07	40,0	5,0	0,7	0,07	0,127	0,028	15,5	—	-5,0	2	Cylindrical	■
980ML015-MEGA	02511219	3	G	1,5	0,75	6,0	0,1	40,0	7,5	1,2	0,1	0,183	0,043	10,5	—	-5,0	2	Cylindrical	■
980ML020-MEGA	02511222	3	G	2,0	1,0	6,0	0,15	40,0	10,0	1,7	0,15	0,269	0,055	8,0	—	-5,0	2	Cylindrical	■
JHF980020G3H.0Z4-MEGA	03003394	3	G	2,0	1,0	6,0	0,15	40,0	10,0	1,7	0,15	0,269	0,055	8,46	—	-5,0	4	Cylindrical	■
980ML030-MEGA	02511225	3	G	3,0	1,5	6,0	0,2	50,0	15,0	2,6	0,2	0,366	0,085	5,0	—	-5,0	2	Cylindrical	■
JHF980030G3H.0Z4-MEGA	03003395	3	G	3,0	1,5	6,0	0,2	50,0	15,0	2,6	0,2	0,366	0,085	4,79	—	-5,0	4	Cylindrical	■
980ML040-MEGA	02511231	3	G	4,0	2,0	6,0	0,25	70,0	20,0	3,5	0,3	0,503	0,107	2,5	—	-5,0	2	Cylindrical	■
JHF980040G3H.0Z4-MEGA	03003396	3	G	4,0	2,0	6,0	0,25	70,0	20,0	3,5	0,3	0,503	0,107	2,59	—	-5,0	4	Cylindrical	■
980ML050-MEGA	02511234	3	G	5,0	2,5	6,0	0,3	80,0	25,0	4,4	0,4	0,641	0,128	1,5	—	-5,0	2	Cylindrical	■
JHF980050G3H.0Z4-MEGA	03003397	3	G	5,0	2,5	6,0	0,3	80,0	25,0	4,4	0,4	0,641	0,128	1,12	—	-5,0	4	Cylindrical	■
980ML060-MEGA	02511315	3	G	6,0	3,0	8,0	0,35	80,0	30,0	5,2	0,5	0,778	0,15	2,0	—	-5,0	2	Cylindrical	■
JHF980060G3H.0Z4-MEGA	03003398	3	G	6,0	3,0	8,0	0,35	80,0	30,0	5,2	0,5	0,778	0,15	1,8	—	-5,0	4	Cylindrical	■
980ML080-MEGA	02511338	3	E	8,0	4,0	8,0	0,4	80,0	40,0	7,0	0,6	0,935	0,198	—	—	-5,0	2	Cylindrical	■
JHF980080E3H.0Z5-MEGA	03003399	3	E	8,0	4,0	8,0	0,4	80,0	40,0	7,0	0,6	0,935	0,198	—	—	-5,0	5	Cylindrical	■
980ML100-MEGA	02511344	3	E	10,0	5,0	10,0	0,45	90,0	50,0	8,8	0,8	1,176	0,232	—	—	-5,0	2	Cylindrical	■
JHF980100E3H.0Z5-MEGA	03003400	3	E	10,0	5,0	10,0	0,45	90,0	50,0	8,8	0,8	1,176	0,232	—	—	-5,0	5	Cylindrical	■
980ML120-MEGA	02511348	3	E	12,0	6,0	12,0	0,5	110,0	60,0	10,6	1,0	1,417	0,265	—	—	-5,0	2	Cylindrical	■
JHF980120E3H.0Z5-MEGA	03003401	3	E	12,0	6,0	12,0	0,5	110,0	60,0	10,6	1,0	1,417	0,265	—	—	-5,0	5	Cylindrical	■
980TL010-MEGA	02587114	4	J	1,0	0,5	6,0	0,07	40,0	7,0	0,7	0,07	0,127	0,028	13,0	0,5	-5,0	2	Cylindrical	■
980TL015-MEGA	02511220	4	J	1,5	0,75	6,0	0,1	40,0	10,5	1,2	0,1	0,183	0,043	8,5	0,5	-5,0	2	Cylindrical	■
980TL020-MEGA	02511223	4	J	2,0	1,0	6,0	0,15	50,0	14,0	1,7	0,15	0,269	0,055	6,5	0,5	-5,0	2	Cylindrical	■
980TL030-MEGA	02511226	4	J	3,0	1,5	6,0	0,2	60,0	21,0	2,6	0,2	0,366	0,085	3,5	0,5	-5,0	2	Cylindrical	■
JHF980030J4H.0Z4-MEGA	03003402	4	J	3,0	1,5	6,0	0,2	60,0	21,0	2,6	0,2	0,366	0,085	3,63	0,5	-5,0	4	Cylindrical	■
980TL040-MEGA	02511232	4	J	4,0	2,0	6,0	0,25	80,0	28,0	3,5	0,3	0,503	0,107	2,0	0,5	-5,0	2	Cylindrical	■
JHF980040J4H.0Z4-MEGA	03003403	4	J	4,0	2,0	6,0	0,25	80,0	28,0	3,5	0,3	0,503	0,107	1,93	0,5	-5,0	4	Cylindrical	■
980TL050-MEGA	02511240	4	J	5,0	2,5	6,0	0,3	90,0	35,0	4,4	0,4	0,641	0,128	1,0	0,5	-5,0	2	Cylindrical	■
JHF980050J4H.0Z4-MEGA	03003404	4	J	5,0	2,5	6,0	0,3	90,0	35,0	4,4	0,4	0,641	0,128	0,82	0,5	-5,0	4	Cylindrical	■
980TL060-MEGA	02511321	4	J	6,0	3,0	8,0	0,35	100,0	42,0	5,2	0,5	0,778	0,15	1,5	0,5	-5,0	2	Cylindrical	■
JHF980060J4H.0Z4-MEGA	03003405	4	J	6,0	3,0	8,0	0,35	100,0	42,0	5,2	0,5	0,778	0,15	1,33	0,5	-5,0	4	Cylindrical	■
980TL080-MEGA	02511340	4	E	8,0	4,0	8,0	0,4	100,0	56,0	7,0	0,6	0,935	0,198	—	0,5	-5,0	2	Cylindrical	■
JHF980080E4H.0Z5-MEGA	03003406	4	E	8,0	4,0	8,0	0,4	100,0	56,0	7,0	0,6	0,935	0,198	—	—	-5,0	5	Cylindrical	■
980TL100-MEGA	02511345	4	E	10,0	5,0	10,0	0,45	110,0	70,0	8,8	0,8	1,176	0,232	—	0,5	-5,0	2	Cylindrical	■
JHF980100E4H.0Z5-MEGA	03003407	4	E	10,0	5,0	10,0	0,45	110,0	70,0	8,8	0,8	1,176	0,232	—	—	-5,0	5	Cylindrical	■
980TL120-MEGA	02511349	4	E	12,0	6,0	12,0	0,5	130,0	84,0	10,6	1,0	1,417	0,265	—	0,5	-5,0	2	Cylindrical	■
JHF980120E4H.0Z5-MEGA	03003408	4	E	12,0	6,0	12,0	0,5	130,0	84,0	10,6	1,0	1,417	0,265	—	—	-5,0	5	Cylindrical	■

■ Stocked standard. *UTCN=uncut-thickness

Cutting data – JHF980 Side milling

SMG		a _e /DCX	a _p /DCX	f _z										v _c
				1	1.5	2	3	4	5	6	8	10	12	
P1	E/M/A	0.30 0.30	0.040 0.040	0.050 0.0020	0.075 0.0030	0.10 0.0040	0.15 0.0060	0.20 0.0080	0.25 0.010	0.30 0.012	0.40 0.016	0.50 0.020	0.60 0.024	385 (350 — 430) 1275 (1200 — 1400)
P2	E/M/A	0.30 0.30	0.040 0.040	0.050 0.0020	0.075 0.0030	0.10 0.0040	0.15 0.0060	0.20 0.0080	0.25 0.010	0.30 0.012	0.40 0.016	0.50 0.020	0.60 0.024	375 (340 — 410) 1225 (1200 — 1300)
P3	E/M/A	0.30 0.30	0.040 0.040	0.050 0.0020	0.075 0.0030	0.10 0.0040	0.15 0.0060	0.20 0.0080	0.25 0.010	0.30 0.012	0.40 0.016	0.50 0.020	0.60 0.024	325 (290 — 360) 1075 (960 — 1100)
P4	E/M/A	0.30 0.30	0.040 0.040	0.050 0.0020	0.075 0.0030	0.10 0.0040	0.15 0.0060	0.20 0.0080	0.25 0.010	0.30 0.012	0.40 0.016	0.50 0.020	0.60 0.024	285 (260 — 310) 940 (860 — 1000)
P5	E/M/A	0.30 0.30	0.040 0.040	0.050 0.0020	0.075 0.0030	0.10 0.0040	0.15 0.0060	0.20 0.0080	0.25 0.010	0.30 0.012	0.40 0.016	0.50 0.020	0.60 0.024	275 (250 — 300) 900 (830 — 980)
P6	E/M/A	0.30 0.30	0.040 0.040	0.044 0.0017	0.070 0.0028	0.090 0.0036	0.14 0.0055	0.18 0.0070	0.22 0.0085	0.28 0.011	0.36 0.014	0.44 0.017	0.55 0.022	215 (190 — 240) 710 (630 — 780)
P7	E/M/A	0.30 0.30	0.040 0.040	0.044 0.0017	0.070 0.0028	0.090 0.0036	0.14 0.0055	0.18 0.0070	0.22 0.0085	0.28 0.011	0.36 0.014	0.44 0.017	0.55 0.022	205 (180 — 230) 670 (600 — 750)
P8	E/M/A	0.30 0.30	0.040 0.040	0.044 0.0017	0.070 0.0028	0.090 0.0036	0.14 0.0055	0.18 0.0070	0.22 0.0085	0.28 0.011	0.36 0.014	0.44 0.017	0.55 0.022	190 (170 — 210) 620 (560 — 680)
P11	E/M/A	0.30 0.30	0.040 0.040	0.044 0.0017	0.070 0.0028	0.090 0.0036	0.14 0.0055	0.18 0.0070	0.22 0.0085	0.28 0.011	0.36 0.014	0.44 0.017	0.55 0.022	195 (170 — 220) 640 (560 — 720)
P12	E/M/A	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	120 (110 — 130) 395 (370 — 420)
M1	E/M/A	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	190 (170 — 210) 620 (560 — 680)
M2	E/M/A	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	150 (140 — 160) 490 (460 — 520)
M3	E/M/A	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	115 (98 — 130) 375 (330 — 420)
M4	E/M/A	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	85 (73 — 100) 280 (240 — 320)
M5	E/M/A	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	70 (61 — 83) 230 (210 — 270)
K1	E/M/A	0.30 0.30	0.040 0.040	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	225 (200 — 250) 740 (660 — 820)
K2	E/M/A	0.30 0.30	0.040 0.040	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	195 (170 — 220) 640 (560 — 720)
K3	E/M/A	0.30 0.30	0.040 0.040	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	165 (150 — 180) 540 (500 — 590)
K4	E/M/A	0.30 0.30	0.040 0.040	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	155 (140 — 170) 510 (460 — 550)
K5	E/M/A	0.30 0.30	0.040 0.040	0.032 0.0013	0.050 0.0020	0.065 0.0026	0.10 0.0040	0.13 0.0050	0.16 0.0065	0.20 0.0080	0.26 0.010	0.32 0.013	0.40 0.016	165 (140 — 190) 540 (460 — 620)
K6	E/M/A	0.30 0.30	0.040 0.040	0.032 0.0013	0.050 0.0020	0.065 0.0026	0.10 0.0040	0.13 0.0050	0.16 0.0065	0.20 0.0080	0.26 0.010	0.32 0.013	0.40 0.016	245 (200 — 290) 800 (660 — 950)
K7	E/M/A	0.30 0.30	0.040 0.040	0.032 0.0013	0.050 0.0020	0.065 0.0026	0.10 0.0040	0.13 0.0050	0.16 0.0065	0.20 0.0080	0.26 0.010	0.32 0.013	0.40 0.016	210 (170 — 250) 690 (560 — 820)
S1	E	0.30 0.30	0.022 0.022	0.024 0.00095	0.036 0.0014	0.048 0.0019	0.070 0.0028	0.095 0.0038	0.12 0.0048	0.14 0.0055	0.19 0.0075	0.24 0.0095	0.28 0.011	60 (50 — 74) 195 (170 — 240)
S2	E	0.30 0.30	0.022 0.022	0.024 0.00095	0.036 0.0014	0.048 0.0019	0.070 0.0028	0.095 0.0038	0.12 0.0048	0.14 0.0055	0.19 0.0075	0.24 0.0095	0.28 0.011	50 (41 — 60) 165 (140 — 190)
S3	E	0.30 0.30	0.022 0.022	0.024 0.00095	0.036 0.0014	0.048 0.0019	0.070 0.0028	0.095 0.0038	0.12 0.0048	0.14 0.0055	0.19 0.0075	0.24 0.0095	0.28 0.011	37 (25 — 49) 120 (83 — 160)
S11	E	0.30 0.30	0.022 0.022	0.036 0.0014	0.050 0.0020	0.070 0.0028	0.10 0.0040	0.14 0.0055	0.18 0.0070	0.20 0.0080	0.28 0.011	0.36 0.014	0.42 0.017	175 (160 — 190) 570 (530 — 620)
S12	E	0.30 0.30	0.022 0.022	0.036 0.0014	0.050 0.0020	0.070 0.0028	0.10 0.0040	0.14 0.0055	0.18 0.0070	0.20 0.0080	0.28 0.011	0.36 0.014	0.42 0.017	135 (120 — 150) 445 (400 — 490)
S13	E	0.30 0.30	0.022 0.022	0.036 0.0014	0.050 0.0020	0.070 0.0028	0.10 0.0040	0.14 0.0055	0.18 0.0070	0.20 0.0080	0.28 0.011	0.36 0.014	0.42 0.017	105 (90 — 110) 345 (300 — 360)
H5	M/A/D	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	115 (98 — 130) 375 (330 — 420)
H8	M/A/D	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	115 (98 — 130) 375 (330 — 420)
H21	M/A/D	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	115 (98 — 130) 375 (330 — 420)
H31	M/A/D	0.30 0.30	0.036 0.036	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	0.48 0.019	90 (74 — 100) 295 (250 — 320)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JHF980 Slot milling

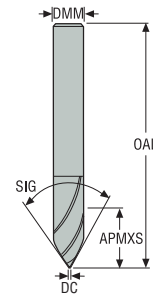
SMG		a _p /DCX	f _z										v _c
			1	1.5	2	3	4	5	6	8	10	12	
P1	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	340 (310 — 370)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	1125 (1100 — 1200)
P2	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	330 (300 — 360)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	1075 (990 — 1100)
P3	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	285 (260 — 310)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	940 (860 — 1000)
P4	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	250 (230 — 270)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	820 (760 — 880)
P5	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	240 (220 — 260)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	790 (730 — 850)
P6	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	185 (160 — 210)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	610 (530 — 680)
P7	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	175 (160 — 200)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	570 (530 — 650)
P8	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	165 (150 — 180)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	540 (500 — 590)
P11	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	170 (150 — 190)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	560 (500 — 620)
P12	E/M/A	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	105 (90 — 110)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	345 (300 — 360)
M1	E/M/A	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	165 (150 — 180)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	540 (500 — 590)
M2	E/M/A	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	130 (120 — 140)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	425 (400 — 450)
M3	E/M/A	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	100 (85 — 110)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	330 (280 — 360)
M4	E/M/A	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	75 (64 — 87)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	245 (210 — 280)
M5	E/M/A	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	65 (53 — 72)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	215 (180 — 230)
K1	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	185 (160 — 210)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	610 (530 — 680)
K2	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	160 (140 — 180)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	520 (460 — 590)
K3	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	135 (120 — 150)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	445 (400 — 490)
K4	E/M/A	0.040	0.030	0.046	0.060	0.090	0.12	0.15	0.18	0.24	0.30	0.36	130 (120 — 140)
		0,040	0,0012	0,0018	0,0024	0,0036	0,0048	0,0060	0,0070	0,0095	0,012	0,014	425 (400 — 450)
K5	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	135 (110 — 150)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	445 (370 — 490)
K6	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	195 (160 — 230)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	640 (530 — 750)
K7	E/M/A	0.040	0.028	0.040	0.055	0.080	0.11	0.14	0.16	0.22	0.28	0.32	170 (140 — 200)
		0,040	0,0011	0,0016	0,0022	0,0032	0,0044	0,0055	0,0065	0,0085	0,011	0,013	560 (460 — 650)
S1	E	0.022	0.018	0.028	0.036	0.055	0.070	0.090	0.11	0.14	0.18	0.22	50 (42 — 62)
		0,022	0,00070	0,0011	0,0014	0,0022	0,0028	0,0036	0,0044	0,0055	0,0070	0,0085	165 (140 — 200)
S2	E	0.022	0.018	0.028	0.036	0.055	0.070	0.090	0.11	0.14	0.18	0.22	42 (34 — 50)
		0,022	0,00070	0,0011	0,0014	0,0022	0,0028	0,0036	0,0044	0,0055	0,0070	0,0085	140 (120 — 160)
S3	E	0.022	0.018	0.028	0.036	0.055	0.070	0.090	0.11	0.14	0.18	0.22	31 (21 — 41)
		0,022	0,00070	0,0011	0,0014	0,0022	0,0028	0,0036	0,0044	0,0055	0,0070	0,0085	100 (69 — 130)
S11	E	0.022	0.018	0.028	0.036	0.055	0.070	0.090	0.11	0.14	0.18	0.22	155 (140 — 170)
		0,022	0,00070	0,0011	0,0014	0,0022	0,0028	0,0036	0,0044	0,0055	0,0070	0,0085	510 (460 — 550)
S12	E	0.022	0.018	0.028	0.036	0.055	0.070	0.090	0.11	0.14	0.18	0.22	120 (110 — 130)
		0,022	0,00070	0,0011	0,0014	0,0022	0,0028	0,0036	0,0044	0,0055	0,0070	0,0085	395 (370 — 420)
S13	E	0.022	0.018	0.028	0.036	0.055	0.070	0.090	0.11	0.14	0.18	0.22	95 (82 — 100)
		0,022	0,00070	0,0011	0,0014	0,0022	0,0028	0,0036	0,0044	0,0055	0,0070	0,0085	310 (270 — 320)
H5	M/A/D	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	100 (86 — 110)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	330 (290 — 360)
H8	M/A/D	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	100 (86 — 110)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	330 (290 — 360)
H21	M/A/D	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	100 (86 — 110)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	330 (290 — 360)
H31	M/A/D	0.036	0.024	0.036	0.048	0.070	0.095	0.12	0.14	0.19	0.24	0.28	75 (65 — 88)
		0,036	0,00095	0,0014	0,0019	0,0028	0,0038	0,0048	0,0055	0,0075	0,0095	0,011	245 (220 — 280)
Minimaster													

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm/tooth (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

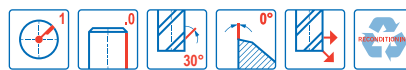
J29

General purpose – Universal – Engraving – 1 Flute – Cylindrical



D

- Tolerances:
- DMM=h5
- Regrind possible if DMM is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm				
29030	00029373	2	D	3,0	0,2	3,0	2,6	40,0	60,0	1	Cylindrical	■
29040	00029381	2	D	4,0	0,2	4,0	3,5	50,0	60,0	1	Cylindrical	■
29060	00029396	2	D	6,0	0,2	6,0	5,2	50,0	60,0	1	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – J29 Slot milling

SMG		a_p/DC	f_z			v_c
			3	4	6	
P1	E	0.50 0,50	0.24 0,0095	0.26 0,010	0.28 0,011	42 (32 — 63) 140 (110 — 200)
P2	E	0.50 0,50	0.24 0,0095	0.26 0,010	0.30 0,012	41 (32 — 61) 135 (110 — 200)
P3	E	0.50 0,50	0.24 0,0095	0.25 0,010	0.28 0,011	36 (28 — 54) 120 (92 — 170)
P4	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	31 (24 — 47) 100 (79 — 150)
P5	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
P6	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	34 (26 — 51) 110 (86 — 160)
P7	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	32 (25 — 48) 105 (83 — 150)
P8	E	0.50 0,50	0.24 0,0095	0.25 0,010	0.28 0,011	30 (23 — 45) 100 (76 — 140)
P11	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	31 (24 — 46) 100 (79 — 150)
P12	E	0.50 0,50	0.15 0,0060	0.16 0,0065	0.18 0,0070	19 (15 — 29) 60 (50 — 95)
M1	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
M2	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
M3	E	0.50 0,50	0.18 0,0070	0.19 0,0075	0.22 0,0085	24 (18 — 35) 80 (60 — 110)
M4	E	0.50 0,50	0.16 0,0065	0.17 0,0065	0.18 0,0070	18 (14 — 27) 60 (46 — 88)
M5	E	0.50 0,50	0.16 0,0065	0.17 0,0065	0.18 0,0070	15 (12 — 22) 49 (40 — 72)
K1	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
K2	E	0.50 0,50	0.20 0,0080	0.22 0,0085	0.24 0,0095	26 (21 — 40) 85 (69 — 130)
K3	E	0.50 0,50	0.20 0,0080	0.22 0,0085	0.24 0,0095	22 (17 — 33) 70 (56 — 100)
K4	E	0.50 0,50	0.20 0,0080	0.22 0,0085	0.24 0,0095	21 (17 — 32) 70 (56 — 100)
K5	E	0.50 0,50	0.18 0,0070	0.20 0,0080	0.22 0,0085	13 (9.8 — 19) 43 (33 — 62)
K6	E	0.50 0,50	0.20 0,0080	0.22 0,0085	0.24 0,0095	19 (15 — 28) 60 (50 — 91)
K7	E	0.50 0,50	0.18 0,0070	0.20 0,0080	0.22 0,0085	16 (13 — 25) 50 (43 — 82)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – J29 Slot milling

SMG		a _p /DC	f _z			v _c
			3	4	6	
N1	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
N2	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	19 (15 — 29) 60 (50 — 95)
N3	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	13 (9.8 — 19) 43 (33 — 62)
N11	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	17 (14 — 26) 55 (46 — 85)
S1	E	0.50 0,50	0.24 0,0095	0.26 0,010	0.28 0,011	43 (33 — 64) 140 (110 — 200)
S2	E	0.50 0,50	0.24 0,0095	0.26 0,010	0.28 0,011	34 (27 — 51) 110 (89 — 160)
S3	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
S11	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	39 (30 — 59) 130 (99 — 190)
S12	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
S13	E	0.50 0,50	0.19 0,0075	0.20 0,0080	0.24 0,0095	24 (18 — 35) 80 (60 — 110)
H5	M/A/D	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
H8	M/A/D	0.50 0,50	0.17 0,0065	0.18 0,0070	0.20 0,0080	32 (24 — 47) 105 (79 — 150)
H11	M/A/D	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	39 (30 — 58) 130 (99 — 190)
H12	M/A/D	0.50 0,50	0.12 0,0048	0.12 0,0048	0.14 0,0055	12 (9.1 — 18) 39 (30 — 59)
H21	M/A/D	0.50 0,50	0.17 0,0065	0.18 0,0070	0.20 0,0080	32 (24 — 47) 105 (79 — 150)
H31	M/A/D	0.50 0,50	0.15 0,0060	0.16 0,0065	0.17 0,0065	24 (19 — 36) 80 (63 — 110)
TS1	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
TP1	E	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)
GR1	D	0.50 0,50	0.22 0,0085	0.24 0,0095	0.26 0,010	30 (23 — 45) 100 (76 — 140)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm/tooth (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

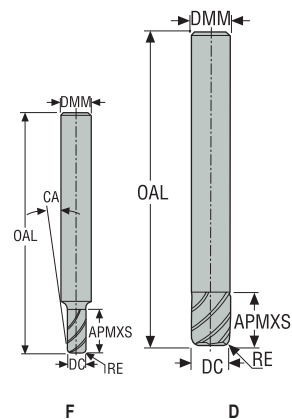
Graphite

X-Heads

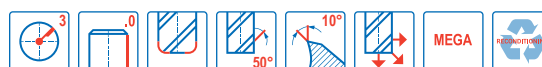
Minimaster

J36

General purpose – Universal – Square – 3 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
 - DC= Ø2-Ø6= -0,02/-0,034 mm
 - DC= Ø8-Ø20= -0,02/-0,044 mm
 - RE= Ø2-Ø12= +0,05 mm
 - RE= Ø14-Ø20= +0,1 mm
 - Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
36020-MEGA	00025621	2	F	2,0	3,0	9,0	40,0	2,05	2,05	0,1	2,5	3	Cylindrical	■
36030-MEGA	00025626	2	D	3,0	3,0	12,0	40,0	—	—	0,1	—	3	Cylindrical	■
36040-MEGA	00025628	2	D	4,0	4,0	14,0	50,0	—	—	0,1	—	3	Cylindrical	■
36050-MEGA	00025651	2	D	5,0	5,0	20,0	50,0	—	—	0,1	—	3	Cylindrical	■
36060-MEGA	00025663	2	D	6,0	6,0	20,0	65,0	—	—	0,1	—	3	Cylindrical	■
36080-MEGA	00025674	2	D	8,0	8,0	20,0	65,0	—	—	0,2	—	3	Cylindrical	■
36100-MEGA	00025680	2	D	10,0	10,0	25,0	75,0	—	—	0,2	—	3	Cylindrical	■
36120-MEGA	00025681	2	D	12,0	12,0	25,0	75,0	—	—	0,2	—	3	Cylindrical	■
36160-MEGA	00025689	2	D	16,0	16,0	30,0	90,0	—	—	0,5	—	3	Cylindrical	■
36200-MEGA	00025692	2	D	20,0	20,0	40,0	100,0	—	—	0,5	—	3	Cylindrical	■

■ Stocked standard.

Cutting data – J36 Side milling

SMG		a_e/DC	a_p/DC	f_z										v_c
				2	3	4	5	6	8	10	12	16	20	
P1	E	0.200 0,200	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.095 0,0038	0.11 0,0044	200 (170 — 220) 660 (560 — 720)
P2	E	0.200 0,200	1.0 1,0	0.013 0,00050	0.020 0,00080	0.026 0,0010	0.034 0,0013	0.040 0,0016	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	190 (170 — 210) 620 (560 — 680)
P3	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	170 (150 — 190) 560 (500 — 620)
P4	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	150 (130 — 160) 490 (430 — 520)
P5	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	140 (130 — 160) 460 (430 — 520)
P6	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.10 0,0040	160 (140 — 180) 520 (460 — 590)
P7	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.10 0,0040	150 (130 — 170) 490 (430 — 550)
P8	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	140 (130 — 160) 460 (430 — 520)
P11	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.085 0,0034	0.10 0,0040	145 (130 — 160) 475 (430 — 520)
P12	E	0.200 0,200	1.0 1,0	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	90 (79 — 100) 295 (260 — 320)
M1	E	0.200 0,200	1.0 1,0	0.015 0,00060	0.024 0,00095	0.030 0,0012	0.038 0,0015	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	115 (92 — 140) 375 (310 — 450)
M2	E	0.200 0,200	1.0 1,0	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	95 (76 — 110) 310 (250 — 360)
M3	E	0.100 0,100	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	75 (56 — 95) 245 (190 — 310)
M4	E	0.100 0,100	1.0 1,0	0.0085 0,00034	0.013 0,00050	0.017 0,00065	0.022 0,00085	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	60 (43 — 73) 195 (150 — 230)
M5	E	0.100 0,100	1.0 1,0	0.0085 0,00034	0.013 0,00050	0.017 0,00065	0.022 0,00085	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	48 (36 — 60) 155 (120 — 190)
K1	E	0.200 0,200	1.0 1,0	0.012 0,00048	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	140 (130 — 160) 460 (430 — 520)
K2	E	0.200 0,200	1.0 1,0	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.028 0,0011	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	125 (110 — 140) 410 (370 — 450)
K3	E	0.200 0,200	1.0 1,0	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.028 0,0011	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	105 (91 — 120) 345 (300 — 390)
K4	E	0.200 0,200	1.0 1,0	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.028 0,0011	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	100 (87 — 110) 330 (290 — 360)
K5	E	0.200 0,200	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.085 0,0034	60 (53 — 69) 195 (180 — 220)
K6	E	0.200 0,200	1.0 1,0	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.028 0,0011	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	90 (76 — 100) 295 (250 — 320)
K7	E	0.200 0,200	1.0 1,0	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.085 0,0034	80 (67 — 89) 260 (220 — 290)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – J36 Side milling

SMG		a _e /DC	a _p /DC	f _z										v _c
				2	3	4	5	6	8	10	12	16	20	
N1	E	0.300	1.2	0.022	0.032	0.042	0.055	0.065	0.085	0.11	0.13	0.16	0.18	650 (540 — 750)
		0,300	1,2	0,00085	0,0013	0,0017	0,0022	0,0026	0,0034	0,0044	0,0050	0,0065	0,0070	2125 (1800 — 2400)
N2	E	0.300	1.2	0.022	0.032	0.042	0.055	0.065	0.085	0.11	0.13	0.16	0.18	415 (350 — 480)
		0,300	1,2	0,00085	0,0013	0,0017	0,0022	0,0026	0,0034	0,0044	0,0050	0,0065	0,0070	1350 (1200 — 1500)
N3	E	0.300	1.2	0.022	0.032	0.042	0.055	0.065	0.085	0.11	0.13	0.16	0.18	275 (240 — 320)
		0,300	1,2	0,00085	0,0013	0,0017	0,0022	0,0026	0,0034	0,0044	0,0050	0,0065	0,0070	900 (790 — 1000)
N11	E	0.300	1.0	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.090	0.10	305 (260 — 350)
		0,300	1,0	0,00048	0,00070	0,00095	0,0012	0,0014	0,0019	0,0024	0,0028	0,0036	0,0040	1000 (860 — 1100)
S1	E	0.120	0.90	0.0055	0.0080	0.011	0.014	0.016	0.022	0.028	0.032	0.040	0.046	70 (60 — 83)
		0,120	0,90	0,00022	0,00032	0,00044	0,00055	0,00065	0,00085	0,0011	0,0013	0,0016	0,0018	230 (200 — 270)
S2	E	0.120	0.90	0.0055	0.0080	0.011	0.014	0.016	0.022	0.028	0.032	0.040	0.046	60 (48 — 67)
		0,120	0,90	0,00022	0,00032	0,00044	0,00055	0,00065	0,00085	0,0011	0,0013	0,0016	0,0018	195 (160 — 210)
S3	E	0.120	0.90	0.0036	0.0055	0.0075	0.0090	0.011	0.015	0.018	0.022	0.028	0.032	39 (30 — 48)
		0,120	0,90	0,00014	0,00022	0,00030	0,00036	0,00044	0,00060	0,00070	0,00085	0,0011	0,0013	130 (99 — 150)
S11	E	0.300	1.0	0.010	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.075	0.085	100 (89 — 110)
		0,300	0,90	0,00040	0,00060	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	330 (300 — 360)
S12	E	0.300	1.0	0.010	0.015	0.020	0.025	0.030	0.040	0.050	0.060	0.075	0.085	80 (68 — 87)
		0,300	0,90	0,00040	0,00060	0,00080	0,0010	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	260 (230 — 280)
S13	E	0.300	1.0	0.0085	0.013	0.017	0.022	0.026	0.034	0.044	0.050	0.065	0.075	60 (54 — 69)
		0,300	0,90	0,00036	0,00050	0,00070	0,00085	0,0010	0,0014	0,0017	0,0020	0,0026	0,0030	195 (180 — 220)
TS1	A	0.400	1.0	0.020	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	500 (460 — 550)
		0,400	1,0	0,00080	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0048	0,0060	0,0065	1650 (1600 — 1800)
TP1	A	0.400	1.0	0.020	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	500 (460 — 550)
		0,400	1,0	0,00080	0,0012	0,0016	0,0020	0,0024	0,0032	0,0040	0,0048	0,0060	0,0065	1650 (1600 — 1800)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

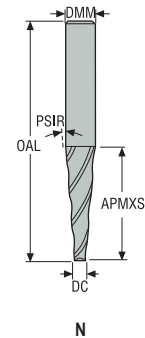
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

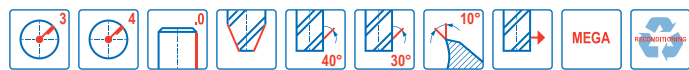
All cutting data are target values

HK

General purpose – Universal – Conical – 3-4 Flutes – Cylindrical – Tapered sharp



—Tolerances:
—DMM= h5
—DC= +0,1/0 mm
—PSIR= $\pm 0,1^\circ$
—Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK020-040-MEGA	00028666	2	N	5,5	4,0	6,0	20,0	65,0	2,0	4,0	3	Cylindrical	■
HK020-050-MEGA	00028669	2	N	7,15	5,0	8,0	30,0	75,0	2,0	4,0	3	Cylindrical	■
HK020-100-MEGA	00028694	2	N	12,0	10,0	12,0	28,0	80,0	2,0	4,0	4	Cylindrical	■

■ Stocked standard.
For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

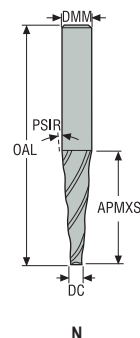
Graphite

X-Heads

Minimaster

HKM-HK

General purpose – Universal – Conical – 2-4 Flutes – Cylindrical – Tapered sharp



—Tolerances:

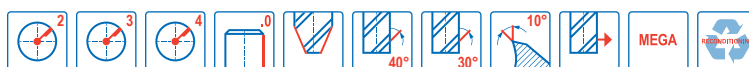
—DMM= h5

—DC= HKM= +0,07/+0,03 mm

—DC= HK= +0,1/0 mm

—PSIR= ±0,1°

—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HKM030-015-MEGA	00028738	2	N	2,4	1,5	3,0	6,0	40,0	3,0	6,0	2	Cylindrical	■
HK030-025-MEGA	00028741	2	N	4,9	2,5	6,0	20,0	65,0	3,0	6,0	3	Cylindrical	■
HK030-033-MEGA	00028744	2	N	6,2	3,0	8,0	30,0	75,0	3,0	6,0	3	Cylindrical	■
HK030-065-MEGA	00028759	2	N	12,0	6,0	12,0	55,0	110,0	3,0	6,0	3	Cylindrical	■
HK030-083-MEGA	00028771	2	N	11,2	8,0	12,0	30,0	80,0	3,0	6,0	4	Cylindrical	■

■ Stocked standard.

For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

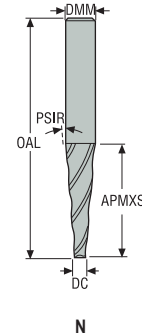
Graphite

X-Heads

Minimaster

HKM-HK

General purpose – Universal – Conical – 2-4 Flutes – Cylindrical – Tapered sharp



- Tolerances:
- DMM= h5
- DC= HKM= +0,07/+0,03 mm
- DC= HK= +0,1/0 mm
- PSIR= $\pm 0,1^\circ$
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HKM050-010-MEGA	00028947	2	N	2,4	1,0	3,0	4,0	40,0	5,0	10,0	2	Cylindrical	■
HKM050-015-MEGA	00028952	2	N	3,0	1,5	3,0	6,0	40,0	5,0	10,0	2	Cylindrical	■
HKM050-020-MEGA	00028954	2	N	4,0	2,0	4,0	10,0	50,0	5,0	10,0	2	Cylindrical	■
HKM050-025-MEGA	00028958	2	N	4,7	2,5	5,0	10,0	50,0	5,0	10,0	2	Cylindrical	■
HK050-025-MEGA	00028960	2	N	6,0	2,5	6,0	20,0	65,0	5,0	10,0	3	Cylindrical	■
HK050-032-MEGA	00028972	2	N	8,0	3,0	8,0	28,0	70,0	5,0	10,0	3	Cylindrical	■
HK050-0420-MEGA	00028998	2	N	8,0	4,0	8,0	22,0	65,0	5,0	10,0	3	Cylindrical	■
HK050-050-MEGA	00029012	2	N	12,0	5,0	12,0	40,0	100,0	5,0	10,0	3	Cylindrical	■
HK050-063-MEGA	00029014	2	N	12,0	6,0	12,0	32,0	90,0	5,0	10,0	3	Cylindrical	■
HK050-065-MEGA	00029017	2	N	16,0	6,0	16,0	55,0	110,0	5,0	10,0	3	Cylindrical	■
HK050-103-MEGA	00029020	2	N	16,0	10,0	16,0	32,0	90,0	5,0	10,0	4	Cylindrical	■
HK050-105-MEGA	00029025	2	N	20,0	10,0	20,0	55,0	115,0	5,0	10,0	4	Cylindrical	■

■ Stocked standard.

For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfpr

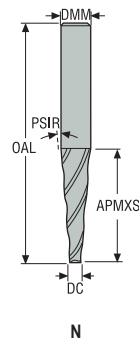
Graphite

X-Heads

Minimaster

HK

General purpose – Universal – Conical – 3 Flutes – Cylindrical – Tapered sharp



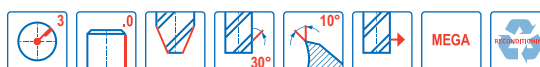
—Tolerances:

—DMM= h5

—DC= +0,1/0 mm

—PSIR= ±0,1°

—Regrind possible



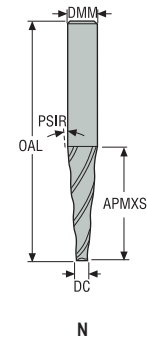
Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK070-025-MEGA	00029030	2	N	8,0	2,5	8,0	22,0	65,0	7,0	14,0	3	Cylindrical	■
HK070-050-MEGA	00029034	2	N	12,0	5,0	12,0	28,0	80,0	7,0	14,0	3	Cylindrical	■

■ Stocked standard.

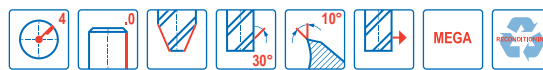
For cutting data, please see My Pages – Suggest on www.secotools.com

HK

General purpose – Universal – Conical – 4 Flutes – Cylindrical – Tapered sharp



- Tolerances:
- DMM= h5
- DC= +0,1/0 mm
- PSIR= $\pm 0,1^\circ$
- Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
HK080-083-MEGA	00029041	2	N	mm 18,0	mm 8,0	mm 18,0	mm 35,0	mm 90,0	8,0	16,0	4	Cylindrical	■

■ Stocked standard.

For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

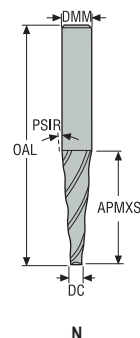
Graphite

X-Heads

Minimaster

HK

General purpose – Universal – Conical – 3-4 Flutes – Cylindrical – Tapered sharp



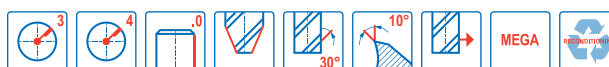
—Tolerances:

—DMM= h5

—DC= +0,1/0 mm

—PSIR= ±0,1°

—Regrind possible



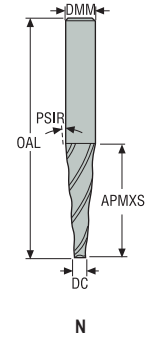
Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK100-025-MEGA	00029052	2	N	10,0	2,5	10,0	20,0	75,0	10,0	20,0	3	Cylindrical	■
HK100-030-MEGA	00029066	2	N	14,0	3,0	14,0	30,0	90,0	10,0	20,0	3	Cylindrical	■
HK100-050-MEGA	00029069	2	N	16,0	5,0	16,0	30,0	90,0	10,0	20,0	3	Cylindrical	■
HK100-080-MEGA	00029083	2	N	20,0	8,0	20,0	32,0	90,0	10,0	20,0	4	Cylindrical	■

■ Stocked standard.

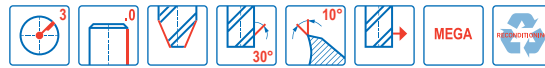
For cutting data, please see My Pages – Suggest on www.secotools.com

HK

General purpose – Universal – Conical – 3 Flutes – Cylindrical – Tapered sharp



- Tolerances:
- DMM= h5
- DC= +0,1/0 mm
- PSIR= $\pm 0,1^\circ$
- Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK110-020-MEGA	00029110	2	N	10,0	2,0	10,0	20,0	75,0	11,0	22,0	3	Cylindrical	■
HK110-050-MEGA	00029117	2	N	14,0	5,0	14,0	20,0	80,0	11,0	22,0	3	Cylindrical	■

■ Stocked standard.

For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

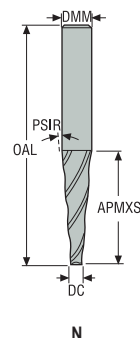
Graphite

X-Heads

Minimaster

HK

General purpose – Universal – Conical – 3-4 Flutes – Cylindrical – Tapered sharp



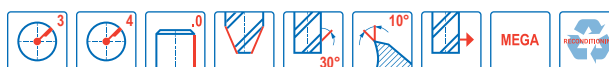
—Tolerances:

—DMM= h5

—DC= +0,1/0 mm

—PSIR= ±0,1°

—Regrind possible



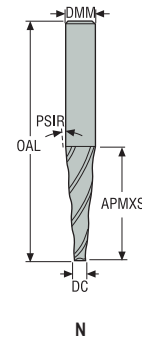
Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK150-025	00029119	2	N	14,0	2,5	14,0	20,0	80,0	15,0	30,0	3	Cylindrical	■
HK150-025-MEGA	00029151	2	N	14,0	2,5	14,0	20,0	80,0	15,0	30,0	3	Cylindrical	■
HK150-040	00029124	2	N	12,0	4,0	12,0	15,0	65,0	15,0	30,0	3	Cylindrical	■
HK150-040-MEGA	00029154	2	N	12,0	4,0	12,0	15,0	65,0	15,0	30,0	3	Cylindrical	■
HK150-0651	00029133	2	N	12,0	6,5	12,0	10,0	65,0	15,0	30,0	3	Cylindrical	■
HK150-0651-MEGA	00029160	2	N	12,0	6,5	12,0	10,0	65,0	15,0	30,0	3	Cylindrical	■
HK150-0652	00029138	2	N	20,0	6,5	20,0	25,0	90,0	15,0	30,0	3	Cylindrical	■
HK150-0652-MEGA	00029161	2	N	20,0	6,5	20,0	25,0	90,0	15,0	30,0	3	Cylindrical	■
HK150-080	00029149	2	N	20,0	8,0	20,0	20,0	80,0	15,0	30,0	4	Cylindrical	■
HK150-080-MEGA	00029162	2	N	20,0	8,0	20,0	20,0	80,0	15,0	30,0	4	Cylindrical	■

■ Stocked standard.

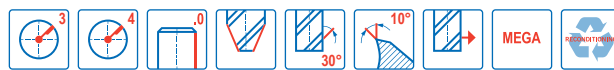
For cutting data, please see My Pages – Suggest on www.secotools.com

HK

General purpose – Universal – Conical – 3-4 Flutes – Cylindrical – Tapered sharp



- Tolerances:
- DMM= h5
- DC= +0,1/0 mm
- PSIR= $\pm 0,1^\circ$
- Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK200-025	00029165	2	N	10,0	2,5	10,0	10,0	75,0	20,0	40,0	3	Cylindrical	■
HK200-025-MEGA	00029168	2	N	10,0	2,5	10,0	10,0	75,0	20,0	40,0	3	Cylindrical	■
HK200-045	00029166	2	N	16,0	4,5	16,0	15,0	90,0	20,0	40,0	4	Cylindrical	■
HK200-045-MEGA	00029203	2	N	16,0	4,5	16,0	15,0	90,0	20,0	40,0	4	Cylindrical	■

■ Stocked standard.
For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

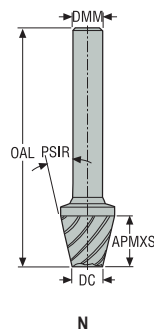
Graphite

X-Heads

Minimaster

HK

General purpose – Universal – Conical – 3-4 Flutes – Cylindrical – Tapered sharp



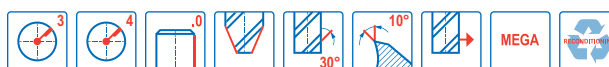
—Tolerances:

—DMM= h5

—DC= +0,1/0 mm

—PSIR= ±0,1°

—Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK300-025	00029208	2	N	14,5	2,5	10,0	10,0	75,0	30,0	60,0	3	Cylindrical	■
HK300-025-MEGA	00029211	2	N	14,5	2,5	10,0	10,0	75,0	30,0	60,0	3	Cylindrical	■
HK300-045	00029210	2	N	23,0	4,5	16,0	16,0	90,0	30,0	60,0	4	Cylindrical	■
HK300-045-MEGA	00029212	2	N	23,0	4,5	16,0	16,0	90,0	30,0	60,0	4	Cylindrical	■

■ Stocked standard.

For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

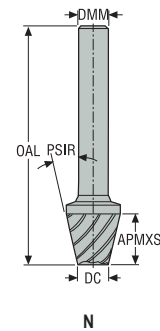
Graphite

X-Heads

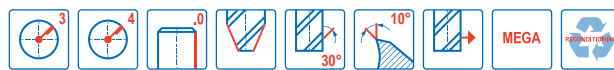
Minimaster

HK

General purpose – Universal – Conical – 3-4 Flutes – Cylindrical – Tapered sharp



- Tolerances:
- DMM= h5
- DC= +0,1/0 mm
- PSIR= $\pm 0,1^\circ$
- Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm					
HK450-025	00029215	2	N	23,0	2,5	12,0	10,0	75,0	45,0	90,0	3	Cylindrical	■
HK450-025-MEGA	00029229	2	N	23,0	2,5	12,0	10,0	75,0	45,0	90,0	3	Cylindrical	■
HK450-045	00029217	2	N	37,0	4,5	16,0	16,0	90,0	45,0	90,0	4	Cylindrical	■
HK450-045-MEGA	00029232	2	N	37,0	4,5	16,0	16,0	90,0	45,0	90,0	4	Cylindrical	■

■ Stocked standard.
For cutting data, please see My Pages – Suggest on www.secotools.com

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

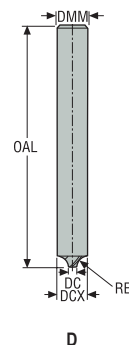
Graphite

X-Heads

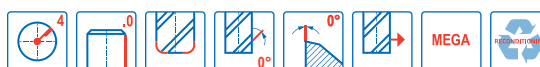
Minimaster

V31

General purpose – Universal – Concave – 4 Flutes – Cylindrical



—Tolerances:
—DMM= h5
—DC= $\pm 0,04$ mm
—RE= $\pm 0,02$ mm
—Reground possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm			
31100-MEGA	00029307	2	D	6,0	4,0	6,0	1,0	64,0	1,0	4	Cylindrical	■
31200-MEGA	00029315	2	D	8,0	4,0	8,0	2,0	75,0	2,0	4	Cylindrical	■
31300-MEGA	00029326	2	D	10,0	4,0	10,0	3,0	75,0	3,0	4	Cylindrical	■
31400-MEGA	00029328	2	D	12,0	4,0	12,0	4,0	75,0	4,0	4	Cylindrical	■
31050-MEGA	00029285	2	D	6,0	5,0	6,0	0,5	64,0	0,5	4	Cylindrical	■
31150-MEGA	00029313	2	D	8,0	5,0	8,0	1,5	75,0	1,5	4	Cylindrical	■
31250-MEGA	00029324	2	D	10,0	5,0	10,0	2,5	75,0	2,5	4	Cylindrical	■
31350-MEGA	00029327	2	D	12,0	5,0	12,0	3,5	75,0	3,5	4	Cylindrical	■
31500-MEGA	00029330	2	D	16,0	6,0	16,0	5,0	75,0	5,0	4	Cylindrical	■
31600-MEGA	00029331	2	D	20,0	8,0	20,0	6,0	80,0	6,0	4	Cylindrical	■
31999-MEGA	00029335	2	D	28,0	8,0	25,0	10,0	80,0	10,0	4	Cylindrical	■
31800-MEGA	00029333	2	D	25,0	9,0	25,0	8,0	75,0	8,0	4	Cylindrical	■

■ Stocked standard.

Cutting data – V31 Side milling roughing

SMG		a _p /DC	f _z								v _c
			6	8	10	12	16	20	25	28	
P1	E/M/A	0,24	0,024	0,032	0,040	0,048	0,065	0,080	0,095	0,10	290 (195 — 310)
		0,24	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,004	950 (640 — 1100)
P2	E/M/A	0,24	0,024	0,034	0,042	0,050	0,065	0,080	0,095	0,10	280 (190 — 305)
		0,24	0,00095	0,0013	0,0017	0,0022	0,0026	0,0032	0,0038	0,004	910 (620 — 1000)
P3	E/M/A	0,24	0,024	0,032	0,040	0,046	0,060	0,075	0,090	0,095	240 (165 — 260)
		0,24	0,00095	0,0013	0,0016	0,0018	0,0024	0,003	0,0036	0,0038	790 (540 — 850)
P4	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,090	0,095	210 (145 — 230)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0036	0,0038	680 (475 — 760)
P5	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0034	0,0038	670 (445 — 730)
P6	E/M/A	0,24	0,022	0,030	0,038	0,044	0,060	0,075	0,085	0,095	230 (155 — 245)
		0,24	0,00085	0,0012	0,0015	0,0017	0,0024	0,003	0,0050	0,0038	760 (510 — 800)
P7	E/M/A	0,24	0,022	0,030	0,038	0,044	0,060	0,075	0,085	0,095	215 (145 — 230)
		0,24	0,00085	0,0012	0,0015	0,0017	0,0024	0,003	0,0050	0,0038	710 (475 — 760)
P8	E/M/A	0,24	0,024	0,032	0,040	0,046	0,060	0,075	0,090	0,095	205 (140 — 220)
		0,24	0,00095	0,0013	0,0016	0,0018	0,0024	0,003	0,0036	0,0038	670 (460 — 730)
P11	E/M/A	0,24	0,022	0,030	0,038	0,044	0,060	0,075	0,085	0,095	210 (140 — 225)
		0,24	0,00085	0,0012	0,0015	0,0017	0,0024	0,003	0,0050	0,0038	680 (460 — 740)
M1	E/M/A	0,24	0,024	0,034	0,042	0,050	0,065	0,080	0,095	0,10	255 (170 — 270)
		0,24	0,00095	0,0013	0,0017	0,0022	0,0026	0,0032	0,0038	0,004	840 (560 — 890)
M2	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
M3	E/M/A	0,24	0,018	0,024	0,030	0,036	0,048	0,060	0,070	0,075	150 (105 — 165)
		0,24	0,0007	0,00095	0,0012	0,0014	0,0019	0,0024	0,0028	0,003	490 (345 — 540)
M4	E/M/A	0,24	0,016	0,020	0,026	0,032	0,042	0,050	0,060	0,065	110 (75 — 120)
		0,24	0,00065	0,0008	0,0010	0,0013	0,0017	0,0022	0,0024	0,0026	360 (250 — 400)
M5	E/M/A	0,24	0,016	0,020	0,026	0,032	0,042	0,050	0,060	0,065	95 (65 — 100)
		0,24	0,00065	0,0008	0,0010	0,0013	0,0017	0,0022	0,0024	0,0026	310 (220 — 320)
K1	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
K2	E/M/A	0,24	0,020	0,028	0,034	0,040	0,055	0,065	0,080	0,085	175 (120 — 190)
		0,24	0,0008	0,0011	0,0013	0,0016	0,0022	0,0026	0,0032	0,0050	570 (400 — 620)
K3	E/M/A	0,24	0,020	0,028	0,034	0,040	0,055	0,065	0,080	0,085	150 (100 — 160)
		0,24	0,0008	0,0011	0,0013	0,0016	0,0022	0,0026	0,0032	0,0050	490 (320 — 530)
K4	E/M/A	0,24	0,020	0,028	0,034	0,040	0,055	0,065	0,080	0,085	140 (95 — 150)
		0,24	0,0008	0,0011	0,0013	0,0016	0,0022	0,0026	0,0032	0,0050	460 (310 — 490)
K5	E/M/A	0,24	0,018	0,024	0,030	0,036	0,050	0,060	0,070	0,075	85 (55 — 90)
		0,24	0,0007	0,00095	0,0012	0,0014	0,0022	0,0024	0,0028	0,003	280 (180 — 300)
K6	E/M/A	0,24	0,020	0,028	0,034	0,040	0,055	0,065	0,080	0,085	125 (85 — 135)
		0,24	0,0008	0,0011	0,0013	0,0016	0,0022	0,0026	0,0032	0,0050	410 (280 — 445)
K7	E/M/A	0,24	0,018	0,024	0,030	0,036	0,050	0,060	0,070	0,075	105 (70 — 115)
		0,24	0,0007	0,00095	0,0012	0,0014	0,0022	0,0024	0,0028	0,003	345 (220 — 375)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cf/p

Graphite

X-Heads

Minimaster

Cutting data – V31 Side milling roughing

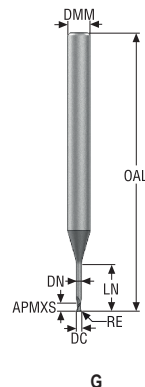
SMG		a _p /DC	f _z								v _c
			6	8	10	12	16	20	25	28	
N1	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	315 (215 — 340)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	1025 (710 — 1125)
N2	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
N3	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	135 (90 — 145)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	445 (300 — 475)
N11	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
S1	E/M/A	0,24	0,024	0,032	0,040	0,048	0,065	0,080	0,095	0,10	205 (140 — 220)
		0,24	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,004	670 (460 — 730)
S2	E/M/A	0,24	0,024	0,032	0,040	0,048	0,065	0,080	0,095	0,10	205 (140 — 220)
		0,24	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,004	670 (460 — 730)
S3	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
S11	E/M/A	0,24	0,020	0,030	0,038	0,046	0,060	0,075	0,085	0,095	265 (180 — 285)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	870 (590 — 940)
S12	E/M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
S13	E/M/A	0,24	0,020	0,026	0,032	0,040	0,050	0,065	0,075	0,080	155 (105 — 165)
		0,24	0,0008	0,0010	0,0013	0,0016	0,0022	0,0026	0,003	0,0032	510 (345 — 540)
H5	M/A	0,24	0,034	0,046	0,055	0,070	0,090	0,11	0,13	0,14	275 (185 — 295)
		0,24	0,0013	0,0018	0,0022	0,0028	0,0036	0,0044	0,0050	0,0055	900 (610 — 950)
H8	M/A	0,24	0,026	0,034	0,044	0,050	0,070	0,085	0,10	0,11	270 (185 — 290)
		0,24	0,0010	0,0013	0,0017	0,0022	0,0028	0,0050	0,004	0,0044	890 (610 — 950)
H21	M/A	0,24	0,026	0,034	0,044	0,050	0,070	0,085	0,10	0,11	270 (185 — 290)
		0,24	0,0010	0,0013	0,0017	0,0022	0,0028	0,0050	0,004	0,0044	890 (610 — 950)
H31	M/A	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
TS1	A/D	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
TP1	A/D	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)
GR1	A/D	0,24	0,022	0,030	0,038	0,046	0,060	0,075	0,085	0,095	205 (135 — 220)
		0,24	0,00085	0,0012	0,0015	0,0018	0,0024	0,003	0,0050	0,0038	670 (445 — 730)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JME542

Miniature – Universal – Square – 2 Flutes – DMM 4 – Cylindrical – Sharp or corner radius



- Tolerances:
— Run-out= <0,007 mm
— DMM= h5
— DC= Ø0,2-Ø0,4= 0,-0,01 mm
— DC= Ø0,5-Ø3,0= 0,-0,013 mm
— RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JME542002G1S.0Z2-SIRA	03171095	1	G	0,2	4,0	0,3	45,0	0,4	0,18	—	14,41	2	Cylindrical	■
JME542003G1S.0Z2-SIRA	03171096	1	G	0,3	4,0	0,45	45,0	0,6	0,28	—	14,0	2	Cylindrical	■
JME542004G1S.0Z2-SIRA	03171128	1	G	0,4	4,0	0,6	45,0	0,8	0,37	—	13,5	2	Cylindrical	■
JME542005G1R005.0Z2-SIRA	03171097	1	G	0,5	4,0	0,8	45,0	1,0	0,46	0,05	13,17	2	Cylindrical	■
JME542006G1R005.0Z2-SIRA	03171098	1	G	0,6	4,0	0,9	45,0	1,2	0,56	0,05	12,76	2	Cylindrical	■
JME542008G1R005.0Z2-SIRA	03171129	1	G	0,8	4,0	1,2	45,0	1,6	0,76	0,05	11,96	2	Cylindrical	■
JME542010G1R010.0Z2-SIRA	03171099	1	G	1,0	4,0	1,5	50,0	2,0	0,95	0,1	11,22	2	Cylindrical	■
JME542012G1R010.0Z2-SIRA	03171100	1	G	1,2	4,0	1,8	50,0	2,4	1,15	0,1	10,43	2	Cylindrical	■
JME542015G1R015.0Z2-SIRA	03171130	1	G	1,5	4,0	2,3	50,0	3,0	1,45	0,15	9,2	2	Cylindrical	■
JME542005G3R005.0Z2-SIRA	03171102	3	G	0,5	4,0	0,8	45,0	2,5	0,46	0,05	11,03	2	Cylindrical	■
JME542006G3R005.0Z2-SIRA	03171103	3	G	0,6	4,0	0,9	45,0	3,0	0,56	0,05	10,36	2	Cylindrical	■
JME542008G3R005.0Z2-SIRA	03171131	3	G	0,8	4,0	1,2	45,0	4,0	0,76	0,05	9,14	2	Cylindrical	■
JME542010G3R010.0Z2-SIRA	03171104	3	G	1,0	4,0	1,5	50,0	5,0	0,95	0,1	8,09	2	Cylindrical	■
JME542012G3R010.0Z2-SIRA	03171105	3	G	1,2	4,0	1,8	50,0	6,0	1,15	0,1	7,13	2	Cylindrical	■
JME542015G3R015.0Z2-SIRA	03171132	3	G	1,5	4,0	2,3	50,0	7,5	1,45	0,15	5,89	2	Cylindrical	■
JME542020G3R015.0Z2-SIRA	03171106	3	G	2,0	4,0	3,0	50,0	10,0	1,94	0,15	4,14	2	Cylindrical	■
JME542025G3R015.0Z2-SIRA	03171108	3	G	2,5	4,0	3,8	50,0	12,5	2,4	0,15	2,79	2	Cylindrical	■
JME542030G3R015.0Z2-SIRA	03171134	3	G	3,0	4,0	4,5	60,0	15,0	2,85	0,15	1,67	2	Cylindrical	■
JME542005G4R005.0Z2-SIRA	03171109	4	G	0,5	4,0	0,8	45,0	4,0	0,46	0,05	9,49	2	Cylindrical	■
JME542006G4R005.0Z2-SIRA	03171110	4	G	0,6	4,0	0,9	45,0	5,0	0,56	0,05	8,56	2	Cylindrical	■
JME542008G4R005.0Z2-SIRA	03171135	4	G	0,8	4,0	1,2	45,0	7,0	0,76	0,05	7,05	2	Cylindrical	■
JME542010G4R010.0Z2-SIRA	03171111	4	G	1,0	4,0	1,5	50,0	8,5	0,95	0,1	6,1	2	Cylindrical	■
JME542012G4R010.0Z2-SIRA	03171112	4	G	1,2	4,0	1,8	50,0	10,0	1,15	0,1	5,27	2	Cylindrical	■
JME542015G4R015.0Z2-SIRA	03171136	4	G	1,5	4,0	2,3	50,0	12,0	1,45	0,15	4,29	2	Cylindrical	■
JME542020G4R015.0Z2-SIRA	03171113	4	G	2,0	4,0	3,0	60,0	16,0	1,94	0,15	2,9	2	Cylindrical	■
JME542030G4R015.0Z2-SIRA	03171137	4	G	3,0	4,0	4,5	70,0	24,0	2,85	0,15	1,1	2	Cylindrical	■
JME542015G5R015.0Z2-SIRA	03171115	5	G	1,5	4,0	2,3	60,0	15,0	1,45	0,15	3,64	2	Cylindrical	■
JME542020G5R015.0Z2-SIRA	03171116	5	G	2,0	4,0	3,0	60,0	20,0	1,94	0,15	2,41	2	Cylindrical	■
JME542030G5R015.0Z2-SIRA	03171117	5	G	3,0	4,0	4,5	70,0	30,0	2,85	0,15	0,9	2	Cylindrical	■
JME542015G6R015.0Z2-SIRA	03171118	6	G	1,5	4,0	2,3	70,0	22,5	1,45	0,15	2,64	2	Cylindrical	■
JME542020G6R015.0Z2-SIRA	03171139	6	G	2,0	4,0	3,0	70,0	30,0	1,94	0,15	1,7	2	Cylindrical	■
JME542030G6R015.0Z2-SIRA	03171120	6	G	3,0	4,0	4,5	90,0	45,0	2,85	0,15	0,61	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfcp

Graphite

X-Heads

Minimaster

Cutting data – JME542 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z												v_c
				0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0	
P1	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	415 (370 — 460) 1350 (1300 — 1500)
P2	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	405 (360 — 440) 1325 (1200 — 1400)
P3	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	350 (310 — 380) 1150 (1100 — 1200)
P4	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	305 (280 — 340) 1000 (920 — 1100)
P5	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 320) 950 (860 — 1000)
P6	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	330 (300 — 360) 1075 (990 — 1100)
P7	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	310 (280 — 340) 1025 (920 — 1100)
P8	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 320) 950 (860 — 1000)
P11	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	300 (270 — 330) 980 (890 — 1000)
P12	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (160 — 190) 570 (530 — 620)
M1	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	220 (190 — 260) 720 (630 — 850)
M2	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	180 (150 — 210) 590 (500 — 680)
M3	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	180 (150 — 210) 590 (500 — 680)
M4	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	135 (110 — 150) 445 (370 — 490)
M5	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	110 (92 — 130) 360 (310 — 420)
N1	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	570 (500 — 640) 1875 (1700 — 2000)
N2	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	570 (500 — 640) 1875 (1700 — 2000)
N3	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	380 (340 — 420) 1250 (1200 — 1300)
N11	E/M/A	0.100 0,100	0.75 0,75	0.0050 0,00020	0.0075 0,00030	0.010 0,00040	0.012 0,00048	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.046 0,0018	0.050 0,0020	0.060 0,0024	0.075 0,0030	510 (440 — 580) 1675 (1500 — 1900)
S11	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (260 — 330) 970 (860 — 1000)
S12	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	225 (200 — 250) 740 (660 — 820)
S13	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (160 — 200) 570 (530 — 650)
H3	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H5	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
H7	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H8	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
H11	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	325 (290 — 360) 1075 (960 — 1100)
H12	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (270 — 330) 970 (890 — 1000)
H21	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
H31	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	195 (170 — 210) 640 (560 — 680)
GR1	A	0.500 0,500	0.50 0,50	0.0030 0,00012	0.0044 0,00017	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.025 0,0010	0.028 0,0011	0.032 0,0013	405 (350 — 460) 1325 (1200 — 1500)

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JME542 Slot milling

SMG		a _p /DC	f _z												v _c	
			0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0		
P1	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	255 (230 — 280) 840 (760 — 910)	Steel and cast iron
P2	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	250 (230 — 270) 820 (760 — 880)	
P3	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	215 (200 — 230) 710 (660 — 750)	
P4	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 200) 620 (560 — 650)	
P5	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P6	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	200 (180 — 220) 660 (600 — 720)	
P7	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
P8	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P11	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	185 (170 — 200) 610 (560 — 650)	
P12	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.022 0.00085	0.022 0.00085	0.026 0.0010	0.028 0.0011	110 (98 — 120) 360 (330 — 390)	
M1	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	135 (120 — 160) 445 (400 — 520)	Non ferrous
M2	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (91 — 130) 360 (300 — 420)	
M3	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (91 — 130) 360 (300 — 420)	
M4	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	80 (68 — 97) 260 (230 — 310)	
M5	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	70 (57 — 81) 230 (190 — 260)	
N1	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	Hard
N2	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	
N3	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	265 (240 — 290) 870 (790 — 950)	
N11	E/M/A	0.24 0.24	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.024 0.00095	0.036 0.0014	0.040 0.0016	0.048 0.0019	0.050 0.0020	350 (300 — 400) 1150 (990 — 1300)	
S11	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (160 — 200) 590 (530 — 650)	Plastic and cf/p
S12	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	140 (120 — 150) 460 (400 — 490)	
S13	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	110 (93 — 120) 360 (310 — 390)	
H3	M/A	0.095 0.095	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	Graphite
H5	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H7	M/A	0.095 0.095	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	
H8	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H11	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	205 (180 — 230) 670 (600 — 750)	X-Heads
H12	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
H21	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H31	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	120 (110 — 130) 395 (370 — 420)	
GR1	A	0.50 0.50	0.0020 0.000080	0.0030 0.00012	0.0040 0.00016	0.0050 0.00020	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.018 0.00070	0.020 0.00080	0.025 0.0010	0.030 0.0012	350 (300 — 400) 1150 (990 — 1300)	Minimaster

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

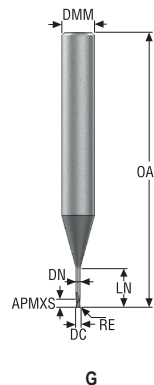
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JME562

Miniature – Universal – Square – 2 Flutes – DMM 6 – Cylindrical – Corner radius



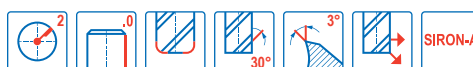
—Tolerances:

—Run-out= <0,007 mm

—DMM= h5

—DC= 0,-0,013 mm

—RE= ±0,005 mm

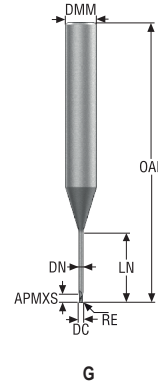


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
JME562005G2R005.0Z2-SIRA	03171145	2	G	0,5	6,0	0,8	50,0	1,5	0,46	0,05	13,48	2	Cylindrical	■
JME562006G2R005.0Z2-SIRA	03171146	2	G	0,6	6,0	0,9	50,0	2,0	0,56	0,05	12,9	2	Cylindrical	■
JME562008G2R005.0Z2-SIRA	03171147	2	G	0,8	6,0	1,2	50,0	2,5	0,76	0,05	12,28	2	Cylindrical	■
JME562010G2R010.0Z2-SIRA	03171148	2	G	1,0	6,0	1,5	50,0	4,0	0,95	0,1	10,85	2	Cylindrical	■
JME562012G2R010.0Z2-SIRA	03171150	2	G	1,2	6,0	1,8	50,0	4,5	1,15	0,1	10,31	2	Cylindrical	■
JME562015G2R015.0Z2-SIRA	03171151	2	G	1,5	6,0	2,3	50,0	5,0	1,45	0,15	9,67	2	Cylindrical	■
JME562018G2R015.0Z2-SIRA	03171152	2	G	1,8	6,0	2,7	50,0	5,4	1,75	0,15	9,12	2	Cylindrical	■
JME562020G2R015.0Z2-SIRA	03171153	2	G	2,0	6,0	3,0	50,0	6,0	1,94	0,15	8,53	2	Cylindrical	■
JME562025G2R015.0Z2-SIRA	03171154	2	G	2,5	6,0	3,8	60,0	7,5	2,4	0,15	7,15	2	Cylindrical	■
JME562030G2R015.0Z2-SIRA	03171155	2	G	3,0	6,0	4,5	60,0	9,0	2,85	0,15	5,81	2	Cylindrical	■
JME562005G4R005.0Z2-SIRA	03171156	4	G	0,5	6,0	0,8	50,0	3,5	0,46	0,05	11,54	2	Cylindrical	■
JME562006G4R005.0Z2-SIRA	03171157	4	G	0,6	6,0	0,9	50,0	4,2	0,56	0,05	10,93	2	Cylindrical	■
JME562008G4R005.0Z2-SIRA	03171158	4	G	0,8	6,0	1,2	50,0	5,6	0,76	0,05	9,81	2	Cylindrical	■
JME562010G4R010.0Z2-SIRA	03171159	4	G	1,0	6,0	1,5	50,0	7,0	0,95	0,1	8,86	2	Cylindrical	■
JME562012G4R010.0Z2-SIRA	03171160	4	G	1,2	6,0	1,8	50,0	8,4	1,15	0,1	8,0	2	Cylindrical	■
JME562015G4R015.0Z2-SIRA	03171162	4	G	1,5	6,0	2,3	50,0	10,5	1,45	0,15	6,86	2	Cylindrical	■
JME562020G4R015.0Z2-SIRA	03171163	4	G	2,0	6,0	3,0	60,0	14,0	1,94	0,15	5,36	2	Cylindrical	■
JME562030G4R015.0Z2-SIRA	03171165	4	G	3,0	6,0	4,5	70,0	21,0	2,85	0,15	3,22	2	Cylindrical	■
JME562005G5R005.0Z2-SIRA	03171166	5	G	0,5	6,0	0,8	50,0	5,0	0,46	0,05	10,42	2	Cylindrical	■
JME562006G5R005.0Z2-SIRA	03171167	5	G	0,6	6,0	0,9	50,0	6,0	0,56	0,05	9,71	2	Cylindrical	■
JME562008G5R005.0Z2-SIRA	03171168	5	G	0,8	6,0	1,2	50,0	8,0	0,76	0,05	8,48	2	Cylindrical	■
JME562010G5R010.0Z2-SIRA	03171169	5	G	1,0	6,0	1,5	50,0	10,0	0,95	0,1	7,48	2	Cylindrical	■
JME562012G5R010.0Z2-SIRA	03171170	5	G	1,2	6,0	1,8	50,0	12,0	1,15	0,1	6,62	2	Cylindrical	■
JME562015G5R015.0Z2-SIRA	03171171	5	G	1,5	6,0	2,3	60,0	15,0	1,45	0,15	5,54	2	Cylindrical	■
JME562020G5R015.0Z2-SIRA	03171172	5	G	2,0	6,0	3,0	60,0	20,0	1,94	0,15	4,19	2	Cylindrical	■
JME562030G5R015.0Z2-SIRA	03171174	5	G	3,0	6,0	4,5	70,0	30,0	2,85	0,15	2,41	2	Cylindrical	■

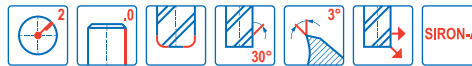
■ Stocked standard.

JME562

Miniature – Universal – Square – 2 Flutes – DMM 6 – Cylindrical – Corner radius



- Tolerances:
- Run-out= <0,007 mm
- DMM= h5
- DC= 0,-0,013 mm
- RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JME562010G6R010.0Z2-SIRA	03171175	6	G	1,0	6,0	1,5	60,0	15,0	0,95	0,1	5,94	2	Cylindrical	■
JME562012G6R010.0Z2-SIRA	03171176	6	G	1,2	6,0	1,8	60,0	18,0	1,15	0,1	5,14	2	Cylindrical	■
JME562015G6R015.0Z2-SIRA	03171177	6	G	1,5	6,0	2,3	70,0	22,5	1,45	0,15	4,2	2	Cylindrical	■
JME562020G6R015.0Z2-SIRA	03171178	6	G	2,0	6,0	3,0	80,0	30,0	1,94	0,15	3,07	2	Cylindrical	■
JME562030G6R015.0Z2-SIRA	03171180	6	G	3,0	6,0	4,5	90,0	45,0	2,85	0,15	1,7	2	Cylindrical	■
JME562010G7R010.0Z2-SIRA	03171181	7	G	1,0	6,0	1,5	60,0	20,0	0,95	0,1	4,93	2	Cylindrical	■
JME562012G7R010.0Z2-SIRA	03171182	7	G	1,2	6,0	1,8	80,0	24,0	1,15	0,1	4,2	2	Cylindrical	■
JME562015G7R015.0Z2-SIRA	03171183	7	G	1,5	6,0	2,3	80,0	30,0	1,45	0,15	3,38	2	Cylindrical	■
JME562020G7R015.0Z2-SIRA	03171184	7	G	2,0	6,0	3,0	80,0	40,0	1,94	0,15	2,42	2	Cylindrical	■
JME562030G7R015.0Z2-SIRA	03171186	7	G	3,0	6,0	4,5	100,0	60,0	2,85	0,15	1,31	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

Graphite

X-Heads

Minimaster

Cutting data – JME562 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z												v_c
				0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0	
P1	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	415 (370 — 460) 1350 (1300 — 1500)
P2	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	405 (360 — 440) 1325 (1200 — 1400)
P3	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	350 (310 — 380) 1150 (1100 — 1200)
P4	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	305 (280 — 340) 1000 (920 — 1100)
P5	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 320) 950 (860 — 1000)
P6	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	330 (300 — 360) 1075 (990 — 1100)
P7	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	310 (280 — 340) 1025 (920 — 1100)
P8	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 320) 950 (860 — 1000)
P11	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	300 (270 — 330) 980 (890 — 1000)
P12	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (160 — 190) 570 (530 — 620)
M1	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	220 (190 — 260) 720 (630 — 850)
M2	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	180 (150 — 210) 590 (500 — 680)
M3	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	180 (150 — 210) 590 (500 — 680)
M4	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	135 (110 — 150) 445 (370 — 490)
M5	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	110 (92 — 130) 360 (310 — 420)
N1	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	570 (500 — 640) 1875 (1700 — 2000)
N2	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	570 (500 — 640) 1875 (1700 — 2000)
N3	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	380 (340 — 420) 1250 (1200 — 1300)
N11	E/M/A	0.100 0,100	0.75 0,75	0.0050 0,00020	0.0075 0,00030	0.010 0,00040	0.012 0,00048	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.046 0,0018	0.050 0,0020	0.060 0,0024	0.075 0,0030	510 (440 — 580) 1675 (1500 — 1900)
S11	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (260 — 330) 970 (860 — 1000)
S12	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	225 (200 — 250) 740 (660 — 820)
S13	E/M/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (160 — 200) 570 (530 — 650)
H3	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H5	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
H7	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H8	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
H11	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	325 (290 — 360) 1075 (960 — 1100)
H12	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (270 — 330) 970 (890 — 1000)
H21	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
H31	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	195 (170 — 210) 640 (560 — 680)
GR1	A	0.500 0,500	0.50 0,50	0.0030 0,00012	0.0044 0,00017	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.025 0,0010	0.028 0,0011	0.032 0,0013	405 (350 — 460) 1325 (1200 — 1500)

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JME562 Slot milling

SMG		a _p /DC	f _z												v _c	
			0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0		
P1	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	255 (230 — 280) 840 (760 — 910)	Steel and cast iron
P2	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	250 (230 — 270) 820 (760 — 880)	
P3	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	215 (200 — 230) 710 (660 — 750)	
P4	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 200) 620 (560 — 650)	
P5	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P6	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	200 (180 — 220) 660 (600 — 720)	
P7	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
P8	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P11	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	185 (170 — 200) 610 (560 — 650)	
P12	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.022 0.00085	0.022 0.00085	0.026 0.0010	0.028 0.0011	110 (98 — 120) 360 (330 — 390)	
M1	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	135 (120 — 160) 445 (400 — 520)	Non ferrous
M2	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (91 — 130) 360 (300 — 420)	
M3	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (91 — 130) 360 (300 — 420)	
M4	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	80 (68 — 97) 260 (230 — 310)	
M5	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	70 (57 — 81) 230 (190 — 260)	
N1	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	Hard
N2	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	
N3	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	265 (240 — 290) 870 (790 — 950)	
N11	E/M/A	0.24 0.24	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.024 0.00095	0.036 0.0014	0.040 0.0016	0.048 0.0019	0.050 0.0020	350 (300 — 400) 1150 (990 — 1300)	
S11	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (160 — 200) 590 (530 — 650)	Plastic and cf/p
S12	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	140 (120 — 150) 460 (400 — 490)	
S13	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	110 (93 — 120) 360 (310 — 390)	
H3	M/A	0.095 0.095	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	Graphite
H5	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H7	M/A	0.095 0.095	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	
H8	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H11	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	205 (180 — 230) 670 (600 — 750)	X-Heads
H12	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
H21	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H31	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.036 0.0014	120 (110 — 130) 395 (370 — 420)	
GR1	A	0.50 0.50	0.0020 0.000080	0.0030 0.00012	0.0040 0.00016	0.0050 0.00020	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.018 0.00070	0.020 0.00080	0.025 0.0010	0.030 0.0012	350 (300 — 400) 1150 (990 — 1300)	Minimaster

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

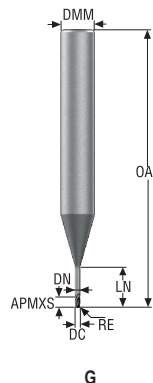
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

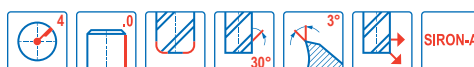
All cutting data are target values

JME564

Miniature – Universal – Square – 4 Flutes – DMM 6 – Cylindrical – Corner radius



—Tolerances:
—Run-out= <0-0,007 mm
—DMM= h5
—DC= 0,-0,013 mm
—RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JME564005G2R005.0Z4-SIRA	03227166	2	G	0,5	6,0	1,0	50,0	1,5	0,46	0,05	13,48	4	Cylindrical	■
JME564006G2R005.0Z4-SIRA	03227271	2	G	0,6	6,0	1,2	50,0	2,0	0,56	0,05	12,9	4	Cylindrical	■
JME564008G2R005.0Z4-SIRA	03171194	2	G	0,8	6,0	1,6	50,0	2,5	0,76	0,05	12,28	4	Cylindrical	■
JME564010G2R010.0Z4-SIRA	03171195	2	G	1,0	6,0	2,0	50,0	4,0	0,95	0,1	10,85	4	Cylindrical	■
JME564012G2R010.0Z4-SIRA	03171196	2	G	1,2	6,0	2,4	50,0	4,5	1,15	0,1	10,31	4	Cylindrical	■
JME564015G2R015.0Z4-SIRA	03171197	2	G	1,5	6,0	3,0	50,0	5,0	1,45	0,15	9,67	4	Cylindrical	■
JME564020G2R015.0Z4-SIRA	03171198	2	G	2,0	6,0	4,0	50,0	6,0	1,94	0,15	8,53	4	Cylindrical	■
JME564025G2R015.0Z4-SIRA	03171199	2	G	2,5	6,0	5,0	60,0	7,5	2,4	0,15	7,15	4	Cylindrical	■
JME564030G2R015.0Z4-SIRA	03171200	2	G	3,0	6,0	6,0	60,0	9,0	2,85	0,15	5,81	4	Cylindrical	■
JME564005G4R005.0Z4-SIRA	03171201	4	G	0,5	6,0	1,0	50,0	3,5	0,46	0,05	11,54	4	Cylindrical	■
JME564006G4R005.0Z4-SIRA	03171202	4	G	0,6	6,0	1,2	50,0	4,2	0,56	0,05	10,93	4	Cylindrical	■
JME564008G4R005.0Z4-SIRA	03171203	4	G	0,8	6,0	1,6	50,0	5,6	0,76	0,05	9,81	4	Cylindrical	■
JME564010G4R010.0Z4-SIRA	03171204	4	G	1,0	6,0	2,0	50,0	7,0	0,95	0,1	8,86	4	Cylindrical	■
JME564012G4R010.0Z4-SIRA	03171205	4	G	1,2	6,0	2,4	50,0	8,4	1,15	0,1	8,0	4	Cylindrical	■
JME564015G4R015.0Z4-SIRA	03171206	4	G	1,5	6,0	3,0	50,0	10,5	1,45	0,15	6,86	4	Cylindrical	■
JME564020G4R015.0Z4-SIRA	03171207	4	G	2,0	6,0	4,0	60,0	14,0	1,94	0,15	5,36	4	Cylindrical	■
JME564030G4R015.0Z4-SIRA	03171209	4	G	3,0	6,0	6,0	70,0	21,0	2,85	0,15	3,22	4	Cylindrical	■

■ Stocked standard.

Cutting data – JME564 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z									v _c
				0.5	0.6	0.8	1.0	1.2	1.5	2.0	2.5	3	
P1	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	395 (360 — 430) 1300 (1200 — 1400)
P2	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	385 (350 — 420) 1275 (1200 — 1300)
P3	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	330 (300 — 360) 1075 (990 — 1100)
P4	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 320) 950 (860 — 1000)
P5	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	280 (250 — 300) 920 (830 — 980)
P6	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	310 (280 — 340) 1025 (920 — 1100)
P7	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (270 — 320) 970 (890 — 1000)
P8	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	280 (250 — 300) 920 (830 — 980)
P11	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	285 (260 — 310) 940 (860 — 1000)
P12	M/E/A	0.0500 0,0500	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	170 (160 — 180) 560 (530 — 590)
M1	E/M/A	0.0250 0,0250	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (200 — 280) 770 (660 — 910)
M2	E/M/A	0.0250 0,0250	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	190 (160 — 220) 620 (530 — 720)
M3	E/M/A	0.0250 0,0250	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	190 (160 — 220) 620 (530 — 720)
M4	E/M/A	0.0250 0,0250	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	145 (120 — 160) 475 (400 — 520)
M5	E/M/A	0.0250 0,0250	0.50 0,50	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	120 (99 — 140) 395 (330 — 450)
N1	E/M/A	0.100 0,100	0.90 0,90	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	550 (490 — 610) 1800 (1700 — 2000)
N2	E/M/A	0.100 0,100	0.90 0,90	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	550 (490 — 610) 1800 (1700 — 2000)
N3	E/M/A	0.100 0,100	0.90 0,90	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	365 (330 — 410) 1200 (1100 — 1300)
N11	E/M/A	0.100 0,100	0.90 0,90	0.012 0,00048	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	490 (430 — 560) 1600 (1500 — 1800)
S11	E/M/A	0.0500 0,0500	0.60 0,60	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	285 (250 — 320) 940 (830 — 1000)
S12	E/M/A	0.0500 0,0500	0.60 0,60	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	220 (190 — 250) 720 (630 — 820)
S13	E/M/A	0.0500 0,0500	0.60 0,60	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	170 (150 — 190) 560 (500 — 620)
H3	M/A	0.0500 0,0500	0.060 0,060	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.038 0,0015	0.042 0,0017	125 (95 — 150) 410 (320 — 490)
H5	M/A	0.0500 0,0500	0.28 0,28	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	240 (210 — 260) 790 (690 — 850)
H7	M/A	0.0500 0,0500	0.060 0,060	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.038 0,0015	0.042 0,0017	125 (95 — 150) 410 (320 — 490)
H8	M/A	0.0500 0,0500	0.28 0,28	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.055 0,0022	240 (210 — 260) 790 (690 — 850)
H11	M/A	0.0500 0,0500	0.28 0,28	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	305 (270 — 340) 1000 (890 — 1100)
H12	M/A	0.0500 0,0500	0.28 0,28	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.055 0,0022	275 (250 — 310) 900 (830 — 1000)
H21	M/A	0.0500 0,0500	0.28 0,28	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.055 0,0022	240 (210 — 260) 790 (690 — 850)
H31	M/A	0.0500 0,0500	0.28 0,28	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.048 0,0019	180 (160 — 200) 590 (530 — 650)
GR1	A	0.500 0,500	0.65 0,50	0.0075 0,00030	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00085	0.025 0,0010	0.028 0,0011	0.032 0,0013	390 (340 — 440) 1300 (1200 — 1400)

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JME564 Slot milling

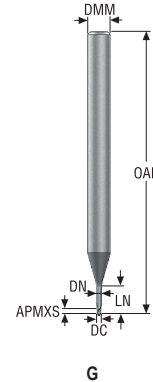
SMG		a _p /DC	f _z									v _c
			0.5	0.6	0.8	1.0	1.2	1.5	2.0	2.5	3	
P1	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	250 (230 — 270)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	820 (760 — 880)
P2	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	245 (220 — 270)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	800 (730 — 880)
P3	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	210 (190 — 230)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	690 (630 — 750)
P4	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	185 (170 — 200)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	610 (560 — 650)
P5	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	175 (160 — 190)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	570 (530 — 620)
P6	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	200 (180 — 220)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	660 (600 — 720)
P7	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	185 (170 — 200)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	610 (560 — 650)
P8	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	175 (160 — 190)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	570 (530 — 620)
P11	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	180 (170 — 200)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	590 (560 — 650)
P12	M/E/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.019	0.024	0.026	0.030	105 (96 — 110)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00075	0,00095	0,0010	0,0012	345 (320 — 360)
M1	E/M/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	135 (110 — 150)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	445 (370 — 490)
M2	E/M/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	110 (89 — 120)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	360 (300 — 390)
M3	E/M/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	110 (89 — 120)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	360 (300 — 390)
M4	E/M/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.038	80 (67 — 95)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0015	260 (220 — 310)
M5	E/M/A	0.038	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.038	65 (56 — 79)
		0,038	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0015	215 (190 — 250)
N1	E/M/A	0.15	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	390 (350 — 440)
		0,15	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	1275 (1200 — 1400)
N2	E/M/A	0.15	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	390 (350 — 440)
		0,15	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	1275 (1200 — 1400)
N3	E/M/A	0.15	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	260 (230 — 290)
		0,15	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	850 (760 — 950)
N11	E/M/A	0.15	0.010	0.012	0.016	0.020	0.024	0.030	0.040	0.048	0.055	345 (300 — 390)
		0,15	0,00040	0,00048	0,00065	0,00080	0,00095	0,0012	0,0016	0,0019	0,0022	1125 (990 — 1200)
S11	E/M/A	0.11	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	180 (160 — 200)
		0,11	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	590 (530 — 650)
S12	E/M/A	0.11	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	135 (120 — 150)
		0,11	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	445 (400 — 490)
S13	E/M/A	0.11	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.036	105 (92 — 120)
		0,11	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0014	345 (310 — 390)
H3	M/A	0.0060	0.0060	0.0070	0.0095	0.012	0.014	0.018	0.024	0.030	0.036	80 (59 — 98)
		0,0060	0,00024	0,00028	0,00038	0,00048	0,00055	0,00070	0,00095	0,0012	0,0014	260 (200 — 320)
H5	M/A	0.020	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	160 (140 — 170)
		0,020	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	520 (460 — 550)
H7	M/A	0.0060	0.0060	0.0070	0.0095	0.012	0.014	0.018	0.024	0.030	0.036	80 (59 — 98)
		0,0060	0,00024	0,00028	0,00038	0,00048	0,00055	0,00070	0,00095	0,0012	0,0014	260 (200 — 320)
H8	M/A	0.020	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.030	0.032	160 (140 — 170)
		0,020	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0012	0,0013	520 (460 — 550)
H11	M/A	0.020	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.032	0.040	200 (180 — 220)
		0,020	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0013	0,0016	660 (600 — 720)
H12	M/A	0.020	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.030	0.032	185 (170 — 200)
		0,020	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0012	0,0013	610 (560 — 650)
H21	M/A	0.020	0.0065	0.0080	0.010	0.013	0.016	0.020	0.026	0.030	0.032	160 (140 — 170)
		0,020	0,00026	0,00032	0,00040	0,00050	0,00065	0,00080	0,0010	0,0012	0,0013	520 (460 — 550)
H31	M/A	0.020	0.0065	0.0080	0.010	0.013	0.016	0.019	0.022	0.025	0.028	120 (110 — 130)
		0,020	0,00026	0,00032	0,00040	0,00050	0,00065	0,00075	0,00085	0,0010	0,0011	395 (370 — 420)
GR1	A	0.20	0.0050	0.0060	0.0080	0.010	0.012	0.015	0.020	0.024	0.026	325 (280 — 370)
		0,20	0,00020	0,00024	0,00032	0,00040	0,00048	0,00060	0,00080	0,00095	0,0010	1075 (920 — 1200)

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

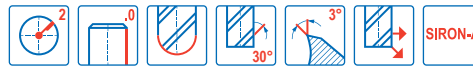
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JMB542

Miniature – Universal – Ball nose – 2 Flutes – DMM 4 – Cylindrical



—Tolerances:
—Run-out=<0,007 mm
—DMM= h5
—DC= 0,-0,01 mm
—RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JMB542002G1B.0Z2-SIRA	03171221	1	G	0,2	4,0	0,2	45,0	0,4	0,18	0,1	14,57	2	Cylindrical	■
JMB542003G1B.0Z2-SIRA	03171222	1	G	0,3	4,0	0,3	45,0	0,6	0,28	0,15	14,24	2	Cylindrical	■
JMB542004G1B.0Z2-SIRA	03171223	1	G	0,4	4,0	0,4	45,0	0,8	0,37	0,2	13,81	2	Cylindrical	■
JMB542005G1B.0Z2-SIRA	03171224	1	G	0,5	4,0	0,5	45,0	1,0	0,46	0,25	13,47	2	Cylindrical	■
JMB542006G1B.0Z2-SIRA	03171225	1	G	0,6	4,0	0,6	45,0	1,2	0,56	0,3	13,14	2	Cylindrical	■
JMB542008G1B.0Z2-SIRA	03171226	1	G	0,8	4,0	0,8	45,0	1,6	0,76	0,4	12,46	2	Cylindrical	■
JMB542010G1B.0Z2-SIRA	03171228	1	G	1,0	4,0	1,0	50,0	2,0	0,95	0,5	11,77	2	Cylindrical	■
JMB542012G1B.0Z2-SIRA	03171229	1	G	1,2	4,0	1,2	50,0	2,4	1,15	0,6	11,07	2	Cylindrical	■
JMB542015G1B.0Z2-SIRA	03171230	1	G	1,5	4,0	1,5	50,0	3,0	1,45	0,75	9,88	2	Cylindrical	■
JMB542005G3B.0Z2-SIRA	03171231	3	G	0,5	4,0	0,5	45,0	2,5	0,46	0,25	11,25	2	Cylindrical	■
JMB542006G3B.0Z2-SIRA	03171233	3	G	0,6	4,0	0,6	45,0	3,0	0,56	0,3	10,61	2	Cylindrical	■
JMB542008G3B.0Z2-SIRA	03171234	3	G	0,8	4,0	0,8	45,0	4,0	0,76	0,4	9,44	2	Cylindrical	■
JMB542010G3B.0Z2-SIRA	03171235	3	G	1,0	4,0	1,0	50,0	5,0	0,95	0,5	8,38	2	Cylindrical	■
JMB542012G3B.0Z2-SIRA	03171236	3	G	1,2	4,0	1,2	50,0	6,0	1,15	0,6	7,44	2	Cylindrical	■
JMB542015G3B.0Z2-SIRA	03171237	3	G	1,5	4,0	1,5	50,0	7,5	1,45	0,75	6,13	2	Cylindrical	■
JMB542020G3B.0Z2-SIRA	03171238	3	G	2,0	4,0	2,0	50,0	10,0	1,94	1,0	4,4	2	Cylindrical	■
JMB542030G3B.0Z2-SIRA	03171240	3	G	3,0	4,0	3,0	60,0	15,0	2,85	1,5	1,81	2	Cylindrical	■
JMB542005G4B.0Z2-SIRA	03171241	4	G	0,5	4,0	0,5	45,0	4,0	0,46	0,25	9,65	2	Cylindrical	■
JMB542006G4B.0Z2-SIRA	03171242	4	G	0,6	4,0	0,6	45,0	5,0	0,56	0,3	8,74	2	Cylindrical	■
JMB542008G4B.0Z2-SIRA	03171243	4	G	0,8	4,0	0,8	45,0	7,0	0,76	0,4	7,23	2	Cylindrical	■
JMB542010G4B.0Z2-SIRA	03171244	4	G	1,0	4,0	1,0	50,0	8,5	0,95	0,5	6,27	2	Cylindrical	■
JMB542012G4B.0Z2-SIRA	03171245	4	G	1,2	4,0	1,2	50,0	10,0	1,15	0,6	5,44	2	Cylindrical	■
JMB542015G4B.0Z2-SIRA	03171246	4	G	1,5	4,0	1,5	50,0	12,0	1,45	0,75	4,44	2	Cylindrical	■
JMB542020G4B.0Z2-SIRA	03171247	4	G	2,0	4,0	2,0	60,0	16,0	1,94	1,0	3,02	2	Cylindrical	■
JMB542030G4B.0Z2-SIRA	03171249	4	G	3,0	4,0	3,0	70,0	24,0	2,85	1,5	1,16	2	Cylindrical	■
JMB542015G5B.0Z2-SIRA	03171250	5	G	1,5	4,0	1,5	60,0	15,0	1,45	0,75	3,75	2	Cylindrical	■
JMB542020G5B.0Z2-SIRA	03171251	5	G	2,0	4,0	2,0	60,0	20,0	1,94	1,0	2,5	2	Cylindrical	■
JMB542030G5B.0Z2-SIRA	03171253	5	G	3,0	4,0	3,0	70,0	30,0	2,85	1,5	0,93	2	Cylindrical	■
JMB542015G6B.0Z2-SIRA	03171254	6	G	1,5	4,0	1,5	70,0	22,5	1,45	0,75	2,7	2	Cylindrical	■
JMB542020G6B.0Z2-SIRA	03171255	6	G	2,0	4,0	2,0	70,0	30,0	1,94	1,0	1,74	2	Cylindrical	■
JMB542030G6B.0Z2-SIRA	03171257	6	G	3,0	4,0	3,0	90,0	45,0	2,85	1,5	0,63	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JMB542 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z												v _c
				0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0	
P1	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	365 (330 — 400) 1200 (1100 — 1300)
P2	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	355 (320 — 390) 1175 (1100 — 1200)
P3	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	305 (280 — 330) 1000 (920 — 1000)
P4	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	270 (240 — 290) 840 (760 — 910)
P5	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
P6	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 310) 950 (860 — 1000)
P7	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	270 (250 — 300) 890 (830 — 980)
P8	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
P11	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	265 (240 — 290) 870 (790 — 950)
P12	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	155 (140 — 170) 510 (460 — 550)
M1	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	215 (180 — 250) 710 (600 — 820)
M2	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (150 — 200) 570 (500 — 650)
M3	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (150 — 200) 570 (500 — 650)
M4	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	130 (110 — 150) 425 (370 — 490)
M5	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	110 (90 — 120) 360 (300 — 390)
N1	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	485 (430 — 540) 1600 (1500 — 1700)
N2	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	485 (430 — 540) 1600 (1500 — 1700)
N3	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	325 (290 — 360) 1075 (960 — 1100)
N11	E/M/A	0.100 0,100	0.75 0,75	0.0050 0,00020	0.0075 0,00030	0.010 0,00040	0.012 0,00048	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.046 0,0018	0.050 0,0020	0.060 0,0024	0.075 0,0030	430 (370 — 480) 1400 (1300 — 1500)
S11	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (250 — 330) 950 (830 — 1000)
S12	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	225 (200 — 250) 740 (660 — 820)
S13	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (150 — 190) 570 (500 — 620)
H3	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H5	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (210 — 260) 770 (690 — 850)
H7	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H8	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (210 — 260) 770 (690 — 850)
H11	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	300 (270 — 330) 980 (890 — 1000)
H12	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	275 (240 — 300) 900 (790 — 980)
H21	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (210 — 260) 770 (690 — 850)
H31	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	180 (160 — 200) 590 (530 — 650)
GR1	A	0.500 0,500	0.50 0,50	0.0030 0,00012	0.0044 0,00017	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.028 0,0011	0.030 0,0012	0.038 0,0015	0.040 0,0016	405 (350 — 460) 1325 (1200 — 1500)

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c= m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JMB542 Slot milling

SMG		a _p /DC	f _z												v _c	
			0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0		
P1	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	255 (230 — 280) 840 (760 — 910)	Steel and cast iron
P2	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	250 (230 — 270) 820 (760 — 880)	
P3	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	215 (200 — 230) 710 (660 — 750)	
P4	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 200) 620 (560 — 650)	
P5	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P6	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	200 (180 — 220) 660 (600 — 720)	
P7	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
P8	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P11	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	185 (170 — 200) 610 (560 — 650)	
P12	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (98 — 120) 360 (330 — 390)	
M1	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	135 (120 — 160) 445 (400 — 520)	Non ferrous
M2	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (90 — 130) 360 (300 — 420)	
M3	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (90 — 130) 360 (300 — 420)	
M4	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	80 (68 — 97) 260 (230 — 310)	
M5	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	70 (57 — 81) 230 (190 — 260)	
N1	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	Hard
N2	E/M/A	0.26 0.26	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	
N3	E/M/A	0.26 0.26	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	265 (240 — 290) 870 (790 — 950)	
N11	E/M/A	0.24 0.24	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.024 0.00095	0.036 0.0014	0.040 0.0016	0.050 0.0020	0.060 0.0024	350 (300 — 390) 1150 (990 — 1200)	
S11	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (160 — 200) 590 (530 — 650)	Plastic and cf/p
S12	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	140 (120 — 150) 460 (400 — 490)	
S13	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	105 (93 — 120) 345 (310 — 390)	
H3	M/A	0.10 0.10	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	Graphite
H5	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H7	M/A	0.10 0.10	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	
H8	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H11	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	205 (180 — 230) 670 (600 — 750)	X-Heads
H12	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
H21	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H31	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	120 (110 — 130) 395 (370 — 420)	
GR1	A	0.50 0.50	0.0020 0.000080	0.0030 0.00012	0.0040 0.00016	0.0050 0.00020	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.018 0.00070	0.020 0.00080	0.025 0.0010	0.030 0.0012	350 (300 — 390) 1150 (990 — 1200)	Minimaster

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

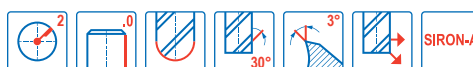
All cutting data are target values

JMB562

Miniature – Universal – Ball nose – 2 Flutes – DMM 6 – Cylindrical



—Tolerances:
—Run-out=<0,007 mm
—DMM= h5
—DC= 0,-0,01 mm
—RE= ±0,005 mm

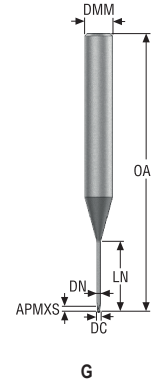


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JMB562005G2B.0Z2-SIRA	03171261	2	G	0,5	6,0	0,5	50,0	1,5	0,46	0,25	13,69	2	Cylindrical	■
JMB562006G2B.0Z2-SIRA	03171262	2	G	0,6	6,0	0,6	50,0	2,0	0,56	0,3	13,13	2	Cylindrical	■
JMB562008G2B.0Z2-SIRA	03171263	2	G	0,8	6,0	0,8	50,0	2,5	0,76	0,4	12,6	2	Cylindrical	■
JMB562010G2B.0Z2-SIRA	03171264	2	G	1,0	6,0	1,0	50,0	4,0	0,95	0,5	11,15	2	Cylindrical	■
JMB562012G2B.0Z2-SIRA	03171265	2	G	1,2	6,0	1,2	50,0	4,5	1,15	0,6	10,67	2	Cylindrical	■
JMB562015G2B.0Z2-SIRA	03171266	2	G	1,5	6,0	1,5	50,0	5,0	1,45	0,75	10,07	2	Cylindrical	■
JMB562018G2B.0Z2-SIRA	03171267	2	G	1,8	6,0	1,8	50,0	5,4	1,75	0,9	9,61	2	Cylindrical	■
JMB562020G2B.0Z2-SIRA	03171268	2	G	2,0	6,0	2,0	50,0	6,0	1,94	1,0	9,05	2	Cylindrical	■
JMB562025G2B.0Z2-SIRA	03171269	2	G	2,5	6,0	2,5	60,0	7,5	2,4	1,25	7,71	2	Cylindrical	■
JMB562030G2B.0Z2-SIRA	03171270	2	G	3,0	6,0	3,0	60,0	9,0	2,85	1,5	6,35	2	Cylindrical	■
JMB562005G4B.0Z2-SIRA	03171271	4	G	0,5	6,0	0,5	50,0	3,5	0,46	0,25	11,7	2	Cylindrical	■
JMB562006G4B.0Z2-SIRA	03171272	4	G	0,6	6,0	0,6	50,0	4,2	0,56	0,3	11,1	2	Cylindrical	■
JMB562008G4B.0Z2-SIRA	03171273	4	G	0,8	6,0	0,8	50,0	5,6	0,76	0,4	10,02	2	Cylindrical	■
JMB562010G4B.0Z2-SIRA	03171274	4	G	1,0	6,0	1,0	50,0	7,0	0,95	0,5	9,06	2	Cylindrical	■
JMB562012G4B.0Z2-SIRA	03171275	4	G	1,2	6,0	1,2	50,0	8,4	1,15	0,6	8,22	2	Cylindrical	■
JMB562015G4B.0Z2-SIRA	03171276	4	G	1,5	6,0	1,5	50,0	10,5	1,45	0,75	7,07	2	Cylindrical	■
JMB562020G4B.0Z2-SIRA	03171277	4	G	2,0	6,0	2,0	60,0	14,0	1,94	1,0	5,57	2	Cylindrical	■
JMB562030G4B.0Z2-SIRA	03171279	4	G	3,0	6,0	3,0	70,0	21,0	2,85	1,5	3,38	2	Cylindrical	■
JMB562005G5B.0Z2-SIRA	03171280	5	G	0,5	6,0	0,5	50,0	5,0	0,46	0,25	10,54	2	Cylindrical	■
JMB562006G5B.0Z2-SIRA	03171281	5	G	0,6	6,0	0,6	50,0	6,0	0,56	0,3	9,85	2	Cylindrical	■
JMB562008G5B.0Z2-SIRA	03171282	5	G	0,8	6,0	0,8	50,0	8,0	0,76	0,4	8,64	2	Cylindrical	■
JMB562010G5B.0Z2-SIRA	03171283	5	G	1,0	6,0	1,0	50,0	10,0	0,95	0,5	7,63	2	Cylindrical	■
JMB562012G5B.0Z2-SIRA	03171284	5	G	1,2	6,0	1,2	50,0	12,0	1,15	0,6	6,77	2	Cylindrical	■
JMB562015G5B.0Z2-SIRA	03171285	5	G	1,5	6,0	1,5	60,0	15,0	1,45	0,75	5,68	2	Cylindrical	■
JMB562020G5B.0Z2-SIRA	03171287	5	G	2,0	6,0	2,0	60,0	20,0	1,94	1,0	4,32	2	Cylindrical	■
JMB562030G5B.0Z2-SIRA	03171289	5	G	3,0	6,0	3,0	70,0	30,0	2,85	1,5	2,5	2	Cylindrical	■

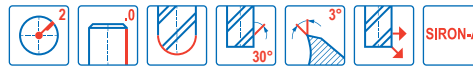
■ Stocked standard.

JMB562

Miniature – Universal – Ball nose – 2 Flutes – DMM 6 – Cylindrical



- Tolerances:
- Run-out=<0,007 mm
- DMM= h5
- DC= 0,-0,01 mm
- RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JMB562010G6B.0Z2-SIRA	03171290	6	G	1,0	6,0	1,0	60,0	15,0	0,95	0,5	6,04	2	Cylindrical	■
JMB562012G6B.0Z2-SIRA	03171291	6	G	1,2	6,0	1,2	60,0	18,0	1,15	0,6	5,24	2	Cylindrical	■
JMB562015G6B.0Z2-SIRA	03171292	6	G	1,5	6,0	1,5	70,0	22,5	1,45	0,75	4,28	2	Cylindrical	■
JMB562020G6B.0Z2-SIRA	03171293	6	G	2,0	6,0	2,0	80,0	30,0	1,94	1,0	3,14	2	Cylindrical	■
JMB562030G6B.0Z2-SIRA	03171295	6	G	3,0	6,0	3,0	90,0	45,0	2,85	1,5	1,74	2	Cylindrical	■
JMB562010G7B.0Z2-SIRA	03171296	7	G	1,0	6,0	1,0	60,0	20,0	0,95	0,5	4,99	2	Cylindrical	■
JMB562012G7B.0Z2-SIRA	03171297	7	G	1,2	6,0	1,2	80,0	24,0	1,15	0,6	4,27	2	Cylindrical	■
JMB562015G7B.0Z2-SIRA	03171298	7	G	1,5	6,0	1,5	80,0	30,0	1,45	0,75	3,43	2	Cylindrical	■
JMB562020G7B.0Z2-SIRA	03171299	7	G	2,0	6,0	2,0	80,0	40,0	1,94	1,0	2,47	2	Cylindrical	■
JMB562030G7B.0Z2-SIRA	03171301	7	G	3,0	6,0	3,0	100,0	60,0	2,85	1,5	1,34	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

Graphite

X-Heads

Minimaster

Cutting data – JMB562 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z												v _c
				0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0	
P1	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	365 (330 — 400) 1200 (1100 — 1300)
P2	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	355 (320 — 390) 1175 (1100 — 1200)
P3	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	305 (280 — 330) 1000 (920 — 1000)
P4	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	270 (240 — 290) 840 (760 — 910)
P5	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
P6	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (260 — 310) 950 (860 — 1000)
P7	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	270 (250 — 300) 890 (830 — 980)
P8	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	255 (230 — 280) 840 (760 — 910)
P11	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	265 (240 — 290) 870 (790 — 950)
P12	M/E/A	0.0500 0,0500	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	155 (140 — 170) 510 (460 — 550)
M1	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	215 (180 — 250) 710 (600 — 820)
M2	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (150 — 200) 570 (500 — 650)
M3	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (150 — 200) 570 (500 — 650)
M4	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	130 (110 — 150) 425 (370 — 490)
M5	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	110 (90 — 120) 360 (300 — 390)
N1	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	485 (430 — 540) 1600 (1500 — 1700)
N2	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	485 (430 — 540) 1600 (1500 — 1700)
N3	E/M/A	0.100 0,100	0.75 0,75	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	325 (290 — 360) 1075 (960 — 1100)
N11	E/M/A	0.100 0,100	0.75 0,75	0.0050 0,00020	0.0075 0,00030	0.010 0,00040	0.012 0,00048	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.046 0,0018	0.050 0,0020	0.060 0,0024	0.075 0,0030	430 (370 — 480) 1400 (1300 — 1500)
S11	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	290 (250 — 330) 950 (830 — 1000)
S12	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	225 (200 — 250) 740 (660 — 820)
S13	E/M/A	0.0250 0,0250	0.60 0,60	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	175 (150 — 190) 570 (500 — 620)
H3	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H5	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (210 — 260) 770 (690 — 850)
H7	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	120 (90 — 140) 395 (300 — 450)
H8	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (210 — 260) 770 (690 — 850)
H11	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	300 (270 — 330) 980 (890 — 1000)
H12	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	275 (240 — 300) 900 (790 — 980)
H21	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	235 (210 — 260) 770 (690 — 850)
H31	M/A	0.0500 0,0500	0.44 0,44	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	180 (160 — 200) 590 (530 — 650)
GR1	A	0.500 0,500	0.50 0,50	0.0030 0,00012	0.0044 0,00017	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.028 0,0011	0.030 0,0012	0.038 0,0015	0.040 0,0016	405 (350 — 460) 1325 (1200 — 1500)

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c= m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JMB562 Slot milling

SMG		a _p /DC	f _z												v _c	
			0.2	0.3	0.4	0.5	0.6	0.8	1.0	1.2	1.8	2.0	2.5	3.0		
P1	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	255 (230 — 280) 840 (760 — 910)	Steel and cast iron
P2	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	250 (230 — 270) 820 (760 — 880)	
P3	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	215 (200 — 230) 710 (660 — 750)	
P4	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 200) 620 (560 — 650)	
P5	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P6	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	200 (180 — 220) 660 (600 — 720)	
P7	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
P8	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (170 — 200) 590 (560 — 650)	
P11	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	185 (170 — 200) 610 (560 — 650)	
P12	M/E/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (98 — 120) 360 (330 — 390)	
M1	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	135 (120 — 160) 445 (400 — 520)	Non ferrous
M2	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (90 — 130) 360 (300 — 420)	
M3	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	110 (90 — 130) 360 (300 — 420)	
M4	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	80 (68 — 97) 260 (230 — 310)	
M5	E/M/A	0.32 0.32	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	70 (57 — 81) 230 (190 — 260)	
N1	E/M/A	0.24 0.24	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	Hard
N2	E/M/A	0.26 0.26	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	400 (350 — 440) 1300 (1200 — 1400)	
N3	E/M/A	0.26 0.26	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	265 (240 — 290) 870 (790 — 950)	
N11	E/M/A	0.24 0.24	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.024 0.00095	0.036 0.0014	0.040 0.0016	0.050 0.0020	0.060 0.0024	350 (300 — 390) 1150 (990 — 1200)	
S11	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	180 (160 — 200) 590 (530 — 650)	Plastic and cf/p
S12	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	140 (120 — 150) 460 (400 — 490)	
S13	E/M/A	0.36 0.36	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	105 (93 — 120) 345 (310 — 390)	
H3	M/A	0.10 0.10	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	Graphite
H5	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H7	M/A	0.10 0.10	0.0024 0.000095	0.0036 0.00014	0.0048 0.00019	0.0060 0.00024	0.0070 0.00028	0.0095 0.00038	0.012 0.00048	0.014 0.00055	0.022 0.00085	0.024 0.00095	0.030 0.0012	0.036 0.0014	80 (61 — 100) 260 (210 — 320)	
H8	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H11	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	205 (180 — 230) 670 (600 — 750)	X-Heads
H12	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	190 (170 — 210) 620 (560 — 680)	
H21	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	160 (150 — 180) 520 (500 — 590)	
H31	M/A	0.20 0.20	0.0026 0.00010	0.0040 0.00016	0.0050 0.00020	0.0065 0.00026	0.0080 0.00032	0.010 0.00040	0.013 0.00050	0.016 0.00065	0.024 0.00095	0.026 0.0010	0.032 0.0013	0.040 0.0016	120 (110 — 130) 395 (370 — 420)	
GR1	A	0.50 0.50	0.0020 0.000080	0.0030 0.00012	0.0040 0.00016	0.0050 0.00020	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.018 0.00070	0.020 0.00080	0.025 0.0010	0.030 0.0012	350 (300 — 390) 1150 (990 — 1200)	Minimaster

Table based on LV1, please recalc based on length version chosen. See page(s) 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

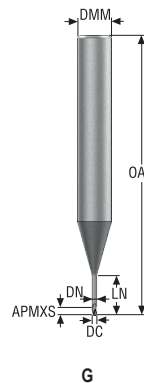
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

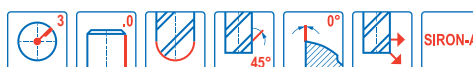
All cutting data are target values

JMB563

Miniature – Universal – Ball nose – 3 Flutes – DMM 6 – Cylindrical



—Tolerances:
—Run-out=<0,007 mm
—DMM= h5
—DC= 0,-0,02 mm
—RE= ±0,01 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JMB563010G2B.0Z3-SIRA	03171307	2	G	1,0	6,0	1,0	50,0	4,0	0,95	0,5	11,15	3	Cylindrical	■
JMB563012G2B.0Z3-SIRA	03171308	2	G	1,2	6,0	1,2	50,0	4,5	1,15	0,6	10,67	3	Cylindrical	■
JMB563015G2B.0Z3-SIRA	03171309	2	G	1,5	6,0	1,5	50,0	5,0	1,45	0,75	10,07	3	Cylindrical	■
JMB563020G2B.0Z3-SIRA	03171310	2	G	2,0	6,0	2,0	50,0	6,0	1,94	1,0	9,05	3	Cylindrical	■
JMB563025G2B.0Z3-SIRA	03171311	2	G	2,5	6,0	2,5	60,0	7,5	2,4	1,25	7,71	3	Cylindrical	■
JMB563030G2B.0Z3-SIRA	03171312	2	G	3,0	6,0	3,0	60,0	9,0	2,85	1,5	6,35	3	Cylindrical	■
JMB563010G4B.0Z3-SIRA	03171316	4	G	1,0	6,0	1,0	50,0	7,0	0,95	0,5	9,06	3	Cylindrical	■
JMB563012G4B.0Z3-SIRA	03171317	4	G	1,2	6,0	1,2	50,0	8,4	1,15	0,6	8,22	3	Cylindrical	■
JMB563015G4B.0Z3-SIRA	03171318	4	G	1,5	6,0	1,5	50,0	10,5	1,45	0,75	7,07	3	Cylindrical	■
JMB563020G4B.0Z3-SIRA	03171319	4	G	2,0	6,0	2,0	60,0	14,0	1,94	1,0	5,57	3	Cylindrical	■
JMB563030G4B.0Z3-SIRA	03171321	4	G	3,0	6,0	3,0	70,0	21,0	2,85	1,5	3,38	3	Cylindrical	■

■ Stocked standard.

Cutting data – JMB563 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z						v_c
				1	1.2	1.5	2.0	2.5	3.0	
P1	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	460 (410 — 500) 1500 (1400 — 1600)
P2	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	445 (400 — 490) 1450 (1400 — 1600)
P3	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	385 (350 — 420) 1275 (1200 — 1300)
P4	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	340 (310 — 370) 1125 (1100 — 1200)
P5	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	325 (290 — 350) 1075 (960 — 1100)
P6	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	365 (330 — 400) 1200 (1100 — 1300)
P7	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	340 (310 — 380) 1125 (1100 — 1200)
P8	M/E/A	0.0500 0,0500	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	325 (290 — 350) 1075 (960 — 1100)
P11	M/E/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	230 (190 — 270) 750 (630 — 880)
P12	M/E/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	135 (120 — 160) 445 (400 — 520)
M1	E/M/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	270 (230 — 320) 890 (760 — 1000)
M2	E/M/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	220 (180 — 250) 720 (600 — 820)
M3	E/M/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	220 (180 — 250) 720 (600 — 820)
M4	E/M/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	165 (140 — 190) 540 (460 — 620)
M5	E/M/A	0.0250 0,0250	0.38 0,38	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	135 (120 — 160) 445 (400 — 520)
N1	E/M/A	0.100 0,100	0.65 0,65	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	590 (520 — 660) 1925 (1800 — 2100)
N2	E/M/A	0.100 0,100	0.65 0,65	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	590 (520 — 660) 1925 (1800 — 2100)
N3	E/M/A	0.100 0,100	0.65 0,65	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	395 (350 — 440) 1300 (1200 — 1400)
N11	E/M/A	0.100 0,100	0.65 0,65	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	520 (450 — 590) 1700 (1500 — 1900)
S11	E/M/A	0.0250 0,0250	0.46 0,46	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	345 (300 — 390) 1125 (990 — 1200)
S12	E/M/A	0.0250 0,0250	0.46 0,46	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	265 (230 — 300) 870 (760 — 980)
S13	E/M/A	0.0250 0,0250	0.46 0,46	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	205 (180 — 230) 670 (600 — 750)
H3	M/A	0.0250 0,0250	0.095 0,095	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	155 (120 — 190) 510 (400 — 620)
H5	M/A	0.0500 0,0500	0.22 0,22	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (260 — 330) 970 (860 — 1000)
H7	M/A	0.0250 0,0250	0.095 0,095	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	155 (120 — 190) 510 (400 — 620)
H8	M/A	0.0500 0,0500	0.22 0,22	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (260 — 330) 970 (860 — 1000)
H11	M/A	0.0500 0,0500	0.22 0,22	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	375 (330 — 420) 1225 (1100 — 1300)
H12	M/A	0.0500 0,0500	0.22 0,22	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	345 (310 — 380) 1125 (1100 — 1200)
H21	M/A	0.0500 0,0500	0.22 0,22	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	295 (260 — 330) 970 (860 — 1000)
H31	M/A	0.0500 0,0500	0.22 0,22	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	225 (200 — 250) 740 (660 — 820)
GR1	A	0.500 0,500	0.50 0,50	0.015 0,00060	0.018 0,00070	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.040 0,0016	450 (390 — 510) 1475 (1300 — 1600)

Table based on LV1, please recalc based on length version chosen. See page(s)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster



STEEL AND CAST IRON

Seco offers a complete range of high performance solid carbide square shoulder end mills, ballnose cutters and finish end mills for high productivity in steel and cast iron.

- ST5541, JHP993, JHP951 and JH142 for chamfer or radius type.
- ST5341, JHB970, JH112, JH150, JH160 for ball-nose type.

Tool selection Steel and cast iron

								Universal
								Steel and cast iron
Name		ST5541	JHP993	JHP951	JH142	ST5341	JHB970	Stainless steel and S-materials
Page(s)		275	292	298	302, 510	305	227, 311	
Family name		Stabilizer	HPM	HPM	HSM/TORNADO	Stabilizer	HSM/TORNADO	
Type of mill								Non ferrous
Shank	Cylindrical	■	■	■	■	■	■	
	Weldon	□	■	■		□		Hard
Number of Flutes		4	3,4,5	3,4,5	2-4-5-6	4	2	
CSP								Plastic and cfrp
Diameter range	Metric	3-25	4-25	3-20	2-12	6-20	2-16	
	Inch	1/8-1				1/4-1		Graphite
Length availability		1,2,3,4	2,3	2	2,3,6	2,3	1,2,3	
Operation								X-Heads
								
								
SMG								Minimaster
P1		●	●	●	●	●	●	
P2		●	●	●	●	●	●	Minimaster
P3		●	●	●	●	●	●	
P4		●	●	●	●	●	●	Minimaster
P5		●	●	●	●	●	●	
P6		●	●	●	●	●	●	Minimaster
P7		●	●	●	●	●	●	
P8		●	●	●	●	●	●	Minimaster
P11-12		●	○	○	●	●	○	
K1		●	●	●	●	●	●	Minimaster
K2		●	●	●	●	●	●	
K3		●	●	●	●	●	●	Minimaster
K4		●	●	●	●	●	●	
K5		●	●	●	●	●	●	Minimaster
K6		●	●	●	●	●	●	
K7		●	●	●	●	●	●	Minimaster

■ Stock standard □ Weldon available, delivery time is 3 days.
 ● Preferred choice ○ Alternative choice

Tool selection Steel and cast iron

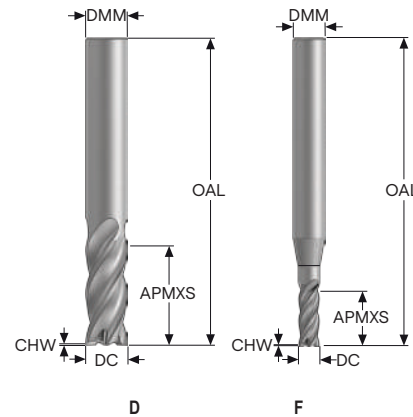
				
Name		JH112	JH150	JH160
Page(s)		313, 513	516	518
Family name		HSM/TORNADO	HSM/TORNADO	HSM/TORNADO
Type of mill				
Shank	Cylindrical			
	Weldon			
Number of Flutes		2	4	4
CSP				
Diameter range	Metric	2-12	6-12	3-12
	Inch			
Length availability		1,2,3,4,5,6	2	2
Operation				
				
SMG				
P1				●
P2				●
P3				●
P4				●
P5				●
P6				●
P7				●
P8				●
P11-12				○
K1		●	●	
K2		●	●	
K3		●	●	
K4		●	●	
K5		●	●	
K6		●	●	
K7		●	●	

■ Stock standard □ Weldon available, delivery time is 3 days.

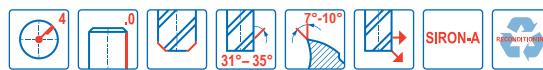
● Preferred choice ○ Alternative choice

ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC=e7
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
ST5541-030F2C.0Z4	SIRA	10302942	2	F	3,0	6,0	7,0	58,0	10,638	3,127	0,035	4	Cylindrical	■
ST5541-040F2C.0Z4	SIRA	10302943	2	F	4,0	6,0	10,0	58,0	14,953	4,127	0,045	4	Cylindrical	■
ST5541-050F2C.0Z4	SIRA	10302944	2	F	5,0	6,0	12,0	58,0	17,334	5,127	0,055	4	Cylindrical	■
ST5541-060D2C.0Z4	SIRA	10302945	2	D	6,0	6,0	14,0	58,0	—	—	0,075	4	Cylindrical	■
ST5541-080D2C.0Z4	SIRA	10302946	2	D	8,0	8,0	18,0	64,0	—	—	0,1	4	Cylindrical	■
ST5541-100D2C.0Z4	SIRA	10302947	2	D	10,0	10,0	22,0	73,0	—	—	0,125	4	Cylindrical	■
ST5541-120D2C.0Z4	SIRA	10302948	2	D	12,0	12,0	26,0	84,0	—	—	0,15	4	Cylindrical	■
ST5541-160D2C.0Z4	SIRA	10302949	2	D	16,0	16,0	34,0	95,0	—	—	0,2	4	Cylindrical	■
ST5541-200D2C.0Z4	SIRA	10302950	2	D	20,0	20,0	42,0	109,0	—	—	0,25	4	Cylindrical	■
ST5541-250D2C.0Z4	SIRA	10302951	2	D	25,0	25,0	52,0	125,0	—	—	0,3	4	Cylindrical	■
ST5541-030F3C.0Z4	SIRA	10302952	3	F	3,0	6,0	9,0	58,0	12,683	3,127	0,035	4	Cylindrical	■
ST5541-040F3C.0Z4	SIRA	10302953	3	F	4,0	6,0	12,0	58,0	16,953	4,127	0,045	4	Cylindrical	■
ST5541-050F3C.0Z4	SIRA	10302954	3	F	5,0	6,0	15,0	58,0	20,334	5,127	0,055	4	Cylindrical	■
ST5541-060D3C.0Z4	SIRA	10302955	3	D	6,0	6,0	18,0	64,0	—	—	0,075	4	Cylindrical	■
ST5541-080D3C.0Z4	SIRA	10302956	3	D	8,0	8,0	24,0	73,0	—	—	0,1	4	Cylindrical	■
ST5541-100D3C.0Z4	SIRA	10302957	3	D	10,0	10,0	30,0	85,0	—	—	0,125	4	Cylindrical	■
ST5541-120D3C.0Z4	SIRA	10302958	3	D	12,0	12,0	36,0	100,0	—	—	0,15	4	Cylindrical	■
ST5541-160D3C.0Z4	SIRA	10302959	3	D	16,0	16,0	48,0	115,0	—	—	0,2	4	Cylindrical	■
ST5541-200D3C.0Z4	SIRA	10302960	3	D	20,0	20,0	60,0	125,0	—	—	0,25	4	Cylindrical	■
ST5541-250D3C.0Z4	SIRA	10302961	3	D	25,0	25,0	75,0	155,0	—	—	0,3	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

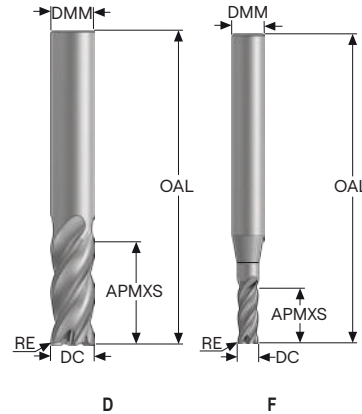
Graphite

X-Heads

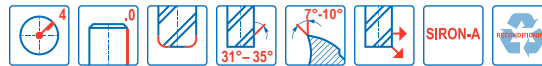
Minimaster

ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC=e7
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6

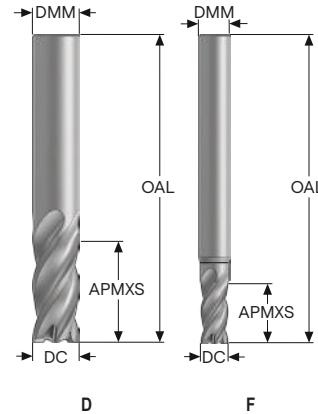


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
ST5541-030F2R020.0Z4	SIRA	10302962	2	F	3,0	6,0	7,0	58,0	10,638	3,127	0,2	4	Cylindrical	■
ST5541-040F2R020.0Z4	SIRA	10302963	2	F	4,0	6,0	10,0	58,0	14,953	4,127	0,2	4	Cylindrical	■
ST5541-050F2R020.0Z4	SIRA	10302964	2	F	5,0	6,0	12,0	58,0	17,334	5,127	0,2	4	Cylindrical	■
ST5541-060D2R050.0Z4	SIRA	10302965	2	D	6,0	6,0	14,0	58,0	—	—	0,5	4	Cylindrical	■
ST5541-080D2R050.0Z4	SIRA	10302966	2	D	8,0	8,0	18,0	64,0	—	—	0,5	4	Cylindrical	■
ST5541-100D2R050.0Z4	SIRA	10302967	2	D	10,0	10,0	22,0	73,0	—	—	0,5	4	Cylindrical	■
ST5541-120D2R050.0Z4	SIRA	10302968	2	D	12,0	12,0	26,0	84,0	—	—	0,5	4	Cylindrical	■
ST5541-120D2R100.0Z4	SIRA	10302969	2	D	12,0	12,0	26,0	84,0	—	—	1,0	4	Cylindrical	■
ST5541-160D2R050.0Z4	SIRA	10302970	2	D	16,0	16,0	34,0	95,0	—	—	0,5	4	Cylindrical	■
ST5541-160D2R100.0Z4	SIRA	10302972	2	D	16,0	16,0	34,0	95,0	—	—	1,0	4	Cylindrical	■
ST5541-160D2R300.0Z4	SIRA	10302971	2	D	16,0	16,0	34,0	95,0	—	—	3,0	4	Cylindrical	■
ST5541-200D2R050.0Z4	SIRA	10302973	2	D	20,0	20,0	42,0	109,0	—	—	0,5	4	Cylindrical	■
ST5541-200D2R100.0Z4	SIRA	10302975	2	D	20,0	20,0	42,0	109,0	—	—	1,0	4	Cylindrical	■
ST5541-200D2R300.0Z4	SIRA	10302974	2	D	20,0	20,0	42,0	109,0	—	—	3,0	4	Cylindrical	■
ST5541-250D2R050.0Z4	SIRA	10302976	2	D	25,0	25,0	52,0	125,0	—	—	0,5	4	Cylindrical	■
ST5541-250D2R100.0Z4	SIRA	10302978	2	D	25,0	25,0	52,0	125,0	—	—	1,0	4	Cylindrical	■
ST5541-250D2R300.0Z4	SIRA	10302977	2	D	25,0	25,0	52,0	125,0	—	—	3,0	4	Cylindrical	■
ST5541-030F3R020.0Z4	SIRA	10302979	3	F	3,0	6,0	9,0	58,0	12,683	3,127	0,2	4	Cylindrical	■
ST5541-040F3R020.0Z4	SIRA	10302980	3	F	4,0	6,0	12,0	58,0	16,953	4,127	0,2	4	Cylindrical	■
ST5541-050F3R020.0Z4	SIRA	10302981	3	F	5,0	6,0	15,0	58,0	20,334	5,127	0,2	4	Cylindrical	■
ST5541-060D3R050.0Z4	SIRA	10302982	3	D	6,0	6,0	18,0	64,0	—	—	0,5	4	Cylindrical	■
ST5541-080D3R050.0Z4	SIRA	10302983	3	D	8,0	8,0	24,0	73,0	—	—	0,5	4	Cylindrical	■
ST5541-100D3R050.0Z4	SIRA	10302984	3	D	10,0	10,0	30,0	85,0	—	—	0,5	4	Cylindrical	■
ST5541-120D3R050.0Z4	SIRA	10302985	3	D	12,0	12,0	36,0	100,0	—	—	0,5	4	Cylindrical	■
ST5541-120D3R100.0Z4	SIRA	10302986	3	D	12,0	12,0	36,0	100,0	—	—	1,0	4	Cylindrical	■
ST5541-160D3R050.0Z4	SIRA	10302987	3	D	16,0	16,0	48,0	115,0	—	—	0,5	4	Cylindrical	■
ST5541-160D3R100.0Z4	SIRA	10302989	3	D	16,0	16,0	48,0	115,0	—	—	1,0	4	Cylindrical	■
ST5541-160D3R300.0Z4	SIRA	10302988	3	D	16,0	16,0	48,0	115,0	—	—	3,0	4	Cylindrical	■
ST5541-200D3R050.0Z4	SIRA	10302990	3	D	20,0	20,0	60,0	125,0	—	—	0,5	4	Cylindrical	■
ST5541-200D3R100.0Z4	SIRA	10302992	3	D	20,0	20,0	60,0	125,0	—	—	1,0	4	Cylindrical	■
ST5541-200D3R300.0Z4	SIRA	10302991	3	D	20,0	20,0	60,0	125,0	—	—	3,0	4	Cylindrical	■
ST5541-250D3R050.0Z4	SIRA	10302993	3	D	25,0	25,0	75,0	155,0	—	—	0,5	4	Cylindrical	■
ST5541-250D3R100.0Z4	SIRA	10302995	3	D	25,0	25,0	75,0	155,0	—	—	1,0	4	Cylindrical	■
ST5541-250D3R300.0Z4	SIRA	10302994	3	D	25,0	25,0	75,0	155,0	—	—	3,0	4	Cylindrical	■

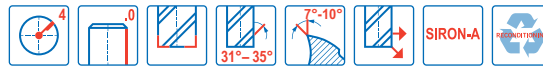
■ Stocked standard.

ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—Regrind possible if DC is $\geq \varnothing.250$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
ST5541-.125D1S.0Z4	SIRA	10302742	1	D	0.125	0.125	0.125	1.500	—	—	4	Cylindrical	■
ST5541-.156F1S.0Z4	SIRA	10302743	1	F	0.156	0.188	0.156	2.000	0.301	0.161	4	Cylindrical	■
ST5541-.188D1S.0Z4	SIRA	10302744	1	D	0.188	0.188	0.188	2.000	—	—	4	Cylindrical	■
ST5541-.219F1S.0Z4	SIRA	10302745	1	F	0.219	0.250	0.219	2.000	0.429	0.224	4	Cylindrical	■
ST5541-.250D1S.0Z4	SIRA	10302746	1	D	0.250	0.250	0.250	2.000	—	—	4	Cylindrical	■
ST5541-.281F1S.0Z4	SIRA	10302747	1	F	0.281	0.313	0.281	2.000	0.428	0.286	4	Cylindrical	■
ST5541-.313D1S.0Z4	SIRA	10302748	1	D	0.313	0.313	0.313	2.000	—	—	4	Cylindrical	■
ST5541-.375D1S.0Z4	SIRA	10302749	1	D	0.375	0.375	0.375	2.000	—	—	4	Cylindrical	■
ST5541-.438D1S.0Z4	SIRA	10302750	1	D	0.438	0.438	0.438	2.750	—	—	4	Cylindrical	■
ST5541-.500D1S.0Z4	SIRA	10302751	1	D	0.500	0.500	0.500	2.500	—	—	4	Cylindrical	■
ST5541-.625D1S.0Z4	SIRA	10302752	1	D	0.625	0.625	0.625	3.000	—	—	4	Cylindrical	■
ST5541-.750D1S.0Z4	SIRA	10302753	1	D	0.750	0.750	0.750	3.000	—	—	4	Cylindrical	■
ST5541-.875D1S.0Z4	SIRA	10302754	1	D	0.875	0.875	0.875	4.000	—	—	4	Cylindrical	■
ST5541-1.00D1S.0Z4	SIRA	10302755	1	D	1.000	1.000	1.000	4.000	—	—	4	Cylindrical	■
ST5541-.125D2S.0Z4	SIRA	10302756	2	D	0.125	0.125	0.250	1.500	—	—	4	Cylindrical	■
ST5541-.156F2S.0Z4	SIRA	10302757	2	F	0.156	0.188	0.313	2.000	0.458	0.161	4	Cylindrical	■
ST5541-.188D2S.0Z4	SIRA	10302758	2	D	0.188	0.188	0.375	2.000	—	—	4	Cylindrical	■
ST5541-.219F2S.0Z4	SIRA	10302759	2	F	0.219	0.250	0.438	2.500	0.648	0.224	4	Cylindrical	■
ST5541-.250D2S.0Z4	SIRA	10302760	2	D	0.250	0.250	0.500	2.500	—	—	4	Cylindrical	■
ST5541-.281F2S.0Z4	SIRA	10302761	2	F	0.281	0.313	0.563	2.500	0.660	0.286	4	Cylindrical	■
ST5541-.313D2S.0Z4	SIRA	10302762	2	D	0.313	0.313	0.625	2.500	—	—	4	Cylindrical	■
ST5541-.375D2S.0Z4	SIRA	10302763	2	D	0.375	0.375	0.750	2.500	—	—	4	Cylindrical	■
ST5541-.438D2S.0Z4	SIRA	10302764	2	D	0.438	0.438	0.875	2.750	—	—	4	Cylindrical	■
ST5541-.500D2S.0Z4	SIRA	10302765	2	D	0.500	0.500	1.000	3.000	—	—	4	Cylindrical	■
ST5541-.625D2S.0Z4	SIRA	10302766	2	D	0.625	0.625	1.250	3.500	—	—	4	Cylindrical	■
ST5541-.750D2S.0Z4	SIRA	10302767	2	D	0.750	0.750	1.500	4.000	—	—	4	Cylindrical	■
ST5541-.875D2S.0Z4	SIRA	10302768	2	D	0.875	0.875	1.750	4.000	—	—	4	Cylindrical	■
ST5541-1.00D2S.0Z4	SIRA	10302769	2	D	1.000	1.000	2.000	5.000	—	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

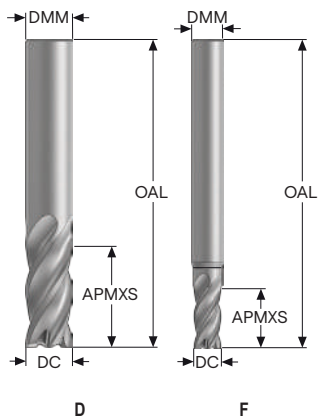
Graphite

X-Heads

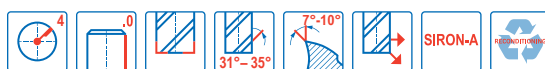
Minimaster

ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—Reground possible if DC is $\geq \varnothing .250$

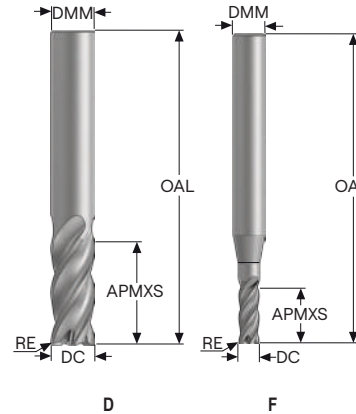


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch			
ST5541-.125D3S.0Z4	SIRA	10302770	3	D	0.125	0.125	0.375	1.500	—	—	4	Cylindrical	■
ST5541-.156F3S.0Z4	SIRA	10302771	3	F	0.156	0.188	0.469	2.000	0.469	0.161	4	Cylindrical	■
ST5541-.188D3S.0Z4	SIRA	10302772	3	D	0.188	0.188	0.563	2.000	—	—	4	Cylindrical	■
ST5541-.219F3S.0Z4	SIRA	10302773	3	F	0.219	0.250	0.656	2.500	0.866	0.224	4	Cylindrical	■
ST5541-.250D3S.0Z4	SIRA	10302774	3	D	0.250	0.250	0.750	2.500	—	—	4	Cylindrical	■
ST5541-.281F3S.0Z4	SIRA	10302775	3	F	0.281	0.313	0.844	2.500	0.844	0.286	4	Cylindrical	■
ST5541-.313D3S.0Z4	SIRA	10302776	3	D	0.313	0.313	0.938	2.500	—	—	4	Cylindrical	■
ST5541-.375D3S.0Z4	SIRA	10302777	3	D	0.375	0.375	1.125	3.000	—	—	4	Cylindrical	■
ST5541-.438D3S.0Z4	SIRA	10302778	3	D	0.438	0.438	1.313	4.000	—	—	4	Cylindrical	■
ST5541-.500D3S.0Z4	SIRA	10302779	3	D	0.500	0.500	1.250	3.000	—	—	4	Cylindrical	■
ST5541-.625D3S.0Z4	SIRA	10302780	3	D	0.625	0.625	1.875	4.000	—	—	4	Cylindrical	■
ST5541-.750D3S.0Z4	SIRA	10302781	3	D	0.750	0.750	2.250	5.000	—	—	4	Cylindrical	■
ST5541-.875D3S.0Z4	SIRA	10302782	3	D	0.875	0.875	2.625	5.000	—	—	4	Cylindrical	■
ST5541-1.00D3S.0Z4	SIRA	10302783	3	D	1.000	1.000	3.000	6.000	—	—	4	Cylindrical	■
ST5541-.500D4S.0Z4	SIRA	10302784	4	D	0.500	0.500	1.500	4.000	—	—	4	Cylindrical	■

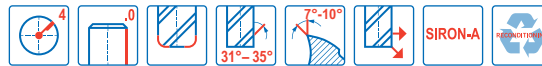
■ Stocked standard.

ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—RE= ±.0008"
—Regrind possible if DC is ≥Ø.250



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5541-.125D1R010.0Z4	SIRA	10302785	1	D	0.125	0.125	0.125	1.500	—	—	0.010	4	Cylindrical	■
ST5541-.156F1R010.0Z4	SIRA	10302786	1	F	0.156	0.188	0.156	2.000	0.301	0.161	0.010	4	Cylindrical	■
ST5541-.188D1R010.0Z4	SIRA	10302787	1	D	0.188	0.188	0.188	2.000	—	—	0.010	4	Cylindrical	■
ST5541-.219F1R020.0Z4	SIRA	10302788	1	F	0.219	0.250	0.219	2.000	0.414	0.224	0.020	4	Cylindrical	■
ST5541-.250D1R020.0Z4	SIRA	10302789	1	D	0.250	0.250	0.250	2.000	—	—	0.020	4	Cylindrical	■
ST5541-.281F1R020.0Z4	SIRA	10302790	1	F	0.281	0.313	0.281	2.000	0.281	0.286	0.020	4	Cylindrical	■
ST5541-.313D1R020.0Z4	SIRA	10302791	1	D	0.313	0.313	0.313	2.000	—	—	0.020	4	Cylindrical	■
ST5541-.375D1R020.0Z4	SIRA	10302792	1	D	0.375	0.375	0.375	2.000	—	—	0.020	4	Cylindrical	■
ST5541-.438D1R020.0Z4	SIRA	10302793	1	D	0.438	0.438	0.438	2.750	—	—	0.020	4	Cylindrical	■
ST5541-.500D1R030.0Z4	SIRA	10302794	1	D	0.500	0.500	0.500	2.500	—	—	0.030	4	Cylindrical	■
ST5541-.625D1R030.0Z4	SIRA	10302795	1	D	0.625	0.625	0.625	3.000	—	—	0.030	4	Cylindrical	■
ST5541-.750D1R030.0Z4	SIRA	10302796	1	D	0.750	0.750	0.750	3.000	—	—	0.030	4	Cylindrical	■
ST5541-.875D1R030.0Z4	SIRA	10302797	1	D	0.875	0.875	0.875	4.000	—	—	0.030	4	Cylindrical	■
ST5541-1.00D1R030.0Z4	SIRA	10302798	1	D	1.000	1.000	1.000	4.000	—	—	0.030	4	Cylindrical	■
ST5541-.125D2R010.0Z4	SIRA	10302799	2	D	0.125	0.125	0.250	1.500	—	—	0.010	4	Cylindrical	■
ST5541-.156F2R010.0Z4	SIRA	10302800	2	F	0.156	0.188	0.313	2.000	0.458	0.161	0.010	4	Cylindrical	■
ST5541-.188D2R010.0Z4	SIRA	10302801	2	D	0.188	0.188	0.375	2.000	—	—	0.010	4	Cylindrical	■
ST5541-.219F2R020.0Z4	SIRA	10302802	2	F	0.219	0.250	0.438	2.500	0.633	0.224	0.020	4	Cylindrical	■
ST5541-.250D2R020.0Z4	SIRA	10302803	2	D	0.250	0.250	0.500	2.500	—	—	0.020	4	Cylindrical	■
ST5541-.281F2R020.0Z4	SIRA	10302805	2	F	0.281	0.313	0.563	2.500	0.563	0.286	0.020	4	Cylindrical	■
ST5541-.313D2R020.0Z4	SIRA	10302806	2	D	0.313	0.313	0.625	2.500	—	—	0.020	4	Cylindrical	■
ST5541-.375D2R020.0Z4	SIRA	10302808	2	D	0.375	0.375	0.750	2.500	—	—	0.020	4	Cylindrical	■
ST5541-.438D2R020.0Z4	SIRA	10302810	2	D	0.438	0.438	0.875	2.750	—	—	0.020	4	Cylindrical	■
ST5541-.500D2R030.0Z4	SIRA	10302812	2	D	0.500	0.500	1.000	3.000	—	—	0.030	4	Cylindrical	■
ST5541-.500D2R060.0Z4	SIRA	10302813	2	D	0.500	0.500	1.000	3.000	—	—	0.060	4	Cylindrical	■
ST5541-.500D2R120.0Z4	SIRA	10302814	2	D	0.500	0.500	1.000	3.000	—	—	0.120	4	Cylindrical	■
ST5541-.625D2R030.0Z4	SIRA	10302816	2	D	0.625	0.625	1.250	3.500	—	—	0.030	4	Cylindrical	■
ST5541-.625D2R060.0Z4	SIRA	10302817	2	D	0.625	0.625	1.250	3.500	—	—	0.060	4	Cylindrical	■
ST5541-.625D2R090.0Z4	SIRA	10302818	2	D	0.625	0.625	1.250	3.500	—	—	0.090	4	Cylindrical	■
ST5541-.625D2R120.0Z4	SIRA	10302819	2	D	0.625	0.625	1.250	3.500	—	—	0.120	4	Cylindrical	■
ST5541-.750D2R030.0Z4	SIRA	10302821	2	D	0.750	0.750	1.500	4.000	—	—	0.030	4	Cylindrical	■
ST5541-.750D2R060.0Z4	SIRA	10302822	2	D	0.750	0.750	1.500	4.000	—	—	0.060	4	Cylindrical	■
ST5541-.750D2R090.0Z4	SIRA	10302823	2	D	0.750	0.750	1.500	4.000	—	—	0.090	4	Cylindrical	■
ST5541-.750D2R120.0Z4	SIRA	10302824	2	D	0.750	0.750	1.500	4.000	—	—	0.120	4	Cylindrical	■
ST5541-.750D2R250.0Z4	SIRA	10302825	2	D	0.750	0.750	1.500	4.000	—	—	0.250	4	Cylindrical	■
ST5541-.875D2R030.0Z4	SIRA	10302827	2	D	0.875	0.875	1.750	4.000	—	—	0.030	4	Cylindrical	■
ST5541-1.00D2R030.0Z4	SIRA	10302828	2	D	1.000	1.000	2.000	5.000	—	—	0.030	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

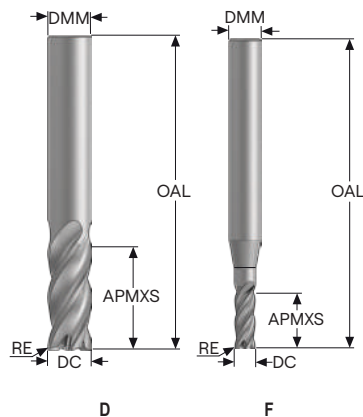
Graphite

X-Heads

Minimaster

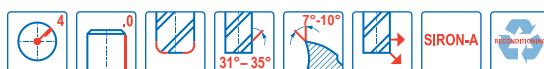
ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0008"

—Regrind possible if DC is ≥Ø.250

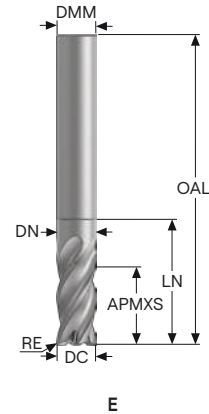


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5541-.125D3R010.0Z4	SIRA	10302830	3	D	0.125	0.125	0.375	1.500	—	—	0.010	4	Cylindrical	■
ST5541-.156F3R010.0Z4	SIRA	10302831	3	F	0.156	0.188	0.469	2.000	0.614	0.161	0.010	4	Cylindrical	■
ST5541-.188D3R010.0Z4	SIRA	10302832	3	D	0.188	0.188	0.563	2.000	—	—	0.010	4	Cylindrical	■
ST5541-.219F3R020.0Z4	SIRA	10302833	3	F	0.219	0.250	0.656	2.500	0.851	0.224	0.020	4	Cylindrical	■
ST5541-.250D3R020.0Z4	SIRA	10302834	3	D	0.250	0.250	0.750	2.500	—	—	0.020	4	Cylindrical	■
ST5541-.281F3R020.0Z4	SIRA	10302835	3	F	0.281	0.313	0.844	2.500	0.844	0.286	0.020	4	Cylindrical	■
ST5541-.313D3R020.0Z4	SIRA	10302836	3	D	0.313	0.313	0.938	2.500	—	—	0.020	4	Cylindrical	■
ST5541-.375D3R020.0Z4	SIRA	10302837	3	D	0.375	0.375	1.125	3.000	—	—	0.020	4	Cylindrical	■
ST5541-.438D3R020.0Z4	SIRA	10302838	3	D	0.438	0.438	1.313	4.000	—	—	0.020	4	Cylindrical	■
ST5541-.500D3R030.0Z4	SIRA	10302839	3	D	0.500	0.500	1.250	3.000	—	—	0.030	4	Cylindrical	■
ST5541-.500D3R060.0Z4	SIRA	10302840	3	D	0.500	0.500	1.250	3.000	—	—	0.060	4	Cylindrical	■
ST5541-.500D3R120.0Z4	SIRA	10302841	3	D	0.500	0.500	1.250	3.000	—	—	0.120	4	Cylindrical	■
ST5541-.625D3R030.0Z4	SIRA	10302842	3	D	0.625	0.625	1.875	4.000	—	—	0.030	4	Cylindrical	■
ST5541-.625D3R060.0Z4	SIRA	10302843	3	D	0.625	0.625	1.875	4.000	—	—	0.060	4	Cylindrical	■
ST5541-.625D3R090.0Z4	SIRA	10302844	3	D	0.625	0.625	1.875	4.000	—	—	0.090	4	Cylindrical	■
ST5541-.625D3R120.0Z4	SIRA	10302845	3	D	0.625	0.625	1.875	4.000	—	—	0.120	4	Cylindrical	■
ST5541-.750D3R030.0Z4	SIRA	10302846	3	D	0.750	0.750	2.250	5.000	—	—	0.030	4	Cylindrical	■
ST5541-.750D3R060.0Z4	SIRA	10302847	3	D	0.750	0.750	2.250	5.000	—	—	0.060	4	Cylindrical	■
ST5541-.750D3R090.0Z4	SIRA	10302848	3	D	0.750	0.750	2.250	5.000	—	—	0.090	4	Cylindrical	■
ST5541-.750D3R120.0Z4	SIRA	10302849	3	D	0.750	0.750	2.250	5.000	—	—	0.120	4	Cylindrical	■
ST5541-.750D3R250.0Z4	SIRA	10302850	3	D	0.750	0.750	2.250	5.000	—	—	0.250	4	Cylindrical	■
ST5541-.875D3R030.0Z4	SIRA	10302851	3	D	0.875	0.875	2.625	5.000	—	—	0.030	4	Cylindrical	■
ST5541-1.00D3R030.0Z4	SIRA	10302852	3	D	1.000	1.000	3.000	6.000	—	—	0.030	4	Cylindrical	■
ST5541-.500D4R030.0Z4	SIRA	10302853	4	D	0.500	0.500	1.500	4.000	—	—	0.030	4	Cylindrical	■

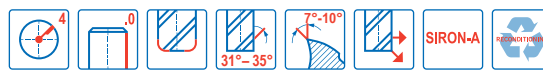
■ Stocked standard.

ST5541

High performance – Steel – Square – 4 Flutes – Cylindrical – Corner radius – Inch



—Tolerances:
 —DMM= $-0.001"/-0.004"$
 —DC= $+0.000"/-0.002"$
 —RE= $\pm 0.0008"$
 —Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
ST5541-.250E2R020.0Z4	SIRA	10302804	2	E	inch	inch	inch	inch	inch	inch	inch			
ST5541-.313E2R020.0Z4	SIRA	10302807	2	E	0.250	0.250	0.500	2.500	0.750	0.240	0.020	4	Cylindrical	■
ST5541-.375E2R020.0Z4	SIRA	10302809	2	E	0.313	0.313	0.625	3.000	0.938	0.300	0.020	4	Cylindrical	■
ST5541-.438E2R020.0Z4	SIRA	10302811	2	E	0.375	0.375	0.750	3.000	1.125	0.360	0.020	4	Cylindrical	■
ST5541-.500E2R030.0Z4	SIRA	10302815	2	E	0.438	0.438	0.875	4.000	1.313	0.420	0.020	4	Cylindrical	■
ST5541-.625E2R030.0Z4	SIRA	10302820	2	E	0.500	0.500	1.000	3.000	1.500	0.480	0.030	4	Cylindrical	■
ST5541-.750E2R030.0Z4	SIRA	10302826	2	E	0.625	0.625	1.250	3.500	1.875	0.600	0.030	4	Cylindrical	■
ST5541-1.00E2R030.0Z4	SIRA	10302829	2	E	0.750	0.750	1.500	4.000	2.250	0.720	0.030	4	Cylindrical	■
ST5541-1.00E2R030.0Z4	SIRA	10302829	2	E	1.000	1.000	2.000	5.000	3.000	0.960	0.030	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

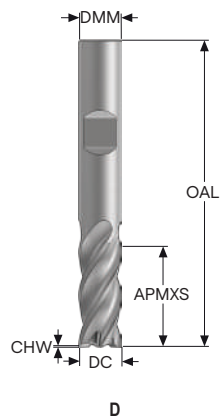
Graphite

X-Heads

Minimaster

ST5541

High performance – Steel – Square – 4 Flutes – Weldon – Chamfer

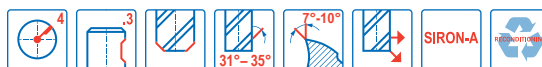


—Tolerances:

—DMM=h5

—DC=e7

—Reground possible

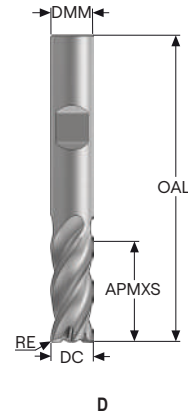


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
ST5541-060D2C.3Z4	SIRA	10302996	2	D	6,0	6,0	14,0	58,0	0,075	4	Weldon	☐
ST5541-080D2C.3Z4	SIRA	10302997	2	D	8,0	8,0	18,0	64,0	0,1	4	Weldon	☐
ST5541-100D2C.3Z4	SIRA	10302998	2	D	10,0	10,0	22,0	73,0	0,125	4	Weldon	☐
ST5541-120D2C.3Z4	SIRA	10302999	2	D	12,0	12,0	26,0	84,0	0,15	4	Weldon	☐
ST5541-160D2C.3Z4	SIRA	10303000	2	D	16,0	16,0	34,0	95,0	0,2	4	Weldon	☐
ST5541-200D2C.3Z4	SIRA	10303001	2	D	20,0	20,0	42,0	109,0	0,25	4	Weldon	☐
ST5541-250D2C.3Z4	SIRA	10303002	2	D	25,0	25,0	52,0	125,0	0,3	4	Weldon	☐
ST5541-060D3C.3Z4	SIRA	10303003	3	D	6,0	6,0	18,0	64,0	0,075	4	Weldon	☐
ST5541-080D3C.3Z4	SIRA	10303004	3	D	8,0	8,0	24,0	73,0	0,1	4	Weldon	☐
ST5541-100D3C.3Z4	SIRA	10303005	3	D	10,0	10,0	30,0	85,0	0,125	4	Weldon	☐
ST5541-120D3C.3Z4	SIRA	10303006	3	D	12,0	12,0	36,0	100,0	0,15	4	Weldon	☐
ST5541-160D3C.3Z4	SIRA	10303007	3	D	16,0	16,0	48,0	115,0	0,2	4	Weldon	☐
ST5541-200D3C.3Z4	SIRA	10303008	3	D	20,0	20,0	60,0	125,0	0,25	4	Weldon	☐
ST5541-250D3C.3Z4	SIRA	10303009	3	D	25,0	25,0	75,0	155,0	0,3	4	Weldon	☐

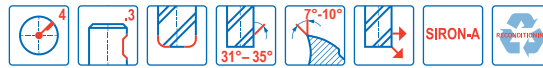
☐ Weldon available. Delivery time is 3 days.

ST5541

High performance – Steel – Square – 4 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
ST5541-060D2R050.3Z4	SIRA	10303010	2	D	6,0	6,0	14,0	58,0	0,5	4	Weldon	☐
ST5541-080D2R050.3Z4	SIRA	10303011	2	D	8,0	8,0	18,0	64,0	0,5	4	Weldon	☐
ST5541-100D2R050.3Z4	SIRA	10303012	2	D	10,0	10,0	22,0	73,0	0,5	4	Weldon	☐
ST5541-120D2R050.3Z4	SIRA	10303013	2	D	12,0	12,0	26,0	84,0	0,5	4	Weldon	☐
ST5541-120D2R100.3Z4	SIRA	10303014	2	D	12,0	12,0	26,0	84,0	1,0	4	Weldon	☐
ST5541-160D2R050.3Z4	SIRA	10303015	2	D	16,0	16,0	34,0	95,0	0,5	4	Weldon	☐
ST5541-160D2R100.3Z4	SIRA	10303017	2	D	16,0	16,0	34,0	95,0	1,0	4	Weldon	☐
ST5541-160D2R300.3Z4	SIRA	10303016	2	D	16,0	16,0	34,0	95,0	3,0	4	Weldon	☐
ST5541-200D2R050.3Z4	SIRA	10303018	2	D	20,0	20,0	42,0	109,0	0,5	4	Weldon	☐
ST5541-200D2R100.3Z4	SIRA	10303020	2	D	20,0	20,0	42,0	109,0	1,0	4	Weldon	☐
ST5541-200D2R300.3Z4	SIRA	10303019	2	D	20,0	20,0	42,0	109,0	3,0	4	Weldon	☐
ST5541-250D2R050.3Z4	SIRA	10303021	2	D	25,0	25,0	52,0	125,0	0,5	4	Weldon	☐
ST5541-250D2R100.3Z4	SIRA	10303023	2	D	25,0	25,0	52,0	125,0	1,0	4	Weldon	☐
ST5541-250D2R300.3Z4	SIRA	10303022	2	D	25,0	25,0	52,0	125,0	3,0	4	Weldon	☐
ST5541-060D3R050.3Z4	SIRA	10303024	3	D	6,0	6,0	18,0	64,0	0,5	4	Weldon	☐
ST5541-080D3R050.3Z4	SIRA	10303025	3	D	8,0	8,0	24,0	73,0	0,5	4	Weldon	☐
ST5541-100D3R050.3Z4	SIRA	10303026	3	D	10,0	10,0	30,0	85,0	0,5	4	Weldon	☐
ST5541-120D3R050.3Z4	SIRA	10303027	3	D	12,0	12,0	36,0	100,0	0,5	4	Weldon	☐
ST5541-120D3R100.3Z4	SIRA	10303028	3	D	12,0	12,0	36,0	100,0	1,0	4	Weldon	☐
ST5541-160D3R050.3Z4	SIRA	10303029	3	D	16,0	16,0	48,0	115,0	0,5	4	Weldon	☐
ST5541-160D3R100.3Z4	SIRA	10303031	3	D	16,0	16,0	48,0	115,0	1,0	4	Weldon	☐
ST5541-160D3R300.3Z4	SIRA	10303030	3	D	16,0	16,0	48,0	115,0	3,0	4	Weldon	☐
ST5541-200D3R050.3Z4	SIRA	10303032	3	D	20,0	20,0	60,0	125,0	0,5	4	Weldon	☐
ST5541-200D3R100.3Z4	SIRA	10303034	3	D	20,0	20,0	60,0	125,0	1,0	4	Weldon	☐
ST5541-200D3R300.3Z4	SIRA	10303033	3	D	20,0	20,0	60,0	125,0	3,0	4	Weldon	☐
ST5541-250D3R050.3Z4	SIRA	10303035	3	D	25,0	25,0	75,0	155,0	0,5	4	Weldon	☐
ST5541-250D3R100.3Z4	SIRA	10303037	3	D	25,0	25,0	75,0	155,0	1,0	4	Weldon	☐
ST5541-250D3R300.3Z4	SIRA	10303036	3	D	25,0	25,0	75,0	155,0	3,0	4	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

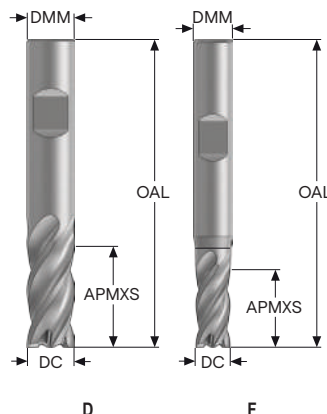
Graphite

X-Heads

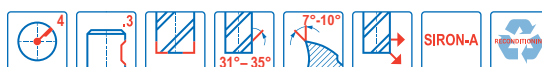
Minimaster

ST5541

High performance – Steel – Square – 4 Flutes – Weldon – Sharp – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—Reground possible

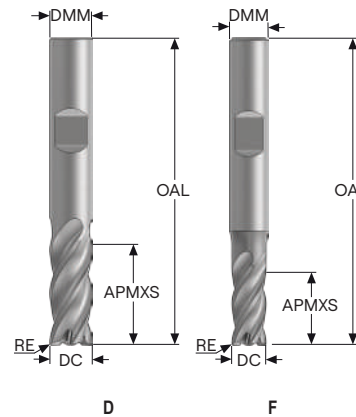


	Designation	Grade	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		LN		PCEDC	Shank	Stock standard
						inch	inch	inch	inch	inch	inch	inch	inch	inch	inch			
Non ferrous	ST5541-.250D1S.3Z4	SIRA	10302854	1	D	0.250	0.250	0.250	0.250	2.000	—	—	—	—	—	4	Weldon	☐
	ST5541-.281F1S.3Z4	SIRA	10302855	1	F	0.281	0.313	0.281	0.281	2.000	0.531	0.286	—	—	—	4	Weldon	☐
	ST5541-.313D1S.3Z4	SIRA	10302856	1	D	0.313	0.313	0.313	0.313	2.000	—	—	—	—	—	4	Weldon	☐
Hard	ST5541-.375D1S.3Z4	SIRA	10302857	1	D	0.375	0.375	0.375	0.375	2.000	—	—	—	—	—	4	Weldon	■
	ST5541-.438D1S.3Z4	SIRA	10302858	1	D	0.438	0.438	0.438	0.438	2.750	—	—	—	—	—	4	Weldon	■
	ST5541-.500D1S.3Z4	SIRA	10302859	1	D	0.500	0.500	0.500	0.500	2.500	—	—	—	—	—	4	Weldon	■
	ST5541-.625D1S.3Z4	SIRA	10302860	1	D	0.625	0.625	0.625	0.625	3.000	—	—	—	—	—	4	Weldon	■
	ST5541-.750D1S.3Z4	SIRA	10302861	1	D	0.750	0.750	0.750	0.750	3.000	—	—	—	—	—	4	Weldon	■
Plastic and cfrp	ST5541-.875D1S.3Z4	SIRA	10302862	1	D	0.875	0.875	0.875	0.875	4.000	—	—	—	—	—	4	Weldon	☐
	ST5541-1.00D1S.3Z4	SIRA	10302863	1	D	1.000	1.000	1.000	1.000	4.000	—	—	—	—	—	4	Weldon	■
	ST5541-.250D2S.3Z4	SIRA	10302864	2	D	0.250	0.250	0.500	0.500	2.500	—	—	—	—	—	4	Weldon	☐
	ST5541-.281F2S.3Z4	SIRA	10302865	2	F	0.281	0.313	0.563	0.563	2.500	0.813	0.286	—	—	—	4	Weldon	☐
	ST5541-.313D2S.3Z4	SIRA	10302866	2	D	0.313	0.313	0.625	0.625	2.500	—	—	—	—	—	4	Weldon	☐
Graphite	ST5541-.375D2S.3Z4	SIRA	10302867	2	D	0.375	0.375	0.750	0.750	2.500	—	—	—	—	—	4	Weldon	■
	ST5541-.438D2S.3Z4	SIRA	10302868	2	D	0.438	0.438	0.875	0.875	2.750	—	—	—	—	—	4	Weldon	■
	ST5541-.500D2S.3Z4	SIRA	10302869	2	D	0.500	0.500	1.000	1.000	3.000	—	—	—	—	—	4	Weldon	■
	ST5541-.625D2S.3Z4	SIRA	10302870	2	D	0.625	0.625	1.250	1.250	3.500	—	—	—	—	—	4	Weldon	■
	ST5541-.750D2S.3Z4	SIRA	10302871	2	D	0.750	0.750	1.500	1.500	4.000	—	—	—	—	—	4	Weldon	■
X-Heads	ST5541-.875D2S.3Z4	SIRA	10302872	2	D	0.875	0.875	1.750	1.750	4.000	—	—	—	—	—	4	Weldon	☐
	ST5541-1.00D2S.3Z4	SIRA	10302873	2	D	1.000	1.000	2.000	2.000	5.000	—	—	—	—	—	4	Weldon	■
	ST5541-.250D3S.3Z4	SIRA	10302874	3	D	0.250	0.250	0.750	0.750	2.500	—	—	—	—	—	4	Weldon	☐
	ST5541-.281F3S.3Z4	SIRA	10302875	3	F	0.281	0.313	0.844	0.844	2.500	1.094	0.286	—	—	—	4	Weldon	☐
	ST5541-.313D3S.3Z4	SIRA	10302876	3	D	0.313	0.313	0.938	0.938	2.500	—	—	—	—	—	4	Weldon	☐
Minimaster	ST5541-.375D3S.3Z4	SIRA	10302877	3	D	0.375	0.375	1.125	1.125	3.000	—	—	—	—	—	4	Weldon	■
	ST5541-.438D3S.3Z4	SIRA	10302878	3	D	0.438	0.438	1.313	1.313	4.000	—	—	—	—	—	4	Weldon	■
	ST5541-.500D3S.3Z4	SIRA	10302879	3	D	0.500	0.500	1.250	1.250	3.000	—	—	—	—	—	4	Weldon	■
	ST5541-.625D3S.3Z4	SIRA	10302880	3	D	0.625	0.625	1.875	1.875	4.000	—	—	—	—	—	4	Weldon	■
	ST5541-.750D3S.3Z4	SIRA	10302881	3	D	0.750	0.750	2.250	2.250	5.000	—	—	—	—	—	4	Weldon	■
	ST5541-.875D3S.3Z4	SIRA	10302882	3	D	0.875	0.875	2.625	2.625	5.000	—	—	—	—	—	4	Weldon	☐
	ST5541-1.00D3S.3Z4	SIRA	10302883	3	D	1.000	1.000	3.000	3.000	6.000	—	—	—	—	—	4	Weldon	■
	ST5541-.500D4S.3Z4	SIRA	10302884	4	D	0.500	0.500	1.500	1.500	4.000	—	—	—	—	—	4	Weldon	■

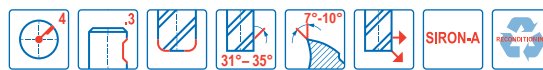
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

ST5541

High performance – Steel – Square – 4 Flutes – Weldon – Corner radius – Inch



—Tolerances:
 —DMM= ± 0.001 " / ± 0.004 "
 —DC= ± 0.000 " / ± 0.002 "
 —RE= ± 0.008 "
 —Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5541-.250D1R020.3Z4	SIRA	10302885	1	D	0.250	0.250	0.250	2.000	—	—	0.020	4	Weldon	□
ST5541-.281F1R020.3Z4	SIRA	10302886	1	F	0.281	0.313	0.281	2.000	0.531	0.286	0.020	4	Weldon	□
ST5541-.313D1R020.3Z4	SIRA	10302887	1	D	0.313	0.313	0.313	2.000	—	—	0.020	4	Weldon	□
ST5541-.375D1R020.3Z4	SIRA	10302888	1	D	0.375	0.375	0.375	2.000	—	—	0.020	4	Weldon	■
ST5541-.438D1R020.3Z4	SIRA	10302889	1	D	0.438	0.438	0.438	2.750	—	—	0.020	4	Weldon	□
ST5541-.500D1R030.3Z4	SIRA	10302890	1	D	0.500	0.500	0.500	2.500	—	—	0.030	4	Weldon	■
ST5541-.625D1R030.3Z4	SIRA	10302891	1	D	0.625	0.625	0.625	3.000	—	—	0.030	4	Weldon	■
ST5541-.750D1R030.3Z4	SIRA	10302892	1	D	0.750	0.750	0.750	3.000	—	—	0.030	4	Weldon	■
ST5541-.875D1R030.3Z4	SIRA	10302893	1	D	0.875	0.875	0.875	4.000	—	—	0.030	4	Weldon	□
ST5541-1.00D1R030.3Z4	SIRA	10302894	1	D	1.000	1.000	1.000	4.000	—	—	0.030	4	Weldon	■
ST5541-.250D2R020.3Z4	SIRA	10302895	2	D	0.250	0.250	0.500	2.500	—	—	0.020	4	Weldon	□
ST5541-.281F2R020.3Z4	SIRA	10302897	2	F	0.281	0.313	0.563	2.500	0.813	0.286	0.020	4	Weldon	□
ST5541-.313D2R020.3Z4	SIRA	10302898	2	D	0.313	0.313	0.625	2.500	—	—	0.020	4	Weldon	□
ST5541-.375D2R020.3Z4	SIRA	10302900	2	D	0.375	0.375	0.750	2.500	—	—	0.020	4	Weldon	■
ST5541-.438D2R020.3Z4	SIRA	10302902	2	D	0.438	0.438	0.875	2.750	—	—	0.020	4	Weldon	□
ST5541-.500D2R030.3Z4	SIRA	10302904	2	D	0.500	0.500	1.000	3.000	—	—	0.030	4	Weldon	■
ST5541-.500D2R060.3Z4	SIRA	10302905	2	D	0.500	0.500	1.000	3.000	—	—	0.060	4	Weldon	□
ST5541-.500D2R120.3Z4	SIRA	10302907	2	D	0.500	0.500	1.000	3.000	—	—	0.120	4	Weldon	□
ST5541-.625D2R030.3Z4	SIRA	10302908	2	D	0.625	0.625	1.250	3.500	—	—	0.030	4	Weldon	■
ST5541-.625D2R060.3Z4	SIRA	10302909	2	D	0.625	0.625	1.250	3.500	—	—	0.060	4	Weldon	□
ST5541-.625D2R090.3Z4	SIRA	10302910	2	D	0.625	0.625	1.250	3.500	—	—	0.090	4	Weldon	□
ST5541-.625D2R120.3Z4	SIRA	10302911	2	D	0.625	0.625	1.250	3.500	—	—	0.120	4	Weldon	□
ST5541-.750D2R030.3Z4	SIRA	10302913	2	D	0.750	0.750	1.500	4.000	—	—	0.030	4	Weldon	■
ST5541-.750D2R060.3Z4	SIRA	10302914	2	D	0.750	0.750	1.500	4.000	—	—	0.060	4	Weldon	□
ST5541-.750D2R090.3Z4	SIRA	10302915	2	D	0.750	0.750	1.500	4.000	—	—	0.090	4	Weldon	□
ST5541-.750D2R120.3Z4	SIRA	10302916	2	D	0.750	0.750	1.500	4.000	—	—	0.120	4	Weldon	□
ST5541-.750D2R250.3Z4	SIRA	10302917	2	D	0.750	0.750	1.500	4.000	—	—	0.250	4	Weldon	□
ST5541-.875D2R030.3Z4	SIRA	10302919	2	D	0.875	0.875	1.750	4.000	—	—	0.030	4	Weldon	□
ST5541-1.00D2R030.3Z4	SIRA	10302920	2	D	1.000	1.000	2.000	5.000	—	—	0.030	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

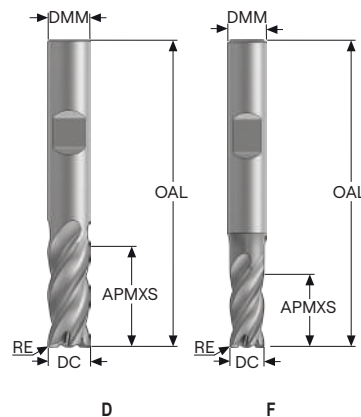
Graphite

X-Heads

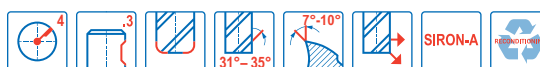
Minimaster

ST5541

High performance – Steel – Square – 4 Flutes – Weldon – Corner radius – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000" / -.002"
—RE= ±.0008"
—Regind possible

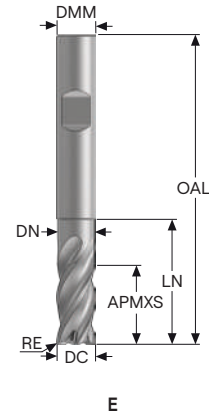


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5541-.250D3R020.3Z4	SIRA	10302922	3	D	0.250	0.250	0.750	2.500	—	—	0.020	4	Weldon	□
ST5541-.281F3R020.3Z4	SIRA	10302923	3	F	0.281	0.313	0.844	2.500	1.094	0.286	0.020	4	Weldon	□
ST5541-.313D3R020.3Z4	SIRA	10302924	3	D	0.313	0.313	0.938	2.500	—	—	0.020	4	Weldon	□
ST5541-.375D3R020.3Z4	SIRA	10302925	3	D	0.375	0.375	1.125	3.000	—	—	0.020	4	Weldon	■
ST5541-.438D3R020.3Z4	SIRA	10302926	3	D	0.438	0.438	1.313	4.000	—	—	0.020	4	Weldon	□
ST5541-.500D3R030.3Z4	SIRA	10302927	3	D	0.500	0.500	1.250	3.000	—	—	0.030	4	Weldon	■
ST5541-.500D3R060.3Z4	SIRA	10302928	3	D	0.500	0.500	1.250	3.000	—	—	0.060	4	Weldon	□
ST5541-.500D3R120.3Z4	SIRA	10302929	3	D	0.500	0.500	1.250	3.000	—	—	0.120	4	Weldon	□
ST5541-.625D3R030.3Z4	SIRA	10302930	3	D	0.625	0.625	1.875	4.000	—	—	0.030	4	Weldon	■
ST5541-.625D3R060.3Z4	SIRA	10302931	3	D	0.625	0.625	1.875	4.000	—	—	0.060	4	Weldon	□
ST5541-.625D3R090.3Z4	SIRA	10302932	3	D	0.625	0.625	1.875	4.000	—	—	0.090	4	Weldon	□
ST5541-.625D3R120.3Z4	SIRA	10302933	3	D	0.625	0.625	1.875	4.000	—	—	0.120	4	Weldon	□
ST5541-.750D3R030.3Z4	SIRA	10302934	3	D	0.750	0.750	2.250	5.000	—	—	0.030	4	Weldon	■
ST5541-.750D3R060.3Z4	SIRA	10302935	3	D	0.750	0.750	2.250	5.000	—	—	0.060	4	Weldon	□
ST5541-.750D3R090.3Z4	SIRA	10302936	3	D	0.750	0.750	2.250	5.000	—	—	0.090	4	Weldon	□
ST5541-.750D3R120.3Z4	SIRA	10302937	3	D	0.750	0.750	2.250	5.000	—	—	0.120	4	Weldon	□
ST5541-.750D3R250.3Z4	SIRA	10302938	3	D	0.750	0.750	2.250	5.000	—	—	0.250	4	Weldon	□
ST5541-.875D3R030.3Z4	SIRA	10302939	3	D	0.875	0.875	2.625	5.000	—	—	0.030	4	Weldon	□
ST5541-1.00D3R030.3Z4	SIRA	10302940	3	D	1.000	1.000	3.000	6.000	—	—	0.030	4	Weldon	■
ST5541-.500D4R030.3Z4	SIRA	10302941	4	D	0.500	0.500	1.500	4.000	—	—	0.030	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

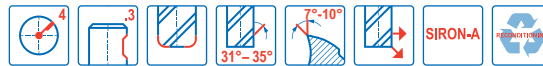
ST5541

High performance – Steel – Square – 4 Flutes – Weldon – Corner radius – Inch



E

—Tolerances:
—DMM= $-.0001"/-.0004"$
—DC= $+.000"/-.002"$
—RE= $\pm .0008"$
—Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
ST5541-.250E2R020.3Z4	SIRA	10302896	2	E	inch	inch	inch	inch	inch	inch	inch			
ST5541-.313E2R020.3Z4	SIRA	10302899	2	E	0.250	0.250	0.500	2.500	0.750	0.240	0.020	4	Weldon	☐
ST5541-.375E2R020.3Z4	SIRA	10302901	2	E	0.313	0.313	0.625	3.000	0.938	0.300	0.020	4	Weldon	☐
ST5541-.438E2R020.3Z4	SIRA	10302903	2	E	0.375	0.375	0.750	3.000	1.125	0.360	0.020	4	Weldon	☐
ST5541-.500E2R030.3Z4	SIRA	10302906	2	E	0.438	0.438	0.875	4.000	1.313	0.420	0.020	4	Weldon	☐
ST5541-.625E2R030.3Z4	SIRA	10302912	2	E	0.500	0.500	1.000	3.000	1.500	0.480	0.030	4	Weldon	☐
ST5541-.750E2R030.3Z4	SIRA	10302918	2	E	0.625	0.625	1.250	3.500	1.875	0.600	0.030	4	Weldon	☐
ST5541-1.00E2R030.3Z4	SIRA	10302921	2	E	0.750	0.750	1.500	4.000	2.250	0.720	0.030	4	Weldon	☐
ST5541-1.00E2R030.3Z4	SIRA	10302921	2	E	1.000	1.000	2.000	5.000	3.000	0.960	0.030	4	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – ST5541 Side milling

SMG		a _e /DC	a _p /DC	f _z										v _c
				3	4	5	6	8	10	12	16	20	25	
P1	M/A/D/E	0,25 0,25	1,5 1,5	0,046 0,0018	0,06 0,0024	0,08 0,0032	0,095 0,0038	0,12 0,0048	0,16 0,0065	0,18 0,0070	0,22 0,0085	0,26 0,010	0,3 0,012	220 (170 — 230) 720 (560 — 750)
P2	M/A/D/E	0,25 0,25	1,5 1,5	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	0,13 0,0050	0,16 0,0065	0,19 0,0075	0,24 0,0095	0,26 0,010	0,3 0,012	215 (160 — 220) 710 (530 — 720)
P3	M/A/D/E	0,25 0,25	1,5 1,5	0,044 0,0017	0,06 0,0024	0,075 0,0030	0,09 0,0036	0,12 0,0048	0,15 0,0060	0,18 0,0070	0,22 0,0085	0,25 0,010	0,28 0,011	190 (140 — 200) 620 (460 — 650)
P4	M/A/D/E	0,25 0,25	1,5 1,5	0,044 0,0017	0,06 0,0024	0,075 0,0030	0,09 0,0036	0,12 0,0048	0,15 0,0060	0,17 0,0065	0,22 0,0085	0,25 0,010	0,28 0,011	165 (130 — 170) 540 (430 — 550)
P5	M/A/D/E	0,25 0,25	1,5 1,5	0,044 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,22 0,0085	0,24 0,0095	0,28 0,011	160 (120 — 170) 520 (400 — 550)
P6	M/A/D/E	0,25 0,25	1,5 1,5	0,042 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,2 0,0080	0,24 0,0095	0,28 0,011	180 (140 — 190) 590 (460 — 620)
P7	M/A/D/E	0,25 0,25	1,5 1,5	0,042 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,2 0,0080	0,24 0,0095	0,28 0,011	170 (130 — 180) 560 (430 — 590)
P8	M/A/D/E	0,25 0,25	1,5 1,5	0,044 0,0017	0,06 0,0024	0,075 0,0030	0,09 0,0036	0,12 0,0048	0,15 0,0060	0,18 0,0070	0,22 0,0085	0,25 0,010	0,28 0,011	160 (120 — 160) 520 (400 — 520)
P11	M/A/D/E	0,25 0,25	1,5 1,5	0,042 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,2 0,0080	0,24 0,0095	0,28 0,011	165 (130 — 170) 540 (430 — 550)
P12	M/A/D/E	0,25 0,25	1,5 1,5	0,03 0,0012	0,038 0,0015	0,048 0,0019	0,06 0,0024	0,08 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,19 0,0075	110 (80 — 110) 360 (270 — 360)
K1	E	0,25 0,25	1,5 1,5	0,048 0,0019	0,065 0,0026	0,08 0,0032	0,095 0,0038	0,13 0,0050	0,16 0,0065	0,19 0,0075	0,24 0,0095	0,26 0,010	0,3 0,012	215 (170 — 230) 710 (560 — 750)
K2	E	0,25 0,25	1,5 1,5	0,044 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,22 0,0085	0,24 0,0095	0,28 0,011	195 (150 — 200) 640 (500 — 650)
K3	E	0,25 0,25	1,5 1,5	0,044 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,22 0,0085	0,24 0,0095	0,28 0,011	165 (130 — 170) 540 (430 — 550)
K4	E	0,25 0,25	1,5 1,5	0,044 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,22 0,0085	0,24 0,0095	0,28 0,011	160 (120 — 160) 520 (400 — 520)
K5	E	0,25 0,25	1,5 1,5	0,038 0,0015	0,05 0,0020	0,065 0,0026	0,075 0,0030	0,1 0,0040	0,13 0,0050	0,15 0,0060	0,19 0,0075	0,22 0,0085	0,25 0,010	95 (71 — 100) 310 (240 — 320)
K6	E	0,25 0,25	1,5 1,5	0,044 0,0017	0,055 0,0022	0,07 0,0028	0,085 0,0034	0,11 0,0044	0,14 0,0055	0,17 0,0065	0,22 0,0085	0,24 0,0095	0,28 0,011	140 (110 — 140) 460 (370 — 450)
K7	E	0,25 0,25	1,5 1,5	0,038 0,0015	0,05 0,0020	0,065 0,0026	0,075 0,0030	0,1 0,0040	0,13 0,0050	0,15 0,0060	0,19 0,0075	0,22 0,0085	0,25 0,010	120 (91 — 130) 395 (300 — 420)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – ST5541 Slot milling

SMG		a _p /DC	f _z										v _c	
			3	4	5	6	8	10	12	16	20	25		
P1	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,16 0,0065	195 (150 — 200) 640 (500 — 650)	Universal
P2	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,16 0,0065	190 (140 — 200) 620 (460 — 650)	
P3	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,16 0,0065	165 (130 — 170) 540 (430 — 550)	Steel and cast iron
P4	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	145 (110 — 150) 475 (370 — 490)	
P5	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	135 (110 — 140) 445 (370 — 450)	Steel and cast iron
P6	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	155 (120 — 160) 510 (400 — 520)	
P7	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	145 (110 — 150) 475 (370 — 490)	Stainless steel and S-materials
P8	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,16 0,0065	135 (110 — 140) 445 (370 — 450)	
P11	M/A/D/E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	140 (110 — 150) 460 (370 — 490)	Stainless steel and S-materials
P12	M/A/D/E	1,5 1,5	0,016 0,00065	0,022 0,00085	0,026 0,0010	0,032 0,0013	0,042 0,0017	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	85 (64 — 92) 280 (210 — 300)	
K1	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,16 0,0065	190 (150 — 200) 620 (500 — 650)	Non ferrous
K2	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	165 (130 — 170) 540 (430 — 550)	
K3	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	140 (110 — 140) 460 (370 — 450)	Non ferrous
K4	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	135 (99 — 140) 445 (330 — 450)	
K5	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,13 0,0050	80 (59 — 85) 260 (200 — 270)	Hard
K6	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,13 0,0050	0,15 0,0060	120 (87 — 120) 395 (290 — 390)	
K7	E	1,5 1,5	0,020 0,00080	0,026 0,0010	0,032 0,0013	0,040 0,0016	0,050 0,0020	0,065 0,0026	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,13 0,0050	100 (76 — 100) 330 (250 — 320)	Hard

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – ST5541 Side milling – Inch

SMG		a _e /DC	a _p /DC	f _z															v _c
				1/8	5/32	3/16	7/32	1/4	9/32	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1		
P1	M/A/D/E	0.25	1.5	0.05	0.06	0.075	0.085	0.1	0.11	0.12	0.15	0.17	0.19	0.22	0.25	0.28	0.3	220 (170 — 230)	
		0.25	1.5	0.0020	0.0024	0.0030	0.0034	0.0040	0.0044	0.0048	0.0060	0.0065	0.0075	0.0085	0.010	0.011	0.012	720 (560 — 750)	
P2	M/A/D/E	0.25	1.5	0.05	0.065	0.075	0.09	0.1	0.11	0.13	0.15	0.17	0.2	0.24	0.26	0.28	0.3	215 (160 — 220)	
		0.25	1.5	0.0020	0.0026	0.0030	0.0036	0.0040	0.0044	0.0050	0.0060	0.0065	0.0080	0.0095	0.010	0.011	0.012	710 (530 — 720)	
P3	M/A/D/E	0.25	1.5	0.048	0.06	0.07	0.085	0.095	0.11	0.12	0.14	0.17	0.18	0.22	0.25	0.26	0.28	190 (140 — 200)	
		0.25	1.5	0.0019	0.0024	0.0028	0.0034	0.0038	0.0044	0.0048	0.0055	0.0065	0.0070	0.0085	0.010	0.010	0.011	620 (460 — 650)	
P4	M/A/D/E	0.25	1.5	0.046	0.06	0.07	0.08	0.095	0.1	0.12	0.14	0.16	0.18	0.22	0.24	0.26	0.28	165 (130 — 170)	
		0.25	1.5	0.0018	0.0024	0.0028	0.0032	0.0038	0.0040	0.0048	0.0055	0.0065	0.0070	0.0085	0.0095	0.010	0.011	540 (430 — 550)	
P5	M/A/D/E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	160 (120 — 170)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	520 (400 — 550)	
P6	M/A/D/E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	180 (140 — 190)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	590 (460 — 620)	
P7	M/A/D/E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	170 (130 — 180)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	560 (430 — 590)	
P8	M/A/D/E	0.25	1.5	0.048	0.06	0.07	0.085	0.095	0.11	0.12	0.14	0.17	0.18	0.22	0.25	0.26	0.28	160 (120 — 160)	
		0.25	1.5	0.0019	0.0024	0.0028	0.0034	0.0038	0.0044	0.0048	0.0055	0.0065	0.0070	0.0085	0.010	0.010	0.011	520 (400 — 520)	
P11	M/A/D/E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	165 (130 — 170)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	540 (430 — 550)	
P12	M/A/D/E	0.25	1.5	0.03	0.038	0.046	0.055	0.06	0.07	0.075	0.095	0.11	0.12	0.14	0.16	0.18	0.19	110 (80 — 110)	
		0.25	1.5	0.0012	0.0015	0.0018	0.0022	0.0024	0.0028	0.0030	0.0038	0.0044	0.0048	0.0055	0.0065	0.0070	0.0075	360 (270 — 360)	
K1	E	0.25	1.5	0.05	0.065	0.075	0.09	0.1	0.11	0.13	0.15	0.17	0.2	0.24	0.26	0.28	0.3	215 (170 — 230)	
		0.25	1.5	0.0020	0.0026	0.0030	0.0036	0.0040	0.0044	0.0050	0.0060	0.0065	0.0080	0.0095	0.010	0.011	0.012	710 (560 — 750)	
K2	E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	195 (150 — 200)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	640 (500 — 650)	
K3	E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	165 (130 — 170)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	540 (430 — 550)	
K4	E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	160 (120 — 160)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	520 (400 — 520)	
K5	E	0.25	1.5	0.04	0.05	0.06	0.07	0.08	0.09	0.1	0.12	0.14	0.16	0.19	0.22	0.24	0.25	95 (71 — 100)	
		0.25	1.5	0.0016	0.0020	0.0024	0.0028	0.0032	0.0036	0.0040	0.0048	0.0055	0.0065	0.0075	0.0085	0.0095	0.010	310 (240 — 320)	
K6	E	0.25	1.5	0.046	0.055	0.07	0.08	0.09	0.1	0.11	0.14	0.16	0.18	0.2	0.24	0.26	0.28	140 (110 — 140)	
		0.25	1.5	0.0018	0.0022	0.0028	0.0032	0.0036	0.0040	0.0044	0.0055	0.0065	0.0070	0.0080	0.0095	0.010	0.011	460 (370 — 450)	
K7	E	0.25	1.5	0.04	0.05	0.06	0.07	0.08	0.09	0.1	0.12	0.14	0.16	0.19	0.22	0.24	0.25	120 (91 — 130)	
		0.25	1.5	0.0016	0.0020	0.0024	0.0028	0.0032	0.0036	0.0040	0.0048	0.0055	0.0065	0.0075	0.0085	0.0095	0.010	395 (300 — 420)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – ST5541 Slot milling – Inch

SMG		a _p /DC	f _z														v _c	
			1/8	5/32	3/16	7/32	1/4	9/32	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1		
P1	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	195 (150 — 200) 640 (500 — 650)	Universal Steel and cast iron
P2	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,17 0.0065	190 (140 — 200) 620 (460 — 650)	
P3	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	165 (130 — 170) 540 (430 — 550)	
P4	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	145 (110 — 150) 475 (370 — 490)	
P5	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	135 (110 — 140) 445 (370 — 450)	
P6	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	155 (120 — 160) 510 (400 — 520)	
P7	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	145 (110 — 150) 475 (370 — 490)	
P8	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	135 (110 — 140) 445 (370 — 450)	
P11	M/A/D/E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	140 (110 — 150) 460 (370 — 490)	
P12	M/A/D/E	1,5 1,5	0,017 0.00065	0,022 0.00085	0,025 0.0010	0,030 0.0012	0,034 0.0013	0,038 0.0015	0,042 0.0017	0,050 0.0020	0,060 0.0024	0,065 0.0026	0,080 0.0032	0,085 0.0034	0,095 0.0038	0,10 0.0040	85 (64 — 92) 280 (210 — 300)	
K1	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,17 0.0065	190 (150 — 200) 620 (500 — 650)	Non ferrous
K2	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	165 (130 — 170) 540 (430 — 550)	
K3	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	140 (110 — 140) 460 (370 — 450)	
K4	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	135 (99 — 140) 445 (330 — 450)	
K5	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,13 0.0050	0,14 0.0055	80 (59 — 85) 260 (200 — 270)	Hard
K6	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,15 0.0060	120 (87 — 120) 395 (290 — 390)	
K7	E	1,5 1,5	0,020 0.00080	0,026 0.0010	0,030 0.0012	0,036 0.0014	0,042 0.0017	0,046 0.0018	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,13 0.0050	0,14 0.0055	100 (76 — 100) 330 (250 — 320)	

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

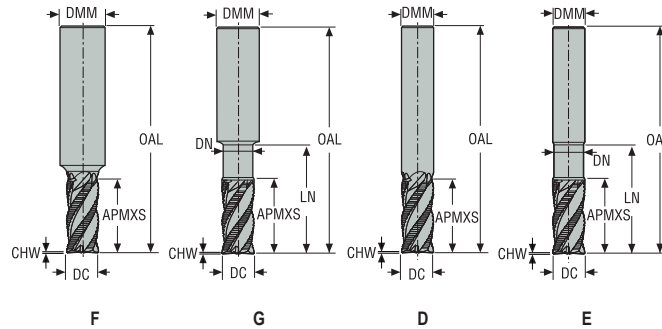
Graphite

X-Heads

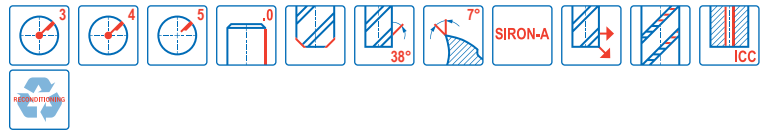
Minimaster

JHP993

High performance – Steel – Square – 3-5 Flutes – Cylindrical – Chamfer



—Tolerances:
—DMM=h5
—DC=−0,02/−0,1 mm
—CHW= ±0,05 mm
—Regrind possible if DC is ≥Ø6

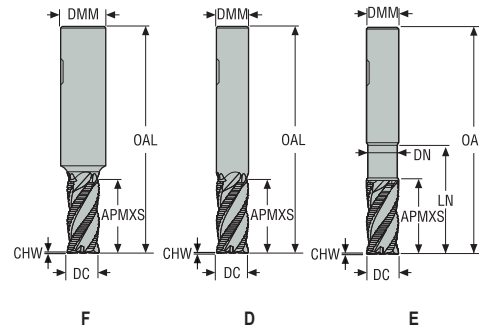


Designation	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
JHP993040F2C.0Z3-SIRA	02826806	2	F	■	—	4,0	6,0	10,0	50,0	12,56	4,0	0,15	3	Cylindrical	■
JHP993050F2C.0Z4-SIRA	02826808	2	F	■	—	5,0	6,0	12,0	55,0	14,75	5,0	0,15	4	Cylindrical	■
JHP993060D2C.0Z4-SIRA	02826809	2	D	■	—	6,0	6,0	14,0	55,0	—	—	0,2	4	Cylindrical	■
JHP993075F2C.0Z4-SIRA	02826811	2	F	■	—	7,5	8,0	17,0	60,0	20,0	7,5	0,2	4	Cylindrical	■
JHP993080D2C.0Z4A-SIRA	02826814	2	D	■	■	8,0	8,0	18,0	60,0	—	—	0,2	4	Cylindrical	■
JHP993080D2C.0Z4-SIRA	02826812	2	D	■	—	8,0	8,0	18,0	60,0	—	—	0,2	4	Cylindrical	■
JHP993095F2C.0Z4-SIRA	02826816	2	F	■	—	9,5	10,0	20,0	70,0	23,0	9,5	0,2	4	Cylindrical	■
JHP993100D2C.0Z4A-SIRA	02826818	2	D	■	■	10,0	10,0	22,0	70,0	—	—	0,2	4	Cylindrical	■
JHP993100D2C.0Z4-SIRA	02826817	2	D	■	—	10,0	10,0	22,0	70,0	—	—	0,2	4	Cylindrical	■
JHP993115F2C.0Z4-SIRA	02826820	2	F	■	—	11,5	12,0	25,0	80,0	28,0	11,5	0,2	4	Cylindrical	■
JHP993120D2C.0Z4A-SIRA	02826822	2	D	■	■	12,0	12,0	26,0	80,0	—	—	0,2	4	Cylindrical	■
JHP993120D2C.0Z4-SIRA	02826821	2	D	■	—	12,0	12,0	26,0	80,0	—	—	0,2	4	Cylindrical	■
JHP993140D2C.0Z4-SIRA	02826824	2	D	■	—	14,0	14,0	30,0	80,0	—	—	0,3	4	Cylindrical	■
JHP993160D2C.0Z4A-SIRA	02856501	2	D	■	■	16,0	16,0	34,0	90,0	—	—	0,3	4	Cylindrical	■
JHP993160D2C.0Z4-SIRA	02856499	2	D	■	—	16,0	16,0	34,0	90,0	—	—	0,3	4	Cylindrical	■
JHP993160D2C.0Z5-SIRA	02826825	2	D	■	—	16,0	16,0	34,0	90,0	—	—	0,3	5	Cylindrical	■
JHP993200D2C.0Z4A-SIRA	02856506	2	D	■	■	20,0	20,0	42,0	100,0	—	—	0,5	4	Cylindrical	■
JHP993200D2C.0Z4-SIRA	02856505	2	D	■	—	20,0	20,0	42,0	100,0	—	—	0,5	4	Cylindrical	■
JHP993200D2C.0Z5-SIRA	02826828	2	D	■	—	20,0	20,0	42,0	100,0	—	—	0,5	5	Cylindrical	■
JHP993250D2C.0Z4A-SIRA	02856510	2	D	■	■	25,0	25,0	52,0	125,0	—	—	0,5	4	Cylindrical	■
JHP993040G3C.0Z3-SIRA	02826807	3	G	■	—	4,0	6,0	10,0	55,0	15,0	3,7	0,15	3	Cylindrical	■
JHP993060E3C.0Z4-SIRA	02826810	3	E	■	—	6,0	6,0	14,0	65,0	24,0	5,6	0,2	4	Cylindrical	■
JHP993080E3C.0Z4-SIRA	02826815	3	E	■	—	8,0	8,0	18,0	70,0	32,0	7,4	0,2	4	Cylindrical	■
JHP993100E3C.0Z4-SIRA	02826819	3	E	■	—	10,0	10,0	22,0	85,0	40,0	9,4	0,2	4	Cylindrical	■
JHP993120E3C.0Z4-SIRA	02826823	3	E	■	—	12,0	12,0	26,0	100,0	50,0	11,4	0,2	4	Cylindrical	■
JHP993160E3C.0Z4-SIRA	02856502	3	E	■	—	16,0	16,0	34,0	110,0	60,0	15,4	0,3	4	Cylindrical	■
JHP993200E3C.0Z4-SIRA	02856507	3	E	■	—	20,0	20,0	42,0	125,0	70,0	19,2	0,5	4	Cylindrical	■

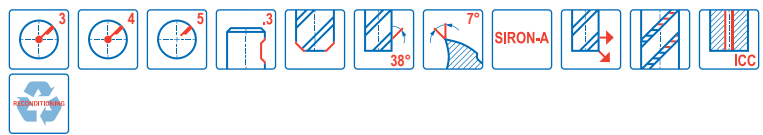
■ Stocked standard.

JHP993

High performance – Steel – Square – 3-5 Flutes – Weldon – Chamfer



- Tolerances:
- DMM=h5
- DC= -0,02/-0,1 mm
- CHW= ±0,05 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
JHP993040F2C.3Z3-SIRA	02828150	2	F	■	—	4,0	6,0	10,0	50,0	12,56	4,0	0,15	3	Weldon	■
JHP993050F2C.3Z4-SIRA	02828152	2	F	■	—	5,0	6,0	12,0	55,0	14,75	5,0	0,15	4	Weldon	■
JHP993060D2C.3Z4-SIRA	02828153	2	D	■	—	6,0	6,0	14,0	55,0	—	—	0,2	4	Weldon	■
JHP993075F2C.3Z4-SIRA	02828155	2	F	■	—	7,5	8,0	17,0	60,0	20,0	7,5	0,2	4	Weldon	■
JHP993080D2C.3Z4A-SIRA	02828246	2	D	■	■	8,0	8,0	18,0	60,0	—	—	0,2	4	Weldon	□
JHP993080D2C.3Z4-SIRA	02828156	2	D	■	—	8,0	8,0	18,0	60,0	—	—	0,2	4	Weldon	■
JHP993095F2C.3Z4-SIRA	02828158	2	F	■	—	9,5	10,0	20,0	70,0	23,0	9,5	0,2	4	Weldon	■
JHP993100D2C.3Z4A-SIRA	02828247	2	D	■	■	10,0	10,0	22,0	70,0	—	—	0,2	4	Weldon	□
JHP993100D2C.3Z4-SIRA	02828159	2	D	■	—	10,0	10,0	22,0	70,0	—	—	0,2	4	Weldon	■
JHP993120D2C.3Z4A-SIRA	02828248	2	D	■	■	12,0	12,0	26,0	80,0	—	—	0,2	4	Weldon	□
JHP993120D2C.3Z4-SIRA	02828162	2	D	■	—	12,0	12,0	26,0	80,0	—	—	0,2	4	Weldon	■
JHP993140D2C.3Z4-SIRA	02828164	2	D	■	—	14,0	14,0	30,0	80,0	—	—	0,3	4	Weldon	■
JHP993160D2C.3Z4A-SIRA	02856512	2	D	■	■	16,0	16,0	34,0	90,0	—	—	0,3	4	Weldon	■
JHP993160D2C.3Z4-SIRA	02856500	2	D	■	—	16,0	16,0	34,0	90,0	—	—	0,3	4	Weldon	■
JHP993160D2C.3Z5-SIRA	02828165	2	D	■	—	16,0	16,0	34,0	90,0	—	—	0,3	5	Weldon	■
JHP993200D2C.3Z4A-SIRA	02856513	2	D	■	■	20,0	20,0	42,0	100,0	—	—	0,5	4	Weldon	■
JHP993200D2C.3Z4-SIRA	02856504	2	D	■	—	20,0	20,0	42,0	100,0	—	—	0,5	4	Weldon	■
JHP993200D2C.3Z5-SIRA	02828167	2	D	■	—	20,0	20,0	42,0	100,0	—	—	0,5	5	Weldon	■
JHP993250D2C.3Z4A-SIRA	02856514	2	D	■	■	25,0	25,0	52,0	125,0	—	—	0,5	4	Weldon	■
JHP993250D2C.3Z4-SIRA	02856509	2	D	■	—	25,0	25,0	52,0	125,0	—	—	0,5	4	Weldon	■
JHP993060E3C.3Z4-SIRA	02828154	3	E	■	—	6,0	6,0	14,0	65,0	24,0	5,6	0,2	4	Weldon	■
JHP993080E3C.3Z4-SIRA	02828157	3	E	■	—	8,0	8,0	18,0	70,0	32,0	7,4	0,2	4	Weldon	■
JHP993100E3C.3Z4-SIRA	02828160	3	E	■	—	10,0	10,0	22,0	85,0	40,0	9,4	0,2	4	Weldon	■
JHP993120E3C.3Z4-SIRA	02828163	3	E	■	—	12,0	12,0	26,0	100,0	50,0	11,4	0,2	4	Weldon	■
JHP993160E3C.3Z4-SIRA	02856503	3	E	■	—	16,0	16,0	34,0	110,0	60,0	15,4	0,3	4	Weldon	■
JHP993200E3C.3Z4-SIRA	02856508	3	E	■	—	20,0	20,0	42,0	125,0	70,0	19,2	0,5	4	Weldon	■
JHP993200E3C.3Z5-SIRA	02828168	3	E	■	—	20,0	20,0	42,0	125,0	70,0	19,2	0,5	5	Weldon	■
JHP993250E3C.3Z4-SIRA	02856511	3	E	■	—	25,0	25,0	52,0	150,0	90,0	24,0	0,5	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

Graphite

X-Heads

Minimaster

Cutting data – JHP993 Side milling PCEDC=3 and PCEDC=4

SMG		a _e /DC	a _p /DC	f _z										v _c
				4	5	6	8	10	12	14	16	20	25	
P1	E/M/A	0.400 0,400	1.7 1,7	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.16 0,0065	0.19 0,0075	0.22 0,0085	230 (200 — 260) 750 (660 — 850)
P2	E/M/A	0.400 0,400	1.7 1,7	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	0.22 0,0085	225 (200 — 250) 740 (660 — 820)
P3	E/M/A	0.400 0,400	1.7 1,7	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.16 0,0065	0.18 0,0070	0.20 0,0080	195 (170 — 220) 640 (560 — 720)
P4	E/M/A	0.400 0,400	1.7 1,7	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.18 0,0070	0.20 0,0080	175 (150 — 190) 570 (500 — 620)
P5	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.20 0,0080	165 (150 — 190) 540 (500 — 620)
P6	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.19 0,0075	185 (160 — 210) 610 (530 — 680)
P7	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.19 0,0075	175 (160 — 200) 570 (530 — 650)
P8	E/M/A	0.400 0,400	1.7 1,7	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.14 0,0055	0.16 0,0065	0.18 0,0070	0.20 0,0080	160 (140 — 180) 520 (460 — 590)
P11	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.19 0,0075	170 (150 — 190) 560 (500 — 620)
P12	E/M/A	0.400 0,400	1.7 1,7	0.028 0,0011	0.034 0,0013	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.095 0,0038	0.10 0,0040	0.12 0,0048	0.13 0,0050	110 (95 — 120) 360 (320 — 390)
K1	E/M/A	0.400 0,400	1.7 1,7	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	0.22 0,0085	225 (200 — 250) 740 (660 — 820)
K2	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.20 0,0080	200 (180 — 220) 660 (600 — 720)
K3	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.20 0,0080	170 (150 — 190) 560 (500 — 620)
K4	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.20 0,0080	160 (140 — 180) 520 (460 — 590)
K5	E/M/A	0.400 0,400	1.7 1,7	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.18 0,0070	100 (86 — 110) 330 (290 — 360)
K6	E/M/A	0.400 0,400	1.7 1,7	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	0.15 0,0060	0.17 0,0065	0.20 0,0080	145 (130 — 160) 475 (430 — 520)
K7	E/M/A	0.400 0,400	1.7 1,7	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.18 0,0070	125 (110 — 140) 410 (370 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JHP993 Side milling PCEDC=5

SMG		a_e/DC	a_p/DC	f_z		v_c
				16	20	
P1	E/M/A	0.376 0.376	1.0 1.0	0.17 0.0065	0.22 0.0085	205 (180 — 230) 670 (600 — 750)
P2	E/M/A	0.376 0.376	1.0 1.0	0.18 0.0070	0.22 0.0085	195 (170 — 220) 640 (560 — 720)
P3	E/M/A	0.376 0.376	1.0 1.0	0.17 0.0065	0.20 0.0080	170 (150 — 190) 560 (500 — 620)
P4	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	155 (140 — 170) 510 (460 — 550)
P5	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	145 (130 — 160) 475 (430 — 520)
P6	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	165 (150 — 180) 540 (500 — 590)
P7	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	155 (140 — 170) 510 (460 — 550)
P8	E/M/A	0.376 0.376	1.0 1.0	0.17 0.0065	0.20 0.0080	145 (130 — 160) 475 (430 — 520)
P11	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	150 (130 — 170) 490 (430 — 550)
P12	E/M/A	0.376 0.376	1.0 1.0	0.11 0.0044	0.13 0.0050	100 (85 — 110) 330 (280 — 360)
K1	E/M/A	0.376 0.376	1.0 1.0	0.18 0.0070	0.22 0.0085	195 (170 — 220) 640 (560 — 720)
K2	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	175 (160 — 200) 570 (530 — 650)
K3	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	150 (130 — 170) 490 (430 — 550)
K4	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	145 (130 — 160) 475 (430 — 520)
K5	E/M/A	0.376 0.376	1.0 1.0	0.15 0.0060	0.18 0.0070	85 (75 — 99) 280 (250 — 320)
K6	E/M/A	0.376 0.376	1.0 1.0	0.16 0.0065	0.20 0.0080	125 (110 — 140) 410 (370 — 450)
K7	E/M/A	0.376 0.376	1.0 1.0	0.15 0.0060	0.18 0.0070	110 (96 — 120) 360 (320 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JHP993 Slot milling PCEDC=3 and PCEDC=4

SMG		a _p /DC	f _z										v _c
			4	5	6	8	10	12	14	16	20	25	
P1	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.20	200 (180 — 220)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0080	660 (600 — 720)
P2	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.20	195 (170 — 220)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0080	640 (560 — 720)
P3	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.20	165 (150 — 190)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0080	540 (500 — 620)
P4	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.20	145 (130 — 160)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0080	475 (430 — 520)
P5	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	140 (130 — 160)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	460 (430 — 520)
P6	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	155 (140 — 170)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	510 (460 — 550)
P7	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	150 (130 — 160)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	490 (430 — 520)
P8	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.20	140 (130 — 160)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0080	460 (430 — 520)
P11	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	145 (130 — 160)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	475 (430 — 520)
P12	E/M/A	1.5	0.028	0.034	0.040	0.055	0.070	0.080	0.090	0.10	0.12	0.13	90 (76 — 100)
		1,5	0,0011	0,0013	0,0016	0,0022	0,0028	0,0032	0,0036	0,0040	0,0048	0,0050	295 (250 — 320)
K1	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.20	195 (170 — 220)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0080	640 (560 — 720)
K2	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	170 (150 — 190)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	560 (500 — 620)
K3	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	145 (130 — 160)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	475 (430 — 520)
K4	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	135 (120 — 150)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	445 (400 — 490)
K5	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.15	0.17	80 (70 — 93)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0060	0,0065	260 (230 — 300)
K6	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.16	0.19	120 (110 — 130)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0065	0,0075	395 (370 — 420)
K7	E/M/A	1.5	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.13	0.15	0.17	105 (90 — 110)
		1,5	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0050	0,0060	0,0065	345 (300 — 360)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JHP993 Slot milling PCEDC=5

SMG		a_p/DC	f_z		v_c
			16	20	
P1	E/M/A	0.44 0,44	0.17 0,0065	0.20 0,0080	160 (140 — 180) 520 (460 — 590)
P2	E/M/A	0.44 0,44	0.17 0,0065	0.22 0,0085	155 (140 — 170) 510 (460 — 550)
P3	E/M/A	0.44 0,44	0.16 0,0065	0.20 0,0080	135 (120 — 150) 445 (400 — 490)
P4	E/M/A	0.44 0,44	0.16 0,0065	0.20 0,0080	120 (110 — 130) 395 (370 — 420)
P5	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	115 (99 — 130) 375 (330 — 420)
P6	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	130 (120 — 140) 425 (400 — 450)
P7	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	120 (110 — 130) 395 (370 — 420)
P8	E/M/A	0.44 0,44	0.16 0,0065	0.20 0,0080	115 (99 — 130) 375 (330 — 420)
P11	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	120 (110 — 130) 395 (370 — 420)
P12	E/M/A	0.44 0,44	0.11 0,0044	0.13 0,0050	80 (68 — 89) 260 (230 — 290)
K1	E/M/A	0.44 0,44	0.17 0,0065	0.22 0,0085	160 (140 — 180) 520 (460 — 590)
K2	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	140 (120 — 150) 460 (400 — 490)
K3	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	120 (110 — 130) 395 (370 — 420)
K4	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	115 (97 — 120) 375 (320 — 390)
K5	E/M/A	0.44 0,44	0.14 0,0055	0.17 0,0065	70 (60 — 79) 230 (200 — 250)
K6	E/M/A	0.44 0,44	0.16 0,0065	0.19 0,0075	100 (86 — 110) 330 (290 — 360)
K7	E/M/A	0.44 0,44	0.14 0,0055	0.17 0,0065	90 (77 — 100) 295 (260 — 320)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

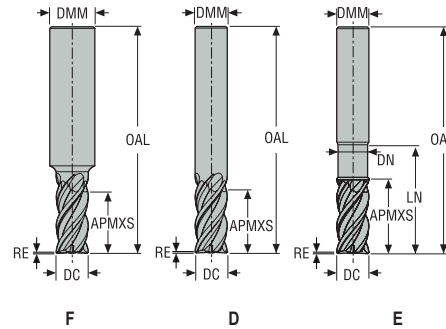
Graphite

X-Heads

Minimaster

JHP951

High performance – Square – Steel – 3-5 Flutes – Cylindrical – Corner radius or chamfer



—Tolerances:
—DMM=h5
—DC=e7
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6

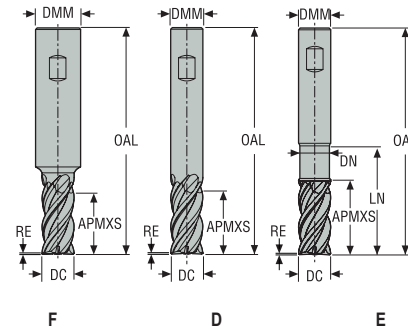


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	RE	PCEDC	Shank	Stock standard
JHP951030F2C.0Z3-SIRA	02828192	2	F	3,0	6,0	8,0	50,0	10,25	3,0	0,1	—	3	Cylindrical	■
JHP951030F2R020.0Z3-SIRA	02828191	2	F	3,0	6,0	8,0	50,0	10,25	3,0	—	0,2	3	Cylindrical	■
JHP951030F2R050.0Z3-SIRA	02828190	2	F	3,0	6,0	8,0	50,0	10,25	3,0	—	0,5	3	Cylindrical	■
JHP951040F2C.0Z4-SIRA	02828197	2	F	4,0	6,0	10,0	55,0	13,25	4,0	0,15	—	4	Cylindrical	■
JHP951040F2R020.0Z4-SIRA	02828194	2	F	4,0	6,0	10,0	55,0	13,25	4,0	—	0,2	4	Cylindrical	■
JHP951040F2R050.0Z4-SIRA	02828195	2	F	4,0	6,0	10,0	55,0	13,25	4,0	—	0,5	4	Cylindrical	■
JHP951050F2C.0Z4-SIRA	02828201	2	F	5,0	6,0	12,0	55,0	15,25	5,0	0,2	—	4	Cylindrical	■
JHP951050F2R020.0Z4-SIRA	02828199	2	F	5,0	6,0	12,0	55,0	15,25	5,0	—	0,2	4	Cylindrical	■
JHP951050F2R050.0Z4-SIRA	02828198	2	F	5,0	6,0	12,0	55,0	15,25	5,0	—	0,5	4	Cylindrical	■
JHP951060D2C.0Z4-SIRA	02828205	2	D	6,0	6,0	14,0	55,0	—	—	0,2	—	4	Cylindrical	■
JHP951060D2R020.0Z4-SIRA	02828203	2	D	6,0	6,0	14,0	55,0	—	—	—	0,2	4	Cylindrical	■
JHP951060D2R050.0Z4-SIRA	02828202	2	D	6,0	6,0	14,0	55,0	—	—	—	0,5	4	Cylindrical	■
JHP951080D2C.0Z4-SIRA	02828212	2	D	8,0	8,0	18,0	60,0	—	—	0,3	—	4	Cylindrical	■
JHP951080D2R020.0Z4-SIRA	02828209	2	D	8,0	8,0	18,0	60,0	—	—	—	0,2	4	Cylindrical	■
JHP951080D2R050.0Z4-SIRA	02828207	2	D	8,0	8,0	18,0	60,0	—	—	—	0,5	4	Cylindrical	■
JHP951080D2R100.0Z4-SIRA	02828208	2	D	8,0	8,0	18,0	60,0	—	—	—	1,0	4	Cylindrical	■
JHP951100E2C.0Z4-SIRA	02828218	2	E	10,0	10,0	22,0	70,0	28,0	9,4	0,3	—	4	Cylindrical	■
JHP951100E2R050.0Z4-SIRA	02828216	2	E	10,0	10,0	22,0	70,0	28,0	9,4	—	0,5	4	Cylindrical	■
JHP951100E2R100.0Z4-SIRA	02828214	2	E	10,0	10,0	22,0	70,0	28,0	9,4	—	1,0	4	Cylindrical	■
JHP951120E2C.0Z4-SIRA	02828226	2	E	12,0	12,0	26,0	80,0	33,0	11,4	0,4	—	4	Cylindrical	■
JHP951120E2R050.0Z4-SIRA	02828224	2	E	12,0	12,0	26,0	80,0	33,0	11,4	—	0,5	4	Cylindrical	■
JHP951120E2R100.0Z4-SIRA	02828222	2	E	12,0	12,0	26,0	80,0	33,0	11,4	—	1,0	4	Cylindrical	■
JHP951160E2C.0Z4-SIRA	02927873	2	E	16,0	16,0	34,0	90,0	40,0	15,0	0,5	—	4	Cylindrical	■
JHP951160E2C.0Z5-SIRA	02828232	2	E	16,0	16,0	34,0	90,0	40,0	15,4	0,5	—	5	Cylindrical	■
JHP951160E2R050.0Z4-SIRA	02927875	2	E	16,0	16,0	34,0	90,0	40,0	15,0	—	0,5	4	Cylindrical	■
JHP951160E2R050.0Z5-SIRA	02828230	2	E	16,0	16,0	34,0	90,0	40,0	15,4	—	0,5	5	Cylindrical	■
JHP951160E2R100.0Z4-SIRA	02927876	2	E	16,0	16,0	34,0	90,0	40,0	15,0	—	1,0	4	Cylindrical	■
JHP951160E2R100.0Z5-SIRA	02828231	2	E	16,0	16,0	34,0	90,0	40,0	15,4	—	1,0	5	Cylindrical	■

■ Stocked standard.

JHP951

High performance – Square – Steel – 3-5 Flutes – Weldon – Corner radius or chamfer



— Tolerances:

— DMM=h5

— DC=e7

— RE= ±0,02 mm

— Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm			
JHP951030F2C.3Z3-SIRA	02828193	2	F	3,0	6,0	8,0	50,0	10,25	3,0	0,1	—	3	Weldon	■
JHP951030F2R020.3Z3-SIRA	02828260	2	F	3,0	6,0	8,0	50,0	10,25	3,0	—	0,2	3	Weldon	■
JHP951030F2R050.3Z3-SIRA	02828259	2	F	3,0	6,0	8,0	50,0	10,25	3,0	—	0,5	3	Weldon	□
JHP951040F2C.3Z4-SIRA	02828196	2	F	4,0	6,0	10,0	55,0	13,25	4,0	0,15	—	4	Weldon	■
JHP951040F2R020.3Z4-SIRA	02828261	2	F	4,0	6,0	10,0	55,0	13,25	4,0	—	0,2	4	Weldon	□
JHP951040F2R050.3Z4-SIRA	02828262	2	F	4,0	6,0	10,0	55,0	13,25	4,0	—	0,5	4	Weldon	□
JHP951050F2C.3Z4-SIRA	02828200	2	F	5,0	6,0	12,0	55,0	15,25	5,0	0,2	—	4	Weldon	■
JHP951050F2R020.3Z4-SIRA	02828264	2	F	5,0	6,0	12,0	55,0	15,25	5,0	—	0,2	4	Weldon	□
JHP951050F2R050.3Z4-SIRA	02828263	2	F	5,0	6,0	12,0	55,0	15,25	5,0	—	0,5	4	Weldon	□
JHP951060D2C.3Z4-SIRA	02828206	2	D	6,0	6,0	14,0	55,0	—	—	0,2	—	4	Weldon	■
JHP951060D2R020.3Z4-SIRA	02828266	2	D	6,0	6,0	14,0	55,0	—	—	—	0,2	4	Weldon	□
JHP951060D2R050.3Z4-SIRA	02828265	2	D	6,0	6,0	14,0	55,0	—	—	—	0,5	4	Weldon	□
JHP951080D2C.3Z4-SIRA	02828210	2	D	8,0	8,0	18,0	60,0	—	—	0,3	—	4	Weldon	■
JHP951080D2R020.3Z4-SIRA	02828269	2	D	8,0	8,0	18,0	60,0	—	—	—	0,2	4	Weldon	□
JHP951080D2R050.3Z4-SIRA	02828267	2	D	8,0	8,0	18,0	60,0	—	—	—	0,5	4	Weldon	■
JHP951080D2R100.3Z4-SIRA	02828268	2	D	8,0	8,0	18,0	60,0	—	—	—	1,0	4	Weldon	□
JHP951100E2C.3Z4-SIRA	02828220	2	E	10,0	10,0	22,0	70,0	28,0	9,4	0,3	—	4	Weldon	■
JHP951100E2R050.3Z4-SIRA	02828271	2	E	10,0	10,0	22,0	70,0	28,0	9,4	—	0,5	4	Weldon	■
JHP951100E2R100.3Z4-SIRA	02828270	2	E	10,0	10,0	22,0	70,0	28,0	9,4	—	1,0	4	Weldon	□
JHP951120E2C.3Z4-SIRA	02828228	2	E	12,0	12,0	26,0	80,0	33,0	11,4	0,4	—	4	Weldon	■
JHP951120E2R050.3Z4-SIRA	02828273	2	E	12,0	12,0	26,0	80,0	33,0	11,4	—	0,5	4	Weldon	■
JHP951120E2R100.3Z4-SIRA	02828272	2	E	12,0	12,0	26,0	80,0	33,0	11,4	—	1,0	4	Weldon	■
JHP951160E2C.3Z4-SIRA	02927874	2	E	16,0	16,0	34,0	90,0	40,0	15,0	0,5	—	4	Weldon	■
JHP951160E2C.3Z5-SIRA	02828233	2	E	16,0	16,0	34,0	90,0	40,0	15,4	0,5	—	5	Weldon	■
JHP951160E2R050.3Z4-SIRA	02927879	2	E	16,0	16,0	34,0	90,0	40,0	15,0	—	0,5	4	Weldon	■
JHP951160E2R050.3Z5-SIRA	02828275	2	E	16,0	16,0	34,0	90,0	40,0	15,4	—	0,5	5	Weldon	□
JHP951160E2R100.3Z4-SIRA	02927880	2	E	16,0	16,0	34,0	90,0	40,0	15,0	—	1,0	4	Weldon	□
JHP951160E2R100.3Z5-SIRA	02828276	2	E	16,0	16,0	34,0	90,0	40,0	15,4	—	1,0	5	Weldon	□
JHP951200E2R050.3Z4-SIRA	02927877	2	E	20,0	20,0	42,0	100,0	48,0	19,0	—	0,5	4	Weldon	■
JHP951200E2R050.3Z5-SIRA	02828235	2	E	20,0	20,0	42,0	100,0	48,0	19,4	—	0,5	5	Weldon	■
JHP951200E2R100.3Z4-SIRA	02927878	2	E	20,0	20,0	42,0	100,0	48,0	19,0	—	1,0	4	Weldon	■
JHP951200E2R100.3Z5-SIRA	02828234	2	E	20,0	20,0	42,0	100,0	48,0	19,4	—	1,0	5	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

Graphite

X-Heads

Minimaster

Cutting data – JHP951 Side milling

SMG		a_e/DC	a_p/DC	f_z									v_c
				3	4	5	6	8	10	12	16	20	
P1	E/M/A	0.400	1.7	0.034	0.044	0.055	0.065	0.090	0.11	0.13	0.16	0.19	230 (200 — 260)
		<i>0,400</i>	<i>1,7</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0022</i>	<i>0,0026</i>	<i>0,0036</i>	<i>0,0044</i>	<i>0,0050</i>	<i>0,0065</i>	<i>0,0075</i>	750 (660 — 850)
P2	E/M/A	0.400	1.7	0.034	0.044	0.055	0.065	0.090	0.11	0.13	0.17	0.19	220 (200 — 250)
		<i>0,400</i>	<i>1,7</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0022</i>	<i>0,0026</i>	<i>0,0036</i>	<i>0,0044</i>	<i>0,0050</i>	<i>0,0065</i>	<i>0,0075</i>	720 (660 — 820)
P3	E/M/A	0.400	1.7	0.032	0.042	0.055	0.065	0.085	0.11	0.13	0.16	0.18	190 (170 — 210)
		<i>0,400</i>	<i>1,7</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0022</i>	<i>0,0026</i>	<i>0,0034</i>	<i>0,0044</i>	<i>0,0050</i>	<i>0,0065</i>	<i>0,0070</i>	620 (560 — 680)
P4	E/M/A	0.400	1.7	0.032	0.042	0.050	0.060	0.085	0.10	0.12	0.15	0.18	170 (150 — 190)
		<i>0,400</i>	<i>1,7</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0034</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0070</i>	560 (500 — 620)
P5	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	165 (150 — 180)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	540 (500 — 590)
P6	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	185 (160 — 210)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	610 (530 — 680)
P7	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	175 (150 — 190)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	570 (500 — 620)
P8	E/M/A	0.400	1.7	0.032	0.042	0.055	0.065	0.085	0.11	0.13	0.16	0.18	160 (140 — 180)
		<i>0,400</i>	<i>1,7</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0022</i>	<i>0,0026</i>	<i>0,0034</i>	<i>0,0044</i>	<i>0,0050</i>	<i>0,0065</i>	<i>0,0070</i>	520 (460 — 590)
P11	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	170 (150 — 190)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	560 (500 — 620)
P12	E/M/A	0.400	1.7	0.020	0.028	0.034	0.042	0.055	0.070	0.080	0.10	0.12	110 (94 — 120)
		<i>0,400</i>	<i>1,7</i>	<i>0,00080</i>	<i>0,0011</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0022</i>	<i>0,0028</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	360 (310 — 390)
K1	E/M/A	0.400	1.7	0.034	0.044	0.055	0.065	0.090	0.11	0.13	0.17	0.19	225 (200 — 250)
		<i>0,400</i>	<i>1,7</i>	<i>0,0013</i>	<i>0,0017</i>	<i>0,0022</i>	<i>0,0026</i>	<i>0,0036</i>	<i>0,0044</i>	<i>0,0050</i>	<i>0,0065</i>	<i>0,0075</i>	740 (660 — 820)
K2	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	200 (180 — 220)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	660 (600 — 720)
K3	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	170 (150 — 190)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	560 (500 — 620)
K4	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	160 (140 — 180)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	520 (460 — 590)
K5	E/M/A	0.400	1.7	0.028	0.036	0.046	0.055	0.075	0.090	0.11	0.14	0.16	100 (85 — 110)
		<i>0,400</i>	<i>1,7</i>	<i>0,0011</i>	<i>0,0014</i>	<i>0,0018</i>	<i>0,0022</i>	<i>0,0030</i>	<i>0,0036</i>	<i>0,0044</i>	<i>0,0055</i>	<i>0,0065</i>	330 (280 — 360)
K6	E/M/A	0.400	1.7	0.030	0.040	0.050	0.060	0.080	0.10	0.12	0.15	0.17	140 (130 — 160)
		<i>0,400</i>	<i>1,7</i>	<i>0,0012</i>	<i>0,0016</i>	<i>0,0020</i>	<i>0,0024</i>	<i>0,0032</i>	<i>0,0040</i>	<i>0,0048</i>	<i>0,0060</i>	<i>0,0065</i>	460 (430 — 520)
K7	E/M/A	0.400	1.7	0.028	0.036	0.046	0.055	0.075	0.090	0.11	0.14	0.16	125 (110 — 140)
		<i>0,400</i>	<i>1,7</i>	<i>0,0011</i>	<i>0,0014</i>	<i>0,0018</i>	<i>0,0022</i>	<i>0,0030</i>	<i>0,0036</i>	<i>0,0044</i>	<i>0,0055</i>	<i>0,0065</i>	410 (370 — 450)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JHP951 Slot milling

SMG		a_p/DC	f_z									v_c	
			3	4	5	6	8	10	12	16	20		
P1	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	195 (170 — 220)	Universal
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	640 (560 — 720)	
P2	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	190 (170 — 210)	Steel and cast iron
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	620 (560 — 680)	
P3	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	165 (150 — 180)	Steel and cast iron
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	540 (500 — 590)	
P4	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	145 (130 — 160)	Steel and cast iron
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	475 (430 — 520)	
P5	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	140 (120 — 150)	Steel and cast iron
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	460 (400 — 490)	
P6	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	155 (140 — 170)	Steel and cast iron
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	510 (460 — 550)	
P7	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	145 (130 — 160)	Stainless steel and S-materials
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	475 (430 — 520)	
P8	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	140 (120 — 150)	Stainless steel and S-materials
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	460 (400 — 490)	
P11	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	145 (130 — 160)	Stainless steel and S-materials
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	475 (430 — 520)	
P12	E/M/A	1.5	0.020	0.028	0.034	0.040	0.055	0.070	0.080	0.10	0.12	85 (75 — 99)	Non ferrous
		1,5	0,00080	0,0011	0,0013	0,0016	0,0022	0,0028	0,0032	0,0040	0,0048	280 (250 — 320)	
K1	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	195 (170 — 220)	Non ferrous
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	640 (560 — 720)	
K2	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	170 (150 — 190)	Non ferrous
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	560 (500 — 620)	
K3	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	140 (130 — 160)	Non ferrous
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	460 (430 — 520)	
K4	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	135 (120 — 150)	Non ferrous
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	445 (400 — 490)	
K5	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.15	80 (70 — 92)	Hard
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0060	260 (230 — 300)	
K6	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.16	120 (110 — 130)	Hard
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0065	395 (370 — 420)	
K7	E/M/A	1.5	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.13	0.15	105 (89 — 110)	Hard
		1,5	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0050	0,0060	345 (300 — 360)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Plastic and cfrp

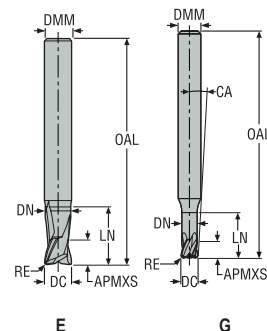
Graphite

X-Heads

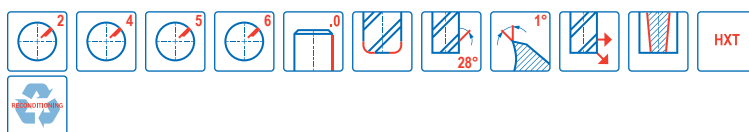
Minimaster

JH142

High speed – High precision – Torical – Hardened steel – 2-6 Flutes – Cylindrical – Corner radius



—Tolerances:
—Run-out= <0,005 mm
—DMM= h5
—DC= 0-0,01 mm
—RE= ±0,005 mm
—Reground possible if DC is ≥Ø6

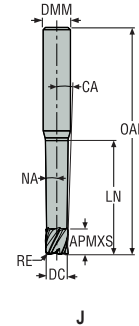


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JH142020G2R030.0Z2-HXT	02968223	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,3	6,64	2	Cylindrical	■
JH142020G2R030.0Z4-HXT	02968224	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,3	6,64	4	Cylindrical	■
JH142020G2R050.0Z2-HXT	02968225	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,5	6,79	2	Cylindrical	■
JH142020G2R050.0Z4-HXT	02968226	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,5	6,79	4	Cylindrical	■
JH142030G2R050.0Z2-HXT	02968227	2	G	3,0	4,0	3,0	40,0	8,0	2,8	0,5	2,95	2	Cylindrical	■
JH142030G2R050.0Z4-HXT	02968228	2	G	3,0	4,0	3,0	40,0	8,0	2,8	0,5	2,95	4	Cylindrical	■
JH142030G2R100.0Z2-HXT	02968229	2	G	3,0	4,0	3,0	40,0	8,0	2,8	1,0	3,1	2	Cylindrical	■
JH142030G2R100.0Z4-HXT	02968230	2	G	3,0	4,0	3,0	40,0	8,0	2,8	1,0	3,1	4	Cylindrical	■
JH142040G2R030.0Z2-HXT	02968231	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,3	5,34	2	Cylindrical	■
JH142040G2R030.0Z4-HXT	02970110	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,3	5,34	4	Cylindrical	■
JH142040G2R050.0Z4-HXT	02968232	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,5	5,44	4	Cylindrical	■
JH142040G2R100.0Z4-HXT	02968233	2	G	4,0	6,0	4,0	50,0	8,0	3,7	1,0	5,69	4	Cylindrical	■
JH142060E2R050.0Z4-HXT	02968235	2	E	6,0	6,0	6,0	50,0	12,0	5,6	0,5	—	4	Cylindrical	■
JH142060E2R100.0Z5-HXT	02968237	2	E	6,0	6,0	6,0	50,0	12,0	5,6	1,0	—	4	Cylindrical	■
JH142060E2R100.0Z5-HXT	02968238	2	E	6,0	6,0	6,0	50,0	12,0	5,6	1,0	—	5	Cylindrical	■
JH142060E2R150.0Z5-HXT	02968240	2	E	6,0	6,0	6,0	50,0	12,0	5,6	1,5	—	5	Cylindrical	■
JH142060E2R200.0Z5-HXT	02968241	2	E	6,0	6,0	6,0	50,0	12,0	5,6	2,0	—	5	Cylindrical	■
JH142080E2R050.0Z5-HXT	02968242	2	E	8,0	8,0	8,0	60,0	16,0	7,4	0,5	—	5	Cylindrical	■
JH142080E2R100.0Z5-HXT	02968243	2	E	8,0	8,0	8,0	60,0	16,0	7,4	1,0	—	5	Cylindrical	■
JH142080E2R150.0Z5-HXT	02968244	2	E	8,0	8,0	8,0	60,0	16,0	7,4	1,5	—	5	Cylindrical	■
JH142080E2R200.0Z5-HXT	02968245	2	E	8,0	8,0	8,0	60,0	16,0	7,4	2,0	—	5	Cylindrical	■
JH142080E2R300.0Z5-HXT	02968246	2	E	8,0	8,0	8,0	60,0	16,0	7,4	3,0	—	5	Cylindrical	■
JH142100E2R050.0Z5-HXT	02968247	2	E	10,0	10,0	10,0	70,0	20,0	9,4	0,5	—	5	Cylindrical	■
JH142100E2R100.0Z5-HXT	02968248	2	E	10,0	10,0	10,0	70,0	20,0	9,4	1,0	—	5	Cylindrical	■
JH142100E2R200.0Z5-HXT	02968249	2	E	10,0	10,0	10,0	70,0	20,0	9,4	2,0	—	5	Cylindrical	■
JH142100E2R250.0Z5-HXT	02968250	2	E	10,0	10,0	10,0	70,0	20,0	9,4	2,5	—	5	Cylindrical	■
JH142120E2R100.0Z6-HXT	02968251	2	E	12,0	12,0	12,0	75,0	24,0	11,4	1,0	—	6	Cylindrical	■
JH142120E2R200.0Z6-HXT	02968252	2	E	12,0	12,0	12,0	75,0	24,0	11,4	2,0	—	6	Cylindrical	■
JH142120E2R300.0Z6-HXT	02968253	2	E	12,0	12,0	12,0	75,0	24,0	11,4	3,0	—	6	Cylindrical	■

■ Stocked standard.

JH142

High speed – High precision – Torical – Hardened steel – 2-5 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out = <0,005 mm
- DMM = h5
- DC = 0-0,01 mm
- RE = ±0,005 mm
- Regrind possible if DC is ≥ Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm					
JH142020J3R030.0Z2-HXT	02968255	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,3	6,72	0,9	2	Cylindrical	■
JH142020J3R030.0Z4-HXT	02968256	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,3	6,72	0,9	4	Cylindrical	■
JH142020J3R050.0Z2-HXT	02968257	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,5	6,79	0,9	2	Cylindrical	■
JH142020J3R050.0Z4-HXT	02968258	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,5	6,79	0,9	4	Cylindrical	■
JH142030J3R050.0Z2-HXT	02968259	3	J	3,0	6,0	3,0	60,0	15,0	2,8	0,5	4,3	0,9	2	Cylindrical	■
JH142030J3R050.0Z4-HXT	02968260	3	J	3,0	6,0	3,0	60,0	15,0	2,8	0,5	4,3	0,9	4	Cylindrical	■
JH142030J3R100.0Z2-HXT	02968261	3	J	3,0	6,0	3,0	60,0	15,0	2,8	1,0	4,4	0,9	2	Cylindrical	■
JH142030J3R100.0Z4-HXT	02968262	3	J	3,0	6,0	3,0	60,0	15,0	2,8	1,0	4,4	0,9	4	Cylindrical	■
JH142040J3R030.0Z2-HXT	02968263	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,3	2,45	0,9	2	Cylindrical	■
JH142040J3R030.0Z4-HXT	02970111	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,3	2,45	0,9	4	Cylindrical	■
JH142040J3R050.0Z2-HXT	02968265	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,5	2,48	0,9	2	Cylindrical	■
JH142040J3R050.0Z4-HXT	02968264	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,5	2,48	0,9	4	Cylindrical	■
JH142040J3R100.0Z2-HXT	02968266	3	J	4,0	6,0	4,0	60,0	20,0	3,7	1,0	2,53	0,9	2	Cylindrical	■
JH142040J3R100.0Z4-HXT	02968267	3	J	4,0	6,0	4,0	60,0	20,0	3,7	1,0	2,53	0,9	4	Cylindrical	■
JH142060J3R050.0Z4-HXT	02968268	3	J	6,0	8,0	6,0	75,0	30,0	5,6	0,5	1,75	0,9	4	Cylindrical	■
JH142060J3R050.0Z5-HXT	02968269	3	J	6,0	8,0	6,0	75,0	30,0	5,6	0,5	1,75	0,9	5	Cylindrical	■
JH142060J3R100.0Z4-HXT	02968270	3	J	6,0	8,0	6,0	75,0	30,0	5,6	1,0	1,77	0,9	4	Cylindrical	■
JH142060J3R100.0Z5-HXT	02968271	3	J	6,0	8,0	6,0	75,0	30,0	5,6	1,0	1,77	0,9	5	Cylindrical	■
JH142060J3R150.0Z5-HXT	02968272	3	J	6,0	8,0	6,0	75,0	30,0	5,6	1,5	1,8	0,9	5	Cylindrical	■
JH142060J3R200.0Z5-HXT	02968273	3	J	6,0	8,0	6,0	75,0	30,0	5,6	2,0	1,83	0,9	5	Cylindrical	■
JH142080J3R050.0Z5-HXT	02968274	3	J	8,0	10,0	8,0	85,0	40,0	7,4	0,5	1,34	0,9	5	Cylindrical	■
JH142080J3R100.0Z5-HXT	02968275	3	J	8,0	10,0	8,0	85,0	40,0	7,4	1,0	1,36	0,9	5	Cylindrical	■
JH142080J3R150.0Z5-HXT	02968276	3	J	8,0	10,0	8,0	85,0	40,0	7,4	1,5	1,37	0,9	5	Cylindrical	■
JH142080J3R200.0Z5-HXT	02968277	3	J	8,0	10,0	8,0	85,0	40,0	7,4	2,0	1,39	0,9	5	Cylindrical	■
JH142100J3R050.0Z5-HXT	02968278	3	J	10,0	12,0	10,0	100,0	50,0	9,4	0,5	1,1	0,9	5	Cylindrical	■
JH142100J3R100.0Z5-HXT	02968279	3	J	10,0	12,0	10,0	100,0	50,0	9,4	1,0	1,11	0,9	5	Cylindrical	■
JH142100J3R200.0Z5-HXT	02968280	3	J	10,0	12,0	10,0	100,0	50,0	9,4	2,0	1,13	0,9	5	Cylindrical	■
JH142020J6R030.0Z4-HXT	02968282	6	J	2,0	6,0	2,0	75,0	20,0	1,9	0,3	4,33	0,9	4	Cylindrical	■
JH142020J6R050.0Z4-HXT	02968283	6	J	2,0	6,0	2,0	75,0	20,0	1,9	0,5	4,36	0,9	4	Cylindrical	■
JH142030J6R050.0Z4-HXT	02968284	6	J	3,0	6,0	3,0	75,0	30,0	2,8	0,5	2,52	0,9	4	Cylindrical	■
JH142030J6R100.0Z4-HXT	02968285	6	J	3,0	6,0	3,0	75,0	30,0	2,8	1,0	2,56	0,9	4	Cylindrical	■
JH142040J6R030.0Z4-HXT	02968286	6	J	4,0	6,0	4,0	80,0	40,0	3,7	0,3	1,36	0,9	4	Cylindrical	■
JH142040J6R050.0Z4-HXT	02968287	6	J	4,0	6,0	4,0	80,0	40,0	3,7	0,5	1,37	0,9	4	Cylindrical	■
JH142040J6R100.0Z4-HXT	02968288	6	J	4,0	6,0	4,0	80,0	40,0	3,7	1,0	1,38	0,9	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfzp

Graphite

X-Heads

Minimaster

Cutting data – JH142 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z								v _c
				2	3	4	6	8	10	12	16	
P1	M/E	0.0500 0,0500	0.050 0,050	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	485 (460 — 530) 1600 (1600 — 1700)
P2	M/E	0.0500 0,0500	0.050 0,050	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	470 (450 — 520) 1550 (1500 — 1700)
P3	M/E	0.0500 0,0500	0.050 0,050	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	405 (390 — 450) 1325 (1300 — 1400)
P4	M/E	0.0500 0,0500	0.050 0,050	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	360 (340 — 390) 1175 (1200 — 1200)
P5	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	345 (330 — 380) 1125 (1100 — 1200)
P6	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	385 (370 — 420) 1275 (1300 — 1300)
P7	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	365 (350 — 400) 1200 (1200 — 1300)
P8	M/E	0.0500 0,0500	0.050 0,050	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	340 (330 — 380) 1125 (1100 — 1200)
P11	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	355 (340 — 390) 1175 (1200 — 1200)
K1	A/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	345 (330 — 380) 1125 (1100 — 1200)
K2	A/E	0.0500 0,0500	0.050 0,050	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.12 0,0048	300 (290 — 330) 980 (960 — 1000)
K3	A/E	0.0500 0,0500	0.050 0,050	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.12 0,0048	255 (240 — 280) 840 (790 — 910)
K4	A/E	0.0500 0,0500	0.050 0,050	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.12 0,0048	245 (230 — 260) 800 (760 — 850)
K5	A/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	345 (330 — 380) 1125 (1100 — 1200)
K6	A/E	0.0500 0,0500	0.050 0,050	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	500 (480 — 550) 1650 (1600 — 1800)
K7	A/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	440 (420 — 490) 1450 (1400 — 1600)
H3	M/A	0.0200 0,0200	0.020 0,020	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	95 (72 — 110) 310 (240 — 360)
H5	M/A	0.0400 0,0400	0.040 0,040	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	305 (290 — 330) 1000 (960 — 1000)
H7	M/A	0.0200 0,0200	0.020 0,020	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	95 (72 — 110) 310 (240 — 360)
H8	M/A	0.0400 0,0400	0.040 0,040	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	310 (290 — 330) 1025 (960 — 1000)
H11	M/A	0.0400 0,0400	0.040 0,040	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	390 (360 — 420) 1275 (1200 — 1300)
H12	M/A	0.0500 0,0500	0.050 0,050	0.0095 0,00038	0.014 0,00055	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.046 0,0018	0.055 0,0022	0.070 0,0028	345 (320 — 370) 1125 (1100 — 1200)
H21	M/A	0.0400 0,0400	0.040 0,040	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	310 (290 — 330) 1025 (960 — 1000)
H31	M/A	0.0300 0,0300	0.030 0,030	0.013 0,00050	0.019 0,00075	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.090 0,0036	140 (120 — 160) 460 (400 — 520)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

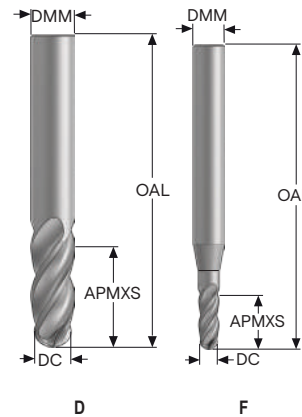
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

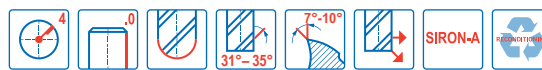
All cutting data are target values

ST5341

High performance – Steel – Ball nose – 4 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
ST5341-030F2B.0Z4	SIRA	10302669	2	F	3,0	6,0	7,0	58,0	10,683	3,127	1,5	4	Cylindrical	■
ST5341-040F2B.0Z4	SIRA	10302670	2	F	4,0	6,0	10,0	58,0	14,953	4,127	2,0	4	Cylindrical	■
ST5341-050F2B.0Z4	SIRA	10302671	2	F	5,0	6,0	12,0	58,0	17,334	5,127	2,5	4	Cylindrical	■
ST5341-060D2B.0Z4	SIRA	10302672	2	D	6,0	6,0	14,0	58,0	—	—	3,0	4	Cylindrical	■
ST5341-080D2B.0Z4	SIRA	10302673	2	D	8,0	8,0	18,0	64,0	—	—	4,0	4	Cylindrical	■
ST5341-100D2B.0Z4	SIRA	10302674	2	D	10,0	10,0	22,0	73,0	—	—	5,0	4	Cylindrical	■
ST5341-120D2B.0Z4	SIRA	10302675	2	D	12,0	12,0	26,0	84,0	—	—	6,0	4	Cylindrical	■
ST5341-160D2B.0Z4	SIRA	10302676	2	D	16,0	16,0	34,0	95,0	—	—	8,0	4	Cylindrical	■
ST5341-200D2B.0Z4	SIRA	10302677	2	D	20,0	20,0	42,0	109,0	—	—	10,0	4	Cylindrical	■
ST5341-030F3B.0Z4	SIRA	10302678	3	F	3,0	6,0	9,0	58,0	12,683	3,127	1,5	4	Cylindrical	■
ST5341-040F3B.0Z4	SIRA	10302679	3	F	4,0	6,0	12,0	58,0	16,953	4,127	2,0	4	Cylindrical	■
ST5341-050F3B.0Z4	SIRA	10302680	3	F	5,0	6,0	15,0	58,0	20,334	5,127	2,5	4	Cylindrical	■
ST5341-060D3B.0Z4	SIRA	10302681	3	D	6,0	6,0	18,0	64,0	—	—	3,0	4	Cylindrical	■
ST5341-080D3B.0Z4	SIRA	10302682	3	D	8,0	8,0	24,0	73,0	—	—	4,0	4	Cylindrical	■
ST5341-100D3B.0Z4	SIRA	10302683	3	D	10,0	10,0	30,0	85,0	—	—	5,0	4	Cylindrical	■
ST5341-120D3B.0Z4	SIRA	10302684	3	D	12,0	12,0	36,0	100,0	—	—	6,0	4	Cylindrical	■
ST5341-160D3B.0Z4	SIRA	10302685	3	D	16,0	16,0	48,0	115,0	—	—	8,0	4	Cylindrical	■
ST5341-200D3B.0Z4	SIRA	10302686	3	D	20,0	20,0	60,0	125,0	—	—	10,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

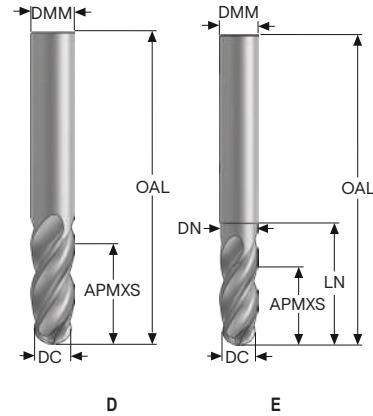
Graphite

X-Heads

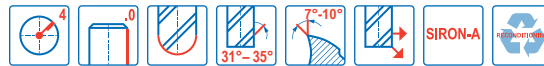
Minimaster

ST5341

High performance – Steel – Ball nose – 4 Flutes – Cylindrical – Inch



—Tolerances:
 —DMM= -.0001"/-.0004"
 —DC= +.000"/-.002"
 —RE= ±.0004"
 —Regrind possible if DC is ≥Ø.250

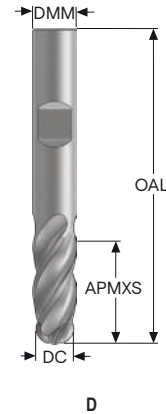


	Designation	Grade	Item number	Length index	Tool shape	DC		DMM		APMXS		OAL		LN		DN		RE	PCEDC	Shank	Stock standard
						inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm				
Non ferrous	ST5341-.125D2B.0Z4	SIRA	10302637	2	D	0.125	0.125	0.125	0.250	1.500	—	—	—	—	—	—	—	0.063	4	Cylindrical	■
	ST5341-.188D2B.0Z4	SIRA	10302638	2	D	0.188	0.188	0.375	2.000	—	—	—	—	—	—	—	—	0.094	4	Cylindrical	■
	ST5341-.250D2B.0Z4	SIRA	10302639	2	D	0.250	0.250	0.500	2.500	—	—	—	—	—	—	—	—	0.125	4	Cylindrical	■
Hard	ST5341-.250E2B.0Z4	SIRA	10302640	2	E	0.250	0.250	0.500	2.500	0.750	0.240	1.125	0.360	0.188	4	Cylindrical	■	0.125	4	Cylindrical	■
	ST5341-.313D2B.0Z4	SIRA	10302641	2	D	0.313	0.313	0.625	2.500	—	—	—	—	—	—	—	—	0.156	4	Cylindrical	■
	ST5341-.313E2B.0Z4	SIRA	10302642	2	E	0.313	0.313	0.625	3.000	0.938	0.300	1.125	0.360	0.188	4	Cylindrical	■	0.156	4	Cylindrical	■
	ST5341-.375D2B.0Z4	SIRA	10302643	2	D	0.375	0.375	0.750	2.500	—	—	—	—	—	—	—	—	0.188	4	Cylindrical	■
	ST5341-.375E2B.0Z4	SIRA	10302644	2	E	0.375	0.375	0.750	3.000	1.125	0.360	1.125	0.360	0.188	4	Cylindrical	■	0.188	4	Cylindrical	■
Plastic and cfrp	ST5341-.438D2B.0Z4	SIRA	10302645	2	D	0.438	0.438	0.875	2.750	—	—	—	—	—	—	—	—	0.219	4	Cylindrical	■
	ST5341-.500D2B.0Z4	SIRA	10302646	2	D	0.500	0.500	1.000	3.000	—	—	—	—	—	—	—	—	0.250	4	Cylindrical	■
	ST5341-.500E2B.0Z4	SIRA	10302647	2	E	0.500	0.500	1.000	3.000	1.500	0.480	1.500	0.480	0.375	4	Cylindrical	■	0.250	4	Cylindrical	■
	ST5341-.625D2B.0Z4	SIRA	10302648	2	D	0.625	0.625	1.250	3.500	—	—	—	—	—	—	—	—	0.313	4	Cylindrical	■
	ST5341-.625E2B.0Z4	SIRA	10302649	2	E	0.625	0.625	1.250	3.500	1.875	0.600	1.875	0.600	0.375	4	Cylindrical	■	0.313	4	Cylindrical	■
	ST5341-.750D2B.0Z4	SIRA	10302650	2	D	0.750	0.750	1.500	4.000	—	—	—	—	—	—	—	—	0.375	4	Cylindrical	■
Graphite	ST5341-.750E2B.0Z4	SIRA	10302651	2	E	0.750	0.750	1.500	4.000	2.250	0.720	2.250	0.720	0.375	4	Cylindrical	■	0.375	4	Cylindrical	■
	ST5341-1.00D2B.0Z4	SIRA	10302652	2	D	1.000	1.000	2.000	5.000	—	—	—	—	—	—	—	—	0.500	4	Cylindrical	■
	ST5341-1.00E2B.0Z4	SIRA	10302653	2	E	1.000	1.000	2.000	5.000	3.000	0.960	3.000	0.960	0.500	4	Cylindrical	■	0.500	4	Cylindrical	■

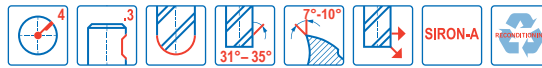
■ Stocked standard.

ST5341

High performance – Steel – Ball nose – 4 Flutes – Weldon



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,01 mm
- Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
ST5341-060D2B.3Z4	SIRA	10302687	2	D	6,0	6,0	14,0	58,0	3,0	4	Weldon	☐
ST5341-080D2B.3Z4	SIRA	10302688	2	D	8,0	8,0	18,0	64,0	4,0	4	Weldon	☐
ST5341-100D2B.3Z4	SIRA	10302689	2	D	10,0	10,0	22,0	73,0	5,0	4	Weldon	☐
ST5341-120D2B.3Z4	SIRA	10302690	2	D	12,0	12,0	26,0	84,0	6,0	4	Weldon	☐
ST5341-160D2B.3Z4	SIRA	10302691	2	D	16,0	16,0	34,0	95,0	8,0	4	Weldon	☐
ST5341-200D2B.3Z4	SIRA	10302692	2	D	20,0	20,0	42,0	109,0	10,0	4	Weldon	☐
ST5341-060D3B.3Z4	SIRA	10302693	3	D	6,0	6,0	18,0	64,0	3,0	4	Weldon	☐
ST5341-080D3B.3Z4	SIRA	10302694	3	D	8,0	8,0	24,0	73,0	4,0	4	Weldon	☐
ST5341-100D3B.3Z4	SIRA	10302695	3	D	10,0	10,0	30,0	85,0	5,0	4	Weldon	☐
ST5341-120D3B.3Z4	SIRA	10302696	3	D	12,0	12,0	36,0	100,0	6,0	4	Weldon	☐
ST5341-160D3B.3Z4	SIRA	10302697	3	D	16,0	16,0	48,0	115,0	8,0	4	Weldon	☐
ST5341-200D3B.3Z4	SIRA	10302698	3	D	20,0	20,0	60,0	125,0	10,0	4	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

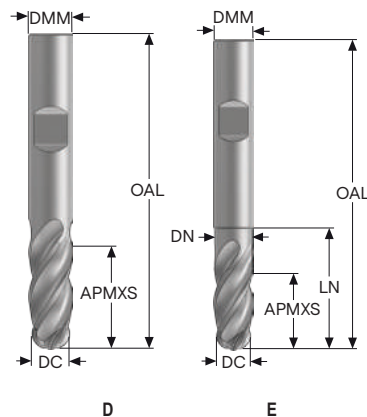
Graphite

X-Heads

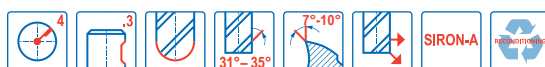
Minimaster

ST5341

High performance – Steel – Ball nose – 4 Flutes – Weldon – Inch



—Tolerances:
—DMM= -.0001"/-.0004"
—DC= +.000"/-.002"
—RE= ±.0004"
—Reground possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					inch	inch	inch	inch	inch	inch	inch			
ST5341-.250D2B.3Z4	SIRA	10302654	2	D	0.250	0.250	0.500	2.500	—	—	0.125	4	Weldon	☐
ST5341-.250E2B.3Z4	SIRA	10302655	2	E	0.250	0.250	0.500	2.500	0.750	0.240	0.125	4	Weldon	☐
ST5341-.313D2B.3Z4	SIRA	10302656	2	D	0.313	0.313	0.625	2.500	—	—	0.156	4	Weldon	☐
ST5341-.313E2B.3Z4	SIRA	10302657	2	E	0.313	0.313	0.625	3.000	0.938	0.300	0.156	4	Weldon	☐
ST5341-.375D2B.3Z4	SIRA	10302658	2	D	0.375	0.375	0.750	2.500	—	—	0.188	4	Weldon	☐
ST5341-.375E2B.3Z4	SIRA	10302659	2	E	0.375	0.375	0.750	3.000	1.125	0.360	0.188	4	Weldon	☐
ST5341-.438D2B.3Z4	SIRA	10302660	2	D	0.438	0.438	0.875	2.750	—	—	0.219	4	Weldon	☐
ST5341-.500D2B.3Z4	SIRA	10302661	2	D	0.500	0.500	1.000	3.000	—	—	0.250	4	Weldon	☐
ST5341-.500E2B.3Z4	SIRA	10302662	2	E	0.500	0.500	1.000	3.000	1.500	0.480	0.250	4	Weldon	☐
ST5341-.625D2B.3Z4	SIRA	10302663	2	D	0.625	0.625	1.250	3.500	—	—	0.313	4	Weldon	☐
ST5341-.625E2B.3Z4	SIRA	10302664	2	E	0.625	0.625	1.250	3.500	1.875	0.600	0.313	4	Weldon	☐
ST5341-.750D2B.3Z4	SIRA	10302665	2	D	0.750	0.750	1.500	4.000	—	—	0.375	4	Weldon	☐
ST5341-.750E2B.3Z4	SIRA	10302666	2	E	0.750	0.750	1.500	4.000	2.250	0.720	0.375	4	Weldon	☐
ST5341-1.00D2B.3Z4	SIRA	10302667	2	D	1.000	1.000	2.000	5.000	—	—	0.500	4	Weldon	☐
ST5341-1.00E2B.3Z4	SIRA	10302668	2	E	1.000	1.000	2.000	5.000	3.000	0.960	0.500	4	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – ST5341 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z										v _c	
				1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1		
P1	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	260 (210 — 310) 850 (690 — 1000)	Steel and cast iron
P2	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	250 (200 — 310) 820 (660 — 1000)	
P3	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	215 (180 — 260) 710 (600 — 850)	
P4	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	190 (160 — 230) 620 (530 — 750)	
P5	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	180 (150 — 220) 590 (500 — 720)	
P6	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	205 (170 — 250) 670 (560 — 820)	
P7	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	190 (160 — 230) 620 (530 — 750)	
P8	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	180 (150 — 220) 590 (500 — 720)	
P11	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	185 (150 — 230) 610 (500 — 750)	
P12	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,20 0.0080	110 (88 — 130) 360 (290 — 420)	
K1	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	255 (210 — 310) 840 (690 — 1000)	Non ferrous
K2	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	220 (180 — 270) 720 (600 — 880)	
K3	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	185 (150 — 230) 610 (500 — 750)	
K4	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	175 (150 — 210) 570 (500 — 680)	
K5	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	105 (85 — 130) 345 (280 — 420)	Hard
K6	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	155 (130 — 190) 510 (430 — 620)	
K7	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	135 (110 — 160) 445 (370 — 520)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – ST5341 Copy milling roughing – Inch

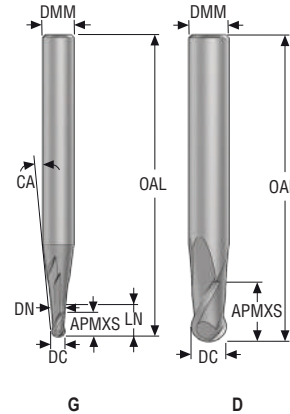
SMG		a _e /DC	a _p /DC	f _z										v _c
				1/8	3/16	1/4	5/16	3/8	7/16	1/2	5/8	3/4	1	
P1	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	260 (210 — 310) 850 (690 — 1000)
P2	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	250 (200 — 310) 820 (660 — 1000)
P3	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	215 (180 — 260) 710 (600 — 850)
P4	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	190 (160 — 230) 620 (530 — 750)
P5	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	180 (150 — 220) 590 (500 — 720)
P6	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	205 (170 — 250) 670 (560 — 820)
P7	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	190 (160 — 230) 620 (530 — 750)
P8	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	180 (150 — 220) 590 (500 — 720)
P11	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	185 (150 — 230) 610 (500 — 750)
P12	M/A/D/E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	20 (88 — 130) 360 (290 — 420)
K1	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	255 (210 — 310) 840 (690 — 1000)
K2	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	220 (180 — 270) 720 (600 — 880)
K3	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	185 (150 — 230) 610 (500 — 750)
K4	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	175 (150 — 210) 570 (500 — 680)
K5	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	105 (85 — 130) 345 (280 — 420)
K6	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	155 (130 — 190) 510 (430 — 620)
K7	E	0,060 0.060	2,0 2.0	0,028 0.0011	0,042 0.0017	0,055 0.0022	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,22 0.0085	135 (110 — 160) 445 (370 — 520)

For cutting data recalculations, see pages 687 – 695

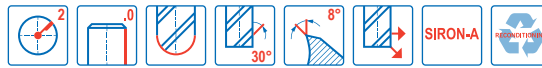
SMG = Seco material group
 Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
 All cutting data are target values

JHB970

High speed – Universal – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
JHB970020G1B.0Z2	SIRA	10072058	1	G	mm	mm	mm	mm	mm	mm	mm	mm			
JHB970030D1B.0Z2	SIRA	10072059	1	D	2,0	3,0	3,0	50,0	10,0	1,9	1,0	2,5	2	Cylindrical	■
JHB970040D1B.0Z2	SIRA	10072060	1	D	3,0	3,0	4,5	50,0	—	—	1,5	—	2	Cylindrical	■
JHB970050D1B.0Z2	SIRA	10072061	1	D	4,0	4,0	6,0	60,0	—	—	2,0	—	2	Cylindrical	■
JHB970060D1B.0Z2	SIRA	10072062	1	D	5,0	5,0	7,5	60,0	—	—	2,5	—	2	Cylindrical	■
JHB970020G2B.0Z2	SIRA	10072063	2	G	6,0	6,0	9,0	75,0	—	—	3,0	—	2	Cylindrical	■
JHB970025G2B.0Z2	SIRA	10072064	2	G	2,0	6,0	3,0	60,0	4,0	1,9	1,0	8,0	2	Cylindrical	■
JHB970030G2B.0Z2	SIRA	10072065	2	G	2,5	6,0	4,0	60,0	5,0	2,4	1,25	7,5	2	Cylindrical	■
JHB970035G2B.0Z2	SIRA	10072066	2	G	3,0	6,0	4,5	60,0	6,0	2,8	1,5	5,5	2	Cylindrical	■
JHB970040G2B.0Z2	SIRA	10072067	2	G	3,5	6,0	5,0	60,0	7,0	3,2	1,75	4,5	2	Cylindrical	■
JHB970050G2B.0Z2	SIRA	10072068	2	G	4,0	6,0	6,0	60,0	8,0	3,7	2,0	3,0	2	Cylindrical	■
JHB970060G2B.0Z2	SIRA	10072069	2	G	5,0	6,0	7,5	60,0	10,0	4,6	2,5	2,0	2	Cylindrical	■
JHB970080D2B.0Z2	SIRA	10072070	2	G	6,0	8,0	9,0	75,0	12,0	5,6	3,0	2,5	2	Cylindrical	■
JHB970100D2B.0Z2	SIRA	10072071	2	D	8,0	8,0	12,0	75,0	—	—	4,0	—	2	Cylindrical	■
JHB970120D2B.0Z2	SIRA	10072072	2	D	10,0	10,0	15,0	80,0	—	—	5,0	—	2	Cylindrical	■
JHB970160D2B.0Z2	SIRA	10072073	2	D	12,0	12,0	18,0	90,0	—	—	6,0	—	2	Cylindrical	■
JHB97020G3B.0Z2	SIRA	10072074	3	G	16,0	16,0	24,0	100,0	—	—	8,0	—	2	Cylindrical	■
JHB970030G3B.0Z2	SIRA	10072075	3	G	2,0	6,0	3,0	80,0	4,0	1,9	1,0	8,0	2	Cylindrical	■
JHB970040G3B.0Z2	SIRA	10072076	3	G	3,0	6,0	4,5	80,0	6,0	2,8	1,5	5,5	2	Cylindrical	■
JHB970060G3B.0Z2	SIRA	10072077	3	G	4,0	6,0	6,0	80,0	8,0	3,7	2,0	3,0	2	Cylindrical	■
JHB970080D3B.0Z2	SIRA	10072078	3	G	6,0	8,0	9,0	100,0	12,0	5,6	3,0	2,5	2	Cylindrical	■
JHB970100D3B.0Z2	SIRA	10072079	3	D	8,0	8,0	12,0	108,0	—	—	4,0	—	2	Cylindrical	■
JHB970120D3B.0Z2	SIRA	10072080	3	D	10,0	10,0	15,0	125,0	—	—	5,0	—	2	Cylindrical	■
JHB970120D3B.0Z2	SIRA	10072080	3	D	12,0	12,0	18,0	125,0	—	—	6,0	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

Graphite

X-Heads

Minimaster

Cutting data – JHB970 Copy milling roughing

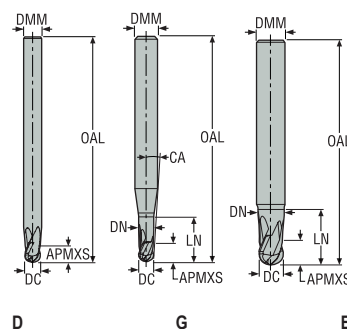
SMG		a _e /DC	a _p /DC	f _z												v _c	
				2	2.5	3	3.5	4	5	6	8	10	12	16			
P1	M	0.200	1.0	0.011	0.014	0.016	0.019	0.022	0.028	0.032	0.044	0.055	0.065	0.080	210	(190 — 230)	
		0.200	1.0	0.00044	0.00055	0.00065	0.00075	0.00085	0.0011	0.0013	0.0017	0.0022	0.0026	0.0032	690	(630 — 750)	
P2	M	0.200	1.0	0.011	0.014	0.017	0.019	0.022	0.028	0.034	0.044	0.055	0.065	0.080	205	(180 — 230)	
		0.200	1.0	0.00044	0.00055	0.00065	0.00075	0.00085	0.0011	0.0013	0.0017	0.0022	0.0026	0.0032	670	(600 — 750)	
P3	M	0.200	1.0	0.010	0.013	0.016	0.018	0.020	0.026	0.032	0.042	0.050	0.060	0.075	180	(160 — 200)	
		0.200	1.0	0.00040	0.00050	0.00065	0.00070	0.00080	0.0010	0.0013	0.0017	0.0020	0.0024	0.0030	590	(530 — 650)	
P4	M	0.200	1.0	0.010	0.013	0.015	0.018	0.020	0.026	0.030	0.040	0.050	0.060	0.075	155	(140 — 170)	
		0.200	1.0	0.00040	0.00050	0.00060	0.00070	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	510	(460 — 550)	
P5	M	0.200	1.0	0.010	0.012	0.015	0.018	0.020	0.025	0.030	0.040	0.050	0.060	0.075	150	(140 — 170)	
		0.200	1.0	0.00040	0.00048	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	490	(460 — 550)	
P6	M	0.200	1.0	0.010	0.012	0.015	0.017	0.020	0.025	0.030	0.040	0.050	0.060	0.075	170	(150 — 190)	
		0.200	1.0	0.00040	0.00048	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	560	(500 — 620)	
P7	M	0.200	1.0	0.010	0.012	0.015	0.017	0.020	0.025	0.030	0.040	0.050	0.060	0.075	160	(140 — 180)	
		0.200	1.0	0.00040	0.00048	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	520	(460 — 590)	
P8	M	0.200	1.0	0.010	0.013	0.016	0.018	0.020	0.026	0.032	0.042	0.050	0.060	0.075	150	(140 — 170)	
		0.200	1.0	0.00040	0.00050	0.00065	0.00070	0.00080	0.0010	0.0013	0.0017	0.0020	0.0024	0.0030	490	(460 — 550)	
P11	M	0.200	1.0	0.010	0.012	0.015	0.017	0.020	0.025	0.030	0.040	0.050	0.060	0.075	75	(67 — 86)	
		0.200	1.0	0.00040	0.00048	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	245	(220 — 280)	
P12	M	0.200	1.0	0.0070	0.0085	0.010	0.012	0.014	0.017	0.020	0.028	0.034	0.040	0.050	48	(42 — 53)	
		0.200	1.0	0.00028	0.00034	0.00040	0.00048	0.00055	0.00065	0.00080	0.0011	0.0013	0.0016	0.0020	155	(140 — 170)	
M1	E	0.200	1.0	0.0090	0.011	0.013	0.015	0.018	0.022	0.026	0.036	0.044	0.050	0.065	90	(80 — 100)	
		0.200	1.0	0.00036	0.00044	0.00050	0.00060	0.00070	0.00085	0.0010	0.0014	0.0017	0.0020	0.0026	295	(270 — 320)	
M2	E	0.200	1.0	0.0080	0.010	0.012	0.014	0.016	0.020	0.024	0.032	0.040	0.048	0.060	75	(65 — 85)	
		0.200	1.0	0.00032	0.00040	0.00048	0.00055	0.00065	0.00080	0.00095	0.0013	0.0016	0.0019	0.0024	245	(220 — 270)	
M3	E	0.150	1.0	0.0060	0.0075	0.0090	0.010	0.012	0.015	0.018	0.024	0.030	0.036	0.044	65	(55 — 75)	
		0.150	1.0	0.00024	0.00030	0.00036	0.00040	0.00048	0.00060	0.00070	0.00095	0.0012	0.0014	0.0017	215	(190 — 240)	
M4	E	0.150	1.0	0.0050	0.0065	0.0080	0.0090	0.010	0.013	0.016	0.020	0.026	0.032	0.038	49	(42 — 56)	
		0.150	1.0	0.00020	0.00026	0.00032	0.00036	0.00040	0.00050	0.00065	0.00080	0.0010	0.0013	0.0015	160	(140 — 180)	
M5	E	0.150	1.0	0.0050	0.0065	0.0080	0.0090	0.010	0.013	0.016	0.020	0.026	0.032	0.038	41	(35 — 47)	
		0.150	1.0	0.00020	0.00026	0.00032	0.00036	0.00040	0.00050	0.00065	0.00080	0.0010	0.0013	0.0015	135	(120 — 150)	
S1	E	0.100	0.80	0.0060	0.0075	0.0090	0.010	0.012	0.015	0.018	0.024	0.030	0.036	0.044	50	(40 — 59)	
		0.100	0.80	0.00024	0.00030	0.00036	0.00040	0.00048	0.00060	0.00070	0.00095	0.0012	0.0014	0.0017	165	(140 — 190)	
S2	E	0.100	0.80	0.0060	0.0075	0.0090	0.010	0.012	0.015	0.018	0.024	0.030	0.036	0.044	40	(33 — 48)	
		0.100	0.80	0.00024	0.00030	0.00036	0.00040	0.00048	0.00060	0.00070	0.00095	0.0012	0.0014	0.0017	130	(110 — 150)	
S3	E	0.100	0.60	0.0040	0.0050	0.0060	0.0070	0.0080	0.010	0.012	0.016	0.020	0.024	0.028	30	(20 — 39)	
		0.100	0.60	0.00016	0.00020	0.00024	0.00028	0.00032	0.00040	0.00048	0.00065	0.00080	0.00095	0.0011	100	(66 — 120)	
S11	E	0.200	1.0	0.010	0.012	0.015	0.018	0.020	0.025	0.030	0.040	0.050	0.060	0.075	90	(79 — 100)	
		0.200	1.0	0.00040	0.00048	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	295	(260 — 320)	
S12	E	0.200	1.0	0.010	0.012	0.015	0.018	0.020	0.025	0.030	0.040	0.050	0.060	0.075	70	(61 — 80)	
		0.200	1.0	0.00040	0.00048	0.00060	0.00065	0.00080	0.0010	0.0012	0.0016	0.0020	0.0024	0.0030	230	(210 — 260)	
S13	E	0.200	1.0	0.0085	0.011	0.013	0.015	0.017	0.022	0.026	0.034	0.044	0.050	0.065	55	(48 — 63)	
		0.200	1.0	0.00034	0.00044	0.00050	0.00060	0.00065	0.00085	0.0010	0.0013	0.0017	0.0020	0.0026	180	(160 — 200)	

For cutting data recalculations, see pages 687 – 695

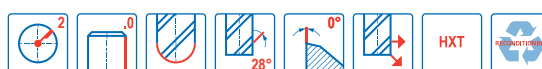
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH112

High speed – High precision – Hardened steel – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- Run-out= <0,005 mm
- DMM= h5
- DC= 0-0,01 mm
- RE= $\pm 0,005$ mm
- Regrind possible if DC is $\geq \phi 6$

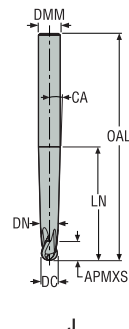


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JH112020G1B.0Z2-HXT	02970112	1	G	2,0	4,0	2,0	40,0	4,0	1,9	1,0	6,45	2	Cylindrical	■
JH112030G1B.0Z2-HXT	02970113	1	G	3,0	4,0	3,0	40,0	6,0	2,8	1,5	3,3	2	Cylindrical	■
JH112040D1B.0Z2-HXT	02970114	1	D	4,0	4,0	4,0	40,0	–	–	2,0	–	2	Cylindrical	■
JH112050G1B.0Z2-HXT	02970115	1	G	5,0	6,0	5,0	50,0	10,0	4,6	2,5	2,0	2	Cylindrical	■
JH112060D1B.0Z2-HXT	02970116	1	D	6,0	6,0	6,0	50,0	–	–	3,0	–	2	Cylindrical	■
JH112080D1B.0Z2-HXT	02970117	1	D	8,0	8,0	8,0	65,0	–	–	4,0	–	2	Cylindrical	■
JH112100D1B.0Z2-HXT	02970118	1	D	10,0	10,0	10,0	65,0	–	–	5,0	–	2	Cylindrical	■
JH112020G2B.0Z2-HXT	02970119	2	G	2,0	3,0	2,0	50,0	10,0	1,9	1,0	2,5	2	Cylindrical	■
JH112030D2B.0Z2-HXT	02970120	2	D	3,0	3,0	3,0	50,0	–	–	1,5	–	2	Cylindrical	■
JH112040D2B.0Z2-HXT	02970121	2	D	4,0	4,0	4,0	60,0	–	–	2,0	–	2	Cylindrical	■
JH112050D2B.0Z2-HXT	02970122	2	D	5,0	5,0	5,0	60,0	–	–	2,5	–	2	Cylindrical	■
JH112060D2B.0Z2-HXT	02970123	2	D	6,0	6,0	6,0	75,0	–	–	3,0	–	2	Cylindrical	■
JH112020G3B.0Z2-HXT	02970124	3	G	2,0	6,0	2,0	60,0	4,0	1,9	1,0	8,12	2	Cylindrical	■
JH112025G3B.0Z2-HXT	02970125	3	G	2,5	6,0	2,5	60,0	5,0	2,4	1,25	7,39	2	Cylindrical	■
JH112030G3B.0Z2-HXT	02970126	3	G	3,0	6,0	3,0	60,0	6,0	2,8	1,5	5,5	2	Cylindrical	■
JH112035G3B.0Z2-HXT	02968289	3	G	3,5	6,0	3,5	65,0	7,0	3,2	1,75	3,81	2	Cylindrical	■
JH112040G3B.0Z2-HXT	02970127	3	G	4,0	6,0	4,0	65,0	8,0	3,7	2,0	3,34	2	Cylindrical	■
JH112050G3B.0Z2-HXT	02970128	3	G	5,0	6,0	5,0	65,0	10,0	4,6	2,5	2,0	2	Cylindrical	■
JH112060G3B.0Z2-HXT	02970129	3	G	6,0	8,0	6,0	75,0	12,0	5,6	3,0	2,78	2	Cylindrical	■
JH112080E3B.0Z2-HXT	02968290	3	E	8,0	8,0	8,0	75,0	16,0	7,4	4,0	–	2	Cylindrical	■
JH112100E3B.0Z2-HXT	02968291	3	E	10,0	10,0	10,0	80,0	20,0	9,4	5,0	–	2	Cylindrical	■
JH112120E3B.0Z2-HXT	02968292	3	E	12,0	12,0	12,0	90,0	24,0	11,4	6,0	–	2	Cylindrical	■
JH112020G4B.0Z2-HXT	02970130	4	G	2,0	6,0	2,0	80,0	20,0	1,9	1,0	3,82	2	Cylindrical	■
JH112030G4B.0Z2-HXT	02970131	4	G	3,0	6,0	3,0	80,0	20,0	2,8	1,5	2,91	2	Cylindrical	■
JH112040G4B.0Z2-HXT	02970132	4	G	4,0	6,0	4,0	80,0	20,0	3,7	2,0	1,97	2	Cylindrical	■
JH112050G4B.0Z2-HXT	02970133	4	G	5,0	6,0	5,0	100,0	50,0	4,6	2,5	0,53	2	Cylindrical	■
JH112060D4B.0Z2-HXT	02968293	4	D	6,0	6,0	6,0	100,0	–	–	3,0	–	2	Cylindrical	■
JH112080D4B.0Z2-HXT	02968294	4	D	8,0	8,0	8,0	110,0	–	–	4,0	–	2	Cylindrical	■
JH112100D4B.0Z2-HXT	02968295	4	D	10,0	10,0	10,0	125,0	–	–	5,0	–	2	Cylindrical	■
JH112120D4B.0Z2-HXT	02968296	4	D	12,0	12,0	12,0	125,0	–	–	6,0	–	2	Cylindrical	■

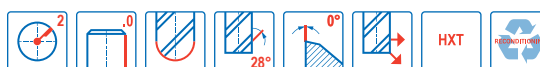
■ Stocked standard.

JH112

High speed – High precision – Hardened steel – Ball nose – 2 Flutes – Cylindrical



—Tolerances:
—Run-out= <0,005 mm
—DMM= h5
—DC= 0-0,01 mm
—RE= ±0,005 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm					
JH112020J5B.0Z2-HXT	02970134	5	J	2,0	6,0	2,0	80,0	35,0	1,9	1,0	3,3	3,55	2	Cylindrical	■
JH112030J5B.0Z2-HXT	02970135	5	J	3,0	6,0	3,0	80,0	40,0	2,8	1,5	2,2	2,5	2	Cylindrical	■
JH112040J5B.0Z2-HXT	02970136	5	J	4,0	6,0	4,0	80,0	52,0	3,7	2,0	1,2	1,4	2	Cylindrical	■
JH112050J5B.0Z2-HXT	02970137	5	J	5,0	8,0	5,0	100,0	56,0	4,6	2,5	1,6	1,95	2	Cylindrical	■
JH112060J5B.0Z2-HXT	02970138	5	J	6,0	8,0	6,0	100,0	56,0	5,6	3,0	1,1	1,4	2	Cylindrical	■
JH112080J5B.0Z2-HXT	02970139	5	J	8,0	10,0	8,0	125,0	62,0	7,4	4,0	1,0	1,43	2	Cylindrical	■
JH112100J5B.0Z2-HXT	02970140	5	J	10,0	12,0	10,0	125,0	61,0	9,4	5,0	1,0	1,5	2	Cylindrical	■
JH112060J6B.0Z2-HXT	02970141	6	J	6,0	10,0	6,0	125,0	62,0	5,6	3,0	2,0	2,3	2	Cylindrical	■
JH112080J6B.0Z2-HXT	02970142	6	J	8,0	12,0	8,0	150,0	67,0	7,4	4,0	1,8	2,3	2	Cylindrical	■
JH112100J6B.0Z2-HXT	02970143	6	J	10,0	12,0	10,0	150,0	79,0	9,4	5,0	0,8	1,1	2	Cylindrical	■

■ Stocked standard.

Cutting data – JH112 Copy milling finishing

SMG		a _p /DC	f _z										v _c	
			2	2.5	3	3.5	4	5	6	8	10	12		
K1	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	520 (500 — 730) 1700 (1700 — 2300)	Steel and cast iron
K2	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	445 (430 — 630) 1450 (1500 — 2000)	
K3	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	380 (360 — 530) 1250 (1200 — 1700)	
K4	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	360 (350 — 510) 1175 (1200 — 1600)	
K5	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	415 (370 — 610) 1350 (1300 — 2000)	
K6	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	610 (550 — 900) 2000 (1900 — 2900)	
K7	E	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	680 (560 — 790) 2225 (1900 — 2500)	Stainless steel and S-materials
H3	M	0.16 0.16	0.028 0.0011	0.036 0.0014	0.042 0.0017	0.048 0.0019	0.055 0.0022	0.070 0.0028	0.085 0.0034	0.11 0.0044	0.14 0.0055	0.17 0.0065	155 (150 — 230) 510 (500 — 750)	
H5	M	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	285 (240 — 330) 940 (790 — 1000)	
H7	M	0.16 0.16	0.028 0.0011	0.036 0.0014	0.042 0.0017	0.048 0.0019	0.055 0.0022	0.070 0.0028	0.085 0.0034	0.11 0.0044	0.14 0.0055	0.17 0.0065	155 (150 — 230) 510 (500 — 750)	
H8	M	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	285 (240 — 330) 940 (790 — 1000)	Non ferrous
H11	M	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	360 (300 — 420) 1175 (990 — 1300)	
H12	M	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	330 (280 — 380) 1075 (920 — 1200)	
H21	M	0.30 0.30	0.030 0.0012	0.038 0.0015	0.044 0.0017	0.050 0.0020	0.060 0.0024	0.075 0.0030	0.090 0.0036	0.12 0.0048	0.15 0.0060	0.18 0.0070	285 (240 — 330) 940 (790 — 1000)	
H31	M	0.30 0.30	0.026 0.0010	0.032 0.0013	0.040 0.0016	0.046 0.0018	0.050 0.0020	0.065 0.0026	0.080 0.0032	0.10 0.0040	0.13 0.0050	0.16 0.0065	300 (290 — 430) 980 (960 — 1400)	Hard

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH112 Copy milling roughing

SMG		a _e /DC	a _p /DC	f _z										v _c
				2	2.5	3	3.5	4	5	6	8	10	12	
K1	E	0.250	0.15	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	315 (310 — 450)
		0,250	0,15	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1025 (1100 — 1400)
K2	E	0.250	0.15	0.028	0.036	0.044	0.050	0.060	0.070	0.085	0.12	0.14	0.17	280 (270 — 390)
		0,250	0,15	0,0011	0,0014	0,0017	0,0020	0,0024	0,0028	0,0034	0,0048	0,0055	0,0065	920 (890 — 1200)
K3	E	0.250	0.15	0.028	0.036	0.044	0.050	0.060	0.070	0.085	0.12	0.14	0.17	235 (230 — 330)
		0,250	0,15	0,0011	0,0014	0,0017	0,0020	0,0024	0,0028	0,0034	0,0048	0,0055	0,0065	770 (760 — 1000)
K4	E	0.250	0.15	0.028	0.036	0.044	0.050	0.060	0.070	0.085	0.12	0.14	0.17	225 (220 — 320)
		0,250	0,15	0,0011	0,0014	0,0017	0,0020	0,0024	0,0028	0,0034	0,0048	0,0055	0,0065	740 (730 — 1000)
K5	E	0.160	0.15	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	280 (250 — 410)
		0,160	0,15	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	920 (830 — 1300)
K6	E	0.160	0.15	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	415 (370 — 610)
		0,160	0,15	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1350 (1300 — 2000)
K7	E	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	420 (350 — 490)
		0,250	0,10	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1375 (1200 — 1600)
H3	M	0.120	0.040	0.028	0.036	0.042	0.048	0.055	0.070	0.085	0.11	0.14	0.17	110 (100 — 160)
		0,120	0,040	0,0011	0,0014	0,0017	0,0019	0,0022	0,0028	0,0034	0,0044	0,0055	0,0065	360 (330 — 520)
H5	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	175 (150 — 200)
		0,250	0,10	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	570 (500 — 650)
H7	M	0.120	0.040	0.028	0.036	0.042	0.048	0.055	0.070	0.085	0.11	0.14	0.17	110 (100 — 160)
		0,120	0,040	0,0011	0,0014	0,0017	0,0019	0,0022	0,0028	0,0034	0,0044	0,0055	0,0065	360 (330 — 520)
H8	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	175 (150 — 200)
		0,250	0,10	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	570 (500 — 650)
H11	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	225 (190 — 260)
		0,250	0,10	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	740 (630 — 850)
H12	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	205 (170 — 240)
		0,250	0,10	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	670 (560 — 780)
H21	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	175 (150 — 200)
		0,250	0,10	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	570 (500 — 650)
H31	M	0.200	0.10	0.026	0.032	0.040	0.046	0.050	0.065	0.080	0.10	0.13	0.16	200 (200 — 280)
		0,200	0,10	0,0010	0,0013	0,0016	0,0018	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	660 (660 — 910)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

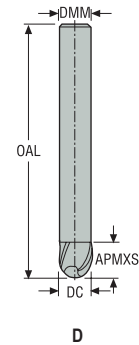
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

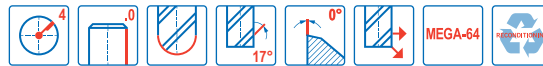
All cutting data are target values

JH150

High speed – Hardened steel – Ball nose – 4 Flutes – Cylindrical



- Tolerances:
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,01 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
150060-MEGA-64	00019198	2	D	6,0	6,0	6,0	80,0	3,0	4	Cylindrical	■
150080-MEGA-64	00019208	2	D	8,0	8,0	8,0	85,0	4,0	4	Cylindrical	■
150100-MEGA-64	00019219	2	D	10,0	10,0	10,0	100,0	5,0	4	Cylindrical	■
150120-MEGA-64	00019254	2	D	12,0	12,0	12,0	100,0	6,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH150 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				6	8	10	12	
K1	A	0.300 0,300	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	290 (310 — 370) 950 (1100 — 1200)
K2	A	0.300 0,300	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	250 (270 — 320) 820 (890 — 1000)
K3	A	0.300 0,300	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	210 (230 — 270) 690 (760 — 880)
K5	A	0.200 0,200	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	255 (270 — 330) 840 (890 — 1000)
K6	A	0.200 0,200	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	375 (390 — 500) 1225 (1300 — 1600)
K7	A	0.200 0,200	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	325 (340 — 430) 1075 (1200 — 1400)
H3	M	0.0500 0,0500	0.020 0,020	0.085 0,0034	0.11 0,0044	0.14 0,0055	0.17 0,0065	85 (88 — 120) 280 (290 — 390)
H5	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	180 (160 — 200) 590 (530 — 650)
H7	M	0.0500 0,0500	0.020 0,020	0.085 0,0034	0.11 0,0044	0.14 0,0055	0.17 0,0065	85 (88 — 120) 280 (290 — 390)
H8	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	180 (160 — 200) 590 (530 — 650)
H11	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	230 (210 — 250) 750 (690 — 820)
H12	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	210 (190 — 230) 690 (630 — 750)
H21	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	180 (160 — 200) 590 (530 — 650)
H31	M	0.150 0,150	0.060 0,060	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	125 (130 — 180) 410 (430 — 590)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

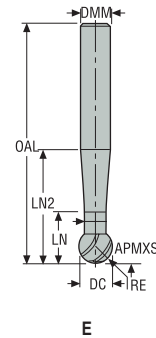
 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

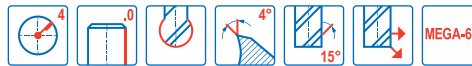
All cutting data are target values

JH160

High speed – Hardened steel – Ball nose – 4 Flutes – Cylindrical



—Tolerances:
—DMM= h5
—DC= 0,02/-0,06 mm
—SA=250°



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
160030-MEGA-64	00040365	2	E	3,0	3,0	2,3	60,0	4,5	1,8	1,5	4	Cylindrical	■
160040-MEGA-64	00040366	2	E	4,0	4,0	3,1	60,0	5,6	2,4	2,0	4	Cylindrical	■
160050-MEGA-64	00040367	2	E	5,0	5,0	3,9	70,0	6,4	3,0	2,5	4	Cylindrical	■
160060-MEGA-64	00040368	2	E	6,0	6,0	4,7	80,0	9,7	3,6	3,0	4	Cylindrical	■
160080-MEGA-64	00040369	2	E	8,0	8,0	6,2	85,0	11,2	4,8	4,0	4	Cylindrical	■
160100-MEGA-64	00040370	2	E	10,0	10,0	7,8	100,0	15,6	6,0	5,0	4	Cylindrical	■
160120-MEGA-64	00040371	2	E	12,0	12,0	9,4	125,0	17,2	7,2	6,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH160 Copy milling finishing

SMG		a _e /DC	a _p /DC	f _z							v _c
				3	4	5	6	8	10	12	
P1	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	550 (450 — 700)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1800 (1500 — 2200)
P2	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	530 (440 — 680)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1750 (1500 — 2200)
P3	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	460 (380 — 590)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1500 (1300 — 1900)
P4	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	405 (340 — 520)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1325 (1200 — 1700)
P5	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	385 (320 — 490)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1275 (1100 — 1600)
P6	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	430 (360 — 560)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1400 (1200 — 1800)
P7	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	410 (340 — 520)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1350 (1200 — 1700)
P8	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	385 (320 — 490)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1275 (1100 — 1600)
P11	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	395 (330 — 510)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1300 (1100 — 1600)
P12	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	235 (200 — 300)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	770 (660 — 980)
H3	M/E/A	0.0100	0.0075	0.040	0.050	0.065	0.080	0.10	0.13	0.16	85 (91 — 110)
		0,0100	0,0075	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	280 (300 — 360)
H5	M/E/A	0.0100	0.016	0.040	0.050	0.065	0.080	0.10	0.13	0.16	340 (320 — 360)
		0,0100	0,016	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	1125 (1100 — 1100)
H7	M/E/A	0.0100	0.0075	0.040	0.050	0.065	0.080	0.10	0.13	0.16	85 (91 — 110)
		0,0100	0,0075	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	280 (300 — 360)
H8	M/E/A	0.0100	0.016	0.040	0.050	0.065	0.080	0.10	0.13	0.16	340 (320 — 360)
		0,0100	0,016	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	1125 (1100 — 1100)
H11	M/E/A	0.0100	0.016	0.040	0.050	0.065	0.080	0.10	0.13	0.16	430 (400 — 460)
		0,0100	0,016	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	1400 (1400 — 1500)
H12	M/E/A	0.0200	0.024	0.050	0.070	0.085	0.10	0.14	0.17	0.20	355 (340 — 380)
		0,0200	0,024	0,0020	0,0028	0,0034	0,0040	0,0055	0,0065	0,0080	1175 (1200 — 1200)
H21	M/E/A	0.0100	0.016	0.040	0.050	0.065	0.080	0.10	0.13	0.16	340 (320 — 360)
		0,0100	0,016	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	1125 (1100 — 1100)
H31	M/E/A	0.0100	0.016	0.040	0.050	0.065	0.080	0.10	0.13	0.16	165 (180 — 210)
		0,0100	0,016	0,0016	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	540 (600 — 680)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values



STAINLESS AND S-MATERIALS

Seco offers a complete range of high performance solid carbide square shoulder end mills, ballnose cutters and finish end mills for high productivity in stainless steel and ISO S-materials.

- JS754, JS755, JS720, JHP751, JHP760, JHP770, JHP780, JHP794, JCG790, JH770, JH740, JH710, JH790, JH730, JHP994, SHF712, SME714, SME716 and JCO710 for chamfer or radius type.
- JS730, JH780, JHB720, JH721, JH722, SMB713, SMB714 and SMB716 for ball-nose type.
- JH724, JH726, JH734, JH736, JH744, JH746 for barrel type.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool selection Stainless and S-materials

Universal								
Steel and cast iron								
Name		JS754	JS755	JS720	JS730	JHP751	JHP760	JHP770
Page(s)		326	343	354	374	378	381	385
Family name		SOLID ²	SOLID ²	SOLID ²	SOLID ²	HPM	HPM	HPM
Type of mill								
Shank	Cylindrical	■	■	■	■	■	■	■
	Weldon	■	■	■	□	■	■	■
	SafeLock	□	□	□	□			□
Number of Flutes		4	5	6-9	6	2-4	2,3,4	4-5
CSP		■					■	■
Diameter range	Metric	3-25	6-25	6-25	6-25	2-20	4-25	6-25
	Inch							
Length availability		2,3	2,3	2,3	2,3	1,2	2,3	2
Operation								
								
								
								
SMG								
X-Heads	M1	●	●	●	●		●	
	M2	●	●	●	●		●	
	M3	●	●	●	●		●	
	M4	●	●	●	●		●	
	M5	●	●	●	●		●	
Minimaster	S1	●	●	●	●	●		
	S2	●	●	●	●	●		
	S3	●	●	●	●	●		
	S11	●	●	●	●	●		●
	S12	●	●	●	●	●		●
	S13	●	●	●	●	●		●

■ Stock standard □ Weldon available, delivery time is 3 days. □ Safe-Lock available, delivery time is 6 days
 ● Preferred choice ○ Alternative choice

Tool selection Stainless and S-materials

										
Name		JHP780	JHP794	JCG790	JH724	JH726	JH734	JH736	JH744	JH746
Page(s)		392	381	399	431	431	405	407	409	411
Family name		HPM	HPM	Ceramic	HSM/ TORNADO	HSM/ TORNADO	HSM/ TORNADO	HSM/ TORNADO	HSM/ TORNADO	HSM/ TORNADO
Type of mill										
Shank	Cylindrical	■		■	■	■	■	■	■	■
	Weldon	■	■							
	Safelock	□								
Number of Flutes		4	4	5-6	6	6	4	6	4	6
CSP		■	■						■	■
Diameter range	Metric	6-25	6-25	6-25	10	10	6-16	10-16	4-16	10-16
	Inch									
Length availability		2	2	2	2	2	2	2	2,4	2
Operation										
										
										
SMG										
M1			●		●	●	●	●	●	●
M2			●		●	●	●	●	●	●
M3			●		●	●	●	●	●	●
M4			●		●	●				
M5			●		●	●				
S1		●		●	●	●				
S2		●		●	●	●				
S3		●		●	●	●				
S11					●	●	●	●	●	●
S12					●	●	●	●	●	●
S13					●	●	●	●	●	●

■ Stock standard □ Weldon available, delivery time is 3 days. □ Safe-Lock available, delivery time is 6 days

● Preferred choice ○ Alternative choice

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool selection Stainless and S-materials

								
								
Name		JH770	JH740	JH710	JH790	JH730	JHP994	JH780
Page(s)		413	415	417	419	421	423	425
Family name		HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HPM	HSM/TORNADO
Type of mill								
Shank	Cylindrical							
	Weldon							
	Safelock							
Number of Flutes		3,4,5,6	4-5	5	6	5,6,7	4	4
CSP								
Diameter range	Metric	3-10	6-10	6-8	9,5	6-10	6-10	1,83-4,89
	Inch							
Length availability		2	2	2	2,3	2	3	2
Operation								
								
								
SMG								
M1								
M2								
M3								
M4								
M5								
S1								
S2		•	•	•	•	•	•	•
S3								
S11		•	•	•	•	•	•	
S12		•	•	•	•	•	•	•
S13								

Tool selection Stainless and S-materials

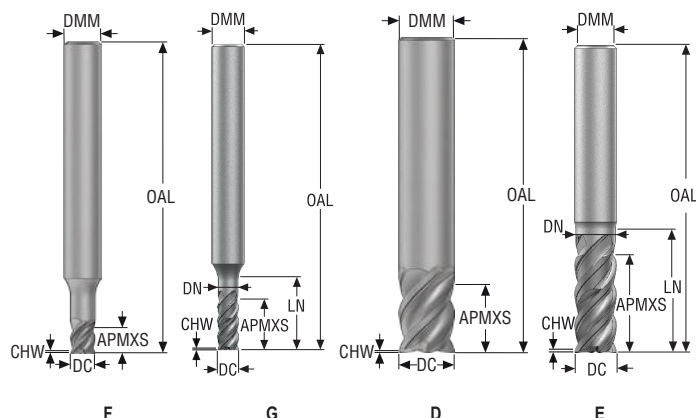
								Universal
Name		JHB720	JH721	JH722	SHF712	SME714/716	SMB713/714/416	Steel and cast iron
Page(s)		427	429	431	500	500	260	
Family name		HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HFM	MINI	MINI	Stainless steel and S-materials
Type of mill								
Shank	Cylindrical	■	■	■	■	■	■	Non ferrous
	Weldon							
	Safelock							
Number of Flutes		3	6	6	3-4-5	3-4-5	4	
CSP								
Diameter range	Metric	2-16	6-8	10	3-6	0,5-2	0,3-3	Hard
	Inch							
Length availability		2	2	2	1,2,3,4	1,2,3,4	2,4	
Operation								Plastic and cfrp
								
								
SMG								Graphite
M1		●						
M2		●						
M3		●						
M4		●						
M5		●						
S1		○						X-Heads
S2		○	●	●	●	●	●	
S3		○						
S11		●	●	●				
S12		●	●	●	●	●	●	
S13		●						Minimaster

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

JS754

High performance – Square – ISO- M and ISO- S – 4 Flutes – Cylindrical – Chamfer

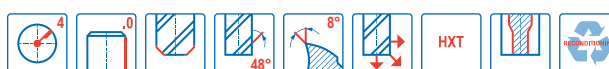


—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible if DC is $\geq \varnothing 6$

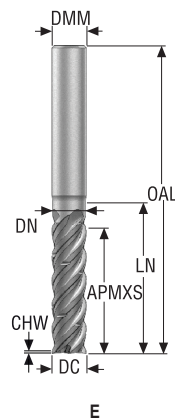


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm	mm		
JS754030F1C.0Z4-HXT	10165556	1	F	3,0	6,0	4,0	50,0	6,0	3,05	0,035	–	4	Cylindrical	■
JS754040F1C.0Z4-HXT	10164855	1	F	4,0	6,0	6,0	50,0	9,0	4,05	0,045	–	4	Cylindrical	■
JS754050F1C.0Z4-HXT	10165557	1	F	5,0	6,0	7,0	50,0	10,0	5,05	0,055	–	4	Cylindrical	■
JS754060D1C.0Z4-HXT	10164856	1	D	6,0	6,0	8,0	50,0	–	–	0,075	–	4	Cylindrical	■
JS754080D1C.0Z4-HXT	10164857	1	D	8,0	8,0	11,0	58,0	–	–	0,1	–	4	Cylindrical	■
JS754100D1C.0Z4-HXT	10164858	1	D	10,0	10,0	13,0	58,0	–	–	0,125	–	4	Cylindrical	■
JS754120D1C.0Z4-HXT	10164859	1	D	12,0	12,0	15,0	67,0	–	–	0,15	–	4	Cylindrical	■
JS754160D1C.0Z4-HXT	10164860	1	D	16,0	16,0	19,0	73,0	–	–	0,2	–	4	Cylindrical	■
JS754030G2C.0Z4-HXT	03186807	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,035	7,0	4	Cylindrical	■
JS754040G2C.0Z4-HXT	03186808	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,045	4,0	4	Cylindrical	■
JS754050G2C.0Z4-HXT	03186809	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,055	2,0	4	Cylindrical	■
JS754060E2C.0Z4-HXT	03186810	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,075	–	4	Cylindrical	■
JS754080E2C.0Z4-HXT	03186811	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	–	4	Cylindrical	■
JS754100E2C.0Z4-HXT	03186812	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,125	–	4	Cylindrical	■
JS754120E2C.0Z4-HXT	03186813	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,15	–	4	Cylindrical	■
JS754160E2C.0Z4-HXT	03186814	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,2	–	4	Cylindrical	■
JS754200E2C.0Z4-HXT	03186815	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,25	–	4	Cylindrical	■
JS754250E2C.0Z4-HXT	03186816	2	E	25,0	25,0	50,0	121,0	65,0	23,8	0,3	–	4	Cylindrical	■
JS754060E3C.0Z4-HXT	03186823	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,075	–	4	Cylindrical	■
JS754080E3C.0Z4-HXT	03186824	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,1	–	4	Cylindrical	■
JS754100E3C.0Z4-HXT	03186825	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,125	–	4	Cylindrical	■
JS754120E3C.0Z4-HXT	03186826	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,15	–	4	Cylindrical	■
JS754160E3C.0Z4-HXT	03186827	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,2	–	4	Cylindrical	■
JS754200E3C.0Z4-HXT	03186828	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,25	–	4	Cylindrical	■
JS754250E3C.0Z4-HXT	03186829	3	E	25,0	25,0	85,0	153,0	94,0	23,8	0,3	–	4	Cylindrical	■

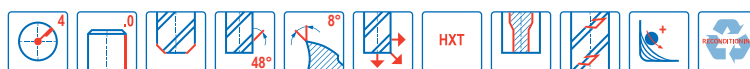
■ Stocked standard.

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS754100E2C.0Z4C-HXT	03186817	2	E	■	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Cylindrical	■
JS754120E2C.0Z4C-HXT	03186818	2	E	■	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Cylindrical	■
JS754060E3C.0Z4C-HXT	03200550	3	E	■	6,0	6,0	21,0	65,0	26,0	5,7	0,075	4	Cylindrical	■
JS754080E3C.0Z4C-HXT	03200551	3	E	■	8,0	8,0	32,0	75,0	37,0	7,6	0,1	4	Cylindrical	■
JS754100E3C.0Z4C-HXT	03186830	3	E	■	10,0	10,0	40,0	89,0	47,0	9,5	0,125	4	Cylindrical	■
JS754120E3C.0Z4C-HXT	03186831	3	E	■	12,0	12,0	45,0	100,0	53,0	11,4	0,15	4	Cylindrical	■
JS754160E3C.0Z4C-HXT	03186832	3	E	■	16,0	16,0	55,0	115,0	65,0	15,2	0,2	4	Cylindrical	■
JS754200E3C.0Z4C-HXT	03186833	3	E	■	20,0	20,0	61,0	125,0	72,0	19,0	0,25	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

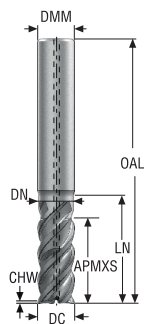
Graphite

X-Heads

Minimaster

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Cylindrical – Chamfer



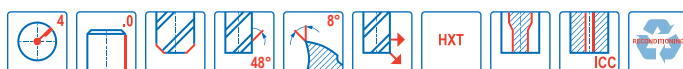
E

—Tolerances:

—DMM= h5

$$-DC = e7$$

—Regrind possible

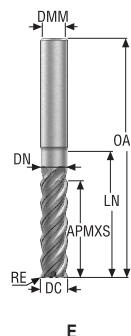


Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
J5754060E2C.0Z4A-HXT	03186834	2	E	■	6,0	6,0	12,0	57,0	18,0	5,7	0,075	4	Cylindrical	■
J5754080E2C.0Z4A-HXT	03186835	2	E	■	8,0	8,0	16,0	63,0	25,0	7,6	0,1	4	Cylindrical	■
J5754100E2C.0Z4A-HXT	03186836	2	E	■	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Cylindrical	■
J5754120E2C.0Z4A-HXT	03186837	2	E	■	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Cylindrical	■
J5754160E2C.0Z4A-HXT	03186838	2	E	■	16,0	16,0	32,0	92,0	42,0	15,2	0,2	4	Cylindrical	■
J5754200E2C.0Z4A-HXT	03186839	2	E	■	20,0	20,0	40,0	104,0	51,0	19,0	0,25	4	Cylindrical	■

■ Stocked standard.

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Cylindrical – Corner radius



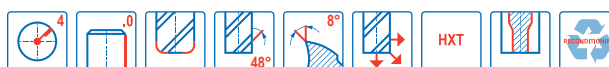
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0.02 mm

—Regrind possible

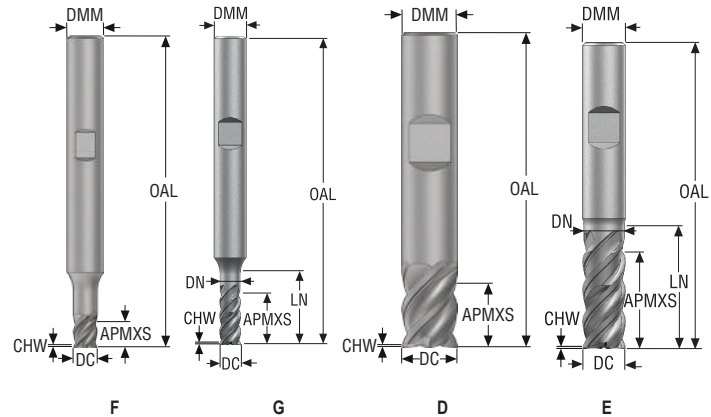


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm	mm	
JS754160E2R300.0Z4-HXT	03186859	2	E	16,0	16,0	32,0	92,0	42,0	15,2	3,0	4	Cylindrical	■
JS754160E2R400.0Z4-HXT	03186860	2	E	16,0	16,0	32,0	92,0	42,0	15,2	4,0	4	Cylindrical	■
JS754160E2R600.0Z4-HXT	03186861	2	E	16,0	16,0	32,0	92,0	42,0	15,2	6,0	4	Cylindrical	■
JS754200E2R050.0Z4-HXT	03186862	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,5	4	Cylindrical	■
JS754200E2R100.0Z4-HXT	03186863	2	E	20,0	20,0	40,0	104,0	51,0	19,0	1,0	4	Cylindrical	■
JS754200E2R200.0Z4-HXT	03186864	2	E	20,0	20,0	40,0	104,0	51,0	19,0	2,0	4	Cylindrical	■
JS754200E2R300.0Z4-HXT	03186865	2	E	20,0	20,0	40,0	104,0	51,0	19,0	3,0	4	Cylindrical	■
JS754200E2R400.0Z4-HXT	03186866	2	E	20,0	20,0	40,0	104,0	51,0	19,0	4,0	4	Cylindrical	■
JS754200E2R600.0Z4-HXT	03186867	2	E	20,0	20,0	40,0	104,0	51,0	19,0	6,0	4	Cylindrical	■
JS754060E3R020.0Z4-HXT	03186873	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,2	4	Cylindrical	■
JS754060E3R050.0Z4-HXT	03186874	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,5	4	Cylindrical	■
JS754060E3R100.0Z4-HXT	03186875	3	E	6,0	6,0	21,0	65,0	26,0	5,7	1,0	4	Cylindrical	■
JS754080E3R050.0Z4-HXT	03186876	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,5	4	Cylindrical	■
JS754080E3R100.0Z4-HXT	03186877	3	E	8,0	8,0	32,0	75,0	37,0	7,6	1,0	4	Cylindrical	■
JS754100E3R050.0Z4-HXT	03186878	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,5	4	Cylindrical	■
JS754100E3R100.0Z4-HXT	03186879	3	E	10,0	10,0	40,0	89,0	47,0	9,5	1,0	4	Cylindrical	■
JS754100E3R200.0Z4-HXT	03186880	3	E	10,0	10,0	40,0	89,0	47,0	9,5	2,0	4	Cylindrical	■
JS754100E3R300.0Z4-HXT	03186881	3	E	10,0	10,0	40,0	89,0	47,0	9,5	3,0	4	Cylindrical	■
JS754120E3R050.0Z4-HXT	03186882	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,5	4	Cylindrical	■
JS754120E3R100.0Z4-HXT	03186883	3	E	12,0	12,0	45,0	100,0	53,0	11,4	1,0	4	Cylindrical	■
JS754120E3R200.0Z4-HXT	03186884	3	E	12,0	12,0	45,0	100,0	53,0	11,4	2,0	4	Cylindrical	■
JS754120E3R300.0Z4-HXT	03186885	3	E	12,0	12,0	45,0	100,0	53,0	11,4	3,0	4	Cylindrical	■
JS754160E3R050.0Z4-HXT	03186886	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,5	4	Cylindrical	■
JS754160E3R100.0Z4-HXT	03186887	3	E	16,0	16,0	55,0	115,0	65,0	15,2	1,0	4	Cylindrical	■
JS754160E3R200.0Z4-HXT	03186888	3	E	16,0	16,0	55,0	115,0	65,0	15,2	2,0	4	Cylindrical	■
JS754160E3R300.0Z4-HXT	03186889	3	E	16,0	16,0	55,0	115,0	65,0	15,2	3,0	4	Cylindrical	■
JS754160E3R400.0Z4-HXT	03186890	3	E	16,0	16,0	55,0	115,0	65,0	15,2	4,0	4	Cylindrical	■
JS754160E3R600.0Z4-HXT	03186891	3	E	16,0	16,0	55,0	115,0	65,0	15,2	6,0	4	Cylindrical	■
JS754200E3R050.0Z4-HXT	03186892	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,5	4	Cylindrical	■
JS754200E3R100.0Z4-HXT	03186893	3	E	20,0	20,0	61,0	125,0	72,0	19,0	1,0	4	Cylindrical	■
JS754200E3R200.0Z4-HXT	03186894	3	E	20,0	20,0	61,0	125,0	72,0	19,0	2,0	4	Cylindrical	■
JS754200E3R300.0Z4-HXT	03186895	3	E	20,0	20,0	61,0	125,0	72,0	19,0	3,0	4	Cylindrical	■
JS754200E3R400.0Z4-HXT	03186896	3	E	20,0	20,0	61,0	125,0	72,0	19,0	4,0	4	Cylindrical	■
JS754200E3R600.0Z4-HXT	03186897	3	E	20,0	20,0	61,0	125,0	72,0	19,0	6,0	4	Cylindrical	■

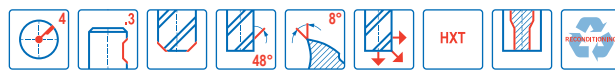
■ Stocked standard.

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Weldon – Chamfer



—Tolerances:
—DMM= h5
—DC= e7
—Regind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JS754030F1C.3Z4-HXT	10165658	1	F	3,0	6,0	4,0	50,0	6,0	3,05	0,035	–	4	Weldon	□
JS754040F1C.3Z4-HXT	10164861	1	F	4,0	6,0	6,0	50,0	9,0	4,05	0,045	–	4	Weldon	□
JS754050F1C.3Z4-HXT	10165660	1	F	5,0	6,0	7,0	50,0	10,0	5,05	0,055	–	4	Weldon	□
JS754060D1C.3Z4-HXT	10164862	1	D	6,0	6,0	8,0	50,0	–	–	0,075	–	4	Weldon	□
JS754080D1C.3Z4-HXT	10164863	1	D	8,0	8,0	11,0	58,0	–	–	0,1	–	4	Weldon	□
JS754100D1C.3Z4-HXT	10164864	1	D	10,0	10,0	13,0	58,0	–	–	0,125	–	4	Weldon	□
JS754120D1C.3Z4-HXT	10164865	1	D	12,0	12,0	15,0	67,0	–	–	0,15	–	4	Weldon	□
JS754160D1C.3Z4-HXT	10164866	1	D	16,0	16,0	19,0	73,0	–	–	0,2	–	4	Weldon	□
JS754030G2C.3Z4-HXT	03186975	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,035	7,0	4	Weldon	□
JS754040G2C.3Z4-HXT	03186976	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,045	4,0	4	Weldon	□
JS754050G2C.3Z4-HXT	03186977	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,055	2,0	4	Weldon	□
JS754060E2C.3Z4-HXT	03186978	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,075	–	4	Weldon	■
JS754080E2C.3Z4-HXT	03186979	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	–	4	Weldon	■
JS754100E2C.3Z4-HXT	03186980	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,125	–	4	Weldon	■
JS754120E2C.3Z4-HXT	03186981	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,15	–	4	Weldon	■
JS754160E2C.3Z4-HXT	03186982	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,2	–	4	Weldon	■
JS754200E2C.3Z4-HXT	03186983	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,25	–	4	Weldon	■
JS754250E2C.3Z4-HXT	03186984	2	E	25,0	25,0	50,0	121,0	65,0	23,8	0,3	–	4	Weldon	■
JS754060E3C.3Z4-HXT	03186990	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,075	–	4	Weldon	■
JS754080E3C.3Z4-HXT	03186991	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,1	–	4	Weldon	■
JS754100E3C.3Z4-HXT	03186992	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,125	–	4	Weldon	■
JS754120E3C.3Z4-HXT	03186993	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,15	–	4	Weldon	■
JS754160E3C.3Z4-HXT	03186994	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,2	–	4	Weldon	■
JS754200E3C.3Z4-HXT	03186995	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,25	–	4	Weldon	■
JS754250E3C.3Z4-HXT	03186996	3	E	25,0	25,0	85,0	153,0	94,0	23,8	0,3	–	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfprp

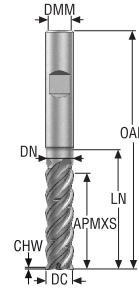
Graphite

X-Heads

Minimaster

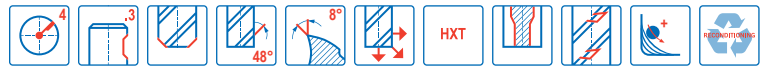
JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Weldon – Chamfer – Chip splitters



E

—Tolerances:
—DMM= h5
—DC= e7
—Regrind possible

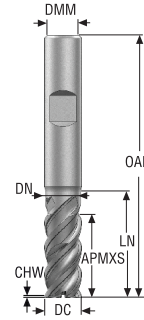


Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm	mm		
JS754100E2C.3Z4C-HXT	03186985	2	E	■	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Weldon	■
JS754120E2C.3Z4C-HXT	03186986	2	E	■	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Weldon	■
JS754060E3C.3Z4C-HXT	03200562	3	E	■	6,0	6,0	21,0	65,0	26,0	5,7	0,075	4	Weldon	■
JS754080E3C.3Z4C-HXT	03200563	3	E	■	8,0	8,0	32,0	75,0	37,0	7,6	0,1	4	Weldon	■
JS754100E3C.3Z4C-HXT	03186997	3	E	■	10,0	10,0	40,0	89,0	47,0	9,5	0,125	4	Weldon	■
JS754120E3C.3Z4C-HXT	03186998	3	E	■	12,0	12,0	45,0	100,0	53,0	11,4	0,15	4	Weldon	■
JS754160E3C.3Z4C-HXT	03186999	3	E	■	16,0	16,0	55,0	115,0	65,0	15,2	0,2	4	Weldon	■
JS754200E3C.3Z4C-HXT	03187000	3	E	■	20,0	20,0	61,0	125,0	72,0	19,0	0,25	4	Weldon	■

■ Stocked standard.

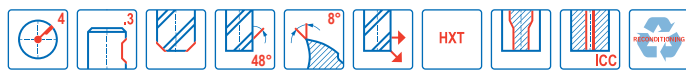
JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Weldon – Chamfer



E

- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS754060E2C.3Z4A-HXT	03187001	2	E	■	6,0	6,0	12,0	57,0	18,0	5,7	0,075	4	Weldon	■
JS754080E2C.3Z4A-HXT	03187002	2	E	■	8,0	8,0	16,0	63,0	25,0	7,6	0,1	4	Weldon	■
JS754100E2C.3Z4A-HXT	03187003	2	E	■	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Weldon	■
JS754120E2C.3Z4A-HXT	03187004	2	E	■	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Weldon	■
JS754160E2C.3Z4A-HXT	03187005	2	E	■	16,0	16,0	32,0	92,0	42,0	15,2	0,2	4	Weldon	■
JS754200E2C.3Z4A-HXT	03187006	2	E	■	20,0	20,0	40,0	104,0	51,0	19,0	0,25	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

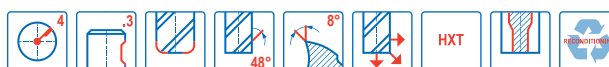
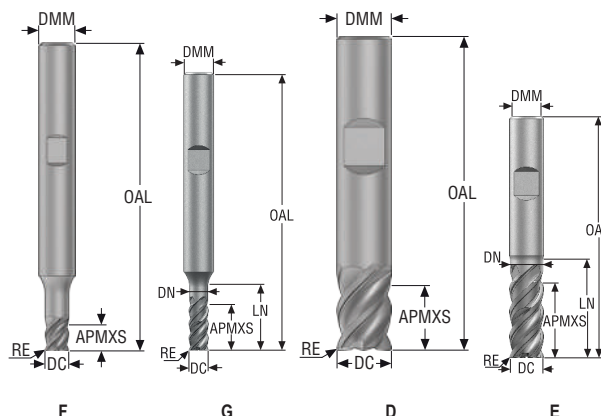
Graphite

X-Heads

Minimaster

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Weldon – Corner radius



—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0.02 mm

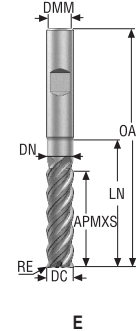
—Regrind possible if DC is $\geq \varnothing 6$

Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm	mm		
JS754030F1R020.3Z4-HXT	10165560	1	F	3,0	6,0	4,0	50,0	6,0	3,05	0,2	–	4	Weldon	□
JS754040F1R020.3Z4-HXT	10164879	1	F	4,0	6,0	6,0	50,0	9,0	4,05	0,2	–	4	Weldon	□
JS754050F1R020.3Z4-HXT	10165561	1	F	5,0	6,0	7,0	50,0	10,0	5,05	0,2	–	4	Weldon	□
JS754060D1R020.3Z4-HXT	10164880	1	D	6,0	6,0	8,0	50,0	–	–	0,2	–	4	Weldon	□
JS754060D1R050.3Z4-HXT	10164881	1	D	6,0	6,0	8,0	50,0	–	–	0,5	–	4	Weldon	□
JS754080D1R050.3Z4-HXT	10164883	1	D	8,0	8,0	11,0	58,0	–	–	0,5	–	4	Weldon	□
JS754100D1R050.3Z4-HXT	10164885	1	D	10,0	10,0	13,0	58,0	–	–	0,5	–	4	Weldon	□
JS754100D1R100.3Z4-HXT	10164886	1	D	10,0	10,0	13,0	58,0	–	–	1,0	–	4	Weldon	□
JS754120D1R050.3Z4-HXT	10164887	1	D	12,0	12,0	15,0	67,0	–	–	0,5	–	4	Weldon	□
JS754120D1R100.3Z4-HXT	10164888	1	D	12,0	12,0	15,0	67,0	–	–	1,0	–	4	Weldon	□
JS754160D1R050.3Z4-HXT	10164889	1	D	16,0	16,0	19,0	73,0	–	–	0,5	–	4	Weldon	□
JS754160D1R100.3Z4-HXT	10164890	1	D	16,0	16,0	19,0	73,0	–	–	1,0	–	4	Weldon	□
JS754030G2R020.3Z4-HXT	03187007	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,2	7,0	4	Weldon	□
JS754040G2R020.3Z4-HXT	03187008	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,2	4,0	4	Weldon	□
JS754050G2R020.3Z4-HXT	03187009	2	G	5,0	6,0	10,0	57,0	16,0	4,75	0,2	2,0	4	Weldon	□
JS754060E2R020.3Z4-HXT	03187010	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,2	–	4	Weldon	■
JS754060E2R050.3Z4-HXT	03187011	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	–	4	Weldon	■
JS754060E2R100.3Z4-HXT	03187012	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	–	4	Weldon	■
JS754080E2R050.3Z4-HXT	03187013	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	–	4	Weldon	■
JS754080E2R100.3Z4-HXT	03187014	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	–	4	Weldon	■
JS754100E2R050.3Z4-HXT	03187015	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	–	4	Weldon	■
JS754100E2R100.3Z4-HXT	03187016	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	–	4	Weldon	■
JS754100E2R150.3Z4-HXT	03200564	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,5	–	4	Weldon	■
JS754100E2R200.3Z4-HXT	03187017	2	E	10,0	10,0	20,0	72,0	29,0	9,5	2,0	–	4	Weldon	■
JS754100E2R300.3Z4-HXT	03187018	2	E	10,0	10,0	20,0	72,0	29,0	9,5	3,0	–	4	Weldon	■
JS754120E2R050.3Z4-HXT	03187019	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	–	4	Weldon	■
JS754120E2R100.3Z4-HXT	03187020	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	–	4	Weldon	■
JS754120E2R150.3Z4-HXT	03200565	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,5	–	4	Weldon	■
JS754120E2R200.3Z4-HXT	03187021	2	E	12,0	12,0	24,0	83,0	35,0	11,4	2,0	–	4	Weldon	■
JS754120E2R300.3Z4-HXT	03187022	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,0	–	4	Weldon	■
JS754160E2R050.3Z4-HXT	03187023	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	–	4	Weldon	■
JS754160E2R100.3Z4-HXT	03187024	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	–	4	Weldon	■
JS754160E2R200.3Z4-HXT	03187025	2	E	16,0	16,0	32,0	92,0	42,0	15,2	2,0	–	4	Weldon	■
JS754160E2R300.3Z4-HXT	03187026	2	E	16,0	16,0	32,0	92,0	42,0	15,2	3,0	–	4	Weldon	■
JS754160E2R400.3Z4-HXT	03187027	2	E	16,0	16,0	32,0	92,0	42,0	15,2	4,0	–	4	Weldon	■
JS754160E2R600.3Z4-HXT	03187028	2	E	16,0	16,0	32,0	92,0	42,0	15,2	6,0	–	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

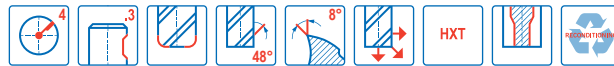
JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Weldon – Corner radius



E

- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS754200E2R050.3Z4-HXT	03187029	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,5	4	Weldon	■
JS754200E2R100.3Z4-HXT	03187030	2	E	20,0	20,0	40,0	104,0	51,0	19,0	1,0	4	Weldon	■
JS754200E2R200.3Z4-HXT	03187031	2	E	20,0	20,0	40,0	104,0	51,0	19,0	2,0	4	Weldon	■
JS754200E2R300.3Z4-HXT	03187032	2	E	20,0	20,0	40,0	104,0	51,0	19,0	3,0	4	Weldon	■
JS754200E2R400.3Z4-HXT	03187033	2	E	20,0	20,0	40,0	104,0	51,0	19,0	4,0	4	Weldon	■
JS754200E2R600.3Z4-HXT	03187034	2	E	20,0	20,0	40,0	104,0	51,0	19,0	6,0	4	Weldon	■
JS754060E3R020.3Z4-HXT	03187040	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,2	4	Weldon	□
JS754060E3R050.3Z4-HXT	03187041	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,5	4	Weldon	□
JS754060E3R100.3Z4-HXT	03187042	3	E	6,0	6,0	21,0	65,0	26,0	5,7	1,0	4	Weldon	□
JS754080E3R050.3Z4-HXT	03187043	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,5	4	Weldon	□
JS754080E3R100.3Z4-HXT	03187044	3	E	8,0	8,0	32,0	75,0	37,0	7,6	1,0	4	Weldon	□
JS754100E3R050.3Z4-HXT	03187045	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,5	4	Weldon	□
JS754100E3R100.3Z4-HXT	03187046	3	E	10,0	10,0	40,0	89,0	47,0	9,5	1,0	4	Weldon	□
JS754100E3R200.3Z4-HXT	03187047	3	E	10,0	10,0	40,0	89,0	47,0	9,5	2,0	4	Weldon	□
JS754100E3R300.3Z4-HXT	03187049	3	E	10,0	10,0	40,0	89,0	47,0	9,5	3,0	4	Weldon	□
JS754120E3R050.3Z4-HXT	03187050	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,5	4	Weldon	□
JS754120E3R100.3Z4-HXT	03187051	3	E	12,0	12,0	45,0	100,0	53,0	11,4	1,0	4	Weldon	□
JS754120E3R200.3Z4-HXT	03187052	3	E	12,0	12,0	45,0	100,0	53,0	11,4	2,0	4	Weldon	□
JS754120E3R300.3Z4-HXT	03187053	3	E	12,0	12,0	45,0	100,0	53,0	11,4	3,0	4	Weldon	□
JS754160E3R050.3Z4-HXT	03187054	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,5	4	Weldon	■
JS754160E3R100.3Z4-HXT	03187055	3	E	16,0	16,0	55,0	115,0	65,0	15,2	1,0	4	Weldon	□
JS754160E3R200.3Z4-HXT	03187056	3	E	16,0	16,0	55,0	115,0	65,0	15,2	2,0	4	Weldon	□
JS754160E3R300.3Z4-HXT	03187057	3	E	16,0	16,0	55,0	115,0	65,0	15,2	3,0	4	Weldon	□
JS754160E3R400.3Z4-HXT	03187058	3	E	16,0	16,0	55,0	115,0	65,0	15,2	4,0	4	Weldon	□
JS754160E3R600.3Z4-HXT	03187059	3	E	16,0	16,0	55,0	115,0	65,0	15,2	6,0	4	Weldon	□
JS754200E3R050.3Z4-HXT	03187060	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,5	4	Weldon	□
JS754200E3R100.3Z4-HXT	03187061	3	E	20,0	20,0	61,0	125,0	72,0	19,0	1,0	4	Weldon	□
JS754200E3R200.3Z4-HXT	03187062	3	E	20,0	20,0	61,0	125,0	72,0	19,0	2,0	4	Weldon	□
JS754200E3R300.3Z4-HXT	03187063	3	E	20,0	20,0	61,0	125,0	72,0	19,0	3,0	4	Weldon	□
JS754200E3R400.3Z4-HXT	03187064	3	E	20,0	20,0	61,0	125,0	72,0	19,0	4,0	4	Weldon	□
JS754200E3R600.3Z4-HXT	03187065	3	E	20,0	20,0	61,0	125,0	72,0	19,0	6,0	4	Weldon	□

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

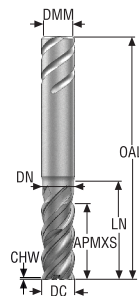
Graphite

X-Heads

Minimaster

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Safelock – Chamfer



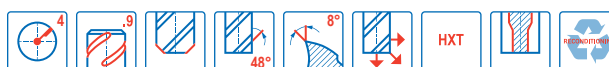
E

—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible

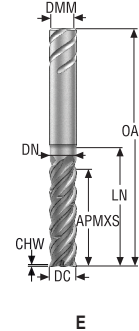


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS754060E2C.9Z4-HXT	03187144	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,075	4	Safe-lock	☐
JS754080E2C.9Z4-HXT	03187145	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	4	Safe-lock	☐
JS754100E2C.9Z4-HXT	03187146	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Safe-lock	☐
JS754120E2C.9Z4-HXT	03187147	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Safe-lock	☐
JS754160E2C.9Z4-HXT	03187148	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,2	4	Safe-lock	☐
JS754200E2C.9Z4-HXT	03187149	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,25	4	Safe-lock	☐
JS754250E2C.9Z4-HXT	03187150	2	E	25,0	25,0	50,0	121,0	65,0	23,8	0,3	4	Safe-lock	☐
JS754060E3C.9Z4-HXT	03187153	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,075	4	Safe-lock	☐
JS754080E3C.9Z4-HXT	03187154	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,1	4	Safe-lock	☐
JS754100E3C.9Z4-HXT	03187155	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,125	4	Safe-lock	☐
JS754120E3C.9Z4-HXT	03187156	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,15	4	Safe-lock	☐
JS754160E3C.9Z4-HXT	03187157	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,2	4	Safe-lock	☐
JS754200E3C.9Z4-HXT	03187158	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,25	4	Safe-lock	☐
JS754250E3C.9Z4-HXT	03187159	3	E	25,0	25,0	85,0	153,0	94,0	23,8	0,3	4	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

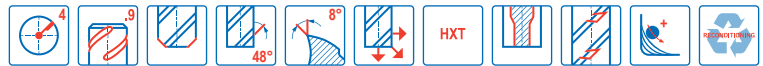
JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Safelock – Chamfer



E

- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS754100E2C.9Z4C-HXT	03187151	2	E	■	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Safe-lock	☐
JS754120E2C.9Z4C-HXT	03187152	2	E	■	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Safe-lock	☐
JS754060E3C.9Z4C-HXT	03200571	3	E	■	6,0	6,0	21,0	65,0	26,0	5,7	0,075	4	Safe-lock	☐
JS754080E3C.9Z4C-HXT	03200572	3	E	■	8,0	8,0	32,0	75,0	37,0	7,6	0,1	4	Safe-lock	☐
JS754100E3C.9Z4C-HXT	03187160	3	E	■	10,0	10,0	40,0	89,0	47,0	9,5	0,125	4	Safe-lock	☐
JS754120E3C.9Z4C-HXT	03187161	3	E	■	12,0	12,0	45,0	100,0	53,0	11,4	0,15	4	Safe-lock	☐
JS754160E3C.9Z4C-HXT	03187162	3	E	■	16,0	16,0	55,0	115,0	65,0	15,2	0,2	4	Safe-lock	☐
JS754200E3C.9Z4C-HXT	03187163	3	E	■	20,0	20,0	61,0	125,0	72,0	19,0	0,25	4	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

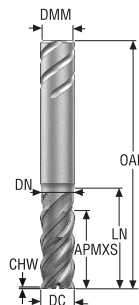
Graphite

X-Heads

Minimaster

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Safelock – Chamfer



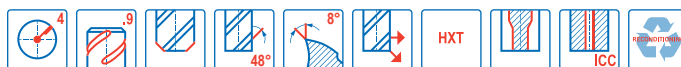
E

—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible

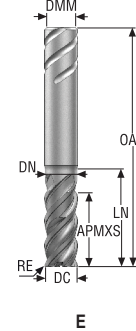


Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS754060E2C.9Z4A-HXT	03187164	2	E	■	6,0	6,0	12,0	57,0	18,0	5,7	0,075	4	Safe-lock	☐
JS754080E2C.9Z4A-HXT	03187165	2	E	■	8,0	8,0	16,0	63,0	25,0	7,6	0,1	4	Safe-lock	☐
JS754100E2C.9Z4A-HXT	03187166	2	E	■	10,0	10,0	20,0	72,0	29,0	9,5	0,125	4	Safe-lock	☐
JS754120E2C.9Z4A-HXT	03187167	2	E	■	12,0	12,0	24,0	83,0	35,0	11,4	0,15	4	Safe-lock	☐
JS754160E2C.9Z4A-HXT	03187168	2	E	■	16,0	16,0	32,0	92,0	42,0	15,2	0,2	4	Safe-lock	☐
JS754200E2C.9Z4A-HXT	03187169	2	E	■	20,0	20,0	40,0	104,0	51,0	19,0	0,25	4	Safe-lock	☐

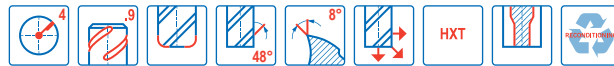
☐ Safelock available. Delivery time is 6 days.

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Safelock – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS754060E2R020.9Z4-HXT	03187170	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,2	4	Safe-lock	☐
JS754060E2R050.9Z4-HXT	03187171	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	4	Safe-lock	☐
JS754060E2R100.9Z4-HXT	03187172	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	4	Safe-lock	☐
JS754080E2R050.9Z4-HXT	03187173	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	4	Safe-lock	☐
JS754080E2R100.9Z4-HXT	03187174	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	4	Safe-lock	☐
JS754100E2R050.9Z4-HXT	03187175	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	4	Safe-lock	☐
JS754100E2R100.9Z4-HXT	03187176	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	4	Safe-lock	☐
JS754100E2R150.9Z4-HXT	03200573	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,5	4	Safe-lock	☐
JS754100E2R200.9Z4-HXT	03187177	2	E	10,0	10,0	20,0	72,0	29,0	9,5	2,0	4	Safe-lock	☐
JS754100E2R300.9Z4-HXT	03187178	2	E	10,0	10,0	20,0	72,0	29,0	9,5	3,0	4	Safe-lock	☐
JS754120E2R050.9Z4-HXT	03187179	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	4	Safe-lock	☐
JS754120E2R100.9Z4-HXT	03187180	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	4	Safe-lock	☐
JS754120E2R150.9Z4-HXT	03200832	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,5	4	Safe-lock	☐
JS754120E2R200.9Z4-HXT	03187181	2	E	12,0	12,0	24,0	83,0	35,0	11,4	2,0	4	Safe-lock	☐
JS754120E2R300.9Z4-HXT	03187182	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,0	4	Safe-lock	☐
JS754160E2R050.9Z4-HXT	03187183	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	4	Safe-lock	☐
JS754160E2R100.9Z4-HXT	03187184	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	4	Safe-lock	☐
JS754160E2R200.9Z4-HXT	03187185	2	E	16,0	16,0	32,0	92,0	42,0	15,2	2,0	4	Safe-lock	☐
JS754160E2R300.9Z4-HXT	03187186	2	E	16,0	16,0	32,0	92,0	42,0	15,2	3,0	4	Safe-lock	☐
JS754160E2R400.9Z4-HXT	03187187	2	E	16,0	16,0	32,0	92,0	42,0	15,2	4,0	4	Safe-lock	☒
JS754160E2R600.9Z4-HXT	03187188	2	E	16,0	16,0	32,0	92,0	42,0	15,2	6,0	4	Safe-lock	☐
JS754200E2R050.9Z4-HXT	03187189	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,5	4	Safe-lock	☐
JS754200E2R100.9Z4-HXT	03187190	2	E	20,0	20,0	40,0	104,0	51,0	19,0	1,0	4	Safe-lock	☐
JS754200E2R200.9Z4-HXT	03187191	2	E	20,0	20,0	40,0	104,0	51,0	19,0	2,0	4	Safe-lock	☐
JS754200E2R300.9Z4-HXT	03187192	2	E	20,0	20,0	40,0	104,0	51,0	19,0	3,0	4	Safe-lock	☐
JS754200E2R400.9Z4-HXT	03187193	2	E	20,0	20,0	40,0	104,0	51,0	19,0	4,0	4	Safe-lock	☐
JS754200E2R600.9Z4-HXT	03187194	2	E	20,0	20,0	40,0	104,0	51,0	19,0	6,0	4	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

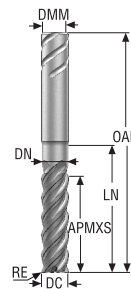
Graphite

X-Heads

Minimaster

JS754

High performance – Square – ISO– M and ISO– S – 4 Flutes – Safelock – Corner radius



E

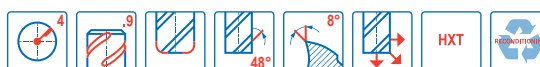
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS754060E3R020.9Z4-HXT	03187197	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,2	4	Safe-lock	☐
JS754060E3R050.9Z4-HXT	03187198	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,5	4	Safe-lock	☐
JS754060E3R100.9Z4-HXT	03187199	3	E	6,0	6,0	21,0	65,0	26,0	5,7	1,0	4	Safe-lock	☐
JS754080E3R050.9Z4-HXT	03187200	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,5	4	Safe-lock	☐
JS754080E3R100.9Z4-HXT	03187201	3	E	8,0	8,0	32,0	75,0	37,0	7,6	1,0	4	Safe-lock	☐
JS754100E3R050.9Z4-HXT	03187202	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,5	4	Safe-lock	☐
JS754100E3R100.9Z4-HXT	03187203	3	E	10,0	10,0	40,0	89,0	47,0	9,5	1,0	4	Safe-lock	☐
JS754100E3R200.9Z4-HXT	03187204	3	E	10,0	10,0	40,0	89,0	47,0	9,5	2,0	4	Safe-lock	☐
JS754100E3R300.9Z4-HXT	03187205	3	E	10,0	10,0	40,0	89,0	47,0	9,5	3,0	4	Safe-lock	☐
JS754120E3R050.9Z4-HXT	03187206	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,5	4	Safe-lock	☐
JS754120E3R100.9Z4-HXT	03187207	3	E	12,0	12,0	45,0	100,0	53,0	11,4	1,0	4	Safe-lock	☐
JS754120E3R200.9Z4-HXT	03187208	3	E	12,0	12,0	45,0	100,0	53,0	11,4	2,0	4	Safe-lock	☐
JS754120E3R300.9Z4-HXT	03187209	3	E	12,0	12,0	45,0	100,0	53,0	11,4	3,0	4	Safe-lock	☐
JS754160E3R050.9Z4-HXT	03187210	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,5	4	Safe-lock	☐
JS754160E3R100.9Z4-HXT	03187211	3	E	16,0	16,0	55,0	115,0	65,0	15,2	1,0	4	Safe-lock	☐
JS754160E3R200.9Z4-HXT	03187212	3	E	16,0	16,0	55,0	115,0	65,0	15,2	2,0	4	Safe-lock	☐
JS754160E3R300.9Z4-HXT	03187213	3	E	16,0	16,0	55,0	115,0	65,0	15,2	3,0	4	Safe-lock	☐
JS754160E3R400.9Z4-HXT	03187214	3	E	16,0	16,0	55,0	115,0	65,0	15,2	4,0	4	Safe-lock	☐
JS754160E3R600.9Z4-HXT	03187215	3	E	16,0	16,0	55,0	115,0	65,0	15,2	6,0	4	Safe-lock	☐
JS754200E3R050.9Z4-HXT	03187216	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,5	4	Safe-lock	☐
JS754200E3R100.9Z4-HXT	03187217	3	E	20,0	20,0	61,0	125,0	72,0	19,0	1,0	4	Safe-lock	☐
JS754200E3R200.9Z4-HXT	03187218	3	E	20,0	20,0	61,0	125,0	72,0	19,0	2,0	4	Safe-lock	☐
JS754200E3R300.9Z4-HXT	03187219	3	E	20,0	20,0	61,0	125,0	72,0	19,0	3,0	4	Safe-lock	☐
JS754200E3R400.9Z4-HXT	03187220	3	E	20,0	20,0	61,0	125,0	72,0	19,0	4,0	4	Safe-lock	☐
JS754200E3R600.9Z4-HXT	03187221	3	E	20,0	20,0	61,0	125,0	72,0	19,0	6,0	4	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Cutting data – JS754 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z										v_c
				3	4	5	6	8	10	12	16	20	25	
P11	M/A/D/E	0.400 0,400	0.80 0,80	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	0.17 0,0065	165 (130 — 180) 540 (430 — 590)
P12	M/A/D/E	0.400 0,400	0.80 0,80	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	105 (83 — 120) 345 (280 — 390)
M1	E	0.400 0,400	1.0 1,0	0.020 0,00080	0.026 0,0010	0.034 0,0013	0.040 0,0016	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.11 0,0044	0.13 0,0050	110 (96 — 130) 360 (320 — 420)
M2	E	0.400 0,400	1.0 1,0	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	90 (79 — 110) 295 (260 — 360)
M3	E	0.400 0,400	0.90 0,90	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	60 (44 — 76) 195 (150 — 240)
M4	E	0.400 0,400	0.90 0,90	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	46 (34 — 59) 150 (120 — 190)
M5	E	0.400 0,400	0.90 0,90	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.075 0,0030	0.085 0,0034	39 (29 — 49) 130 (96 — 160)
S1	E	0.150 0,150	0.50 0,50	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.17 0,0065	165 (86 — 220) 41 (21 — 55)
S2	E	0.150 0,150	0.50 0,50	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.17 0,0065	135 (69 — 180) 36 (26 — 48)
S3	E	0.150 0,150	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	120 (63 — 150) 110 (73 — 140)
S11	E	0.400 0,400	0.70 0,70	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	360 (240 — 450) 85 (56 — 110)
S12	E	0.400 0,400	0.70 0,70	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.12 0,0048	280 (190 — 360) 65 (44 — 87)
S13	E	0.400 0,400	0.70 0,70	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	0.10 0,0040	215 (150 — 280)

Cutting data – JS754 Slot milling

SMG		a_p/DC	f_z										v_c
			3	4	5	6	8	10	12	16	20	25	
P11	M/A/D/E	0.80 0,80	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.13 0,0050	150 (120 — 170) 490 (400 — 550)
P12	M/A/D/E	0.80 0,80	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.11 0,0044	90 (69 — 100) 295 (230 — 320)
M1	E	0.80 0,80	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	95 (85 — 120) 310 (280 — 390)
M2	E	0.80 0,80	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	80 (69 — 97) 260 (230 — 310)
M3	E	0.60 0,60	0.0095 0,00038	0.012 0,00048	0.015 0,00060	0.019 0,00075	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	55 (39 — 67) 180 (130 — 210)
M4	E	0.60 0,60	0.0095 0,00038	0.012 0,00048	0.015 0,00060	0.019 0,00075	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	40 (29 — 50) 130 (96 — 160)
M5	E	0.60 0,60	0.0095 0,00038	0.012 0,00048	0.015 0,00060	0.019 0,00075	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	33 (25 — 42) 110 (83 — 130)
S1	E	0.30 0,30	0.0095 0,00038	0.012 0,00048	0.015 0,00060	0.019 0,00075	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	41 (21 — 54) 135 (69 — 170)
S2	E	0.30 0,30	0.0095 0,00038	0.012 0,00048	0.015 0,00060	0.019 0,00075	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	33 (17 — 43) 110 (56 — 140)
S3	E	0.30 0,30	0.0095 0,00038	0.012 0,00048	0.015 0,00060	0.019 0,00075	0.025 0,0010	0.030 0,0012	0.038 0,0015	0.050 0,0020	0.060 0,0024	0.075 0,0030	28 (15 — 37) 90 (50 — 120)
S11	E	0.50 0,50	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	95 (63 — 120) 310 (210 — 390)
S12	E	0.50 0,50	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	70 (48 — 95) 230 (160 — 310)
S13	E	0.50 0,50	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	55 (38 — 74) 180 (130 — 240)

If radius exceeds 15% of value DC please reduce fz with 20%

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JS754-2C Advanced roughing $a_e/DC=0,05-0,1$

SMG		a_e/DC	a_p/DC	f_z		v_c
				10	12	
P11	M/A/D/E	0.100 0,100	2.0 2,0	0.15 0,0060	0.17 0,0065	265 (220 — 290) 870 (730 — 950)
P12	M/A/D/E	0.100 0,100	2.0 2,0	0.10 0,0040	0.12 0,0048	170 (150 — 190) 560 (500 — 620)
M1	E	0.100 0,100	2.0 2,0	0.11 0,0044	0.13 0,0050	205 (180 — 230) 670 (600 — 750)
M2	E	0.100 0,100	2.0 2,0	0.10 0,0040	0.12 0,0048	170 (150 — 190) 560 (500 — 620)
M3	E	0.100 0,100	2.0 2,0	0.10 0,0040	0.12 0,0048	130 (120 — 150) 425 (400 — 490)
M4	E	0.100 0,100	2.0 2,0	0.085 0,0034	0.10 0,0040	100 (86 — 110) 330 (290 — 360)
M5	E	0.100 0,100	2.0 2,0	0.085 0,0034	0.10 0,0040	85 (72 — 96) 280 (240 — 310)
S1	E	0.0500 0,0500	2.0 2,0	0.085 0,0034	0.10 0,0040	70 (43 — 99) 230 (150 — 320)
S2	E	0.0500 0,0500	2.0 2,0	0.085 0,0034	0.10 0,0040	60 (35 — 80) 195 (120 — 260)
S3	E	0.0500 0,0500	2.0 2,0	0.080 0,0032	0.095 0,0038	50 (31 — 70) 165 (110 — 220)
S11	E	0.0800 0,0800	2.0 2,0	0.070 0,0028	0.085 0,0034	165 (140 — 190) 540 (460 — 620)
S12	E	0.0800 0,0800	2.0 2,0	0.070 0,0028	0.085 0,0034	125 (110 — 150) 410 (370 — 490)
S13	E	0.0800 0,0800	2.0 2,0	0.060 0,0024	0.070 0,0028	100 (84 — 110) 330 (280 — 360)

Cutting data – JS754-3C Advanced roughing $a_e/DC=0,05-0,1$

SMG		a_e/DC	a_p/DC	f_z						v_c
				6	8	10	12	16	20	
P11	M/A/D/E	0.100 0,100	4.0 4,0	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.22 0,0085	0.25 0,010	265 (220 — 290) 870 (730 — 950)
P12	M/A/D/E	0.100 0,100	4.0 4,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	170 (140 — 180) 560 (460 — 590)
M1	E	0.100 0,100	4.0 4,0	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	205 (170 — 230) 670 (560 — 750)
M2	E	0.100 0,100	4.0 4,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	170 (140 — 190) 560 (460 — 620)
M3	E	0.100 0,100	4.0 4,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (110 — 150) 425 (370 — 490)
M4	E	0.100 0,100	4.0 4,0	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	100 (86 — 110) 330 (290 — 360)
M5	E	0.100 0,100	4.0 4,0	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	85 (72 — 96) 280 (240 — 310)
S1	E	0.0500 0,0500	4.0 4,0	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	70 (43 — 99) 230 (150 — 320)
S2	E	0.0500 0,0500	4.0 4,0	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	55 (35 — 80) 180 (120 — 260)
S3	E	0.0500 0,0500	4.0 4,0	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	50 (30 — 70) 165 (99 — 220)
S11	E	0.0800 0,0800	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	165 (140 — 190) 540 (460 — 620)
S12	E	0.0800 0,0800	4.0 4,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	125 (110 — 150) 410 (370 — 490)
S13	E	0.0800 0,0800	4.0 4,0	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	100 (84 — 110) 330 (280 — 360)

If radius exceeds 15% of value DC please reduce f_z with 20%

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

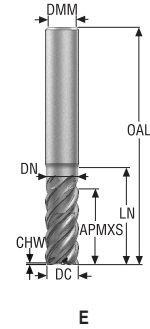
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

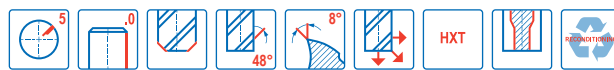
All cutting data are target values

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Cylindrical – Chamfer



—Tolerances:
—DMM= h5
—DC= e7
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E2C.0Z5-HXT	03186907	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,075	5	Cylindrical	■
JS755080E2C.0Z5-HXT	03186908	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	5	Cylindrical	■
JS755100E2C.0Z5-HXT	03186909	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,125	5	Cylindrical	■
JS755120E2C.0Z5-HXT	03186910	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,15	5	Cylindrical	■
JS755160E2C.0Z5-HXT	03186911	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,2	5	Cylindrical	■
JS755200E2C.0Z5-HXT	03186912	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,25	5	Cylindrical	■
JS755250E2C.0Z5-HXT	03186913	2	E	25,0	25,0	50,0	121,0	65,0	23,8	0,3	5	Cylindrical	■
JS755060E3C.0Z5-HXT	03186914	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,075	5	Cylindrical	■
JS755080E3C.0Z5-HXT	03186915	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,1	5	Cylindrical	■
JS755100E3C.0Z5-HXT	03186916	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,125	5	Cylindrical	■
JS755120E3C.0Z5-HXT	03186917	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,15	5	Cylindrical	■
JS755160E3C.0Z5-HXT	03186918	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,2	5	Cylindrical	■
JS755200E3C.0Z5-HXT	03186919	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,25	5	Cylindrical	■
JS755250E3C.0Z5-HXT	03186920	3	E	25,0	25,0	85,0	153,0	94,0	23,8	0,3	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

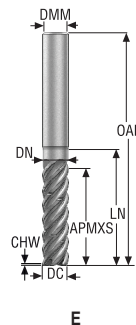
Graphite

X-Heads

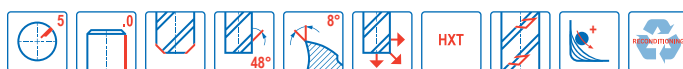
Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Cylindrical – Chamfer



—Tolerances:
—DMM= h5
—DC= e7
—Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS755100E3C.0Z5C-HXT	03186921	3	E	■	10,0	10,0	40,0	89,0	47,0	9,5	0,125	5	Cylindrical	■
JS755120E3C.0Z5C-HXT	03186922	3	E	■	12,0	12,0	45,0	100,0	53,0	11,4	0,15	5	Cylindrical	■
JS755160E3C.0Z5C-HXT	03186923	3	E	■	16,0	16,0	55,0	115,0	65,0	15,2	0,2	5	Cylindrical	■
JS755200E3C.0Z5C-HXT	03186924	3	E	■	20,0	20,0	61,0	125,0	72,0	19,0	0,25	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

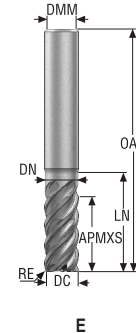
Graphite

X-Heads

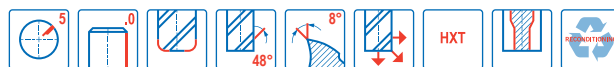
Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E2R020.0Z5-HXT	03186925	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,2	5	Cylindrical	■
JS755060E2R050.0Z5-HXT	03186926	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	5	Cylindrical	■
JS755060E2R100.0Z5-HXT	03186927	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	5	Cylindrical	■
JS755080E2R050.0Z5-HXT	03186928	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	5	Cylindrical	■
JS755080E2R100.0Z5-HXT	03186929	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	5	Cylindrical	■
JS755100E2R050.0Z5-HXT	03186930	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	5	Cylindrical	■
JS755100E2R100.0Z5-HXT	03186931	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	5	Cylindrical	■
JS755100E2R200.0Z5-HXT	03186932	2	E	10,0	10,0	20,0	72,0	29,0	9,5	2,0	5	Cylindrical	■
JS755100E2R300.0Z5-HXT	03186933	2	E	10,0	10,0	20,0	72,0	29,0	9,5	3,0	5	Cylindrical	■
JS755120E2R050.0Z5-HXT	03186934	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	5	Cylindrical	■
JS755120E2R100.0Z5-HXT	03186935	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	5	Cylindrical	■
JS755120E2R200.0Z5-HXT	03186936	2	E	12,0	12,0	24,0	83,0	35,0	11,4	2,0	5	Cylindrical	■
JS755120E2R300.0Z5-HXT	03186937	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,0	5	Cylindrical	■
JS755160E2R050.0Z5-HXT	03186938	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	5	Cylindrical	■
JS755160E2R100.0Z5-HXT	03186939	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	5	Cylindrical	■
JS755160E2R600.0Z5-HXT	03186940	2	E	16,0	16,0	32,0	92,0	42,0	15,2	6,0	5	Cylindrical	■
JS755200E2R050.0Z5-HXT	03186941	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,5	5	Cylindrical	■
JS755200E2R100.0Z5-HXT	03186942	2	E	20,0	20,0	40,0	104,0	51,0	19,0	1,0	5	Cylindrical	■
JS755200E2R600.0Z5-HXT	03186943	2	E	20,0	20,0	40,0	104,0	51,0	19,0	6,0	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

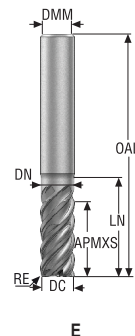
Graphite

X-Heads

Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Cylindrical – Corner radius



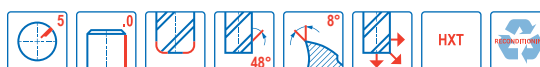
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible

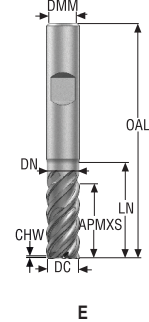


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E3R020.0Z5-HXT	03186946	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,2	5	Cylindrical	■
JS755060E3R050.0Z5-HXT	03186947	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,5	5	Cylindrical	■
JS755060E3R100.0Z5-HXT	03186948	3	E	6,0	6,0	21,0	65,0	26,0	5,7	1,0	5	Cylindrical	■
JS755080E3R050.0Z5-HXT	03186949	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,5	5	Cylindrical	■
JS755080E3R100.0Z5-HXT	03186950	3	E	8,0	8,0	32,0	75,0	37,0	7,6	1,0	5	Cylindrical	■
JS755100E3R050.0Z5-HXT	03186951	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,5	5	Cylindrical	■
JS755100E3R100.0Z5-HXT	03186952	3	E	10,0	10,0	40,0	89,0	47,0	9,5	1,0	5	Cylindrical	■
JS755100E3R200.0Z5-HXT	03186953	3	E	10,0	10,0	40,0	89,0	47,0	9,5	2,0	5	Cylindrical	■
JS755100E3R300.0Z5-HXT	03186954	3	E	10,0	10,0	40,0	89,0	47,0	9,5	3,0	5	Cylindrical	■
JS755120E3R050.0Z5-HXT	03186955	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,5	5	Cylindrical	■
JS755120E3R100.0Z5-HXT	03186956	3	E	12,0	12,0	45,0	100,0	53,0	11,4	1,0	5	Cylindrical	■
JS755120E3R200.0Z5-HXT	03186957	3	E	12,0	12,0	45,0	100,0	53,0	11,4	2,0	5	Cylindrical	■
JS755120E3R300.0Z5-HXT	03186958	3	E	12,0	12,0	45,0	100,0	53,0	11,4	3,0	5	Cylindrical	■
JS755160E3R050.0Z5-HXT	03186959	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,5	5	Cylindrical	■
JS755160E3R600.0Z5-HXT	03186960	3	E	16,0	16,0	55,0	115,0	65,0	15,2	6,0	5	Cylindrical	■
JS755200E3R050.0Z5-HXT	03186961	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,5	5	Cylindrical	■
JS755200E3R600.0Z5-HXT	03186962	3	E	20,0	20,0	61,0	125,0	72,0	19,0	6,0	5	Cylindrical	■

■ Stocked standard.

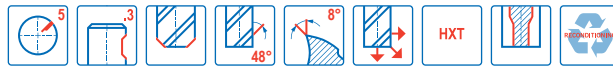
JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Weldon – Chamfer



E

- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E2C.3Z5-HXT	03187083	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,075	5	Weldon	■
JS755080E2C.3Z5-HXT	03187084	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	5	Weldon	■
JS755100E2C.3Z5-HXT	03187085	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,125	5	Weldon	■
JS755120E2C.3Z5-HXT	03187086	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,15	5	Weldon	■
JS755160E2C.3Z5-HXT	03187087	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,2	5	Weldon	■
JS755200E2C.3Z5-HXT	03187088	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,25	5	Weldon	■
JS755250E2C.3Z5-HXT	03187089	2	E	25,0	25,0	50,0	121,0	65,0	23,8	0,3	5	Weldon	■
JS755060E3C.3Z5-HXT	03187090	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,075	5	Weldon	■
JS755080E3C.3Z5-HXT	03187091	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,1	5	Weldon	■
JS755100E3C.3Z5-HXT	03187092	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,125	5	Weldon	■
JS755120E3C.3Z5-HXT	03187093	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,15	5	Weldon	■
JS755160E3C.3Z5-HXT	03187094	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,2	5	Weldon	■
JS755200E3C.3Z5-HXT	03187095	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,25	5	Weldon	■
JS755250E3C.3Z5-HXT	03187096	3	E	25,0	25,0	85,0	153,0	94,0	23,8	0,3	5	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

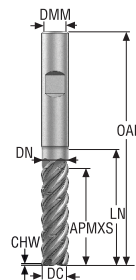
Graphite

X-Heads

Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Weldon – Chamfer



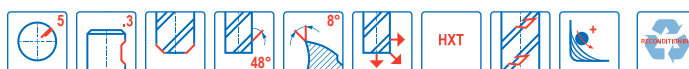
E

—Tolerances:

—DMM= h5

—DC= e7

—Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS755100E3C.3Z5C-HXT	03187097	3	E	■	10,0	10,0	40,0	89,0	47,0	9,5	0,125	5	Weldon	■
JS755120E3C.3Z5C-HXT	03187098	3	E	■	12,0	12,0	45,0	100,0	53,0	11,4	0,15	5	Weldon	■
JS755160E3C.3Z5C-HXT	03187099	3	E	■	16,0	16,0	55,0	115,0	65,0	15,2	0,2	5	Weldon	■
JS755200E3C.3Z5C-HXT	03187100	3	E	■	20,0	20,0	61,0	125,0	72,0	19,0	0,25	5	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

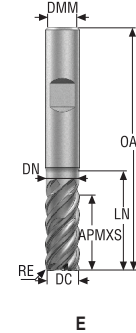
Graphite

X-Heads

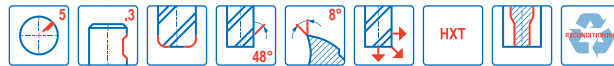
Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Weldon – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E2R020.3Z5-HXT	03187101	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,2	5	Weldon	■
JS755060E2R050.3Z5-HXT	03187102	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	5	Weldon	■
JS755060E2R100.3Z5-HXT	03187103	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	5	Weldon	■
JS755080E2R050.3Z5-HXT	03187104	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	5	Weldon	■
JS755080E2R100.3Z5-HXT	03187105	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	5	Weldon	■
JS755100E2R050.3Z5-HXT	03187106	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	5	Weldon	■
JS755100E2R100.3Z5-HXT	03187107	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	5	Weldon	■
JS755100E2R200.3Z5-HXT	03187108	2	E	10,0	10,0	20,0	72,0	29,0	9,5	2,0	5	Weldon	■
JS755100E2R300.3Z5-HXT	03187109	2	E	10,0	10,0	20,0	72,0	29,0	9,5	3,0	5	Weldon	■
JS755120E2R050.3Z5-HXT	03187110	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	5	Weldon	■
JS755120E2R100.3Z5-HXT	03187111	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	5	Weldon	■
JS755120E2R200.3Z5-HXT	03187112	2	E	12,0	12,0	24,0	83,0	35,0	11,4	2,0	5	Weldon	■
JS755120E2R300.3Z5-HXT	03187113	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,0	5	Weldon	■
JS755160E2R050.3Z5-HXT	03187114	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	5	Weldon	■
JS755160E2R100.3Z5-HXT	03187115	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	5	Weldon	■
JS755160E2R600.3Z5-HXT	03187116	2	E	16,0	16,0	32,0	92,0	42,0	15,2	6,0	5	Weldon	■
JS755200E2R050.3Z5-HXT	03187117	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,5	5	Weldon	■
JS755200E2R100.3Z5-HXT	03187118	2	E	20,0	20,0	40,0	104,0	51,0	19,0	1,0	5	Weldon	■
JS755200E2R600.3Z5-HXT	03187119	2	E	20,0	20,0	40,0	104,0	51,0	19,0	6,0	5	Weldon	■
JS755060E3R020.3Z5-HXT	03187122	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,2	5	Weldon	□
JS755060E3R050.3Z5-HXT	03187123	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,5	5	Weldon	□
JS755060E3R100.3Z5-HXT	03187124	3	E	6,0	6,0	21,0	65,0	26,0	5,7	1,0	5	Weldon	□
JS755080E3R050.3Z5-HXT	03187125	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,5	5	Weldon	□
JS755080E3R100.3Z5-HXT	03187126	3	E	8,0	8,0	32,0	75,0	37,0	7,6	1,0	5	Weldon	□
JS755100E3R050.3Z5-HXT	03187127	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,5	5	Weldon	□
JS755100E3R100.3Z5-HXT	03187128	3	E	10,0	10,0	40,0	89,0	47,0	9,5	1,0	5	Weldon	□
JS755100E3R200.3Z5-HXT	03187129	3	E	10,0	10,0	40,0	89,0	47,0	9,5	2,0	5	Weldon	□
JS755100E3R300.3Z5-HXT	03187130	3	E	10,0	10,0	40,0	89,0	47,0	9,5	3,0	5	Weldon	□
JS755120E3R050.3Z5-HXT	03187131	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,5	5	Weldon	□
JS755120E3R100.3Z5-HXT	03187132	3	E	12,0	12,0	45,0	100,0	53,0	11,4	1,0	5	Weldon	□
JS755120E3R200.3Z5-HXT	03187133	3	E	12,0	12,0	45,0	100,0	53,0	11,4	2,0	5	Weldon	□
JS755120E3R300.3Z5-HXT	03187134	3	E	12,0	12,0	45,0	100,0	53,0	11,4	3,0	5	Weldon	□
JS755160E3R050.3Z5-HXT	03187135	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,5	5	Weldon	□
JS755160E3R600.3Z5-HXT	03187136	3	E	16,0	16,0	55,0	115,0	65,0	15,2	6,0	5	Weldon	□
JS755200E3R050.3Z5-HXT	03187137	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,5	5	Weldon	□
JS755200E3R600.3Z5-HXT	03187138	3	E	20,0	20,0	61,0	125,0	72,0	19,0	6,0	5	Weldon	□

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

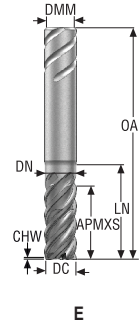
Graphite

X-Heads

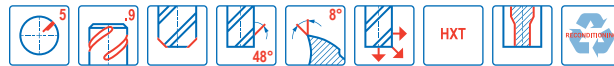
Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Safelock – Chamfer



—Tolerances:
—DMM= h5
—DC= e7
—Regrind possible

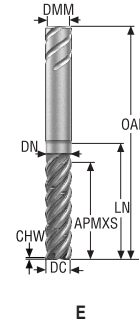


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E2C.9Z5-HXT	03187235	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,075	5	Safe-lock	☐
JS755080E2C.9Z5-HXT	03187236	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	5	Safe-lock	☐
JS755100E2C.9Z5-HXT	03187237	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,125	5	Safe-lock	☐
JS755120E2C.9Z5-HXT	03187238	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,15	5	Safe-lock	☐
JS755160E2C.9Z5-HXT	03187239	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,2	5	Safe-lock	☐
JS755200E2C.9Z5-HXT	03187240	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,25	5	Safe-lock	☐
JS755250E2C.9Z5-HXT	03187241	2	E	25,0	25,0	50,0	121,0	65,0	23,8	0,3	5	Safe-lock	☐
JS755060E3C.9Z5-HXT	03187242	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,075	5	Safe-lock	☐
JS755080E3C.9Z5-HXT	03187243	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,1	5	Safe-lock	☐
JS755100E3C.9Z5-HXT	03187244	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,125	5	Safe-lock	☐
JS755120E3C.9Z5-HXT	03187245	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,15	5	Safe-lock	☐
JS755160E3C.9Z5-HXT	03187246	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,2	5	Safe-lock	☐
JS755200E3C.9Z5-HXT	03187247	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,25	5	Safe-lock	☐
JS755250E3C.9Z5-HXT	03187248	3	E	25,0	25,0	85,0	153,0	94,0	23,8	0,3	5	Safe-lock	☐

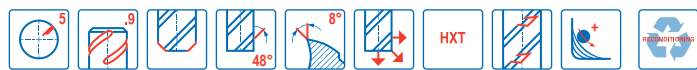
☐ Safelock available. Delivery time is 6 days.

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Safelock – Chamfer



- Tolerances:
- DMM= h5
- DC= e7
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JS755100E3C.9Z5C-HXT	03187249	3	E	■	10,0	10,0	40,0	89,0	47,0	9,5	0,125	5	Safe-lock	☐
JS755120E3C.9Z5C-HXT	03187250	3	E	■	12,0	12,0	45,0	100,0	53,0	11,4	0,15	5	Safe-lock	☐
JS755160E3C.9Z5C-HXT	03187252	3	E	■	16,0	16,0	55,0	115,0	65,0	15,2	0,2	5	Safe-lock	☐
JS755200E3C.9Z5C-HXT	03187253	3	E	■	20,0	20,0	61,0	125,0	72,0	19,0	0,25	5	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

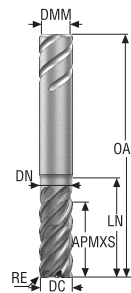
Graphite

X-Heads

Minimaster

JS755

High performance – Square – ISO– M and ISO– S – 5 Flutes – Safelock – Corner radius



E

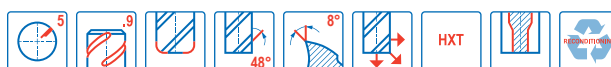
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JS755060E2R020.9Z5-HXT	03187254	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,2	5	Safe-lock	☐
JS755060E2R050.9Z5-HXT	03187255	2	E	6,0	6,0	12,0	57,0	18,0	5,7	0,5	5	Safe-lock	☐
JS755060E2R100.9Z5-HXT	03187256	2	E	6,0	6,0	12,0	57,0	18,0	5,7	1,0	5	Safe-lock	☐
JS755080E2R050.9Z5-HXT	03187257	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	5	Safe-lock	☐
JS755080E2R100.9Z5-HXT	03187258	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	5	Safe-lock	☐
JS755100E2R050.9Z5-HXT	03187259	2	E	10,0	10,0	20,0	72,0	29,0	9,5	0,5	5	Safe-lock	☐
JS755100E2R100.9Z5-HXT	03187260	2	E	10,0	10,0	20,0	72,0	29,0	9,5	1,0	5	Safe-lock	☐
JS755100E2R200.9Z5-HXT	03187261	2	E	10,0	10,0	20,0	72,0	29,0	9,5	2,0	5	Safe-lock	☐
JS755100E2R300.9Z5-HXT	03187262	2	E	10,0	10,0	20,0	72,0	29,0	9,5	3,0	5	Safe-lock	☐
JS755120E2R050.9Z5-HXT	03187263	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,5	5	Safe-lock	☐
JS755120E2R100.9Z5-HXT	03187264	2	E	12,0	12,0	24,0	83,0	35,0	11,4	1,0	5	Safe-lock	☐
JS755120E2R200.9Z5-HXT	03187265	2	E	12,0	12,0	24,0	83,0	35,0	11,4	2,0	5	Safe-lock	☐
JS755120E2R300.9Z5-HXT	03187266	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,0	5	Safe-lock	☐
JS755160E2R050.9Z5-HXT	03187267	2	E	16,0	16,0	32,0	92,0	42,0	15,2	0,5	5	Safe-lock	☐
JS755160E2R100.9Z5-HXT	03187269	2	E	16,0	16,0	32,0	92,0	42,0	15,2	1,0	5	Safe-lock	☐
JS755160E2R600.9Z5-HXT	03187270	2	E	16,0	16,0	32,0	92,0	42,0	15,2	6,0	5	Safe-lock	☐
JS755200E2R050.9Z5-HXT	03187271	2	E	20,0	20,0	40,0	104,0	51,0	19,0	0,5	5	Safe-lock	☐
JS755200E2R100.9Z5-HXT	03187272	2	E	20,0	20,0	40,0	104,0	51,0	19,0	1,0	5	Safe-lock	☐
JS755200E2R600.9Z5-HXT	03187273	2	E	20,0	20,0	40,0	104,0	51,0	19,0	6,0	5	Safe-lock	☐
JS755060E3R020.9Z5-HXT	03187276	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,2	5	Safe-lock	☐
JS755060E3R050.9Z5-HXT	03187277	3	E	6,0	6,0	21,0	65,0	26,0	5,7	0,5	5	Safe-lock	☐
JS755060E3R100.9Z5-HXT	03187279	3	E	6,0	6,0	21,0	65,0	26,0	5,7	1,0	5	Safe-lock	☐
JS755080E3R050.9Z5-HXT	03187280	3	E	8,0	8,0	32,0	75,0	37,0	7,6	0,5	5	Safe-lock	☐
JS755080E3R100.9Z5-HXT	03187281	3	E	8,0	8,0	32,0	75,0	37,0	7,6	1,0	5	Safe-lock	☐
JS755100E3R050.9Z5-HXT	03187282	3	E	10,0	10,0	40,0	89,0	47,0	9,5	0,5	5	Safe-lock	☐
JS755100E3R100.9Z5-HXT	03187283	3	E	10,0	10,0	40,0	89,0	47,0	9,5	1,0	5	Safe-lock	☐
JS755100E3R200.9Z5-HXT	03187284	3	E	10,0	10,0	40,0	89,0	47,0	9,5	2,0	5	Safe-lock	☐
JS755100E3R300.9Z5-HXT	03187285	3	E	10,0	10,0	40,0	89,0	47,0	9,5	3,0	5	Safe-lock	☐
JS755120E3R050.9Z5-HXT	03187286	3	E	12,0	12,0	45,0	100,0	53,0	11,4	0,5	5	Safe-lock	☐
JS755120E3R100.9Z5-HXT	03187287	3	E	12,0	12,0	45,0	100,0	53,0	11,4	1,0	5	Safe-lock	☐
JS755120E3R200.9Z5-HXT	03187288	3	E	12,0	12,0	45,0	100,0	53,0	11,4	2,0	5	Safe-lock	☐
JS755120E3R300.9Z5-HXT	03187289	3	E	12,0	12,0	45,0	100,0	53,0	11,4	3,0	5	Safe-lock	☐
JS755160E3R050.9Z5-HXT	03187290	3	E	16,0	16,0	55,0	115,0	65,0	15,2	0,5	5	Safe-lock	☐
JS755160E3R600.9Z5-HXT	03187291	3	E	16,0	16,0	55,0	115,0	65,0	15,2	6,0	5	Safe-lock	☐
JS755200E3R050.9Z5-HXT	03187292	3	E	20,0	20,0	61,0	125,0	72,0	19,0	0,5	5	Safe-lock	☐
JS755200E3R600.9Z5-HXT	03187293	3	E	20,0	20,0	61,0	125,0	72,0	19,0	6,0	5	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Cutting data – JS755 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z							v _c
				6	8	10	12	16	20	25	
P11	M/A/D/E	0.400 0,400	1.1 1,1	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.11 0,0044	0.12 0,0048	0.14 0,0055	135 (97 — 150) 445 (320 — 490)
P12	M/A/D/E	0.400 0,400	1.1 1,1	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	85 (63 — 99) 280 (210 — 320)
M1	E	0.400 0,400	1.1 1,1	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	170 (150 — 190) 560 (500 — 620)
M2	E	0.400 0,400	1.1 1,1	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	140 (120 — 150) 460 (400 — 490)
M3	E	0.400 0,400	1.1 1,1	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	110 (92 — 120) 360 (310 — 390)
M4	E	0.400 0,400	1.1 1,1	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.085 0,0034	85 (71 — 95) 280 (240 — 310)
M5	E	0.400 0,400	1.1 1,1	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.085 0,0034	70 (59 — 79) 230 (200 — 250)
S1	E	0.0300 0,0300	2.0 2,0	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	70 (48 — 110) 230 (160 — 360)
S2	E	0.0300 0,0300	2.0 2,0	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.14 0,0055	60 (39 — 89) 195 (130 — 290)
S3	E	0.0300 0,0300	2.0 2,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	50 (34 — 78) 165 (120 — 250)
S11	E	0.400 0,400	1.1 1,1	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	140 (120 — 160) 460 (400 — 520)
S12	E	0.400 0,400	1.1 1,1	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	110 (91 — 120) 360 (300 — 390)
S13	E	0.400 0,400	1.1 1,1	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.085 0,0034	85 (73 — 100) 280 (240 — 320)

Cutting data – JS755_3C Advanced roughing a_e/DC=0,05-0,1

SMG		a _e /DC	a _p /DC	f _z				v _c
				10	12	16	20	
P11	M/A/D/E	0.100 0,100	4.0 4,0	0.15 0,0060	0.17 0,0065	0.22 0,0085	0.25 0,010	265 (220 — 290) 870 (730 — 950)
P12	M/A/D/E	0.100 0,100	4.0 4,0	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	170 (140 — 180) 560 (460 — 590)
M1	E	0.100 0,100	4.0 4,0	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	205 (170 — 220) 670 (560 — 720)
M2	E	0.100 0,100	4.0 4,0	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	170 (140 — 180) 560 (460 — 590)
M3	E	0.100 0,100	4.0 4,0	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	130 (110 — 140) 425 (370 — 450)
M4	E	0.100 0,100	4.0 4,0	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	100 (85 — 110) 330 (280 — 360)
M5	E	0.100 0,100	4.0 4,0	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	85 (71 — 96) 280 (240 — 310)
S1	E	0.0500 0,0500	4.0 4,0	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	70 (43 — 99) 230 (150 — 320)
S2	E	0.0500 0,0500	4.0 4,0	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	55 (35 — 80) 180 (120 — 260)
S3	E	0.0500 0,0500	4.0 4,0	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	50 (31 — 70) 165 (110 — 220)
S11	E	0.0800 0,0800	4.0 4,0	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	160 (140 — 190) 520 (460 — 620)
S12	E	0.0800 0,0800	4.0 4,0	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	125 (110 — 140) 410 (370 — 450)
S13	E	0.0800 0,0800	4.0 4,0	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	100 (83 — 110) 330 (280 — 360)

If radius exceeds 15% of value DC please reduce fz with 20%

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

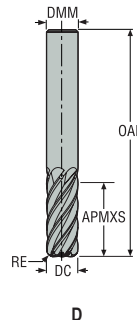
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JS720

High performance – Titanium – Square – 6 Flutes – Cylindrical – Corner radius



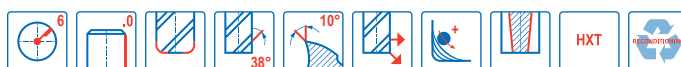
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible

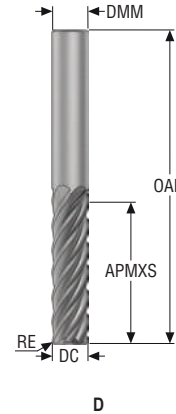


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720060D2R050.0Z6-HXT	03060293	2	D	6,0	6,0	17,0	57,0	0,5	6	Cylindrical	■
JS720060D2R100.0Z6-HXT	03060294	2	D	6,0	6,0	17,0	57,0	1,0	6	Cylindrical	■
JS720080D2R050.0Z6-HXT	03060295	2	D	8,0	8,0	23,0	63,0	0,5	6	Cylindrical	■
JS720080D2R100.0Z6-HXT	03061294	2	D	8,0	8,0	23,0	63,0	1,0	6	Cylindrical	■
JS720100D2R050.0Z6-HXT	03060296	2	D	10,0	10,0	26,0	72,0	0,5	6	Cylindrical	■
JS720100D2R100.0Z6-HXT	03060298	2	D	10,0	10,0	26,0	72,0	1,0	6	Cylindrical	■
JS720100D2R200.0Z6-HXT	03060299	2	D	10,0	10,0	26,0	72,0	2,0	6	Cylindrical	■
JS720100D2R300.0Z6-HXT	03060300	2	D	10,0	10,0	26,0	72,0	3,0	6	Cylindrical	■
JS720120D2R050.0Z6-HXT	03060301	2	D	12,0	12,0	30,0	83,0	0,5	6	Cylindrical	■
JS720120D2R100.0Z6-HXT	03060304	2	D	12,0	12,0	30,0	83,0	1,0	6	Cylindrical	■
JS720120D2R200.0Z6-HXT	03060305	2	D	12,0	12,0	30,0	83,0	2,0	6	Cylindrical	■
JS720120D2R300.0Z6-HXT	03060306	2	D	12,0	12,0	30,0	83,0	3,0	6	Cylindrical	■
JS720160D2R050.0Z6-HXT	03060307	2	D	16,0	16,0	44,0	99,0	0,5	6	Cylindrical	■
JS720160D2R100.0Z6-HXT	03060309	2	D	16,0	16,0	44,0	99,0	1,0	6	Cylindrical	■
JS720160D2R200.0Z6-HXT	03060310	2	D	16,0	16,0	44,0	99,0	2,0	6	Cylindrical	■
JS720160D2R300.0Z6-HXT	03060311	2	D	16,0	16,0	44,0	99,0	3,0	6	Cylindrical	■
JS720160D2R400.0Z6-HXT	03060312	2	D	16,0	16,0	44,0	99,0	4,0	6	Cylindrical	■
JS720160D2R600.0Z6-HXT	03060313	2	D	16,0	16,0	44,0	99,0	6,0	6	Cylindrical	■
JS720200D2R050.0Z6-HXT	10228426	2	D	20,0	20,0	45,0	105,0	0,5	6	Cylindrical	■
JS720200D2R100.0Z6-HXT	10228427	2	D	20,0	20,0	45,0	105,0	1,0	6	Cylindrical	■
JS720200D2R200.0Z6-HXT	10228428	2	D	20,0	20,0	45,0	105,0	2,0	6	Cylindrical	■
JS720200D2R300.0Z6-HXT	10228429	2	D	20,0	20,0	45,0	105,0	3,0	6	Cylindrical	■
JS720250D2R050.0Z6-HXT	10228430	2	D	25,0	25,0	50,0	125,0	0,5	6	Cylindrical	■
JS720250D2R100.0Z6-HXT	10228431	2	D	25,0	25,0	50,0	125,0	1,0	6	Cylindrical	■
JS720250D2R200.0Z6-HXT	10228432	2	D	25,0	25,0	50,0	125,0	2,0	6	Cylindrical	■
JS720250D2R300.0Z6-HXT	03169498	2	D	25,0	25,0	50,0	125,0	3,0	6	Cylindrical	■

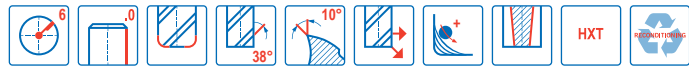
■ Stocked standard.

JS720

High performance – Titanium – Square – 6 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720080D3R050.0Z6-HXT	10228433	3	D	8,0	8,0	32,0	80,0	0,5	6	Cylindrical	■
JS720080D3R100.0Z6-HXT	10228434	3	D	8,0	8,0	32,0	80,0	1,0	6	Cylindrical	■
JS720100D3R050.0Z6-HXT	10228435	3	D	10,0	10,0	40,0	89,0	0,5	6	Cylindrical	■
JS720100D3R100.0Z6-HXT	10228436	3	D	10,0	10,0	40,0	89,0	1,0	6	Cylindrical	■
JS720100D3R200.0Z6-HXT	10228437	3	D	10,0	10,0	40,0	89,0	2,0	6	Cylindrical	■
JS720120D3R050.0Z6-HXT	10228438	3	D	12,0	12,0	45,0	100,0	0,5	6	Cylindrical	■
JS720120D3R100.0Z6-HXT	10228439	3	D	12,0	12,0	45,0	100,0	1,0	6	Cylindrical	■
JS720120D3R200.0Z6-HXT	10228440	3	D	12,0	12,0	45,0	100,0	2,0	6	Cylindrical	■
JS720160D3R050.0Z6-HXT	10228441	3	D	16,0	16,0	65,0	130,0	0,5	6	Cylindrical	■
JS720160D3R100.0Z6-HXT	10228442	3	D	16,0	16,0	65,0	130,0	1,0	6	Cylindrical	■
JS720160D3R200.0Z6-HXT	10228443	3	D	16,0	16,0	65,0	130,0	2,0	6	Cylindrical	■
JS720160D3R300.0Z6-HXT	03169497	3	D	16,0	16,0	65,0	130,0	3,0	6	Cylindrical	■
JS720200D3R050.0Z6-HXT	03060314	3	D	20,0	20,0	62,0	121,0	0,5	6	Cylindrical	■
JS720200D3R100.0Z6-HXT	03060316	3	D	20,0	20,0	62,0	121,0	1,0	6	Cylindrical	■
JS720200D3R200.0Z6-HXT	03060317	3	D	20,0	20,0	62,0	121,0	2,0	6	Cylindrical	■
JS720200D3R300.0Z6-HXT	03060318	3	D	20,0	20,0	62,0	121,0	3,0	6	Cylindrical	■
JS720200D3R400.0Z6-HXT	03060319	3	D	20,0	20,0	62,0	121,0	4,0	6	Cylindrical	■
JS720200D3R500.0Z6-HXT	03060320	3	D	20,0	20,0	62,0	121,0	5,0	6	Cylindrical	■
JS720200D3R600.0Z6-HXT	03060321	3	D	20,0	20,0	62,0	121,0	6,0	6	Cylindrical	■
JS720250D3R050.0Z6-HXT	03060322	3	D	25,0	25,0	78,0	146,0	0,5	6	Cylindrical	■
JS720250D3R100.0Z6-HXT	03060323	3	D	25,0	25,0	78,0	146,0	1,0	6	Cylindrical	■
JS720250D3R200.0Z6-HXT	03060324	3	D	25,0	25,0	78,0	146,0	2,0	6	Cylindrical	■
JS720250D3R300.0Z6-HXT	03060325	3	D	25,0	25,0	78,0	146,0	3,0	6	Cylindrical	■
JS720250D3R400.0Z6-HXT	03060326	3	D	25,0	25,0	78,0	146,0	4,0	6	Cylindrical	■
JS720250D3R600.0Z6-HXT	03060327	3	D	25,0	25,0	78,0	146,0	6,0	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

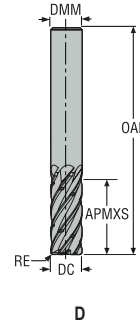
Graphite

X-Heads

Minimaster

JS720

High performance – Titanium – Square – 6 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible

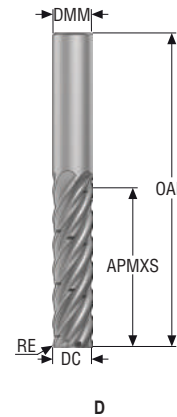


Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720080D2R050.0Z6C-HXT	10228513	2	D	■	8,0	8,0	23,0	63,0	0,5	6	Cylindrical	■
JS720080D2R100.0Z6C-HXT	10228514	2	D	■	8,0	8,0	23,0	63,0	1,0	6	Cylindrical	■
JS720100D2R050.0Z6C-HXT	03060297	2	D	■	10,0	10,0	26,0	72,0	0,5	6	Cylindrical	■
JS720100D2R100.0Z6C-HXT	10228515	2	D	■	10,0	10,0	26,0	72,0	1,0	6	Cylindrical	■
JS720120D2R050.0Z6C-HXT	03060302	2	D	■	12,0	12,0	30,0	83,0	0,5	6	Cylindrical	■
JS720120D2R100.0Z6C-HXT	03298280	2	D	■	12,0	12,0	30,0	83,0	1,0	6	Cylindrical	■
JS720120D2R200.0Z6C-HXT	03298281	2	D	■	12,0	12,0	30,0	83,0	2,0	6	Cylindrical	■
JS720120D2R250.0Z6C-HXT	03298282	2	D	■	12,0	12,0	30,0	83,0	2,5	6	Cylindrical	■
JS720120D2R300.0Z6C-HXT	03298283	2	D	■	12,0	12,0	30,0	83,0	3,0	6	Cylindrical	■
JS720120D2R310.0Z6C-HXT	03298284	2	D	■	12,0	12,0	30,0	83,0	3,1	6	Cylindrical	■
JS720160D2R050.0Z6C-HXT	03060308	2	D	■	16,0	16,0	44,0	99,0	0,5	6	Cylindrical	■
JS720160D2R100.0Z6C-HXT	03298285	2	D	■	16,0	16,0	44,0	99,0	1,0	6	Cylindrical	■
JS720160D2R200.0Z6C-HXT	03298286	2	D	■	16,0	16,0	44,0	99,0	2,0	6	Cylindrical	■
JS720160D2R250.0Z6C-HXT	03298287	2	D	■	16,0	16,0	44,0	99,0	2,5	6	Cylindrical	■
JS720160D2R300.0Z6C-HXT	03298288	2	D	■	16,0	16,0	44,0	99,0	3,0	6	Cylindrical	■
JS720160D2R310.0Z6C-HXT	03298289	2	D	■	16,0	16,0	44,0	99,0	3,1	6	Cylindrical	■
JS720160D2R400.0Z6C-HXT	03298290	2	D	■	16,0	16,0	44,0	99,0	4,0	6	Cylindrical	■
JS720160D2R600.0Z6C-HXT	03298291	2	D	■	16,0	16,0	44,0	99,0	6,0	6	Cylindrical	■

■ Stocked standard.

JS720

High performance – Titanium – Square – 6 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720160D3R050.0Z6C-HXT	10228516	3	D	■	16,0	16,0	65,0	130,0	0,5	6	Cylindrical	■
JS720160D3R100.0Z6C-HXT	10228517	3	D	■	16,0	16,0	65,0	130,0	1,0	6	Cylindrical	■
JS720160D3R200.0Z6C-HXT	10228518	3	D	■	16,0	16,0	65,0	130,0	2,0	6	Cylindrical	■
JS720160D3R300.0Z6C-HXT	10228519	3	D	■	16,0	16,0	65,0	130,0	3,0	6	Cylindrical	■
JS720200D3R050.0Z6C-HXT	03060315	3	D	■	20,0	20,0	62,0	121,0	0,5	6	Cylindrical	■
JS720200D3R100.0Z6C-HXT	03298292	3	D	■	20,0	20,0	62,0	121,0	1,0	6	Cylindrical	■
JS720200D3R200.0Z6C-HXT	03298293	3	D	■	20,0	20,0	62,0	121,0	2,0	6	Cylindrical	■
JS720200D3R250.0Z6C-HXT	03298294	3	D	■	20,0	20,0	62,0	121,0	2,5	6	Cylindrical	■
JS720200D3R300.0Z6C-HXT	03298295	3	D	■	20,0	20,0	62,0	121,0	3,0	6	Cylindrical	■
JS720200D3R310.0Z6C-HXT	03298296	3	D	■	20,0	20,0	62,0	121,0	3,1	6	Cylindrical	■
JS720200D3R400.0Z6C-HXT	03298297	3	D	■	20,0	20,0	62,0	121,0	4,0	6	Cylindrical	■
JS720200D3R500.0Z6C-HXT	03298298	3	D	■	20,0	20,0	62,0	121,0	5,0	6	Cylindrical	■
JS720200D3R600.0Z6C-HXT	03298299	3	D	■	20,0	20,0	62,0	121,0	6,0	6	Cylindrical	■
JS720250D3R050.0Z6C-HXT	03066270	3	D	■	25,0	25,0	78,0	146,0	0,5	6	Cylindrical	■
JS720250D3R100.0Z6C-HXT	03298300	3	D	■	25,0	25,0	78,0	146,0	1,0	6	Cylindrical	■
JS720250D3R200.0Z6C-HXT	03298301	3	D	■	25,0	25,0	78,0	146,0	2,0	6	Cylindrical	■
JS720250D3R300.0Z6C-HXT	03298302	3	D	■	25,0	25,0	78,0	146,0	3,0	6	Cylindrical	■
JS720250D3R400.0Z6C-HXT	03298303	3	D	■	25,0	25,0	78,0	146,0	4,0	6	Cylindrical	■
JS720250D3R600.0Z6C-HXT	03298304	3	D	■	25,0	25,0	78,0	146,0	6,0	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

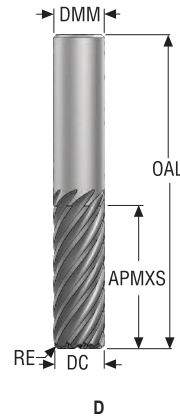
Graphite

X-Heads

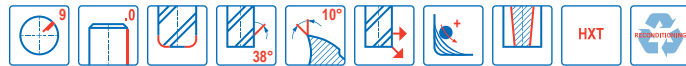
Minimaster

JS720

High performance – Titanium – Square – 9 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible

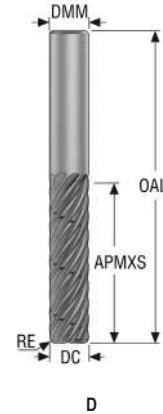


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720100D2R050.0Z9-HXT	10067510	2	D	10,0	10,0	26,0	72,0	0,5	9	Cylindrical	■
JS720100D2R100.0Z9-HXT	10067511	2	D	10,0	10,0	26,0	72,0	1,0	9	Cylindrical	■
JS720100D2R200.0Z9-HXT	10067512	2	D	10,0	10,0	26,0	72,0	2,0	9	Cylindrical	■
JS720120D2R050.0Z9-HXT	10067513	2	D	12,0	12,0	30,0	83,0	0,5	9	Cylindrical	■
JS720120D2R100.0Z9-HXT	10067514	2	D	12,0	12,0	30,0	83,0	1,0	9	Cylindrical	■
JS720120D2R200.0Z9-HXT	10067515	2	D	12,0	12,0	30,0	83,0	2,0	9	Cylindrical	■
JS720160D2R100.0Z9-HXT	10008152	2	D	16,0	16,0	44,0	99,0	1,0	9	Cylindrical	■
JS720160D2R200.0Z9-HXT	10008153	2	D	16,0	16,0	44,0	99,0	2,0	9	Cylindrical	■
JS720160D2R300.0Z9-HXT	10008154	2	D	16,0	16,0	44,0	99,0	3,0	9	Cylindrical	■
JS720200D2R100.0Z9-HXT	10228393	2	D	20,0	20,0	45,0	105,0	1,0	9	Cylindrical	■
JS720200D2R200.0Z9-HXT	10228394	2	D	20,0	20,0	45,0	105,0	2,0	9	Cylindrical	■
JS720200D2R300.0Z9-HXT	10228395	2	D	20,0	20,0	45,0	105,0	3,0	9	Cylindrical	■
JS720250D2R100.0Z9-HXT	10008155	2	D	25,0	25,0	50,0	125,0	1,0	9	Cylindrical	■
JS720250D2R200.0Z9-HXT	10008156	2	D	25,0	25,0	50,0	125,0	2,0	9	Cylindrical	■
JS720250D2R300.0Z9-HXT	10008157	2	D	25,0	25,0	50,0	125,0	3,0	9	Cylindrical	■
JS720100D3R050.0Z9-HXT	10067516	3	D	10,0	10,0	40,0	89,0	0,5	9	Cylindrical	■
JS720100D3R100.0Z9-HXT	10067517	3	D	10,0	10,0	40,0	89,0	1,0	9	Cylindrical	■
JS720100D3R200.0Z9-HXT	10067518	3	D	10,0	10,0	40,0	89,0	2,0	9	Cylindrical	■
JS720120D3R050.0Z9-HXT	10067519	3	D	12,0	12,0	45,0	100,0	0,5	9	Cylindrical	■
JS720120D3R100.0Z9-HXT	10067520	3	D	12,0	12,0	45,0	100,0	1,0	9	Cylindrical	■
JS720120D3R200.0Z9-HXT	10067521	3	D	12,0	12,0	45,0	100,0	2,0	9	Cylindrical	■
JS720160D3R100.0Z9-HXT	10008158	3	D	16,0	16,0	65,0	130,0	1,0	9	Cylindrical	■
JS720160D3R200.0Z9-HXT	10008159	3	D	16,0	16,0	65,0	130,0	2,0	9	Cylindrical	■
JS720160D3R300.0Z9-HXT	10008160	3	D	16,0	16,0	65,0	130,0	3,0	9	Cylindrical	■
JS720200D3R100.0Z9-HXT	10008161	3	D	20,0	20,0	62,0	121,0	1,0	9	Cylindrical	■
JS720200D3R200.0Z9-HXT	10008162	3	D	20,0	20,0	62,0	121,0	2,0	9	Cylindrical	■
JS720200D3R300.0Z9-HXT	10008163	3	D	20,0	20,0	62,0	121,0	3,0	9	Cylindrical	■
JS720250D3R100.0Z9-HXT	10008164	3	D	25,0	25,0	78,0	146,0	1,0	9	Cylindrical	■
JS720250D3R200.0Z9-HXT	10008165	3	D	25,0	25,0	78,0	146,0	2,0	9	Cylindrical	■
JS720250D3R300.0Z9-HXT	10008166	3	D	25,0	25,0	78,0	146,0	3,0	9	Cylindrical	■

■ Stocked standard.

JS720

High performance – Titanium – Square – 9 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720100D3R050.0Z9C-HXT	10067522	3	D	■	10,0	10,0	40,0	89,0	0,5	9	Cylindrical	■
JS720100D3R100.0Z9C-HXT	10067523	3	D	■	10,0	10,0	40,0	89,0	1,0	9	Cylindrical	■
JS720100D3R200.0Z9C-HXT	10067524	3	D	■	10,0	10,0	40,0	89,0	2,0	9	Cylindrical	■
JS720120D3R050.0Z9C-HXT	10067525	3	D	■	12,0	12,0	45,0	100,0	0,5	9	Cylindrical	■
JS720120D3R100.0Z9C-HXT	10067526	3	D	■	12,0	12,0	45,0	100,0	1,0	9	Cylindrical	■
JS720120D3R200.0Z9C-HXT	10067527	3	D	■	12,0	12,0	45,0	100,0	2,0	9	Cylindrical	■
JS720160D3R100.0Z9C-HXT	10067528	3	D	■	16,0	16,0	65,0	130,0	1,0	9	Cylindrical	■
JS720160D3R200.0Z9C-HXT	10067529	3	D	■	16,0	16,0	65,0	130,0	2,0	9	Cylindrical	■
JS720160D3R300.0Z9C-HXT	10067530	3	D	■	16,0	16,0	65,0	130,0	3,0	9	Cylindrical	■
JS720200D3R100.0Z9C-HXT	10067531	3	D	■	20,0	20,0	62,0	121,0	1,0	9	Cylindrical	■
JS720200D3R200.0Z9C-HXT	10067532	3	D	■	20,0	20,0	62,0	121,0	2,0	9	Cylindrical	■
JS720200D3R300.0Z9C-HXT	10067533	3	D	■	20,0	20,0	62,0	121,0	3,0	9	Cylindrical	■
JS720250D3R100.0Z9C-HXT	10067534	3	D	■	25,0	25,0	78,0	146,0	1,0	9	Cylindrical	■
JS720250D3R200.0Z9C-HXT	10067535	3	D	■	25,0	25,0	78,0	146,0	2,0	9	Cylindrical	■
JS720250D3R300.0Z9C-HXT	10067536	3	D	■	25,0	25,0	78,0	146,0	3,0	9	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

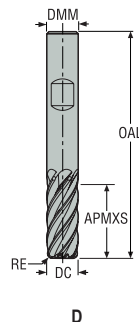
Graphite

X-Heads

Minimaster

JS720

High performance – Titanium – Square – 6 Flutes – Weldon – Corner radius



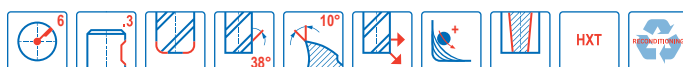
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible

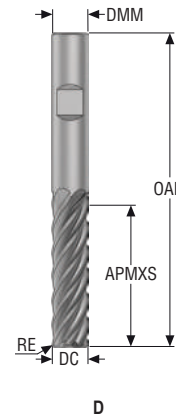


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720060D2R050.3Z6-HXT	03060339	2	D	6,0	6,0	17,0	57,0	0,5	6	Weldon	☐
JS720060D2R100.3Z6-HXT	03060340	2	D	6,0	6,0	17,0	57,0	1,0	6	Weldon	☐
JS720080D2R050.3Z6-HXT	03060341	2	D	8,0	8,0	23,0	63,0	0,5	6	Weldon	☐
JS720080D2R100.3Z6-HXT	03061295	2	D	8,0	8,0	23,0	63,0	1,0	6	Weldon	☐
JS720100D2R050.3Z6-HXT	03060342	2	D	10,0	10,0	26,0	72,0	0,5	6	Weldon	☐
JS720100D2R100.3Z6-HXT	03060344	2	D	10,0	10,0	26,0	72,0	1,0	6	Weldon	☐
JS720100D2R200.3Z6-HXT	03060345	2	D	10,0	10,0	26,0	72,0	2,0	6	Weldon	☐
JS720100D2R300.3Z6-HXT	03060346	2	D	10,0	10,0	26,0	72,0	3,0	6	Weldon	☐
JS720120D2R050.3Z6-HXT	03060347	2	D	12,0	12,0	30,0	83,0	0,5	6	Weldon	☐
JS720120D2R100.3Z6-HXT	03060349	2	D	12,0	12,0	30,0	83,0	1,0	6	Weldon	☐
JS720120D2R200.3Z6-HXT	03060350	2	D	12,0	12,0	30,0	83,0	2,0	6	Weldon	☐
JS720120D2R300.3Z6-HXT	03060351	2	D	12,0	12,0	30,0	83,0	3,0	6	Weldon	☐
JS720160D2R050.3Z6-HXT	03060352	2	D	16,0	16,0	44,0	99,0	0,5	6	Weldon	☐
JS720160D2R100.3Z6-HXT	03060354	2	D	16,0	16,0	44,0	99,0	1,0	6	Weldon	☐
JS720160D2R200.3Z6-HXT	03060355	2	D	16,0	16,0	44,0	99,0	2,0	6	Weldon	☒
JS720160D2R300.3Z6-HXT	03060356	2	D	16,0	16,0	44,0	99,0	3,0	6	Weldon	☒
JS720160D2R400.3Z6-HXT	03060357	2	D	16,0	16,0	44,0	99,0	4,0	6	Weldon	☐
JS720160D2R600.3Z6-HXT	03060358	2	D	16,0	16,0	44,0	99,0	6,0	6	Weldon	☐
JS720200D2R050.3Z6-HXT	10228444	2	D	20,0	20,0	45,0	105,0	0,5	6	Weldon	☐
JS720200D2R100.3Z6-HXT	10228445	2	D	20,0	20,0	45,0	105,0	1,0	6	Weldon	☐
JS720200D2R200.3Z6-HXT	10228446	2	D	20,0	20,0	45,0	105,0	2,0	6	Weldon	☐
JS720200D2R300.3Z6-HXT	10228447	2	D	20,0	20,0	45,0	105,0	3,0	6	Weldon	☐
JS720250D2R050.3Z6-HXT	10228448	2	D	25,0	25,0	50,0	125,0	0,5	6	Weldon	☐
JS720250D2R100.3Z6-HXT	10228449	2	D	25,0	25,0	50,0	125,0	1,0	6	Weldon	☐
JS720250D2R200.3Z6-HXT	10228450	2	D	25,0	25,0	50,0	125,0	2,0	6	Weldon	☐
JS720250D2R300.3Z6-HXT	10228451	2	D	25,0	25,0	50,0	125,0	3,0	6	Weldon	☐

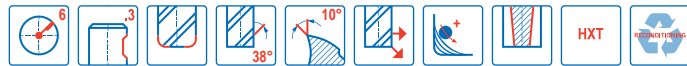
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JS720

High performance – Titanium – Square – 6 Flutes – Weldon – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720080D3R050.3Z6-HXT	10228452	3	D	8,0	8,0	32,0	80,0	0,5	6	Weldon	☐
JS720080D3R100.3Z6-HXT	10228453	3	D	8,0	8,0	32,0	80,0	1,0	6	Weldon	☐
JS720100D3R050.3Z6-HXT	10228454	3	D	10,0	10,0	40,0	89,0	0,5	6	Weldon	☐
JS720100D3R100.3Z6-HXT	10228455	3	D	10,0	10,0	40,0	89,0	1,0	6	Weldon	☐
JS720100D3R200.3Z6-HXT	10228456	3	D	10,0	10,0	40,0	89,0	2,0	6	Weldon	☐
JS720120D3R050.3Z6-HXT	10228457	3	D	12,0	12,0	45,0	100,0	0,5	6	Weldon	☐
JS720120D3R100.3Z6-HXT	10228458	3	D	12,0	12,0	45,0	100,0	1,0	6	Weldon	☐
JS720120D3R200.3Z6-HXT	10228459	3	D	12,0	12,0	45,0	100,0	2,0	6	Weldon	☐
JS720160D3R050.3Z6-HXT	10228460	3	D	16,0	16,0	65,0	130,0	0,5	6	Weldon	☐
JS720160D3R100.3Z6-HXT	10228461	3	D	16,0	16,0	65,0	130,0	1,0	6	Weldon	☐
JS720160D3R200.3Z6-HXT	10228462	3	D	16,0	16,0	65,0	130,0	2,0	6	Weldon	☐
JS720160D3R300.3Z6-HXT	10228463	3	D	16,0	16,0	65,0	130,0	3,0	6	Weldon	☐
JS720200D3R050.3Z6-HXT	03060359	3	D	20,0	20,0	62,0	121,0	0,5	6	Weldon	☐
JS720200D3R100.3Z6-HXT	03060361	3	D	20,0	20,0	62,0	121,0	1,0	6	Weldon	☐
JS720200D3R200.3Z6-HXT	03060362	3	D	20,0	20,0	62,0	121,0	2,0	6	Weldon	☐
JS720200D3R300.3Z6-HXT	03060363	3	D	20,0	20,0	62,0	121,0	3,0	6	Weldon	☒
JS720200D3R400.3Z6-HXT	03060364	3	D	20,0	20,0	62,0	121,0	4,0	6	Weldon	☒
JS720200D3R500.3Z6-HXT	03060365	3	D	20,0	20,0	62,0	121,0	5,0	6	Weldon	☐
JS720200D3R600.3Z6-HXT	03060366	3	D	20,0	20,0	62,0	121,0	6,0	6	Weldon	☐
JS720250D3R050.3Z6-HXT	03060367	3	D	25,0	25,0	78,0	146,0	0,5	6	Weldon	☐
JS720250D3R100.3Z6-HXT	03060368	3	D	25,0	25,0	78,0	146,0	1,0	6	Weldon	☐
JS720250D3R200.3Z6-HXT	03060369	3	D	25,0	25,0	78,0	146,0	2,0	6	Weldon	☐
JS720250D3R300.3Z6-HXT	03060370	3	D	25,0	25,0	78,0	146,0	3,0	6	Weldon	☐
JS720250D3R400.3Z6-HXT	03060371	3	D	25,0	25,0	78,0	146,0	4,0	6	Weldon	☒
JS720250D3R600.3Z6-HXT	03060372	3	D	25,0	25,0	78,0	146,0	6,0	6	Weldon	☐

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

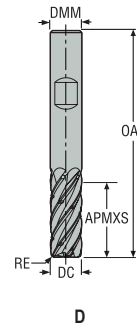
Graphite

X-Heads

Minimaster

JS720

High performance – Titanium – Square – 6 Flutes – Weldon – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible

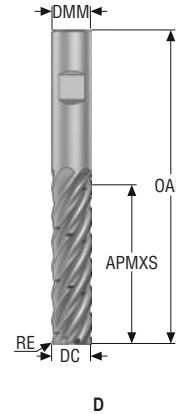


Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720080D2R050.3Z6C-HXT	10228520	2	D	■	8,0	8,0	23,0	63,0	0,5	6	Weldon	□
JS720080D2R100.3Z6C-HXT	10228521	2	D	■	8,0	8,0	23,0	63,0	1,0	6	Weldon	□
JS720100D2R050.3Z6C-HXT	03060343	2	D	■	10,0	10,0	26,0	72,0	0,5	6	Weldon	□
JS720100D2R100.3Z6C-HXT	10228522	2	D	■	10,0	10,0	26,0	72,0	1,0	6	Weldon	□
JS720120D2R050.3Z6C-HXT	03060348	2	D	■	12,0	12,0	30,0	83,0	0,5	6	Weldon	□
JS720120D2R100.3Z6C-HXT	03298308	2	D	■	12,0	12,0	30,0	83,0	1,0	6	Weldon	□
JS720120D2R200.3Z6C-HXT	03298309	2	D	■	12,0	12,0	30,0	83,0	2,0	6	Weldon	□
JS720120D2R250.3Z6C-HXT	03298310	2	D	■	12,0	12,0	30,0	83,0	2,5	6	Weldon	□
JS720120D2R300.3Z6C-HXT	03298311	2	D	■	12,0	12,0	30,0	83,0	3,0	6	Weldon	□
JS720120D2R310.3Z6C-HXT	03298312	2	D	■	12,0	12,0	30,0	83,0	3,1	6	Weldon	□
JS720160D2R050.3Z6C-HXT	03060353	2	D	■	16,0	16,0	44,0	99,0	0,5	6	Weldon	■
JS720160D2R100.3Z6C-HXT	03298313	2	D	■	16,0	16,0	44,0	99,0	1,0	6	Weldon	■
JS720160D2R200.3Z6C-HXT	03298314	2	D	■	16,0	16,0	44,0	99,0	2,0	6	Weldon	■
JS720160D2R250.3Z6C-HXT	03298315	2	D	■	16,0	16,0	44,0	99,0	2,5	6	Weldon	■
JS720160D2R300.3Z6C-HXT	03298316	2	D	■	16,0	16,0	44,0	99,0	3,0	6	Weldon	■
JS720160D2R310.3Z6C-HXT	03298317	2	D	■	16,0	16,0	44,0	99,0	3,1	6	Weldon	■
JS720160D2R400.3Z6C-HXT	03298318	2	D	■	16,0	16,0	44,0	99,0	4,0	6	Weldon	■
JS720160D2R600.3Z6C-HXT	03298319	2	D	■	16,0	16,0	44,0	99,0	6,0	6	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JS720

High performance – Titanium – Square – 6 Flutes – Weldon – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720160D3R050.3Z6C-HXT	10228523	3	D	■	16,0	16,0	65,0	130,0	0,5	6	Weldon	□
JS720160D3R100.3Z6C-HXT	10228524	3	D	■	16,0	16,0	65,0	130,0	1,0	6	Weldon	□
JS720160D3R200.3Z6C-HXT	10228525	3	D	■	16,0	16,0	65,0	130,0	2,0	6	Weldon	□
JS720160D3R300.3Z6C-HXT	10228526	3	D	■	16,0	16,0	65,0	130,0	3,0	6	Weldon	□
JS720200D3R050.3Z6C-HXT	03060360	3	D	■	20,0	20,0	62,0	121,0	0,5	6	Weldon	■
JS720200D3R100.3Z6C-HXT	03298320	3	D	■	20,0	20,0	62,0	121,0	1,0	6	Weldon	■
JS720200D3R200.3Z6C-HXT	03298321	3	D	■	20,0	20,0	62,0	121,0	2,0	6	Weldon	■
JS720200D3R250.3Z6C-HXT	03298322	3	D	■	20,0	20,0	62,0	121,0	2,5	6	Weldon	■
JS720200D3R300.3Z6C-HXT	03298323	3	D	■	20,0	20,0	62,0	121,0	3,0	6	Weldon	■
JS720200D3R310.3Z6C-HXT	03298324	3	D	■	20,0	20,0	62,0	121,0	3,1	6	Weldon	■
JS720200D3R400.3Z6C-HXT	03298325	3	D	■	20,0	20,0	62,0	121,0	4,0	6	Weldon	■
JS720200D3R500.3Z6C-HXT	03298326	3	D	■	20,0	20,0	62,0	121,0	5,0	6	Weldon	■
JS720200D3R600.3Z6C-HXT	03298327	3	D	■	20,0	20,0	62,0	121,0	6,0	6	Weldon	■
JS720250D3R050.3Z6C-HXT	03066460	3	D	■	25,0	25,0	78,0	146,0	0,5	6	Weldon	■
JS720250D3R100.3Z6C-HXT	03298328	3	D	■	25,0	25,0	78,0	146,0	1,0	6	Weldon	■
JS720250D3R200.3Z6C-HXT	03298329	3	D	■	25,0	25,0	78,0	146,0	2,0	6	Weldon	■
JS720250D3R300.3Z6C-HXT	03298330	3	D	■	25,0	25,0	78,0	146,0	3,0	6	Weldon	■
JS720250D3R400.3Z6C-HXT	03298331	3	D	■	25,0	25,0	78,0	146,0	4,0	6	Weldon	■
JS720250D3R600.3Z6C-HXT	03298332	3	D	■	25,0	25,0	78,0	146,0	6,0	6	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

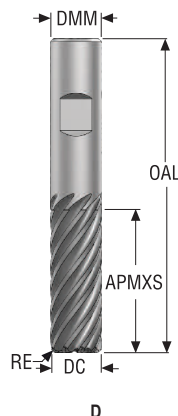
Graphite

X-Heads

Minimaster

JS720

High performance – Titanium – Square – 9 Flutes – Weldon – Corner radius



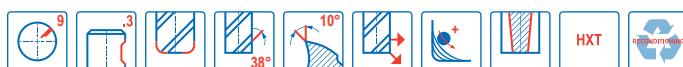
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible

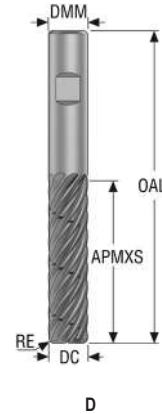


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720100D2R050.3Z9-HXT	10067881	2	D	10,0	10,0	26,0	72,0	0,5	9	Weldon	☐
JS720100D2R100.3Z9-HXT	10067882	2	D	10,0	10,0	26,0	72,0	1,0	9	Weldon	☐
JS720100D2R200.3Z9-HXT	10067883	2	D	10,0	10,0	26,0	72,0	2,0	9	Weldon	☐
JS720120D2R050.3Z9-HXT	10067884	2	D	12,0	12,0	30,0	83,0	0,5	9	Weldon	☐
JS720120D2R100.3Z9-HXT	10067885	2	D	12,0	12,0	30,0	83,0	1,0	9	Weldon	☐
JS720120D2R200.3Z9-HXT	10067886	2	D	12,0	12,0	30,0	83,0	2,0	9	Weldon	☐
JS720160D2R100.3Z9-HXT	10008279	2	D	16,0	16,0	44,0	99,0	1,0	9	Weldon	☐
JS720160D2R200.3Z9-HXT	10008280	2	D	16,0	16,0	44,0	99,0	2,0	9	Weldon	☐
JS720160D2R300.3Z9-HXT	10008281	2	D	16,0	16,0	44,0	99,0	3,0	9	Weldon	☐
JS720200D2R100.3Z9-HXT	10228396	2	D	20,0	20,0	45,0	105,0	1,0	9	Weldon	☐
JS720200D2R200.3Z9-HXT	10228397	2	D	20,0	20,0	45,0	105,0	2,0	9	Weldon	☐
JS720200D2R300.3Z9-HXT	10228398	2	D	20,0	20,0	45,0	105,0	3,0	9	Weldon	☐
JS720250D2R100.3Z9-HXT	10008282	2	D	25,0	25,0	50,0	125,0	1,0	9	Weldon	☐
JS720250D2R200.3Z9-HXT	10008283	2	D	25,0	25,0	50,0	125,0	2,0	9	Weldon	☐
JS720250D2R300.3Z9-HXT	10008284	2	D	25,0	25,0	50,0	125,0	3,0	9	Weldon	☐
JS720100D3R050.3Z9-HXT	10067887	3	D	10,0	10,0	40,0	89,0	0,5	9	Weldon	☐
JS720100D3R100.3Z9-HXT	10067888	3	D	10,0	10,0	40,0	89,0	1,0	9	Weldon	☐
JS720100D3R200.3Z9-HXT	10067889	3	D	10,0	10,0	40,0	89,0	2,0	9	Weldon	☐
JS720120D3R050.3Z9-HXT	10067890	3	D	12,0	12,0	45,0	100,0	0,5	9	Weldon	☐
JS720120D3R100.3Z9-HXT	10067891	3	D	12,0	12,0	45,0	100,0	1,0	9	Weldon	☐
JS720120D3R200.3Z9-HXT	10067892	3	D	12,0	12,0	45,0	100,0	2,0	9	Weldon	☐
JS720160D3R100.3Z9-HXT	10008285	3	D	16,0	16,0	65,0	130,0	1,0	9	Weldon	☐
JS720160D3R200.3Z9-HXT	10008286	3	D	16,0	16,0	65,0	130,0	2,0	9	Weldon	☐
JS720160D3R300.3Z9-HXT	10008287	3	D	16,0	16,0	65,0	130,0	3,0	9	Weldon	☐
JS720200D3R100.3Z9-HXT	10008288	3	D	20,0	20,0	62,0	121,0	1,0	9	Weldon	☐
JS720200D3R200.3Z9-HXT	10008289	3	D	20,0	20,0	62,0	121,0	2,0	9	Weldon	☐
JS720200D3R300.3Z9-HXT	10008290	3	D	20,0	20,0	62,0	121,0	3,0	9	Weldon	☐
JS720250D3R100.3Z9-HXT	10008292	3	D	25,0	25,0	78,0	146,0	1,0	9	Weldon	☐
JS720250D3R200.3Z9-HXT	10008293	3	D	25,0	25,0	78,0	146,0	2,0	9	Weldon	☐
JS720250D3R300.3Z9-HXT	10008294	3	D	25,0	25,0	78,0	146,0	3,0	9	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

JS720

High performance – Titanium – Square – 9 Flutes – Weldon – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720100D3R050.3Z9C-HXT	10067893	3	D	■	10,0	10,0	40,0	89,0	0,5	9	Weldon	☐
JS720100D3R100.3Z9C-HXT	10067894	3	D	■	10,0	10,0	40,0	89,0	1,0	9	Weldon	☐
JS720100D3R200.3Z9C-HXT	10067895	3	D	■	10,0	10,0	40,0	89,0	2,0	9	Weldon	☐
JS720120D3R050.3Z9C-HXT	10067897	3	D	■	12,0	12,0	45,0	100,0	0,5	9	Weldon	☐
JS720120D3R100.3Z9C-HXT	10067898	3	D	■	12,0	12,0	45,0	100,0	1,0	9	Weldon	☐
JS720120D3R200.3Z9C-HXT	10067899	3	D	■	12,0	12,0	45,0	100,0	2,0	9	Weldon	☐
JS720160D3R100.3Z9C-HXT	10067900	3	D	■	16,0	16,0	65,0	130,0	1,0	9	Weldon	☐
JS720160D3R200.3Z9C-HXT	10067901	3	D	■	16,0	16,0	65,0	130,0	2,0	9	Weldon	☐
JS720160D3R300.3Z9C-HXT	10067902	3	D	■	16,0	16,0	65,0	130,0	3,0	9	Weldon	☐
JS720200D3R100.3Z9C-HXT	10067903	3	D	■	20,0	20,0	62,0	121,0	1,0	9	Weldon	☐
JS720200D3R200.3Z9C-HXT	10067904	3	D	■	20,0	20,0	62,0	121,0	2,0	9	Weldon	☐
JS720200D3R300.3Z9C-HXT	10067905	3	D	■	20,0	20,0	62,0	121,0	3,0	9	Weldon	☐
JS720250D3R100.3Z9C-HXT	10067906	3	D	■	25,0	25,0	78,0	146,0	1,0	9	Weldon	☐
JS720250D3R200.3Z9C-HXT	10067907	3	D	■	25,0	25,0	78,0	146,0	2,0	9	Weldon	☐
JS720250D3R300.3Z9C-HXT	10067908	3	D	■	25,0	25,0	78,0	146,0	3,0	9	Weldon	☐

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

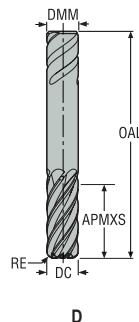
Graphite

X-Heads

Minimaster

JS720

High performance – Titanium – Square – 6 Flutes – Safelock – Corner radius



D

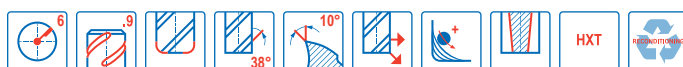
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible

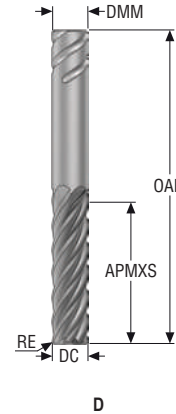


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720060D2R050.9Z6-HXT	03060374	2	D	6,0	6,0	17,0	57,0	0,5	6	Safe-lock	☐
JS720060D2R100.9Z6-HXT	03060375	2	D	6,0	6,0	17,0	57,0	1,0	6	Safe-lock	☐
JS720080D2R050.9Z6-HXT	03060376	2	D	8,0	8,0	23,0	63,0	0,5	6	Safe-lock	☐
JS720080D2R100.9Z6-HXT	03061296	2	D	8,0	8,0	23,0	63,0	1,0	6	Safe-lock	☐
JS720100D2R050.9Z6-HXT	03060377	2	D	10,0	10,0	26,0	72,0	0,5	6	Safe-lock	☐
JS720100D2R100.9Z6-HXT	03060379	2	D	10,0	10,0	26,0	72,0	1,0	6	Safe-lock	☐
JS720100D2R200.9Z6-HXT	03060380	2	D	10,0	10,0	26,0	72,0	2,0	6	Safe-lock	☐
JS720100D2R300.9Z6-HXT	03060381	2	D	10,0	10,0	26,0	72,0	3,0	6	Safe-lock	☐
JS720120D2R050.9Z6-HXT	03060382	2	D	12,0	12,0	30,0	83,0	0,5	6	Safe-lock	☐
JS720120D2R100.9Z6-HXT	03060384	2	D	12,0	12,0	30,0	83,0	1,0	6	Safe-lock	☐
JS720120D2R200.9Z6-HXT	03060385	2	D	12,0	12,0	30,0	83,0	2,0	6	Safe-lock	☐
JS720120D2R300.9Z6-HXT	03060386	2	D	12,0	12,0	30,0	83,0	3,0	6	Safe-lock	☐
JS720160D2R050.9Z6-HXT	03060387	2	D	16,0	16,0	44,0	99,0	0,5	6	Safe-lock	☐
JS720160D2R100.9Z6-HXT	03060389	2	D	16,0	16,0	44,0	99,0	1,0	6	Safe-lock	☐
JS720160D2R200.9Z6-HXT	03060390	2	D	16,0	16,0	44,0	99,0	2,0	6	Safe-lock	☐
JS720160D2R300.9Z6-HXT	03060391	2	D	16,0	16,0	44,0	99,0	3,0	6	Safe-lock	☐
JS720160D2R400.9Z6-HXT	03060392	2	D	16,0	16,0	44,0	99,0	4,0	6	Safe-lock	☐
JS720160D2R600.9Z6-HXT	03060393	2	D	16,0	16,0	44,0	99,0	6,0	6	Safe-lock	☐
JS720200D2R050.9Z6-HXT	10228464	2	D	20,0	20,0	45,0	105,0	0,5	6	Safe-lock	☐
JS720200D2R100.9Z6-HXT	10228465	2	D	20,0	20,0	45,0	105,0	1,0	6	Safe-lock	☐
JS720200D2R200.9Z6-HXT	10228467	2	D	20,0	20,0	45,0	105,0	2,0	6	Safe-lock	☐
JS720200D2R300.9Z6-HXT	10228468	2	D	20,0	20,0	45,0	105,0	3,0	6	Safe-lock	☐
JS720250D2R050.9Z6-HXT	10228469	2	D	25,0	25,0	50,0	125,0	0,5	6	Safe-lock	☐
JS720250D2R100.9Z6-HXT	10228470	2	D	25,0	25,0	50,0	125,0	1,0	6	Safe-lock	☐
JS720250D2R200.9Z6-HXT	10228471	2	D	25,0	25,0	50,0	125,0	2,0	6	Safe-lock	☐
JS720250D2R300.9Z6-HXT	10228472	2	D	25,0	25,0	50,0	125,0	3,0	6	Safe-lock	☐

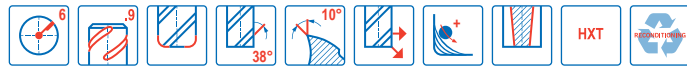
☐ Safelock available. Delivery time is 6 days.

JS720

High performance – Titanium – Square – 6 Flutes – Safelock – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720080D3R050.9Z6-HXT	10228473	3	D	8,0	8,0	32,0	80,0	0,5	6	Safe-lock	☐
JS720080D3R100.9Z6-HXT	10228474	3	D	8,0	8,0	32,0	80,0	1,0	6	Safe-lock	☐
JS720100D3R050.9Z6-HXT	10228475	3	D	10,0	10,0	40,0	89,0	0,5	6	Safe-lock	☐
JS720100D3R100.9Z6-HXT	10228476	3	D	10,0	10,0	40,0	89,0	1,0	6	Safe-lock	☐
JS720100D3R200.9Z6-HXT	10228477	3	D	10,0	10,0	40,0	89,0	2,0	6	Safe-lock	☐
JS720120D3R050.9Z6-HXT	10228478	3	D	12,0	12,0	45,0	100,0	0,5	6	Safe-lock	☐
JS720120D3R100.9Z6-HXT	10228479	3	D	12,0	12,0	45,0	100,0	1,0	6	Safe-lock	☐
JS720120D3R200.9Z6-HXT	10228480	3	D	12,0	12,0	45,0	100,0	2,0	6	Safe-lock	☐
JS720160D3R050.9Z6-HXT	10228481	3	D	16,0	16,0	65,0	130,0	0,5	6	Safe-lock	☐
JS720160D3R100.9Z6-HXT	10228482	3	D	16,0	16,0	65,0	130,0	1,0	6	Safe-lock	☐
JS720160D3R200.9Z6-HXT	10228483	3	D	16,0	16,0	65,0	130,0	2,0	6	Safe-lock	☐
JS720160D3R300.9Z6-HXT	10228484	3	D	16,0	16,0	65,0	130,0	3,0	6	Safe-lock	☐
JS720200D3R050.9Z6-HXT	03060394	3	D	20,0	20,0	62,0	121,0	0,5	6	Safe-lock	☐
JS720200D3R100.9Z6-HXT	03060396	3	D	20,0	20,0	62,0	121,0	1,0	6	Safe-lock	☐
JS720200D3R200.9Z6-HXT	03060397	3	D	20,0	20,0	62,0	121,0	2,0	6	Safe-lock	☐
JS720200D3R300.9Z6-HXT	03060398	3	D	20,0	20,0	62,0	121,0	3,0	6	Safe-lock	☐
JS720200D3R400.9Z6-HXT	03060399	3	D	20,0	20,0	62,0	121,0	4,0	6	Safe-lock	☐
JS720200D3R500.9Z6-HXT	03060400	3	D	20,0	20,0	62,0	121,0	5,0	6	Safe-lock	☐
JS720200D3R600.9Z6-HXT	03060401	3	D	20,0	20,0	62,0	121,0	6,0	6	Safe-lock	☐
JS720250D3R050.9Z6-HXT	03060402	3	D	25,0	25,0	78,0	146,0	0,5	6	Safe-lock	☐
JS720250D3R100.9Z6-HXT	03060403	3	D	25,0	25,0	78,0	146,0	1,0	6	Safe-lock	☐
JS720250D3R200.9Z6-HXT	03060404	3	D	25,0	25,0	78,0	146,0	2,0	6	Safe-lock	☐
JS720250D3R300.9Z6-HXT	03060405	3	D	25,0	25,0	78,0	146,0	3,0	6	Safe-lock	☐
JS720250D3R400.9Z6-HXT	03060406	3	D	25,0	25,0	78,0	146,0	4,0	6	Safe-lock	☐
JS720250D3R600.9Z6-HXT	03060407	3	D	25,0	25,0	78,0	146,0	6,0	6	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

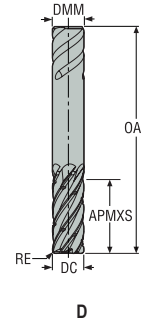
Graphite

X-Heads

Minimaster

JS720

High performance – Titanium – Square – 6 Flutes – Safelock – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible

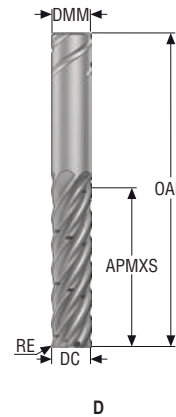


Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720080D2R050.9Z6C-HXT	10228527	2	D	■	8,0	8,0	23,0	63,0	0,5	6	Safe-lock	□
JS720080D2R100.9Z6C-HXT	10228528	2	D	■	8,0	8,0	23,0	63,0	1,0	6	Safe-lock	□
JS720100D2R050.9Z6C-HXT	03060378	2	D	■	10,0	10,0	26,0	72,0	0,5	6	Safe-lock	□
JS720100D2R100.9Z6C-HXT	10228529	2	D	■	10,0	10,0	26,0	72,0	1,0	6	Safe-lock	□
JS720120D2R050.9Z6C-HXT	03060383	2	D	■	12,0	12,0	30,0	83,0	0,5	6	Safe-lock	□
JS720120D2R100.9Z6C-HXT	03298334	2	D	■	12,0	12,0	30,0	83,0	1,0	6	Safe-lock	□
JS720120D2R200.9Z6C-HXT	03298335	2	D	■	12,0	12,0	30,0	83,0	2,0	6	Safe-lock	□
JS720120D2R250.9Z6C-HXT	03298336	2	D	■	12,0	12,0	30,0	83,0	2,5	6	Safe-lock	□
JS720120D2R300.9Z6C-HXT	03298337	2	D	■	12,0	12,0	30,0	83,0	3,0	6	Safe-lock	□
JS720120D2R310.9Z6C-HXT	03298338	2	D	■	12,0	12,0	30,0	83,0	3,1	6	Safe-lock	□
JS720160D2R050.9Z6C-HXT	03060388	2	D	■	16,0	16,0	44,0	99,0	0,5	6	Safe-lock	■
JS720160D2R100.9Z6C-HXT	03298339	2	D	■	16,0	16,0	44,0	99,0	1,0	6	Safe-lock	□
JS720160D2R200.9Z6C-HXT	03298340	2	D	■	16,0	16,0	44,0	99,0	2,0	6	Safe-lock	□
JS720160D2R250.9Z6C-HXT	03298341	2	D	■	16,0	16,0	44,0	99,0	2,5	6	Safe-lock	□
JS720160D2R300.9Z6C-HXT	03298342	2	D	■	16,0	16,0	44,0	99,0	3,0	6	Safe-lock	□
JS720160D2R310.9Z6C-HXT	03298343	2	D	■	16,0	16,0	44,0	99,0	3,1	6	Safe-lock	□
JS720160D2R400.9Z6C-HXT	03298344	2	D	■	16,0	16,0	44,0	99,0	4,0	6	Safe-lock	□
JS720160D2R600.9Z6C-HXT	03298345	2	D	■	16,0	16,0	44,0	99,0	6,0	6	Safe-lock	□

■ Stocked standard.

JS720

High performance – Titanium – Square – 6 Flutes – Safelock – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720160D3R050.9Z6C-HXT	10228530	3	D	■	16,0	16,0	65,0	130,0	0,5	6	Safe-lock	☐
JS720160D3R100.9Z6C-HXT	10228531	3	D	■	16,0	16,0	65,0	130,0	1,0	6	Safe-lock	☐
JS720160D3R200.9Z6C-HXT	10228532	3	D	■	16,0	16,0	65,0	130,0	2,0	6	Safe-lock	☐
JS720160D3R300.9Z6C-HXT	10228533	3	D	■	16,0	16,0	65,0	130,0	3,0	6	Safe-lock	☐
JS720200D3R050.9Z6C-HXT	03060395	3	D	■	20,0	20,0	62,0	121,0	0,5	6	Safe-lock	☐
JS720200D3R100.9Z6C-HXT	03298346	3	D	■	20,0	20,0	62,0	121,0	1,0	6	Safe-lock	☐
JS720200D3R200.9Z6C-HXT	03298347	3	D	■	20,0	20,0	62,0	121,0	2,0	6	Safe-lock	☐
JS720200D3R250.9Z6C-HXT	03298348	3	D	■	20,0	20,0	62,0	121,0	2,5	6	Safe-lock	☐
JS720200D3R300.9Z6C-HXT	03298349	3	D	■	20,0	20,0	62,0	121,0	3,0	6	Safe-lock	☐
JS720200D3R310.9Z6C-HXT	03298350	3	D	■	20,0	20,0	62,0	121,0	3,1	6	Safe-lock	☐
JS720200D3R400.9Z6C-HXT	03298351	3	D	■	20,0	20,0	62,0	121,0	4,0	6	Safe-lock	☐
JS720200D3R500.9Z6C-HXT	03298352	3	D	■	20,0	20,0	62,0	121,0	5,0	6	Safe-lock	☐
JS720200D3R600.9Z6C-HXT	03298353	3	D	■	20,0	20,0	62,0	121,0	6,0	6	Safe-lock	☐
JS720250D3R050.9Z6C-HXT	03066461	3	D	■	25,0	25,0	78,0	146,0	0,5	6	Safe-lock	☐
JS720250D3R100.9Z6C-HXT	03298354	3	D	■	25,0	25,0	78,0	146,0	1,0	6	Safe-lock	☐
JS720250D3R200.9Z6C-HXT	03298355	3	D	■	25,0	25,0	78,0	146,0	2,0	6	Safe-lock	☐
JS720250D3R300.9Z6C-HXT	03298356	3	D	■	25,0	25,0	78,0	146,0	3,0	6	Safe-lock	☐
JS720250D3R400.9Z6C-HXT	03298357	3	D	■	25,0	25,0	78,0	146,0	4,0	6	Safe-lock	☐
JS720250D3R600.9Z6C-HXT	03298358	3	D	■	25,0	25,0	78,0	146,0	6,0	6	Safe-lock	☐

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

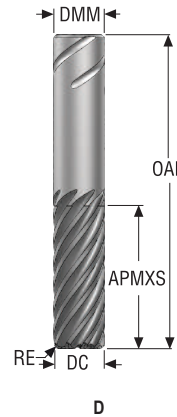
Graphite

X-Heads

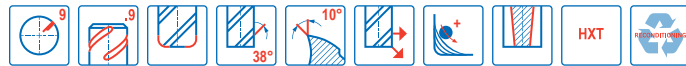
Minimaster

JS720

High performance – Titanium – Square – 9 Flutes – Safelock – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible

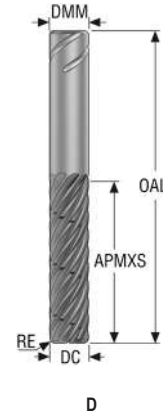


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS720100D2R050.9Z9-HXT	10067909	2	D	10,0	10,0	26,0	72,0	0,5	9	Safe-lock	☐
JS720100D2R100.9Z9-HXT	10067910	2	D	10,0	10,0	26,0	72,0	1,0	9	Safe-lock	☐
JS720100D2R200.9Z9-HXT	10067911	2	D	10,0	10,0	26,0	72,0	2,0	9	Safe-lock	☐
JS720120D2R050.9Z9-HXT	10067912	2	D	12,0	12,0	30,0	83,0	0,5	9	Safe-lock	☐
JS720120D2R100.9Z9-HXT	10067913	2	D	12,0	12,0	30,0	83,0	1,0	9	Safe-lock	☐
JS720120D2R200.9Z9-HXT	10067914	2	D	12,0	12,0	30,0	83,0	2,0	9	Safe-lock	☐
JS720160D2R100.9Z9-HXT	10008295	2	D	16,0	16,0	44,0	99,0	1,0	9	Safe-lock	☐
JS720160D2R200.9Z9-HXT	10008296	2	D	16,0	16,0	44,0	99,0	2,0	9	Safe-lock	☐
JS720160D2R300.9Z9-HXT	10008297	2	D	16,0	16,0	44,0	99,0	3,0	9	Safe-lock	☐
JS720200D2R100.9Z9-HXT	10228399	2	D	20,0	20,0	45,0	105,0	1,0	9	Safe-lock	☐
JS720200D2R200.9Z9-HXT	10228400	2	D	20,0	20,0	45,0	105,0	2,0	9	Safe-lock	☐
JS720200D2R300.9Z9-HXT	10228401	2	D	20,0	20,0	45,0	105,0	3,0	9	Safe-lock	☐
JS720250D2R100.9Z9-HXT	10008298	2	D	25,0	25,0	50,0	125,0	1,0	9	Safe-lock	☐
JS720250D2R200.9Z9-HXT	10008299	2	D	25,0	25,0	50,0	125,0	2,0	9	Safe-lock	☐
JS720250D2R300.9Z9-HXT	10008300	2	D	25,0	25,0	50,0	125,0	3,0	9	Safe-lock	☐
JS720100D3R050.9Z9-HXT	10067915	3	D	10,0	10,0	40,0	89,0	0,5	9	Safe-lock	☐
JS720100D3R100.9Z9-HXT	10067916	3	D	10,0	10,0	40,0	89,0	1,0	9	Safe-lock	☐
JS720100D3R200.9Z9-HXT	10067917	3	D	10,0	10,0	40,0	89,0	2,0	9	Safe-lock	☐
JS720120D3R050.9Z9-HXT	10067918	3	D	12,0	12,0	45,0	100,0	0,5	9	Safe-lock	☐
JS720120D3R100.9Z9-HXT	10067919	3	D	12,0	12,0	45,0	100,0	1,0	9	Safe-lock	☐
JS720120D3R200.9Z9-HXT	10067921	3	D	12,0	12,0	45,0	100,0	2,0	9	Safe-lock	☐
JS720160D3R100.9Z9-HXT	10008301	3	D	16,0	16,0	65,0	130,0	1,0	9	Safe-lock	☐
JS720160D3R200.9Z9-HXT	10008302	3	D	16,0	16,0	65,0	130,0	2,0	9	Safe-lock	☐
JS720160D3R300.9Z9-HXT	10008303	3	D	16,0	16,0	65,0	130,0	3,0	9	Safe-lock	☐
JS720200D3R100.9Z9-HXT	10008304	3	D	20,0	20,0	62,0	121,0	1,0	9	Safe-lock	☐
JS720200D3R200.9Z9-HXT	10008305	3	D	20,0	20,0	62,0	121,0	2,0	9	Safe-lock	☐
JS720200D3R300.9Z9-HXT	10008306	3	D	20,0	20,0	62,0	121,0	3,0	9	Safe-lock	☐
JS720250D3R100.9Z9-HXT	10008307	3	D	25,0	25,0	78,0	146,0	1,0	9	Safe-lock	☐
JS720250D3R200.9Z9-HXT	10008308	3	D	25,0	25,0	78,0	146,0	2,0	9	Safe-lock	☐
JS720250D3R300.9Z9-HXT	10008309	3	D	25,0	25,0	78,0	146,0	3,0	9	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

JS720

High performance – Titanium – Square – 9 Flutes – Safelock – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JS720100D3R050.9Z9C-HXT	10067922	3	D	■	10,0	10,0	40,0	89,0	0,5	9	Safe-lock	☐
JS720100D3R100.9Z9C-HXT	10067923	3	D	■	10,0	10,0	40,0	89,0	1,0	9	Safe-lock	☐
JS720100D3R200.9Z9C-HXT	10067924	3	D	■	10,0	10,0	40,0	89,0	2,0	9	Safe-lock	☐
JS720120D3R050.9Z9C-HXT	10067925	3	D	■	12,0	12,0	45,0	100,0	0,5	9	Safe-lock	☐
JS720120D3R100.9Z9C-HXT	10067926	3	D	■	12,0	12,0	45,0	100,0	1,0	9	Safe-lock	☐
JS720120D3R200.9Z9C-HXT	10067927	3	D	■	12,0	12,0	45,0	100,0	2,0	9	Safe-lock	☐
JS720160D3R100.9Z9C-HXT	10067928	3	D	■	16,0	16,0	65,0	130,0	1,0	9	Safe-lock	☐
JS720160D3R200.9Z9C-HXT	10067929	3	D	■	16,0	16,0	65,0	130,0	2,0	9	Safe-lock	☐
JS720160D3R300.9Z9C-HXT	10067930	3	D	■	16,0	16,0	65,0	130,0	3,0	9	Safe-lock	☐
JS720200D3R100.9Z9C-HXT	10067931	3	D	■	20,0	20,0	62,0	121,0	1,0	9	Safe-lock	☐
JS720200D3R200.9Z9C-HXT	10067932	3	D	■	20,0	20,0	62,0	121,0	2,0	9	Safe-lock	☐
JS720200D3R300.9Z9C-HXT	10067933	3	D	■	20,0	20,0	62,0	121,0	3,0	9	Safe-lock	☐
JS720250D3R100.9Z9C-HXT	10067934	3	D	■	25,0	25,0	78,0	146,0	1,0	9	Safe-lock	☐
JS720250D3R200.9Z9C-HXT	10067935	3	D	■	25,0	25,0	78,0	146,0	2,0	9	Safe-lock	☐
JS720250D3R300.9Z9C-HXT	10067936	3	D	■	25,0	25,0	78,0	146,0	3,0	9	Safe-lock	☐

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

Cutting data – JS720 Side milling PCEDC =6

SMG		a _e /DC	a _p /DC	f _z							v _c
				6	8	10	12	16	20	25	
M1	E	0.400	1.1	0.032	0.044	0.055	0.065	0.080	0.095	0.11	110 (85 — 140)
		0,400	1,1	0,0013	0,0017	0,0022	0,0026	0,0032	0,0038	0,0044	360 (280 — 450)
M2	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	90 (70 — 110)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	295 (230 — 360)
M3	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	70 (55 — 99)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	230 (190 — 320)
M4	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	80 (60 — 99)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	260 (200 — 320)
M5	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	65 (50 — 83)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	215 (170 — 270)
S1	E	0.0500	2.6	0.046	0.060	0.075	0.090	0.11	0.13	0.14	43 (29 — 71)
		0,0500	2,6	0,0018	0,0024	0,0030	0,0036	0,0044	0,0050	0,0055	140 (96 — 230)
S2	E	0.0500	2.6	0.046	0.060	0.075	0.090	0.11	0.13	0.14	34 (23 — 57)
		0,0500	2,6	0,0018	0,0024	0,0030	0,0036	0,0044	0,0050	0,0055	110 (76 — 180)
S3	E	0.0500	2.6	0.042	0.055	0.070	0.085	0.10	0.12	0.13	30 (20 — 49)
		0,0500	2,6	0,0017	0,0022	0,0028	0,0034	0,0040	0,0048	0,0050	100 (66 — 160)
S11	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	105 (78 — 120)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	345 (260 — 390)
S12	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	80 (60 — 99)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	260 (200 — 320)
S13	E	0.400	1.1	0.030	0.040	0.050	0.060	0.075	0.085	0.095	80 (60 — 99)
		0,400	1,1	0,0012	0,0016	0,0020	0,0024	0,0030	0,0034	0,0038	260 (200 — 320)

Cutting data – JS720 Side milling advanced roughing a_e/DC=0,07 PCEDC =6

SMG		a _p /DC	f _z							v _c
			6	8	10	12	16	20	25	
M1	E	1.9	0.065	0.085	0.11	0.13	0.16	0.18	0.20	140 (110 — 180)
		1.9	0,0026	0,0034	0,0044	0,0050	0,0065	0,0070	0,0080	460 (370 — 590)
M2	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	115 (91 — 150)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	375 (300 — 490)
M3	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	90 (72 — 120)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	295 (240 — 390)
M4	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	105 (78 — 120)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	345 (260 — 390)
M5	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	85 (65 — 100)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	280 (220 — 320)
S1	E	2.6	0.038	0.050	0.065	0.075	0.095	0.11	0.12	41 (28 — 68)
		2.6	0,0015	0,0020	0,0026	0,0030	0,0038	0,0044	0,0048	135 (92 — 220)
S2	E	2.6	0.038	0.050	0.065	0.075	0.095	0.11	0.12	33 (22 — 54)
		2.6	0,0015	0,0020	0,0026	0,0030	0,0038	0,0044	0,0048	110 (73 — 170)
S3	E	2.6	0.036	0.048	0.060	0.070	0.085	0.10	0.11	29 (20 — 47)
		2.6	0,0014	0,0019	0,0024	0,0028	0,0034	0,0040	0,0044	95 (66 — 150)
S11	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	135 (110 — 160)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	445 (370 — 520)
S12	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	105 (78 — 120)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	345 (260 — 390)
S13	E	1.9	0.060	0.080	0.095	0.12	0.14	0.16	0.19	105 (78 — 120)
		1.9	0,0024	0,0032	0,0038	0,0048	0,0055	0,0065	0,0075	345 (260 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – JS720 Side milling advanced roughing $a_e/DC=0,07$ PCEDC =9

SMG		a_p/DC	f_z					v_c
			10	12	16	20	25	
M1	E	2.0	0.11	0.13	0.16	0.18	0.20	125 (98 — 160)
		2.0	0,0044	0,0050	0,0065	0,0070	0,0080	410 (330 — 520)
M2	E	2.0	0.095	0.12	0.14	0.16	0.19	105 (82 — 130)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	345 (270 — 420)
M3	E	2.0	0.095	0.12	0.14	0.16	0.19	80 (64 — 110)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	260 (210 — 360)
M4	E	2.0	0.095	0.12	0.14	0.16	0.19	95 (70 — 110)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	310 (230 — 360)
M5	E	2.0	0.095	0.12	0.14	0.16	0.19	75 (59 — 96)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	245 (200 — 310)
S1	E	2.8	0.065	0.075	0.095	0.11	0.12	37 (25 — 61)
		2.8	0,0026	0,0030	0,0038	0,0044	0,0048	120 (83 — 200)
S2	E	2.8	0.065	0.075	0.095	0.11	0.12	30 (20 — 49)
		2.8	0,0026	0,0030	0,0038	0,0044	0,0048	100 (66 — 160)
S3	E	2.8	0.060	0.070	0.085	0.10	0.11	26 (18 — 43)
		2.8	0,0024	0,0028	0,0034	0,0040	0,0044	85 (60 — 140)
S11	E	2.0	0.095	0.12	0.14	0.16	0.19	120 (91 — 150)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	395 (300 — 490)
S12	E	2.0	0.095	0.12	0.14	0.16	0.19	95 (70 — 110)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	310 (230 — 360)
S13	E	2.0	0.095	0.12	0.14	0.16	0.19	95 (70 — 110)
		2.0	0,0038	0,0048	0,0055	0,0065	0,0075	310 (230 — 360)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

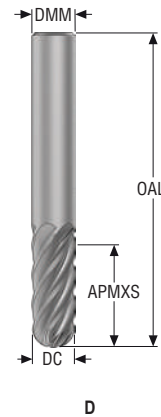
Graphite

X-Heads

Minimaster

JS730

High performance – Titanium – Ball nose – 6 Flutes – Cylindrical



- Tolerances:
 —DMM= h5
 —DC= e7
 —RE= ±0,02 mm
 —Two flutes to centre
 —Regrind possible

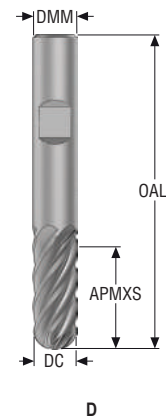


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS730060D2B.0Z6-HXT	03067605	2	D	6,0	6,0	17,0	57,0	3,0	6	Cylindrical	■
JS730080D2B.0Z6-HXT	03067606	2	D	8,0	8,0	23,0	63,0	4,0	6	Cylindrical	■
JS730100D2B.0Z6-HXT	03067607	2	D	10,0	10,0	26,0	72,0	5,0	6	Cylindrical	■
JS730120D2B.0Z6-HXT	03067608	2	D	12,0	12,0	30,0	83,0	6,0	6	Cylindrical	■
JS730160D2B.0Z6-HXT	03067609	2	D	16,0	16,0	44,0	99,0	8,0	6	Cylindrical	■
JS730200D3B.0Z6-HXT	03067610	3	D	20,0	20,0	62,0	121,0	10,0	6	Cylindrical	■
JS730250D3B.0Z6-HXT	03067611	3	D	25,0	25,0	78,0	146,0	12,5	6	Cylindrical	■

■ Stocked standard.

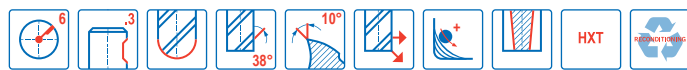
JS730

High performance – Titanium – Ball nose – 6 Flutes – Weldon



D

- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Two flutes to centre
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS730060D2B.3Z6-HXT	03067778	2	D	6,0	6,0	17,0	57,0	3,0	6	Weldon	☐
JS730080D2B.3Z6-HXT	03067779	2	D	8,0	8,0	23,0	63,0	4,0	6	Weldon	☒
JS730100D2B.3Z6-HXT	03067780	2	D	10,0	10,0	26,0	72,0	5,0	6	Weldon	☐
JS730120D2B.3Z6-HXT	03067781	2	D	12,0	12,0	30,0	83,0	6,0	6	Weldon	☐
JS730160D2B.3Z6-HXT	03067782	2	D	16,0	16,0	44,0	99,0	8,0	6	Weldon	☐
JS730200D3B.3Z6-HXT	03067783	3	D	20,0	20,0	62,0	121,0	10,0	6	Weldon	☐
JS730250D3B.3Z6-HXT	03067784	3	D	25,0	25,0	78,0	146,0	12,5	6	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

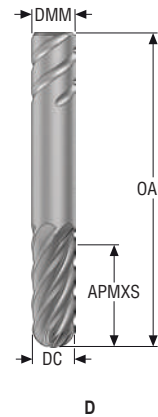
Graphite

X-Heads

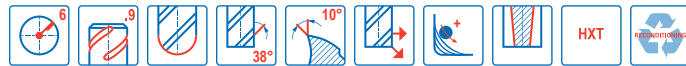
Minimaster

JS730

High performance – Titanium – Ball nose 6 Flutes – Safelock



- Tolerances:
 —DMM= h5
 —DC= e7
 —RE= ±0,02 mm
 —Two flutes to centre
 —Reground possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JS730060D2B.9Z6-HXT	03067785	2	D	6,0	6,0	17,0	57,0	3,0	6	Safe-lock	☐
JS730080D2B.9Z6-HXT	03067786	2	D	8,0	8,0	23,0	63,0	4,0	6	Safe-lock	☐
JS730100D2B.9Z6-HXT	03067787	2	D	10,0	10,0	26,0	72,0	5,0	6	Safe-lock	☐
JS730120D2B.9Z6-HXT	03067788	2	D	12,0	12,0	30,0	83,0	6,0	6	Safe-lock	☐
JS730160D2B.9Z6-HXT	03067789	2	D	16,0	16,0	44,0	99,0	8,0	6	Safe-lock	☐
JS730200D3B.9Z6-HXT	03067790	3	D	20,0	20,0	62,0	121,0	10,0	6	Safe-lock	☐
JS730250D3B.9Z6-HXT	03067791	3	D	25,0	25,0	78,0	146,0	12,5	6	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Cutting data – JS730 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z							v _c
				6	8	10	12	16	20	25	
M1	E	0.100 0,100	1.8 1,8	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	140 (89 — 150) 460 (300 — 490)
M2	E	0.150 0,150	2.2 2,2	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	110 (70 — 120) 360 (230 — 390)
M3	E	0.100 0,100	1.8 1,8	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.15 0,0060	85 (55 — 99) 280 (190 — 320)
M4	E	0.100 0,100	1.8 1,8	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	90 (57 — 100) 295 (190 — 320)
M5	E	0.100 0,100	1.8 1,8	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.13 0,0050	75 (47 — 85) 245 (160 — 270)
S1	E	0.150 0,150	2.2 2,2	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	0.10 0,0040	43 (29 — 70) 140 (96 — 220)
S2	E	0.150 0,150	2.2 2,2	0.032 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.090 0,0036	0.10 0,0040	34 (23 — 57) 110 (76 — 180)
S3	E	0.150 0,150	2.2 2,2	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	30 (20 — 49) 100 (66 — 160)
S11	E	0.300 0,300	1.2 1,2	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	130 (79 — 130) 425 (260 — 420)
S12	E	0.300 0,300	1.2 1,2	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	0.095 0,0038	100 (61 — 100) 330 (210 — 320)
S13	E	0.300 0,300	1.2 1,2	0.026 0,0010	0.034 0,0013	0.044 0,0017	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.085 0,0034	100 (62 — 100) 330 (210 — 320)

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Cutting data – JS730 Side milling advanced roughing a_e/DC=0,07

SMG		a _p /DC	f _z							v _c
			6	8	10	12	16	20	25	
M1	E	1.9 0,0022	0.055 0,0030	0.075 0,0038	0.095 0,0044	0.11 0,0055	0.14 0,0065	0.16 0,0070	0.18 0,0070	145 (93 — 150) 475 (310 — 490)
M2	E	2.2 0,0017	0.042 0,0022	0.055 0,0028	0.070 0,0034	0.085 0,0040	0.10 0,0048	0.12 0,0050	0.13 0,0050	125 (78 — 130) 410 (260 — 420)
M3	E	1.9 0,0022	0.055 0,0030	0.075 0,0038	0.095 0,0044	0.11 0,0055	0.14 0,0065	0.16 0,0070	0.18 0,0070	90 (58 — 100) 295 (200 — 320)
M4	E	1.9 0,0020	0.050 0,0026	0.065 0,0032	0.080 0,0038	0.095 0,0048	0.12 0,0055	0.14 0,0065	0.16 0,0065	95 (59 — 100) 310 (200 — 320)
M5	E	1.9 0,0020	0.050 0,0026	0.065 0,0032	0.080 0,0038	0.095 0,0048	0.12 0,0055	0.14 0,0065	0.16 0,0065	80 (50 — 89) 260 (170 — 290)
S1	E	2.2 0,0018	0.046 0,0024	0.060 0,0030	0.075 0,0036	0.090 0,0044	0.11 0,0050	0.13 0,0060	0.15 0,0060	47 (32 — 79) 155 (110 — 250)
S2	E	2.2 0,0018	0.046 0,0024	0.060 0,0030	0.075 0,0036	0.090 0,0044	0.11 0,0050	0.13 0,0060	0.15 0,0060	38 (26 — 63) 125 (86 — 200)
S3	E	2.2 0,0017	0.042 0,0022	0.055 0,0028	0.070 0,0034	0.085 0,0040	0.10 0,0048	0.12 0,0050	0.13 0,0050	33 (23 — 55) 110 (76 — 180)
S11	E	1.9 0,0020	0.050 0,0028	0.070 0,0034	0.085 0,0040	0.10 0,0050	0.13 0,0060	0.15 0,0065	0.17 0,0065	150 (94 — 150) 490 (310 — 490)
S12	E	1.9 0,0020	0.050 0,0028	0.070 0,0034	0.085 0,0040	0.10 0,0050	0.13 0,0060	0.15 0,0065	0.17 0,0065	115 (72 — 110) 375 (240 — 360)
S13	E	1.9 0,0018	0.046 0,0024	0.060 0,0030	0.075 0,0036	0.090 0,0044	0.11 0,0050	0.13 0,0060	0.15 0,0060	120 (74 — 120) 395 (250 — 390)

Hard

Plastic and cf/np

Graphite

X-Heads

Minimaster

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

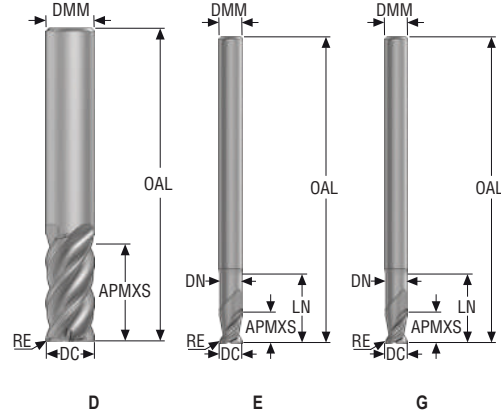
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JHP751

High performance – Titanium – Square – 2-4 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC=−0,02/−0,04 mm
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6

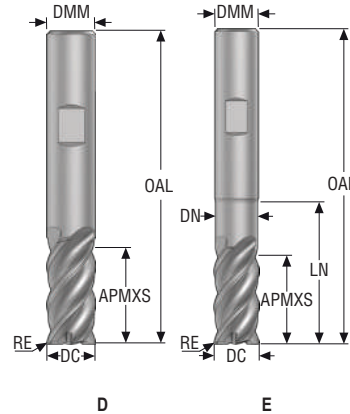


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JHP751080D1R040.0Z4	HXT	10105487	1	D	8,0	8,0	16,0	58,0	—	—	0,4	4	Cylindrical	■
JHP751100D1R040.0Z4	HXT	10105548	1	D	10,0	10,0	20,0	66,0	—	—	0,4	4	Cylindrical	■
JHP751100D1R150.0Z4	HXT	10105549	1	D	10,0	10,0	20,0	66,0	—	—	1,5	4	Cylindrical	■
JHP751120D1R040.0Z4	HXT	10105550	1	D	12,0	12,0	24,0	75,0	—	—	0,4	4	Cylindrical	■
JHP751120D1R150.0Z4	HXT	10105552	1	D	12,0	12,0	24,0	75,0	—	—	1,5	4	Cylindrical	■
JHP751160D1R040.0Z4	HXT	10105581	1	D	16,0	16,0	32,0	92,0	—	—	0,4	4	Cylindrical	■
JHP751160D1R150.0Z4	HXT	10105582	1	D	16,0	16,0	32,0	92,0	—	—	1,5	4	Cylindrical	■
JHP751200D1R080.0Z4	HXT	10105583	1	D	20,0	20,0	40,0	104,0	—	—	0,8	4	Cylindrical	■
JHP751020G2R020.0Z2	HXT	10105584	2	G	2,0	3,0	3,0	38,0	6,0	1,9	0,2	2	Cylindrical	■
JHP751030G2R020.0Z2	HXT	10105585	2	E	3,0	3,0	4,5	38,0	9,0	2,8	0,2	2	Cylindrical	■
JHP751040G2R020.0Z2	HXT	10105586	2	G	4,0	6,0	6,0	50,0	9,0	3,7	0,2	2	Cylindrical	■
JHP751050G2R030.0Z2	HXT	10105587	2	G	5,0	6,0	7,5	50,0	9,0	4,6	0,3	2	Cylindrical	■
JHP751060E2R030.0Z3	HXT	10105588	2	E	6,0	6,0	9,0	57,0	19,0	5,6	0,3	3	Cylindrical	■
JHP751080E2R040.0Z4	HXT	10105589	2	E	8,0	8,0	16,0	63,0	24,0	7,4	0,4	4	Cylindrical	■
JHP751100E2R040.0Z4	HXT	10105590	2	E	10,0	10,0	20,0	72,0	30,0	9,4	0,4	4	Cylindrical	■
JHP751100E2R080.0Z4	HXT	10105591	2	E	10,0	10,0	20,0	72,0	30,0	9,4	0,8	4	Cylindrical	■
JHP751100E2R200.0Z4	HXT	10105593	2	E	10,0	10,0	20,0	72,0	30,0	9,4	2,0	4	Cylindrical	■
JHP751120E2R040.0Z4	HXT	10105594	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,4	4	Cylindrical	■
JHP751120E2R080.0Z4	HXT	10105595	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,8	4	Cylindrical	■
JHP751120E2R310.0Z4	HXT	10105596	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,1	4	Cylindrical	■
JHP751140E2R080.0Z4	HXT	10105597	2	E	14,0	14,0	28,0	92,0	45,0	13,4	0,8	4	Cylindrical	■
JHP751160E2R040.0Z4	HXT	10105598	2	E	16,0	16,0	32,0	104,0	52,0	15,4	0,4	4	Cylindrical	■
JHP751160E2R080.0Z4	HXT	10105599	2	E	16,0	16,0	32,0	104,0	52,0	15,4	0,8	4	Cylindrical	■
JHP751160E2R200.0Z4	HXT	10105600	2	E	16,0	16,0	32,0	104,0	52,0	15,4	2,0	4	Cylindrical	■
JHP751200E2R080.0Z4	HXT	10105601	2	E	20,0	20,0	40,0	129,0	75,0	19,4	0,8	4	Cylindrical	■

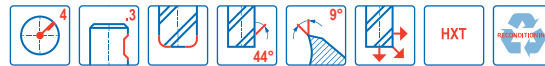
■ Stocked standard.

JHP751

High performance – Titanium – Square – 2-4 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=-0,02/-0,04 mm
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JHP751080D1R040.3Z4	HXT	10105739	1	D	8,0	8,0	16,0	58,0	—	—	0,4	4	Weldon	■
JHP751100D1R040.3Z4	HXT	10105740	1	D	10,0	10,0	20,0	66,0	—	—	0,4	4	Weldon	■
JHP751100D1R150.3Z4	HXT	10105742	1	D	10,0	10,0	20,0	66,0	—	—	1,5	4	Weldon	■
JHP751120D1R040.3Z4	HXT	10105743	1	D	12,0	12,0	24,0	75,0	—	—	0,4	4	Weldon	■
JHP751120D1R150.3Z4	HXT	10105744	1	D	12,0	12,0	24,0	75,0	—	—	1,5	4	Weldon	■
JHP751160D1R040.3Z4	HXT	10105745	1	D	16,0	16,0	32,0	92,0	—	—	0,4	4	Weldon	■
JHP751160D1R150.3Z4	HXT	10105746	1	D	16,0	16,0	32,0	92,0	—	—	1,5	4	Weldon	■
JHP751200D1R080.3Z4	HXT	10105747	1	D	20,0	20,0	40,0	104,0	—	—	0,8	4	Weldon	■
JHP751080E2R040.3Z4	HXT	10105748	2	E	8,0	8,0	16,0	63,0	24,0	7,4	0,4	4	Weldon	■
JHP751100E2R040.3Z4	HXT	10105749	2	E	10,0	10,0	20,0	72,0	30,0	9,4	0,4	4	Weldon	■
JHP751100E2R080.3Z4	HXT	10105750	2	E	10,0	10,0	20,0	72,0	30,0	9,4	0,8	4	Weldon	■
JHP751100E2R200.3Z4	HXT	10105751	2	E	10,0	10,0	20,0	72,0	30,0	9,4	2,0	4	Weldon	■
JHP751120E2R040.3Z4	HXT	10105752	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,4	4	Weldon	■
JHP751120E2R080.3Z4	HXT	10105753	2	E	12,0	12,0	24,0	83,0	35,0	11,4	0,8	4	Weldon	■
JHP751120E2R310.3Z4	HXT	10105754	2	E	12,0	12,0	24,0	83,0	35,0	11,4	3,1	4	Weldon	■
JHP751140E2R080.3Z4	HXT	10105755	2	E	14,0	14,0	28,0	92,0	45,0	13,4	0,8	4	Weldon	■
JHP751160E2R040.3Z4	HXT	10105756	2	E	16,0	16,0	32,0	104,0	52,0	15,4	0,4	4	Weldon	■
JHP751160E2R080.3Z4	HXT	10105757	2	E	16,0	16,0	32,0	104,0	52,0	15,4	0,8	4	Weldon	■
JHP751160E2R200.3Z4	HXT	10105758	2	E	16,0	16,0	32,0	104,0	52,0	15,4	2,0	4	Weldon	■
JHP751200E2R080.3Z4	HXT	10105759	2	E	20,0	20,0	40,0	129,0	75,0	19,4	0,8	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

Graphite

X-Heads

Minimaster

Cutting data – JHP751 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				2	3	4	5	6	8	10	12	14	16	20		
S1	E/M/A	0.0600	1.2	0.016	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.12	0.14	48 (33 — 64)	
		0,0600	1,2	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0048	0,0055	155 (110 — 200)	
S2	E/M/A	0.0600	1.2	0.016	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.12	0.14	39 (26 — 51)	
		0,0600	1,2	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0048	0,0055	130 (86 — 160)	
S3	E/M/A	0.0400	1.2	0.012	0.018	0.024	0.030	0.036	0.048	0.060	0.070	0.080	0.090	0.10	33 (26 — 50)	
		0,0400	1,2	0,00048	0,00070	0,00095	0,0012	0,0014	0,0019	0,0024	0,0028	0,0032	0,0036	0,0040	110 (86 — 160)	
S11	E/M/A	0.0800	1.2	0.016	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.12	0.14	145 (130 — 180)	
		0,0800	1,2	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0048	0,0055	475 (430 — 590)	
S12	E/M/A	0.0800	1.2	0.016	0.024	0.032	0.040	0.048	0.065	0.080	0.095	0.11	0.12	0.14	110 (95 — 140)	
		0,0800	1,2	0,00065	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	0,0044	0,0048	0,0055	360 (320 — 450)	
S13	E/M/A	0.0800	1.2	0.014	0.020	0.028	0.034	0.042	0.055	0.070	0.085	0.095	0.10	0.12	90 (76 — 110)	
		0,0800	1,2	0,00055	0,00080	0,0011	0,0013	0,0017	0,0022	0,0028	0,0034	0,0038	0,0040	0,0048	295 (250 — 360)	

Cutting data – JHP751 Slot milling

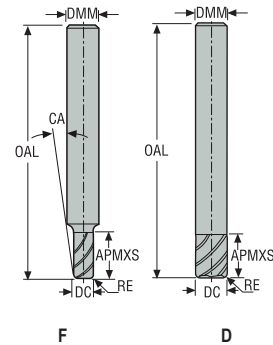
SMG		a _p /DC	f _z												v _c
			2	3	4	5	6	8	10	12	14	16	20		
S1	E/M/A	0.44	0.0075	0.011	0.015	0.019	0.022	0.030	0.038	0.044	0.050	0.055	0.065	30 (20 — 39)	
		0.44	0,00030	0,00044	0,00060	0,00075	0,00085	0,0012	0,0015	0,0017	0,0020	0,0022	0,0026	100 (66 — 120)	
S2	E/M/A	0.44	0.0075	0.011	0.015	0.019	0.022	0.030	0.038	0.044	0.050	0.055	0.065	24 (17 — 32)	
		0.44	0,00030	0,00044	0,00060	0,00075	0,00085	0,0012	0,0015	0,0017	0,0020	0,0022	0,0026	80 (56 — 100)	
S3	E/M/A	0.34	0.0046	0.0070	0.0095	0.012	0.014	0.019	0.024	0.028	0.032	0.034	0.040	20 (15 — 29)	
		0.34	0,00018	0,00028	0,00038	0,00048	0,00055	0,00075	0,00095	0,0011	0,0013	0,0013	0,0016	65 (50 — 95)	
S11	E/M/A	0.70	0.0085	0.013	0.017	0.022	0.026	0.034	0.044	0.050	0.055	0.065	0.075	90 (78 — 110)	
		0.70	0,00034	0,00050	0,00065	0,00085	0,0010	0,0013	0,0017	0,0020	0,0022	0,0026	0,0030	295 (260 — 360)	
S12	E/M/A	0.70	0.0085	0.013	0.017	0.022	0.026	0.034	0.044	0.050	0.055	0.065	0.075	70 (60 — 89)	
		0.70	0,00034	0,00050	0,00065	0,00085	0,0010	0,0013	0,0017	0,0020	0,0022	0,0026	0,0030	230 (200 — 290)	
S13	E/M/A	0.70	0.0075	0.011	0.015	0.019	0.022	0.030	0.038	0.044	0.050	0.055	0.065	55 (48 — 71)	
		0.70	0,00030	0,00044	0,00060	0,00075	0,00085	0,0012	0,0015	0,0017	0,0020	0,0022	0,0026	180 (160 — 230)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JHP760

High performance – ISO-M – Square – 2-4 Flutes – Cylindrical – Corner radius



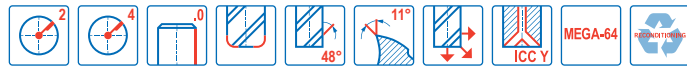
— Tolerances:

— DMM=h5

— DC= -0,02/-0,04 mm

— RE= ±0,03 mm

— Regrind possible if DC is ≥ Ø6



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm				
760040R020Z2.0A-MEGA-64	02734051	2	F	■	4,0	6,0	8,0	50,0	8,95	4,0	0,2	4,0	2	Cylindrical	■
760040R040Z2.0A-MEGA-64	02623413	2	F	■	4,0	6,0	8,0	50,0	8,95	4,0	0,4	4,0	2	Cylindrical	■
760050R020Z2.0A-MEGA-64	02734052	2	F	■	5,0	6,0	10,0	50,0	10,95	5,0	0,2	2,0	2	Cylindrical	■
760050R040Z2.0A-MEGA-64	02623435	2	F	■	5,0	6,0	10,0	50,0	10,95	5,0	0,4	2,0	2	Cylindrical	■
760060R020Z4.0A-MEGA-64	02734053	2	D	■	6,0	6,0	12,0	50,0	—	—	0,2	—	4	Cylindrical	■
760060R040Z4.0A-MEGA-64	02623433	2	D	■	6,0	6,0	12,0	50,0	—	—	0,4	—	4	Cylindrical	■
760080R040Z4.0A-MEGA-64	02623436	2	D	■	8,0	8,0	16,0	55,0	—	—	0,4	—	4	Cylindrical	■
760080R100Z4.0A-MEGA-64	02623437	2	D	■	8,0	8,0	16,0	55,0	—	—	1,0	—	4	Cylindrical	■
760100R040Z4.0A-MEGA-64	02623460	2	D	■	10,0	10,0	20,0	65,0	—	—	0,4	—	4	Cylindrical	■
760100R100Z4.0A-MEGA-64	02623463	2	D	■	10,0	10,0	20,0	65,0	—	—	1,0	—	4	Cylindrical	■
760100R150Z4.0A-MEGA-64	02623466	2	D	■	10,0	10,0	20,0	65,0	—	—	1,5	—	4	Cylindrical	■
760120R040Z4.0A-MEGA-64	02623819	2	D	■	12,0	12,0	24,0	75,0	—	—	0,4	—	4	Cylindrical	■
760120R100Z4.0A-MEGA-64	02623825	2	D	■	12,0	12,0	24,0	75,0	—	—	1,0	—	4	Cylindrical	■
760120R150Z4.0A-MEGA-64	02623828	2	D	■	12,0	12,0	24,0	75,0	—	—	1,5	—	4	Cylindrical	■
760120R310Z4.0A-MEGA-64	02623833	2	D	■	12,0	12,0	24,0	75,0	—	—	3,1	—	4	Cylindrical	■
760200R040Z4.0A-MEGA-64	02734055	2	D	■	20,0	20,0	45,0	100,0	—	—	0,4	—	4	Cylindrical	■
760200R080Z4.0A-MEGA-64	02623852	2	D	■	20,0	20,0	45,0	100,0	—	—	0,8	—	4	Cylindrical	■
760L080R040Z4.0A-MEGA-64	02623438	3	D	■	8,0	8,0	28,0	65,0	—	—	0,4	—	4	Cylindrical	■
760L100R040Z4.0A-MEGA-64	02623461	3	D	■	10,0	10,0	36,0	75,0	—	—	0,4	—	4	Cylindrical	■
760L100R100Z4.0A-MEGA-64	02623464	3	D	■	10,0	10,0	36,0	75,0	—	—	1,0	—	4	Cylindrical	■
760L100R150Z4.0A-MEGA-64	02623467	3	D	■	10,0	10,0	36,0	75,0	—	—	1,5	—	4	Cylindrical	■
760L100R200Z4.0A-MEGA-64	02623472	3	D	■	10,0	10,0	36,0	75,0	—	—	2,0	—	4	Cylindrical	■
760L100R310Z4.0A-MEGA-64	02623807	3	D	■	10,0	10,0	36,0	75,0	—	—	3,1	—	4	Cylindrical	■
760L120R040Z4.0A-MEGA-64	02623821	3	D	■	12,0	12,0	42,0	90,0	—	—	0,4	—	4	Cylindrical	■
760L120R100Z4.0A-MEGA-64	02623826	3	D	■	12,0	12,0	42,0	90,0	—	—	1,0	—	4	Cylindrical	■
760L120R150Z4.0A-MEGA-64	02623829	3	D	■	12,0	12,0	42,0	90,0	—	—	1,5	—	4	Cylindrical	■
760L120R400Z4.0A-MEGA-64	02623838	3	D	■	12,0	12,0	42,0	90,0	—	—	4,0	—	4	Cylindrical	■
760L160R040Z4.0A-MEGA-64	02623840	3	D	■	16,0	16,0	50,0	100,0	—	—	0,4	—	4	Cylindrical	■
760L160R100Z4.0A-MEGA-64	02623842	3	D	■	16,0	16,0	50,0	100,0	—	—	1,0	—	4	Cylindrical	■
760L160R150Z4.0A-MEGA-64	02623844	3	D	■	16,0	16,0	50,0	100,0	—	—	1,5	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

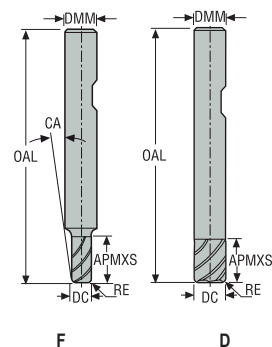
Graphite

X-Heads

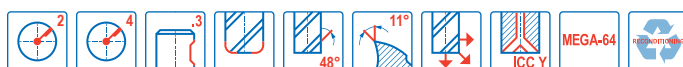
Minimaster

JHP760

High performance – ISO-M – Square – 2-4 Flutes – Weldon – Corner radius



—Tolerances:
—DMM=h5
—DC= -0,02/-0,04 mm
—RE= ±0,03 mm
—Regrind possible if DC is ≥Ø6

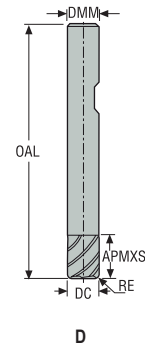


Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
760040R020Z2.0A-MEGA-64W	02734065	2	F	■	4,0	6,0	8,0	50,0	8,95	4,0	0,2	4,0	2	Weldon	□
760040R040Z2.0A-MEGA-64W	02669339	2	F	■	4,0	6,0	8,0	50,0	8,95	4,0	0,4	4,0	2	Weldon	□
760050R020Z2.0A-MEGA-64W	02734068	2	F	■	5,0	6,0	10,0	50,0	10,95	5,0	0,2	2,0	2	Weldon	□
760050R040Z2.0A-MEGA-64W	02669340	2	F	■	5,0	6,0	10,0	50,0	10,95	5,0	0,4	2,0	2	Weldon	□
760060R020Z4.0A-MEGA-64W	02734069	2	D	■	6,0	6,0	12,0	50,0	—	—	0,2	—	4	Weldon	□
760060R040Z4.0A-MEGA-64W	02669341	2	D	■	6,0	6,0	12,0	50,0	—	—	0,4	—	4	Weldon	□
760080R040Z4.0A-MEGA-64W	02669343	2	D	■	8,0	8,0	16,0	55,0	—	—	0,4	—	4	Weldon	■
760080R100Z4.0A-MEGA-64W	02669344	2	D	■	8,0	8,0	16,0	55,0	—	—	1,0	—	4	Weldon	□
760100R040Z4A-MEGA-64	02623442	2	D	■	10,0	10,0	20,0	65,0	—	—	0,4	—	4	Weldon	■
760100R100Z4A-MEGA-64	02623462	2	D	■	10,0	10,0	20,0	65,0	—	—	1,0	—	4	Weldon	■
760100R150Z4A-MEGA-64	02623465	2	D	■	10,0	10,0	20,0	65,0	—	—	1,5	—	4	Weldon	■
760120R040Z4A-MEGA-64	02623817	2	D	■	12,0	12,0	24,0	75,0	—	—	0,4	—	4	Weldon	■
760120R100Z4A-MEGA-64	02623824	2	D	■	12,0	12,0	24,0	75,0	—	—	1,0	—	4	Weldon	■
760120R150Z4A-MEGA-64	02623827	2	D	■	12,0	12,0	24,0	75,0	—	—	1,5	—	4	Weldon	■
760120R400Z4A-MEGA-64	02623835	2	D	■	12,0	12,0	24,0	75,0	—	—	4,0	—	4	Weldon	■
760160R040Z4A-MEGA-64	02623839	2	D	■	16,0	16,0	40,0	90,0	—	—	0,4	—	4	Weldon	■
760160R100Z4A-MEGA-64	02623841	2	D	■	16,0	16,0	40,0	90,0	—	—	1,0	—	4	Weldon	■
760160R150Z4A-MEGA-64	02623843	2	D	■	16,0	16,0	40,0	90,0	—	—	1,5	—	4	Weldon	■
760160R200Z4A-MEGA-64	02623845	2	D	■	16,0	16,0	40,0	90,0	—	—	2,0	—	4	Weldon	■
760200R040Z4A-MEGA-64	02734054	2	D	■	20,0	20,0	45,0	100,0	—	—	0,4	—	4	Weldon	■
760200R080Z4A-MEGA-64	02623851	2	D	■	20,0	20,0	45,0	100,0	—	—	0,8	—	4	Weldon	■

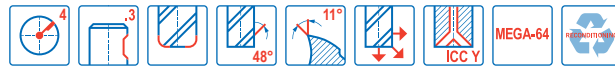
■ Stocked standard. □ Weldon available. Delivery time is 3 days.

JHP760

High performance – ISO-M – Square – 2-4 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC= -0,02/-0,04 mm
- RE= ±0,03 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
760L080R040Z4.0A-MEGA-64W	02720459	3	D	■	8,0	8,0	28,0	65,0	0,4	4	Weldon	☐
760L100R040Z4.0A-MEGA-64W	02669345	3	D	■	10,0	10,0	36,0	75,0	0,4	4	Weldon	☐
760L100R100Z4.0A-MEGA-64W	02669346	3	D	■	10,0	10,0	36,0	75,0	1,0	4	Weldon	☐
760L100R150Z4.0A-MEGA-64W	02669347	3	D	■	10,0	10,0	36,0	75,0	1,5	4	Weldon	☐
760L100R200Z4.0A-MEGA-64W	02669348	3	D	■	10,0	10,0	36,0	75,0	2,0	4	Weldon	☐
760L120R040Z4.0A-MEGA-64W	02669350	3	D	■	12,0	12,0	42,0	90,0	0,4	4	Weldon	☐
760L120R100Z4.0A-MEGA-64W	02669351	3	D	■	12,0	12,0	42,0	90,0	1,0	4	Weldon	☐
760L120R150Z4.0A-MEGA-64W	02669352	3	D	■	12,0	12,0	42,0	90,0	1,5	4	Weldon	☐
760L160R040Z4.0A-MEGA-64W	02669356	3	D	■	16,0	16,0	50,0	100,0	0,4	4	Weldon	☐
760L160R100Z4.0A-MEGA-64W	02669357	3	D	■	16,0	16,0	50,0	100,0	1,0	4	Weldon	☐
760L160R150Z4.0A-MEGA-64W	02669358	3	D	■	16,0	16,0	50,0	100,0	1,5	4	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

Graphite

X-Heads

Minimaster

Cutting data – JHP760 Side milling

SMG		a_e/DC	a_p/DC	f_z									v_c
				4	5	6	8	10	12	16	20	25	
M1	E	0.300 0,300	1.5 1,5	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.17 0,0065	120 (97 — 130) 395 (320 — 420)
M2	E	0.300 0,300	1.5 1,5	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.13 0,0050	0.15 0,0060	100 (81 — 110) 330 (270 — 360)
M3	E	0.300 0,300	1.4 1,4	0.026 0,0010	0.032 0,0013	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.12 0,0048	75 (58 — 91) 245 (200 — 290)
M4	E	0.300 0,300	1.4 1,4	0.022 0,00085	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.095 0,0038	0.11 0,0044	60 (45 — 70) 195 (150 — 220)
M5	E	0.300 0,300	1.4 1,4	0.022 0,00085	0.028 0,0011	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.065 0,0026	0.085 0,0034	0.095 0,0038	0.11 0,0044	48 (37 — 59) 155 (130 — 190)

Cutting data – JHP760 Slot milling

SMG		a_p/DC	f_z									v_c
			4	5	6	8	10	12	16	20	25	
M1	E	1.0 1,0	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	110 (92 — 130) 360 (310 — 420)
M2	E	1.0 1,0	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.10 0,0040	90 (74 — 100) 295 (250 — 320)
M3	E	0.80 0,80	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	70 (54 — 85) 230 (180 — 270)
M4	E	0.80 0,80	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	50 (40 — 63) 165 (140 — 200)
M5	E	0.80 0,80	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	43 (34 — 53) 140 (120 — 170)

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

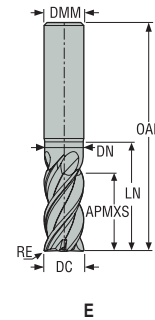
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

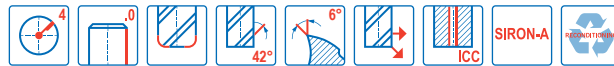
All cutting data are target values

JHP770

High performance – Titanium – Square – 4-5 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP770060E2R030.0Z4A-SIRA	02760645	2	E	■	6,0	6,0	12,0	60,0	18,0	5,6	0,3	4	Cylindrical	■
JHP770080E2R040.0Z4A-SIRA	02760653	2	E	■	8,0	8,0	16,0	65,0	24,0	7,4	0,4	4	Cylindrical	■
JHP770080E2R050.0Z4A-SIRA	02823416	2	E	■	8,0	8,0	16,0	65,0	24,0	7,4	0,5	4	Cylindrical	■
JHP770100E2R040.0Z4A-SIRA	02760654	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,4	4	Cylindrical	■
JHP770100E2R050.0Z4A-SIRA	02823417	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,5	4	Cylindrical	■
JHP770120E2R040.0Z4A-SIRA	02760656	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,4	4	Cylindrical	■
JHP770120E2R050.0Z4A-SIRA	02823419	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,5	4	Cylindrical	■
JHP770120E2R100.0Z4A-SIRA	02823420	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	1,0	4	Cylindrical	■
JHP770120E2R250.0Z4A-SIRA	02760659	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	2,5	4	Cylindrical	■
JHP770140E2R050.0Z4A-SIRA	02823421	2	E	■	14,0	14,0	28,0	95,0	42,0	13,4	0,5	4	Cylindrical	■
JHP770160E2R040.0Z4A-SIRA	02760661	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,4	4	Cylindrical	■
JHP770160E2R050.0Z4A-SIRA	02823422	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,5	4	Cylindrical	■
JHP770160E2R080.0Z4A-SIRA	02760662	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,8	4	Cylindrical	■
JHP770160E2R100.0Z4A-SIRA	02823423	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	1,0	4	Cylindrical	■
JHP770160E2R250.0Z4A-SIRA	02760663	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	2,5	4	Cylindrical	■
JHP770160E2R310.0Z4A-SIRA	02760664	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	3,1	4	Cylindrical	■
JHP770160E2R400.0Z4A-SIRA	02760665	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	4,0	4	Cylindrical	■
JHP770200E2R050.0Z4A-SIRA	02823424	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	0,5	4	Cylindrical	■
JHP770200E2R100.0Z4A-SIRA	02823425	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	1,0	4	Cylindrical	■
JHP770200E2R250.0Z4A-SIRA	02760668	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	2,5	4	Cylindrical	■
JHP770200E2R310.0Z4A-SIRA	02760669	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	3,1	4	Cylindrical	■
JHP770200E2R400.0Z4A-SIRA	02760670	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	4,0	4	Cylindrical	■

■ Stocked standard.

Remark: if cornerradius is >15% of DC → a_p = -30%, f_z = -20%

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

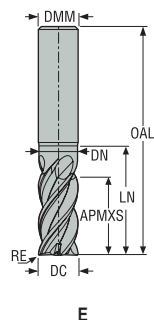
Graphite

X-Heads

Minimaster

JHP770

High performance – Titanium – Square –4-5 Flutes – Cylindrical – Corner radius



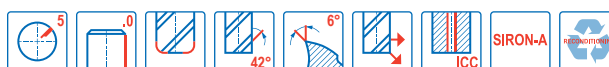
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible



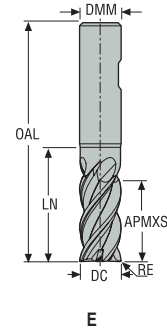
Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP770160E2R050.0Z5A-SIRA	02810129	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,5	5	Cylindrical	■
JHP770160E2R100.0Z5A-SIRA	02810130	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	1,0	5	Cylindrical	■
JHP770160E2R250.0Z5A-SIRA	02810131	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	2,5	5	Cylindrical	■
JHP770160E2R310.0Z5A-SIRA	02810132	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	3,1	5	Cylindrical	■
JHP770160E2R400.0Z5A-SIRA	02810133	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	4,0	5	Cylindrical	■
JHP770200E2R050.0Z5A-SIRA	02810134	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	0,5	5	Cylindrical	■
JHP770200E2R100.0Z5A-SIRA	02810135	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	1,0	5	Cylindrical	■
JHP770200E2R250.0Z5A-SIRA	02810136	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	2,5	5	Cylindrical	■
JHP770200E2R310.0Z5A-SIRA	02810137	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	3,1	5	Cylindrical	■
JHP770200E2R400.0Z5A-SIRA	02810138	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	4,0	5	Cylindrical	■
JHP770250E2R050.0Z5A-SIRA	02810139	2	E	■	25,0	25,0	50,0	130,0	65,0	24,4	0,5	5	Cylindrical	■

■ Stocked standard.

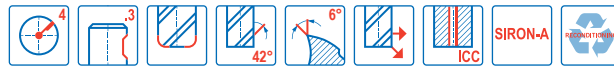
Remark: if cornerradius is >15% of DC → $a_p = -30\%$, $f_z = -20\%$

JHP770

High performance – Titanium – Square – 4-5 Flutes – Weldon – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP770060E2R030.3Z4A-SIRA	02760796	2	E	■	6,0	6,0	12,0	60,0	18,0	5,6	0,3	4	Weldon	■
JHP770080E2R040.3Z4A-SIRA	02760799	2	E	■	8,0	8,0	16,0	65,0	24,0	7,4	0,4	4	Weldon	□
JHP770080E2R050.3Z4A-SIRA	02823428	2	E	■	8,0	8,0	16,0	65,0	24,0	7,4	0,5	4	Weldon	■
JHP770100E2R040.3Z4A-SIRA	02760801	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,4	4	Weldon	□
JHP770100E2R050.3Z4A-SIRA	02823429	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,5	4	Weldon	■
JHP770120E2R040.3Z4A-SIRA	02760803	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,4	4	Weldon	□
JHP770120E2R050.3Z4A-SIRA	02823431	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,5	4	Weldon	■
JHP770120E2R100.3Z4A-SIRA	02823432	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	1,0	4	Weldon	■
JHP770120E2R250.3Z4A-SIRA	02760805	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	2,5	4	Weldon	□
JHP770140E2R050.3Z4A-SIRA	02823433	2	E	■	14,0	14,0	28,0	95,0	42,0	13,4	0,5	4	Weldon	■
JHP770160E2R040.3Z4A-SIRA	02760807	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,4	4	Weldon	□
JHP770160E2R050.3Z4A-SIRA	02823434	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,5	4	Weldon	■
JHP770160E2R080.3Z4A-SIRA	02760809	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,8	4	Weldon	□
JHP770160E2R100.3Z4A-SIRA	02823435	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	1,0	4	Weldon	■
JHP770160E2R250.3Z4A-SIRA	02760810	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	2,5	4	Weldon	■
JHP770160E2R310.3Z4A-SIRA	02760811	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	3,1	4	Weldon	□
JHP770160E2R400.3Z4A-SIRA	02760817	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	4,0	4	Weldon	□
JHP770200E2R050.3Z4A-SIRA	02823436	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	0,5	4	Weldon	■
JHP770200E2R100.3Z4A-SIRA	02823437	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	1,0	4	Weldon	■
JHP770200E2R250.3Z4A-SIRA	02760823	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	2,5	4	Weldon	□
JHP770200E2R310.3Z4A-SIRA	02760824	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	3,1	4	Weldon	□
JHP770200E2R400.3Z4A-SIRA	02760825	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	4,0	4	Weldon	□

■ Stocked standard. □ Weldon available. Delivery time is 3 days.
Remark: if cornerradius is >15% of DC → a_p = -30%, f_z = -20%

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

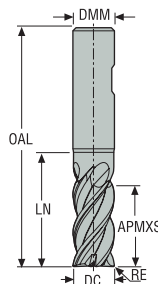
Graphite

X-Heads

Minimaster

JHP770

High performance – Titanium – Square – 4-5 Flutes – Weldon – Corner radius



E

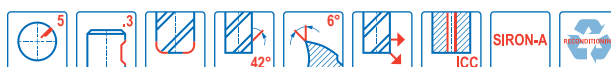
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible



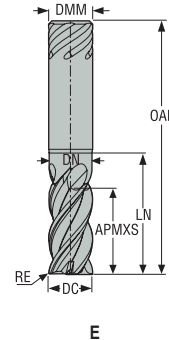
Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP770160E2R050.3Z5A-SIRA	02810143	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,5	5	Weldon	■
JHP770160E2R100.3Z5A-SIRA	02810144	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	1,0	5	Weldon	■
JHP770160E2R250.3Z5A-SIRA	02810145	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	2,5	5	Weldon	□
JHP770160E2R310.3Z5A-SIRA	02810146	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	3,1	5	Weldon	■
JHP770160E2R400.3Z5A-SIRA	02810147	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	4,0	5	Weldon	□
JHP770200E2R050.3Z5A-SIRA	02810148	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	0,5	5	Weldon	■
JHP770200E2R100.3Z5A-SIRA	02810149	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	1,0	5	Weldon	■
JHP770200E2R250.3Z5A-SIRA	02810150	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	2,5	5	Weldon	□
JHP770200E2R310.3Z5A-SIRA	02810151	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	3,1	5	Weldon	■
JHP770200E2R400.3Z5A-SIRA	02810152	2	E	■	20,0	20,0	40,0	115,0	55,0	19,4	4,0	5	Weldon	■
JHP770250E2R050.3Z5A-SIRA	02810153	2	E	■	25,0	25,0	50,0	130,0	65,0	24,4	0,5	5	Weldon	■
JHP770250E2R100.3Z5A-SIRA	02810154	2	E	■	25,0	25,0	50,0	130,0	65,0	24,4	1,0	5	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

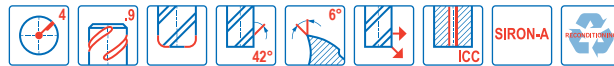
Remark: if cornerradius is >15% of DC → a_p = -30%, f_z = -20%

JHP770

High performance – Titanium – Square – 4-5 Flutes – Safelock – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP770060E2R030.9Z4A-SIRA	02927936	2	E	■	6,0	6,0	12,0	60,0	18,0	6,0	0,3	4	Safe-lock	☐
JHP770080E2R040.9Z4A-SIRA	02927937	2	E	■	8,0	8,0	16,0	65,0	24,0	7,0	0,4	4	Safe-lock	☐
JHP770080E2R050.9Z4A-SIRA	02927938	2	E	■	8,0	8,0	16,0	65,0	24,0	7,0	0,5	4	Safe-lock	☐
JHP770100E2R040.9Z4A-SIRA	02927939	2	E	■	10,0	10,0	20,0	75,0	30,0	9,0	0,4	4	Safe-lock	☐
JHP770100E2R050.9Z4A-SIRA	02927940	2	E	■	10,0	10,0	20,0	75,0	30,0	9,0	0,5	4	Safe-lock	☐
JHP770120E2R040.9Z4A-SIRA	02927943	2	E	■	12,0	12,0	24,0	90,0	36,0	11,0	0,4	4	Safe-lock	☐
JHP770120E2R050.9Z4A-SIRA	02927944	2	E	■	12,0	12,0	24,0	90,0	36,0	11,0	0,5	4	Safe-lock	☐
JHP770120E2R100.9Z4A-SIRA	02927946	2	E	■	12,0	12,0	24,0	90,0	36,0	11,0	1,0	4	Safe-lock	☐
JHP770120E2R250.9Z4A-SIRA	02927947	2	E	■	12,0	12,0	24,0	90,0	36,0	11,0	2,5	4	Safe-lock	☐
JHP770140E2R050.9Z4A-SIRA	02927950	2	E	■	14,0	14,0	28,0	95,0	42,0	13,0	0,5	4	Safe-lock	☐
JHP770160E2R040.9Z4A-SIRA	02927948	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	0,4	4	Safe-lock	☐
JHP770160E2R050.9Z4A-SIRA	02927978	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	0,5	4	Safe-lock	☐
JHP770160E2R080.9Z4A-SIRA	02927951	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	0,8	4	Safe-lock	☐
JHP770160E2R100.9Z4A-SIRA	02927952	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	1,0	4	Safe-lock	☐
JHP770160E2R250.9Z4A-SIRA	02927954	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	2,5	4	Safe-lock	☐
JHP770160E2R310.9Z4A-SIRA	02927956	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	3,1	4	Safe-lock	☐
JHP770160E2R400.9Z4A-SIRA	02927958	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	4,0	4	Safe-lock	☐
JHP770200E2R050.9Z4A-SIRA	02927960	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	0,5	4	Safe-lock	☐
JHP770200E2R100.9Z4A-SIRA	02927962	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	1,0	4	Safe-lock	☐
JHP770200E2R250.9Z4A-SIRA	02927964	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	2,5	4	Safe-lock	☐
JHP770200E2R310.9Z4A-SIRA	02927966	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	3,1	4	Safe-lock	☐
JHP770200E2R400.9Z4A-SIRA	02927968	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	4,0	4	Safe-lock	☐

☐ Safelock available. Delivery time is 6 days.

Remark: if cornerradius is >15% of DC → a_p = -30%, f_z = -20%

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

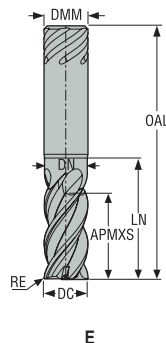
Graphite

X-Heads

Minimaster

JHP770

High performance – Titanium – Square – 4-5 Flutes – Safelock – Corner radius



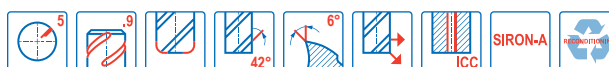
—Tolerances:

—DMM= h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP770160E2R050.9Z5A-SIRA	02927949	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	0,5	5	Safe-lock	□
JHP770160E2R100.9Z5A-SIRA	02927953	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	1,0	5	Safe-lock	□
JHP770160E2R250.9Z5A-SIRA	02927955	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	2,5	5	Safe-lock	□
JHP770160E2R310.9Z5A-SIRA	02927957	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	3,1	5	Safe-lock	□
JHP770160E2R400.9Z5A-SIRA	02927959	2	E	■	16,0	16,0	32,0	100,0	45,0	15,0	4,0	5	Safe-lock	■
JHP770200E2R050.9Z5A-SIRA	02927961	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	0,5	5	Safe-lock	□
JHP770200E2R100.9Z5A-SIRA	02927963	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	1,0	5	Safe-lock	□
JHP770200E2R250.9Z5A-SIRA	02927965	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	2,5	5	Safe-lock	□
JHP770200E2R310.9Z5A-SIRA	02927967	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	3,1	5	Safe-lock	□
JHP770200E2R400.9Z5A-SIRA	02927969	2	E	■	20,0	20,0	40,0	115,0	55,0	19,0	4,0	5	Safe-lock	□
JHP770250E2R050.9Z5A-SIRA	02927971	2	E	■	25,0	25,0	50,0	130,0	65,0	24,0	0,5	5	Safe-lock	□

□ Safelock available. Delivery time is 6 days.

Remark: if cornerradius is >15% of DC → a_p =-30%, f_z =-20%

Cutting data – JHP770 Side milling

SMG		a_e/DC	a_p/DC	f_z								v_c
				6	8	10	12	14	16	20	25	
S11	E	0.400 0,400	1.8 1,6	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	120 (110 — 130) 395 (370 — 420)
S12	E	0.400 0,400	1.8 1,6	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	0.16 0,0065	90 (80 — 100) 295 (270 — 320)
S13	E	0.400 0,400	1.8 1,6	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.095 0,0038	0.11 0,0044	0.12 0,0048	0.14 0,0055	75 (64 — 81) 245 (210 — 260)

Cutting data – JHP770 Slot milling

SMG		a_p/DC	f_z								v_c
			6	8	10	12	14	16	20	25	
S11	E	1.6 1,6	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	105 (94 — 120) 345 (310 — 390)
S12	E	1.6 1,6	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	80 (72 — 92) 260 (240 — 300)
S13	E	1.6 1,6	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	65 (56 — 71) 215 (190 — 230)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

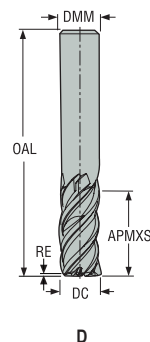
Graphite

X-Heads

Minimaster

JHP780

High performance – Superalloy – Square – 4-Flutes – Cylindrical – Corner radius



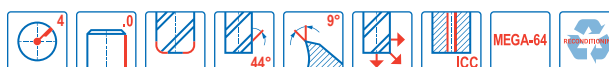
—Tolerances:

—DMM=h5

—DC=e7

—RE= ±0,02 mm

—Reground possible

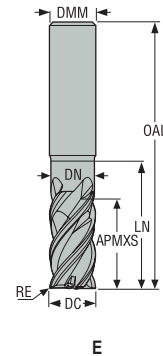


Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
JHP780060D1R030.0Z4A-M64	03134984	1	D	■	6,0	6,0	7,5	47,0	0,3	4	Cylindrical	■
JHP780060D1R080.0Z4A-M64	03134985	1	D	■	6,0	6,0	7,5	47,0	0,8	4	Cylindrical	■
JHP780080D1R040.0Z4A-M64	03134986	1	D	■	8,0	8,0	10,0	50,0	0,4	4	Cylindrical	■
JHP780080D1R080.0Z4A-M64	03134987	1	D	■	8,0	8,0	10,0	50,0	0,8	4	Cylindrical	■
JHP780100D1R040.0Z4A-M64	03134988	1	D	■	10,0	10,0	12,5	57,0	0,4	4	Cylindrical	■
JHP780100D1R080.0Z4A-M64	03134989	1	D	■	10,0	10,0	12,5	57,0	0,8	4	Cylindrical	■

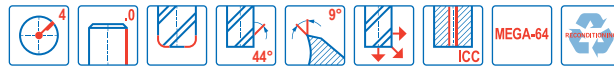
■ Stocked standard.

JHP780

High performance – Superalloy – Square – 4-Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JHP780060E2R030.0Z4A-M64	03134992	2	E	■	6,0	6,0	12,0	60,0	18,0	5,6	0,3	4	Cylindrical	■
JHP780060E2R030.0Z4A-M64	02760834	2	E	—	6,0	6,0	12,0	60,0	18,0	5,6	0,3	4	Cylindrical	■
JHP780080E2R040.0Z4A-M64	03134993	2	E	■	8,0	8,0	16,0	65,0	24,0	7,4	0,4	4	Cylindrical	■
JHP780080E2R040.0Z4A-M64	02760842	2	E	—	8,0	8,0	16,0	65,0	24,0	7,4	0,4	4	Cylindrical	■
JHP780100E2R040.0Z4A-M64	03134994	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,4	4	Cylindrical	■
JHP780100E2R040.0Z4A-M64	02760846	2	E	—	10,0	10,0	20,0	75,0	30,0	9,4	0,4	4	Cylindrical	■
JHP780100E2R080.0Z4A-M64	03134995	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,8	4	Cylindrical	■
JHP780100E2R080.0Z4A-M64	02760847	2	E	—	10,0	10,0	20,0	75,0	30,0	9,4	0,8	4	Cylindrical	■
JHP780120E2R040.0Z4A-M64	03134996	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,4	4	Cylindrical	■
JHP780120E2R040.0Z4A-M64	02760848	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	0,4	4	Cylindrical	■
JHP780120E2R080.0Z4A-M64	03134997	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,8	4	Cylindrical	■
JHP780120E2R080.0Z4A-M64	02760849	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	0,8	4	Cylindrical	■
JHP780120E2R150.0Z4A-M64	02760850	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	1,5	4	Cylindrical	■
JHP780120E2R250.0Z4A-M64	02760851	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	2,5	4	Cylindrical	■
JHP780140E2R040.0Z4A-M64	02760852	2	E	—	14,0	14,0	28,0	95,0	42,0	13,4	0,4	4	Cylindrical	■
JHP780160E2R040.0Z4A-M64	03135000	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,4	4	Cylindrical	■
JHP780160E2R040.0Z4A-M64	02760853	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	0,4	4	Cylindrical	■
JHP780160E2R080.0Z4A-M64	03135001	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,8	4	Cylindrical	■
JHP780160E2R080.0Z4A-M64	02760861	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	0,8	4	Cylindrical	■
JHP780160E2R310.0Z4A-M64	02760862	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	3,1	4	Cylindrical	■
JHP780160E2R400.0Z4A-M64	02760863	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	4,0	4	Cylindrical	■
JHP780200E2R040.0Z4A-M64	02760865	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	0,4	4	Cylindrical	■
JHP780200E2R080.0Z4A-M64	02760866	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	0,8	4	Cylindrical	■
JHP780200E2R310.0Z4A-M64	02760867	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	3,1	4	Cylindrical	■
JHP780200E2R400.0Z4A-M64	02760868	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	4,0	4	Cylindrical	■
JHP780250E2R080.0Z4A-M64	02760870	2	E	—	25,0	25,0	50,0	130,0	65,0	24,4	0,8	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

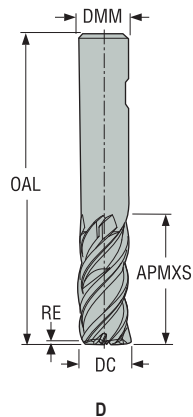
Graphite

X-Heads

Minimaster

JHP780

High performance – Superalloy – Square – 4-Flutes – Weldon – Corner radius



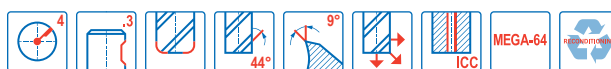
—Tolerances:

—DMM=h5

—DC=e7

—RE= ±0,02 mm

—Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
JHP780060D1R030.3Z4A-M64	03135445	1	D	■	6,0	6,0	7,5	47,0	0,3	4	Weldon	■
JHP780060D1R080.3Z4A-M64	03135446	1	D	■	6,0	6,0	7,5	47,0	0,8	4	Weldon	■
JHP780080D1R040.3Z4A-M64	03135447	1	D	■	8,0	8,0	10,0	50,0	0,4	4	Weldon	■
JHP780080D1R080.3Z4A-M64	03135449	1	D	■	8,0	8,0	10,0	50,0	0,8	4	Weldon	■
JHP780100D1R040.3Z4A-M64	03135450	1	D	■	10,0	10,0	12,5	57,0	0,4	4	Weldon	■
JHP780100D1R080.3Z4A-M64	03135451	1	D	■	10,0	10,0	12,5	57,0	0,8	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

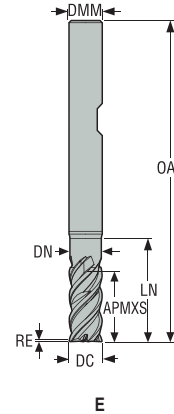
Graphite

X-Heads

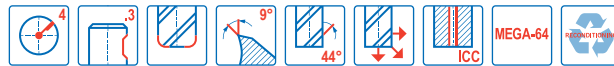
Minimaster

JHP780

High performance – Superalloy – Square – 4-Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JHP780060E2R030.3Z4-M64	02760878	2	E	—	6,0	6,0	12,0	60,0	18,0	5,6	0,3	4	Weldon	■
JHP780060E2R030.3Z4A-M64	03135454	2	E	■	6,0	6,0	12,0	60,0	18,0	5,6	0,3	4	Weldon	■
JHP780080E2R040.3Z4-M64	02760879	2	E	—	8,0	8,0	16,0	65,0	24,0	7,4	0,4	4	Weldon	■
JHP780080E2R040.3Z4A-M64	03135455	2	E	■	8,0	8,0	16,0	65,0	24,0	7,4	0,4	4	Weldon	■
JHP780100E2R040.3Z4-M64	02760880	2	E	—	10,0	10,0	20,0	75,0	30,0	9,4	0,4	4	Weldon	■
JHP780100E2R040.3Z4A-M64	03135456	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,4	4	Weldon	■
JHP780100E2R080.3Z4-M64	02760881	2	E	—	10,0	10,0	20,0	75,0	30,0	9,4	0,8	4	Weldon	■
JHP780100E2R080.3Z4A-M64	03135457	2	E	■	10,0	10,0	20,0	75,0	30,0	9,4	0,8	4	Weldon	■
JHP780120E2R040.3Z4-M64	02760883	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	0,4	4	Weldon	■
JHP780120E2R040.3Z4A-M64	03134998	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,4	4	Weldon	■
JHP780120E2R080.3Z4-M64	02760885	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	0,8	4	Weldon	■
JHP780120E2R080.3Z4A-M64	03134999	2	E	■	12,0	12,0	24,0	90,0	36,0	11,4	0,8	4	Weldon	■
JHP780120E2R150.3Z4-M64	02760887	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	1,5	4	Weldon	■
JHP780120E2R250.3Z4-M64	02766989	2	E	—	12,0	12,0	24,0	90,0	36,0	11,4	2,5	4	Weldon	■
JHP780140E2R040.3Z4-M64	02760888	2	E	—	14,0	14,0	28,0	95,0	42,0	13,4	0,4	4	Weldon	■
JHP780160E2R040.3Z4-M64	02760889	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	0,4	4	Weldon	■
JHP780160E2R040.3Z4A-M64	03135002	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,4	4	Weldon	■
JHP780160E2R080.3Z4-M64	02760890	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	0,8	4	Weldon	■
JHP780160E2R080.3Z4A-M64	03135003	2	E	■	16,0	16,0	32,0	100,0	45,0	15,4	0,8	4	Weldon	■
JHP780160E2R400.3Z4-M64	02760893	2	E	—	16,0	16,0	32,0	100,0	45,0	15,4	4,0	4	Weldon	■
JHP780200E2R040.3Z4-M64	02760894	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	0,4	4	Weldon	■
JHP780200E2R080.3Z4-M64	02760896	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	0,8	4	Weldon	■
JHP780200E2R310.3Z4-M64	02760897	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	3,1	4	Weldon	■
JHP780200E2R400.3Z4-M64	02760898	2	E	—	20,0	20,0	40,0	115,0	55,0	19,4	4,0	4	Weldon	■
JHP780250E2R080.3Z4-M64	02760901	2	E	—	25,0	25,0	50,0	130,0	65,0	24,4	0,8	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JHP780 Side milling

SMG		a_e/DC	a_p/DC	f_z								v_c
				6	8	10	12	14	16	20	25	
S1	E	0.300 <i>0,300</i>	1.0 <i>1,0</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	0.070 <i>0,0028</i>	0.080 <i>0,0032</i>	0.090 <i>0,0036</i>	0.10 <i>0,0040</i>	0.12 <i>0,0048</i>	50 (45 — 59) 165 (150 — 190)
S2	E	0.300 <i>0,300</i>	1.0 <i>1,0</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	0.070 <i>0,0028</i>	0.080 <i>0,0032</i>	0.090 <i>0,0036</i>	0.10 <i>0,0040</i>	0.12 <i>0,0048</i>	42 (36 — 47) 140 (120 — 150)
S3	E	0.300 <i>0,300</i>	0.80 <i>0,80</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	0.070 <i>0,0028</i>	0.080 <i>0,0032</i>	0.090 <i>0,0036</i>	0.10 <i>0,0040</i>	0.11 <i>0,0044</i>	28 (23 — 33) 90 (76 — 100)

Cutting data – JHP780 Slot milling

SMG		a_p/DC	f_z								v_c
			6	8	10	12	14	16	20	25	
S1	E	0.80 <i>0,80</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	0.048 <i>0,0019</i>	0.055 <i>0,0022</i>	0.070 <i>0,0028</i>	0.085 <i>0,0034</i>	43 (38 — 49) 140 (130 — 160)
S2	E	0.80 <i>0,80</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	0.048 <i>0,0019</i>	0.055 <i>0,0022</i>	0.070 <i>0,0028</i>	0.085 <i>0,0034</i>	35 (30 — 40) 115 (99 — 130)
S3	E	0.60 <i>0,60</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.025 <i>0,0010</i>	0.028 <i>0,0011</i>	0.032 <i>0,0013</i>	0.040 <i>0,0016</i>	0.050 <i>0,0020</i>	26 (21 — 30) 85 (69 — 98)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

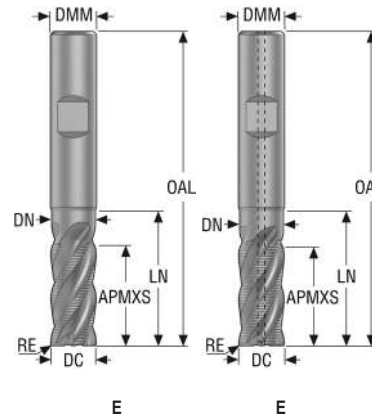
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

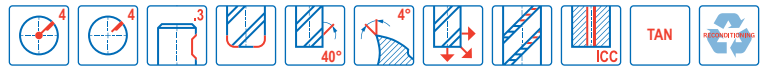
All cutting data are target values

JHP794

High performance – ISO-M – Square – 4 Flutes – Weldon – Corner radius



- Tolerances:
- DMM= h6
- DC= h12
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø8



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JHP794060E2R020.3Z4	TAN	10072338	2	E	■	—	6,0	6,0	13,0	57,0	18,5	2,0	0,2	4	Weldon	■
JHP794060E2R020.3Z4A	TAN	10072339	2	E	■	■	6,0	6,0	13,0	57,0	18,5	5,5	0,2	4	Weldon	■
JHP794080E2R020.3Z4	TAN	10072340	2	E	■	—	8,0	8,0	19,0	63,0	24,5	7,5	0,2	4	Weldon	■
JHP794080E2R020.3Z4A	TAN	10072341	2	E	■	■	8,0	8,0	19,0	63,0	24,5	7,5	0,2	4	Weldon	■
JHP794100E2R035.3Z4	TAN	10072342	2	E	■	—	10,0	10,0	22,0	72,0	29,5	9,5	0,35	4	Weldon	■
JHP794100E2R035.3Z4A	TAN	10072343	2	E	■	■	10,0	10,0	22,0	72,0	29,5	9,5	0,35	4	Weldon	■
JHP794120E2R035.3Z4	TAN	10072344	2	E	■	—	12,0	12,0	26,0	83,0	35,5	11,4	0,35	4	Weldon	■
JHP794120E2R035.3Z4A	TAN	10072345	2	E	■	■	12,0	12,0	26,0	92,0	35,5	11,4	0,35	4	Weldon	■
JHP794160E2R040.3Z4	TAN	10072346	2	E	■	—	16,0	16,0	32,0	92,0	41,5	15,2	0,4	4	Weldon	■
JHP794160E2R040.3Z4A	TAN	10072347	2	E	■	■	16,0	16,0	32,0	92,0	41,5	15,2	0,4	4	Weldon	■
JHP794200E2R040.3Z4	TAN	10072348	2	E	■	—	20,0	20,0	38,0	104,0	51,5	19,0	0,4	4	Weldon	■
JHP794200E2R040.3Z4A	TAN	10072349	2	E	■	■	20,0	20,0	38,0	104,0	51,5	19,0	0,4	4	Weldon	■
JHP794250E2R040.3Z4	TAN	10072350	2	E	■	—	25,0	25,0	45,0	121,0	62,5	23,8	0,4	4	Weldon	■
JHP794250E2R040.3Z4A	TAN	10072351	2	E	■	■	25,0	25,0	45,0	121,0	62,5	23,8	0,4	4	Weldon	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JHP794 Side milling

SMG		a_p/DC	f_z							v_c
			6	8	10	12	16	20	25	
M1	E	1.3	0.032	0.044	0.055	0.065	0.080	0.090	0.10	90 (61 — 120)
		1,3	0,0013	0,0017	0,0022	0,0026	0,0032	0,0036	0,0040	295 (210 — 390)
M2	E	1.3	0.030	0.040	0.048	0.060	0.070	0.085	0.095	75 (50 — 99)
		1,3	0,0012	0,0016	0,0019	0,0024	0,0028	0,0034	0,0038	245 (170 — 320)
M3	E	1.3	0.024	0.032	0.040	0.046	0.055	0.065	0.075	60 (40 — 78)
		1,3	0,00095	0,0013	0,0016	0,0018	0,0022	0,0026	0,0030	195 (140 — 250)
M4	E	1.3	0.020	0.028	0.034	0.040	0.050	0.060	0.065	45 (31 — 60)
		1,3	0,00080	0,0011	0,0013	0,0016	0,0020	0,0024	0,0026	150 (110 — 190)
M5	E	1.3	0.020	0.028	0.034	0.040	0.050	0.060	0.065	38 (26 — 50)
		1,3	0,00080	0,0011	0,0013	0,0016	0,0020	0,0024	0,0026	125 (86 — 160)

Cutting data – JHP794 Slot milling

SMG		a_p/DC	f_z							v_c
			6	8	10	12	16	20	25	
M1	E	0.60	0.024	0.032	0.040	0.048	0.065	0.080	0.095	75 (50 — 99)
		0,60	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0038	245 (170 — 320)
M2	E	0.60	0.024	0.032	0.040	0.048	0.065	0.080	0.090	60 (40 — 79)
		0,60	0,00095	0,0013	0,0016	0,0019	0,0026	0,0032	0,0036	195 (140 — 250)
M3	E	0.60	0.022	0.030	0.036	0.044	0.055	0.060	0.070	47 (32 — 62)
		0,60	0,00085	0,0012	0,0014	0,0017	0,0022	0,0024	0,0028	155 (110 — 200)
M4	E	0.60	0.019	0.026	0.032	0.038	0.048	0.055	0.060	36 (24 — 47)
		0,60	0,00075	0,0010	0,0013	0,0015	0,0019	0,0022	0,0024	120 (79 — 150)
M5	E	0.60	0.019	0.026	0.032	0.038	0.048	0.055	0.060	30 (20 — 39)
		0,60	0,00075	0,0010	0,0013	0,0015	0,0019	0,0022	0,0024	100 (66 — 120)

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

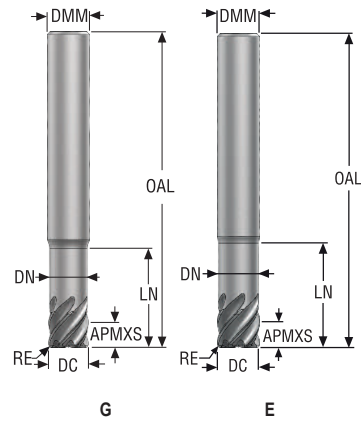
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

JCG790

High performance – Square – Superalloy – 5-6 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= -0,02/-0,1 mm
—RE= ±0,05 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JCG790060E2R050.0Z5	10010512	2	E	6,0	6,0	6,0	59,0	15,0	5,7	0,5	5	Cylindrical	■
JCG790080E2R050.0Z5	10010513	2	E	8,0	8,0	6,0	67,0	20,0	7,6	0,5	5	Cylindrical	■
JCG790094G2R100.0Z6	10010514	2	G	9,4	10,0	6,0	75,0	23,5	9,0	1,0	6	Cylindrical	■
JCG790100E2R100.0Z6	10010515	2	E	10,0	10,0	6,0	75,0	25,0	9,5	1,0	6	Cylindrical	■
JCG790114G2R150.0Z6	10010516	2	G	11,4	12,0	6,0	82,0	28,5	10,9	1,5	6	Cylindrical	■
JCG790120E2R150.0Z6	10010517	2	E	12,0	12,0	6,0	82,0	30,0	11,4	1,5	6	Cylindrical	■
JCG790160E2R200.0Z6	10010518	2	E	16,0	16,0	8,0	93,0	40,0	15,2	2,0	6	Cylindrical	■
JCG790200E2R300.0Z6	10010519	2	E	20,0	20,0	8,0	103,0	50,0	19,0	3,0	6	Cylindrical	■
JCG790250E2R400.0Z6	10010520	2	E	25,0	25,0	8,0	108,0	50,0	23,8	4,0	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JCG790 Side milling roughing

SMG		a_e/DC	APMXS	f_z							v_c
				6	8	10	12	16	20	25	
S1	A/D	0.0500 0,0500	1 1	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	830 (420 — 1300) 2725 (1400 — 4200)
S2	A/D	0.0500 0,0500	1 1	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	670 (340 — 1100) 2200 (1200 — 3600)
S3	A/D	0.0500 0,0500	1 1	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	570 (290 — 950) 1875 (960 — 3100)

Cutting data – JCG790 Slot milling

SMG		a_p/DC	f_z							v_c
			6	8	10	12	16	20	25	
S1	A/D	0.05 0,05	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	830 (420 — 1300) 2725 (1400 — 4200)
S2	A/D	0.05 0,05	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	670 (340 — 1100) 2200 (1200 — 3600)
S3	A/D	0.05 0,05	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.075 0,0030	570 (290 — 950) 1875 (960 — 3100)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

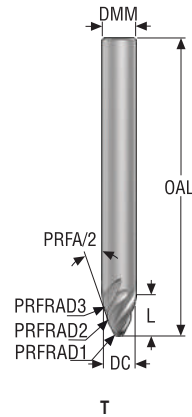
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

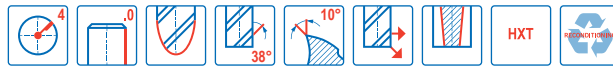
All cutting data are target values

JH724

High speed – ISO– M and ISO– S – Taper Shape – 4 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- PRFRAD1= ±0.03 mm
- Form tolerance PRFRAD2= 0.02 mm
- Regrind possible if PRFRAD is ≥1,5



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	L	APMXS	OAL	PRFRAD1	PRFRAD2	PRFRAD3	PRFA/2°	FCEDC	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm	mm					
JH724100T2R2R030.0Z4	HXT	10106106	2	T	10,0	10,0	12,3	12,3	89,0	2,0	30,0	5,0	20,0	4	4	Cylindrical	■
JH724100T2R2R050.0Z4	HXT	10106107	2	T	10,0	10,0	12,5	12,5	89,0	2,0	50,0	5,0	20,0	4	4	Cylindrical	■
JH724100T2R3R100.0Z4	HXT	10106108	2	T	10,0	10,0	10,7	10,7	89,0	3,0	100,0	5,0	20,0	4	4	Cylindrical	■
JH724100T2R3R250.0Z4	HXT	10106109	2	T	10,0	10,0	10,8	10,8	89,0	3,0	250,0	5,0	20,0	4	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH724 Copy milling finishing

SMG		a_e/DC	f_z	v_c
P12	E	0,010 0.010	0,05 0.0022	120 (95 - 135) 400 (310 - 445)
M1	E	0,010 0.010	0,05 0.0022	150 (125 - 155) 490 (410 - 510)
M2	E	0,010 0.010	0,05 0.0022	145 (120 - 150) 475 (400 - 490)
M3	E	0,010 0.010	0,05 0.0022	130 (95 - 140) 425 (310 - 460)
S2	E	0,010 0.010	0,05 0.0022	65 (55 - 75) 215 (180 - 245)
S11	E	0,010 0.010	0,05 0.0022	130 (95 - 140) 425 (310 - 475)
S12	E	0,010 0.010	0,05 0.0022	120 (95 - 135) 400 (310 - 445)
S13	E	0,010 0.010	0,05 0.0022	95 (80 - 100) 310 (260 - 320)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

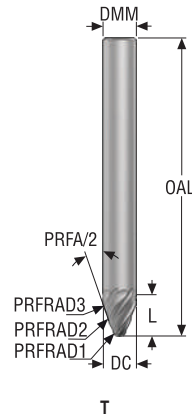
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

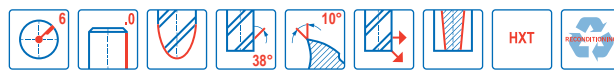
All cutting data are target values

JH726

High speed – ISO– M and ISO– S – Taper Shape – 6 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- PRFRAD1= ±0.03 mm
- Form tolerance PRFRAD2= 0.02 mm
- Regrind possible if PRFRAD is ≥1,5



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	L	APMXS	OAL	PRFRAD1	PRFRAD2	PRFRAD3	PRFA/2°	PCEDC	Shank	Stock standard
JH726100T2R2R030.0Z6	HXT	10106110	2	T	mm	mm	mm	mm	mm	mm	mm	mm				
JH726100T2R2R050.0Z6	HXT	10106111	2	T	10,0	10,0	10,8	10,8	89,0	2,0	30,0	5,0	20,0	6	Cylindrical	■
JH726100T2R3R100.0Z6	HXT	10106112	2	T	10,0	10,0	12,3	12,3	89,0	3,0	100,0	5,0	20,0	6	Cylindrical	■
JH726100T2R3R250.0Z6	HXT	10106113	2	T	10,0	10,0	12,5	12,5	89,0	3,0	250,0	5,0	20,0	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH726 Copy milling finishing

Universal	SMG		a_e/DC	f_z	v_c
Steel and cast iron	P12	E	0,010 0.010	0,05 0.0022	120 (95 - 135) 400 (310 - 445)
	M1	E	0,010 0.010	0,05 0.0022	150 (125 - 155) 490 (410 - 510)
	M2	E	0,010 0.010	0,05 0.0022	145 (120 - 150) 475 (400 - 490)
	M3	E	0,010 0.010	0,05 0.0022	130 (95 - 140) 425 (310 - 460)
	S2	E	0,010 0.010	0,05 0.0022	65 (55 - 75) 215 (180 - 245)
	S11	E	0,010 0.010	0,05 0.0022	130 (95 - 140) 425 (310 - 475)
	S12	E	0,010 0.010	0,05 0.0022	120 (95 - 135) 400 (310 - 445)
	S13	E	0,010 0.010	0,05 0.0022	95 (80 - 100) 310 (260 - 320)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

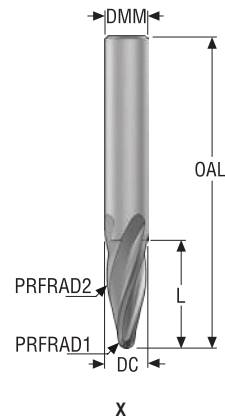
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

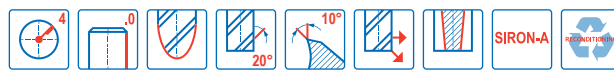
All cutting data are target values

JH734

High speed – ISO– M and ISO– S – Drop Shape – 4 Flutes – Cylindrical



- Tolerances:
- DMM= h5
- PRFRAD1= $\pm 0.03\text{mm}$
- Form tolerance PRFRAD2= 0.02mm
- Regrind possible if PRFRAD is $\geq 1,5$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	L	APMXS	OAL	PRFRAD1	PRFRAD2	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JH734060X2R1R95.0Z4	SIRA	10044783	2	X	6,0	6,0	20,8	18,39	62,0	1,0	95,0	4	Cylindrical	■
JH734080X2R1R90.0Z4	SIRA	10044784	2	X	8,0	8,0	24,5	22,05	68,0	1,0	90,0	4	Cylindrical	■
JH734100X2R2R85.0Z4	SIRA	10044785	2	X	10,0	10,0	24,7	22,29	72,0	2,0	85,0	4	Cylindrical	■
JH734120X2R2R80.0Z4	SIRA	10044786	2	X	12,0	12,0	27,3	24,87	83,0	2,0	80,0	4	Cylindrical	■
JH734160X2R3R75.0Z4	SIRA	10044787	2	X	16,0	16,0	30,1	27,61	92,0	3,0	75,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH734 Copy milling finishing

SMG		a _g /DC	f _z					v _c
			6	8	10	12	16	
P8	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	170 (150 - 195) 560 (490 - 640)
P12	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	120 (95 - 135) 400 (310 - 445)
M1	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	150 (125 - 155) 490 (410 - 510)
M2	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	145 (120 - 150) 475 (400 - 490)
M3	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	130 (90 - 140) 425 (295 - 460)
S2	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	60 (50 - 70) 195 (165 - 230)
S11	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	100 (85 - 105) 320 (280 - 345)
S12	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	95 (80 - 100) 310 (260 - 320)
S13	E	0,010 0.010	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	90 (75 - 95) 295 (245 - 310)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

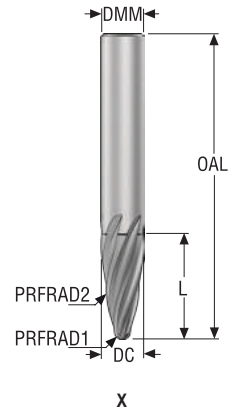
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

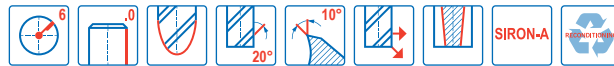
All cutting data are target values

JH736

High speed – ISO– M and ISO– S – Drop Shape – 6 Flutes – Cylindrical



- Tolerances:
- DMM= h5
- PRFRAD1= $\pm 0.03\text{mm}$
- Form tolerance PRFRAD2= 0.02mm
- Regrind possible



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	L	APMXS	OAL	PRFRAD1	PRFRAD2	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JH736100X2R2R85.0Z6	SIRA	10044834	2	X	10,0	10,0	24,7	22,29	72,0	2,0	85,0	6	Cylindrical	■
JH736120X2R2R80.0Z6	SIRA	10044835	2	X	12,0	12,0	27,3	24,87	83,0	2,0	80,0	6	Cylindrical	■
JH736160X2R3R75.0Z6	SIRA	10044836	2	X	16,0	16,0	30,1	27,61	92,0	3,0	75,0	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH736 Copy milling finishing

SMG		a_e/DC	f_z			v_c
			10	12	16	
P8	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	170 (150 - 195) 560 (490 - 640)
P12	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	120 (95 - 135) 400 (310 - 445)
M1	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	150 (125 - 155) 490 (410 - 510)
M2	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	145 (120 - 150) 475 (400 - 490)
M3	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	130 (90 - 140) 425 (295 - 460)
S2	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	60 (50 - 70) 195 (165 - 230)
S11	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	100 (85 - 105) 320 (280 - 345)
S12	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	95 (80 - 100) 310 (260 - 320)
S13	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	90 (75 - 95) 295 (245 - 310)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

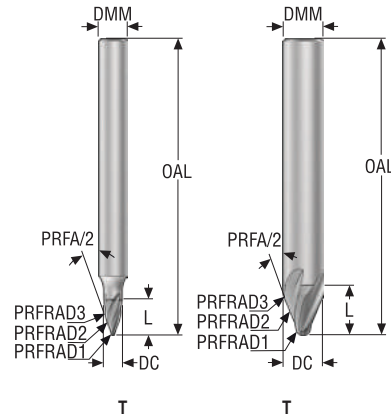
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

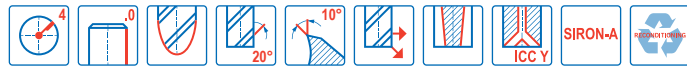
All cutting data are target values

JH744

High speed – ISO– M and ISO– S – Taper Shape – 4 Flutes – Cylindrical



- Tolerances:
- DMM= h5
- PRFRAD1= ±0.03mm
- Form tolerance PRFRAD2= 0.02mm
- Regrind possible if PRFRAD1 is ≥1,5



Designation	Grade	Item number	Length index	Tool shape	CSP	DC	DMM	L	APMXS	OAL	PRFRAD1	PRFRAD2	PRFRAD3	PRFA/2°	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm	mm				
JH744100T1R1.5R250.0Z4	SIRA	10044920	1	T	—	10,0	10,0	5,4	1,62	72,0	1,5	250,0	2,0	65,0	4	Cylindrical	■
JH744120T1R3R250.0Z4	SIRA	10044921	1	T	—	12,0	12,0	10,5	5,33	89,0	3,0	250,0	6,0	32,5	4	Cylindrical	■
JH744160T1R4R500.0Z4	SIRA	10044922	1	T	—	16,0	16,0	14,6	8,95	108,0	4,0	500,0	8,0	27,5	4	Cylindrical	■
JH744040T2R0.5R250.0Z4	SIRA	10044923	2	T	—	4,0	6,0	7,6	4,7	62,0	0,5	250,0	3,0	17,5	4	Cylindrical	■
JH744060T2R1R250.0Z4	SIRA	10044924	2	T	—	6,0	6,0	9,6	6,71	62,0	1,0	250,0	3,0	17,5	4	Cylindrical	■
JH744080T2R1.5R250.0Z4	SIRA	10044925	2	T	—	8,0	8,0	10,7	7,42	68,0	1,5	250,0	4,0	20,0	4	Cylindrical	■
JH744100T2R2R250.0Z4	SIRA	10044926	2	T	—	10,0	10,0	12,7	9,04	75,0	2,0	250,0	5,0	20,0	4	Cylindrical	■
JH744120T2R3R250.0Z4	SIRA	10044927	2	T	—	12,0	12,0	13,7	9,71	89,0	3,0	250,0	6,0	20,0	4	Cylindrical	■
JH744160T2R4R500.0Z4	SIRA	10044928	2	T	—	16,0	16,0	17,6	12,94	108,0	4,0	500,0	8,0	20,0	4	Cylindrical	■
JH744160T2R2R1000.0Z4	SIRA	10044929	2	T	—	16,0	16,0	31,3	28,27	108,0	2,0	1000,0	5,0	12,5	4	Cylindrical	■
JH744160T2R4R1000.0Z4	SIRA	10044930	2	T	—	16,0	16,0	24,1	21,02	108,0	4,0	1000,0	5,0	12,5	4	Cylindrical	■
JH744160T4R4R1000.0Z4A	SIRA	10044931	4	T	■	16,0	16,0	24,1	21,02	150,0	4,0	1000,0	5,0	12,5	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH744 Copy milling finishing

SMG		a _e /DC	f _z						v _c
			4	6	8	10	12	16	
P8	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	170 (150 - 195) 560 (490 - 640)
P12	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	120 (95 - 135) 400 (310 - 445)
M1	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	150 (125 - 155) 490 (410 - 510)
M2	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	145 (120 - 150) 475 (400 - 490)
M3	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	130 (90 - 140) 425 (295 - 460)
S2	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	60 (50 - 70) 195 (165 - 230)
S11	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	100 (85 - 105) 320 (280 - 345)
S12	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	95 (80 - 100) 310 (260 - 320)
S13	E	0,010 0.010	0,02 0.0008	0,03 0.0012	0,04 0.0016	0,05 0.0022	0,06 0.0024	0,08 0.0032	90 (75 - 95) 295 (245 - 310)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

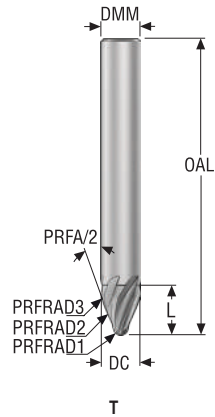
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

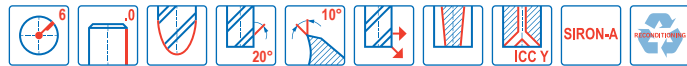
All cutting data are target values

JH746

High speed – ISO– M and ISO– S – Taper Shape – 6 Flutes – Cylindrical



- Tolerances:
- DMM= h5
- PRFRAD1= ±0.03mm
- Form tolerance PRFRAD2= 0.02mm
- Regrind possible



Designation	Grade	Item number	Length index	Tool shape	CSP	DC	DMM	L	APMXS	OAL	PRFRAD1	PRFRAD2	PRFRAD3	PRFA/2°	FCEDC	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm	mm					
JH746100T2R2R250.0Z6	SIRA	10044958	2	T	—	10,0	10,0	12,7	9,04	75,0	2,0	250,0	5,0	20,0	6	6	Cylindrical	■
JH746120T2R3R250.0Z6	SIRA	10044959	2	T	—	12,0	12,0	13,7	9,71	89,0	3,0	250,0	6,0	20,0	6	6	Cylindrical	■
JH746160T2R4R500.0Z6	SIRA	10044960	2	T	—	16,0	16,0	17,6	12,94	108,0	4,0	500,0	8,0	20,0	6	6	Cylindrical	■
JH746160T4R4R500.0Z6A	SIRA	10044961	4	T	■	16,0	16,0	17,6	12,94	150,0	4,0	500,0	8,0	20,0	6	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH746 Copy milling finishing

SMG		a_e/DC	f_z			v_c
			10	12	16	
P8	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	170 (150 - 195) 560 (490 - 640)
P12	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	120 (95 - 135) 400 (310 - 445)
M1	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	150 (125 - 155) 490 (410 - 510)
M2	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	145 (120 - 150) 475 (400 - 490)
M3	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	130 (90 - 140) 425 (295 - 460)
S2	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	60 (50 - 70) 195 (165 - 230)
S11	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	100 (85 - 105) 320 (280 - 345)
S12	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	95 (80 - 100) 310 (260 - 320)
S13	E	0,010 0,010	0,05 0,0022	0,06 0,0024	0,08 0,0032	90 (75 - 95) 295 (245 - 310)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JH746 Copy milling roughing

SMG		a_e/DC	f_z			v_c
			10	12	16	
P12	E	0,025 0,025	0,03 0,0012	0,036 0,0014	0,048 0,0019	120 (95 - 135) 400 (310 - 445)
M1	E	0,025 0,025	0,03 0,0012	0,036 0,0014	0,048 0,0019	145 (120 - 150) 475 (400 - 490)
M2	E	0,025 0,025	0,03 0,0012	0,036 0,0014	0,048 0,0019	145 (120 - 150) 475 (400 - 490)
S12	E	0,025 0,025	0,03 0,0012	0,036 0,0014	0,048 0,0019	95 (80 - 100) 310 (270 - 320)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

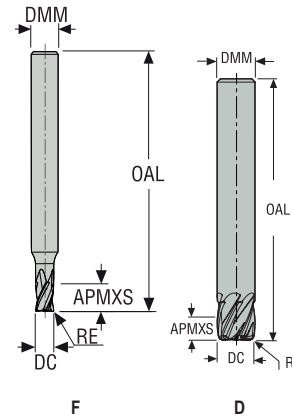
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

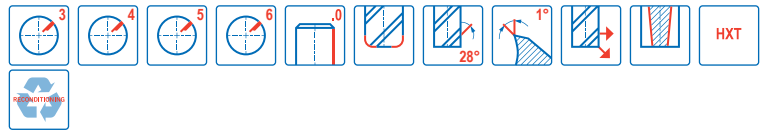
All cutting data are target values

JH770

High speed – CoCr/Titanium – Square – 3-4-5-6 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
JH770030F2R020.0Z3-HXT	03320783	2	F	3,0	6,0	5,0	58,0	6,0	3,05	0,2	3	Cylindrical	■
JH770040F2R020.0Z4-HXT	03320784	2	F	4,0	6,0	6,0	58,0	7,0	4,05	0,2	4	Cylindrical	■
JH770050F2R020.0Z4-HXT	10000170	2	F	5,0	6,0	7,0	58,0	8,0	5,05	0,2	4	Cylindrical	■
JH770060D2R050.0Z4-HXT	03127351	2	D	6,0	6,0	8,0	50,0	—	—	0,5	4	Cylindrical	■
JH770080D2R050.0Z4-HXT	03127352	2	D	8,0	8,0	10,0	58,0	—	—	0,5	4	Cylindrical	■
JH770080D2R050.0Z5-HXT	03127354	2	D	8,0	8,0	10,0	58,0	—	—	0,5	5	Cylindrical	■
JH770080D2R100.0Z4-HXT	03127353	2	D	8,0	8,0	10,0	58,0	—	—	1,0	4	Cylindrical	■
JH770080D2R100.0Z5-HXT	03127355	2	D	8,0	8,0	10,0	58,0	—	—	1,0	5	Cylindrical	■
JH770080D2R100.0Z6-HXT	03127356	2	D	8,0	8,0	10,0	58,0	—	—	1,0	6	Cylindrical	■
JH770100D2R100.0Z5-HXT	03127357	2	D	10,0	10,0	12,0	66,0	—	—	1,0	5	Cylindrical	■
JH770100D2R100.0Z6-HXT	03127358	2	D	10,0	10,0	12,0	66,0	—	—	1,0	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

Cutting data – JH770 Side milling roughing PCEDC 3 and 4

SMG		a_e/DC	a_p/DC	f_z				v_c
				3	4	6	8	
S2	E	0.750 0,750	0.12 0,12	0.015 0,00060	0.020 0,00080	0.030 0,0012	0.040 0,0016	50 (42 — 62) 165 (140 — 200)
S11	E	0.250 0,250	0.32 0,32	0.0075 0,00030	0.010 0,00040	0.015 0,00060	0.020 0,00080	65 (53 — 91) 215 (180 — 290)
S12	E	0.250 0,250	0.32 0,32	0.0075 0,00030	0.010 0,00040	0.015 0,00060	0.020 0,00080	50 (41 — 70) 165 (140 — 220)

Cutting data – JH770 Side milling roughing PCEDC 6

SMG		a_e/DC	a_p/DC	f_z		v_c
				8	10	
S2	E	0.750 0,750	0.12 0,12	0.050 0,0020	0.060 0,0024	55 (43 — 64) 180 (150 — 200)
S11	E	0.250 0,250	0.32 0,32	0.022 0,00085	0.026 0,0010	65 (54 — 93) 215 (180 — 300)
S12	E	0.250 0,250	0.32 0,32	0.022 0,00085	0.026 0,0010	50 (42 — 71) 165 (140 — 230)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

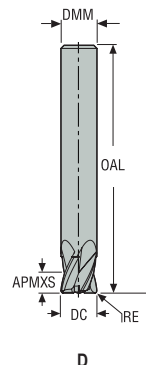
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

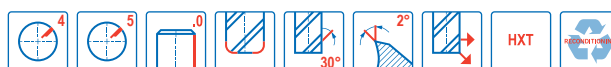
All cutting data are target values

JH740

High speed – CoCr/Titanium – Bottom finisher – 4-5 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JH740060D2R025.0Z4-HXT	03127359	2	D	6,0	6,0	6,0	50,0	0,25	4	Cylindrical	■
JH740060D2R050.0Z4-HXT	03127360	2	D	6,0	6,0	6,0	50,0	0,5	4	Cylindrical	■
JH740080D2R025.0Z4-HXT	03127361	2	D	8,0	8,0	8,0	58,0	0,25	4	Cylindrical	■
JH740080D2R050.0Z4-HXT	03127362	2	D	8,0	8,0	8,0	58,0	0,5	4	Cylindrical	■
JH740100D2R025.0Z5-HXT	03127363	2	D	10,0	10,0	10,0	66,0	0,25	5	Cylindrical	■
JH740100D2R050.0Z5-HXT	03127364	2	D	10,0	10,0	10,0	66,0	0,5	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH740 Face finishing PCEDC 4

SMG		a_e/DC	a_p/DC	f_z		v_c
				6	8	
S2	E	0.500 0,500	0.0060 0,0060	0.044 0,0017	0.060 0,0024	50 (40 — 59) 165 (140 — 190)
S11	E	0.500 0,500	0.0060 0,0060	0.044 0,0017	0.060 0,0024	65 (52 — 77) 215 (180 — 250)
S12	E	0.500 0,500	0.0060 0,0060	0.044 0,0017	0.060 0,0024	50 (40 — 59) 165 (140 — 190)

Cutting data – JH740 Face finishing PCEDC 5

SMG		a_e/DC	a_p/DC	f_z	v_c
				10	
S2	E	0.500 0,500	0.0065 0,0065	0.046 0,0018	48 (39 — 58) 155 (130 — 190)
S11	E	0.500 0,500	0.0065 0,0065	0.046 0,0018	65 (51 — 75) 215 (170 — 240)
S12	E	0.500 0,500	0.0065 0,0065	0.046 0,0018	48 (39 — 58) 155 (130 — 190)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

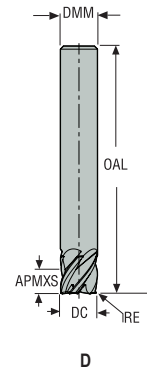
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

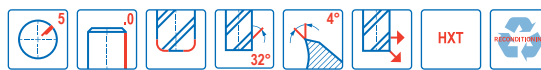
All cutting data are target values

JH710

High speed – CoCr/Titanium – Square – 5 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JH710060D2R025.0Z5-HXT	03127365	2	D	6,0	6,0	6,0	57,0	0,25	5	Cylindrical	■
JH710060D2R050.0Z5-HXT	03127366	2	D	6,0	6,0	6,0	57,0	0,5	5	Cylindrical	■
JH710080D2R025.0Z5-HXT	03127367	2	D	8,0	8,0	8,0	63,0	0,25	5	Cylindrical	■
JH710080D2R050.0Z5-HXT	03127368	2	D	8,0	8,0	8,0	63,0	0,5	5	Cylindrical	■
JH710080D2R100.0Z5-HXT	03127369	2	D	8,0	8,0	8,0	63,0	1,0	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH710 Side milling finishing

SMG		a_e/DC	a_p/DC	f_z		v_c
				6	8	
S1	E	0.00800 0,00800	0.65 0,65	0.034 0,0013	0.044 0,0017	100 (79 — 110) 330 (260 — 360)
S2	E	0.00800 0,00800	0.65 0,65	0.034 0,0013	0.044 0,0017	100 (79 — 110) 330 (260 — 360)
S3	E	0.00800 0,00800	0.65 0,65	0.034 0,0013	0.044 0,0017	100 (79 — 110) 330 (260 — 360)
S11	E	0.00800 0,00800	0.65 0,65	0.036 0,0014	0.046 0,0018	180 (160 — 200) 590 (530 — 650)
S12	E	0.00800 0,00800	0.65 0,65	0.036 0,0014	0.046 0,0018	135 (120 — 150) 445 (400 — 490)
S13	E	0.00800 0,00800	0.65 0,65	0.032 0,0013	0.040 0,0016	105 (92 — 120) 345 (310 — 390)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Non ferrous

Hard

Plastic and cfrp

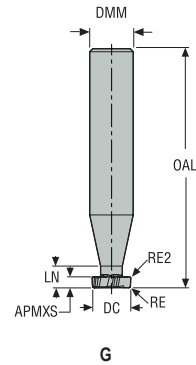
Graphite

X-Heads

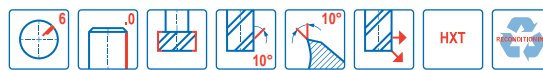
Minimaster

JH790

High speed – CoCr/Titanium – T Cutter – 6 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC= $\pm 0,02$ mm
- RE= $\pm 0,02$ mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	RE2	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm				
JH790095G2R025.0Z6-HXT	03127370	2	G	9,5	10,0	2,0	66,0	5,0	5,0	0,25	0,25	0,94	6	Cylindrical	■
JH790095G2R050.0Z6-HXT	03127371	2	G	9,5	10,0	2,0	66,0	5,0	5,0	0,5	0,5	0,96	6	Cylindrical	■
JH790095G3R025.0Z6-HXT	03127372	3	G	9,5	10,0	2,54	66,0	5,0	5,0	0,25	0,25	0,94	6	Cylindrical	■
JH790095G3R050.0Z6-HXT	03127373	3	G	9,5	10,0	2,54	66,0	5,0	5,0	0,5	0,5	0,96	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH790 (T) Side milling roughing

SMG		a_e/DC	a_p/DC	f_z	v_c
S2	E	0.189 <i>0,189</i>	0.19 <i>0,19</i>	0.030 <i>0,0012</i>	39 (31 — 50) <i>130 (110 — 160)</i>
S11	E	0.189 <i>0,189</i>	0.19 <i>0,19</i>	0.022 <i>0,00085</i>	85 (66 — 100) <i>280 (220 — 320)</i>
S12	E	0.189 <i>0,189</i>	0.19 <i>0,19</i>	0.022 <i>0,00085</i>	65 (51 — 80) <i>215 (170 — 260)</i>

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (*sf/min*)

f_z = mm (*in/tooth*)

a_p = mm/DC (*in/DC*) = factor

a_e = mm/DC (*in/DC*) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

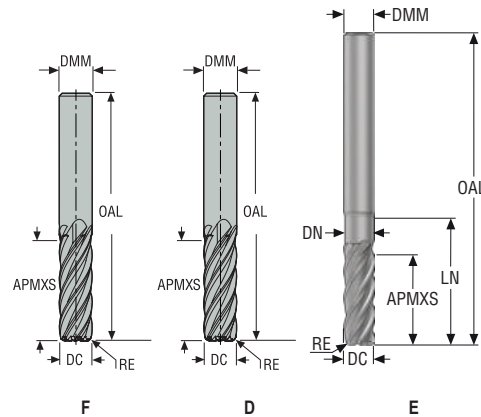
Graphite

X-Heads

Minimaster

JH730

High speed – CoCr/Titanium – Square – 5-6-7 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JH730060E2R050.0Z5-HXT	10217826	2	E	6,0	6,0	19,0	65,0	25,0	5,7	0,5	5	Cylindrical	■
JH730060E2R100.0Z5-HXT	10217827	2	E	6,0	6,0	19,0	65,0	25,0	5,7	1,0	5	Cylindrical	■
JH730060E2R150.0Z5-HXT	10217828	2	E	6,0	6,0	19,0	65,0	25,0	5,7	1,5	5	Cylindrical	■
JH730075F2R050.0Z6-HXT	10217829	2	F	7,5	8,0	24,0	63,0	—	—	0,5	6	Cylindrical	■
JH730075F2R100.0Z6-HXT	10217830	2	F	7,5	8,0	24,0	63,0	—	—	1,0	6	Cylindrical	■
JH730075F2R150.0Z6-HXT	10217831	2	F	7,5	8,0	24,0	63,0	—	—	1,5	6	Cylindrical	■
JH730080D2R050.0Z6-HXT	03127375	2	D	8,0	8,0	25,0	63,0	—	—	0,5	6	Cylindrical	■
JH730080D2R100.0Z6-HXT	03127377	2	D	8,0	8,0	25,0	63,0	—	—	1,0	6	Cylindrical	■
JH730080D2R150.0Z6-HXT	03127378	2	D	8,0	8,0	25,0	63,0	—	—	1,5	6	Cylindrical	■
JH730080D2R200.0Z6-HXT	03127379	2	D	8,0	8,0	25,0	63,0	—	—	2,0	6	Cylindrical	■
JH730100D2R100.0Z7-HXT	03127380	2	D	10,0	10,0	31,0	72,0	—	—	1,0	7	Cylindrical	■
JH730100D2R250.0Z7-HXT	03127381	2	D	10,0	10,0	31,0	72,0	—	—	2,5	7	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

Graphite

X-Heads

Minimaster

Cutting data – JH730 Side milling finishing

SMG		a_e/DC	a_p/DC	f_z				v_c
				6	7.5	8	10	
S2	E	0,065 0.065	1,3 1.3	0,015 0.00060	0,019 0.00075	0,020 0.00080	0,025 0.0010	80 (63 — 94) 260 (210 — 300)
S11	E	0,065 0.065	1,3 1.3	0,012 0.00048	0,015 0.00060	0,017 0.00065	0,020 0.00080	135 (110 — 160) 445 (370 — 520)
S12	E	0,065 0.065	1,3 1.3	0,012 0.00048	0,015 0.00060	0,017 0.00065	0,020 0.00080	105 (84 — 120) 345 (280 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

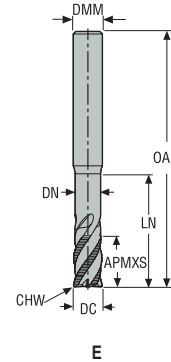
Graphite

X-Heads

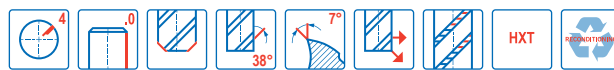
Minimaster

JHP994

High performance – CoCr/Titanium – Square – 4 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC=−0,02/−0,1 mm
- CHW=0/−0,1 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
JHP994060E3C.0Z4-HXT	03127382	3	E	■	6,0	6,0	14,0	63,0	24,0	5,6	0,2	4	Cylindrical	■
JHP994080E3C.0Z4-HXT	03127383	3	E	■	8,0	8,0	18,0	69,0	32,0	7,4	0,2	4	Cylindrical	■
JHP994100E3C.0Z4-HXT	03127384	3	E	■	10,0	10,0	22,0	88,0	40,0	9,4	0,2	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JHP994 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z			v_c
				6	8	10	
S2	E	0.0480 <i>0,0480</i>	2.0 <i>2,0</i>	0.025 <i>0,0010</i>	0.032 <i>0,0013</i>	0.042 <i>0,0017</i>	55 (40 — 69) <i>180 (140 — 220)</i>
S11	E	0.450 <i>0,450</i>	0.60 <i>0,60</i>	0.025 <i>0,0010</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	50 (39 — 77) <i>165 (130 — 250)</i>
S12	E	0.450 <i>0,450</i>	0.60 <i>0,60</i>	0.025 <i>0,0010</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	40 (30 — 59) <i>130 (99 — 190)</i>

Cutting data – JHP994 Slot milling

SMG		a_p/DC	f_z			v_c
			6	8	10	
S2	E	2.0 <i>2,0</i>	0.011 <i>0,00044</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	33 (24 — 41) <i>110 (79 — 130)</i>
S11	E	0.60 <i>0,60</i>	0.025 <i>0,0010</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	42 (32 — 63) <i>140 (110 — 200)</i>
S12	E	0.60 <i>0,60</i>	0.025 <i>0,0010</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	33 (25 — 48) <i>110 (83 — 150)</i>

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (*sf/min*)

f_z = mm (*in/tooth*)

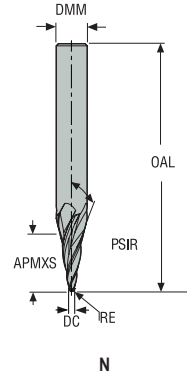
a_p = mm/DC (*in/DC*) = factor

a_e = mm/DC (*in/DC*) = factor

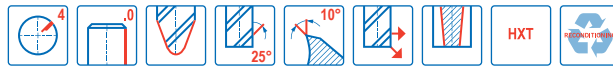
All cutting data are target values

JH780

High speed – CoCr/Titanium – Tapered ball nose – 4 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC= ±0,04 mm
- RE= ±0,01 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	RE	PSIR°	SIG°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm					
JH780018N2R100.0Z4-HXT	03127386	2	N	8,0	1,827	8,0	23,5	63,0	1,0	5,1838	10,3676	4	Cylindrical	■
JH780028N2R150.0Z4-HXT	03127387	2	N	8,0	2,803	8,0	23,5	63,0	1,5	3,8915	7,783	4	Cylindrical	■
JH780038N2R200.0Z4-HXT	03127388	2	N	8,0	3,823	8,0	23,5	63,0	2,0	2,5972	5,1944	4	Cylindrical	■
JH780049N2R250.0Z4-HXT	03127389	2	N	8,0	4,888	8,0	23,5	63,0	2,5	1,3003	2,6006	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH780 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				1.8	2.8	3.8	4.9	
S2	E	0.0510	4.2	0.0080	0.012	0.017	0.022	70 (54 — 86)
		0,0510	4,2	0,00032	0,00048	0,00065	0,00085	230 (180 — 280)
S12	E	0.0510	4.2	0.0060	0.0090	0.013	0.016	95 (76 — 110)
		0,0510	4,2	0,00024	0,00036	0,00050	0,00065	310 (250 — 360)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

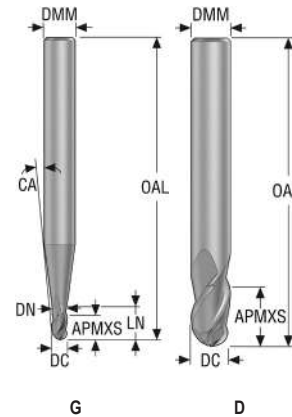
Graphite

X-Heads

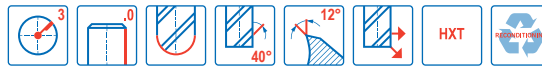
Minimaster

JHB720

High speed – Titanium – Ball nose – 3 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=-0,02/-0,04 mm
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
JHB720020G2B.0Z3	HXT	10072323	2	G	2,0	6,0	3,0	60,0	6,0	1,9	1,0	7,0	3	Cylindrical	■
JHB720030G2B.0Z3	HXT	10072324	2	G	3,0	6,0	4,5	60,0	6,5	2,8	1,5	5,0	3	Cylindrical	■
JHB720035G2B.0Z3	HXT	10072325	2	G	3,5	6,0	5,0	65,0	7,0	3,2	1,75	3,5	3	Cylindrical	■
JHB720040G2B.0Z3	HXT	10072326	2	G	4,0	6,0	6,0	65,0	8,0	3,7	2,0	3,0	3	Cylindrical	■
JHB720060D2B.0Z3	HXT	10072327	2	D	6,0	6,0	9,0	75,0	—	—	3,0	—	3	Cylindrical	■
JHB720080D2B.0Z3	HXT	10072328	2	D	8,0	8,0	12,0	75,0	—	—	4,0	—	3	Cylindrical	■
JHB720100D2B.0Z3	HXT	10072329	2	D	10,0	10,0	15,0	80,0	—	—	5,0	—	3	Cylindrical	■
JHB720120D2B.0Z3	HXT	10072330	2	D	12,0	12,0	18,0	90,0	—	—	6,0	—	3	Cylindrical	■
JHB720160D2B.0Z3	HXT	10072331	2	D	16,0	16,0	24,0	100,0	—	—	8,0	—	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JHB720 Side milling

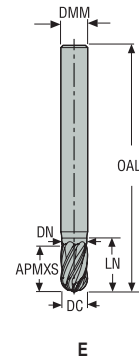
SMG		a _e /DC	a _p /DC	f _z									v _c
				2	3	3.5	4	6	8	10	12	16	
M1	E	0.200	1.2	0.0080	0.012	0.014	0.016	0.024	0.032	0.040	0.048	0.060	85 (62 — 110)
		0,200	1,2	0,00032	0,00048	0,00055	0,00065	0,00095	0,0013	0,0016	0,0019	0,0024	280 (210 — 360)
M2	E	0.200	1.2	0.0080	0.012	0.014	0.016	0.024	0.032	0.040	0.048	0.060	70 (51 — 90)
		0,200	1,2	0,00032	0,00048	0,00055	0,00065	0,00095	0,0013	0,0016	0,0019	0,0024	230 (170 — 290)
M3	E	0.200	1.2	0.0080	0.012	0.014	0.016	0.024	0.032	0.040	0.048	0.060	65 (46 — 84)
		0,200	1,2	0,00032	0,00048	0,00055	0,00065	0,00095	0,0013	0,0016	0,0019	0,0024	215 (160 — 270)
M4	E	0.200	1.2	0.0070	0.011	0.012	0.014	0.022	0.028	0.034	0.042	0.050	50 (35 — 65)
		0,200	1,2	0,00028	0,00044	0,00048	0,00055	0,00085	0,0011	0,0013	0,0017	0,0020	165 (120 — 210)
M5	E	0.200	1.2	0.0070	0.011	0.012	0.014	0.022	0.028	0.034	0.042	0.050	42 (29 — 54)
		0,200	1,2	0,00028	0,00044	0,00048	0,00055	0,00085	0,0011	0,0013	0,0017	0,0020	140 (96 — 170)
N1	E/M/A	0.400	1.2	0.020	0.030	0.036	0.040	0.060	0.080	0.10	0.12	0.15	600 (500 — 690)
		0,400	1,2	0,00080	0,0012	0,0014	0,0016	0,0024	0,0032	0,0040	0,0048	0,0060	1975 (1700 — 2200)
N2	E/M/A	0.400	1.2	0.016	0.024	0.028	0.032	0.048	0.065	0.080	0.095	0.12	500 (400 — 600)
		0,400	1,2	0,00065	0,00095	0,0011	0,0013	0,0019	0,0026	0,0032	0,0038	0,0048	1650 (1400 — 1900)
N3	E/M/A	0.400	1.2	0.016	0.024	0.028	0.032	0.048	0.065	0.080	0.095	0.12	335 (270 — 400)
		0,400	1,2	0,00065	0,00095	0,0011	0,0013	0,0019	0,0026	0,0032	0,0038	0,0048	1100 (890 — 1300)
N11	E/M/A	0.300	1.2	0.012	0.018	0.022	0.024	0.036	0.048	0.060	0.070	0.090	300 (260 — 340)
		0,300	1,2	0,00048	0,00070	0,00085	0,00095	0,0014	0,0019	0,0024	0,0028	0,0036	980 (860 — 1100)
S1	E	0.100	1.2	0.0065	0.0095	0.011	0.013	0.019	0.026	0.032	0.038	0.048	43 (29 — 57)
		0,100	1,2	0,00026	0,00038	0,00044	0,00050	0,00075	0,0010	0,0013	0,0015	0,0019	140 (96 — 180)
S2	E	0.100	1.2	0.0065	0.0095	0.011	0.013	0.019	0.026	0.032	0.038	0.048	35 (24 — 46)
		0,100	1,2	0,00026	0,00038	0,00044	0,00050	0,00075	0,0010	0,0013	0,0015	0,0019	115 (79 — 150)
S3	E	0.100	1.2	0.0060	0.0090	0.011	0.012	0.018	0.024	0.030	0.036	0.044	30 (21 — 39)
		0,100	1,2	0,00024	0,00036	0,00044	0,00048	0,00070	0,00095	0,0012	0,0014	0,0017	100 (69 — 120)
S11	E	0.300	1.2	0.010	0.015	0.018	0.020	0.030	0.040	0.050	0.060	0.075	90 (79 — 100)
		0,300	1,2	0,00040	0,00060	0,00070	0,00080	0,0012	0,0016	0,0020	0,0024	0,0030	295 (260 — 320)
S12	E	0.300	1.2	0.010	0.015	0.018	0.020	0.030	0.040	0.050	0.060	0.075	70 (61 — 80)
		0,300	1,2	0,00040	0,00060	0,00070	0,00080	0,0012	0,0016	0,0020	0,0024	0,0030	230 (210 — 260)
S13	E	0.300	1.2	0.0085	0.013	0.015	0.017	0.026	0.034	0.044	0.050	0.065	55 (48 — 63)
		0,300	1,2	0,00034	0,00050	0,00060	0,00065	0,0010	0,0013	0,0017	0,0020	0,0026	180 (160 — 200)
TS1	A	0.400	1.2	0.020	0.030	0.036	0.040	0.060	0.080	0.10	0.12	0.15	500 (400 — 600)
		0,400	1,2	0,00080	0,0012	0,0014	0,0016	0,0024	0,0032	0,0040	0,0048	0,0060	1650 (1400 — 1900)
TP1	M	0.400	1.2	0.020	0.030	0.036	0.040	0.060	0.080	0.10	0.12	0.15	500 (400 — 600)
		0,400	1,2	0,00080	0,0012	0,0014	0,0016	0,0024	0,0032	0,0040	0,0048	0,0060	1650 (1400 — 1900)

For cutting data recalculations, see pages 687 – 695

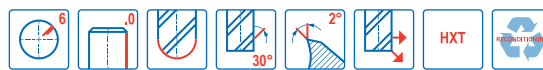
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH721

High speed – CoCr/Titanium – Ball nose – 6 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=e7
- RE= ±0,02 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JH721060E2B.0Z6-HXT	03127390	2	E	6,0	6,0	10,0	57,0	12,0	5,6	2,987	6	Cylindrical	■
JH721080E2B.0Z6-HXT	03127391	2	E	8,0	8,0	13,0	58,0	16,0	7,4	3,98375	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH721 Copy milling finishing

SMG		a_e/DC	a_p/DC	f_z		v_c
				6	8	
S2	E	0.0424 0,0424	0.040 0,040	0.032 0,0013	0.042 0,0017	120 (110 — 140) 395 (370 — 450)
S11	E	0.0424 0,0424	0.040 0,040	0.032 0,0013	0.042 0,0017	210 (140 — 230) 690 (460 — 750)
S12	E	0.0424 0,0424	0.040 0,040	0.032 0,0013	0.042 0,0017	160 (110 — 180) 520 (370 — 590)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

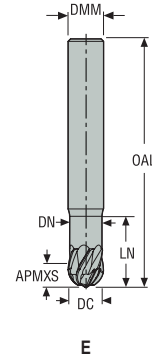
Graphite

X-Heads

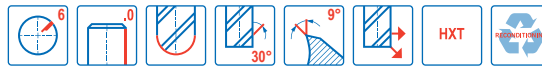
Minimaster

JH722

High speed – CoCr/Titanium – Ball nose – 6 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC=h7
- RE= ±0,01 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JH722100E2B.0Z6-HXT	03127392	2	E	mm 10,0	mm 10,0	mm 10,0	mm 72,0	mm 20,0	mm 9,4	mm 4,98375	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH722 Copy milling finishing

SMG		a_e/DC	a_p/DC	f_z	v_c
S2	E	0.0500 0,0500	0.15 0,15	0.065 0,0026	125 (110 — 150) 410 (370 — 490)
S11	E	0.0500 0,0500	0.15 0,15	0.048 0,0019	210 (190 — 230) 690 (630 — 750)
S12	E	0.0500 0,0500	0.15 0,15	0.048 0,0019	160 (150 — 180) 520 (500 — 590)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

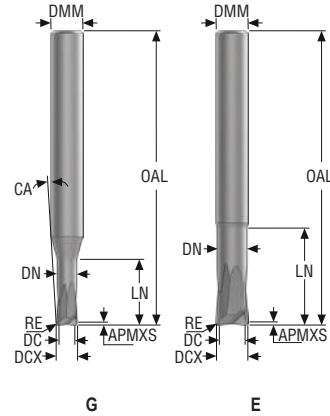
Graphite

X-Heads

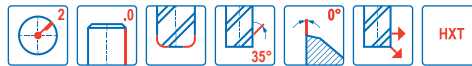
Minimaster

SHF712

High feed – ISO– S – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out= <0,005 mm
- DMM = h5
- DC G- Shape = 0/-0,01 mm
- DC E- Shape = 0,005/-0,015 mm
- RE = ±0,005 mm



Designation	Grade	Item number	Length index	Tool shape	DCX	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PSIR°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm	mm					
SHF712040G2R050.0Z2	HXT	10106493	2	G	4,0	3,0	6,0	0,5	55,0	12,0	3,8	0,5	3,9	1,5	2	Cylindrical	■
SHF712060E2R050.0Z2	HXT	10106494	2	E	6,0	5,0	6,0	0,5	55,0	18,0	5,7	0,5	—	1,5	2	Cylindrical	■
SHF712030G3R050.0Z2	HXT	10106495	3	G	3,0	2,0	6,0	0,5	55,0	12,0	2,85	0,5	5,65	1,5	2	Cylindrical	■
SHF712040G3R050.0Z2	HXT	10106496	3	G	4,0	3,0	6,0	0,5	55,0	16,0	3,8	0,5	3,07	1,5	2	Cylindrical	■
SHF712060E3R050.0Z2	HXT	10106497	3	E	6,0	5,0	6,0	0,5	55,0	25,0	5,7	0,5	—	1,5	2	Cylindrical	■
SHF712030G4R050.0Z2	HXT	10106498	4	G	3,0	2,0	6,0	0,5	55,0	16,0	2,85	0,5	4,47	1,5	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – SFH712 Side milling

SMG		a_e/DCX	a_p/DCX	f_z			v_c
				3	4	6	
S2	E	0,30 0.30	0,050 0.050	0,055 0.0022	0,075 0.0030	0,11 0.0044	65 (51 — 76) 215 (170 — 240)
S12	E	0,30 0.30	0,050 0.050	0,085 0.0034	0,12 0.0048	0,17 0.0065	170 (150 — 190) 560 (500 — 620)

Cutting data – SFH712 Slot milling

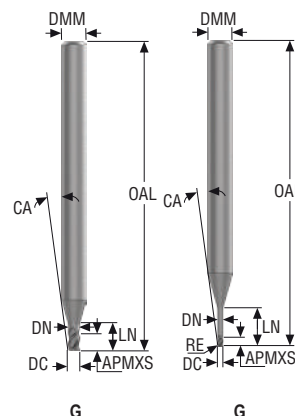
SMG		a_p/DCX	f_z			v_c
			3	4	6	
S2	E	0,050 0.050	0,046 0.0018	0,060 0.0024	0,090 0.0036	50 (41 — 60) 165 (140 — 190)
S12	E	0,050 0.050	0,046 0.0018	0,060 0.0024	0,090 0.0036	145 (130 — 160) 475 (430 — 520)

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

SME714/716

Miniature – ISO– S – Square – 2-3 Flutes – Cylindrical – Sharp or corner radius



- Tolerances:
- Run-out= <0,005 mm
- DMM = h5
- DC = 0/-0,01 mm
- RE = $\pm 0,005$ mm



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm				
SME714020G1S.0Z3	HXT	10107349	1	G	2,0	4,0	2,0	50,0	4,0	1,9	–	6,86	3	Cylindrical	■
SME716020G1S.0Z3	HXT	10107360	1	G	2,0	6,0	2,0	50,0	4,0	1,9	–	9,42	3	Cylindrical	■
SME714020G3R010.0Z3	HXT	10107350	3	G	2,0	4,0	2,5	50,0	8,0	1,9	0,1	4,68	3	Cylindrical	■
SME716020G3R010.0Z3	HXT	10107361	3	G	2,0	6,0	2,5	50,0	8,0	1,9	0,1	7,14	3	Cylindrical	■
SME716010G4R010.0Z3	HXT	10107362	4	G	1,0	6,0	1,2	50,0	6,0	0,95	0,1	9,03	3	Cylindrical	■
SME716015G4R010.0Z3	HXT	10107363	4	G	1,5	6,0	1,8	50,0	10,0	1,4	0,1	6,79	3	Cylindrical	■
SME714010G4R010.0Z3	HXT	10107351	4	G	2,0	4,0	1,2	50,0	6,0	0,95	0,1	7,13	3	Cylindrical	■
SME714015G4R010.0Z3	HXT	10107352	4	G	2,0	4,0	1,8	50,0	10,0	1,4	0,1	4,72	3	Cylindrical	■
SME714020G4R010.0Z3	HXT	10107353	4	G	2,0	4,0	2,5	50,0	12,0	1,9	0,1	3,53	3	Cylindrical	■
SME716020G4R010.0Z3	HXT	10107364	4	G	2,0	6,0	2,5	50,0	12,0	1,9	0,1	5,72	3	Cylindrical	■
SME714015G5R010.0Z3	HXT	10107354	5	G	1,5	4,0	1,8	50,0	12,0	1,4	0,1	3,38	3	Cylindrical	■
SME716015G5R010.0Z3	HXT	10107365	5	G	1,5	6,0	1,8	50,0	12,0	1,4	0,1	6,15	3	Cylindrical	■
SME714020G5R010.0Z3	HXT	10107355	5	G	2,0	4,0	2,5	50,0	16,0	1,9	0,1	2,83	3	Cylindrical	■
SME716020G5R010.0Z3	HXT	10107366	5	G	2,0	6,0	2,5	50,0	16,0	1,9	0,1	4,77	3	Cylindrical	■
SME714005G6R005.0Z2	HXT	10107356	6	G	0,5	4,0	0,6	50,0	5,0	0,45	0,05	8,31	2	Cylindrical	■
SME716005G6R005.0Z2	HXT	10107367	6	G	0,5	6,0	0,6	50,0	5,0	0,45	0,05	9,93	2	Cylindrical	■
SME714010G6R010.0Z3	HXT	10107357	6	G	1,0	4,0	1,2	50,0	12,0	0,95	0,1	4,77	3	Cylindrical	■
SME716010G6R010.0Z3	HXT	10107368	6	G	1,0	6,0	1,6	50,0	12,0	0,95	0,1	6,56	3	Cylindrical	■
SME714015G6R010.0Z3	HXT	10107358	6	G	1,5	4,0	1,8	50,0	16,0	1,4	0,1	3,38	3	Cylindrical	■
SME716015G6R010.0Z3	HXT	10107369	6	G	1,5	6,0	1,8	50,0	16,0	1,4	0,1	5,16	3	Cylindrical	■
SME714010G7R010.0Z3	HXT	10107359	7	G	1,0	4,0	1,2	50,0	16,0	0,95	0,1	3,9	3	Cylindrical	■
SME716010G7R010.0Z3	HXT	10107370	7	G	1,0	6,0	1,2	50,0	16,0	0,95	0,1	5,55	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – SME714 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				0.5	1	1.5	2	
S2	E	0,0800 0.0800	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	60 (31 — 120) 195 (110 — 390)
S12	E	0,0800 0.0800	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	65 (33 — 130) 215 (110 — 420)

Cutting data – SME714 Slot milling

SMG		a_p/DC	f_z				v_c
			0.5	1	1.5	2	
S2	E	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	41 (21 — 82) 135 (69 — 260)
S12	E	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	45 (23 — 89) 150 (76 — 290)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – SME716 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				0.5	1	1.5	2	
S2	E	0,0800 0.0800	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	60 (31 — 120) 195 (110 — 390)
S12	E	0,0800 0.0800	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	65 (33 — 130) 215 (110 — 420)

Cutting data – SME716 Slot milling

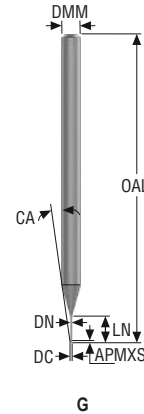
SMG		a_p/DC	f_z				v_c
			0.5	1	1.5	2	
S2	E	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	41 (21 — 82) 135 (69 — 260)
S12	E	0,070 0.070	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	45 (23 — 89) 150 (76 — 290)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

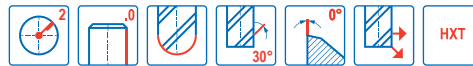
SMB713/714/716

Miniature – ISO– S – Ball nose – 2 Flutes – Cylindrical



G

- Tolerances:
- Run-out= <0,005 mm
- DMM = h5
- DC = 0/-0,01 mm
- RE = ±0,005 mm



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm				
SMB714020G2B.022	HXT	10109582	2	G	2,0	4,0	2,0	50,0	6,0	1,9	1,0	6,13	2	Cylindrical	■
SMB716020G2B.022	HXT	10109596	2	G	2,0	6,0	2,0	50,0	6,0	1,9	1,0	8,72	2	Cylindrical	■
SMB714030G2B.022	HXT	10109583	2	G	3,0	4,0	3,0	50,0	9,0	2,85	1,5	2,85	2	Cylindrical	■
SMB716030G2B.022	HXT	10109597	2	G	3,0	6,0	3,0	50,0	9,0	2,85	1,5	6,22	2	Cylindrical	■
SMB714030G3B.022	HXT	10109584	3	G	3,0	4,0	3,0	50,0	12,0	2,85	1,5	2,2	2	Cylindrical	■
SMB716030G3B.022	HXT	10109598	3	G	3,0	6,0	3,0	50,0	12,0	2,85	1,5	5,11	2	Cylindrical	■
SMB714015G4B.022	HXT	10109585	4	G	1,5	4,0	1,5	50,0	9,0	1,4	0,75	5,29	2	Cylindrical	■
SMB716015G4B.022	HXT	10109599	4	G	1,5	6,0	1,5	50,0	9,0	1,4	0,75	7,44	2	Cylindrical	■
SMB714020G4B.022	HXT	10109586	4	G	2,0	4,0	2,0	50,0	10,0	1,9	1,0	4,3	2	Cylindrical	■
SMB716020G4B.022	HXT	10109600	4	G	2,0	6,0	2,0	50,0	10,0	1,9	1,0	6,69	2	Cylindrical	■
SMB714005G5B.022	HXT	10109587	5	G	0,5	4,0	0,5	50,0	4,0	0,45	0,25	9,23	2	Cylindrical	■
SMB716005G5B.022	HXT	10109601	5	G	0,5	6,0	0,5	50,0	4,0	0,45	0,25	10,73	2	Cylindrical	■
SMB714010G5B.022	HXT	10109588	5	G	1,0	4,0	1,0	50,0	10,0	0,95	0,5	5,5	2	Cylindrical	■
SMB716010G5B.022	HXT	10109602	5	G	1,0	6,0	1,0	50,0	10,0	0,95	0,5	7,37	2	Cylindrical	■
SMB714015G5B.022	HXT	10109589	5	G	1,5	4,0	1,5	50,0	12,0	1,4	0,75	4,41	2	Cylindrical	■
SMB716015G5B.022	HXT	10109603	5	G	1,5	6,0	1,5	50,0	12,0	1,4	0,75	6,35	2	Cylindrical	■
SMB714020G5B.022	HXT	10109590	5	G	2,0	4,0	2,0	50,0	16,0	1,9	1,0	2,96	2	Cylindrical	■
SMB716020G5B.022	HXT	10109604	5	G	2,0	6,0	2,0	50,0	16,0	1,9	1,0	4,96	2	Cylindrical	■
SMB713003G6B.022	HXT	10109581	6	G	0,3	3,0	0,3	50,0	4,0	0,28	0,15	8,24	2	Cylindrical	■
SMB714005G6B.022	HXT	10109591	6	G	0,5	4,0	0,5	50,0	6,0	0,45	0,25	7,8	2	Cylindrical	■
SMB716005G6B.022	HXT	10109605	6	G	0,5	6,0	0,5	50,0	6,0	0,45	0,25	9,46	2	Cylindrical	■
SMB714010G6B.022	HXT	10109592	6	G	1,0	4,0	1,0	50,0	12,0	0,95	0,5	4,97	2	Cylindrical	■
SMB716010G6B.022	HXT	10109606	6	G	1,0	6,0	1,0	50,0	12,0	0,95	0,5	6,69	2	Cylindrical	■
SMB714015G6B.022	HXT	10109593	6	G	1,5	4,0	1,5	50,0	16,0	1,4	0,75	3,49	2	Cylindrical	■
SMB716015G6B.022	HXT	10109607	6	G	1,5	6,0	1,5	55,0	16,0	1,4	0,75	5,31	2	Cylindrical	■
SMB714005G7B.022	HXT	10109594	7	G	0,5	4,0	0,5	50,0	9,0	0,45	0,25	6,33	2	Cylindrical	■
SMB716005G7B.022	HXT	10109608	7	G	0,5	6,0	0,5	50,0	9,0	0,45	0,25	8,03	2	Cylindrical	■
SMB714010G7B.022	HXT	10109595	7	G	1,0	4,0	1,0	50,0	16,0	0,95	0,5	3,98	2	Cylindrical	■
SMB716010G7B.022	HXT	10109609	7	G	1,0	6,0	1,0	55,0	16,0	0,95	0,5	5,64	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – SMB713 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z	v_c
				0.3	
S2	E	0,0600	0,050	0,0020	47 (26 — 64)
		0.0600	0.050	0.000080	155 (86 — 200)
S12	E	0,0600	0,050	0,0020	47 (26 — 64)
		0.0600	0.050	0.000080	155 (86 — 200)

Cutting data – SMB714 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				0.5	1	1.5	2	3	
S2	E	0,0600 0.0600	0,050 0.050	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	0,020 0.00080	60 (33 — 81) 195 (110 — 260)
S12	E	0,0600 0.0600	0,050 0.050	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	0,020 0.00080	60 (33 — 81) 195 (110 — 260)

Cutting data – SMB716 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				0.5	1	1.5	2	3	
S2	E	0,0600 0.0600	0,050 0.050	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	0,020 0.00080	60 (33 — 81) 195 (110 — 260)
S12	E	0,0600 0.0600	0,050 0.050	0,0036 0.00014	0,0070 0.00028	0,010 0.00040	0,014 0.00055	0,020 0.00080	60 (33 — 81) 195 (110 — 260)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values



NON FERROUS

Seco offers a complete range of high performance solid carbide square shoulder end mills, ballnose cutters and finish end mills for high productivity for non ferrous materials.

- JS412 and JS413 for sharp corner type.
- JS452, JS453, S4521, S4531 and S4651 with 45° chamfer type.
- JS452, JS453, S4521, S4531, S4651, JHP490, JH40, JH421, JM403, JM404, JM406, JH410 and JH440 for radius type.
- S4321, JH450, JH460, SMB413, SMB414, SMB416, JM413 and JM416 for ball-nose type.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool selection Non ferrous

							
							
Name		JS412	JS413	S4521	S4531	S4651	JHP490
Page(s)		443	446	449	454	463	466
Family name		SOLID ²	SOLID ²	SOLID ²	SOLID ²	SOLID ²	HPM
Type of mill							
Shank	Cylindrical	■	■	■	■	■	■
	Weldon	■	■	□	□	□	■
	SafeLock						□
Number of Flutes		2	3	2	3	5	2-3
CSP						■	■
Diameter range	Metric	2-20	2-20	2-20	2-20	6-20	10-25
	Inch						
Length availability		2	2,3	2,3	2,3	2,4	2,3,4
Operation							
							
							
SMG							
N1		●	●	●	●	●	●
N2		●	●	●	●		●
N3			●	●	●		●
N11						●	
TS1		●	●	●	●		
TP1		●	●	●	●		

■ Stock standard □ Weldon available, delivery time is 3 days. □ Safe-Lock available, delivery time is 6 days
 ● Preferred choice ○ Alternative choice

Tool selection Non ferrous

						Universal
Name		JH40	JH421	JH410	JH440	Steel and cast iron
Page(s)		470	473	477	479	Steel and cast iron
Family name		HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	Stainless steel and S-materials
Type of mill						Stainless steel and S-materials
Shank	Cylindrical	■	■	■	■	Non ferrous
	Weldon					
	Safelock					
Number of Flutes		2	2-3	1	2	Hard
CSP			■			
Diameter range	Metric	2-20	2-25	2-17	6-8	
	Inch					Plastic and cfrp
Length availability		1,2	2,3	2,3	2	
Operation						Graphite
						
SMG						
N1		●	●	●	●	X-Heads
N2					●	
N3					●	
N11		●	●	●	●	Minimaster
TS1		●	●	●	●	
TP1			●		●	

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Tool selection Non ferrous

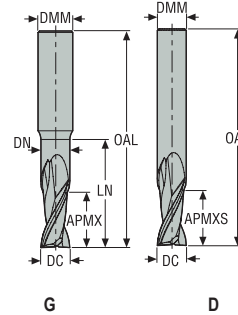
							
Name		S4321	JH450	JH460	SMB413/414/416	JM403/404/406	JM413/416
Page(s)		481	484	486	492	490	492
Family name		SOLID ²	HSM/TORNADO	HSM/TORNADO	MINI	MINI	MINI
Type of mill							
Shank	Cylindrical	☒	☒	☒	☒	☒	☒
	Weldon	☐					
	Safelock						
Number of Flutes		2	2	2	2	1	2
CSP							
Diameter range	Metric	2-20	2-20	3-12	1-3	0,5-2	0,5-2
	Inch						
Length availability		2	2,3	2	2,3,5	1,2,5	2,3,5
Operation							
							
							
SMG							
N1		☒	☒	☒	☒	☒	☒
N2		☒	☒	☒	☒	☒	☒
N3		☒	☒	☒	☒	☒	☒
N11		☒	☒	☒	☒	☒	☒
TS1		☒	☒	☒	☒		☒
TP1		☒	☒	☒	☒		☒

■ Stock standard □ Weldon available, delivery time is 3 days.

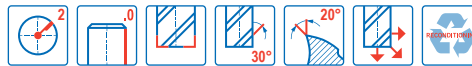
● Preferred choice ○ Alternative choice

JS412

General purpose – Aluminium – Square – 2 Flutes – Cylindrical – Sharp



- Tolerances:
- DMM= h5
- DC= e8
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm			
JS412020G2SZ2.0	02881760	2	G	2,0	6,0	4,0	57,0	7,0	1,9	2	Cylindrical	■
JS412030G2SZ2.0	02881761	2	G	3,0	6,0	6,0	57,0	10,0	2,8	2	Cylindrical	■
JS412040G2SZ2.0	02881762	2	G	4,0	6,0	8,0	57,0	14,0	3,8	2	Cylindrical	■
JS412050G2SZ2.0	02881763	2	G	5,0	6,0	10,0	57,0	17,0	4,7	2	Cylindrical	■
JS412060D2SZ2.0	02881764	2	D	6,0	6,0	12,0	57,0	—	—	2	Cylindrical	■
JS412080D2SZ2.0	02881765	2	D	8,0	8,0	16,0	63,0	—	—	2	Cylindrical	■
JS412100D2SZ2.0	02881766	2	D	10,0	10,0	20,0	75,0	—	—	2	Cylindrical	■
JS412120D2SZ2.0	02881767	2	D	12,0	12,0	24,0	88,0	—	—	2	Cylindrical	■
JS412160D2SZ2.0	02881769	2	D	16,0	16,0	32,0	100,0	—	—	2	Cylindrical	■
JS412200D2SZ2.0	02881770	2	D	20,0	20,0	40,0	124,0	—	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfcp

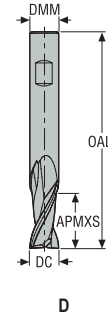
Graphite

X-Heads

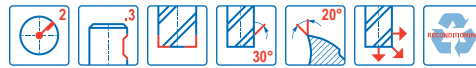
Minimaster

JS412

General purpose – Aluminium – Square – 2 Flutes – Weldon – Sharp



—Tolerances:
—DMM= h5
—DC= e8
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
				mm	mm	mm	mm			
JS412060D2SZ2.3	02881771	2	D	6,0	6,0	12,0	57,0	2	Weldon	■
JS412080D2SZ2.3	02881772	2	D	8,0	8,0	16,0	63,0	2	Weldon	■
JS412100D2SZ2.3	02881773	2	D	10,0	10,0	20,0	75,0	2	Weldon	■
JS412120D2SZ2.3	02881774	2	D	12,0	12,0	24,0	88,0	2	Weldon	■
JS412160D2SZ2.3	02881776	2	D	16,0	16,0	32,0	100,0	2	Weldon	■
JS412200D2SZ2.3	02881777	2	D	20,0	20,0	40,0	124,0	2	Weldon	■

■ Stocked standard.

Cutting data – JS412 Side milling

SMG		a_e/DC	a_p/DC	f_z										v_c
				2	3	4	5	6	8	10	12	16	20	
N1	E/M/A	0.400 0,400	1.5 1,5	0.026 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.19 0,0075	0.22 0,0085	590 (470 — 700) 1925 (1600 — 2200)
N2	E/M/A	0.300 0,300	1.4 1,4	0.026 0,0010	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	0.19 0,0075	0.22 0,0085	475 (360 — 590) 1550 (1200 — 1900)
TS1	A/D	0.400 0,400	1.5 1,5	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	600 (480 — 710) 1975 (1600 — 2300)
TP1	A/D	0.400 0,400	1.5 1,5	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	500 (380 — 630) 1650 (1300 — 2000)

Cutting data – JS412 Slot milling

SMG		a_p/DC	f_z										v_c
			2	3	4	5	6	8	10	12	16	20	
N1	E	1.2 1,2	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.16 0,0065	0.20 0,0080	500 (410 — 590) 1650 (1400 — 1900)
N2	E	1.0 1,0	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	0.16 0,0065	400 (310 — 500) 1300 (1100 — 1600)
TS1	A	1.2 1,2	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.16 0,0065	0.20 0,0080	500 (410 — 590) 1650 (1400 — 1900)
TP1	A	1.2 1,2	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.16 0,0065	0.20 0,0080	420 (320 — 520) 1375 (1100 — 1700)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

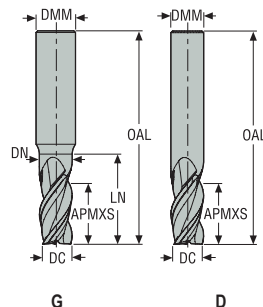
Graphite

X-Heads

Minimaster

JS413

General purpose – Aluminium – Square – 3 Flutes – Cylindrical – Sharp

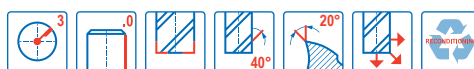


—Tolerances:

—DMM= h5

—DC= e8

—Regrind possible if DC is ≥Ø6

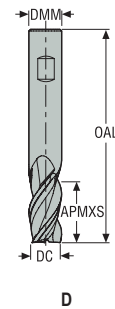


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm			
JS413020G2SZ3.0	02881797	2	G	2,0	6,0	4,0	57,0	7,0	1,9	3	Cylindrical	■
JS413030G2SZ3.0	02881798	2	G	3,0	6,0	6,0	57,0	10,0	2,8	3	Cylindrical	■
JS413040G2SZ3.0	02881799	2	G	4,0	6,0	8,0	57,0	14,0	3,8	3	Cylindrical	■
JS413050G2SZ3.0	02881800	2	G	5,0	6,0	10,0	57,0	17,0	4,7	3	Cylindrical	■
JS413060D2SZ3.0	02881801	2	D	6,0	6,0	12,0	57,0	—	—	3	Cylindrical	■
JS413080D2SZ3.0	02881802	2	D	8,0	8,0	16,0	63,0	—	—	3	Cylindrical	■
JS413100D2SZ3.0	02881803	2	D	10,0	10,0	20,0	72,0	—	—	3	Cylindrical	■
JS413120D2SZ3.0	02881804	2	D	12,0	12,0	24,0	88,0	—	—	3	Cylindrical	■
JS413160D2SZ3.0	02881806	2	D	16,0	16,0	32,0	100,0	—	—	3	Cylindrical	■
JS413200D2SZ3.0	02881807	2	D	20,0	20,0	40,0	124,0	—	—	3	Cylindrical	■
JS413060D3SZ3.0	02881815	3	D	6,0	6,0	24,0	70,0	—	—	3	Cylindrical	■
JS413080D3SZ3.0	02881816	3	D	8,0	8,0	32,0	85,0	—	—	3	Cylindrical	■
JS413100D3SZ3.0	02881817	3	D	10,0	10,0	40,0	100,0	—	—	3	Cylindrical	■
JS413120D3SZ3.0	02881818	3	D	12,0	12,0	50,0	115,0	—	—	3	Cylindrical	■
JS413160D3SZ3.0	02881820	3	D	16,0	16,0	55,0	125,0	—	—	3	Cylindrical	■
JS413200D3SZ3.0	02881821	3	D	20,0	20,0	75,0	150,0	—	—	3	Cylindrical	■

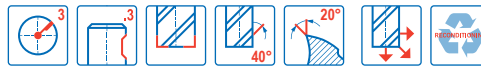
■ Stocked standard.

JS413

General purpose – Aluminium – Square – 3 Flutes – Weldon – Sharp



- Tolerances:
- DMM= h5
- DC= e8
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
				mm	mm	mm	mm			
JS413060D2SZ3.3	02881808	2	D	6,0	6,0	12,0	57,0	3	Weldon	■
JS413080D2SZ3.3	02881809	2	D	8,0	8,0	16,0	63,0	3	Weldon	■
JS413100D2SZ3.3	02881810	2	D	10,0	10,0	20,0	72,0	3	Weldon	■
JS413120D2SZ3.3	02881811	2	D	12,0	12,0	24,0	88,0	3	Weldon	■
JS413160D2SZ3.3	02881813	2	D	16,0	16,0	32,0	100,0	3	Weldon	■
JS413200D2SZ3.3	02881814	2	D	20,0	20,0	40,0	124,0	3	Weldon	■
JS413060D3SZ3.3	02881955	3	D	6,0	6,0	24,0	70,0	3	Weldon	□
JS413080D3SZ3.3	02881956	3	D	8,0	8,0	32,0	85,0	3	Weldon	□
JS413100D3SZ3.3	02881957	3	D	10,0	10,0	40,0	100,0	3	Weldon	□
JS413120D3SZ3.3	02881958	3	D	12,0	12,0	50,0	115,0	3	Weldon	□
JS413160D3SZ3.3	02881960	3	D	16,0	16,0	55,0	125,0	3	Weldon	■
JS413200D3SZ3.3	02881961	3	D	20,0	20,0	75,0	150,0	3	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JS413 Side milling

SMG		a _e /DC	a _p /DC	f _z										v _c
				2	3	4	5	6	8	10	12	16	20	
N1	E/M/A	0.400 0,400	1.5 1,5	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	600 (480 — 710) 1975 (1600 — 2300)
N2	E/M/A	0.300 0,300	1.5 1,5	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	470 (360 — 580) 1550 (1200 — 1900)
N3	E/M/A	0.300 0,300	1.5 1,5	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.18 0,0070	0.20 0,0080	315 (240 — 390) 1025 (790 — 1200)
TS1	A/D	0.400 0,400	1.5 1,5	0.022 0,00085	0.034 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.17 0,0065	0.19 0,0075	610 (500 — 730) 2000 (1700 — 2300)
TP1	A/D	0.400 0,400	1.5 1,5	0.022 0,00085	0.034 0,0013	0.044 0,0017	0.055 0,0022	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.17 0,0065	0.19 0,0075	330 (250 — 410) 1075 (830 — 1300)

Cutting data – JS413 Slot milling

SMG		a _p /DC	f _z										v _c
			2	3	4	5	6	8	10	12	16	20	
N1	E	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.16 0,0065	0.20 0,0080	500 (400 — 600) 1650 (1400 — 1900)
N2	E	1.0 1,0	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.14 0,0055	400 (300 — 490) 1300 (990 — 1600)
N3	E	1.0 1,0	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.11 0,0044	0.14 0,0055	265 (200 — 330) 870 (660 — 1000)
TS1	A	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.16 0,0065	0.19 0,0075	500 (400 — 600) 1650 (1400 — 1900)
TP1	A	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.16 0,0065	0.19 0,0075	270 (210 — 330) 890 (690 — 1000)

For cutting data recalculations, see pages 687 - 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

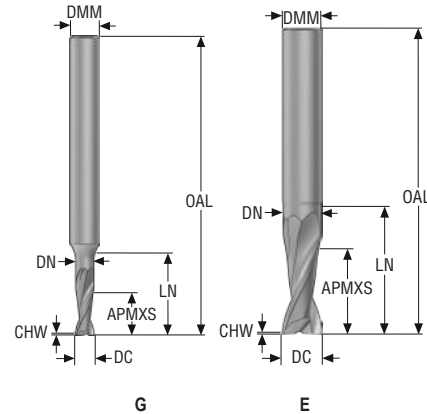
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

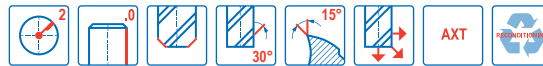
All cutting data are target values

S4521

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC= e7
- CHW= +0,04 mm
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
S4521-020G2C.0Z2	AXT	10228022	2	G	2,0	6,0	4,0	57,0	8,0	1,9	0,1	2	Cylindrical	■
S4521-030G2C.0Z2	AXT	10228023	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,1	2	Cylindrical	■
S4521-040G2C.0Z2	AXT	10228024	2	G	4,0	6,0	8,0	57,0	14,0	3,8	0,1	2	Cylindrical	■
S4521-050G2C.0Z2	AXT	10228025	2	G	5,0	6,0	10,0	57,0	17,0	4,75	0,1	2	Cylindrical	■
S4521-060E2C.0Z2	AXT	10228026	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,1	2	Cylindrical	■
S4521-080E2C.0Z2	AXT	10228029	2	E	8,0	8,0	16,0	63,0	24,0	7,6	0,1	2	Cylindrical	■
S4521-100E2C.0Z2	AXT	10228033	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,1	2	Cylindrical	■
S4521-120E2C.0Z2	AXT	10228037	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,1	2	Cylindrical	■
S4521-140E2C.0Z2	AXT	10228043	2	E	14,0	14,0	28,0	89,0	41,0	13,3	0,1	2	Cylindrical	■
S4521-160E2C.0Z2	AXT	10228044	2	E	16,0	16,0	32,0	100,0	48,0	15,2	0,1	2	Cylindrical	■
S4521-200E2C.0Z2	AXT	10228051	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,1	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

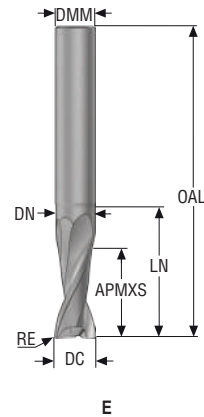
Graphite

X-Heads

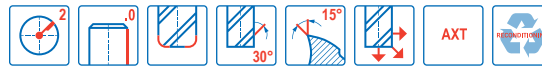
Minimaster

S4521

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6

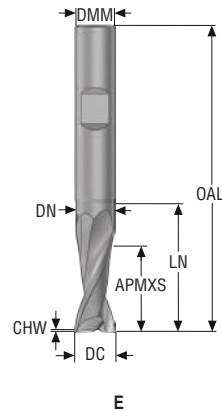


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4521-060E2R050.0Z2	AXT	10228027	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,5	2	Cylindrical	■
S4521-060E2R100.0Z2	AXT	10228028	2	E	6,0	6,0	12,0	57,0	19,0	5,7	1,0	2	Cylindrical	■
S4521-080E2R050.0Z2	AXT	10228030	2	E	8,0	8,0	16,0	63,0	24,0	7,6	0,5	2	Cylindrical	■
S4521-080E2R100.0Z2	AXT	10228031	2	E	8,0	8,0	16,0	63,0	24,0	7,6	1,0	2	Cylindrical	■
S4521-100E2R050.0Z2	AXT	10228034	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,5	2	Cylindrical	■
S4521-100E2R100.0Z2	AXT	10228035	2	E	10,0	10,0	20,0	72,0	31,0	9,5	1,0	2	Cylindrical	■
S4521-120E2R050.0Z2	AXT	10228038	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,5	2	Cylindrical	■
S4521-120E2R100.0Z2	AXT	10228039	2	E	12,0	12,0	24,0	88,0	37,0	11,4	1,0	2	Cylindrical	■
S4521-120E2R200.0Z2	AXT	10228040	2	E	12,0	12,0	24,0	88,0	37,0	11,4	2,0	2	Cylindrical	■
S4521-120E2R300.0Z2	AXT	10228041	2	E	12,0	12,0	24,0	88,0	37,0	11,4	3,0	2	Cylindrical	■
S4521-160E2R050.0Z2	AXT	10228045	2	E	16,0	16,0	32,0	100,0	48,0	15,2	0,5	2	Cylindrical	■
S4521-160E2R100.0Z2	AXT	10228046	2	E	16,0	16,0	32,0	100,0	48,0	15,2	1,0	2	Cylindrical	■
S4521-160E2R200.0Z2	AXT	10228047	2	E	16,0	16,0	32,0	100,0	48,0	15,2	2,0	2	Cylindrical	■
S4521-160E2R300.0Z2	AXT	10228048	2	E	16,0	16,0	32,0	100,0	48,0	15,2	3,0	2	Cylindrical	■
S4521-160E2R400.0Z2	AXT	10228049	2	E	16,0	16,0	32,0	100,0	48,0	15,2	4,0	2	Cylindrical	■
S4521-200E2R050.0Z2	AXT	10228052	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,5	2	Cylindrical	■
S4521-200E2R100.0Z2	AXT	10228053	2	E	20,0	20,0	40,0	114,0	60,0	19,0	1,0	2	Cylindrical	■
S4521-200E2R200.0Z2	AXT	10228054	2	E	20,0	20,0	40,0	114,0	60,0	19,0	2,0	2	Cylindrical	■
S4521-200E2R300.0Z2	AXT	10228055	2	E	20,0	20,0	40,0	114,0	60,0	19,0	3,0	2	Cylindrical	■
S4521-200E2R400.0Z2	AXT	10228056	2	E	20,0	20,0	40,0	114,0	60,0	19,0	4,0	2	Cylindrical	■
S4521-080E3R020.0Z2	AXT	10228032	3	E	8,0	8,0	12,0	79,0	41,0	7,6	0,2	2	Cylindrical	■
S4521-100E3R050.0Z2	AXT	10228036	3	E	10,0	10,0	15,0	99,0	57,0	9,5	0,5	2	Cylindrical	■
S4521-120E3R050.0Z2	AXT	10228042	3	E	12,0	12,0	18,0	119,0	72,0	11,4	0,5	2	Cylindrical	■
S4521-160E3R050.0Z2	AXT	10228050	3	E	16,0	16,0	24,0	129,0	79,0	15,2	0,5	2	Cylindrical	■
S4521-200E3R050.0Z2	AXT	10228057	3	E	20,0	20,0	30,0	164,0	111,0	19,0	0,5	2	Cylindrical	■

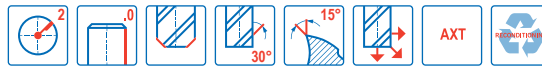
■ Stocked standard.

S4521

High performance – Aluminium – Square – 2 Flutes – Weldon – Chamfer



- Tolerances:
- DMM=h5
- DC= e7
- CHW= +0,04 mm
- Regrind possible if DC is $\geq \varnothing 6$



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4521-060E2C.3Z2	AXT	10286908	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,1	2	Weldon	☐
S4521-080E2C.3Z2	AXT	10286911	2	E	8,0	8,0	16,0	63,0	24,0	7,6	0,1	2	Weldon	☐
S4521-100E2C.3Z2	AXT	10286915	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,1	2	Weldon	☐
S4521-120E2C.3Z2	AXT	10286919	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,1	2	Weldon	☐
S4521-140E2C.3Z2	AXT	10286925	2	E	14,0	14,0	28,0	89,0	41,0	13,3	0,1	2	Weldon	☐
S4521-160E2C.3Z2	AXT	10286926	2	E	16,0	16,0	32,0	100,0	48,0	15,2	0,1	2	Weldon	☐
S4521-200E2C.3Z2	AXT	10286933	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,1	2	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

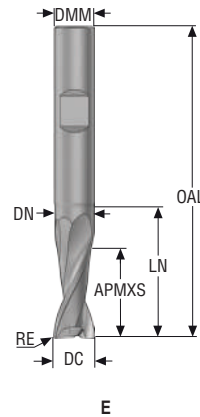
Graphite

X-Heads

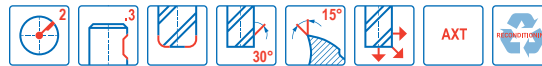
Minimaster

S4521

High performance – Aluminium – Square – 2 Flutes – Weldon – Corner radius



—Tolerances:
—DMM=h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4521-060E2R050.3Z2	AXT	10286909	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,5	2	Weldon	☐
S4521-060E2R100.3Z2	AXT	10286910	2	E	6,0	6,0	12,0	57,0	19,0	5,7	1,0	2	Weldon	☐
S4521-080E3R020.3Z2	AXT	10286914	2	E	8,0	8,0	12,0	79,0	41,0	7,6	0,2	2	Weldon	☐
S4521-080E2R050.3Z2	AXT	10286912	2	E	8,0	8,0	16,0	63,0	24,0	7,6	0,5	2	Weldon	☐
S4521-080E2R100.3Z2	AXT	10286913	2	E	8,0	8,0	16,0	63,0	24,0	7,6	1,0	2	Weldon	☐
S4521-100E2R050.3Z2	AXT	10286916	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,5	2	Weldon	☐
S4521-100E3R050.3Z2	AXT	10286918	2	E	10,0	10,0	15,0	99,0	57,0	9,5	0,5	2	Weldon	☐
S4521-100E2R100.3Z2	AXT	10286917	2	E	10,0	10,0	20,0	72,0	31,0	9,5	1,0	2	Weldon	☐
S4521-120E2R050.3Z2	AXT	10286920	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,5	2	Weldon	☐
S4521-120E2R100.3Z2	AXT	10286921	2	E	12,0	12,0	24,0	88,0	37,0	11,4	1,0	2	Weldon	☐
S4521-120E2R200.3Z2	AXT	10286922	2	E	12,0	12,0	24,0	88,0	37,0	11,4	2,0	2	Weldon	☐
S4521-120E2R300.3Z2	AXT	10286923	2	E	12,0	12,0	24,0	88,0	37,0	11,4	3,0	2	Weldon	☐
S4521-160E2R050.3Z2	AXT	10286927	2	E	16,0	16,0	32,0	100,0	48,0	15,2	0,5	2	Weldon	☐
S4521-160E2R100.3Z2	AXT	10286928	2	E	16,0	16,0	32,0	100,0	48,0	15,2	1,0	2	Weldon	☐
S4521-160E2R200.3Z2	AXT	10286929	2	E	16,0	16,0	32,0	100,0	48,0	15,2	2,0	2	Weldon	☐
S4521-160E2R300.3Z2	AXT	10286930	2	E	16,0	16,0	32,0	100,0	48,0	15,2	3,0	2	Weldon	☐
S4521-160E2R400.3Z2	AXT	10286931	2	E	16,0	16,0	32,0	100,0	48,0	15,2	4,0	2	Weldon	☐
S4521-200E2R050.3Z2	AXT	10286934	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,5	2	Weldon	☐
S4521-200E2R100.3Z2	AXT	10286935	2	E	20,0	20,0	40,0	114,0	60,0	19,0	1,0	2	Weldon	☐
S4521-200E2R200.3Z2	AXT	10286936	2	E	20,0	20,0	40,0	114,0	60,0	19,0	2,0	2	Weldon	☐
S4521-200E2R300.3Z2	AXT	10286937	2	E	20,0	20,0	40,0	114,0	60,0	19,0	3,0	2	Weldon	☐
S4521-200E2R400.3Z2	AXT	10286938	2	E	20,0	20,0	40,0	114,0	60,0	19,0	4,0	2	Weldon	☐
S4521-120E3R050.3Z2	AXT	10286924	3	E	12,0	12,0	18,0	119,0	72,0	11,4	0,5	2	Weldon	☐
S4521-160E3R050.3Z2	AXT	10286932	3	E	16,0	16,0	24,0	129,0	79,0	15,2	0,5	2	Weldon	☐
S4521-200E3R050.3Z2	AXT	10286939	3	E	20,0	20,0	30,0	164,0	111,0	19,0	0,5	2	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – S4521 Side milling

SMG		a_e/DC	a_p/DC	f_z											v_c
				2	3	4	5	6	8	10	12	14	16	20	
N1	E/M/A	0,40 0,40	1,5 1,5	0,030 0,0012	0,046 0,0018	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,12 0,0048	0,15 0,0060	0,18 0,0070	0,20 0,0080	0,22 0,0085	0,25 0,010	560 (450 — 660) 1825 (1500 — 2100)
N2	E/M/A	0,30 0,30	1,5 1,5	0,024 0,00095	0,036 0,0014	0,048 0,0019	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,18 0,0070	0,20 0,0080	480 (370 — 600) 1575 (1300 — 1900)
N3	E/M/A	0,30 0,30	1,5 1,5	0,024 0,00095	0,036 0,0014	0,048 0,0019	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,18 0,0070	0,20 0,0080	320 (250 — 400) 1050 (830 — 1300)
N11	E/M/A	0,30 0,30	1,2 1,2	0,024 0,00095	0,036 0,0014	0,048 0,0019	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,18 0,0070	0,20 0,0080	295 (240 — 350) 970 (790 — 1100)
TS1	A/D	0,40 0,40	1,5 1,5	0,030 0,0012	0,046 0,0018	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,12 0,0048	0,15 0,0060	0,18 0,0070	0,20 0,0080	0,22 0,0085	0,25 0,010	560 (450 — 660) 1825 (1500 — 2100)
TP1	A/D	0,40 0,40	1,5 1,5	0,030 0,0012	0,046 0,0018	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,12 0,0048	0,15 0,0060	0,18 0,0070	0,20 0,0080	0,22 0,0085	0,25 0,010	445 (340 — 550) 1450 (1200 — 1800)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – S4521 Slot milling

SMG		a_p/DC	f_z											v_c
			2	3	4	5	6	8	10	12	14	16	20	
N1	E	1,5 1,5	0,020 0,00080	0,030 0,0012	0,040 0,0016	0,050 0,0020	0,060 0,0024	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,20 0,0080	495 (400 — 590) 1625 (1400 — 1900)
N2	E	1,2 1,2	0,016 0,00065	0,024 0,00095	0,032 0,0013	0,040 0,0016	0,048 0,0019	0,065 0,0026	0,080 0,0032	0,095 0,0038	0,11 0,0044	0,13 0,0050	0,16 0,0065	395 (300 — 490) 1300 (990 — 1600)
N3	E	1,2 1,2	0,016 0,00065	0,024 0,00095	0,032 0,0013	0,040 0,0016	0,048 0,0019	0,065 0,0026	0,080 0,0032	0,095 0,0038	0,11 0,0044	0,13 0,0050	0,16 0,0065	265 (200 — 320) 870 (660 — 1000)
N11	E	0,60 0,60	0,015 0,00060	0,022 0,00085	0,030 0,0012	0,038 0,0015	0,046 0,0018	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,12 0,0048	0,15 0,0060	250 (200 — 290) 820 (660 — 950)
TS1	A	1,5 1,5	0,020 0,00080	0,030 0,0012	0,040 0,0016	0,050 0,0020	0,060 0,0024	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,20 0,0080	495 (400 — 590) 1625 (1400 — 1900)
TP1	A	1,5 1,5	0,020 0,00080	0,030 0,0012	0,040 0,0016	0,050 0,0020	0,060 0,0024	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	0,20 0,0080	395 (300 — 490) 1300 (990 — 1600)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

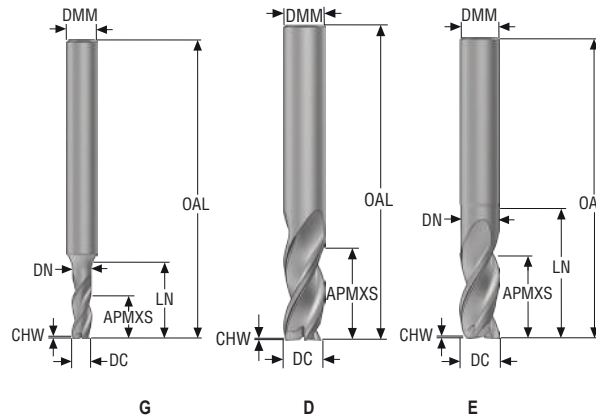
Graphite

X-Heads

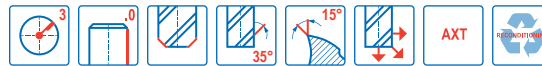
Minimaster

S4531

High performance – Aluminium – Square – 3 Flutes – Cylindrical – Chamfer



—Tolerances:
—DMM=h5
—DC= e7
—CHW= +0,04 mm
—Regrind possible if DC is ≥Ø6

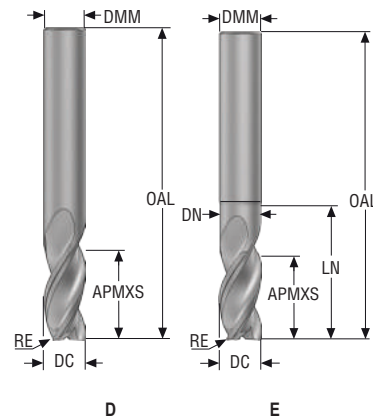


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4531-020G2C.0Z3	AXT	10228067	2	G	2,0	6,0	4,0	57,0	7,0	1,9	0,1	3	Cylindrical	■
S4531-030G2C.0Z3	AXT	10228068	2	G	3,0	6,0	6,0	57,0	10,0	2,85	0,1	3	Cylindrical	■
S4531-040G2C.0Z3	AXT	10228069	2	G	4,0	6,0	8,0	57,0	13,0	3,8	0,1	3	Cylindrical	■
S4531-050G2C.0Z3	AXT	10228070	2	G	5,0	6,0	10,0	57,0	15,0	4,75	0,1	3	Cylindrical	■
S4531-060D2C.0Z3	AXT	10228071	2	D	6,0	6,0	12,0	57,0	—	—	0,1	3	Cylindrical	■
S4531-060E2C.0Z3	AXT	10228074	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,1	3	Cylindrical	■
S4531-080D2C.0Z3	AXT	10228077	2	D	8,0	8,0	16,0	63,0	—	—	0,1	3	Cylindrical	■
S4531-080E2C.0Z3	AXT	10228080	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	3	Cylindrical	■
S4531-100D2C.0Z3	AXT	10228083	2	D	10,0	10,0	20,0	72,0	—	—	0,1	3	Cylindrical	■
S4531-100E2C.0Z3	AXT	10228087	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,1	3	Cylindrical	■
S4531-120D2C.0Z3	AXT	10228091	2	D	12,0	12,0	24,0	88,0	—	—	0,1	3	Cylindrical	■
S4531-120E2C.0Z3	AXT	10228096	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,1	3	Cylindrical	■
S4531-140D2C.0Z3	AXT	10228102	2	D	14,0	14,0	28,0	89,0	—	—	0,1	3	Cylindrical	■
S4531-160D2C.0Z3	AXT	10228103	2	D	16,0	16,0	32,0	100,0	—	—	0,1	3	Cylindrical	■
S4531-200E2C.0Z3	AXT	10228114	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,1	3	Cylindrical	■
S4531-030G3C.0Z3	AXT	10228058	3	G	3,0	6,0	10,0	63,0	14,0	2,85	0,1	3	Cylindrical	■
S4531-040G3C.0Z3	AXT	10228059	3	G	4,0	6,0	13,0	63,0	18,0	3,8	0,1	3	Cylindrical	■
S4531-050G3C.0Z3	AXT	10228060	3	G	5,0	6,0	16,0	63,0	20,0	4,75	0,1	3	Cylindrical	■
S4531-060D3C.0Z3	AXT	10228061	3	D	6,0	6,0	19,0	63,0	—	—	0,1	3	Cylindrical	■
S4531-080D3C.0Z3	AXT	10228062	3	D	8,0	8,0	26,0	74,0	—	—	0,1	3	Cylindrical	■
S4531-100D3C.0Z3	AXT	10228063	3	D	10,0	10,0	32,0	84,0	—	—	0,1	3	Cylindrical	■
S4531-120D3C.0Z3	AXT	10228064	3	D	12,0	12,0	38,0	99,0	—	—	0,1	3	Cylindrical	■
S4531-160D3C.0Z3	AXT	10228065	3	D	16,0	16,0	50,0	114,0	—	—	0,1	3	Cylindrical	■
S4531-200D3C.0Z3	AXT	10228066	3	D	20,0	20,0	62,0	150,0	—	—	0,1	3	Cylindrical	■
S4531-200E3C.0Z3	AXT	10228120	3	E	20,0	20,0	40,0	150,0	90,0	19,0	0,1	3	Cylindrical	■

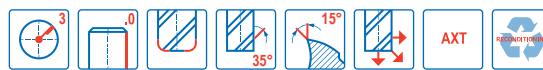
■ Stocked standard.

S4531

High performance – Aluminium – Square – 3 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
S4531-060D2R050.0Z3	AXT	10228072	2	D	6,0	6,0	12,0	57,0	—	—	0,5	3	Cylindrical	■
S4531-060E2R050.0Z3	AXT	10228075	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,5	3	Cylindrical	■
S4531-060D2R100.0Z3	AXT	10228073	2	D	6,0	6,0	12,0	57,0	—	—	1,0	3	Cylindrical	■
S4531-060E2R100.0Z3	AXT	10228076	2	E	6,0	6,0	12,0	57,0	19,0	5,7	1,0	3	Cylindrical	■
S4531-080D2R050.0Z3	AXT	10228078	2	D	8,0	8,0	16,0	63,0	—	—	0,5	3	Cylindrical	■
S4531-080E2R050.0Z3	AXT	10228081	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	3	Cylindrical	■
S4531-080D2R100.0Z3	AXT	10228079	2	D	8,0	8,0	16,0	63,0	—	—	1,0	3	Cylindrical	■
S4531-080E2R100.0Z3	AXT	10228082	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	3	Cylindrical	■
S4531-100D2R050.0Z3	AXT	10228084	2	D	10,0	10,0	20,0	72,0	—	—	0,5	3	Cylindrical	■
S4531-100E2R050.0Z3	AXT	10228088	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,5	3	Cylindrical	■
S4531-100D2R100.0Z3	AXT	10228085	2	D	10,0	10,0	20,0	72,0	—	—	1,0	3	Cylindrical	■
S4531-100E2R100.0Z3	AXT	10228089	2	E	10,0	10,0	20,0	72,0	31,0	9,5	1,0	3	Cylindrical	■
S4531-100D2R200.0Z3	AXT	10228086	2	D	10,0	10,0	20,0	72,0	—	—	2,0	3	Cylindrical	■
S4531-100E2R200.0Z3	AXT	10228090	2	E	10,0	10,0	20,0	72,0	31,0	9,5	2,0	3	Cylindrical	■
S4531-120D2R050.0Z3	AXT	10228092	2	D	12,0	12,0	24,0	88,0	—	—	0,5	3	Cylindrical	■
S4531-120E2R050.0Z3	AXT	10228097	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,5	3	Cylindrical	■
S4531-120D2R100.0Z3	AXT	10228093	2	D	12,0	12,0	24,0	88,0	—	—	1,0	3	Cylindrical	■
S4531-120E2R100.0Z3	AXT	10228098	2	E	12,0	12,0	24,0	88,0	37,0	11,4	1,0	3	Cylindrical	■
S4531-120D2R200.0Z3	AXT	10228094	2	D	12,0	12,0	24,0	88,0	—	—	2,0	3	Cylindrical	■
S4531-120E2R200.0Z3	AXT	10228099	2	E	12,0	12,0	24,0	88,0	37,0	11,4	2,0	3	Cylindrical	■
S4531-120D2R300.0Z3	AXT	10228095	2	D	12,0	12,0	24,0	88,0	—	—	3,0	3	Cylindrical	■
S4531-120E2R300.0Z3	AXT	10228100	2	E	12,0	12,0	24,0	88,0	37,0	11,4	3,0	3	Cylindrical	■
S4531-160D2R050.0Z3	AXT	10228104	2	D	16,0	16,0	32,0	100,0	—	—	0,5	3	Cylindrical	■
S4531-160E2R100.0Z3	AXT	10228105	2	E	16,0	16,0	32,0	100,0	48,0	15,2	1,0	3	Cylindrical	■
S4531-160E2R200.0Z3	AXT	10228106	2	E	16,0	16,0	32,0	100,0	48,0	15,2	2,0	3	Cylindrical	■
S4531-160E2R250.0Z3	AXT	10228107	2	E	16,0	16,0	32,0	100,0	48,0	15,2	2,5	3	Cylindrical	■
S4531-160E2R300.0Z3	AXT	10228108	2	E	16,0	16,0	32,0	100,0	48,0	15,2	3,0	3	Cylindrical	■
S4531-160E2R400.0Z3	AXT	10228109	2	E	16,0	16,0	32,0	100,0	48,0	15,2	4,0	3	Cylindrical	■
S4531-200E2R050.0Z3	AXT	10228115	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,5	3	Cylindrical	■
S4531-200E2R100.0Z3	AXT	10228116	2	E	20,0	20,0	40,0	114,0	60,0	19,0	1,0	3	Cylindrical	■
S4531-200E2R200.0Z3	AXT	10228117	2	E	20,0	20,0	40,0	114,0	60,0	19,0	2,0	3	Cylindrical	■
S4531-200E2R300.0Z3	AXT	10228118	2	E	20,0	20,0	40,0	114,0	60,0	19,0	3,0	3	Cylindrical	■
S4531-200E2R400.0Z3	AXT	10228119	2	E	20,0	20,0	40,0	114,0	60,0	19,0	4,0	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

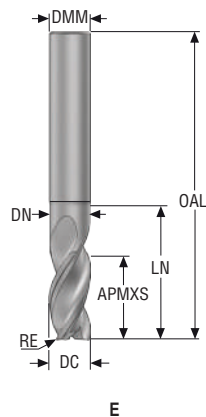
Graphite

X-Heads

Minimaster

S4531

High performance – Aluminium – Square – 3 Flutes – Cylindrical – Corner radius



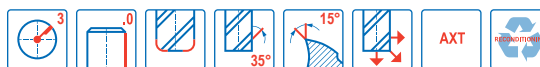
—Tolerances:

—DMM=h5

—DC= e7

—RE= ±0,02 mm

—Regrind possible if DC is ≥Ø6

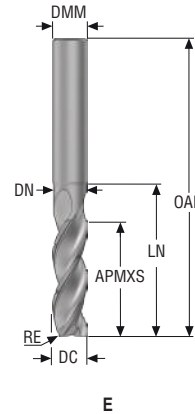


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4531-120E3R300.0Z3	AXT	10228101	3	E	12,0	12,0	24,0	110,0	54,0	11,4	3,0	3	Cylindrical	■
S4531-160E3R100.0Z3	AXT	10228110	3	E	16,0	16,0	32,0	129,0	77,0	15,2	1,0	3	Cylindrical	■
S4531-160E3R200.0Z3	AXT	10228111	3	E	16,0	16,0	32,0	129,0	77,0	15,2	2,0	3	Cylindrical	■
S4531-160E3R300.0Z3	AXT	10228112	3	E	16,0	16,0	32,0	129,0	77,0	15,2	3,0	3	Cylindrical	■
S4531-160E3R400.0Z3	AXT	10228113	3	E	16,0	16,0	32,0	129,0	77,0	15,2	4,0	3	Cylindrical	■
S4531-200E3R050.0Z3	AXT	10228121	3	E	20,0	20,0	40,0	150,0	90,0	19,0	0,5	3	Cylindrical	■
S4531-200E3R100.0Z3	AXT	10228122	3	E	20,0	20,0	40,0	150,0	90,0	19,0	1,0	3	Cylindrical	■
S4531-200E3R200.0Z3	AXT	10228123	3	E	20,0	20,0	40,0	150,0	90,0	19,0	2,0	3	Cylindrical	■
S4531-200E3R300.0Z3	AXT	10228124	3	E	20,0	20,0	40,0	150,0	90,0	19,0	3,0	3	Cylindrical	■
S4531-200E3R400.0Z3	AXT	10228125	3	E	20,0	20,0	40,0	150,0	90,0	19,0	4,0	3	Cylindrical	■

■ Stocked standard.

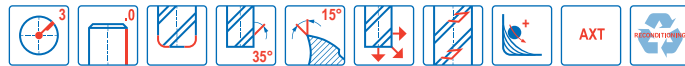
S4531

High performance – Aluminium – Square – 3 Flutes – Cylindrical – Corner radius



E

- Tolerances:
- DMM=h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
S4531-060E3R050.0Z3C	AXT	10228126	3	E	■	6,0	6,0	19,0	63,0	25,0	5,7	0,5	3	Cylindrical	■
S4531-060E3R100.0Z3C	AXT	10228127	3	E	■	6,0	6,0	19,0	63,0	25,0	5,7	1,0	3	Cylindrical	■
S4531-080E3R050.0Z3C	AXT	10228128	3	E	■	8,0	8,0	26,0	74,0	34,0	7,6	0,5	3	Cylindrical	■
S4531-080E3R100.0Z3C	AXT	10228129	3	E	■	8,0	8,0	26,0	74,0	34,0	7,6	1,0	3	Cylindrical	■
S4531-080E3R200.0Z3C	AXT	10228130	3	E	■	8,0	8,0	26,0	74,0	34,0	7,6	2,0	3	Cylindrical	■
S4531-100E3R050.0Z3C	AXT	10228131	3	E	■	10,0	10,0	32,0	84,0	42,0	9,5	0,5	3	Cylindrical	■
S4531-100E3R100.0Z3C	AXT	10228132	3	E	■	10,0	10,0	32,0	84,0	42,0	9,5	1,0	3	Cylindrical	■
S4531-100E3R200.0Z3C	AXT	10228133	3	E	■	10,0	10,0	32,0	84,0	42,0	9,5	2,0	3	Cylindrical	■
S4531-120E3R050.0Z3C	AXT	10228134	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	0,5	3	Cylindrical	■
S4531-120E3R100.0Z3C	AXT	10228135	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	1,0	3	Cylindrical	■
S4531-120E3R200.0Z3C	AXT	10228136	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	2,0	3	Cylindrical	■
S4531-120E3R300.0Z3C	AXT	10228137	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	3,0	3	Cylindrical	■
S4531-160E3R050.0Z3C	AXT	10228138	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	0,5	3	Cylindrical	■
S4531-160E3R100.0Z3C	AXT	10228139	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	1,0	3	Cylindrical	■
S4531-160E3R200.0Z3C	AXT	10228140	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	2,0	3	Cylindrical	■
S4531-160E3R300.0Z3C	AXT	10228141	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	3,0	3	Cylindrical	■
S4531-200E3R050.0Z3C	AXT	10228142	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	0,5	3	Cylindrical	■
S4531-200E3R100.0Z3C	AXT	10228143	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	1,0	3	Cylindrical	■
S4531-200E3R200.0Z3C	AXT	10228144	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	2,0	3	Cylindrical	■
S4531-200E3R300.0Z3C	AXT	10228145	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	3,0	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

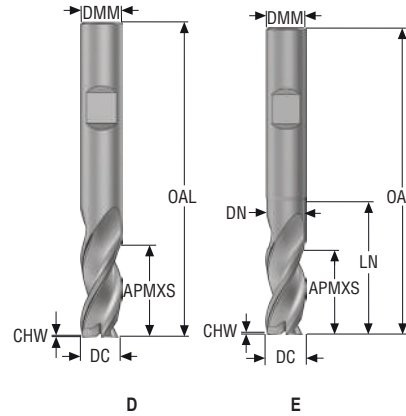
Graphite

X-Heads

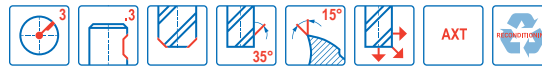
Minimaster

S4531

High performance – Aluminium – Square – 3 Flutes – Weldon – Chamfer



—Tolerances:
—DMM=h5
—DC= e7
—CHW= +0,04 mm
—Regrind possible if DC is $\geq \varnothing 6$

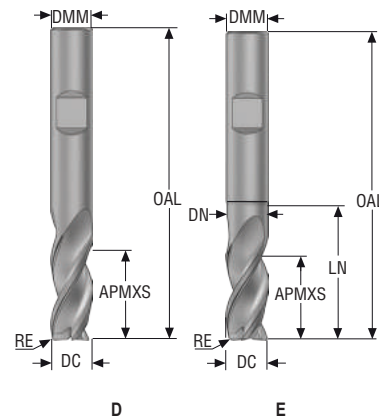


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
S4531-060D2C.3Z3	AXT	10286946	2	D	6,0	6,0	12,0	57,0	—	—	0,1	3	Weldon	☐
S4531-060E2C.3Z3	AXT	10286949	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,1	3	Weldon	☐
S4531-080D2C.3Z3	AXT	10286952	2	D	8,0	8,0	16,0	63,0	—	—	0,1	3	Weldon	☐
S4531-080E2C.3Z3	AXT	10286955	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,1	3	Weldon	☐
S4531-100D2C.3Z3	AXT	10286958	2	D	10,0	10,0	20,0	72,0	—	—	0,1	3	Weldon	☐
S4531-100E2C.3Z3	AXT	10286962	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,1	3	Weldon	☐
S4531-120D2C.3Z3	AXT	10286966	2	D	12,0	12,0	24,0	88,0	—	—	0,1	3	Weldon	☐
S4531-120E2C.3Z3	AXT	10286971	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,1	3	Weldon	☐
S4531-140D2C.3Z3	AXT	10286977	2	D	14,0	14,0	28,0	89,0	—	—	0,1	3	Weldon	☐
S4531-160D2C.3Z3	AXT	10286978	2	D	16,0	16,0	32,0	100,0	—	—	0,1	3	Weldon	☐
S4531-200E2C.3Z3	AXT	10286989	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,1	3	Weldon	☐
S4531-060D3C.3Z3	AXT	10286940	3	D	6,0	6,0	19,0	63,0	—	—	0,1	3	Weldon	☐
S4531-080D3C.3Z3	AXT	10286941	3	D	8,0	8,0	26,0	74,0	—	—	0,1	3	Weldon	☐
S4531-100D3C.3Z3	AXT	10286942	3	D	10,0	10,0	32,0	84,0	—	—	0,1	3	Weldon	☐
S4531-120D3C.3Z3	AXT	10286943	3	D	12,0	12,0	38,0	99,0	—	—	0,1	3	Weldon	☐
S4531-160D3C.3Z3	AXT	10286944	3	D	16,0	16,0	50,0	114,0	—	—	0,1	3	Weldon	☐
S4531-200D3C.3Z3	AXT	10286945	3	D	20,0	20,0	62,0	150,0	—	—	0,1	3	Weldon	☐
S4531-200E3C.3Z3	AXT	10286995	3	E	20,0	20,0	40,0	150,0	90,0	19,0	0,1	3	Weldon	☐

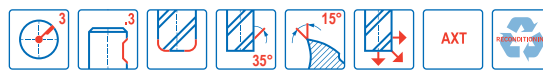
☐ Weldon available. Delivery time is 3 days.

S4531

High performance – Aluminium – Square – 3 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
S4531-060D2R050.3Z3	AXT	10286947	2	D	6,0	6,0	12,0	57,0	—	—	0,5	3	Weldon	☐
S4531-060E2R050.3Z3	AXT	10286950	2	E	6,0	6,0	12,0	57,0	19,0	5,7	0,5	3	Weldon	☐
S4531-060D2R100.3Z3	AXT	10286948	2	D	6,0	6,0	12,0	57,0	—	—	1,0	3	Weldon	☐
S4531-060E2R100.3Z3	AXT	10286951	2	E	6,0	6,0	12,0	57,0	19,0	5,7	1,0	3	Weldon	☐
S4531-080D2R050.3Z3	AXT	10286953	2	D	8,0	8,0	16,0	63,0	—	—	0,5	3	Weldon	☐
S4531-080E2R050.3Z3	AXT	10286956	2	E	8,0	8,0	16,0	63,0	25,0	7,6	0,5	3	Weldon	☐
S4531-080D2R100.3Z3	AXT	10286954	2	D	8,0	8,0	16,0	63,0	—	—	1,0	3	Weldon	☐
S4531-080E2R100.3Z3	AXT	10286957	2	E	8,0	8,0	16,0	63,0	25,0	7,6	1,0	3	Weldon	☐
S4531-100D2R050.3Z3	AXT	10286959	2	D	10,0	10,0	20,0	72,0	—	—	0,5	3	Weldon	☐
S4531-100E2R050.3Z3	AXT	10286963	2	E	10,0	10,0	20,0	72,0	31,0	9,5	0,5	3	Weldon	☐
S4531-100D2R100.3Z3	AXT	10286960	2	D	10,0	10,0	20,0	72,0	—	—	1,0	3	Weldon	☐
S4531-100E2R100.3Z3	AXT	10286964	2	E	10,0	10,0	20,0	72,0	31,0	9,5	1,0	3	Weldon	☐
S4531-100D2R200.3Z3	AXT	10286961	2	D	10,0	10,0	20,0	72,0	—	—	2,0	3	Weldon	☐
S4531-100E2R200.3Z3	AXT	10286965	2	E	10,0	10,0	20,0	72,0	31,0	9,5	2,0	3	Weldon	☐
S4531-120D2R050.3Z3	AXT	10286967	2	D	12,0	12,0	24,0	88,0	—	—	0,5	3	Weldon	☐
S4531-120E2R050.3Z3	AXT	10286972	2	E	12,0	12,0	24,0	88,0	37,0	11,4	0,5	3	Weldon	☐
S4531-120D2R100.3Z3	AXT	10286968	2	D	12,0	12,0	24,0	88,0	—	—	1,0	3	Weldon	☐
S4531-120E2R100.3Z3	AXT	10286973	2	E	12,0	12,0	24,0	88,0	37,0	11,4	1,0	3	Weldon	☐
S4531-120D2R200.3Z3	AXT	10286969	2	D	12,0	12,0	24,0	88,0	—	—	2,0	3	Weldon	☐
S4531-120E2R200.3Z3	AXT	10286974	2	E	12,0	12,0	24,0	88,0	37,0	11,4	2,0	3	Weldon	☐
S4531-120D2R300.3Z3	AXT	10286970	2	D	12,0	12,0	24,0	88,0	—	—	3,0	3	Weldon	☐
S4531-120E2R300.3Z3	AXT	10286975	2	E	12,0	12,0	24,0	88,0	37,0	11,4	3,0	3	Weldon	☐
S4531-160D2R050.3Z3	AXT	10286979	2	D	16,0	16,0	32,0	100,0	—	—	0,5	3	Weldon	☐
S4531-160E2R100.3Z3	AXT	10286980	2	E	16,0	16,0	32,0	100,0	48,0	15,2	1,0	3	Weldon	☐
S4531-160E2R200.3Z3	AXT	10286981	2	E	16,0	16,0	32,0	100,0	48,0	15,2	2,0	3	Weldon	☐
S4531-160E2R250.3Z3	AXT	10286982	2	E	16,0	16,0	32,0	100,0	48,0	15,2	2,5	3	Weldon	☐
S4531-160E2R300.3Z3	AXT	10286983	2	E	16,0	16,0	32,0	100,0	48,0	15,2	3,0	3	Weldon	☐
S4531-160E2R400.3Z3	AXT	10286984	2	E	16,0	16,0	32,0	100,0	48,0	15,2	4,0	3	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

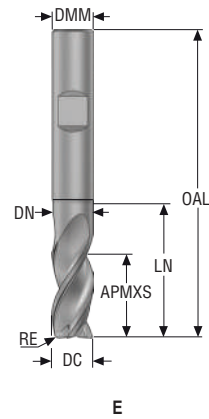
Graphite

X-Heads

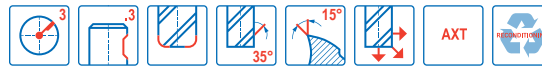
Minimaster

S4531

High performance – Aluminium – Square – 3 Flutes – Weldon – Corner radius



—Tolerances:
—DMM=h5
—DC= e7
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6

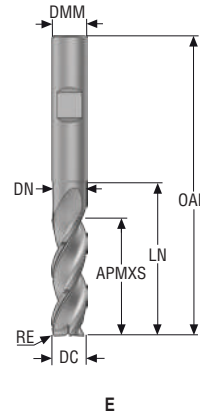


Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4531-200E2R050.3Z3	AXT	10286990	2	E	20,0	20,0	40,0	114,0	60,0	19,0	0,5	3	Weldon	☐
S4531-200E2R100.3Z3	AXT	10286991	2	E	20,0	20,0	40,0	114,0	60,0	19,0	1,0	3	Weldon	☐
S4531-200E2R200.3Z3	AXT	10286992	2	E	20,0	20,0	40,0	114,0	60,0	19,0	2,0	3	Weldon	☐
S4531-200E2R300.3Z3	AXT	10286993	2	E	20,0	20,0	40,0	114,0	60,0	19,0	3,0	3	Weldon	☐
S4531-200E2R400.3Z3	AXT	10286994	2	E	20,0	20,0	40,0	114,0	60,0	19,0	4,0	3	Weldon	☐
S4531-120E3R300.3Z3	AXT	10286976	3	E	12,0	12,0	24,0	110,0	54,0	11,4	3,0	3	Weldon	☐
S4531-160E3R100.3Z3	AXT	10286985	3	E	16,0	16,0	32,0	129,0	77,0	15,2	1,0	3	Weldon	☐
S4531-160E3R200.3Z3	AXT	10286986	3	E	16,0	16,0	32,0	129,0	77,0	15,2	2,0	3	Weldon	☐
S4531-160E3R300.3Z3	AXT	10286987	3	E	16,0	16,0	32,0	129,0	77,0	15,2	3,0	3	Weldon	☐
S4531-160E3R400.3Z3	AXT	10286988	3	E	16,0	16,0	32,0	129,0	77,0	15,2	4,0	3	Weldon	☐
S4531-200E3R050.3Z3	AXT	10286996	3	E	20,0	20,0	40,0	150,0	90,0	19,0	0,5	3	Weldon	☐
S4531-200E3R100.3Z3	AXT	10286997	3	E	20,0	20,0	40,0	150,0	90,0	19,0	1,0	3	Weldon	☐
S4531-200E3R200.3Z3	AXT	10286998	3	E	20,0	20,0	40,0	150,0	90,0	19,0	2,0	3	Weldon	☐
S4531-200E3R300.3Z3	AXT	10286999	3	E	20,0	20,0	40,0	150,0	90,0	19,0	3,0	3	Weldon	☐
S4531-200E3R400.3Z3	AXT	10287000	3	E	20,0	20,0	40,0	150,0	90,0	19,0	4,0	3	Weldon	☐

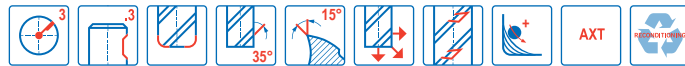
☐ Weldon available. Delivery time is 3 days.

S4531

High performance – Aluminium – Square – 3 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
S4531-060E3R050.3Z3C	AXT	10287001	3	E	■	6,0	6,0	19,0	63,0	25,0	5,7	0,5	3	Weldon	☐
S4531-060E3R100.3Z3C	AXT	10287002	3	E	■	6,0	6,0	19,0	63,0	25,0	5,7	1,0	3	Weldon	☐
S4531-080E3R050.3Z3C	AXT	10287004	3	E	■	8,0	8,0	26,0	74,0	34,0	7,6	0,5	3	Weldon	☐
S4531-080E3R100.3Z3C	AXT	10287005	3	E	■	8,0	8,0	26,0	74,0	34,0	7,6	1,0	3	Weldon	☐
S4531-080E3R200.3Z3C	AXT	10287006	3	E	■	8,0	8,0	26,0	74,0	34,0	7,6	2,0	3	Weldon	☐
S4531-100E3R050.3Z3C	AXT	10287007	3	E	■	10,0	10,0	32,0	84,0	42,0	9,5	0,5	3	Weldon	☐
S4531-100E3R100.3Z3C	AXT	10287008	3	E	■	10,0	10,0	32,0	84,0	42,0	9,5	1,0	3	Weldon	☐
S4531-100E3R200.3Z3C	AXT	10287009	3	E	■	10,0	10,0	32,0	84,0	42,0	9,5	2,0	3	Weldon	☐
S4531-120E3R050.3Z3C	AXT	10287010	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	0,5	3	Weldon	☐
S4531-120E3R100.3Z3C	AXT	10287011	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	1,0	3	Weldon	☐
S4531-120E3R200.3Z3C	AXT	10287012	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	2,0	3	Weldon	☐
S4531-120E3R300.3Z3C	AXT	10287013	3	E	■	12,0	12,0	39,0	99,0	51,0	11,4	3,0	3	Weldon	☐
S4531-160E3R050.3Z3C	AXT	10287014	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	0,5	3	Weldon	☐
S4531-160E3R100.3Z3C	AXT	10287015	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	1,0	3	Weldon	☐
S4531-160E3R200.3Z3C	AXT	10287016	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	2,0	3	Weldon	☐
S4531-160E3R300.3Z3C	AXT	10287017	3	E	■	16,0	16,0	52,0	125,0	68,0	15,2	3,0	3	Weldon	☐
S4531-200E3R050.3Z3C	AXT	10287018	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	0,5	3	Weldon	☐
S4531-200E3R100.3Z3C	AXT	10287019	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	1,0	3	Weldon	☐
S4531-200E3R200.3Z3C	AXT	10287020	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	2,0	3	Weldon	☐
S4531-200E3R300.3Z3C	AXT	10287021	3	E	■	20,0	20,0	65,0	150,0	85,0	19,0	3,0	3	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

Cutting data – S4531 Side milling

SMG		a _e /DC	a _p /DC	f _z												v _c
				2	3	4	5	6	8	10	12	14	16	20		
N1	E/M/A	0,40	1,5	0,030	0,046	0,060	0,075	0,090	0,12	0,15	0,18	0,20	0,22	0,25	560 (450 — 660)	
		0.40	1.5	0.0012	0.0018	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	0.0080	0.0085	0.010	1825 (1500 — 2100)	
N2	E/M/A	0,30	1,5	0,024	0,036	0,048	0,060	0,070	0,095	0,12	0,14	0,16	0,18	0,20	480 (370 — 600)	
		0.30	1.5	0.00095	0.0014	0.0019	0.0024	0.0028	0.0038	0.0048	0.0055	0.0065	0.0070	0.0080	1575 (1300 — 1900)	
N3	E/M/A	0,30	1,5	0,024	0,036	0,048	0,060	0,070	0,095	0,12	0,14	0,16	0,18	0,20	320 (250 — 400)	
		0.30	1.5	0.00095	0.0014	0.0019	0.0024	0.0028	0.0038	0.0048	0.0055	0.0065	0.0070	0.0080	1050 (830 — 1300)	
N11	E/M/A	0,40	1,5	0,022	0,034	0,046	0,055	0,070	0,090	0,11	0,13	0,15	0,17	0,19	280 (230 — 330)	
		0.40	1.5	0.00085	0.0013	0.0018	0.0022	0.0028	0.0036	0.0044	0.0050	0.0060	0.0065	0.0075	920 (760 — 1000)	
TS1	A/D	0,40	1,5	0,030	0,046	0,060	0,075	0,090	0,12	0,15	0,18	0,20	0,22	0,25	560 (450 — 660)	
		0.40	1.5	0.0012	0.0018	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	0.0080	0.0085	0.010	1825 (1500 — 2100)	
TP1	A/D	0,40	1,5	0,030	0,046	0,060	0,075	0,090	0,12	0,15	0,18	0,20	0,22	0,25	445 (340 — 550)	
		0.40	1.5	0.0012	0.0018	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	0.0080	0.0085	0.010	1450 (1200 — 1800)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – S4531 Slot milling

SMG		a _p /DC	f _z												v _c
			2	3	4	5	6	8	10	12	14	16	20		
N1	E	1,5	0,020	0,030	0,040	0,050	0,060	0,080	0,10	0,12	0,14	0,16	0,20	495 (400 — 590)	
		1.5	0.00080	0.0012	0.0016	0.0020	0.0024	0.0032	0.0040	0.0048	0.0055	0.0065	0.0080	1625 (1400 — 1900)	
N2	E	1,2	0,016	0,024	0,032	0,040	0,048	0,065	0,080	0,095	0,11	0,13	0,16	395 (300 — 490)	
		1.2	0.00065	0.00095	0.0013	0.0016	0.0019	0.0026	0.0032	0.0038	0.0044	0.0050	0.0065	1300 (990 — 1600)	
N3	E	1,2	0,016	0,024	0,032	0,040	0,048	0,065	0,080	0,095	0,11	0,13	0,16	265 (200 — 320)	
		1.2	0.00065	0.00095	0.0013	0.0016	0.0019	0.0026	0.0032	0.0038	0.0044	0.0050	0.0065	870 (660 — 1000)	
N11	E	1,5	0,015	0,022	0,030	0,038	0,046	0,060	0,075	0,090	0,11	0,12	0,15	245 (200 — 290)	
		1.5	0.00060	0.00085	0.0012	0.0015	0.0018	0.0024	0.0030	0.0036	0.0044	0.0048	0.0060	800 (660 — 950)	
TS1	A	1,5	0,020	0,030	0,040	0,050	0,060	0,080	0,10	0,12	0,14	0,16	0,20	495 (400 — 590)	
		1.5	0.00080	0.0012	0.0016	0.0020	0.0024	0.0032	0.0040	0.0048	0.0055	0.0065	0.0080	1625 (1400 — 1900)	
TP1	A	1,5	0,020	0,030	0,040	0,050	0,060	0,080	0,10	0,12	0,14	0,16	0,20	395 (300 — 490)	
		1.5	0.00080	0.0012	0.0016	0.0020	0.0024	0.0032	0.0040	0.0048	0.0055	0.0065	0.0080	1300 (990 — 1600)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

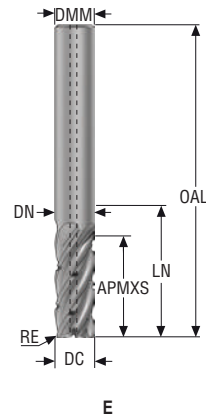
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

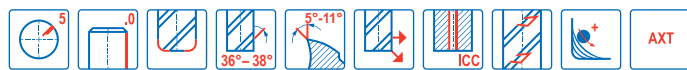
All cutting data are target values

S4651

High performance – Aluminium – Square – 5 Flutes – Cylindrical



—Tolerances:
—DMM=h5
—DC= e7
—RE= ±0,02 mm



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
							mm	mm	mm	mm	mm	mm	mm			
S4651-060E2R050.0Z5AC	AXT	10228163	2	E	■	■	6,0	6,0	14,0	57,0	20,0	5,7	0,5	5	Cylindrical	■
S4651-060E2R100.0Z5AC	AXT	10228164	2	E	■	■	6,0	6,0	14,0	57,0	20,0	5,7	1,0	5	Cylindrical	■
S4651-080E2R050.0Z5AC	AXT	10228167	2	E	■	■	8,0	8,0	18,0	63,0	26,0	7,6	0,5	5	Cylindrical	■
S4651-080E2R100.0Z5AC	AXT	10228168	2	E	■	■	8,0	8,0	18,0	63,0	26,0	7,6	1,0	5	Cylindrical	■
S4651-100E2R050.0Z5AC	AXT	10228171	2	E	■	■	10,0	10,0	23,0	75,0	33,0	9,5	0,5	5	Cylindrical	■
S4651-100E2R100.0Z5AC	AXT	10228172	2	E	■	■	10,0	10,0	23,0	75,0	33,0	9,5	1,0	5	Cylindrical	■
S4651-120E2R050.0Z5AC	AXT	10228175	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	0,5	5	Cylindrical	■
S4651-120E2R100.0Z5AC	AXT	10228176	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	1,0	5	Cylindrical	■
S4651-120E2R200.0Z5AC	AXT	10228177	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	2,0	5	Cylindrical	■
S4651-120E2R300.0Z5AC	AXT	10228178	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	3,0	5	Cylindrical	■
S4651-160E2R050.0Z5AC	AXT	10228183	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	0,5	5	Cylindrical	■
S4651-160E2R100.0Z5AC	AXT	10228184	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	1,0	5	Cylindrical	■
S4651-160E2R200.0Z5AC	AXT	10228185	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	2,0	5	Cylindrical	■
S4651-160E2R300.0Z5AC	AXT	10228186	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	3,0	5	Cylindrical	■
S4651-200E2R050.0Z5AC	AXT	10228191	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	0,5	5	Cylindrical	■
S4651-200E2R100.0Z5AC	AXT	10228193	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	1,0	5	Cylindrical	■
S4651-200E2R200.0Z5AC	AXT	10228194	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	2,0	5	Cylindrical	■
S4651-200E2R300.0Z5AC	AXT	10228195	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	3,0	5	Cylindrical	■
S4651-060E4R050.0Z5AC	AXT	10228165	4	E	■	■	6,0	6,0	26,0	70,0	32,0	5,7	0,5	5	Cylindrical	■
S4651-060E4R100.0Z5AC	AXT	10228166	4	E	■	■	6,0	6,0	26,0	70,0	32,0	5,7	1,0	5	Cylindrical	■
S4651-080E4R050.0Z5AC	AXT	10228169	4	E	■	■	8,0	8,0	34,0	80,0	42,0	7,6	0,5	5	Cylindrical	■
S4651-080E4R100.0Z5AC	AXT	10228170	4	E	■	■	8,0	8,0	34,0	80,0	42,0	7,6	1,0	5	Cylindrical	■
S4651-100E4R050.0Z5AC	AXT	10228173	4	E	■	■	10,0	10,0	43,0	95,0	53,0	9,5	0,5	5	Cylindrical	■
S4651-100E4R100.0Z5AC	AXT	10228174	4	E	■	■	10,0	10,0	43,0	95,0	53,0	9,5	1,0	5	Cylindrical	■
S4651-120E4R050.0Z5AC	AXT	10228179	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	0,5	5	Cylindrical	■
S4651-120E4R100.0Z5AC	AXT	10228180	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	1,0	5	Cylindrical	■
S4651-120E4R200.0Z5AC	AXT	10228181	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	2,0	5	Cylindrical	■
S4651-120E4R300.0Z5AC	AXT	10228182	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	3,0	5	Cylindrical	■
S4651-160E4R050.0Z5AC	AXT	10228187	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	0,5	5	Cylindrical	■
S4651-160E4R100.0Z5AC	AXT	10228188	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	1,0	5	Cylindrical	■
S4651-160E4R200.0Z5AC	AXT	10228189	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	2,0	5	Cylindrical	■
S4651-160E4R300.0Z5AC	AXT	10228190	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,8	3,0	5	Cylindrical	■
S4651-200E4R050.0Z5AC	AXT	10228196	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	0,5	5	Cylindrical	■
S4651-200E4R100.0Z5AC	AXT	10228197	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	1,0	5	Cylindrical	■
S4651-200E4R200.0Z5AC	AXT	10228198	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	2,0	5	Cylindrical	■
S4651-200E4R300.0Z5AC	AXT	10228199	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	3,0	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

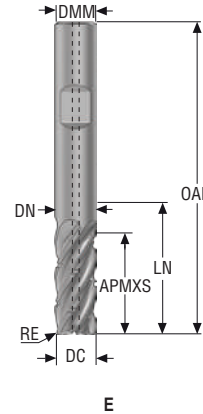
Graphite

X-Heads

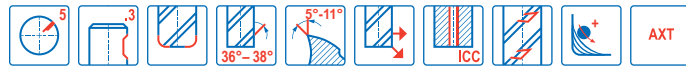
Minimaster

S4651

High performance – Aluminium – Square – 5 Flutes – Weldon



—Tolerances:
—DMM=h5
—DC= e7
—RE= ±0,02 mm



Designation	Grade	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
							mm	mm	mm	mm	mm	mm	mm			
S4651-060E2R050.3Z5AC	AXT	10287053	2	E	■	■	6,0	6,0	14,0	57,0	20,0	5,7	0,5	5	Weldon	☐
S4651-060E2R100.3Z5AC	AXT	10287054	2	E	■	■	6,0	6,0	14,0	57,0	20,0	5,7	1,0	5	Weldon	☐
S4651-080E2R050.3Z5AC	AXT	10287057	2	E	■	■	8,0	8,0	18,0	63,0	26,0	7,6	0,5	5	Weldon	☐
S4651-080E2R100.3Z5AC	AXT	10287058	2	E	■	■	8,0	8,0	18,0	63,0	26,0	7,6	1,0	5	Weldon	☐
S4651-100E2R050.3Z5AC	AXT	10287061	2	E	■	■	10,0	10,0	23,0	75,0	33,0	9,5	0,5	5	Weldon	☐
S4651-100E2R100.3Z5AC	AXT	10287062	2	E	■	■	10,0	10,0	23,0	75,0	33,0	9,5	1,0	5	Weldon	☐
S4651-120E2R050.3Z5AC	AXT	10287065	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	0,5	5	Weldon	☐
S4651-120E2R100.3Z5AC	AXT	10287066	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	1,0	5	Weldon	☐
S4651-120E2R200.3Z5AC	AXT	10287067	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	2,0	5	Weldon	☐
S4651-120E2R300.3Z5AC	AXT	10287068	2	E	■	■	12,0	12,0	27,0	88,0	39,0	11,4	3,0	5	Weldon	☐
S4651-160E2R050.3Z5AC	AXT	10287073	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	0,5	5	Weldon	☐
S4651-160E2R100.3Z5AC	AXT	10287074	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	1,0	5	Weldon	☐
S4651-160E2R200.3Z5AC	AXT	10287075	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	2,0	5	Weldon	☐
S4651-160E2R300.3Z5AC	AXT	10287076	2	E	■	■	16,0	16,0	36,0	105,0	52,0	15,2	3,0	5	Weldon	☐
S4651-200E2R050.3Z5AC	AXT	10287081	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	0,5	5	Weldon	☐
S4651-200E2R100.3Z5AC	AXT	10287082	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	1,0	5	Weldon	☐
S4651-200E2R200.3Z5AC	AXT	10287083	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	2,0	5	Weldon	☐
S4651-200E2R300.3Z5AC	AXT	10287084	2	E	■	■	20,0	20,0	45,0	120,0	65,0	19,0	3,0	5	Weldon	☐
S4651-060E4R050.3Z5AC	AXT	10287055	4	E	■	■	6,0	6,0	26,0	70,0	32,0	5,7	0,5	5	Weldon	☐
S4651-060E4R100.3Z5AC	AXT	10287056	4	E	■	■	6,0	6,0	26,0	70,0	32,0	5,7	1,0	5	Weldon	☐
S4651-080E4R050.3Z5AC	AXT	10287059	4	E	■	■	8,0	8,0	34,0	80,0	42,0	7,6	0,5	5	Weldon	☐
S4651-080E4R100.3Z5AC	AXT	10287060	4	E	■	■	8,0	8,0	34,0	80,0	42,0	7,6	1,0	5	Weldon	☐
S4651-100E4R050.3Z5AC	AXT	10287063	4	E	■	■	10,0	10,0	43,0	95,0	53,0	9,5	0,5	5	Weldon	☐
S4651-100E4R100.3Z5AC	AXT	10287064	4	E	■	■	10,0	10,0	43,0	95,0	53,0	9,5	1,0	5	Weldon	☐
S4651-120E4R050.3Z5AC	AXT	10287069	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	0,5	5	Weldon	☐
S4651-120E4R100.3Z5AC	AXT	10287070	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	1,0	5	Weldon	☐
S4651-120E4R200.3Z5AC	AXT	10287071	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	2,0	5	Weldon	☐
S4651-120E4R300.3Z5AC	AXT	10287072	4	E	■	■	12,0	12,0	51,0	110,0	63,0	11,4	3,0	5	Weldon	☐
S4651-160E4R050.3Z5AC	AXT	10287077	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	0,5	5	Weldon	☐
S4651-160E4R100.3Z5AC	AXT	10287078	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	1,0	5	Weldon	☐
S4651-160E4R200.3Z5AC	AXT	10287079	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	2,0	5	Weldon	☐
S4651-160E4R300.3Z5AC	AXT	10287080	4	E	■	■	16,0	16,0	68,0	135,0	84,0	15,2	3,0	5	Weldon	☐
S4651-200E4R050.3Z5AC	AXT	10287085	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	0,5	5	Weldon	☐
S4651-200E4R100.3Z5AC	AXT	10287086	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	1,0	5	Weldon	☐
S4651-200E4R200.3Z5AC	AXT	10287087	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	2,0	5	Weldon	☐
S4651-200E4R300.3Z5AC	AXT	10287088	4	E	■	■	20,0	20,0	85,0	160,0	105,0	19,0	3,0	5	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – S4651 Side milling

SMG		a_e/DC	a_p/DC	f_z						v_c
				6	8	10	12	16	20	
N1	E	0,40 0.40	2,0 2.0	0,055 0.0022	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	330 (260 — 410) 1075 (860 — 1300)
N2	E	0,40 0.40	2,0 2.0	0,046 0.0018	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	280 (220 — 350) 920 (730 — 1100)
N3	E	0,40 0.40	2,0 2.0	0,046 0.0018	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	185 (150 — 230) 610 (500 — 750)
N11	E	0,40 0.40	2,0 2.0	0,046 0.0018	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	250 (190 — 310) 820 (630 — 1000)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – S4651 Side milling advanced roughing $a_e/DC=0,07$

SMG		a_p/DC	f_z						v_c
			6	8	10	12	16	20	
N1	E	2,0 2.0	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,19 0.0075	0,24 0.0095	475 (370 — 600) 1550 (1300 — 1900)
N2	E	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,13 0.0050	0,16 0.0065	410 (320 — 520) 1350 (1100 — 1700)
N3	E	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,13 0.0050	0,16 0.0065	275 (210 — 350) 900 (690 — 1100)
N11	E	2,0 2.0	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	0,13 0.0050	0,16 0.0065	365 (280 — 460) 1200 (920 — 1500)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

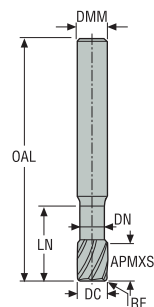
Plastic and cfrp

Graphite

X-Heads

Minimaster

High performance – Aluminium – Square – 2-3 Flutes – Cylindrical – Corner radius



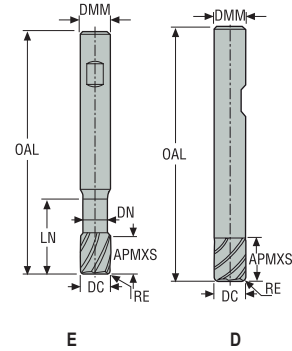
F

Designation	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
490V100R050Z2.0A-MEGA-T	02623870	2	E	■	■	10,0	10,0	12,0	65,0	20,0	9,0	0,5	2	Cylindrical	■
490V120R200Z2.0A-MEGA-T	02623883	2	E	■	■	12,0	12,0	14,0	75,0	24,0	11,0	2,0	2	Cylindrical	■
490V160R050Z3.0A-MEGA-T	02623889	2	E	■	■	16,0	16,0	18,0	85,0	32,0	14,5	0,5	3	Cylindrical	■
490V200R050Z3.0A-MEGA-T	02623908	2	E	■	■	20,0	20,0	22,0	100,0	40,0	18,0	0,5	3	Cylindrical	■
490V250R050Z3.0A-MEGA-T	02623926	2	E	■	■	25,0	25,0	27,0	125,0	50,0	23,0	0,5	3	Cylindrical	■
490VL100R100Z2.0A-MEGA-T	02623876	3	E	■	■	10,0	10,0	22,0	85,0	42,0	9,0	1,0	2	Cylindrical	■
490VL120R050Z3.0A-MEGA-T	02623880	3	E	■	■	12,0	12,0	14,0	95,0	40,0	11,0	0,5	3	Cylindrical	■
490VL120R100Z2.0A-MEGA-T	02623886	3	E	■	■	12,0	12,0	26,0	95,0	50,0	11,0	1,0	2	Cylindrical	■
490VL160R050Z3.0A-MEGA-T	02623891	3	E	■	■	16,0	16,0	18,0	95,0	45,0	14,5	0,5	3	Cylindrical	■
490VL200R200Z3.0A-MEGA-T	02623916	3	E	■	■	20,0	20,0	42,0	125,0	65,0	18,0	2,0	3	Cylindrical	■
490VXL250R050Z3.0A-MEGA-T	02623927	4	E	■	■	25,0	25,0	50,0	125,0	75,0	23,0	0,5	3	Cylindrical	■

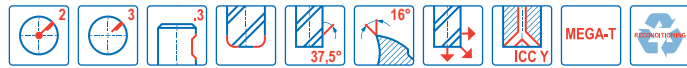
■ Stocked standard.

JHP490

High performance – Aluminium – Square – 2-3 Flutes – Weldon – Corner radius



- Tolerances:
- DMM=h5
- DC= -0,02/-0,1 mm
- RE= ±0,05 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
490V120R200Z2.0A-MEGA-TW	02669371	2	E	■	■	12,0	12,0	14,0	75,0	24,0	11,0	2,0	2	Weldon	□
490V160R050Z3A-MEGA-T	02623888	2	E	■	■	16,0	16,0	18,0	85,0	32,0	14,5	0,5	3	Weldon	■
490160R200Z3A-MEGA-T	02623898	2	D	■	■	16,0	16,0	34,0	95,0	—	—	2,0	3	Weldon	■
490V200R050Z3A-MEGA-T	02623907	2	E	■	■	20,0	20,0	22,0	100,0	40,0	18,0	0,5	3	Weldon	■
490V250R050Z3A-MEGA-T	02623925	2	E	■	■	25,0	25,0	27,0	125,0	50,0	23,0	0,5	3	Weldon	■
490VL100R100Z2.0A-MEGA-TW	02669368	3	E	■	■	10,0	10,0	22,0	85,0	42,0	9,0	1,0	2	Weldon	□
490VL120R050Z3.0A-MEGA-TW	02669374	3	E	■	■	12,0	12,0	14,0	95,0	40,0	11,0	0,5	3	Weldon	□
490VL120R100Z2.0A-MEGA-TW	02669375	3	E	■	■	12,0	12,0	26,0	95,0	50,0	11,0	1,0	2	Weldon	□
490VL160R050Z3.0A-MEGA-TW	02669382	3	E	■	■	16,0	16,0	18,0	95,0	45,0	14,5	0,5	3	Weldon	□
490VL200R200Z3.0A-MEGA-TW	02669388	3	E	■	■	20,0	20,0	42,0	125,0	65,0	18,0	2,0	3	Weldon	□
490VXL250R050Z3.0A-MEGA-TW	02669397	4	E	■	■	25,0	25,0	50,0	125,0	75,0	23,0	0,5	3	Weldon	□

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

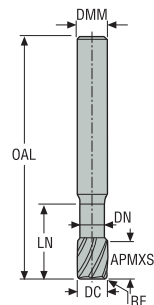
Graphite

X-Heads

Minimaster

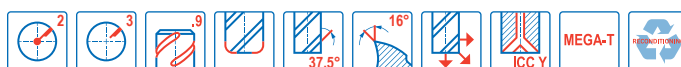
JHP490

High performance – Aluminium – Square – 2-3 Flutes – Safelock – Corner radius



E

—Tolerances:
—DMM=h5
—DC=-0,02/-0,1 mm
—RE= ±0,05 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	Chip splitters	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
						mm	mm	mm	mm	mm	mm	mm			
490V100R050Z2.9A-MEGA-T	02927984	2	E	■	■	10,0	10,0	12,0	65,0	20,0	9,0	0,5	2	Safe-lock	☐
490V120R200Z2.9A-MEGA-T	02927988	2	E	■	■	12,0	12,0	14,0	75,0	24,0	11,0	2,0	2	Safe-lock	☐
490V160R050Z3.9A-MEGA-T	02927990	2	E	■	■	16,0	16,0	18,0	85,0	32,0	14,0	0,5	3	Safe-lock	☐
490V200R050Z3.9A-MEGA-T	02927992	2	E	■	■	20,0	20,0	22,0	100,0	40,0	18,0	0,5	3	Safe-lock	☐
490V250R050Z3.9A-MEGA-T	02927993	2	E	■	■	25,0	25,0	27,0	125,0	50,0	23,0	0,5	3	Safe-lock	☐
490VL100R100Z2.9A-MEGA-T	02927994	3	E	■	■	10,0	10,0	22,0	85,0	42,0	9,0	1,0	2	Safe-lock	☐
490VL120R050Z3.9A-MEGA-T	02927995	3	E	■	■	12,0	12,0	14,0	95,0	40,0	11,0	0,5	3	Safe-lock	☐
490VL120R100Z2.9A-MEGA-T	02927996	3	E	■	■	12,0	12,0	26,0	95,0	50,0	11,0	1,0	2	Safe-lock	☐
490VL160R050Z3.9A-MEGA-T	02927997	3	E	■	■	16,0	16,0	18,0	95,0	32,0	14,0	0,5	3	Safe-lock	☐
490VL200R200Z3.9A-MEGA-T	02927998	3	E	■	■	20,0	20,0	42,0	125,0	65,0	18,0	2,0	3	Safe-lock	☐
490VXL250R050Z3.9A-MEGA-T	02927999	4	E	■	■	25,0	25,0	50,0	125,0	75,0	23,0	0,5	3	Safe-lock	☐

☐ Safelock available. Subject to change, refer to current Price and Stock List.

Cutting data – JHP490 Side milling roughing

SMG		$a_{e/DC}$	$a_{p/DC}$	f_z					v_c
				10	12	16	20	25	
N1	E/M/A	0.500 0,500	1.1 1,0	0.20 0,0080	0.24 0,0095	0.30 0,012	0.34 0,013	0.38 0,015	700 (550 — 860) 2325 (1900 — 2800)
N2	E/M/A	0.500 0,500	1.1 1,0	0.20 0,0080	0.24 0,0095	0.30 0,012	0.34 0,013	0.38 0,015	455 (350 — 550) 1500 (1200 — 1800)
N3	E/M/A	0.500 0,500	1.1 1,0	0.20 0,0080	0.24 0,0095	0.30 0,012	0.34 0,013	0.38 0,015	540 (440 — 650) 1775 (1500 — 2100)

Cutting data – JHP490 Slot milling

SMG		$a_{p/DC}$	f_z					v_c
			10	12	16	20	25	
N1	E/M/A	1.0 1,0	0.15 0,0060	0.18 0,0070	0.24 0,0095	0.30 0,012	0.38 0,015	650 (500 — 790) 2125 (1700 — 2500)
N2	E/M/A	1.0 1,0	0.15 0,0060	0.18 0,0070	0.24 0,0095	0.30 0,012	0.38 0,015	420 (330 — 510) 1375 (1100 — 1600)
N3	E/M/A	1.0 1,0	0.15 0,0060	0.18 0,0070	0.24 0,0095	0.30 0,012	0.38 0,015	500 (400 — 590) 1650 (1400 — 1900)

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

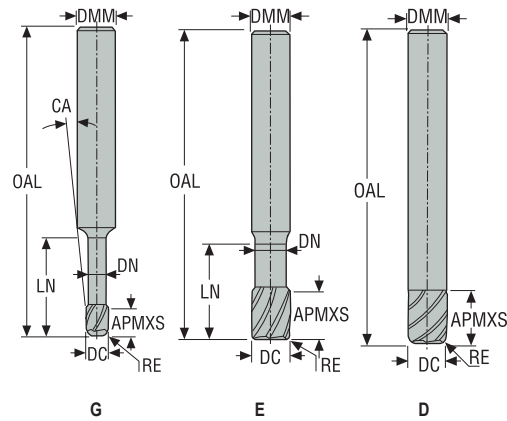
Graphite

X-Heads

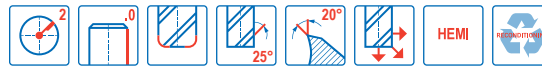
Minimaster

JH40

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC= -0,02/-0,04 mm
—RE= ±0,1 mm
—Regrind possible if DC is ≥ Ø6

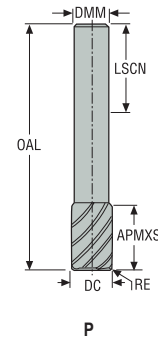


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
40K060-HEMI	00022089	1	D	6,0	6,0	13,0	50,0	—	—	0,1	—	2	Cylindrical	■
40K080-HEMI	00022090	1	D	8,0	8,0	13,0	50,0	—	—	0,1	—	2	Cylindrical	■
40K100-HEMI	00022091	1	D	10,0	10,0	16,0	50,0	—	—	0,1	—	2	Cylindrical	■
40K120-HEMI	00022092	1	D	12,0	12,0	16,0	65,0	—	—	0,1	—	2	Cylindrical	■
40020-HEMI	00022093	2	G	2,0	3,0	3,0	40,0	6,0	1,9	0,1	3,5	2	Cylindrical	■
40030-HEMI	00022094	2	E	3,0	3,0	4,0	40,0	8,0	2,9	0,1	—	2	Cylindrical	■
40040-HEMI	00022095	2	E	4,0	4,0	5,0	50,0	12,0	3,8	0,1	—	2	Cylindrical	■
40050-HEMI	00022120	2	E	5,0	5,0	8,0	50,0	14,0	4,8	0,1	—	2	Cylindrical	■
40060-HEMI	00022250	2	E	6,0	6,0	8,0	65,0	18,0	5,7	0,1	—	2	Cylindrical	■
40080-HEMI	00022580	2	E	8,0	8,0	10,0	70,0	22,0	7,7	0,1	—	2	Cylindrical	■
40100-HEMI	00022663	2	E	10,0	10,0	14,0	80,0	28,0	9,7	0,1	—	2	Cylindrical	■
40120-HEMI	00022667	2	E	12,0	12,0	16,0	90,0	35,0	11,5	0,1	—	2	Cylindrical	■
40160-HEMI	00022668	2	E	16,0	16,0	20,0	90,0	40,0	15,5	0,1	—	2	Cylindrical	■
40200-HEMI	00022701	2	E	20,0	20,0	25,0	100,0	50,0	19,5	0,1	—	2	Cylindrical	■

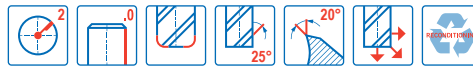
■ Stocked standard.

JH40

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,1 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
40020-RS	02479642	2	P	2,0	1,9	3,0	40,0	0,1	2	Cylindrical	■
40030-RS	02479643	2	P	3,0	2,9	4,0	60,0	0,1	2	Cylindrical	■
40040-RS	02479644	2	P	4,0	3,8	5,0	60,0	0,1	2	Cylindrical	■
40050-RS	02479645	2	P	5,0	4,8	8,0	70,0	0,1	2	Cylindrical	■
40060-RS	02479646	2	P	6,0	5,8	8,0	65,0	0,1	2	Cylindrical	■
40080-RS	02479647	2	P	8,0	7,8	10,0	70,0	0,1	2	Cylindrical	■
40100-RS	02479648	2	P	10,0	9,7	14,0	100,0	0,1	2	Cylindrical	■
40120-RS	02479649	2	P	12,0	11,7	16,0	90,0	0,1	2	Cylindrical	■
40L060-RS	02479650	3	P	6,0	5,8	8,0	100,0	0,1	2	Cylindrical	■
40L080-RS	02479651	3	P	8,0	7,8	10,0	100,0	0,1	2	Cylindrical	■
40L120-RS	02479652	3	P	12,0	11,7	16,0	125,0	0,1	2	Cylindrical	■
40L160-RS	02479653	3	P	16,0	15,7	20,0	125,0	0,1	2	Cylindrical	■
40L200-RS	02479654	3	P	20,0	19,7	25,0	125,0	0,1	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH40 Side milling

SMG		a _e /DC	a _p /DC	f _z										v _c
				2	3	4	5	6	8	10	12	16	20	
N1	E/M/A	0.400 0,400	1.2 1,2	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.22 0,0085	0.25 0,010	730 (610 — 840) 2400 (2100 — 2700)
N11	E/M/A	0.400 0,400	1.0 1,0	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.22 0,0085	0.26 0,010	425 (320 — 520) 1400 (1100 — 1700)
TS1	A	0.400 0,400	1.2 1,2	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.22 0,0085	0.25 0,010	730 (610 — 840) 2400 (2100 — 2700)

Cutting data – JH40 Slot milling

SMG		a _p /DC	f _z										v _c
			2	3	4	5	6	8	10	12	16	20	
N1	E/M/A	0.60 0,60	0.026 0,0010	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	0.20 0,0080	0.25 0,010	600 (510 — 700) 1975 (1700 — 2200)
N11	E/M/A	0.40 0,40	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	0.16 0,0065	400 (310 — 500) 1300 (1100 — 1600)
TS1	A	1.0 1,0	0.026 0,0010	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	0.20 0,0080	0.25 0,010	600 (510 — 700) 1975 (1700 — 2200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

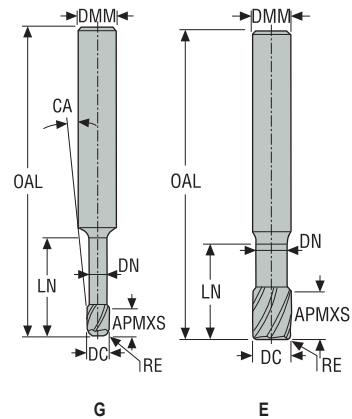
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

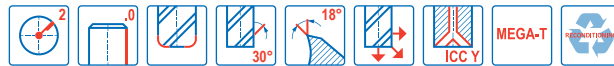
All cutting data are target values

JH421

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC= -0,02/-0,04 mm
- RE= ±0,05 mm
- Regrind possible if DC is ≥ Ø6



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm				
421020R020Z2-MEGA-T	02434927	2	G	—	2,0	3,0	3,0	40,0	8,0	1,8	0,2	3,0	2	Cylindrical	■
421030R020Z2-MEGA-T	02434939	2	E	—	3,0	3,0	4,0	40,0	12,0	2,7	0,2	—	2	Cylindrical	■
421040R020Z2-MEGA-T	02434940	2	G	—	4,0	6,0	5,0	50,0	16,0	3,6	0,2	3,0	2	Cylindrical	■
421040R030Z2-MEGA-T	02434941	2	G	—	4,0	6,0	5,0	50,0	16,0	3,6	0,3	3,0	2	Cylindrical	■
421050R100Z2-MEGA-T	02434942	2	G	—	5,0	6,0	6,0	50,0	18,0	4,5	1,0	1,5	2	Cylindrical	■
421060R025Z2-MEGA-T	02434946	2	E	—	6,0	6,0	8,0	50,0	20,0	5,4	0,25	—	2	Cylindrical	■
421060R050Z2-MEGA-T	02434947	2	E	—	6,0	6,0	8,0	50,0	20,0	5,4	0,5	—	2	Cylindrical	■
421060R100Z2-MEGA-T	02434958	2	E	—	6,0	6,0	8,0	50,0	20,0	5,4	1,0	—	2	Cylindrical	■
421080R030Z2-MEGA-T	02434960	2	E	—	8,0	8,0	10,0	65,0	30,0	7,2	0,3	—	2	Cylindrical	■
421080R060Z2-MEGA-T	02434964	2	E	—	8,0	8,0	10,0	65,0	30,0	7,2	0,6	—	2	Cylindrical	■
421080R100Z2-MEGA-T	02434967	2	E	—	8,0	8,0	10,0	65,0	30,0	7,2	1,0	—	2	Cylindrical	■
421100R030Z2-MEGA-T	02434968	2	E	—	10,0	10,0	12,0	80,0	36,0	9,0	0,3	—	2	Cylindrical	■
421100R080Z2-MEGA-T	02434970	2	E	—	10,0	10,0	12,0	80,0	36,0	9,0	0,8	—	2	Cylindrical	■
421100R150Z2-MEGA-T	02434971	2	E	—	10,0	10,0	12,0	80,0	36,0	9,0	1,5	—	2	Cylindrical	■
421100R250Z2-MEGA-T	02438614	2	E	—	10,0	10,0	12,0	80,0	36,0	9,0	2,5	—	2	Cylindrical	■
421100R310Z2-MEGA-T	02438683	2	E	—	10,0	10,0	12,0	80,0	36,0	9,0	3,1	—	2	Cylindrical	■
421120R030Z2-MEGA-T	02434983	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	0,3	—	2	Cylindrical	■
421120R050Z2-MEGA-T	02434986	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	0,5	—	2	Cylindrical	■
421120R100Z2-MEGA-T	02434988	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	1,0	—	2	Cylindrical	■
421120R150Z2-MEGA-T	02434989	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	1,5	—	2	Cylindrical	■
421120R200Z2-MEGA-T	02434990	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	2,0	—	2	Cylindrical	■
421120R250Z2AMEGA-T	02435008	2	E	■	12,0	12,0	14,0	90,0	40,0	11,0	2,5	—	2	Cylindrical	■
421120R250Z2-MEGA-T	02435007	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	2,5	—	2	Cylindrical	■
421120R310Z2-MEGA-T	02435009	2	E	—	12,0	12,0	14,0	90,0	40,0	11,0	3,1	—	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

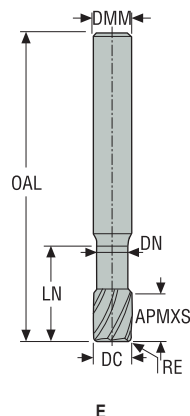
Graphite

X-Heads

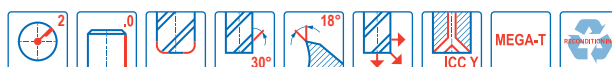
Minimaster

JH421

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC=−0,02/−0,04 mm
—RE= ±0,05 mm
—Regrind possible

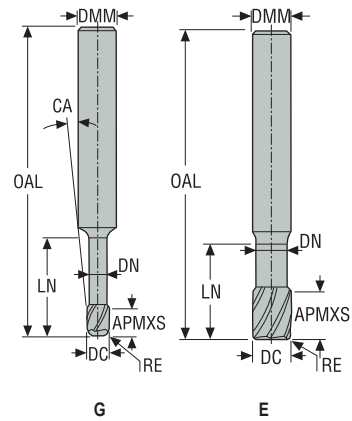


Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
421160R050Z2-MEGA-T	02435010	2	E	—	16,0	16,0	18,0	100,0	45,0	14,5	0,5	2	Cylindrical	■
421160R200Z2-MEGA-T	02435014	2	E	—	16,0	16,0	18,0	100,0	45,0	14,5	2,0	2	Cylindrical	■
421160R250Z2AMEGA-T	02435020	2	E	■	16,0	16,0	18,0	100,0	45,0	14,5	2,5	2	Cylindrical	■
421160R250Z2-MEGA-T	02435012	2	E	—	16,0	16,0	18,0	100,0	45,0	14,5	2,5	2	Cylindrical	■
421160R310Z2-MEGA-T	02435036	2	E	—	16,0	16,0	18,0	100,0	45,0	14,5	3,1	2	Cylindrical	■
421160R400Z2AMEGA-T	02438684	2	E	■	16,0	16,0	18,0	100,0	45,0	14,5	4,0	2	Cylindrical	■
421160R400Z2-MEGA-T	02435039	2	E	—	16,0	16,0	18,0	100,0	45,0	14,5	4,0	2	Cylindrical	■
421200R160Z2-MEGA-T	02435042	2	E	—	20,0	20,0	24,0	100,0	45,0	18,0	1,6	2	Cylindrical	■
421200R200Z2-MEGA-T	02435044	2	E	—	20,0	20,0	24,0	100,0	45,0	18,0	2,0	2	Cylindrical	■
421200R250Z2AMEGA-T	02438685	2	E	■	20,0	20,0	24,0	100,0	45,0	18,0	2,5	2	Cylindrical	■
421200R250Z2-MEGA-T	02435046	2	E	—	20,0	20,0	24,0	100,0	45,0	18,0	2,5	2	Cylindrical	■
421200R310Z2-MEGA-T	02435049	2	E	—	20,0	20,0	24,0	100,0	45,0	18,0	3,1	2	Cylindrical	■
421200R400Z2-MEGA-T	02435051	2	E	—	20,0	20,0	24,0	100,0	45,0	18,0	4,0	2	Cylindrical	■
421200R500Z2-MEGA-T	02435055	2	E	—	20,0	20,0	24,0	100,0	45,0	18,0	5,0	2	Cylindrical	■

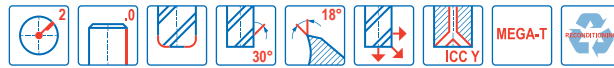
■ Stocked standard.

JH421

High performance – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



— Tolerances:
— DMM=h5
— DC= -0,02/-0,04 mm
— RE= ±0,05 mm
— Regrind possible



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
421L080R020Z2-MEGA-T	02435068	3	E	—	8,0	8,0	6,0	75,0	40,0	7,2	0,2	2	Cylindrical	■
421L100R050Z2-MEGA-T	02435070	3	E	—	10,0	10,0	8,0	90,0	50,0	9,0	0,5	2	Cylindrical	■
421L100R250Z2-MEGA-T	02435074	3	E	—	10,0	10,0	8,0	90,0	50,0	9,0	2,5	2	Cylindrical	■
421L100R310Z2-MEGA-T	02438690	3	E	—	10,0	10,0	8,0	90,0	50,0	9,0	3,1	2	Cylindrical	■
421L120R050Z2-MEGA-T	02435340	3	E	—	12,0	12,0	10,0	110,0	70,0	11,0	0,5	2	Cylindrical	■
421L120R100Z2-MEGA-T	02435343	3	E	—	12,0	12,0	10,0	110,0	70,0	11,0	1,0	2	Cylindrical	■
421L120R200Z2-MEGA-T	02435373	3	E	—	12,0	12,0	10,0	110,0	70,0	11,0	2,0	2	Cylindrical	■
421L120R250Z2-MEGA-T	02435374	3	E	—	12,0	12,0	10,0	110,0	70,0	11,0	2,5	2	Cylindrical	■
421L120R310Z2-MEGA-T	02438692	3	E	—	12,0	12,0	10,0	110,0	70,0	11,0	3,1	2	Cylindrical	■
421L160R050Z2-MEGA-T	02435375	3	E	—	16,0	16,0	13,0	125,0	80,0	14,5	0,5	2	Cylindrical	■
421L160R100Z2-MEGA-T	02435380	3	E	—	16,0	16,0	13,0	125,0	80,0	14,5	1,0	2	Cylindrical	■
421L160R200Z2-MEGA-T	02435381	3	E	—	16,0	16,0	13,0	125,0	80,0	14,5	2,0	2	Cylindrical	■
421L160R250Z2AMEGA-T	02435383	3	E	■	16,0	16,0	13,0	125,0	80,0	14,5	2,5	2	Cylindrical	■
421L160R250Z2-MEGA-T	02435382	3	E	—	16,0	16,0	13,0	125,0	80,0	14,5	2,5	2	Cylindrical	■
421L160R310Z2-MEGA-T	02435384	3	E	—	16,0	16,0	13,0	125,0	80,0	14,5	3,1	2	Cylindrical	■
421L160R400Z2AMEGA-T	02435386	3	E	■	16,0	16,0	13,0	125,0	80,0	14,5	4,0	2	Cylindrical	■
421L200R050Z2-MEGA-T	02435387	3	E	—	20,0	20,0	16,0	150,0	100,0	18,0	0,5	2	Cylindrical	■
421L200R200Z2-MEGA-T	02435391	3	E	—	20,0	20,0	16,0	150,0	100,0	18,0	2,0	2	Cylindrical	■
421L200R310Z2-MEGA-T	02435398	3	E	—	20,0	20,0	16,0	150,0	100,0	18,0	3,1	2	Cylindrical	■
421L200R500Z2-MEGA-T	02435401	3	E	—	20,0	20,0	16,0	150,0	100,0	18,0	5,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH421 Side milling

SMG		a_e/DC	a_p/DC	f_z												v_c	
				2	3	4	5	6	8	10	12	14	16	20	25		
N1	E/M/A	0.400 0,400	1.0 1,0	0.030 0,0012	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.20 0,0080	0.22 0,0085	0.25 0,010	0.28 0,011	620 (520 — 720) 2025 (1800 — 2300)	
N11	E/M/A	0.400 0,400	1.0 1,0	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.13 0,0050	0.15 0,0060	0.17 0,0065	0.19 0,0075	410 (310 — 510) 1350 (1100 — 1600)	
TS1	A	0.400 0,400	1.0 1,0	0.030 0,0012	0.044 0,0017	0.060 0,0024	0.075 0,0030	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.20 0,0080	0.22 0,0085	0.25 0,010	0.28 0,011	620 (520 — 720) 2025 (1800 — 2300)	
TP1	M	0.400 0,400	1.0 1,0	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.16 0,0065	0.18 0,0070	0.20 0,0080	0.24 0,0095	410 (310 — 500) 1350 (1100 — 1600)	

Cutting data – JH421 Slot milling

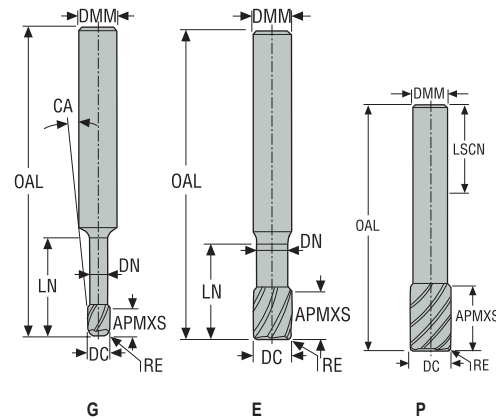
SMG		a_p/DC	f_z												v_c	
			2	3	4	5	6	8	10	12	14	16	20	25		
N1	E/M/A	0.50 0,50	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.18 0,0070	610 (510 — 700) 2000 (1700 — 2200)	
N11	E/M/A	0.50 0,50	0.0080 0,00032	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	0.032 0,0013	0.040 0,0016	0.050 0,0020	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.10 0,0040	405 (310 — 500) 1325 (1100 — 1600)	
TS1	A	0.50 0,50	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.036 0,0014	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.11 0,0044	0.14 0,0055	0.18 0,0070	610 (510 — 700) 2000 (1700 — 2200)	
TP1	M	0.50 0,50	0.010 0,00040	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.13 0,0050	405 (310 — 500) 1325 (1100 — 1600)	

For cutting data recalculations, see pages 687 – 695

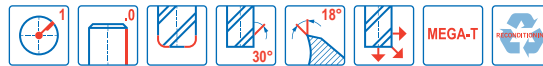
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH410

High performance – Aluminium – Square – 1 Flute – Cylindrical – Corner radius



- Tolerances:
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,02 mm
- Regrind possible if DC is ≥ Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	RE2	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm				
410020R050-MEGA-T	02451548	2	G	2,0	6,0	3,0	50,0	6,0	1,7	0,5	2,0	12,0	1	Cylindrical	■
410030R050-MEGA-T	02451578	2	G	3,0	6,0	4,0	50,0	8,0	2,7	0,5	2,0	7,5	1	Cylindrical	■
410ML030R050-MEGA-T	02451580	2	G	3,0	6,0	4,0	60,0	15,0	2,7	0,5	2,0	5,0	1	Cylindrical	■
410040R050-MEGA-T	02451581	2	G	4,0	6,0	5,0	60,0	8,0	3,6	0,5	2,0	5,5	1	Cylindrical	■
410ML040R050-MEGA-T	02451585	2	G	4,0	6,0	5,0	60,0	15,0	3,6	0,5	2,0	3,5	1	Cylindrical	■
410050R050-MEGA-T	02451586	2	G	5,0	6,0	7,0	65,0	11,0	4,5	0,5	2,0	2,5	1	Cylindrical	■
410ML050R050-MEGA-T	02451589	2	G	5,0	6,0	7,0	65,0	18,0	4,5	0,5	2,0	1,5	1	Cylindrical	■
410TL050R050-MEGA-T	02451587	2	G	5,0	6,0	7,0	65,0	26,0	4,5	0,5	2,0	1,5	1	Cylindrical	■
410060R050-MEGA-T	02451591	2	E	6,0	6,0	8,0	70,0	11,0	5,3	0,5	2,0	—	1	Cylindrical	■
410ML060R050-MEGA-T	02451593	2	E	6,0	6,0	8,0	70,0	18,0	5,3	0,5	2,0	—	1	Cylindrical	■
410TL060R050-MEGA-T	02451592	2	E	6,0	6,0	8,0	70,0	31,0	5,3	0,5	2,0	—	1	Cylindrical	■
410070RSR050-MEGA-T	02451594	2	P	7,0	6,0	9,0	65,0	—	—	0,5	3,0	—	1	Cylindrical	■
410090RSR050-MEGA-T	02451596	2	P	9,0	8,0	11,0	65,0	—	—	0,5	3,0	—	1	Cylindrical	■
410110RSR050-MEGA-T	02451598	2	P	11,0	10,0	13,0	70,0	—	—	0,5	3,0	—	1	Cylindrical	■
410130RSR100-MEGA-T	02451600	2	P	13,0	12,0	15,0	70,0	—	—	1,0	3,0	—	1	Cylindrical	■
410150RSR100-MEGA-T	02451603	2	P	15,0	14,0	17,0	80,0	—	—	1,0	3,0	—	1	Cylindrical	■
410170RSR100-MEGA-T	02451605	2	P	17,0	16,0	19,0	80,0	—	—	1,0	3,0	—	1	Cylindrical	■
410L070RSR200-MEGA-T	02451595	3	P	7,0	6,0	9,0	85,0	—	—	2,0	3,0	—	1	Cylindrical	■
410L090RSR200-MEGA-T	02451597	3	P	9,0	8,0	11,0	85,0	—	—	2,0	3,0	—	1	Cylindrical	■
410L110RSR200-MEGA-T	02451599	3	P	11,0	10,0	13,0	90,0	—	—	2,0	3,0	—	1	Cylindrical	■
410L130RSR200-MEGA-T	02451601	3	P	13,0	12,0	15,0	90,0	—	—	2,0	3,0	—	1	Cylindrical	■
410L150RSR200-MEGA-T	02451604	3	P	15,0	14,0	17,0	110,0	—	—	2,0	3,0	—	1	Cylindrical	■
410L170RSR200-MEGA-T	02451606	3	P	17,0	16,0	19,0	110,0	—	—	2,0	3,0	—	1	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH410 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z												v _c
				2	3	4	5	6	7	9	11	13	15	17		
N1	E/M/A	0.410 0,410	1.0 1,0	0.070 0,0028	0.11 0,0044	0.14 0,0055	0.18 0,0070	0.22 0,0085	0.25 0,010	0.32 0,013	0.40 0,016	0.46 0,018	0.50 0,020	0.55 0,022	710 (600 — 820) 2325 (2000 — 2600)	
N11	E/M/A	0.318 0,318	0.65 0,65	0.026 0,0010	0.040 0,0016	0.055 0,0022	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.12 0,0048	0.15 0,0060	0.17 0,0065	0.19 0,0075	0.22 0,0085	495 (380 — 610) 1625 (1300 — 2000)	
TS1	A	0.410	1.0	0.070	0.11	0.14	0.18	0.22	0.25	0.32	0.40	0.46	0.50	0.55	710 (600 — 820)	
		0,410	1,0	0,0028	0,0044	0,0055	0,0070	0,0085	0,010	0,013	0,016	0,018	0,020	0,022	2325 (2000 — 2600)	

Cutting data – JH410 Slot milling

SMG		a _p /DC	f _z												v _c
			2	3	4	5	6	7	9	11	13	15	17		
N1	E/M/A	0.75	0.055	0.080	0.11	0.14	0.16	0.19	0.25	0.30	0.36	0.40	0.46	630 (530 — 730)	
		0.75	0.0022	0.0032	0.0044	0.0055	0.0065	0.0075	0.010	0.012	0.014	0.016	0.018	2075 (1800 — 2300)	
N11	E/M/A	0.36	0.018	0.028	0.036	0.046	0.055	0.065	0.080	0.10	0.12	0.14	0.15	420 (320 — 520)	
		0.36	0.00070	0.0011	0.0014	0.0018	0.0022	0.0026	0.0032	0.0040	0.0048	0.0055	0.0060	1375 (1100 — 1700)	
TS1	A	1.0	0.055	0.080	0.11	0.14	0.16	0.19	0.25	0.30	0.36	0.40	0.46	630 (530 — 730)	
		1.0	0.0022	0.0032	0.0044	0.0055	0.0065	0.0075	0.010	0.012	0.014	0.016	0.018	2075 (1800 — 2300)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

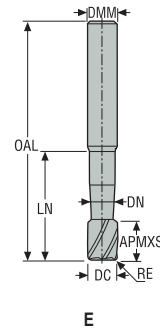
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

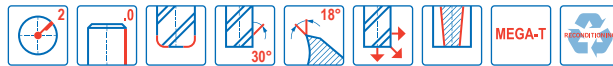
All cutting data are target values

JH440

High speed – Aluminium – Square – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC= -0,02/-0,04 mm
- RE= ±0,05 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	NA°	PCEDC	Shank	Stock standard
440060-MEGA-T	00022702	2	E	6,0	6,0	8,0	60,0	30,0	5,4	1,5	2,09	2	Cylindrical	■
440080-MEGA-T	00022865	2	E	8,0	8,0	10,0	60,0	30,0	7,2	2,0	3,12	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH440 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z		v_c
				6	8	
N1	E/M/A	0.300 0,300	0.50 0,50	0.080 0,0032	0.10 0,0040	780 (650 — 900) 2550 (2200 — 2900)
N2	E/M/A	0.300 0,300	0.50 0,50	0.060 0,0024	0.080 0,0032	510 (390 — 640) 1675 (1300 — 2000)
N3	E/M/A	0.300 0,300	0.50 0,50	0.060 0,0024	0.080 0,0032	340 (260 — 420) 1125 (860 — 1300)
N11	E/M/A	0.300 0,300	0.50 0,50	0.060 0,0024	0.080 0,0032	255 (130 — 370) 840 (430 — 1200)
TS1	A	0.300 0,300	0.50 0,50	0.080 0,0032	0.10 0,0040	780 (650 — 900) 2550 (2200 — 2900)
TP1	A	0.300 0,300	0.60 0,60	0.060 0,0024	0.080 0,0032	510 (380 — 630) 1675 (1300 — 2000)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

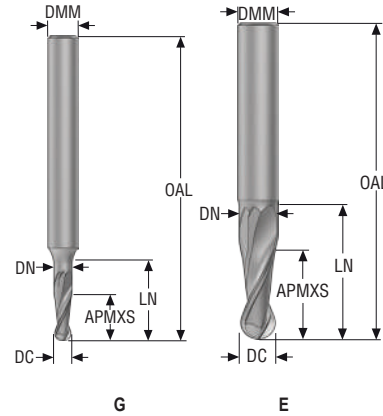
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

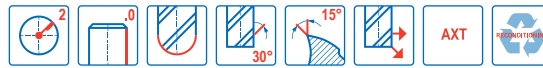
All cutting data are target values

S4321

High performance – Aluminium – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- DMM=h5
- DC= e7
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
S4321-020G2B.0Z2	AXT	10228152	2	G	2,0	6,0	4,0	57,0	8,0	1,9	1,0	2	Cylindrical	■
S4321-030G2B.0Z2	AXT	10228153	2	G	3,0	6,0	6,0	57,0	10,0	2,85	1,5	2	Cylindrical	■
S4321-040G2B.0Z2	AXT	10228154	2	G	4,0	6,0	8,0	57,0	14,0	3,8	2,0	2	Cylindrical	■
S4321-050G2B.0Z2	AXT	10228155	2	G	5,0	6,0	10,0	57,0	17,0	4,75	2,5	2	Cylindrical	■
S4321-060E2B.0Z2	AXT	10228156	2	E	6,0	6,0	12,0	57,0	19,0	5,7	3,0	2	Cylindrical	■
S4321-080E2B.0Z2	AXT	10228157	2	E	8,0	8,0	16,0	63,0	24,0	7,6	4,0	2	Cylindrical	■
S4321-100E2B.0Z2	AXT	10228158	2	E	10,0	10,0	20,0	72,0	31,0	9,5	5,0	2	Cylindrical	■
S4321-120E2B.0Z2	AXT	10228159	2	E	12,0	12,0	24,0	88,0	37,0	11,4	6,0	2	Cylindrical	■
S4321-160E2B.0Z2	AXT	10228160	2	E	16,0	16,0	32,0	100,0	48,0	15,2	8,0	2	Cylindrical	■
S4321-200E2B.0Z2	AXT	10228161	2	E	20,0	20,0	40,0	114,0	60,0	19,0	10,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfpr

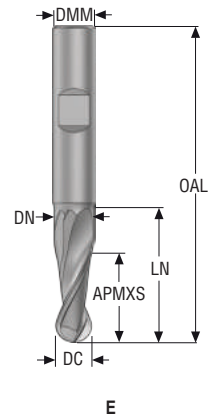
Graphite

X-Heads

Minimaster

S4321

High performance – Aluminium – Ball nose – 2 Flutes – Weldon



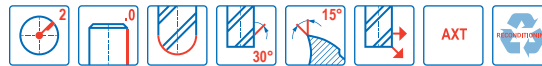
—Tolerances:

—DMM=h5

—DC= e7

—RE= ±0,01 mm

—Regrind possible if DC is ≥Ø6



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
S4321-060E2B.3Z2	AXT	10287043	2	E	6,0	6,0	12,0	57,0	19,0	5,7	3,0	2	Weldon	☐
S4321-080E2B.3Z2	AXT	10287044	2	E	8,0	8,0	16,0	63,0	24,0	7,6	4,0	2	Weldon	☐
S4321-100E2B.3Z2	AXT	10287045	2	E	10,0	10,0	20,0	72,0	31,0	9,5	5,0	2	Weldon	☐
S4321-120E2B.3Z2	AXT	10287046	2	E	12,0	12,0	24,0	88,0	37,0	11,4	6,0	2	Weldon	☐
S4321-160E2B.3Z2	AXT	10287047	2	E	16,0	16,0	32,0	100,0	48,0	15,2	8,0	2	Weldon	☐
S4321-200E2B.3Z2	AXT	10287048	2	E	20,0	20,0	40,0	114,0	60,0	19,0	10,0	2	Weldon	☐

☐ Weldon available. Delivery time is 3 days.

Cutting data – S4321 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z										v _c
				2	3	4	5	6	8	10	12	16	20	
N1	E/M/A	0,30 0,30	1,5 1,5	0,020 0.00080	0,032 0.0013	0,042 0.0017	0,050 0.0020	0,065 0.0026	0,085 0.0034	0,10 0.0040	0,13 0.0050	0,17 0.0065	0,20 0.0080	560 (510 — 680) 1825 (1700 — 2200)
N2	E/M/A	0,30 0,30	1,5 1,5	0,018 0.00070	0,026 0.0010	0,036 0.0014	0,044 0.0017	0,055 0.0022	0,070 0.0028	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	355 (270 — 440) 1175 (890 — 1400)
N3	E/M/A	0,30 0,30	1,5 1,5	0,018 0.00070	0,026 0.0010	0,036 0.0014	0,044 0.0017	0,055 0.0022	0,070 0.0028	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	235 (180 — 290) 770 (600 — 950)
N11	E/M/A	0,30 0,30	1,5 1,5	0,015 0.00060	0,022 0.00085	0,030 0.0012	0,036 0.0014	0,044 0.0017	0,060 0.0024	0,075 0.0030	0,085 0.0034	0,11 0.0044	0,12 0.0048	330 (250 — 410) 1075 (830 — 1300)
TS1	A/D	0,30 0,30	1,5 1,5	0,022 0.00085	0,034 0.0013	0,046 0.0018	0,055 0.0022	0,070 0.0028	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,17 0.0065	0,19 0.0075	670 (560 — 770) 2200 (1900 — 2500)
TP1	A/D	0,30 0,30	1,5 1,5	0,0036 0.00014	0,0050 0.00020	0,0070 0.00028	0,0090 0.00036	0,010 0.00040	0,014 0.00055	0,018 0.00070	0,020 0.00080	0,028 0.0011	0,036 0.0014	460 (350 — 570) 1500 (1200 — 1800)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

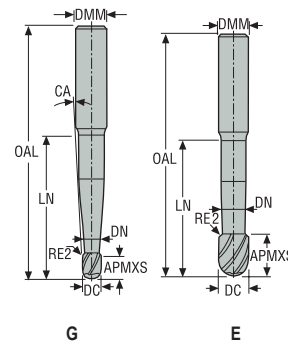
Graphite

X-Heads

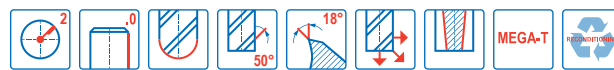
Minimaster

JH450

High speed – Aluminium – Ball nose – 2 Flutes – Cylindrical



—Tolerances:
—DMM= h5
—DC= -0,02/-0,04 mm
—RE= ±0,02 mm
—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	RE2	CA°	NA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm					
450020-MEGA-T	00022977	2	G	2,0	3,0	1,75	40,0	10,0	1,8	1,0	1,0	3,0	2,24	2	Cylindrical	■
450030-MEGA-T	00022978	2	E	3,0	3,0	2,5	40,0	12,0	2,7	1,5	2,0	—	2,497	2	Cylindrical	■
450040-MEGA-T	00022979	2	G	4,0	6,0	3,5	50,0	21,0	3,6	2,0	2,0	3,0	5,053	2	Cylindrical	■
450050-MEGA-T	00022980	2	G	5,0	6,0	4,5	50,0	22,5	4,5	2,5	2,0	2,0	3,576	2	Cylindrical	■
450060-MEGA-T	00023020	2	E	6,0	6,0	5,5	55,0	25,0	5,4	3,0	2,0	—	2,465	2	Cylindrical	■
450080-MEGA-T	00023032	2	E	8,0	8,0	7,0	65,0	30,0	7,2	4,0	2,0	—	2,491	2	Cylindrical	■
450100-MEGA-T	00023040	2	E	10,0	10,0	8,5	75,0	35,0	9,0	5,0	3,0	—	3,086	2	Cylindrical	■
450120-MEGA-T	00029842	2	E	12,0	12,0	10,5	75,0	40,0	11,0	6,0	3,0	—	2,735	2	Cylindrical	■
450160-MEGA-T	00023050	2	E	16,0	16,0	14,0	90,0	50,0	14,5	8,0	4,0	—	3,45	2	Cylindrical	■
450200-MEGA-T	00023053	2	E	20,0	20,0	17,0	100,0	50,0	18,0	10,0	4,0	—	5,321	2	Cylindrical	■
450L100-MEGA-T	00023056	3	G	10,0	12,0	8,5	125,0	50,0	9,0	5,0	3,0	1,5	3,16	2	Cylindrical	■
450L120-MEGA-T	00023091	3	E	12,0	12,0	10,5	150,0	60,0	11,0	6,0	3,0	—	2,79	2	Cylindrical	■
450L160-MEGA-T	00023095	3	E	16,0	16,0	14,0	150,0	70,0	14,5	8,0	4,0	—	3,51	2	Cylindrical	■

■ Stocked standard.

Cutting data – JH450 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z										v_c
				2	3	4	5	6	8	10	12	16	20	
N1	E/M/A	0.400 0.400	0.24 0.24	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	690 (670 — 930) 2275 (2200 — 3000)
N2	E/M/A	0.300 0.300	0.24 0.24	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	470 (410 — 680) 1550 (1400 — 2200)
N3	E/M/A	0.300 0.300	0.24 0.24	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.40 0.016	315 (280 — 450) 1025 (920 — 1400)
N11	E/M/A	0.300 0.300	0.24 0.24	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.38 0.015	470 (420 — 680) 1550 (1400 — 2200)
TS1	A	0.500 0.500	0.50 0.50	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.30 0.012	0.34 0.013	700 (630 — 860) 2300 (2100 — 2800)
TP1	M	0.300 0.300	0.24 0.24	0.040 0.0016	0.060 0.0024	0.080 0.0032	0.10 0.0040	0.12 0.0048	0.16 0.0065	0.20 0.0080	0.24 0.0095	0.32 0.013	0.38 0.015	470 (410 — 680) 1550 (1400 — 2200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

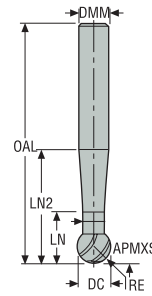
Graphite

X-Heads

Minimaster

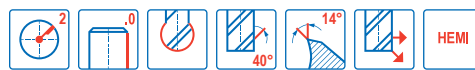
JH460

High speed – Aluminium – Ball nose – 2 Flutes – Cylindrical



E

—Tolerances:
—DMM=h5
—DC=−0,02/−0,06 mm
—RE= ±0.02 mm
—SA=250°



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
460030-HEMI	00040372	2	E	3,0	3,0	2,3	60,0	4,8	1,5	1,5	2	Cylindrical	■
460040-HEMI	00040373	2	E	4,0	4,0	3,1	60,0	5,6	2,0	2,0	2	Cylindrical	■
460050-HEMI	00040376	2	E	5,0	5,0	3,9	70,0	6,4	2,5	2,5	2	Cylindrical	■
460060-HEMI	00040377	2	E	6,0	6,0	4,7	80,0	9,7	3,0	3,0	2	Cylindrical	■
460080-HEMI	00040378	2	E	8,0	8,0	6,2	85,0	11,2	4,0	4,0	2	Cylindrical	■
460100-HEMI	00040379	2	E	10,0	10,0	7,8	100,0	15,6	5,0	5,0	2	Cylindrical	■
460120-HEMI	00040380	2	E	12,0	12,0	9,4	125,0	17,2	6,0	6,0	2	Cylindrical	■

■ Stocked standard.

Cutting data – JH460 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z							v_c
				3	4	5	6	8	10	12	
N1	E/M/A	0.500 <i>0,500</i>	0.20 <i>0,20</i>	0.055 <i>0,0022</i>	0.075 <i>0,0030</i>	0.095 <i>0,0038</i>	0.11 <i>0,0044</i>	0.15 <i>0,0060</i>	0.19 <i>0,0075</i>	0.22 <i>0,0085</i>	590 (500 — 680) 1925 (1700 — 2200)
N11	E/M/A	0.300 <i>0,300</i>	0.20 <i>0,20</i>	0.046 <i>0,0018</i>	0.065 <i>0,0026</i>	0.080 <i>0,0032</i>	0.095 <i>0,0038</i>	0.13 <i>0,0050</i>	0.16 <i>0,0065</i>	0.18 <i>0,0070</i>	610 (510 — 700) 2000 (1700 — 2200)
S11	E/M/A	0.300 <i>0,300</i>	0.20 <i>0,20</i>	0.034 <i>0,0013</i>	0.044 <i>0,0017</i>	0.055 <i>0,0022</i>	0.065 <i>0,0026</i>	0.090 <i>0,0036</i>	0.11 <i>0,0044</i>	0.13 <i>0,0050</i>	120 (110 — 130) 395 (370 — 420)
S12	E/M/A	0.300 <i>0,300</i>	0.20 <i>0,20</i>	0.034 <i>0,0013</i>	0.044 <i>0,0017</i>	0.055 <i>0,0022</i>	0.065 <i>0,0026</i>	0.090 <i>0,0036</i>	0.11 <i>0,0044</i>	0.13 <i>0,0050</i>	90 (82 — 100) 295 (270 — 320)
S13	E/M/A	0.300 <i>0,300</i>	0.20 <i>0,20</i>	0.030 <i>0,0012</i>	0.038 <i>0,0015</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	0.075 <i>0,0030</i>	0.095 <i>0,0038</i>	0.11 <i>0,0044</i>	75 (65 — 81) 245 (220 — 260)
TS1	A	0.500 <i>0,500</i>	0.50 <i>0,50</i>	0.055 <i>0,0022</i>	0.070 <i>0,0028</i>	0.13 <i>0,0050</i>	0.15 <i>0,0060</i>	0.20 <i>0,0080</i>	0.25 <i>0,010</i>	0.30 <i>0,012</i>	620 (520 — 720) 2025 (1800 — 2300)
TP1	M	0.300 <i>0,300</i>	0.20 <i>0,20</i>	0.046 <i>0,0018</i>	0.065 <i>0,0026</i>	0.080 <i>0,0032</i>	0.095 <i>0,0038</i>	0.13 <i>0,0050</i>	0.16 <i>0,0065</i>	0.18 <i>0,0070</i>	405 (360 — 450) 1325 (1200 — 1400)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

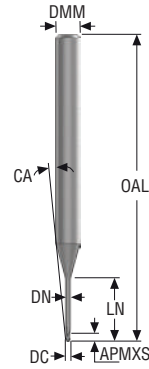
Graphite

X-Heads

Minimaster

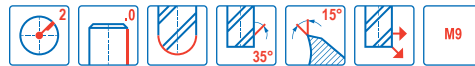
SMB413/414/416

Miniature – Aluminium – Ball nose – 2 Flutes – Cylindrical



G

—Tolerances:
—Run-out= <0,005 mm
—DMM = h5
—DC = 0/-0,01 mm
—RE = ±0,005 mm



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm				
SMB414020G4B.0Z2	—	10109385	4	G	2,0	4,0	2,0	50,0	12,0	1,9	1,0	3,75	2	Cylindrical	■
SMB414020G4B.0Z2	M9	10109139	4	G	2,0	4,0	2,0	50,0	12,0	1,9	1,0	3,75	2	Cylindrical	■
SMB414030G4B.0Z2	—	10109386	4	G	3,0	4,0	3,0	50,0	16,0	2,85	1,5	1,68	2	Cylindrical	■
SMB414030G4B.0Z2	M9	10109140	4	G	3,0	4,0	3,0	50,0	16,0	2,85	1,5	1,68	2	Cylindrical	■
SMB413025G5B.0Z2	—	10109133	5	G	2,5	3,0	2,5	50,0	20,0	2,4	1,25	0,71	2	Cylindrical	■
SMB413025G5B.0Z2	M9	10109136	5	G	2,5	3,0	2,5	50,0	20,0	2,4	1,25	0,71	2	Cylindrical	■
SMB414025G5B.0Z2	—	10109387	5	G	2,5	4,0	2,5	50,0	20,0	2,4	1,25	1,94	2	Cylindrical	■
SMB414025G5B.0Z2	M9	10109141	5	G	2,5	4,0	2,5	50,0	20,0	2,4	1,25	1,94	2	Cylindrical	■
SMB416025G5B.0Z2	—	10109390	5	G	2,5	6,0	2,5	55,0	20,0	2,4	1,25	3,87	2	Cylindrical	■
SMB416025G5B.0Z2	M9	10109145	5	G	2,5	6,0	1,0	55,0	20,0	0,95	1,25	3,87	2	Cylindrical	■
SMB414010G6B.0Z2	—	10109381	6	G	1,0	4,0	1,0	50,0	10,0	0,95	0,5	5,5	2	Cylindrical	■
SMB414010G6B.0Z2	M9	10109142	6	G	1,0	4,0	1,0	50,0	10,0	0,95	0,5	5,5	2	Cylindrical	■
SMB413015G6B.0Z2	—	10109134	6	G	1,5	3,0	1,5	50,0	20,0	1,4	0,75	1,9	2	Cylindrical	■
SMB413015G6B.0Z2	M9	10109137	6	G	1,5	3,0	1,5	50,0	20,0	1,4	0,75	1,9	2	Cylindrical	■
SMB414015G6B.0Z2	—	10109388	6	G	1,5	4,0	2,5	55,0	20,0	2,4	0,75	2,92	2	Cylindrical	■
SMB414015G6B.0Z2	M9	10109143	6	G	1,5	4,0	1,5	55,0	20,0	1,4	0,75	2,92	2	Cylindrical	■
SMB416015G6B.0Z2	—	10109391	6	G	1,5	6,0	1,5	55,0	20,0	1,4	0,75	4,56	2	Cylindrical	■
SMB416015G6B.0Z2	M9	10109146	6	G	1,5	6,0	1,5	55,0	20,0	1,4	0,75	4,56	2	Cylindrical	■
SMB413010G7B.0Z2	—	10109135	7	G	1,0	3,0	1,0	50,0	18,0	0,95	0,5	2,63	2	Cylindrical	■
SMB413010G7B.0Z2	M9	10109138	7	G	1,0	3,0	1,0	50,0	18,0	0,95	0,5	2,63	2	Cylindrical	■
SMB414010G7B.0Z2	—	10109389	7	G	1,0	4,0	1,0	50,0	18,0	0,95	0,5	3,64	2	Cylindrical	■
SMB414010G7B.0Z2	M9	10109144	7	G	1,0	4,0	1,0	50,0	18,0	0,95	0,5	3,64	2	Cylindrical	■
SMB416010G7B.0Z2	—	10109392	7	G	1,0	6,0	1,0	55,0	18,0	0,95	0,5	5,23	2	Cylindrical	■
SMB416010G7B.0Z2	M9	10109147	7	G	1,0	6,0	1,0	55,0	18,0	0,95	0,5	5,23	2	Cylindrical	■

■ Stocked standard.

Cutting data – SMB413 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z			v_c
				1	1.5	2.5	
N1	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	135 (86 — 170) 445 (290 — 550)
N2	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	85 (55 — 100) 280 (190 — 320)
N3	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	55 (37 — 73) 180 (130 — 230)
TS1	A	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	135 (86 — 170) 445 (290 — 550)
TP1	A	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	135 (86 — 170) 445 (290 — 550)

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Cutting data – SMB414 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				1	1.5	2	2.5	3	
N1	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,026 0.0010	0,032 0.0013	0,040 0.0016	135 (86 — 170) 445 (290 — 550)
N2	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,026 0.0010	0,032 0.0013	0,040 0.0016	85 (55 — 100) 280 (190 — 320)
N3	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,026 0.0010	0,032 0.0013	0,040 0.0016	55 (37 — 73) 180 (130 — 230)
TS1	A	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,026 0.0010	0,032 0.0013	0,040 0.0016	135 (86 — 170) 445 (290 — 550)
TP1	A	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,026 0.0010	0,032 0.0013	0,040 0.0016	135 (86 — 170) 445 (290 — 550)

Non ferrous

Hard

Cutting data – SMB416 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z			v_c
				1	1.5	2.5	
N1	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	135 (86 — 170) 445 (290 — 550)
N2	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	85 (55 — 100) 280 (190 — 320)
N3	E	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	55 (37 — 73) 180 (130 — 230)
TS1	A	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	135 (86 — 170) 445 (290 — 550)
TP1	A	0,0500 0.0500	0,080 0.080	0,013 0.00050	0,020 0.00080	0,032 0.0013	135 (86 — 170) 445 (290 — 550)

Plastic and cfprp

Graphite

X-Heads

Minimaster

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

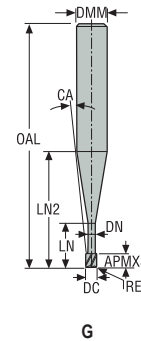
 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

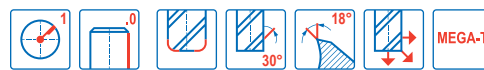
All cutting data are target values

JM403/JM404/JM406

Miniature – Aluminium – Square – 1 Flute – Cylindrical – Corner radius



—Tolerances:
—Run-out=<0,005 mm
—DMM= h5
—DC= < Ø0,6= -0,005/-0,013 mm
—DC= ≥ Ø0,6= -0,005/-0,015 mm
—RE= ±0,01 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
403ML005R005-MEGA-T	02568434	2	G	0,5	3,0	0,5	40,0	1,5	0,45	0,05	11,0	1	Cylindrical	■
403ML008R005-MEGA-T	02568450	2	G	0,8	3,0	0,8	40,0	2,5	0,75	0,05	9,0	1	Cylindrical	■
403ML010R010-MEGA-T	02568456	2	G	1,0	3,0	1,0	40,0	4,0	0,95	0,1	7,5	1	Cylindrical	■
406ML015R010-MEGA-T	02568478	5	G	1,5	6,0	1,5	50,0	5,0	1,4	0,1	9,5	1	Cylindrical	■
404ML020R010-MEGA-T	02577246	5	G	2,0	4,0	2,0	40,0	6,0	1,9	0,1	6,0	1	Cylindrical	■

■ Stocked standard.

Cutting data – JM403/JM404/406 Side milling

SMG		a_e/DC	a_p/DC	f_z					v_c
				0.5	0.8	1	1.5	2	
N1	E	0.500 0,500	0.70 0,70	0.015 0,00060	0.024 0,00095	0.030 0,0012	0.042 0,0017	0.050 0,0020	365 (310 — 420) 1200 (1100 — 1300)
N2	E	0.500 0,500	0.70 0,70	0.015 0,00060	0.024 0,00095	0.030 0,0012	0.042 0,0017	0.050 0,0020	235 (200 — 270) 770 (660 — 880)
N3	E	0.500 0,500	0.70 0,70	0.015 0,00060	0.024 0,00095	0.030 0,0012	0.042 0,0017	0.050 0,0020	155 (140 — 180) 510 (460 — 590)

Cutting data – JM403/JM404/406 Slot milling

SMG		a_p/DC	f_z					v_c
			0.5	0.8	1	1.5	2	
N1	E	0.40 0,40	0.015 0,00060	0.025 0,0010	0.030 0,0012	0.044 0,0017	0.050 0,0020	315 (270 — 360) 1025 (890 — 1100)
N2	E	0.40 0,40	0.015 0,00060	0.025 0,0010	0.030 0,0012	0.044 0,0017	0.050 0,0020	200 (170 — 230) 660 (560 — 750)
N3	E	0.40 0,40	0.015 0,00060	0.025 0,0010	0.030 0,0012	0.044 0,0017	0.050 0,0020	135 (120 — 150) 445 (400 — 490)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

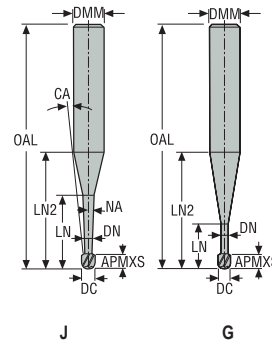
Graphite

X-Heads

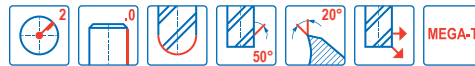
Minimaster

JM413/JM416

Miniature – Aluminium – Ball nose – 2 Flute – Cylindrical



—Tolerances:
—Run-out=<0,005 mm
—DMM=h5
—DC= < Ø 0,6= -0,005/-0,013 mm
—DC= ≥ Ø 0,6= -0,005/-0,015 mm
—RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm					
413ML005TN-MEGA-T	02568709	2	J	0,5	3,0	0,375	40,0	1,5	0,45	0,25	11,5	0,9	2	Cylindrical	■
413L005-MEGA-T	02568711	3	G	0,5	3,0	0,375	40,0	2,5	0,45	0,25	10,0	—	2	Cylindrical	■
413L008-MEGA-T	02568727	3	G	0,8	3,0	0,6	40,0	4,0	0,75	0,4	8,0	—	2	Cylindrical	■
413L010-MEGA-T	02568736	3	G	1,0	3,0	0,75	40,0	5,0	0,95	0,5	7,0	—	2	Cylindrical	■
416L015-MEGA-T	02568772	3	G	1,5	6,0	1,125	50,0	7,5	1,4	0,75	8,5	—	2	Cylindrical	■
416L020-MEGA-T	02568779	3	G	2,0	6,0	1,5	50,0	10,0	1,9	1,0	7,0	—	2	Cylindrical	■

■ Stocked standard.

Cutting data – JM413/416 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				0,5	0,8	1	1,5	2	
N1	E	0.300 0,300	0.30 0,30	0.030 0,0012	0.048 0,0019	0.060 0,0024	0.085 0,0034	0.10 0,0040	385 (370 — 510) 1275 (1300 — 1600)
N2	E	0.300 0,300	0.30 0,30	0.030 0,0012	0.048 0,0019	0.060 0,0024	0.085 0,0034	0.10 0,0040	245 (240 — 320) 800 (790 — 1000)
N3	E	0.300 0,300	0.30 0,30	0.030 0,0012	0.048 0,0019	0.060 0,0024	0.085 0,0034	0.10 0,0040	165 (160 — 210) 540 (530 — 680)
N11	E	0.300 0,300	0.30 0,30	0.030 0,0012	0.048 0,0019	0.060 0,0024	0.085 0,0034	0.10 0,0040	320 (300 — 430) 1050 (990 — 1400)
TS1	A	0.300 0,300	0.30 0,30	0.030 0,0012	0.048 0,0019	0.060 0,0024	0.085 0,0034	0.10 0,0040	385 (370 — 510) 1275 (1300 — 1600)
TP1	A	0.300 0,300	0.30 0,30	0.030 0,0012	0.048 0,0019	0.060 0,0024	0.085 0,0034	0.10 0,0040	385 (370 — 510) 1275 (1300 — 1600)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster



HARD

Seco offers a complete range of high performance solid carbide square shoulder end mills, ballnose cutters and finish end mills for high productivity for hardened steel.

- JHP170, JHF181, JH120, JH130, JH930, JH142, JME142 and JME144 for radius type.
- JH112, JH150, JH160 and JMB112 for ball-nose type.

Tool Selection Hard

							
Name		JHP170	JHF181	JH120	JH130	JH930	JH142
Page(s)		497	500	503	505	225, 507	302, 510
Family name		HPM	HFM	HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	HSM/TORNADO
Type of mill							
Shank	Cylindrical	■	■	■	■	■	■
	Weldon	■					
Number of Flutes		3-4	3-4-5	4	5-6, 8	5-6, 8	2-4-5-6
CSP			■				
Diameter range	Metric	2-20	1-10	2-16	6-20	6-20	2-12
	Inch						
Length availability		2	1,2,3,4	2	2	2	2,3,6
Operation							
							
							
SMG							
H3		●	●	●	●	●	●
H5		●	●	●	●	●	●
H7		●	●	●	●	●	●
H8		●	●	●	●	●	●
H11		●	●	●	●	●	
H12		●	●	●	●	●	
H21		●	●	●	●	●	●
H31		●	●	●	●	●	●

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Hard

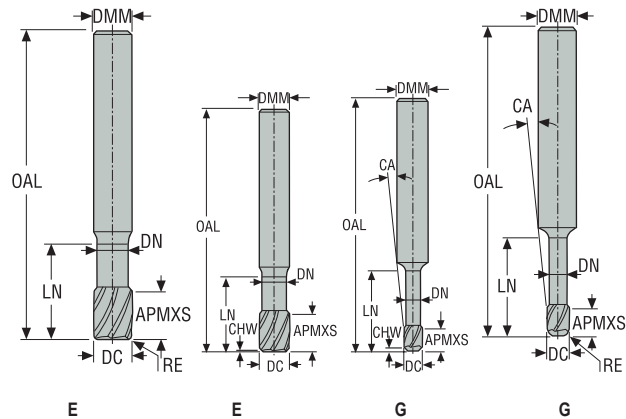
							
Name		JH112	JH150	JH160	JME142	JME144	JMB112
Page(s)		313, 513	516	518	520	525	527
Family name		HSM/TORNADO	HSM/TORNADO	HSM/TORNADO	MINI	MINI	MINI
Type of mill							
Shank	Cylindrical	■	■	■	■	■	■
	Weldon						
Number of Flutes		2	4	4	2	4	2
CSP							
Diameter range	Metric	2-12	6-12	3-12	0,2-3,0	1,0-3,0	0,2-3,0
	Inch						
Length availability		1,2,3,4,5,6	2	2	1,2,3,4,5,6	2,3,4	1,2,3,4,5,6
Operation							
							
							
SMG							
H3		●	●	●	●	●	●
H5		●	●	●	●	●	●
H7		●	●	●	●	●	●
H8		●	●	●	●	●	●
H11			●	●	●	●	●
H12			●	●	●	●	●
H21		●	●	●	●	●	●
H31		●	●	●	●	●	●

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

JHP170

High performance – Hardened steel – Square – 3-4 Flutes – Cylindrical – Corner radius or chamfer



- Tolerances:
- DMM= h5
- DC= -0,02/-0,04 mm
- CHW= Ø2- Ø4=+0,05 mm
- CHW= Ø5-Ø16=+0,1 mm
- RE= ±0,05 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm	mm				
170020.0-MEGA-64	02462685	2	G	2,0	6,0	2,0	50,0	4,0	1,9	0,08	—	14,5	3	Cylindrical	■
170020R020.0-MEGA-64	02587615	2	G	2,0	6,0	2,0	50,0	4,0	1,9	—	0,2	14,5	3	Cylindrical	■
170020R050.0-MEGA-64	02587617	2	G	2,0	6,0	2,0	50,0	4,0	1,9	—	0,5	15,0	3	Cylindrical	■
170030.0-MEGA-64	02462686	2	G	3,0	6,0	3,0	50,0	6,0	2,8	0,08	—	9,0	3	Cylindrical	■
170030R020.0-MEGA-64	02587618	2	G	3,0	6,0	3,0	50,0	6,0	2,8	—	0,2	9,5	3	Cylindrical	■
170030R050.0-MEGA-64	02587619	2	G	3,0	6,0	3,0	50,0	6,0	2,8	—	0,5	9,5	3	Cylindrical	■
170040.0-MEGA-64	02462687	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,1	—	5,5	4	Cylindrical	■
170040R020.0-MEGA-64	02587620	2	G	4,0	6,0	4,0	50,0	8,0	3,7	—	0,2	5,5	4	Cylindrical	■
170040R050.0-MEGA-64	02587621	2	G	4,0	6,0	4,0	50,0	8,0	3,7	—	0,5	5,5	4	Cylindrical	■
170050.0-MEGA-64	02462688	2	G	5,0	6,0	5,0	50,0	10,0	4,6	0,12	—	2,5	4	Cylindrical	■
170050R020.0-MEGA-64	02587622	2	G	5,0	6,0	5,0	50,0	10,0	4,6	—	0,2	2,5	4	Cylindrical	■
170050R050.0-MEGA-64	02587623	2	G	5,0	6,0	5,0	50,0	10,0	4,6	—	0,5	2,5	4	Cylindrical	■
170060.0-MEGA-64	02462689	2	E	6,0	6,0	6,0	50,0	11,5	5,6	0,14	—	—	4	Cylindrical	■
170060R020.0-MEGA-64	02587624	2	E	6,0	6,0	6,0	50,0	11,5	5,6	—	0,2	—	4	Cylindrical	■
170060R050.0-MEGA-64	02587625	2	E	6,0	6,0	6,0	50,0	11,5	5,6	—	0,5	—	4	Cylindrical	■
170080.0-MEGA-64	02462690	2	E	8,0	8,0	8,0	55,0	16,0	7,4	0,16	—	—	4	Cylindrical	■
170080R020.0-MEGA-64	02587626	2	E	8,0	8,0	8,0	55,0	16,0	7,4	—	0,2	—	4	Cylindrical	■
170080R050.0-MEGA-64	02587627	2	E	8,0	8,0	8,0	55,0	16,0	7,4	—	0,5	—	4	Cylindrical	■
170080R100.0-MEGA-64	02587628	2	E	8,0	8,0	8,0	55,0	16,0	7,4	—	1,0	—	4	Cylindrical	■
170100.0-MEGA-64	02462691	2	E	10,0	10,0	10,0	65,0	22,0	9,4	0,18	—	—	4	Cylindrical	■
170100R050.0-MEGA-64	02587629	2	E	10,0	10,0	10,0	65,0	22,0	9,4	—	0,5	—	4	Cylindrical	■
170100R100.0-MEGA-64	02587630	2	E	10,0	10,0	10,0	65,0	22,0	9,4	—	1,0	—	4	Cylindrical	■
170120.0-MEGA-64	02462692	2	E	12,0	12,0	12,0	75,0	27,0	11,4	0,2	—	—	4	Cylindrical	■
170120R050.0-MEGA-64	02587631	2	E	12,0	12,0	12,0	75,0	27,0	11,4	—	0,5	—	4	Cylindrical	■
170120R100.0-MEGA-64	02587632	2	E	12,0	12,0	12,0	75,0	27,0	11,4	—	1,0	—	4	Cylindrical	■
170160.0-MEGA-64	02462693	2	E	16,0	16,0	16,0	80,0	29,0	15,4	0,3	—	—	4	Cylindrical	■
170160R050.0-MEGA-64	02587633	2	E	16,0	16,0	16,0	80,0	29,0	15,4	—	0,5	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

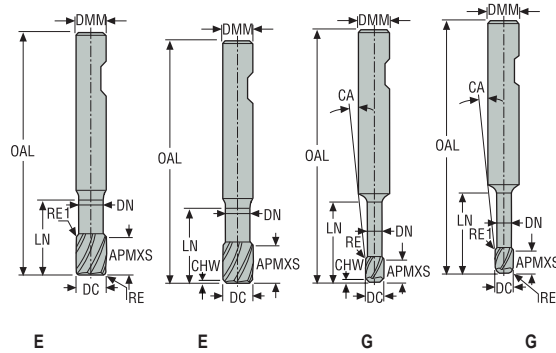
Graphite

X-Heads

Minimaster

JHP170

High performance – Hardened steel – Square – 3-4 Flutes – Weldon – Corner radius or chamfer



—Tolerances:
—DMM= h5
—DC= -0,02/-0,04 mm
—CHW= Ø2-Ø4=+0,05 mm
—CHW= Ø5-Ø16= +0,1 mm
—RE= ±0,05 mm
—Regrind possible if DC is ≥Ø6



	Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CHW	RE	CA°	PCEDC	Shank	Stock standard
Hard	170020-MEGA-64	02452924	2	G	2,0	6,0	2,0	50,0	4,0	1,9	0,08	—	14,5	3	Weldon	■
	170020R020.0-MEGA-64W	02669319	2	G	2,0	6,0	2,0	50,0	4,0	1,9	—	0,2	—	3	Weldon	□
	170020R050.0-MEGA-64W	02669320	2	G	2,0	6,0	2,0	50,0	4,0	1,9	—	0,5	—	3	Weldon	□
	170030-MEGA-64	02452925	2	G	3,0	6,0	3,0	50,0	6,0	2,8	0,08	—	9,0	3	Weldon	■
Plastic and cfrp	170030R020.0-MEGA-64W	02669321	2	G	3,0	6,0	3,0	50,0	6,0	2,8	—	0,2	—	3	Weldon	□
	170030R050.0-MEGA-64W	02669322	2	G	3,0	6,0	3,0	50,0	6,0	2,8	—	0,5	—	3	Weldon	□
	170040-MEGA-64	02452927	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,1	—	5,5	4	Weldon	■
	170040R020.0-MEGA-64W	02669323	2	G	4,0	6,0	4,0	50,0	8,0	3,7	—	0,2	—	4	Weldon	□
Graphite	170040R050.0-MEGA-64W	02669324	2	G	4,0	6,0	4,0	50,0	8,0	3,7	—	0,5	—	4	Weldon	□
	170050-MEGA-64	02452928	2	G	5,0	6,0	5,0	50,0	10,0	4,6	0,12	—	2,5	4	Weldon	■
	170050R020.0-MEGA-64W	02669325	2	G	5,0	6,0	5,0	50,0	10,0	4,6	—	0,2	—	4	Weldon	□
	170050R050.0-MEGA-64W	02669326	2	G	5,0	6,0	5,0	50,0	10,0	4,6	—	0,5	—	4	Weldon	□
X-Heads	170060-MEGA-64	02452929	2	E	6,0	6,0	6,0	50,0	11,5	5,6	0,14	—	—	4	Weldon	■
	170060R020.0-MEGA-64W	02669327	2	E	6,0	6,0	6,0	50,0	11,5	5,6	—	0,2	—	4	Weldon	□
	170060R050.0-MEGA-64W	02669328	2	E	6,0	6,0	6,0	50,0	11,5	5,6	—	0,5	—	4	Weldon	□
	170080-MEGA-64	02452930	2	E	8,0	8,0	8,0	55,0	16,0	7,4	0,16	—	—	4	Weldon	■
Minimaster	170080R020.0-MEGA-64W	02669329	2	E	8,0	8,0	8,0	55,0	16,0	7,4	—	0,2	—	4	Weldon	□
	170080R050.0-MEGA-64W	02669331	2	E	8,0	8,0	8,0	55,0	16,0	7,4	—	0,5	—	4	Weldon	□
	170080R100.0-MEGA-64W	02669332	2	E	8,0	8,0	8,0	55,0	16,0	7,4	—	1,0	—	4	Weldon	□
	170100-MEGA-64	02452931	2	E	10,0	10,0	10,0	65,0	22,0	9,4	0,18	—	—	4	Weldon	■
	170100R050.0-MEGA-64W	02669333	2	E	10,0	10,0	10,0	65,0	22,0	9,4	—	0,5	—	4	Weldon	□
	170100R100.0-MEGA-64W	02669334	2	E	10,0	10,0	10,0	65,0	22,0	9,4	—	1,0	—	4	Weldon	□
	170120-MEGA-64	02452932	2	E	12,0	12,0	12,0	75,0	27,0	11,4	0,2	—	—	4	Weldon	■
	170120R050.0-MEGA-64W	02669335	2	E	12,0	12,0	12,0	75,0	27,0	11,4	—	0,5	—	4	Weldon	□
	170120R100.0-MEGA-64W	02669336	2	E	12,0	12,0	12,0	75,0	27,0	11,4	—	1,0	—	4	Weldon	□
	170160-MEGA-64	02452933	2	E	16,0	16,0	16,0	80,0	29,0	15,4	0,3	—	—	4	Weldon	■
	170160R050.0-MEGA-64W	02669337	2	E	16,0	16,0	16,0	80,0	29,0	15,4	—	0,5	—	4	Weldon	□
	170200R050-MEGA-64	02611637	2	E	20,0	20,0	20,0	100,0	40,0	19,2	—	0,5	—	4	Weldon	■

■ Stocked standard. □ Weldon available. Delivery time is 3 days.

Cutting data – JHP170 Side milling

SMG		a_e/DC	a_p/DC	f_z										v_c
				2	3	4	5	6	8	10	12	16	20	
H3	M	0.150 0.150	0.60 0.60	0.0055 0.00022	0.0085 0.00034	0.011 0.00044	0.014 0.00055	0.017 0.00065	0.022 0.00085	0.028 0.0011	0.034 0.0013	0.042 0.0017	0.048 0.0019	29 (22 — 35) 95 (73 — 110)
H5	M	0.300 0.300	0.80 0.80	0.012 0.00048	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.060 0.0024	0.070 0.0028	0.090 0.0036	0.10 0.0040	60 (56 — 68) 195 (190 — 220)
H7	M	0.150 0.150	0.60 0.60	0.0055 0.00022	0.0085 0.00034	0.011 0.00044	0.014 0.00055	0.017 0.00065	0.022 0.00085	0.028 0.0011	0.034 0.0013	0.042 0.0017	0.048 0.0019	29 (22 — 35) 95 (73 — 110)
H8	M	0.300 0.300	0.80 0.80	0.0090 0.00036	0.014 0.00055	0.018 0.00070	0.022 0.00085	0.028 0.0011	0.036 0.0014	0.046 0.0018	0.055 0.0022	0.065 0.0026	0.080 0.0032	65 (59 — 71) 215 (200 — 230)
H11	M	0.300 0.300	0.80 0.80	0.012 0.00048	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.060 0.0024	0.070 0.0028	0.090 0.0036	0.10 0.0040	80 (71 — 86) 260 (240 — 280)
H12	M	0.300 0.300	0.80 0.80	0.0090 0.00036	0.014 0.00055	0.018 0.00070	0.022 0.00085	0.028 0.0011	0.036 0.0014	0.046 0.0018	0.055 0.0022	0.065 0.0026	0.080 0.0032	75 (69 — 83) 245 (230 — 270)
H21	M	0.300 0.300	0.80 0.80	0.0090 0.00036	0.014 0.00055	0.018 0.00070	0.022 0.00085	0.028 0.0011	0.036 0.0014	0.046 0.0018	0.055 0.0022	0.065 0.0026	0.080 0.0032	65 (59 — 71) 215 (200 — 230)
H31	M	0.300 0.300	0.80 0.80	0.012 0.00048	0.018 0.00070	0.024 0.00095	0.030 0.0012	0.036 0.0014	0.048 0.0019	0.060 0.0024	0.070 0.0028	0.090 0.0036	0.10 0.0040	60 (56 — 68) 195 (190 — 220)

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Cutting data – JHP170 Slot milling

SMG		a_p/DC	f_z										v_c
			2	3	4	5	6	8	10	12	16	20	
H3	M	0.40 0.40	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.024 0.00095	0.030 0.0012	0.034 0.0013	20 (16 — 25) 65 (53 — 82)
H5	M	0.60 0.60	0.0080 0.00032	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.032 0.0013	0.040 0.0016	0.050 0.0020	0.065 0.0026	0.080 0.0032	50 (46 — 55) 165 (160 — 180)
H7	M	0.40 0.40	0.0040 0.00016	0.0060 0.00024	0.0080 0.00032	0.010 0.00040	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.024 0.00095	0.030 0.0012	0.034 0.0013	20 (16 — 25) 65 (53 — 82)
H8	M	0.60 0.60	0.0080 0.00032	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.032 0.0013	0.040 0.0016	0.050 0.0020	0.065 0.0026	0.080 0.0032	50 (46 — 55) 165 (160 — 180)
H11	M	0.60 0.60	0.0080 0.00032	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.032 0.0013	0.040 0.0016	0.050 0.0020	0.065 0.0026	0.080 0.0032	50 (46 — 55) 215 (200 — 220)
H12	M	0.60 0.60	0.0080 0.00032	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.032 0.0013	0.040 0.0016	0.050 0.0020	0.065 0.0026	0.080 0.0032	50 (46 — 55) 195 (180 — 200)
H21	M	0.60 0.60	0.0080 0.00032	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.032 0.0013	0.040 0.0016	0.050 0.0020	0.065 0.0026	0.080 0.0032	50 (46 — 55) 165 (160 — 180)
H31	M	0.60 0.60	0.0080 0.00032	0.012 0.00048	0.016 0.00065	0.020 0.00080	0.025 0.0010	0.032 0.0013	0.040 0.0016	0.050 0.0020	0.065 0.0026	0.080 0.0032	50 (46 — 55) 165 (160 — 180)

Non ferrous

Hard

Plastic and cfpr

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

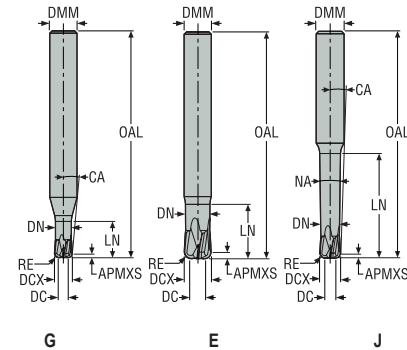
Graphite

X-Heads

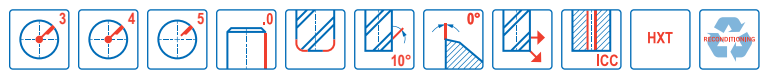
Minimaster

JHF181

High feed – Hardened steel – Square – 3-5 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC=−0,02/−0,04 mm
—RE= ±0,01 mm
—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	CSP	DCX	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PCEDC	Shank	Stock standard
JHF181020G1R050.0Z4-HXT	03067297	1	G	—	2,0	1,0	6,0	0,5	50,0	4,0	1,8	0,5	10,0	—	4	Cylindrical	■
JHF181030G1R075.0Z4-HXT	03067298	1	G	—	3,0	1,5	6,0	0,75	50,0	6,0	2,7	0,75	7,5	—	4	Cylindrical	■
JHF181040G1R100.0Z4-HXT	03067299	1	G	—	4,0	2,0	6,0	1,0	50,0	8,0	3,6	1,0	5,0	—	4	Cylindrical	■
JHF181060E1R150.0Z4-HXT	03067300	1	E	—	6,0	3,0	6,0	1,5	50,0	12,0	5,4	1,5	—	—	4	Cylindrical	■
JHF181080E1R200.0Z4-HXT	03067301	1	E	—	8,0	4,0	8,0	2,0	55,0	16,0	7,3	2,0	—	—	4	Cylindrical	■
JHF181100E1R200.0Z4-HXT	03067302	1	E	—	10,0	6,0	10,0	2,0	65,0	20,0	9,2	2,0	—	—	4	Cylindrical	■
JHF181100E1R200.0Z5-HXT	03067303	1	E	—	10,0	6,0	10,0	2,0	65,0	20,0	9,2	2,0	—	—	5	Cylindrical	■
JHF181120E1R300.0Z4-HXT	03067304	1	E	—	12,0	6,0	12,0	3,0	75,0	24,0	11,0	3,0	—	—	4	Cylindrical	■
JHF181120E1R300.0Z5-HXT	03067305	1	E	—	12,0	6,0	12,0	3,0	75,0	24,0	11,0	3,0	—	—	5	Cylindrical	■
JHF181160E1R300.0Z4-HXT	03067306	1	E	—	16,0	10,0	16,0	3,0	80,0	32,0	14,8	3,0	—	—	4	Cylindrical	■
JHF181020G2R050.0Z4-HXT	03067307	2	G	—	2,0	1,0	6,0	0,5	50,0	8,0	1,8	0,5	7,5	—	4	Cylindrical	■
JHF181030G2R075.0Z4-HXT	03067308	2	G	—	3,0	1,5	6,0	0,75	50,0	12,0	2,7	0,75	5,0	—	4	Cylindrical	■
JHF181040G2R100.0Z4-HXT	03067309	2	G	—	4,0	2,0	6,0	1,0	50,0	16,0	3,6	1,0	3,0	—	4	Cylindrical	■
JHF181060E2R150.0Z4A-HXT	03067311	2	E	■	6,0	3,0	6,0	1,5	65,0	24,0	5,4	1,5	—	—	4	Cylindrical	■
JHF181060E2R150.0Z4-HXT	03067310	2	E	—	6,0	3,0	6,0	1,5	65,0	24,0	5,4	1,5	—	—	4	Cylindrical	■
JHF181080E2R200.0Z4A-HXT	03067313	2	E	■	8,0	4,0	8,0	2,0	70,0	32,0	7,3	2,0	—	—	4	Cylindrical	■
JHF181080E2R200.0Z4-HXT	03067312	2	E	—	8,0	4,0	8,0	2,0	70,0	32,0	7,3	2,0	—	—	4	Cylindrical	■
JHF181100E2R200.0Z4A-HXT	03067315	2	E	■	10,0	6,0	10,0	2,0	85,0	40,0	9,2	2,0	—	—	4	Cylindrical	■
JHF181100E2R200.0Z4-HXT	03067314	2	E	—	10,0	6,0	10,0	2,0	85,0	40,0	9,2	2,0	—	—	4	Cylindrical	■
JHF181120E2R300.0Z4A-HXT	03067317	2	E	■	12,0	6,0	12,0	3,0	100,0	48,0	11,0	3,0	—	—	4	Cylindrical	■
JHF181120E2R300.0Z4-HXT	03067316	2	E	—	12,0	6,0	12,0	3,0	100,0	48,0	11,0	3,0	—	—	4	Cylindrical	■
JHF181020J3R050.0Z4-HXT	03067318	3	J	—	2,0	1,0	6,0	0,5	50,0	10,0	1,8	0,5	6,8	0,9	4	Cylindrical	■
JHF181030J3R075.0Z4-HXT	03067319	3	J	—	3,0	1,5	6,0	0,75	50,0	15,0	2,7	0,75	4,4	0,9	4	Cylindrical	■
JHF181040J3R100.0Z4-HXT	03067320	3	J	—	4,0	2,0	6,0	1,0	60,0	20,0	3,6	1,0	2,6	0,9	4	Cylindrical	■
JHF181060J3R150.0Z4-HXT	03067321	3	J	—	6,0	3,0	8,0	1,5	65,0	30,0	5,4	1,5	1,9	0,9	4	Cylindrical	■
JHF181080J3R200.0Z4-HXT	03067325	3	J	—	8,0	4,0	10,0	2,0	85,0	40,0	7,3	2,0	1,5	0,9	4	Cylindrical	■
JHF181100J3R200.0Z4-HXT	03067327	3	J	—	10,0	6,0	12,0	2,0	100,0	50,0	9,2	2,0	1,2	0,9	4	Cylindrical	■
JHF181020J4R050.0Z3-HXT	03067329	4	J	—	2,0	1,0	6,0	0,5	50,0	14,0	1,8	0,5	5,6	0,9	3	Cylindrical	■
JHF181030J4R075.0Z3-HXT	03067330	4	J	—	3,0	1,5	6,0	0,75	60,0	21,0	2,7	0,75	3,4	0,9	3	Cylindrical	■
JHF181040J4R100.0Z3-HXT	03067331	4	J	—	4,0	2,0	6,0	1,0	65,0	28,0	3,6	1,0	2,0	0,9	3	Cylindrical	■
JHF181060J4R150.0Z3-HXT	03067332	4	J	—	6,0	3,0	8,0	1,5	80,0	42,0	5,4	1,5	1,4	0,9	3	Cylindrical	■
JHF181080J4R200.0Z3-HXT	03067333	4	J	—	8,0	4,0	10,0	2,0	100,0	56,0	7,3	2,0	1,1	0,9	3	Cylindrical	■
JHF181100J4R200.0Z3-HXT	03067334	4	J	—	10,0	6,0	12,0	2,0	125,0	70,0	9,2	2,0	0,9	0,9	3	Cylindrical	■

■ Stocked standard.

Cutting data – JHF181 Side milling roughing

SMG		a_e/DCX	a_p/DCX	f_z								v_c	
				2	3	4	6	8	10	12	16		
P6	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	305 (290 — 320) 1000 (960 — 1000)	Universal
P7	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	290 (270 — 300) 950 (890 — 980)	
P8	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	270 (260 — 290) 890 (860 — 950)	Steel and cast iron
P11	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	280 (270 — 290) 920 (890 — 950)	
K1	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	210 (190 — 240) 690 (630 — 780)	Steel and stainless steel
K2	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	185 (160 — 200) 610 (530 — 650)	
K3	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	155 (140 — 170) 510 (460 — 550)	Stainless steel and S-materials
K4	E/M/A	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	150 (130 — 160) 490 (430 — 520)	
K5	E/M/A	0.30 0,30	0.040 0,040	0.050 0,0020	0.080 0,0032	0.10 0,0040	0.16 0,0065	0.20 0,0080	0.26 0,010	0.32 0,013	0.42 0,017	150 (120 — 170) 490 (400 — 550)	Non ferrous
K6	E/M/A	0.30 0,30	0.040 0,040	0.050 0,0020	0.080 0,0032	0.10 0,0040	0.16 0,0065	0.20 0,0080	0.26 0,010	0.32 0,013	0.42 0,017	220 (180 — 260) 720 (600 — 850)	
K7	E/M/A	0.30 0,30	0.040 0,040	0.050 0,0020	0.080 0,0032	0.10 0,0040	0.16 0,0065	0.20 0,0080	0.26 0,010	0.32 0,013	0.42 0,017	190 (160 — 220) 620 (530 — 720)	Hard
S1	E	0.18 0,18	0.014 0,014	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.075 0,0030	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.19 0,0075	60 (40 — 79) 195 (140 — 250)	
S2	E	0.18 0,18	0.014 0,014	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.075 0,0030	0.10 0,0040	0.13 0,0050	0.15 0,0060	0.19 0,0075	48 (33 — 64) 155 (110 — 200)	Hard
S3	E	0.18 0,18	0.014 0,014	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.070 0,0028	0.095 0,0038	0.12 0,0048	0.14 0,0055	0.17 0,0065	42 (28 — 55) 140 (92 — 180)	
S11	E	0.18 0,18	0.034 0,034	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.11 0,0044	0.14 0,0055	0.18 0,0070	0.22 0,0085	0.26 0,010	200 (180 — 220) 660 (600 — 720)	Hard
S12	E	0.18 0,18	0.034 0,034	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.11 0,0044	0.14 0,0055	0.18 0,0070	0.22 0,0085	0.26 0,010	155 (140 — 170) 510 (460 — 550)	
S13	E	0.18 0,18	0.034 0,034	0.032 0,0013	0.046 0,0018	0.065 0,0026	0.095 0,0038	0.13 0,0050	0.16 0,0065	0.18 0,0070	0.24 0,0095	125 (110 — 130) 410 (370 — 420)	Plastic and cfrp
H3	M/A/D	0.30 0,30	0.020 0,020	0.050 0,0020	0.080 0,0032	0.10 0,0040	0.16 0,0065	0.20 0,0080	0.26 0,010	0.32 0,013	0.42 0,017	85 (73 — 96) 280 (240 — 310)	
H5	M/A/D	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	165 (150 — 180) 540 (500 — 590)	Plastic and cfrp
H7	M/A/D	0.30 0,30	0.020 0,020	0.050 0,0020	0.080 0,0032	0.10 0,0040	0.16 0,0065	0.20 0,0080	0.26 0,010	0.32 0,013	0.42 0,017	85 (73 — 96) 280 (240 — 310)	
H8	M/A/D	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	165 (150 — 180) 540 (500 — 590)	Graphite
H11	M/A/D	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	210 (190 — 230) 690 (630 — 750)	
H12	M/A/D	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	190 (180 — 210) 620 (600 — 680)	Graphite
H21	M/A/D	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	165 (150 — 180) 540 (500 — 590)	
H31	M/A/D	0.30 0,30	0.040 0,040	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.20 0,0080	0.28 0,011	0.34 0,013	0.40 0,016	0.55 0,022	125 (120 — 130) 410 (400 — 420)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JHF181 Slot milling

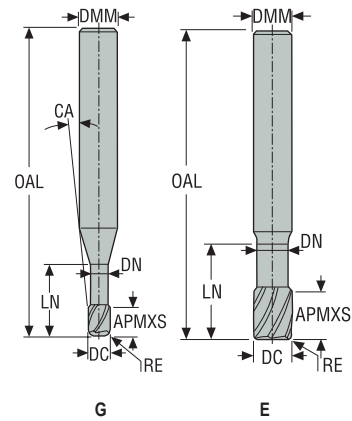
	SMG		a_p/DCX	f_z								v_c
				2	3	4	6	8	10	12	16	
Universal	P6	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	270 (260 — 280) 890 (860 — 910)
Steel and cast iron	P7	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	255 (240 — 270) 840 (790 — 880)
	P8	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	240 (230 — 250) 790 (760 — 820)
	P11	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	250 (240 — 260) 820 (790 — 850)
	K1	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	185 (170 — 210) 610 (560 — 680)
Stainless steel and S-materials	K2	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	160 (140 — 180) 520 (460 — 590)
	K3	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	135 (120 — 150) 445 (400 — 490)
	K4	E/M/A	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	130 (120 — 140) 425 (400 — 450)
	K5	E/M/A	0.040 0,040	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.24 0,0095	130 (110 — 150) 425 (370 — 490)
Non ferrous	K6	E/M/A	0.040 0,040	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.24 0,0095	195 (160 — 230) 640 (530 — 750)
	K7	E/M/A	0.040 0,040	0.030 0,0012	0.046 0,0018	0.060 0,0024	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	0.24 0,0095	170 (140 — 200) 560 (460 — 650)
	S1	E	0.014 0,014	0.0090 0,00036	0.014 0,00055	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	48 (33 — 64) 155 (110 — 200)
	S2	E	0.014 0,014	0.0090 0,00036	0.014 0,00055	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	39 (26 — 51) 130 (86 — 160)
Hard	S3	E	0.014 0,014	0.0090 0,00036	0.014 0,00055	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.046 0,0018	0.055 0,0022	0.070 0,0028	33 (23 — 44) 110 (76 — 140)
	S11	E	0.034 0,034	0.011 0,00044	0.017 0,00065	0.022 0,00085	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.090 0,0036	170 (150 — 190) 560 (500 — 620)
	S12	E	0.034 0,034	0.011 0,00044	0.017 0,00065	0.022 0,00085	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.090 0,0036	130 (120 — 140) 425 (400 — 450)
	S13	E	0.034 0,034	0.011 0,00044	0.017 0,00065	0.022 0,00085	0.034 0,0013	0.046 0,0018	0.055 0,0022	0.070 0,0028	0.090 0,0036	100 (89 — 110) 330 (300 — 360)
Plastic and cf/rp	H3	M/A/D	0.020 0,020	0.034 0,0013	0.050 0,0020	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	0.28 0,011	75 (63 — 83) 245 (210 — 270)
	H5	M/A/D	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	145 (130 — 160) 475 (430 — 520)
	H7	M/A/D	0.020 0,020	0.034 0,0013	0.050 0,0020	0.070 0,0028	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	0.28 0,011	75 (63 — 83) 245 (210 — 270)
	H8	M/A/D	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	145 (130 — 160) 475 (430 — 520)
Graphite	H11	M/A/D	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	185 (170 — 200) 610 (560 — 650)
	H12	M/A/D	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	170 (160 — 180) 560 (530 — 590)
	H21	M/A/D	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	145 (130 — 160) 475 (430 — 520)
	H31	M/A/D	0.040 0,040	0.042 0,0017	0.065 0,0026	0.085 0,0034	0.13 0,0050	0.17 0,0065	0.20 0,0080	0.25 0,010	0.34 0,013	110 (98 — 120) 360 (330 — 390)

For cutting data recalculations, see pages 687 – 695

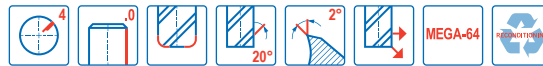
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH120

High speed – Hardened steel – Square – 4 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=−0,02/−0,03 mm
- RE= ±0,01 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
120020-MEGA-64	00019437	2	G	2,0	6,0	2,5	50,0	5,0	1,9	0,2	10,5	4	Cylindrical	■
120025-MEGA-64	00019448	2	G	2,5	6,0	3,0	50,0	6,0	2,4	0,25	8,5	4	Cylindrical	■
120030-MEGA-64	00019450	2	G	3,0	6,0	4,0	50,0	7,0	2,8	0,3	7,0	4	Cylindrical	■
120035-MEGA-64	00019460	2	G	3,5	6,0	4,5	50,0	8,0	3,2	0,35	5,5	4	Cylindrical	■
120040-MEGA-64	00019462	2	G	4,0	6,0	5,0	50,0	9,0	3,7	0,4	4,5	4	Cylindrical	■
120050-MEGA-64	00019476	2	G	5,0	6,0	6,0	50,0	12,0	4,6	0,5	2,5	4	Cylindrical	■
120060-MEGA-64	00019479	2	E	6,0	6,0	7,0	55,0	14,0	5,6	0,6	—	4	Cylindrical	■
120080-MEGA-64	00019481	2	E	8,0	8,0	10,0	60,0	18,0	7,4	0,8	—	4	Cylindrical	■
120100-MEGA-64	00019494	2	E	10,0	10,0	12,0	70,0	25,0	9,4	1,0	—	4	Cylindrical	■
120120-MEGA-64	00019501	2	E	12,0	12,0	15,0	80,0	30,0	11,4	1,2	—	4	Cylindrical	■
120160-MEGA-64	00019503	2	E	16,0	16,0	18,0	90,0	35,0	15,4	1,6	—	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH120 Side milling

SMG		a _e /DC	a _p /DC	f _z											v _c
				2	2.5	3	3.5	4	5	6	8	10	12	16	
H3	M	0.0150 0,0150	0.50 0,50	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.016 0,00065	0.019 0,00075	0.024 0,00095	0.028 0,0011	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.070 0,0028	90 (57 — 130) 295 (190 — 420)
H5	M	0.0300 0,0300	1.0 1,0	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	215 (180 — 250) 710 (600 — 820)
H7	M	0.0150 0,0150	0.50 0,50	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.016 0,00065	0.019 0,00075	0.024 0,00095	0.028 0,0011	0.038 0,0015	0.048 0,0019	0.055 0,0022	0.070 0,0028	90 (57 — 130) 295 (190 — 420)
H8	M	0.0300 0,0300	1.0 1,0	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	215 (180 — 250) 710 (600 — 820)
H11	M	0.0300 0,0300	1.0 1,0	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	275 (230 — 320) 900 (760 — 1000)
H12	M	0.0300 0,0300	1.0 1,0	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	250 (210 — 290) 820 (690 — 950)
H21	M	0.0300 0,0300	1.0 1,0	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	215 (180 — 250) 710 (600 — 820)
H31	M	0.0300 0,0300	1.0 1,0	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.095 0,0038	135 (120 — 150) 445 (400 — 490)

Cutting data – JH120 Slot milling

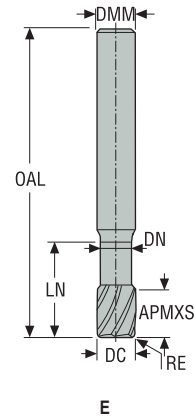
SMG		a _p /DC	f _z											v _c
			2	2.5	3	3.5	4	5	6	8	10	12	16	
H3	M	0.050 0,050	0.0050 0,00020	0.0065 0,00026	0.0075 0,00030	0.0090 0,00036	0.010 0,00040	0.013 0,00050	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.038 0,0015	55 (34 — 78) 180 (120 — 250)
H5	M	0.18 0,18	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.014 0,00055	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	120 (98 — 140) 395 (330 — 450)
H7	M	0.050 0,050	0.0050 0,00020	0.0065 0,00026	0.0075 0,00030	0.0090 0,00036	0.010 0,00040	0.013 0,00050	0.015 0,00060	0.020 0,00080	0.025 0,0010	0.030 0,0012	0.038 0,0015	55 (34 — 78) 180 (120 — 250)
H8	M	0.18 0,18	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.011 0,00044	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.025 0,0010	0.030 0,0012	0.036 0,0014	0.044 0,0017	125 (110 — 140) 410 (370 — 450)
H11	M	0.18 0,18	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.014 0,00055	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	150 (130 — 170) 490 (430 — 550)
H12	M	0.18 0,18	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.011 0,00044	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.025 0,0010	0.030 0,0012	0.036 0,0014	0.044 0,0017	145 (120 — 170) 475 (400 — 550)
H21	M	0.18 0,18	0.0060 0,00024	0.0075 0,00030	0.0090 0,00036	0.011 0,00044	0.012 0,00048	0.015 0,00060	0.018 0,00070	0.025 0,0010	0.030 0,0012	0.036 0,0014	0.044 0,0017	125 (110 — 140) 410 (370 — 450)
H31	M	0.18 0,18	0.0055 0,00022	0.0065 0,00026	0.0080 0,00032	0.0090 0,00036	0.011 0,00044	0.013 0,00050	0.016 0,00065	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.038 0,0015	80 (70 — 92) 260 (230 — 300)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH130

High speed – Hardened steel – Square – 5-8 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=-0,02/-0,04 mm
- RE= ±0,05 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
130060-MEGA-64	00019504	2	E	6,0	6,0	6,0	55,0	12,0	5,6	0,2	5	Cylindrical	■
130080-MEGA-64	00019507	2	E	8,0	8,0	8,0	60,0	16,0	7,4	0,2	5	Cylindrical	■
130100-MEGA-64	00019511	2	E	10,0	10,0	10,0	70,0	20,0	9,4	0,3	6	Cylindrical	■
130120-MEGA-64	00019512	2	E	12,0	12,0	12,0	80,0	24,0	11,4	0,5	6	Cylindrical	■
130160-MEGA-64	00019514	2	E	16,0	16,0	16,0	90,0	30,0	15,4	0,5	8	Cylindrical	■
130200-MEGA-64	00019542	2	E	20,0	20,0	20,0	100,0	35,0	19,2	0,5	8	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH130 Side milling finishing

SMG		a_e/DC	a_p/DC	f_z						v_c
				6	8	10	12	16	20	
H3	M	0.0300 0,0300	0.50 0,50	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.038 0,0015	85 (73 — 93) 280 (240 — 300)
H5	M	0.0300 0,0300	1.0 1,0	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	255 (240 — 270) 840 (790 — 880)
H7	M	0.0300 0,0300	0.50 0,50	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.038 0,0015	85 (73 — 93) 280 (240 — 300)
H8	M	0.0300 0,0300	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	260 (240 — 270) 850 (790 — 880)
H11	M	0.0300 0,0300	1.0 1,0	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	320 (300 — 340) 1050 (990 — 1100)
H12	M	0.0300 0,0300	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	300 (280 — 320) 980 (920 — 1000)
H21	M	0.0300 0,0300	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	260 (240 — 270) 850 (790 — 880)
H31	M	0.0300 0,0300	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	155 (140 — 170) 510 (460 — 550)

Cutting data – JH130 Side milling roughing

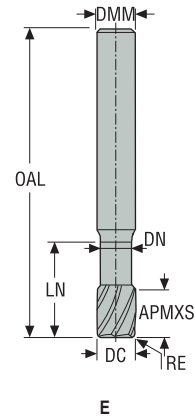
SMG		a_e/DC	a_p/DC	f_z						v_c
				6	8	10	12	16	20	
H3	M	0.0300 0,0300	0.50 0,50	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.038 0,0015	85 (73 — 93) 280 (240 — 300)
H5	M	0.0300 0,0300	1.0 1,0	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	255 (240 — 270) 840 (790 — 880)
H7	M	0.0300 0,0300	0.50 0,50	0.013 0,00050	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.038 0,0015	85 (73 — 93) 280 (240 — 300)
H8	M	0.0300 0,0300	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	260 (240 — 270) 850 (790 — 880)
H11	M	0.0300 0,0300	1.0 1,0	0.032 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.090 0,0036	320 (300 — 340) 1050 (990 — 1100)
H12	M	0.0300 0,0300	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	300 (280 — 320) 980 (920 — 1000)
H21	M	0.0300 0,0300	1.0 1,0	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.060 0,0024	0.065 0,0026	260 (240 — 270) 850 (790 — 880)
H31	M	0.0300 0,0300	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	155 (140 — 170) 510 (460 — 550)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH930

High speed – Universal – Square – 5-8 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=-0,02/-0,04 mm
- RE= ±0,05 mm
- Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
930060R020-MEGA	00022026	2	E	6,0	6,0	9,0	55,0	15,0	5,6	0,2	5	Cylindrical	■
930060R050-MEGA	00022027	2	E	6,0	6,0	9,0	55,0	15,0	5,6	0,5	5	Cylindrical	■
930080R020-MEGA	00022028	2	E	8,0	8,0	12,0	60,0	18,0	7,4	0,2	5	Cylindrical	■
930080R050-MEGA	00022029	2	E	8,0	8,0	12,0	60,0	18,0	7,4	0,5	5	Cylindrical	■
930100R030-MEGA	00022030	2	E	10,0	10,0	15,0	70,0	25,0	9,4	0,3	6	Cylindrical	■
930100R100-MEGA	00022031	2	E	10,0	10,0	15,0	70,0	25,0	9,4	1,0	6	Cylindrical	■
930120R050-MEGA	00022033	2	E	12,0	12,0	18,0	80,0	30,0	11,4	0,5	6	Cylindrical	■
930120R100-MEGA	00022034	2	E	12,0	12,0	18,0	80,0	30,0	11,4	1,0	6	Cylindrical	■
930160R050-MEGA	00022035	2	E	16,0	16,0	24,0	90,0	35,0	15,4	0,5	8	Cylindrical	■
930160R100-MEGA	00022040	2	E	16,0	16,0	24,0	90,0	35,0	15,4	1,0	8	Cylindrical	■
930200R050-MEGA	00022044	2	E	20,0	20,0	30,0	100,0	38,0	19,2	0,5	8	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH930 Side milling

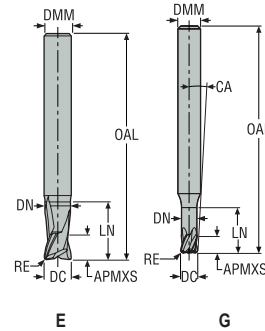
	SMG		a _e /DC	a _p /DC	f _z						v _c
					6	8	10	12	16	20	
Universal	P1	M/E/A	0.0400 0,0400	0.70 0,70	0.065 0,0026	0.085 0,0034	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.18 0,0070	440 (370 — 490) 1450 (1300 — 1600)
	P2	M/E/A	0.0400 0,0400	0.70 0,70	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	430 (360 — 480) 1400 (1200 — 1500)
Steel and cast iron	P3	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	375 (320 — 420) 1225 (1100 — 1300)
	P4	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	330 (280 — 370) 1075 (920 — 1200)
	P5	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	315 (270 — 350) 1025 (890 — 1100)
	P6	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	355 (300 — 390) 1175 (990 — 1200)
Stainless steel and S-materials	P7	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	335 (280 — 370) 1100 (920 — 1200)
	P8	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.085 0,0034	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.18 0,0070	315 (270 — 350) 1025 (890 — 1100)
	P11	M/E/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	325 (280 — 360) 1075 (920 — 1100)
	P12	M/E/A	0.0400 0,0400	0.70 0,70	0.040 0,0016	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	0.11 0,0044	200 (170 — 220) 660 (560 — 720)
Non ferrous	K1	E/M/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	255 (210 — 300) 840 (690 — 980)
	K2	E/M/A	0.0400 0,0400	0.70 0,70	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	225 (180 — 260) 740 (600 — 850)
	K3	E/M/A	0.0400 0,0400	0.70 0,70	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	190 (160 — 220) 620 (530 — 720)
	K4	E/M/A	0.0400 0,0400	0.70 0,70	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	180 (150 — 210) 590 (500 — 680)
Hard	K5	E/M/A	0.0300 0,0300	0.50 0,50	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	205 (160 — 250) 670 (530 — 820)
	K6	E/M/A	0.0300 0,0300	0.50 0,50	0.065 0,0026	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.16 0,0065	0.19 0,0075	300 (230 — 370) 980 (760 — 1200)
	K7	E/M/A	0.0300 0,0300	0.50 0,50	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	260 (200 — 320) 850 (660 — 1000)
	S1	E/M/A	0.0300 0,0300	0.44 0,44	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	80 (62 — 100) 260 (210 — 320)
Plastic and cfrp	S2	E/M/A	0.0300 0,0300	0.44 0,44	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	65 (50 — 82) 215 (170 — 260)
	S3	E/M/A	0.0200 0,0200	0.70 0,70	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	0.15 0,0060	41 (31 — 50) 135 (110 — 160)
	S11	E/M/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	160 (140 — 180) 520 (460 — 590)
	S12	E/M/A	0.0400 0,0400	0.70 0,70	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	120 (110 — 140) 395 (370 — 450)
Graphite	S13	E/M/A	0.0400 0,0400	0.70 0,70	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.13 0,0050	0.15 0,0060	95 (81 — 110) 310 (270 — 360)
	H3	M/A	0.0200 0,0200	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	55 (41 — 71) 180 (140 — 230)
	H5	M/A	0.0300 0,0300	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	250 (210 — 300) 820 (690 — 980)
	H7	M/A	0.0200 0,0200	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	55 (41 — 71) 180 (140 — 230)
X-Heads	H8	M/A	0.0300 0,0300	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	255 (210 — 300) 840 (690 — 980)
	H11	M/A	0.0300 0,0300	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	320 (260 — 380) 1050 (860 — 1200)
	H12	M/A	0.0400 0,0400	0.70 0,70	0.030 0,0012	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.075 0,0030	0.085 0,0034	270 (220 — 320) 890 (730 — 1000)
	H21	M/A	0.0300 0,0300	0.50 0,50	0.018 0,00070	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.044 0,0017	0.050 0,0020	255 (210 — 300) 840 (690 — 980)
Minimaster	H31	M/A	0.0300 0,0300	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.070 0,0028	155 (130 — 180) 510 (430 — 590)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JH142

High speed – High precision – Torical – Hardened steel – 2-6 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out= <0,005 mm
- DMM= h5
- DC= 0-0,01 mm
- RE= ±0,005 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JH142020G2R030.0Z2-HXT	02968223	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,3	6,64	2	Cylindrical	■
JH142020G2R030.0Z4-HXT	02968224	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,3	6,64	4	Cylindrical	■
JH142020G2R050.0Z2-HXT	02968225	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,5	6,79	2	Cylindrical	■
JH142020G2R050.0Z4-HXT	02968226	2	G	2,0	4,0	2,0	40,0	6,0	1,9	0,5	6,79	4	Cylindrical	■
JH142030G2R050.0Z2-HXT	02968227	2	G	3,0	4,0	3,0	40,0	8,0	2,8	0,5	2,95	2	Cylindrical	■
JH142030G2R050.0Z4-HXT	02968228	2	G	3,0	4,0	3,0	40,0	8,0	2,8	0,5	2,95	4	Cylindrical	■
JH142030G2R100.0Z2-HXT	02968229	2	G	3,0	4,0	3,0	40,0	8,0	2,8	1,0	3,1	2	Cylindrical	■
JH142030G2R100.0Z4-HXT	02968230	2	G	3,0	4,0	3,0	40,0	8,0	2,8	1,0	3,1	4	Cylindrical	■
JH142040G2R030.0Z2-HXT	02968231	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,3	5,34	2	Cylindrical	■
JH142040G2R030.0Z4-HXT	02970110	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,3	5,34	4	Cylindrical	■
JH142040G2R050.0Z4-HXT	02968232	2	G	4,0	6,0	4,0	50,0	8,0	3,7	0,5	5,44	4	Cylindrical	■
JH142040G2R100.0Z4-HXT	02968233	2	G	4,0	6,0	4,0	50,0	8,0	3,7	1,0	5,69	4	Cylindrical	■
JH142060E2R050.0Z4-HXT	02968235	2	E	6,0	6,0	6,0	50,0	12,0	5,6	0,5	—	4	Cylindrical	■
JH142060E2R100.0Z4-HXT	02968237	2	E	6,0	6,0	6,0	50,0	12,0	5,6	1,0	—	4	Cylindrical	■
JH142060E2R100.0Z5-HXT	02968238	2	E	6,0	6,0	6,0	50,0	12,0	5,6	1,0	—	5	Cylindrical	■
JH142060E2R150.0Z5-HXT	02968240	2	E	6,0	6,0	6,0	50,0	12,0	5,6	1,5	—	5	Cylindrical	■
JH142060E2R200.0Z5-HXT	02968241	2	E	6,0	6,0	6,0	50,0	12,0	5,6	2,0	—	5	Cylindrical	■
JH142080E2R050.0Z5-HXT	02968242	2	E	8,0	8,0	8,0	60,0	16,0	7,4	0,5	—	5	Cylindrical	■
JH142080E2R100.0Z5-HXT	02968243	2	E	8,0	8,0	8,0	60,0	16,0	7,4	1,0	—	5	Cylindrical	■
JH142080E2R150.0Z5-HXT	02968244	2	E	8,0	8,0	8,0	60,0	16,0	7,4	1,5	—	5	Cylindrical	■
JH142080E2R200.0Z5-HXT	02968245	2	E	8,0	8,0	8,0	60,0	16,0	7,4	2,0	—	5	Cylindrical	■
JH142080E2R300.0Z5-HXT	02968246	2	E	8,0	8,0	8,0	60,0	16,0	7,4	3,0	—	5	Cylindrical	■
JH142100E2R050.0Z5-HXT	02968247	2	E	10,0	10,0	10,0	70,0	20,0	9,4	0,5	—	5	Cylindrical	■
JH142100E2R100.0Z5-HXT	02968248	2	E	10,0	10,0	10,0	70,0	20,0	9,4	1,0	—	5	Cylindrical	■
JH142100E2R200.0Z5-HXT	02968249	2	E	10,0	10,0	10,0	70,0	20,0	9,4	2,0	—	5	Cylindrical	■
JH142100E2R250.0Z5-HXT	02968250	2	E	10,0	10,0	10,0	70,0	20,0	9,4	2,5	—	5	Cylindrical	■
JH142120E2R100.0Z6-HXT	02968251	2	E	12,0	12,0	12,0	75,0	24,0	11,4	1,0	—	6	Cylindrical	■
JH142120E2R200.0Z6-HXT	02968252	2	E	12,0	12,0	12,0	75,0	24,0	11,4	2,0	—	6	Cylindrical	■
JH142120E2R300.0Z6-HXT	02968253	2	E	12,0	12,0	12,0	75,0	24,0	11,4	3,0	—	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

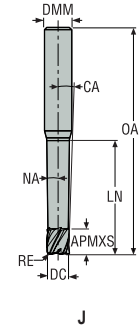
Graphite

X-Heads

Minimaster

JH142

High speed – High precision – Torical – Hardened steel – 2-5 Flutes – Cylindrical – Corner radius



—Tolerances:
—Run-out= <0,005 mm
—DMM= h5
—DC= 0-0,01 mm
—RE= ±0,005 mm
—Reground possible if DC is ≥Ø6



	Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PCEDC	Shank	Stock standard
Universal	JH142020J3R030.0Z2-HXT	02968255	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,3	6,72	0,9	2	Cylindrical	■
	JH142020J3R030.0Z4-HXT	02968256	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,3	6,72	0,9	4	Cylindrical	■
Steel and cast iron	JH142020J3R050.0Z2-HXT	02968257	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,5	6,79	0,9	2	Cylindrical	■
	JH142020J3R050.0Z4-HXT	02968258	3	J	2,0	6,0	2,0	60,0	10,0	1,9	0,5	6,79	0,9	4	Cylindrical	■
Stainless steel and S-materials	JH142030J3R050.0Z2-HXT	02968259	3	J	3,0	6,0	3,0	60,0	15,0	2,8	0,5	4,3	0,9	2	Cylindrical	■
	JH142030J3R050.0Z4-HXT	02968260	3	J	3,0	6,0	3,0	60,0	15,0	2,8	0,5	4,3	0,9	4	Cylindrical	■
Non ferrous	JH142030J3R100.0Z2-HXT	02968261	3	J	3,0	6,0	3,0	60,0	15,0	2,8	1,0	4,4	0,9	2	Cylindrical	■
	JH142030J3R100.0Z4-HXT	02968262	3	J	3,0	6,0	3,0	60,0	15,0	2,8	1,0	4,4	0,9	4	Cylindrical	■
Hard	JH142040J3R030.0Z2-HXT	02968263	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,3	2,45	0,9	2	Cylindrical	■
	JH142040J3R030.0Z4-HXT	02970111	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,3	2,45	0,9	4	Cylindrical	■
Plastic and cfrp	JH142040J3R050.0Z2-HXT	02968265	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,5	2,48	0,9	2	Cylindrical	■
	JH142040J3R050.0Z4-HXT	02968264	3	J	4,0	6,0	4,0	60,0	20,0	3,7	0,5	2,48	0,9	4	Cylindrical	■
Graphite	JH142040J3R100.0Z2-HXT	02968266	3	J	4,0	6,0	4,0	60,0	20,0	3,7	1,0	2,53	0,9	2	Cylindrical	■
	JH142040J3R100.0Z4-HXT	02968267	3	J	4,0	6,0	4,0	60,0	20,0	3,7	1,0	2,53	0,9	4	Cylindrical	■
X-Heads	JH142060J3R050.0Z4-HXT	02968268	3	J	6,0	8,0	6,0	75,0	30,0	5,6	0,5	1,75	0,9	4	Cylindrical	■
	JH142060J3R050.0Z5-HXT	02968269	3	J	6,0	8,0	6,0	75,0	30,0	5,6	0,5	1,75	0,9	5	Cylindrical	■
Minimaster	JH142060J3R100.0Z4-HXT	02968270	3	J	6,0	8,0	6,0	75,0	30,0	5,6	1,0	1,77	0,9	4	Cylindrical	■
	JH142060J3R100.0Z5-HXT	02968271	3	J	6,0	8,0	6,0	75,0	30,0	5,6	1,0	1,77	0,9	5	Cylindrical	■
	JH142060J3R150.0Z5-HXT	02968272	3	J	6,0	8,0	6,0	75,0	30,0	5,6	1,5	1,8	0,9	5	Cylindrical	■
	JH142060J3R200.0Z5-HXT	02968273	3	J	6,0	8,0	6,0	75,0	30,0	5,6	2,0	1,83	0,9	5	Cylindrical	■
	JH142080J3R050.0Z5-HXT	02968274	3	J	8,0	10,0	8,0	85,0	40,0	7,4	0,5	1,34	0,9	5	Cylindrical	■
	JH142080J3R100.0Z5-HXT	02968275	3	J	8,0	10,0	8,0	85,0	40,0	7,4	1,0	1,36	0,9	5	Cylindrical	■
	JH142080J3R150.0Z5-HXT	02968276	3	J	8,0	10,0	8,0	85,0	40,0	7,4	1,5	1,37	0,9	5	Cylindrical	■
	JH142080J3R200.0Z5-HXT	02968277	3	J	8,0	10,0	8,0	85,0	40,0	7,4	2,0	1,39	0,9	5	Cylindrical	■
	JH142100J3R050.0Z5-HXT	02968278	3	J	10,0	12,0	10,0	100,0	50,0	9,4	0,5	1,1	0,9	5	Cylindrical	■
	JH142100J3R100.0Z5-HXT	02968279	3	J	10,0	12,0	10,0	100,0	50,0	9,4	1,0	1,11	0,9	5	Cylindrical	■
	JH142100J3R200.0Z5-HXT	02968280	3	J	10,0	12,0	10,0	100,0	50,0	9,4	2,0	1,13	0,9	5	Cylindrical	■
	JH142020J6R030.0Z4-HXT	02968282	6	J	2,0	6,0	2,0	75,0	20,0	1,9	0,3	4,33	0,9	4	Cylindrical	■
	JH142020J6R050.0Z4-HXT	02968283	6	J	2,0	6,0	2,0	75,0	20,0	1,9	0,5	4,36	0,9	4	Cylindrical	■
	JH142030J6R050.0Z4-HXT	02968284	6	J	3,0	6,0	3,0	75,0	30,0	2,8	0,5	2,52	0,9	4	Cylindrical	■
	JH142030J6R100.0Z4-HXT	02968285	6	J	3,0	6,0	3,0	75,0	30,0	2,8	1,0	2,56	0,9	4	Cylindrical	■
	JH142040J6R030.0Z4-HXT	02968286	6	J	4,0	6,0	4,0	80,0	40,0	3,7	0,3	1,36	0,9	4	Cylindrical	■
	JH142040J6R050.0Z4-HXT	02968287	6	J	4,0	6,0	4,0	80,0	40,0	3,7	0,5	1,37	0,9	4	Cylindrical	■
	JH142040J6R100.0Z4-HXT	02968288	6	J	4,0	6,0	4,0	80,0	40,0	3,7	1,0	1,38	0,9	4	Cylindrical	■

■ Stocked standard.

Cutting data – JH142 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z								v_c	
				2	3	4	6	8	10	12	16		
P1	M/E	0.0500 0,0500	0.050 0,050	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.14 0,0055	485 (460 — 530) 1600 (1600 — 1700)	Universal
P2	M/E	0.0500 0,0500	0.050 0,050	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	470 (450 — 520) 1550 (1500 — 1700)	Steel and cast iron
P3	M/E	0.0500 0,0500	0.050 0,050	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	405 (390 — 450) 1325 (1300 — 1400)	
P4	M/E	0.0500 0,0500	0.050 0,050	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	360 (340 — 390) 1175 (1200 — 1200)	
P5	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	345 (330 — 380) 1125 (1100 — 1200)	
P6	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	385 (370 — 420) 1275 (1300 — 1300)	Stainless steel and S-materials
P7	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	365 (350 — 400) 1200 (1200 — 1300)	
P8	M/E	0.0500 0,0500	0.050 0,050	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.055 0,0022	0.075 0,0030	0.095 0,0038	0.11 0,0044	0.14 0,0055	340 (330 — 380) 1125 (1100 — 1200)	
P11	M/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	0.13 0,0050	355 (340 — 390) 1175 (1200 — 1200)	
K1	A/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	345 (330 — 380) 1125 (1100 — 1200)	Non ferrous
K2	A/E	0.0500 0,0500	0.050 0,050	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.12 0,0048	300 (290 — 330) 980 (960 — 1000)	
K3	A/E	0.0500 0,0500	0.050 0,050	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.12 0,0048	255 (240 — 280) 840 (790 — 910)	
K4	A/E	0.0500 0,0500	0.050 0,050	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.050 0,0020	0.065 0,0026	0.085 0,0034	0.10 0,0040	0.12 0,0048	245 (230 — 260) 800 (760 — 850)	
K5	A/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	345 (330 — 380) 1125 (1100 — 1200)	Hard
K6	A/E	0.0500 0,0500	0.050 0,050	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	500 (480 — 550) 1650 (1600 — 1800)	
K7	A/E	0.0500 0,0500	0.050 0,050	0.018 0,00070	0.028 0,0011	0.036 0,0014	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.13 0,0050	440 (420 — 490) 1450 (1400 — 1600)	
H3	M/A	0.0200 0,0200	0.020 0,020	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	95 (72 — 110) 310 (240 — 360)	Plastic and cfrp
H5	M/A	0.0400 0,0400	0.040 0,040	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	305 (290 — 330) 1000 (960 — 1000)	
H7	M/A	0.0200 0,0200	0.020 0,020	0.014 0,00055	0.020 0,00080	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.080 0,0032	0.10 0,0040	95 (72 — 110) 310 (240 — 360)	
H8	M/A	0.0400 0,0400	0.040 0,040	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	310 (290 — 330) 1025 (960 — 1000)	
H11	M/A	0.0400 0,0400	0.040 0,040	0.014 0,00055	0.022 0,00085	0.028 0,0011	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	0.10 0,0040	390 (360 — 420) 1275 (1200 — 1300)	Graphite
H12	M/A	0.0500 0,0500	0.050 0,050	0.0095 0,00038	0.014 0,00055	0.019 0,00075	0.028 0,0011	0.038 0,0015	0.046 0,0018	0.055 0,0022	0.070 0,0028	345 (320 — 370) 1125 (1100 — 1200)	
H21	M/A	0.0400 0,0400	0.040 0,040	0.011 0,00044	0.016 0,00065	0.022 0,00085	0.032 0,0013	0.042 0,0017	0.055 0,0022	0.065 0,0026	0.080 0,0032	310 (290 — 330) 1025 (960 — 1000)	
H31	M/A	0.0300 0,0300	0.030 0,030	0.013 0,00050	0.019 0,00075	0.025 0,0010	0.038 0,0015	0.050 0,0020	0.065 0,0026	0.075 0,0030	0.090 0,0036	140 (120 — 160) 460 (400 — 520)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

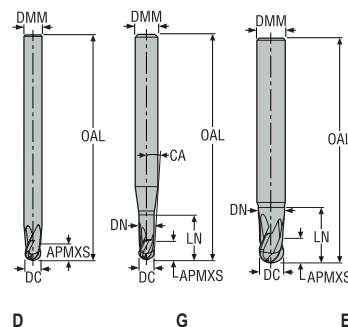
f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

High speed – High precision – Hardened steel – Ball nose – 2 Flutes – Cylindrical

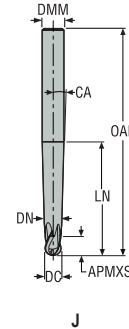


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JH112020G1B.0Z2-HXT	02970112	1	G	2,0	4,0	2,0	40,0	4,0	1,9	1,0	6,45	2	Cylindrical	■
JH112030G1B.0Z2-HXT	02970113	1	G	3,0	4,0	3,0	40,0	6,0	2,8	1,5	3,3	2	Cylindrical	■
JH112040D1B.0Z2-HXT	02970114	1	D	4,0	4,0	4,0	40,0	–	–	2,0	–	2	Cylindrical	■
JH112050G1B.0Z2-HXT	02970115	1	G	5,0	6,0	5,0	50,0	10,0	4,6	2,5	2,0	2	Cylindrical	■
JH112060D1B.0Z2-HXT	02970116	1	D	6,0	6,0	6,0	50,0	–	–	3,0	–	2	Cylindrical	■
JH112080D1B.0Z2-HXT	02970117	1	D	8,0	8,0	8,0	65,0	–	–	4,0	–	2	Cylindrical	■
JH112100D1B.0Z2-HXT	02970118	1	D	10,0	10,0	10,0	65,0	–	–	5,0	–	2	Cylindrical	■
JH112020G2B.0Z2-HXT	02970119	2	G	2,0	3,0	2,0	50,0	10,0	1,9	1,0	2,5	2	Cylindrical	■
JH112030D2B.0Z2-HXT	02970120	2	D	3,0	3,0	3,0	50,0	–	–	1,5	–	2	Cylindrical	■
JH112040D2B.0Z2-HXT	02970121	2	D	4,0	4,0	4,0	60,0	–	–	2,0	–	2	Cylindrical	■
JH112050D2B.0Z2-HXT	02970122	2	D	5,0	5,0	5,0	60,0	–	–	2,5	–	2	Cylindrical	■
JH112060D2B.0Z2-HXT	02970123	2	D	6,0	6,0	6,0	75,0	–	–	3,0	–	2	Cylindrical	■
JH112020G3B.0Z2-HXT	02970124	3	G	2,0	6,0	2,0	60,0	4,0	1,9	1,0	8,12	2	Cylindrical	■
JH112025G3B.0Z2-HXT	02970125	3	G	2,5	6,0	2,5	60,0	5,0	2,4	1,25	7,39	2	Cylindrical	■
JH112030G3B.0Z2-HXT	02970126	3	G	3,0	6,0	3,0	60,0	6,0	2,8	1,5	5,5	2	Cylindrical	■
JH112035G3B.0Z2-HXT	02968289	3	G	3,5	6,0	3,5	65,0	7,0	3,2	1,75	3,81	2	Cylindrical	■
JH112040G3B.0Z2-HXT	02970127	3	G	4,0	6,0	4,0	65,0	8,0	3,7	2,0	3,34	2	Cylindrical	■
JH112050G3B.0Z2-HXT	02970128	3	G	5,0	6,0	5,0	65,0	10,0	4,6	2,5	2,0	2	Cylindrical	■
JH112060G3B.0Z2-HXT	02970129	3	G	6,0	8,0	6,0	75,0	12,0	5,6	3,0	2,78	2	Cylindrical	■
JH112080E3B.0Z2-HXT	02968290	3	E	8,0	8,0	8,0	75,0	16,0	7,4	4,0	–	2	Cylindrical	■
JH112100E3B.0Z2-HXT	02968291	3	E	10,0	10,0	10,0	80,0	20,0	9,4	5,0	–	2	Cylindrical	■
JH112120E3B.0Z2-HXT	02968292	3	E	12,0	12,0	12,0	90,0	24,0	11,4	6,0	–	2	Cylindrical	■
JH112020G4B.0Z2-HXT	02970130	4	G	2,0	6,0	2,0	80,0	20,0	1,9	1,0	3,82	2	Cylindrical	■
JH112030G4B.0Z2-HXT	02970131	4	G	3,0	6,0	3,0	80,0	20,0	2,8	1,5	2,91	2	Cylindrical	■
JH112040G4B.0Z2-HXT	02970132	4	G	4,0	6,0	4,0	80,0	20,0	3,7	2,0	1,97	2	Cylindrical	■
JH112050G4B.0Z2-HXT	02970133	4	G	5,0	6,0	5,0	100,0	50,0	4,6	2,5	0,53	2	Cylindrical	■
JH112060D4B.0Z2-HXT	02968293	4	D	6,0	6,0	6,0	100,0	–	–	3,0	–	2	Cylindrical	■
JH112080D4B.0Z2-HXT	02968294	4	D	8,0	8,0	8,0	110,0	–	–	4,0	–	2	Cylindrical	■
JH112100D4B.0Z2-HXT	02968295	4	D	10,0	10,0	10,0	125,0	–	–	5,0	–	2	Cylindrical	■
JH112120D4B.0Z2-HXT	02968296	4	D	12,0	12,0	12,0	125,0	–	–	6,0	–	2	Cylindrical	■

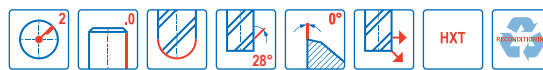
■ Stocked standard.

JH112

High speed – High precision – Hardened steel – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- Run-out = <0,005 mm
- DMM = h5
- DC = <Ø0,6 = 0/-0,008 mm
- DC = ≥Ø0,6 = 0/-0,01 mm
- RE = <Ø0,5 = ±0,004 mm
- RE = ≥Ø1,5 = ±0,005 mm
- Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PCEDC	Shank	Stock standard
JH112020J5B.0Z2-HXT	02970134	5	J	2,0	6,0	2,0	80,0	35,0	1,9	1,0	3,3	3,55	2	Cylindrical	■
JH112030J5B.0Z2-HXT	02970135	5	J	3,0	6,0	3,0	80,0	40,0	2,8	1,5	2,2	2,5	2	Cylindrical	■
JH112040J5B.0Z2-HXT	02970136	5	J	4,0	6,0	4,0	80,0	52,0	3,7	2,0	1,2	1,4	2	Cylindrical	■
JH112050J5B.0Z2-HXT	02970137	5	J	5,0	8,0	5,0	100,0	56,0	4,6	2,5	1,6	1,95	2	Cylindrical	■
JH112060J5B.0Z2-HXT	02970138	5	J	6,0	8,0	6,0	100,0	56,0	5,6	3,0	1,1	1,4	2	Cylindrical	■
JH112080J5B.0Z2-HXT	02970139	5	J	8,0	10,0	8,0	125,0	62,0	7,4	4,0	1,0	1,43	2	Cylindrical	■
JH112100J5B.0Z2-HXT	02970140	5	J	10,0	12,0	10,0	125,0	61,0	9,4	5,0	1,0	1,5	2	Cylindrical	■
JH112060J6B.0Z2-HXT	02970141	6	J	6,0	10,0	6,0	125,0	62,0	5,6	3,0	2,0	2,3	2	Cylindrical	■
JH112080J6B.0Z2-HXT	02970142	6	J	8,0	12,0	8,0	150,0	67,0	7,4	4,0	1,8	2,3	2	Cylindrical	■
JH112100J6B.0Z2-HXT	02970143	6	J	10,0	12,0	10,0	150,0	79,0	9,4	5,0	0,8	1,1	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

Cutting data – JH112 Copy milling finishing

SMG		a_p/DC	f_z										v_c
			2	2.5	3	3.5	4	5	6	8	10	12	
K1	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	520 (500 — 730)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1700 (1700 — 2300)
K2	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	445 (430 — 630)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1450 (1500 — 2000)
K3	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	380 (360 — 530)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1250 (1200 — 1700)
K4	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	360 (350 — 510)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1175 (1200 — 1600)
K5	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	415 (370 — 610)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1350 (1300 — 2000)
K6	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	610 (550 — 900)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	2000 (1900 — 2900)
K7	E	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	680 (560 — 790)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	2225 (1900 — 2500)
H3	M	0.16	0.028	0.036	0.042	0.048	0.055	0.070	0.085	0.11	0.14	0.17	155 (150 — 230)
		0,16	0,0011	0,0014	0,0017	0,0019	0,0022	0,0028	0,0034	0,0044	0,0055	0,0065	510 (500 — 750)
H5	M	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	285 (240 — 330)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	940 (790 — 1000)
H7	M	0.16	0.028	0.036	0.042	0.048	0.055	0.070	0.085	0.11	0.14	0.17	155 (150 — 230)
		0,16	0,0011	0,0014	0,0017	0,0019	0,0022	0,0028	0,0034	0,0044	0,0055	0,0065	510 (500 — 750)
H8	M	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	285 (240 — 330)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	940 (790 — 1000)
H11	M	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	360 (300 — 420)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1175 (990 — 1300)
H12	M	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	330 (280 — 380)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	1075 (920 — 1200)
H21	M	0.30	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	285 (240 — 330)
		0,30	0,0012	0,0015	0,0017	0,0020	0,0024	0,0030	0,0036	0,0048	0,0060	0,0070	940 (790 — 1000)
H31	M	0.30	0.026	0.032	0.040	0.046	0.050	0.065	0.080	0.10	0.13	0.16	300 (290 — 430)
		0,30	0,0010	0,0013	0,0016	0,0018	0,0020	0,0026	0,0032	0,0040	0,0050	0,0065	980 (960 — 1400)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – JH112 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z										v_c	
				2	2.5	3	3.5	4	5	6	8	10	12		
K1	E	0.250	0.15	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	315 (310 — 450)	Universal
		0.250	0.15	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	1025 (1100 — 1400)	
K2	E	0.250	0.15	0.028	0.036	0.044	0.050	0.060	0.070	0.085	0.12	0.14	0.17	280 (270 — 390)	Steel and cast iron
		0.250	0.15	0.0011	0.0014	0.0017	0.0020	0.0024	0.0028	0.0034	0.0048	0.0055	0.0065	920 (890 — 1200)	
K3	E	0.250	0.15	0.028	0.036	0.044	0.050	0.060	0.070	0.085	0.12	0.14	0.17	235 (230 — 330)	Steel and cast iron
		0.250	0.15	0.0011	0.0014	0.0017	0.0020	0.0024	0.0028	0.0034	0.0048	0.0055	0.0065	770 (760 — 1000)	
K4	E	0.250	0.15	0.028	0.036	0.044	0.050	0.060	0.070	0.085	0.12	0.14	0.17	225 (220 — 320)	Steel and cast iron
		0.250	0.15	0.0011	0.0014	0.0017	0.0020	0.0024	0.0028	0.0034	0.0048	0.0055	0.0065	740 (730 — 1000)	
K5	E	0.160	0.15	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	280 (250 — 410)	Steel and cast iron
		0.160	0.15	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	920 (830 — 1300)	
K6	E	0.160	0.15	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	415 (370 — 610)	Steel and cast iron
		0.160	0.15	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	1350 (1300 — 2000)	
K7	E	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	420 (350 — 490)	Stainless steel and S-materials
		0.250	0.10	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	1375 (1200 — 1600)	
H3	M	0.120	0.040	0.028	0.036	0.042	0.048	0.055	0.070	0.085	0.11	0.14	0.17	110 (100 — 160)	Stainless steel and S-materials
		0.120	0.040	0.0011	0.0014	0.0017	0.0019	0.0022	0.0028	0.0034	0.0044	0.0055	0.0065	360 (330 — 520)	
H5	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	175 (150 — 200)	Stainless steel and S-materials
		0.250	0.10	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	570 (500 — 650)	
H7	M	0.120	0.040	0.028	0.036	0.042	0.048	0.055	0.070	0.085	0.11	0.14	0.17	110 (100 — 160)	Non ferrous
		0.120	0.040	0.0011	0.0014	0.0017	0.0019	0.0022	0.0028	0.0034	0.0044	0.0055	0.0065	360 (330 — 520)	
H8	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	175 (150 — 200)	Non ferrous
		0.250	0.10	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	570 (500 — 650)	
H11	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	225 (190 — 260)	Non ferrous
		0.250	0.10	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	740 (630 — 850)	
H12	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	205 (170 — 240)	Non ferrous
		0.250	0.10	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	670 (560 — 780)	
H21	M	0.250	0.10	0.030	0.038	0.044	0.050	0.060	0.075	0.090	0.12	0.15	0.18	175 (150 — 200)	Non ferrous
		0.250	0.10	0.0012	0.0015	0.0017	0.0020	0.0024	0.0030	0.0036	0.0048	0.0060	0.0070	570 (500 — 650)	
H31	M	0.200	0.10	0.026	0.032	0.040	0.046	0.050	0.065	0.080	0.10	0.13	0.16	200 (200 — 280)	Hard
		0.200	0.10	0.0010	0.0013	0.0016	0.0018	0.0020	0.0026	0.0032	0.0040	0.0050	0.0065	660 (660 — 910)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

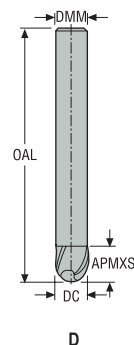
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

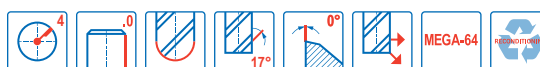
All cutting data are target values

JH150

High speed – Hardened steel – Ball nose – 4 Flutes – Cylindrical



—Tolerances:
—DMM= h5
—DC= -0,02/-0,04 mm
—RE= ±0,01 mm
—Regrind possible



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
150060-MEGA-64	00019198	2	D	mm	mm	mm	mm	mm			
150080-MEGA-64	00019208	2	D	6,0	6,0	6,0	80,0	3,0	4	Cylindrical	■
150100-MEGA-64	00019219	2	D	8,0	8,0	8,0	85,0	4,0	4	Cylindrical	■
150120-MEGA-64	00019254	2	D	10,0	10,0	10,0	100,0	5,0	4	Cylindrical	■
150120-MEGA-64	00019254	2	D	12,0	12,0	12,0	100,0	6,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JH150 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				6	8	10	12	
K1	A	0.300 0,300	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	290 (310 — 370) 950 (1100 — 1200)
K2	A	0.300 0,300	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	250 (270 — 320) 820 (890 — 1000)
K3	A	0.300 0,300	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	210 (230 — 270) 690 (760 — 880)
K5	A	0.200 0,200	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	255 (270 — 330) 840 (890 — 1000)
K6	A	0.200 0,200	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	375 (390 — 500) 1225 (1300 — 1600)
K7	A	0.200 0,200	0.15 0,15	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	325 (340 — 430) 1075 (1200 — 1400)
H3	M	0.0500 0,0500	0.020 0,020	0.085 0,0034	0.11 0,0044	0.14 0,0055	0.17 0,0065	85 (88 — 120) 280 (290 — 390)
H5	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	180 (160 — 200) 590 (530 — 650)
H7	M	0.0500 0,0500	0.020 0,020	0.085 0,0034	0.11 0,0044	0.14 0,0055	0.17 0,0065	85 (88 — 120) 280 (290 — 390)
H8	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	180 (160 — 200) 590 (530 — 650)
H11	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	230 (210 — 250) 750 (690 — 820)
H12	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	210 (190 — 230) 690 (630 — 750)
H21	M	0.200 0,200	0.060 0,060	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	180 (160 — 200) 590 (530 — 650)
H31	M	0.150 0,150	0.060 0,060	0.090 0,0036	0.12 0,0048	0.15 0,0060	0.18 0,0070	125 (130 — 180) 410 (430 — 590)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

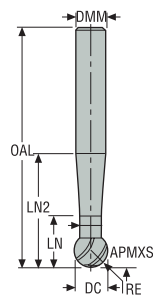
Graphite

X-Heads

Minimaster

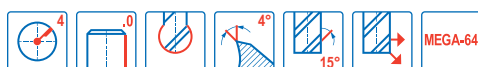
JH160

High speed – Hardened steel – Ball nose – 4 Flutes – Cylindrical



E

—Tolerances:
—DMM= h5
—DC= 0,02/-0,06 mm
—SA=250°



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
160030-MEGA-64	00040365	2	E	3,0	3,0	2,3	60,0	4,5	1,8	1,5	4	Cylindrical	■
160040-MEGA-64	00040366	2	E	4,0	4,0	3,1	60,0	5,6	2,4	2,0	4	Cylindrical	■
160050-MEGA-64	00040367	2	E	5,0	5,0	3,9	70,0	6,4	3,0	2,5	4	Cylindrical	■
160060-MEGA-64	00040368	2	E	6,0	6,0	4,7	80,0	9,7	3,6	3,0	4	Cylindrical	■
160080-MEGA-64	00040369	2	E	8,0	8,0	6,2	85,0	11,2	4,8	4,0	4	Cylindrical	■
160100-MEGA-64	00040370	2	E	10,0	10,0	7,8	100,0	15,6	6,0	5,0	4	Cylindrical	■
160120-MEGA-64	00040371	2	E	12,0	12,0	9,4	125,0	17,2	7,2	6,0	4	Cylindrical	■

■ Stocked standard.

Cutting data – JH160 Copy milling finishing

SMG		a_e/DC	a_p/DC	f_z							v_c	
				3	4	5	6	8	10	12		
P1	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	550 (450 — 700) 1800 (1500 — 2200)	Universal
P2	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	530 (440 — 680) 1750 (1500 — 2200)	Steel and cast iron
P3	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	460 (380 — 590) 1500 (1300 — 1900)	
P4	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	405 (340 — 520) 1325 (1200 — 1700)	
P5	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	385 (320 — 490) 1275 (1100 — 1600)	
P6	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	430 (360 — 560) 1400 (1200 — 1800)	Stainless steel and S-materials
P7	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	410 (340 — 520) 1350 (1200 — 1700)	
P8	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	395 (330 — 510) 1275 (1100 — 1600)	
P11	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	395 (330 — 510) 1300 (1100 — 1600)	
P12	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	235 (200 — 300) 770 (660 — 980)	Non ferrous
H3	M/E/A	0.0100 0,0100	0.0075 0,0075	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	85 (91 — 110) 280 (300 — 360)	
H5	M/E/A	0.0100 0,0100	0.016 0,016	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	340 (320 — 360) 1125 (1100 — 1100)	
H7	M/E/A	0.0100 0,0100	0.0075 0,0075	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	85 (91 — 110) 280 (300 — 360)	
H8	M/E/A	0.0100 0,0100	0.016 0,016	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	340 (320 — 360) 1125 (1100 — 1100)	Hard
H11	M/E/A	0.0100 0,0100	0.016 0,016	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	430 (400 — 460) 1400 (1400 — 1500)	
H12	M/E/A	0.0200 0,0200	0.024 0,024	0.050 0,0020	0.070 0,0028	0.085 0,0034	0.10 0,0040	0.14 0,0055	0.17 0,0065	0.20 0,0080	355 (340 — 380) 1175 (1200 — 1200)	
H21	M/E/A	0.0100 0,0100	0.016 0,016	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	340 (320 — 360) 1125 (1100 — 1100)	
H31	M/E/A	0.0100 0,0100	0.016 0,016	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	165 (180 — 210) 540 (600 — 680)	Plastic and cfrp

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

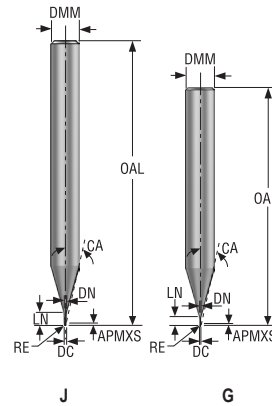
Graphite

X-Heads

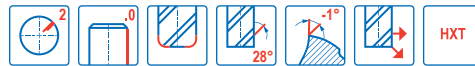
Minimaster

JME142

Miniature – Hardened steel – Square – 2 Flutes – Cylindrical – Corner radius



—Tolerances:
—Run-out= <0,005 mm
—DMM = h5
—DC= < Ø0,6= 0/-0,008 mm
—DC= ≥ Ø0,6= 0/-0,01 mm
—RE = ±0,005 mm

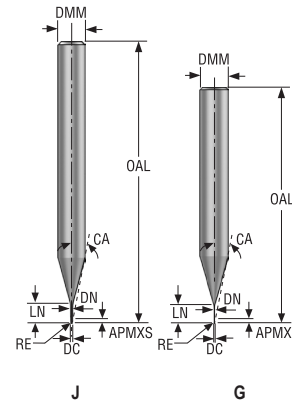


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
JME142002G1R005Z2.0-HXT	03205080	1	G	0,2	4,0	0,15	40,0	0,4	0,18	0,05	15,12	—	-1,0	2	Cylindrical	■
JME142003G1R005Z2.0-HXT	03205082	1	G	0,3	4,0	0,225	40,0	0,6	0,28	0,05	14,77	—	-1,0	2	Cylindrical	■
JME142004G1R005Z2.0-HXT	03205084	1	G	0,4	4,0	0,3	40,0	0,8	0,37	0,05	14,39	—	-1,0	2	Cylindrical	■
JME142005G1R005Z2.0-HXT	03205086	1	G	0,5	4,0	0,375	40,0	0,75	0,46	0,05	14,01	—	-1,0	2	Cylindrical	■
JME142006G1R005Z2.0-HXT	03205099	1	G	0,6	4,0	0,45	40,0	0,9	0,56	0,05	13,67	—	-1,0	2	Cylindrical	■
JME142008G1R005Z2.0-HXT	03205121	1	G	0,8	6,0	0,6	50,0	1,2	0,76	0,05	13,98	—	-1,0	2	Cylindrical	■
JME142010G1R005Z2.0-HXT	03205139	1	G	1,0	6,0	0,75	50,0	1,5	0,95	0,05	13,49	—	-1,0	2	Cylindrical	■
JME142012G1R005Z2.0-HXT	03205151	1	G	1,2	6,0	0,9	50,0	1,8	1,15	0,05	13,02	—	-1,0	2	Cylindrical	■
JME142015G1R005Z2.0-HXT	03205161	1	G	1,5	6,0	1,125	50,0	2,25	1,45	0,05	12,3	—	-1,0	2	Cylindrical	■
JME142002J2R005Z2.0-HXT	03205081	2	J	0,2	4,0	0,15	40,0	0,6	0,18	0,05	14,23	0,9	-1,0	2	Cylindrical	■
JME142003J2R005Z2.0-HXT	03205083	2	J	0,3	4,0	0,225	40,0	0,9	0,28	0,05	13,67	0,9	-1,0	2	Cylindrical	■
JME142004J2R005Z2.0-HXT	03205085	2	J	0,4	4,0	0,3	40,0	1,2	0,37	0,05	13,1	0,9	-1,0	2	Cylindrical	■
JME142005J2R005Z2.0-HXT	03205087	2	J	0,5	4,0	0,375	40,0	1,5	0,46	0,05	12,54	0,9	-1,0	2	Cylindrical	■
JME142005J2R010Z2.0-HXT	03205093	2	J	0,5	4,0	0,375	40,0	1,5	0,46	0,1	12,61	0,9	-1,0	2	Cylindrical	■
JME142005G2R005Z2.0-HXT	03205088	2	G	0,5	6,0	0,375	50,0	1,5	0,46	0,05	13,5	—	-1,0	2	Cylindrical	■
JME142005G2R010Z2.0-HXT	03205094	2	G	0,5	6,0	0,375	50,0	1,5	0,46	0,1	13,55	—	-1,0	2	Cylindrical	■
JME142006J2R005Z2.0-HXT	03205100	2	J	0,6	4,0	0,45	40,0	2,0	0,56	0,05	11,76	0,9	-1,0	2	Cylindrical	■
JME142006J2R010Z2.0-HXT	03205107	2	J	0,6	4,0	0,45	40,0	2,0	0,56	0,1	11,83	0,9	-1,0	2	Cylindrical	■
JME142006G2R005Z2.0-HXT	03205101	2	G	0,6	6,0	0,45	50,0	2,0	0,56	0,05	9,48	—	-1,0	2	Cylindrical	■
JME142006G2R010Z2.0-HXT	03205108	2	G	0,6	6,0	0,45	50,0	2,0	0,56	0,1	9,51	—	-1,0	2	Cylindrical	■
JME142008J2R005Z2.0-HXT	03205122	2	J	0,8	4,0	0,6	40,0	2,5	0,76	0,05	10,92	0,9	-1,0	2	Cylindrical	■
JME142008J2R010Z2.0-HXT	03205129	2	J	0,8	4,0	0,6	40,0	2,5	0,76	0,1	10,98	0,9	-1,0	2	Cylindrical	■
JME142008J2R020Z2.0-HXT	03205135	2	J	0,8	4,0	0,6	40,0	2,5	0,76	0,2	11,1	0,9	-1,0	2	Cylindrical	■
JME142008G2R005Z2.0-HXT	03205123	2	G	0,8	6,0	0,6	50,0	2,5	0,76	0,05	9,15	—	-1,0	2	Cylindrical	■
JME142008G2R010Z2.0-HXT	03205130	2	G	0,8	6,0	0,6	50,0	2,5	0,76	0,1	9,17	—	-1,0	2	Cylindrical	■
JME142008G2R020Z2.0-HXT	03205136	2	G	0,8	6,0	0,6	50,0	2,5	0,76	0,2	9,22	—	-1,0	2	Cylindrical	■
JME142010G2R005Z2.0-HXT	03205140	2	G	1,0	6,0	0,75	50,0	4,0	0,95	0,05	8,29	—	-1,0	2	Cylindrical	■
JME142010G2R010Z2.0-HXT	03205145	2	G	1,0	6,0	0,75	50,0	4,0	0,95	0,1	8,31	—	-1,0	2	Cylindrical	■
JME142010G2R020Z2.0-HXT	03205148	2	G	1,0	6,0	0,75	50,0	4,0	0,95	0,2	8,36	—	-1,0	2	Cylindrical	■
JME142012G2R005Z2.0-HXT	03205152	2	G	1,2	6,0	0,9	50,0	4,5	1,15	0,05	7,97	—	-1,0	2	Cylindrical	■
JME142012G2R010Z2.0-HXT	03205155	2	G	1,2	6,0	0,9	50,0	4,5	1,15	0,1	7,99	—	-1,0	2	Cylindrical	■
JME142012G2R020Z2.0-HXT	03205158	2	G	1,2	6,0	0,9	50,0	4,5	1,15	0,2	8,04	—	-1,0	2	Cylindrical	■
JME142015G2R005Z2.0-HXT	03205162	2	G	1,5	6,0	1,125	50,0	5,0	1,45	0,05	7,6	—	-1,0	2	Cylindrical	■
JME142015G2R010Z2.0-HXT	03205167	2	G	1,5	6,0	1,125	50,0	5,0	1,45	0,1	9,7	—	-1,0	2	Cylindrical	■
JME142015G2R020Z2.0-HXT	03205171	2	G	1,5	6,0	1,125	50,0	5,0	1,45	0,2	9,76	—	-1,0	2	Cylindrical	■

■ Stocked standard.

JME142

Miniature – Hardened steel – Square – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out = <0,005 mm
- DMM = h5
- DC = < Ø0,6 = 0/-0,008 mm
- DC = ≥ Ø0,6 = 0/-0,01 mm
- RE = ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
JME142020G2R005Z2.0-HXT	03205180	2	G	2,0	6,0	1,5	50,0	6,0	1,94	0,05	8,52	—	-1,0	2	Cylindrical	■
JME142020G2R010Z2.0-HXT	03205185	2	G	2,0	6,0	1,5	50,0	6,0	1,94	0,1	8,55	—	-1,0	2	Cylindrical	■
JME142020G2R020Z2.0-HXT	03205188	2	G	2,0	6,0	1,5	50,0	6,0	1,94	0,2	8,6	—	-1,0	2	Cylindrical	■
JME142020G2R030Z2.0-HXT	03205191	2	G	2,0	6,0	1,5	50,0	6,0	1,94	0,3	8,66	—	-1,0	2	Cylindrical	■
JME142030G2R005Z2.0-HXT	03205201	2	G	3,0	6,0	2,25	50,0	9,0	2,85	0,05	5,81	—	-1,0	2	Cylindrical	■
JME142005J3R005Z2.0-HXT	03205089	3	J	0,5	4,0	0,375	40,0	2,5	0,46	0,05	11,24	0,9	-1,0	2	Cylindrical	■
JME142005J3R010Z2.0-HXT	03205095	3	J	0,5	4,0	0,375	40,0	2,5	0,46	0,1	11,29	0,9	-1,0	2	Cylindrical	■
JME142005G3R005Z2.0-HXT	03205090	3	G	0,5	6,0	0,375	50,0	3,5	0,46	0,05	11,55	—	-1,0	2	Cylindrical	■
JME142005G3R010Z2.0-HXT	03205096	3	G	0,5	6,0	0,375	50,0	3,5	0,46	0,1	11,59	—	-1,0	2	Cylindrical	■
JME142006J3R005Z2.0-HXT	03205103	3	J	0,6	4,0	0,45	40,0	3,0	0,56	0,05	10,58	0,9	-1,0	2	Cylindrical	■
JME142006J3R010Z2.0-HXT	03205109	3	J	0,6	4,0	0,45	40,0	3,0	0,56	0,1	10,63	0,9	-1,0	2	Cylindrical	■
JME142006G3R005Z2.0-HXT	03205104	3	G	0,6	6,0	0,45	50,0	4,0	0,56	0,05	8,46	—	-1,0	2	Cylindrical	■
JME142006G3R010Z2.0-HXT	03205110	3	G	0,6	6,0	0,45	50,0	4,0	0,56	0,1	8,48	—	-1,0	2	Cylindrical	■
JME142008J3R005Z2.0-HXT	03205124	3	J	0,8	4,0	0,6	40,0	4,0	0,76	0,05	9,36	0,9	-1,0	2	Cylindrical	■
JME142008G3R005Z2.0-HXT	03205126	3	G	0,8	6,0	0,6	50,0	5,5	0,76	0,05	9,89	—	-1,0	2	Cylindrical	■
JME142010G3R005Z2.0-HXT	03205141	3	G	1,0	6,0	0,75	50,0	7,0	0,95	0,05	8,84	—	-1,0	2	Cylindrical	■
JME142010G3R010Z2.0-HXT	03205146	3	G	1,0	6,0	0,75	50,0	7,0	0,95	0,1	8,86	—	-1,0	2	Cylindrical	■
JME142010G3R020Z2.0-HXT	03205149	3	G	1,0	6,0	0,75	50,0	7,0	0,95	0,2	8,91	—	-1,0	2	Cylindrical	■
JME142015G3R005Z2.0-HXT	03205163	3	G	1,5	6,0	1,125	50,0	10,0	1,45	0,05	7,05	—	-1,0	2	Cylindrical	■
JME142015G3R010Z2.0-HXT	03205169	3	G	1,5	6,0	1,125	50,0	10,0	1,45	0,1	7,06	—	-1,0	2	Cylindrical	■
JME142015G3R020Z2.0-HXT	03205172	3	G	1,5	6,0	1,125	50,0	10,0	1,45	0,2	7,1	—	-1,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

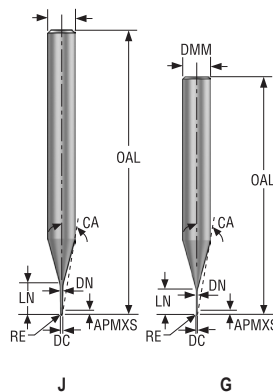
Graphite

X-Heads

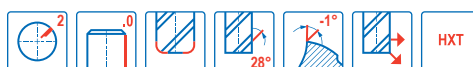
Minimaster

JME142

Miniature – Hardened steel – Square – 2 Flutes – Cylindrical – Corner radius



—Tolerances:
—Run-out= <0,005 mm
—DMM = h5
—DC= < Ø0,6= 0/-0,008 mm
—DC= ≥ Ø0,6= 0/-0,01 mm
—RE = ±0,005 mm

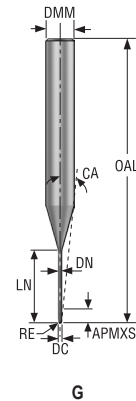


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
JME142020G3R005Z2.0-HXT	03205181	3	G	2,0	6,0	1,5	50,0	12,0	1,94	0,05	5,9	—	-1,0	2	Cylindrical	■
JME142020G3R010Z2.0-HXT	03205186	3	G	2,0	6,0	1,5	50,0	12,0	1,94	0,1	5,92	—	-1,0	2	Cylindrical	■
JME142020G3R020Z2.0-HXT	03205189	3	G	2,0	6,0	1,5	50,0	12,0	1,94	0,2	5,95	—	-1,0	2	Cylindrical	■
JME142030G3R010Z2.0-HXT	03205206	3	G	3,0	6,0	2,25	60,0	15,0	2,85	0,1	4,15	—	-1,0	2	Cylindrical	■
JME142005J4R010Z2.0-HXT	03205097	4	J	0,5	4,0	0,375	40,0	4,0	0,46	0,1	9,76	0,9	-1,0	2	Cylindrical	■
JME142005G4R005Z2.0-HXT	03205092	4	G	0,5	6,0	0,375	50,0	5,0	0,46	0,05	10,42	—	-1,0	2	Cylindrical	■
JME142005G4R010Z2.0-HXT	03205098	4	G	0,5	6,0	0,375	50,0	5,0	0,46	0,1	10,45	—	-1,0	2	Cylindrical	■
JME142006J4R005Z2.0-HXT	03205105	4	J	0,6	4,0	0,45	40,0	5,0	0,56	0,05	8,79	0,9	-1,0	2	Cylindrical	■
JME142008G4R005Z2.0-HXT	03205128	4	G	0,8	6,0	0,6	50,0	8,0	0,76	0,05	8,49	—	-1,0	2	Cylindrical	■
JME142010G4R010Z2.0-HXT	03205147	4	G	1,0	6,0	0,75	50,0	10,0	0,95	0,1	7,48	—	-1,0	2	Cylindrical	■
JME142010G4R020Z2.0-HXT	03205150	4	G	1,0	6,0	0,75	50,0	10,0	0,95	0,2	7,52	—	-1,0	2	Cylindrical	■
JME142012G4R010Z2.0-HXT	03205157	4	G	1,2	6,0	0,9	50,0	12,0	1,15	0,1	6,62	—	-1,0	2	Cylindrical	■
JME142012G4R020Z2.0-HXT	03205160	4	G	1,2	6,0	0,9	50,0	12,0	1,15	0,2	6,65	—	-1,0	2	Cylindrical	■
JME142015G4R010Z2.0-HXT	03205170	4	G	1,5	6,0	1,125	60,0	15,0	1,45	0,1	5,55	—	-1,0	2	Cylindrical	■
JME142015G4R020Z2.0-HXT	03205173	4	G	1,5	6,0	1,125	60,0	15,0	1,45	0,2	5,58	—	-1,0	2	Cylindrical	■

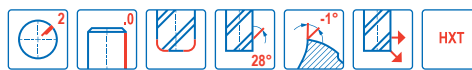
■ Stocked standard.

JME142

Miniature – Hardened steel – Square – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
 — Run-out = <0,005 mm
 — DMM = h5
 — DC = < Ø0,6 = 0/-0,008 mm
 — DC = ≥ Ø0,6 = 0/-0,01 mm
 — RE = ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PSIR°	PCEDC	Shank	Stock standard
JME142020G4R010Z2.0-HXT	03205187	4	G	2,0	6,0	1,5	60,0	20,0	1,94	0,1	4,19	-1,0	2	Cylindrical	■
JME142020G4R020Z2.0-HXT	03205190	4	G	2,0	6,0	1,5	60,0	20,0	1,94	0,2	4,21	-1,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JME142 Side milling roughing

SMG		a _e /DC	a _p /DC	f _z													v _c
				0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	1.8	2	2.5	3	
H3	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	90 (59 — 110) 295 (200 — 360)
H5	M/A	0.0500 0,0500	0.46 0,46	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	160 (140 — 190) 520 (460 — 620)
H7	M/A	0.0500 0,0500	0.30 0,30	0.0036 0,00014	0.0055 0,00022	0.0070 0,00028	0.0090 0,00036	0.011 0,00044	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.026 0,0010	0.032 0,0013	0.036 0,0014	0.044 0,0017	0.055 0,0022	90 (59 — 110) 295 (200 — 360)
H8	M/A	0.0500 0,0500	0.46 0,46	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	160 (140 — 190) 520 (460 — 620)
H11	M/A	0.0500 0,0500	0.46 0,46	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	205 (170 — 240) 670 (560 — 780)
H12	M/A	0.0500 0,0500	0.46 0,46	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	190 (160 — 220) 620 (530 — 720)
H21	M/A	0.0500 0,0500	0.46 0,46	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	160 (140 — 190) 520 (460 — 620)
H31	M/A	0.0500 0,0500	0.46 0,46	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	120 (110 — 140) 395 (370 — 450)

Cutting data – JME142 Slot milling

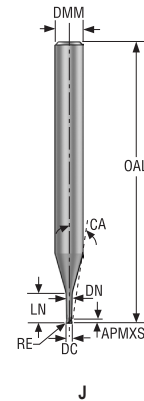
SMG		a _p /DC	f _z													v _c
			0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	1.8	2	2.5	3	
H3	M/A	0.012 0,012	0.0024 0,000095	0.0036 0,00014	0.0048 0,00019	0.0060 0,00024	0.0070 0,00028	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.024 0,00095	0.030 0,0012	0.036 0,0014	65 (43 — 85) 215 (150 — 270)
H5	M/A	0.020 0,020	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	120 (97 — 130) 395 (320 — 420)
H7	M/A	0.012 0,012	0.0024 0,000095	0.0036 0,00014	0.0048 0,00019	0.0060 0,00024	0.0070 0,00028	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.024 0,00095	0.030 0,0012	0.036 0,0014	65 (43 — 85) 215 (150 — 270)
H8	M/A	0.020 0,020	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	120 (97 — 130) 395 (320 — 420)
H11	M/A	0.020 0,020	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	150 (130 — 170) 490 (430 — 550)
H12	M/A	0.020 0,020	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	135 (120 — 160) 445 (400 — 520)
H21	M/A	0.012 0,012	0.0024 0,000095	0.0036 0,00014	0.0048 0,00019	0.0060 0,00024	0.0070 0,00028	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.018 0,00070	0.022 0,00085	0.024 0,00095	0.030 0,0012	0.036 0,0014	120 (98 — 140) 395 (330 — 450)
H31	M/A	0.020 0,020	0.0040 0,00016	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.040 0,0016	0.050 0,0020	0.060 0,0024	90 (73 — 100) 295 (240 — 320)

For cutting data recalculations, see pages 687 – 695

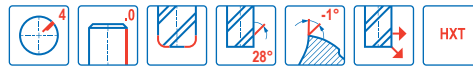
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
v_c = m/min (sf/min)
f_z = mm (in/tooth)
a_p = mm/DC (in/DC) = factor
a_e = mm/DC (in/DC) = factor
All cutting data are target values

JME144

Miniature – Hardened steel – Square – 4 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out= <0,005 mm
- DMM=h5
- DC = 0-0,01 mm
- RE= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm						
JME144010J2R005Z4.0-HXT	03205214	2	J	1,0	4,0	0,75	40,0	4,0	0,95	0,05	9,08	0,9	-1,0	4	Cylindrical	■
JME144010J2R010Z4.0-HXT	03205217	2	J	1,0	4,0	0,75	40,0	4,0	0,95	0,1	9,13	0,9	-1,0	4	Cylindrical	■
JME144010J2R020Z4.0-HXT	03205220	2	J	1,0	4,0	0,75	40,0	4,0	0,95	0,2	9,22	0,9	-1,0	4	Cylindrical	■
JME144015J2R005Z4.0-HXT	03205227	2	J	1,5	4,0	1,125	50,0	5,0	1,45	0,05	7,52	0,9	-1,0	4	Cylindrical	■
JME144015J2R010Z4.0-HXT	03205229	2	J	1,5	4,0	1,125	50,0	5,0	1,45	0,1	7,56	0,9	-1,0	4	Cylindrical	■
JME144015J2R020Z4.0-HXT	03205232	2	J	1,5	4,0	1,125	50,0	5,0	1,45	0,2	7,63	0,9	-1,0	4	Cylindrical	■
JME144020J2R005Z4.0-HXT	03205234	2	J	2,0	4,0	1,5	50,0	6,0	1,94	0,05	5,97	0,9	-1,0	4	Cylindrical	■
JME144020J2R010Z4.0-HXT	03205236	2	J	2,0	4,0	1,5	50,0	6,0	1,94	0,1	6,0	0,9	-1,0	4	Cylindrical	■
JME144020J2R020Z4.0-HXT	03205239	2	J	2,0	4,0	1,5	50,0	6,0	1,94	0,2	6,06	0,9	-1,0	4	Cylindrical	■
JME144020J2R030Z4.0-HXT	03205241	2	J	2,0	4,0	1,5	50,0	6,0	1,94	0,3	6,12	0,9	-1,0	4	Cylindrical	■
JME144030J2R010Z4.0-HXT	03205243	2	J	3,0	4,0	2,25	50,0	9,0	2,85	0,1	2,66	0,9	-1,0	4	Cylindrical	■
JME144030J2R020Z4.0-HXT	03205246	2	J	3,0	4,0	2,25	50,0	9,0	2,85	0,2	2,69	0,9	-1,0	4	Cylindrical	■
JME144010J3R010Z4.0-HXT	03205218	3	J	1,0	4,0	0,75	40,0	5,0	0,95	0,1	8,3	0,9	-1,0	4	Cylindrical	■
JME144015J3R010Z4.0-HXT	03205230	3	J	1,5	4,0	1,125	50,0	7,5	1,45	0,1	6,06	0,9	-1,0	4	Cylindrical	■
JME144020J3R005Z4.0-HXT	03205235	3	J	2,0	4,0	1,5	50,0	10,0	1,94	0,05	4,29	0,9	-1,0	4	Cylindrical	■
JME144020J3R010Z4.0-HXT	03205237	3	J	2,0	4,0	1,5	50,0	10,0	1,94	0,1	4,31	0,9	-1,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfpr

Graphite

X-Heads

Minimaster

Cutting data – JME144 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				1.0	1.2	1.5	2.0	3	
H3	M/A	0.0500 <i>0,0500</i>	0.095 <i>0,095</i>	0.013 <i>0,00050</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.026 <i>0,0010</i>	0.040 <i>0,0016</i>	95 (65 — 120) 310 (220 — 390)
H5	M/A	0.0500 <i>0,0500</i>	0.22 <i>0,22</i>	0.014 <i>0,00055</i>	0.017 <i>0,00065</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.042 <i>0,0017</i>	165 (140 — 190) 540 (460 — 620)
H7	M/A	0.0500 <i>0,0500</i>	0.095 <i>0,095</i>	0.013 <i>0,00050</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.026 <i>0,0010</i>	0.040 <i>0,0016</i>	95 (65 — 120) 310 (220 — 390)
H8	M/A	0.0500 <i>0,0500</i>	0.22 <i>0,22</i>	0.014 <i>0,00055</i>	0.017 <i>0,00065</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.042 <i>0,0017</i>	165 (140 — 190) 540 (460 — 620)
H11	M/A	0.0500 <i>0,0500</i>	0.22 <i>0,22</i>	0.014 <i>0,00055</i>	0.017 <i>0,00065</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.042 <i>0,0017</i>	210 (180 — 240) 690 (600 — 780)
H12	M/A	0.0500 <i>0,0500</i>	0.22 <i>0,22</i>	0.014 <i>0,00055</i>	0.017 <i>0,00065</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.042 <i>0,0017</i>	190 (160 — 220) 620 (530 — 720)
H21	M/A	0.0500 <i>0,0500</i>	0.22 <i>0,22</i>	0.014 <i>0,00055</i>	0.017 <i>0,00065</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.042 <i>0,0017</i>	165 (140 — 190) 540 (460 — 620)
H31	M/A	0.0500 <i>0,0500</i>	0.22 <i>0,22</i>	0.014 <i>0,00055</i>	0.017 <i>0,00065</i>	0.020 <i>0,00080</i>	0.028 <i>0,0011</i>	0.042 <i>0,0017</i>	125 (110 — 140) 410 (370 — 450)

Cutting data – JME144 Slot milling

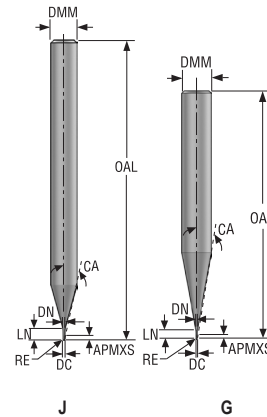
SMG		a_p/DC	f_z					v_c
			1.0	1.2	1.5	2.0	3,0	
H3	M/A	0.0090 <i>0,0090</i>	0.0065 <i>0,00026</i>	0.0075 <i>0,00030</i>	0.0095 <i>0,00038</i>	0.013 <i>0,00050</i>	0.019 <i>0,00075</i>	65 (43 — 84) 215 (150 — 270)
H5	M/A	0.019 <i>0,019</i>	0.012 <i>0,00048</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	115 (96 — 130) 375 (320 — 420)
H7	M/A	0.0090 <i>0,0090</i>	0.0065 <i>0,00026</i>	0.0075 <i>0,00030</i>	0.0095 <i>0,00038</i>	0.013 <i>0,00050</i>	0.019 <i>0,00075</i>	65 (43 — 84) 215 (150 — 270)
H8	M/A	0.019 <i>0,019</i>	0.012 <i>0,00048</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	115 (96 — 130) 375 (320 — 420)
H11	M/A	0.019 <i>0,019</i>	0.012 <i>0,00048</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	150 (130 — 170) 490 (430 — 550)
H12	M/A	0.019 <i>0,019</i>	0.012 <i>0,00048</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	135 (120 — 160) 445 (400 — 520)
H21	M/A	0.019 <i>0,019</i>	0.012 <i>0,00048</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	115 (96 — 130) 375 (320 — 420)
H31	M/A	0.019 <i>0,019</i>	0.012 <i>0,00048</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	90 (73 — 100) 295 (240 — 320)

For cutting data recalculations, see pages 687 – 695

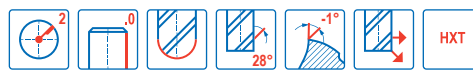
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (*sf/min*)
 f_z = mm (*in/tooth*)
 a_p = mm/DC (*in/DC*) = factor
 a_e = mm/DC (*in/DC*) = factor
All cutting data are target values

JMB112

Miniature – Hardened steel – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
 — Run-out= <0,005 mm
 — DMM= h5
 — DC= <Ø0,6= 0/-0,008 mm
 — DC= ≥Ø0,6= 0/-0,01 mm
 — RE=DC <Ø1,5= ±0,004 mm
 — RE=DC ≥Ø1,5= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm						
JMB112002G1BZ2.0-HXT	03204964	1	G	0,2	4,0	0,15	40,0	0,4	0,18	0,1	15,11	—	-1,0	2	Cylindrical	■
JMB112003G1BZ2.0-HXT	03204966	1	G	0,3	4,0	0,225	40,0	0,6	0,28	0,15	14,77	—	-1,0	2	Cylindrical	■
JMB112004G1BZ2.0-HXT	03204968	1	G	0,4	4,0	0,3	40,0	0,8	0,37	0,2	14,32	—	-1,0	2	Cylindrical	■
JMB112005G1BZ2.0-HXT	03204970	1	G	0,5	4,0	0,5	40,0	1,0	0,46	0,25	13,97	—	-1,0	2	Cylindrical	■
JMB112006G1BZ2.0-HXT	03204977	1	G	0,6	4,0	0,6	40,0	1,2	0,56	0,3	13,64	—	-1,0	2	Cylindrical	■
JMB112008G1BZ2.0-HXT	03204984	1	G	0,8	6,0	0,8	50,0	1,6	0,76	0,4	13,96	—	-1,0	2	Cylindrical	■
JMB112010G1BZ2.0-HXT	03204991	1	G	1,0	6,0	1,0	50,0	2,0	0,95	0,5	13,49	—	-1,0	2	Cylindrical	■
JMB112012G1BZ2.0-HXT	03205000	1	G	1,2	6,0	1,2	50,0	2,4	1,15	0,6	13,02	—	-1,0	2	Cylindrical	■
JMB112015G1BZ2.0-HXT	03205009	1	G	1,5	6,0	1,5	50,0	3,0	1,45	0,75	12,2	—	-1,0	2	Cylindrical	■
JMB112002J2BZ2.0-HXT	03204965	2	J	0,2	4,0	0,15	40,0	0,6	0,18	0,1	14,33	0,9	-1,0	2	Cylindrical	■
JMB112003J2BZ2.0-HXT	03204967	2	J	0,3	4,0	0,225	40,0	0,9	0,28	0,15	13,85	0,9	-1,0	2	Cylindrical	■
JMB112004J2BZ2.0-HXT	03204969	2	J	0,4	4,0	0,3	40,0	1,2	0,37	0,2	13,3	0,9	-1,0	2	Cylindrical	■
JMB112005J2BZ2.0-HXT	03204971	2	J	0,5	4,0	0,5	40,0	1,5	0,46	0,25	12,85	0,9	-1,0	2	Cylindrical	■
JMB112005G2BZ2.0-HXT	03204972	2	G	0,5	6,0	0,5	50,0	1,5	0,46	0,25	9,91	—	-1,0	2	Cylindrical	■
JMB112006J2BZ2.0-HXT	03204978	2	J	0,6	4,0	0,6	50,0	2,0	0,56	0,3	12,09	0,9	-1,0	2	Cylindrical	■
JMB112006G2BZ2.0-HXT	03204979	2	G	0,6	6,0	0,6	50,0	2,0	0,56	0,3	9,62	—	-1,0	2	Cylindrical	■
JMB112008J2BZ2.0-HXT	03204985	2	J	0,8	4,0	0,8	50,0	2,5	0,76	0,4	11,34	0,9	-1,0	2	Cylindrical	■
JMB112008G2BZ2.0-HXT	03204986	2	G	0,8	6,0	0,8	50,0	2,5	0,76	0,4	9,33	—	-1,0	2	Cylindrical	■
JMB112010J2BZ2.0-HXT	03204992	2	J	1,0	4,0	1,0	40,0	4,0	0,95	0,5	9,49	0,9	-1,0	2	Cylindrical	■
JMB112010G2BZ2.0-HXT	03204993	2	G	1,0	6,0	1,0	50,0	4,0	0,95	0,5	8,49	—	-1,0	2	Cylindrical	■
JMB112012J2BZ2.0-HXT	03205001	2	J	1,2	4,0	1,2	50,0	4,5	1,15	0,6	8,83	0,9	-1,0	2	Cylindrical	■
JMB112012G2BZ2.0-HXT	03205002	2	G	1,2	6,0	1,2	50,0	4,5	1,15	0,6	8,21	—	-1,0	2	Cylindrical	■
JMB112015J2BZ2.0-HXT	03205010	2	J	1,5	4,0	1,5	50,0	5,0	1,45	0,75	8,1	0,9	-1,0	2	Cylindrical	■
JMB112015G2BZ2.0-HXT	03205011	2	G	1,5	6,0	1,5	50,0	5,0	1,45	0,75	10,14	—	-1,0	2	Cylindrical	■
JMB112020J2BZ2.0-HXT	03205024	2	J	2,0	4,0	2,0	50,0	6,0	1,94	1,0	6,6	0,9	-1,0	2	Cylindrical	■
JMB112020G2BZ2.0-HXT	03205025	2	G	2,0	6,0	2,0	50,0	6,0	1,94	1,0	9,1	—	-1,0	2	Cylindrical	■
JMB112030J2BZ2.0-HXT	03205037	2	J	3,0	4,0	3,0	50,0	9,0	2,85	1,5	3,04	0,9	-1,0	2	Cylindrical	■
JMB112030G2BZ2.0-HXT	03205038	2	G	3,0	6,0	3,0	50,0	9,0	2,85	1,5	6,35	—	-1,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

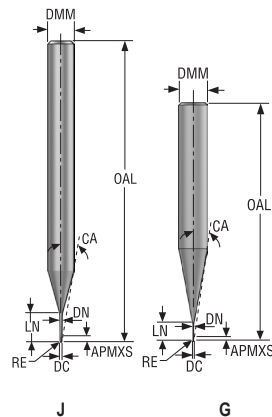
Graphite

X-Heads

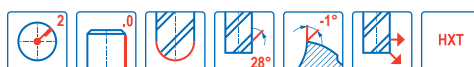
Minimaster

JMB112

Miniature – Hardened steel – Ball nose – 2 Flutes – Cylindrical



—Tolerances:
—Run-out= <0,005 mm
—DMM= h5
—DC= <Ø0,6= 0/-0,008 mm
—DC= ≥Ø0,6= 0/-0,01 mm
—RE=DC <Ø1,5= ±0,004 mm
—RE=DC ≥Ø1,5= ±0,005 mm

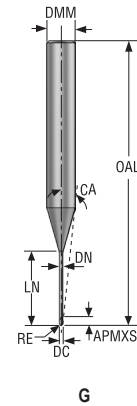


Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	NA°	PSIR°	PCEDC	Shank	Stock standard
JMB112005J3BZ2.0-HXT	03204973	3	J	0,5	4,0	0,5	40,0	2,5	0,46	0,25	11,49	0,9	-1,0	2	Cylindrical	■
JMB112005G3BZ2.0-HXT	03204974	3	G	0,5	6,0	0,5	50,0	3,5	0,46	0,25	8,81	—	-1,0	2	Cylindrical	■
JMB112006J3BZ2.0-HXT	03204980	3	J	0,6	4,0	0,6	40,0	3,0	0,56	0,3	10,83	0,9	-1,0	2	Cylindrical	■
JMB112006G3BZ2.0-HXT	03204981	3	G	0,6	6,0	0,6	50,0	4,0	0,56	0,3	8,56	—	-1,0	2	Cylindrical	■
JMB112008J3BZ2.0-HXT	03204987	3	J	0,8	4,0	0,8	40,0	4,0	0,76	0,4	9,67	0,9	-1,0	2	Cylindrical	■
JMB112008G3BZ2.0-HXT	03204988	3	G	0,8	6,0	0,8	50,0	5,5	0,76	0,4	10,1	—	-1,0	2	Cylindrical	■
JMB112010J3BZ2.0-HXT	03204994	3	J	1,0	4,0	1,0	40,0	5,0	0,95	0,5	8,6	0,9	-1,0	2	Cylindrical	■
JMB112010G3BZ2.0-HXT	03204995	3	G	1,0	6,0	1,0	50,0	7,0	0,95	0,5	9,06	—	-1,0	2	Cylindrical	■
JMB112012J3BZ2.0-HXT	03205003	3	J	1,2	4,0	1,2	50,0	6,0	1,15	0,6	7,65	0,9	-1,0	2	Cylindrical	■
JMB112012G3BZ2.0-HXT	03205004	3	G	1,2	6,0	1,2	50,0	8,0	1,15	0,6	8,42	—	-1,0	2	Cylindrical	■
JMB112015J3BZ2.0-HXT	03205012	3	J	1,5	4,0	1,5	40,0	7,5	1,45	0,75	6,4	0,9	-1,0	2	Cylindrical	■
JMB112015G3BZ2.0-HXT	03205013	3	G	1,5	6,0	1,5	50,0	10,0	1,45	0,75	7,31	—	-1,0	2	Cylindrical	■
JMB112020J3BZ2.0-HXT	03205026	3	J	2,0	4,0	2,0	50,0	10,0	1,94	1,0	4,61	0,9	-1,0	2	Cylindrical	■
JMB112020G3BZ2.0-HXT	03205027	3	G	2,0	6,0	2,0	50,0	12,0	1,94	1,0	6,19	—	-1,0	2	Cylindrical	■
JMB112030J3BZ2.0-HXT	03205039	3	J	3,0	4,0	3,0	50,0	15,0	2,85	1,5	1,91	0,9	-1,0	2	Cylindrical	■
JMB112030G3BZ2.0-HXT	03205040	3	G	3,0	6,0	3,0	60,0	15,0	2,85	1,5	4,41	—	-1,0	2	Cylindrical	■

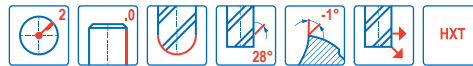
■ Stocked standard.

JMB112

Miniature – Hardened steel – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
 — Run-out= <0,005 mm
 — DMM= h5
 — DC= <Ø0,6= 0/-0,008 mm
 — DC= ≥Ø0,6= 0/-0,01 mm
 — RE=DC <Ø1,5= ±0,004 mm
 — RE=DC ≥Ø1,5= ±0,005 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PSIR°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm					
JMB112006G4BZ2.0-HXT	03204983	4	G	0,6	6,0	0,6	50,0	6,0	0,56	0,3	9,86	-1,0	2	Cylindrical	■
JMB112008G4BZ2.0-HXT	03204990	4	G	0,8	6,0	0,8	50,0	8,0	0,76	0,4	8,65	-1,0	2	Cylindrical	■
JMB112010G4BZ2.0-HXT	03204998	4	G	1,0	6,0	1,0	50,0	10,0	0,95	0,5	7,63	-1,0	2	Cylindrical	■
JMB112015G4BZ2.0-HXT	03205015	4	G	1,5	6,0	1,5	70,0	15,0	1,45	0,75	5,7	-1,0	2	Cylindrical	■
JMB112020G4BZ2.0-HXT	03205029	4	G	2,0	6,0	2,0	60,0	18,0	1,94	1,0	4,68	-1,0	2	Cylindrical	■
JMB112030G4BZ2.0-HXT	03205042	4	G	3,0	6,0	3,0	80,0	30,0	2,85	1,5	2,51	-1,0	2	Cylindrical	■
JMB112010G6BZ2.0-HXT	03205054	6	G	1,0	6,0	1,0	60,0	20,0	0,95	0,5	4,99	-1,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JMB112 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z													v_c
				0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	1.8	2	2.5	3	
H3	M	0.0500 <i>0,0500</i>	0.30 <i>0,30</i>	0.0036 <i>0,00014</i>	0.0055 <i>0,00022</i>	0.0070 <i>0,00028</i>	0.0090 <i>0,00036</i>	0.011 <i>0,00044</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.022 <i>0,00085</i>	0.026 <i>0,0010</i>	0.032 <i>0,0013</i>	0.036 <i>0,0014</i>	0.044 <i>0,0017</i>	0.048 <i>0,0019</i>	150 (130 — 170) 490 (430 — 550)
H5	M	0.0500 <i>0,0500</i>	0.44 <i>0,44</i>	0.0040 <i>0,00016</i>	0.0060 <i>0,00024</i>	0.0080 <i>0,00032</i>	0.010 <i>0,00040</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.024 <i>0,00095</i>	0.030 <i>0,0012</i>	0.036 <i>0,0014</i>	0.040 <i>0,0016</i>	0.050 <i>0,0020</i>	0.060 <i>0,0024</i>	220 (200 — 240) 720 (660 — 780)
H7	M	0.0500 <i>0,0500</i>	0.30 <i>0,30</i>	0.0036 <i>0,00014</i>	0.0055 <i>0,00022</i>	0.0070 <i>0,00028</i>	0.0090 <i>0,00036</i>	0.011 <i>0,00044</i>	0.014 <i>0,00055</i>	0.018 <i>0,00070</i>	0.022 <i>0,00085</i>	0.026 <i>0,0010</i>	0.032 <i>0,0013</i>	0.036 <i>0,0014</i>	0.044 <i>0,0017</i>	0.048 <i>0,0019</i>	150 (130 — 170) 490 (430 — 550)
H8	M	0.0500 <i>0,0500</i>	0.44 <i>0,44</i>	0.0040 <i>0,00016</i>	0.0060 <i>0,00024</i>	0.0080 <i>0,00032</i>	0.010 <i>0,00040</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.024 <i>0,00095</i>	0.030 <i>0,0012</i>	0.036 <i>0,0014</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	0.050 <i>0,0020</i>	220 (200 — 240) 720 (660 — 780)
H11	M	0.0500 <i>0,0500</i>	0.44 <i>0,44</i>	0.0040 <i>0,00016</i>	0.0060 <i>0,00024</i>	0.0080 <i>0,00032</i>	0.010 <i>0,00040</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.024 <i>0,00095</i>	0.030 <i>0,0012</i>	0.036 <i>0,0014</i>	0.040 <i>0,0016</i>	0.050 <i>0,0020</i>	0.060 <i>0,0024</i>	280 (250 — 310) 920 (830 — 1000)
H12	M	0.0500 <i>0,0500</i>	0.44 <i>0,44</i>	0.0040 <i>0,00016</i>	0.0060 <i>0,00024</i>	0.0080 <i>0,00032</i>	0.010 <i>0,00040</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.024 <i>0,00095</i>	0.030 <i>0,0012</i>	0.036 <i>0,0014</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	0.050 <i>0,0020</i>	255 (230 — 280) 840 (760 — 910)
H21	M	0.0500 <i>0,0500</i>	0.44 <i>0,44</i>	0.0040 <i>0,00016</i>	0.0060 <i>0,00024</i>	0.0080 <i>0,00032</i>	0.010 <i>0,00040</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.024 <i>0,00095</i>	0.030 <i>0,0012</i>	0.036 <i>0,0014</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	0.050 <i>0,0020</i>	220 (200 — 240) 720 (660 — 780)
H31	M	0.0500 <i>0,0500</i>	0.44 <i>0,44</i>	0.0040 <i>0,00016</i>	0.0060 <i>0,00024</i>	0.0080 <i>0,00032</i>	0.010 <i>0,00040</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.024 <i>0,00095</i>	0.030 <i>0,0012</i>	0.034 <i>0,0013</i>	0.036 <i>0,0014</i>	0.042 <i>0,0017</i>	0.044 <i>0,0017</i>	165 (150 — 180) 540 (500 — 590)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (*sf/min*)
 f_z = mm (*in/tooth*)
 a_p = mm/DC (*in/DC*) = factor
 a_e = mm/DC (*in/DC*) = factor
All cutting data are target values



PLASTIC AND CFRP

Seco presents a complete solid carbide end mill product range for the machining of glass and carbon fiber reinforced plastics. It consists of diamond-coated and uncoated solid carbide and PCD end mills incorporating different geometries as well as with PCD-brazed cutting edges. This is a product range offering optimized tools for difficult cutting conditions on challenging workpiece materials.

- JC860, JC870, JC871, JC899, JPD890, J93F and J28 for sharp corner type.
- JC845, JC880, JC885 and JC898 for radius type.
- JC875, JC876, JC877 and JPD880 with 45° chamfer type.
- JC850 and JPD850 for ball-nose type.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Plastic and CFRP

Universal						
						
Steel and cast iron						
						
Stainless steel and S-materials						
Non ferrous	Name					
	Page(s)					
Hard	Family name					
	Type of mill					
Plastic and cfrp	Shank	Cylindrical				
		Weldon				
Graphite	Number of Flutes					
	CSP					
Mini-master	Diameter range	Metric	6-8	3-12	6-12	3-12
		Inch			1/4 - 1/2	1/4 - 1/2
X-Heads	Length availability					
	Operation					
Minimaster	SMG					
	TS1					
	TS2					
	TS3					
	TP1					
	TP2					
	TP3					
	Honeycomb*					

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Tool Selection Plastic and CFRP

								
								
Name		JC875	JC876	JC877	JC880	JC885	JC898	JC899
Page(s)		553	557	561	565	567	569	571
Family name		COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE	COMPOSITE
Type of mill								
Shank	Cylindrical							
	Weldon							
Number of Flutes		5,6,10	6,8,10,12,14	6,8,10,12,14	4	4	4	4
CSP								
Diameter range	Metric	3-10	3-12	3-12	4-20	4-10	8-15	8,5-14,8
	Inch	1/4	1/4-3/8	1/4				3/8
Length availability		2	2	2	2	2	2	2
Operation								
								
SMG								
TS1								
TS2		•	•	•	•	•		
TS3		•	•	•	•	•		
TP1								
TP2		•	•	•	•	•		
TP3		•	•	•	•	•		
Honeycomb*								

■ Stock standard □ Weldon available, delivery time is 3 days.

• Preferred choice ○ Alternative choice

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Plastic and CFRP

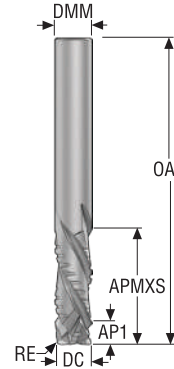
Universal						
Steel and cast iron						
Stainless steel and S-materials						
Non ferrous						
Hard						
Plastic and cfrp						
Graphite						
X-Heads						
Minimaster						
Name		JPD850	JPD880	JPD890	J93F	J28
Page(s)		574	576	578	580	582
Family name		PCD	PCD	PCD	VHM	VHM
Type of mill						
Shank	Cylindrical					
	Weldon					
Number of Flutes		2	2	2	2	1
CSP						
Diameter range	Metric	4-10	6-16	6-12	1,5-20	3-12
	Inch					
Length availability		2	2,3	2,3	1,2,3,4	2
Operation						
						
						
SMG						
TS1					•	•
TS2		•	•	•		
TS3		•	•	•		
TP1					•	
TP2		•	•	•		
TP3		•	•	•		
Honeycomb*						

■ Stock standard □ Weldon available, delivery time is 3 days.

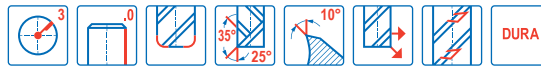
● Preferred choice ○ Alternative choice

JC845

Composite – Compression – 3 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM= h5
—DC= -0,02/-0,04 mm
—RE= ±0,01 mm



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	AP1	OAL	RE	PCEDC	Shank	Stock standard
JC845060D2R050.0Z3-DURA	02843006	2	D	■	6,0	6,0	18,0	4,2	65,0	0,5	3	Cylindrical	■
JC845080D2R050.0Z3-DURA	02843007	2	D	■	8,0	8,0	24,0	5,2	75,0	0,5	3	Cylindrical	■
JC845100D2R050.0Z3-DURA	02843008	2	D	■	10,0	10,0	30,0	6,3	85,0	0,5	3	Cylindrical	■
JC845120D2R050.0Z5-DURA	02843009	2	D	■	12,0	12,0	36,0	8,3	100,0	0,5	5	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC845 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				6	8	10	12	
TS2	E/A/D	0.376	1.5	0.038	0.050	0.060	0.075	185 (130 — 240)
		0,376	1,5	0,0015	0,0020	0,0024	0,0030	610 (430 — 780)
TS3	E/A/D	0.376	1.4	0.038	0.050	0.060	0.075	125 (87 — 160)
		0,376	1,4	0,0015	0,0020	0,0024	0,0030	410 (290 — 520)
TP2	E/A/D	0.376	1.5	0.038	0.050	0.060	0.075	125 (87 — 180)
		0,376	1,5	0,0015	0,0020	0,0024	0,0030	410 (290 — 590)
TP3	E/A/D	0.376	1.4	0.038	0.050	0.060	0.075	85 (62 — 110)
		0,376	1,4	0,0015	0,0020	0,0024	0,0030	280 (210 — 360)

Cutting data – JC845 Slot milling

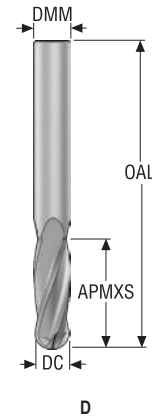
SMG		a_p/DC	f_z				v_c
			6	8	10	12	
TS2	E/A/D	1.0	0.025	0.032	0.040	0.050	160 (110 — 210)
		1,0	0,0010	0,0013	0,0016	0,0020	520 (370 — 680)
TS3	E/A/D	0.75	0.025	0.032	0.040	0.050	105 (76 — 130)
		0,75	0,0010	0,0013	0,0016	0,0020	345 (250 — 420)
TP2	E/A/D	1.0	0.025	0.032	0.040	0.050	105 (75 — 160)
		1,0	0,0010	0,0013	0,0016	0,0020	345 (250 — 520)
TP3	E/A/D	0.75	0.025	0.032	0.040	0.050	75 (54 — 96)
		0,75	0,0010	0,0013	0,0016	0,0020	245 (180 — 310)

For cutting data recalculations, see pages 687 – 695

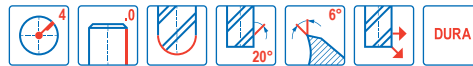
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC850

Composite – Ball nose – 4 Flutes – Cylindrical



—Tolerances:
—DMM=h5
—DC=-0,02/-0,04 mm
—RE= ±0,02 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
850030Z4.0-DURA	02719949	2	D	3,0	3,0	9,0	50,0	1,5	4	Cylindrical	■
850040Z4.0-DURA	02719952	2	D	4,0	4,0	12,0	50,0	2,0	4	Cylindrical	■
850060Z4.0-DURA	02719953	2	D	6,0	6,0	18,0	65,0	3,0	4	Cylindrical	■
850080Z4.0-DURA	02719954	2	D	8,0	8,0	24,0	70,0	4,0	4	Cylindrical	■
850100Z4.0-DURA	02719955	2	D	10,0	10,0	30,0	85,0	5,0	4	Cylindrical	■
850120Z4.0-DURA	02719956	2	D	12,0	12,0	36,0	100,0	6,0	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC850 Copy milling

SMG		a_e/DC	a_p/DC	f_z						v_c
				3	4	6	8	10	12	
TS2	E/A/D	0.200 <i>0,200</i>	2.0 <i>2,0</i>	0.030 <i>0,0012</i>	0.040 <i>0,0016</i>	0.060 <i>0,0024</i>	0.080 <i>0,0032</i>	0.10 <i>0,0040</i>	0.12 <i>0,0048</i>	265 (220 — 320) <i>870 (730 — 1000)</i>
TS3	E/A/D	0.200 <i>0,200</i>	2.0 <i>2,0</i>	0.024 <i>0,00095</i>	0.032 <i>0,0013</i>	0.048 <i>0,0019</i>	0.065 <i>0,0026</i>	0.080 <i>0,0032</i>	0.095 <i>0,0038</i>	160 (110 — 210) <i>520 (370 — 680)</i>
TP2	E/A/D	0.200 <i>0,200</i>	2.0 <i>2,0</i>	0.030 <i>0,0012</i>	0.040 <i>0,0016</i>	0.060 <i>0,0024</i>	0.080 <i>0,0032</i>	0.10 <i>0,0040</i>	0.12 <i>0,0048</i>	215 (110 — 320) <i>710 (370 — 1000)</i>
TP3	E/A/D	0.200 <i>0,200</i>	2.0 <i>2,0</i>	0.024 <i>0,00095</i>	0.032 <i>0,0013</i>	0.048 <i>0,0019</i>	0.065 <i>0,0026</i>	0.080 <i>0,0032</i>	0.095 <i>0,0038</i>	105 (54 — 150) <i>345 (180 — 490)</i>

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (*sf/min*)

f_z = mm (*in/tooth*)

a_p = mm/DC (*in/DC*) = factor

a_e = mm/DC (*in/DC*) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

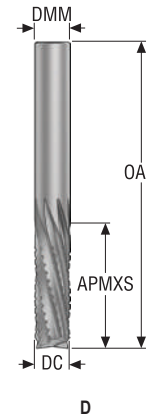
Graphite

X-Heads

Minimaster

JC860

Honeycomb – Square – 5-9 Flutes – Cylindrical – Sharp



- Tolerances:
- DMM=h5
- DC= -0.02-0.08 mm
- FCEDC=frontal teeth



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	L	APMXS	OAL	FCEDC	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm				
860060Z5.0-DURA	02720211	2	D	■	6,0	6,0	18,0	18,0	70,0	2	5	Cylindrical	■
860080Z6.0-DURA	02720212	2	D	■	8,0	8,0	24,0	24,0	80,0	2	6	Cylindrical	■
860100Z8.0-DURA	02720216	2	D	■	10,0	10,0	30,0	30,0	90,0	2	8	Cylindrical	■
860120Z9.0-DURA	02720217	2	D	■	12,0	12,0	36,0	36,0	110,0	2	9	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC860 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				6	8	10	12	
TS2	E/A/D	0.100 <i>0,100</i>	1.0 <i>1,0</i>	0.024 <i>0,00095</i>	0.032 <i>0,0013</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	235 (200 — 270) <i>770 (660 — 880)</i>
TS3	E/A/D	0.100 <i>0,100</i>	1.0 <i>1,0</i>	0.024 <i>0,00095</i>	0.032 <i>0,0013</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	160 (130 — 180) <i>520 (430 — 590)</i>
TP2	E/A/D	0.100 <i>0,100</i>	1.0 <i>1,0</i>	0.024 <i>0,00095</i>	0.032 <i>0,0013</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	165 (130 — 200) <i>540 (430 — 650)</i>
TP3	E/A/D	0.100 <i>0,100</i>	1.0 <i>1,0</i>	0.024 <i>0,00095</i>	0.032 <i>0,0013</i>	0.040 <i>0,0016</i>	0.048 <i>0,0019</i>	65 (50 — 110) <i>215 (170 — 360)</i>

Cutting data – JC860 Slot milling

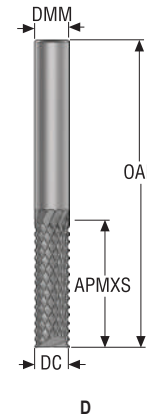
SMG		a_p/DC	f_z				v_c
			6	8	10	12	
TS2	E/A/D	0.50 <i>0,50</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.025 <i>0,0010</i>	160 (140 — 180) <i>520 (460 — 590)</i>
TS3	E/A/D	0.50 <i>0,50</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.025 <i>0,0010</i>	105 (85 — 120) <i>345 (280 — 390)</i>
TP2	E/A/D	0.50 <i>0,50</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.025 <i>0,0010</i>	110 (84 — 130) <i>360 (280 — 420)</i>
TP3	E/A/D	0.50 <i>0,50</i>	0.012 <i>0,00048</i>	0.016 <i>0,00065</i>	0.020 <i>0,00080</i>	0.025 <i>0,0010</i>	44 (34 — 78) <i>145 (120 — 250)</i>

For cutting data recalculations, see pages 687 – 695

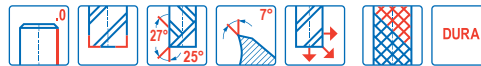
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (*sf/min*)
 f_z = mm (*in/tooth*)
 a_p = mm/DC (*in/DC*) = factor
 a_e = mm/DC (*in/DC*) = factor
All cutting data are target values

JC870

Composite – Router – Square – Cylindrical – Sharp



- Tolerances:
- DMM=h5
- DC=-0,02/-0,08 mm
- Router (downcut)*



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	L	APMXS	OAL	FCEDC	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm				
870030.0-DURA	02720219	2	D	■	3,0	3,0	9,0	9,0	50,0	2	8	Cylindrical	■
870040.0-DURA	02720226	2	D	■	4,0	4,0	12,0	12,0	50,0	2	8	Cylindrical	■
870060.0-DURA	02720228	2	D	■	6,0	6,0	18,0	18,0	65,0	2	10	Cylindrical	■
870080.0-DURA	02720229	2	D	■	8,0	8,0	24,0	24,0	75,0	2	12	Cylindrical	■
870100.0-DURA	02720231	2	D	■	10,0	10,0	30,0	30,0	85,0	2	12	Cylindrical	■
870120.0-DURA	02720232	2	D	■	12,0	12,0	36,0	36,0	100,0	2	14	Cylindrical	■

■ Stocked standard.

*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

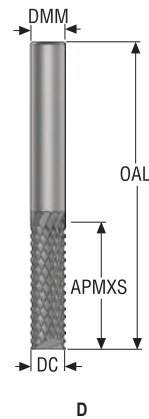
Graphite

X-Heads

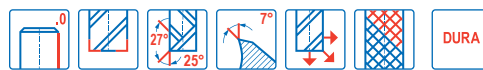
Minimaster

JC870

Composite – Router – Square – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= h5
—DC= -.0008/-.0030 Inch
—Router (downcut)*



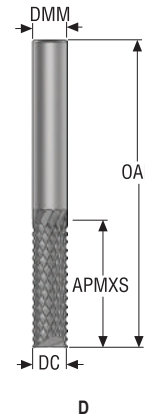
Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	FCEDC	PCEDC	Shank	Stock standard
8700250.0-DURA	02720784	2	D	■	inch	inch	inch	inch				
8700375.0-DURA	02720785	2	D	■	0.250	0.250	0.750	2.250	2	10	Cylindrical	■
					0.375	0.375	1.250	3.500	2	12	Cylindrical	■

■ Stocked standard.

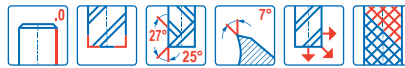
*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

JC870

Composite – Router – Square – Cylindrical – Sharp



- Tolerances:
- DMM=h5
- DC=-0,02/-0,08 mm
- Router (downcut)*



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	L	APMXS	OAL	FCEDC	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm				
870030.0	02742789	2	D	■	3,0	3,0	9,0	9,0	50,0	2	8	Cylindrical	■
870040.0	02742792	2	D	■	4,0	4,0	12,0	12,0	50,0	2	8	Cylindrical	■
870050.0	02742793	2	D	■	5,0	5,0	15,0	15,0	50,0	2	10	Cylindrical	■
870060.0	02742794	2	D	■	6,0	6,0	18,0	18,0	65,0	2	10	Cylindrical	■
870080.0	02742795	2	D	■	8,0	8,0	24,0	24,0	75,0	2	12	Cylindrical	■
870100.0	02742796	2	D	■	10,0	10,0	30,0	30,0	85,0	2	12	Cylindrical	■
870120.0	02742797	2	D	■	12,0	12,0	36,0	36,0	100,0	2	14	Cylindrical	■

■ Stocked standard.

*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

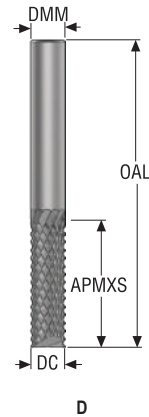
Graphite

X-Heads

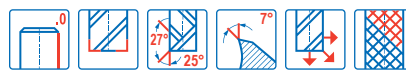
Minimaster

JC870

Composite – Router – Square – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= h5
—DC= -.0008/-.0030 Inch
—Router (downcut)*



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	FCEDC	PCEDC	Shank	Stock standard
					inch	inch	inch	inch				
8700250.0	02742798	2	D	■	0.250	0.250	0.750	2.250	2	10	Cylindrical	■
8700500.0	02742800	2	D	■	0.500	0.500	1.500	4.250	2	14	Cylindrical	■

■ Stocked standard.

*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

Cutting data – JC870 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z							v_c
				3	4	5	6	8	10	12	
TS2	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	175 (150 — 200) 570 (500 — 650)
TS3	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	115 (94 — 130) 375 (310 — 420)
TP2	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	115 (88 — 140) 375 (290 — 450)
TP3	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	46 (36 — 81) 150 (120 — 260)

Cutting data – JC870 Slot milling

SMG		a_p/DC	f_z							v_c
			3	4	5	6	8	10	12	
TS2	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	145 (130 — 170) 475 (430 — 550)
TS3	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	100 (79 — 110) 330 (260 — 360)
TP2	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	100 (74 — 120) 330 (250 — 390)
TP3	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	39 (30 — 68) 130 (99 — 220)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC870 Side milling roughing – Inch

SMG		a_e/DC	a_p/DC	f_z			v_c
				1/4	3/8	1/2	
TS2	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	175 (150 — 200) 570 (500 — 650)
TS3	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	115 (94 — 130) 375 (310 — 420)
TP2	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	115 (88 — 140) 375 (290 — 450)
TP3	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	46 (36 — 81) 150 (120 — 260)

Cutting data – JC870 Slot milling – Inch

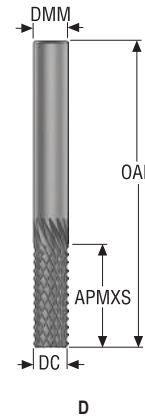
SMG		a_p/DC	f_z			v_c
			1/4	3/8	1/2	
TS2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	145 (130 — 170) 475 (430 — 550)
TS3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	100 (79 — 110) 330 (260 — 360)
TP2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	100 (74 — 120) 330 (250 — 390)
TP3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	39 (30 — 68) 130 (99 — 220)

For cutting data recalculations, see pages 687 – 695

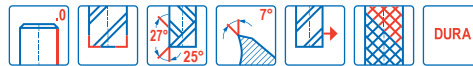
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC871

Composite – Router – Square – Cylindrical – Sharp



—Tolerances:
—DMM= h5
—DC= -0,02/-0,08 mm
—Router (downcut)*



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					mm	mm	mm	mm			
871030.0-DURA	02720249	2	D	■	3,0	3,0	9,0	50,0	8	Cylindrical	■
871040.0-DURA	02720250	2	D	■	4,0	4,0	12,0	50,0	8	Cylindrical	■
871060.0-DURA	02720252	2	D	■	6,0	6,0	18,0	65,0	10	Cylindrical	■
871080.0-DURA	02720253	2	D	■	8,0	8,0	24,0	75,0	12	Cylindrical	■
871100.0-DURA	02720254	2	D	■	10,0	10,0	30,0	85,0	12	Cylindrical	■
871120.0-DURA	02720257	2	D	■	12,0	12,0	36,0	100,0	14	Cylindrical	■

■ Stocked standard.

*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

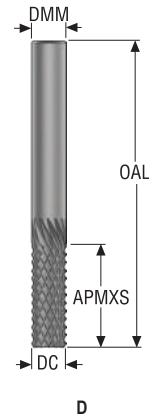
Graphite

X-Heads

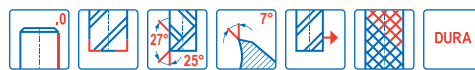
Minimaster

JC871

Composite – Router – Square – Cylindrical – Sharp – Inch



—Tolerances:
—DMM= h5
—DC= -.0008/-.0030 Inch
—Router (downcut)*



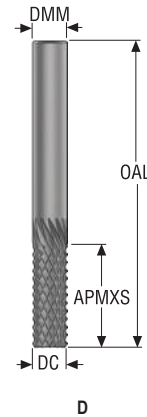
Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					inch	inch	inch	inch			
8710250.0-DURA	02720788	2	D	■	0.250	0.250	0.750	2.250	10	Cylindrical	■
8710375.0-DURA	02720789	2	D	■	0.375	0.375	1.250	3.500	12	Cylindrical	■
8710500.0-DURA	02720790	2	D	■	0.500	0.500	1.500	4.250	14	Cylindrical	■

■ Stocked standard.

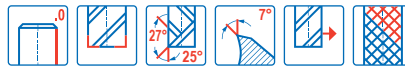
*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

JC871

Composite – Router – Square – Cylindrical – Sharp



—Tolerances:
—DMM= h5
—DC= -0,02/-0,08 mm
—Router (downcut)*



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
					mm	mm	mm	mm			
871030.0	02742801	2	D	■	3,0	3,0	9,0	50,0	8	Cylindrical	■
871040.0	02742803	2	D	■	4,0	4,0	12,0	50,0	8	Cylindrical	■
871060.0	02742806	2	D	■	6,0	6,0	18,0	65,0	10	Cylindrical	■
871080.0	02742807	2	D	■	8,0	8,0	24,0	75,0	12	Cylindrical	■
871100.0	02742808	2	D	■	10,0	10,0	30,0	85,0	12	Cylindrical	■
871120.0	02742809	2	D	■	12,0	12,0	36,0	100,0	14	Cylindrical	■

■ Stocked standard.

*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

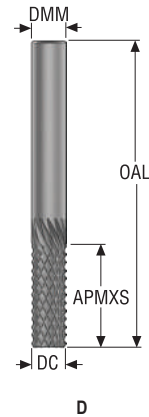
Graphite

X-Heads

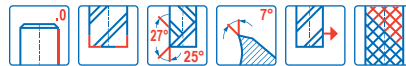
Minimaster

JC871

Composite – Router – Square – Cylindrical – Sharp – Inch



—Tolerances:
—DMM=h5
—DC= -.0008/-.0030 Inch
—Router (downcut)*



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
8710500.0	02742814	2	D	■	inch 0.500	inch 0.500	inch 1.500	inch 4.250	14	Cylindrical	■

■ Stocked standard.

*Downcut indicates flute geometries that are combined to create small down forces that assist with maintaining component clamping, particularly where vacuum clamping is employed.

Cutting data – JC871 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z							v_c
				3	4	5	6	8	10	12	
TS2	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	175 (150 — 200) 570 (500 — 650)
TS3	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	115 (94 — 130) 375 (310 — 420)
TP2	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	115 (88 — 140) 375 (290 — 450)
TP3	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.013 0,00050	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	0.038 0,0015	46 (36 — 81) 150 (120 — 260)

Cutting data – JC871 Slot milling

SMG		a_p/DC	f_z							v_c
			3	4	5	6	8	10	12	
TS2	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	155 (140 — 180) 510 (460 — 590)
TS3	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	105 (84 — 120) 345 (280 — 390)
TP2	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	105 (79 — 130) 345 (260 — 420)
TP3	E/A/D	1.0 1,0	0.0060 0,00024	0.0080 0,00032	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	0.025 0,0010	40 (31 — 70) 130 (110 — 220)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC871 Side milling roughing – Inch

SMG		a_e/DC	a_p/DC	f_z			v_c
				1/4	3/8	1/2	
TS2	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	175 (150 — 200) 570 (500 — 650)
TS3	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	115 (94 — 130) 375 (310 — 420)
TP2	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	115 (88 — 140) 375 (290 — 450)
TP3	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	46 (36 — 81) 150 (120 — 260)

Cutting data – JC871 Slot milling – Inch

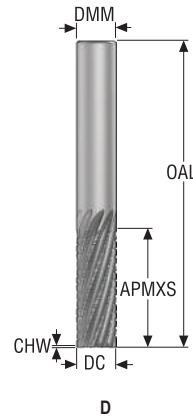
SMG		a_p/DC	f_z			v_c
			1/4	3/8	1/2	
TS2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	145 (130 — 170) 475 (430 — 550)
TS3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	100 (79 — 110) 330 (260 — 360)
TP2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	100 (74 — 120) 330 (250 — 390)
TP3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	39 (30 — 68) 130 (99 — 220)

For cutting data recalculations, see pages 687 – 695

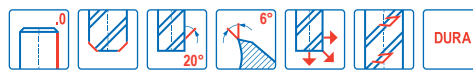
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC875

Composite – Square – 5-10 Flutes – Cylindrical – Chamfer



— Tolerances:
— DMM=h5
— DC=-0,02/-0,08 mm



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm			
JC875030D2.0-DURA	02968155	2	D	■	3,0	3,0	9,0	50,0	0,05	5	Cylindrical	■
JC875050D2.0-DURA	02968157	2	D	■	5,0	5,0	15,0	50,0	0,05	6	Cylindrical	■
JC875060D2.0-DURA	02968158	2	D	■	6,0	6,0	18,0	65,0	0,06	6	Cylindrical	■
JC875080D2.0-DURA	02968159	2	D	■	8,0	8,0	24,0	70,0	0,08	10	Cylindrical	■
JC875100D2.0-DURA	02968160	2	D	■	10,0	10,0	30,0	80,0	0,1	10	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

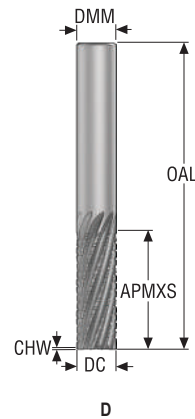
Graphite

X-Heads

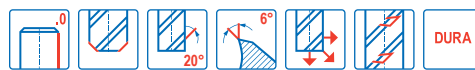
Minimaster

JC875

Composite – Square – 6-10 Flutes – Cylindrical – Chamfer – Inch



—Tolerances:
—DMM=h5
—DC= -.0008/-.0030 Inch



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	CHW	PCEDC	Shank	Stock standard
JC875.250D2.0-DURA	02968162	2	D	■	inch 0.250	inch 0.250	inch 0.750	inch 3.000	inch 0.002	6	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC875 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				3	5	6	8	10	
TS2	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	190 (160 — 220) 620 (530 — 720)
TS3	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	130 (110 — 150) 425 (370 — 490)
TP2	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	130 (96 — 150) 425 (320 — 490)
TP3	E/A/D	0.350 0,350	2.0 2,0	0.0095 0,00038	0.016 0,00065	0.019 0,00075	0.025 0,0010	0.032 0,0013	50 (39 — 89) 165 (130 — 290)

Cutting data – JC875 Slot milling

SMG		a_p/DC	f_z					v_c
			3	5	6	8	10	
TS2	E/A/D	1.0 1,0	0.0060 0,00024	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	160 (140 — 180) 520 (460 — 590)
TS3	E/A/D	1.0 1,0	0.0060 0,00024	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	105 (86 — 120) 345 (290 — 390)
TP2	E/A/D	1.0 1,0	0.0060 0,00024	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	105 (81 — 130) 345 (270 — 420)
TP3	E/A/D	1.0 1,0	0.0060 0,00024	0.010 0,00040	0.012 0,00048	0.016 0,00065	0.020 0,00080	42 (33 — 74) 140 (110 — 240)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC875 Side milling – Inch

SMG		a_e/DC	a_p/DC	f_z			v_c
				1/4	3/8	1/2	
TS2	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	190 (160 — 220) 620 (530 — 720)
TS3	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	130 (110 — 150) 425 (370 — 490)
TP2	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	130 (96 — 150) 425 (320 — 490)
TP3	E/A/D	0.350 0,350	2.0 2,0	0.020 0,00080	0.030 0,0012	0.038 0,0015	50 (39 — 89) 165 (130 — 290)

Cutting data – JC875 Slot milling – Inch

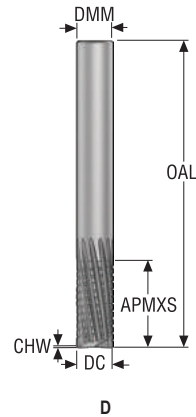
SMG		a_p/DC	f_z			v_c
			1/4	3/8	1/2	
TS2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	160 (140 — 180) 520 (460 — 590)
TS3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	105 (86 — 120) 345 (290 — 390)
TP2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	105 (81 — 130) 345 (270 — 420)
TP3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	42 (33 — 74) 140 (110 — 240)

For cutting data recalculations, see pages 687 – 695

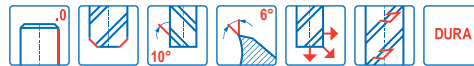
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC876

Composite – Square – 6-14 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC=-0,02 -0,08 mm
- Left hand helix



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	L	APMXS	OAL	CHW	FCEDC	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm				
JC876030D2C.0Z6-DURA	03135004	2	D	■	3,0	3,0	7,5	7,5	50,0	0,035	2	6	Cylindrical	■
JC876040D2C.0Z6-DURA	03135005	2	D	■	4,0	4,0	10,0	10,0	54,0	0,045	2	6	Cylindrical	■
JC876060D2C.0Z8-DURA	03135006	2	D	■	6,0	6,0	15,0	15,0	62,0	0,075	2	8	Cylindrical	■
JC876060D2C.0Z10-DURA	03135007	2	D	■	6,0	6,0	15,0	15,0	62,0	0,075	2	10	Cylindrical	■
JC876080D2C.0Z10-DURA	03135009	2	D	■	8,0	8,0	20,0	20,0	70,0	0,1	2	10	Cylindrical	■
JC876100D2C.0Z12-DURA	03135011	2	D	■	10,0	10,0	25,0	25,0	82,0	0,125	2	12	Cylindrical	■
JC876120D2C.0Z14-DURA	03135012	2	D	■	12,0	12,0	30,0	30,0	95,0	0,15	2	14	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

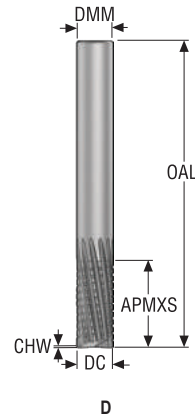
Graphite

X-Heads

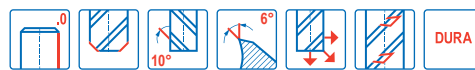
Minimaster

JC876

Composite – Square – 8-14 Flutes – Cylindrical – Chamfer – Inch



—Tolerances:
—DMM=h5
—DC= -.0008/-.0030 Inch
—Left hand helix



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	CHW	FCEDC	PCEDC	Shank	Stock standard
JC876.250D2C.0Z8-DURA	03135125	2	D	■	inch 0.250	inch 0.250	inch 0.625	inch 2.500	inch 0.003	2	8	Cylindrical	■
JC876.375D2C.0Z12-DURA	03135127	2	D	■	inch 0.375	inch 0.375	inch 1.000	inch 3.000	inch 0.005	2	12	Cylindrical	■

■ Stocked standard.

Cutting data – JC876 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z						v_c
				3	4	6	8	10	12	
TS2	E/A/D	0.334	1.7	0.0095	0.013	0.019	0.026	0.032	0.038	220 (190 — 250)
		0.334	1.7	0.00038	0.00050	0.00075	0.0010	0.0013	0.0015	720 (630 — 820)
TS3	E/A/D	0.334	1.7	0.0095	0.013	0.019	0.026	0.032	0.038	145 (120 — 170)
		0.334	1.7	0.00038	0.00050	0.00075	0.0010	0.0013	0.0015	475 (400 — 550)
TP2	E/A/D	0.334	1.7	0.0095	0.013	0.019	0.026	0.032	0.038	145 (110 — 180)
		0.334	1.7	0.00038	0.00050	0.00075	0.0010	0.0013	0.0015	475 (370 — 590)
TP3	E/A/D	0.334	1.7	0.0095	0.013	0.019	0.026	0.032	0.038	75 (44 — 100)
		0.334	1.7	0.00038	0.00050	0.00075	0.0010	0.0013	0.0015	245 (150 — 320)

Cutting data – JC876 Slot milling

SMG		a_p/DC	f_z						v_c
			3	4	6	8	10	12	
TS2	E/A/D	1.0	0.0060	0.0080	0.012	0.016	0.020	0.025	175 (150 — 200)
		1.0	0.00024	0.00032	0.00048	0.00065	0.00080	0.0010	570 (500 — 650)
TS3	E/A/D	1.0	0.0060	0.0080	0.012	0.016	0.020	0.025	115 (94 — 140)
		1.0	0.00024	0.00032	0.00048	0.00065	0.00080	0.0010	375 (310 — 450)
TP2	E/A/D	1.0	0.0060	0.0080	0.012	0.016	0.020	0.025	115 (88 — 140)
		1.0	0.00024	0.00032	0.00048	0.00065	0.00080	0.0010	375 (290 — 450)
TP3	E/A/D	1.0	0.0060	0.0080	0.012	0.016	0.020	0.025	60 (36 — 81)
		1.0	0.00024	0.00032	0.00048	0.00065	0.00080	0.0010	195 (120 — 260)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC876 Side milling roughing – Inch

SMG		a_e/DC	a_p/DC	f_z			v_c
				1/4	3/8	1/2	
TS2	E/A/D	0.334 0.334	1.7 1.7	0.020 0,00080	0.030 0,0012	0.040 0,0016	220 (190 — 250) 720 (630 — 820)
TS3	E/A/D	0.334 0.334	1.7 1.7	0.020 0,00080	0.030 0,0012	0.040 0,0016	145 (120 — 170) 475 (400 — 550)
TP2	E/A/D	0.334 0.334	1.7 1.7	0.020 0,00080	0.030 0,0012	0.040 0,0016	145 (110 — 180) 475 (370 — 590)
TP3	E/A/D	0.334 0.334	1.7 1.7	0.020 0,00080	0.030 0,0012	0.040 0,0016	75 (44 — 100) 245 (150 — 320)

Cutting data – JC876 Slot milling – Inch

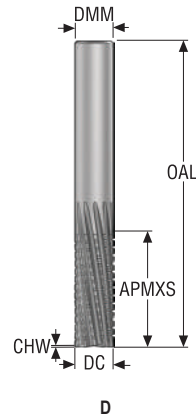
SMG		a_p/DC	f_z			v_c
			1/4	3/8	1/2	
TS2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	175 (150 — 200) 570 (500 — 650)
TS3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	115 (94 — 140) 375 (310 — 450)
TP2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	115 (88 — 140) 375 (290 — 450)
TP3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	60 (36 — 81) 195 (120 — 260)

For cutting data recalculations, see pages 687 – 695

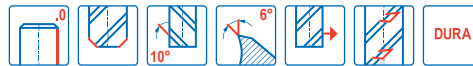
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC877

Composite – Square – 6-14 Flutes – Cylindrical – Chamfer



- Tolerances:
- DMM=h5
- DC=-0,02, -0,08 mm
- Left hand helix



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	L	APMXS	OAL	CHW	FCEDC	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm				
JC877030D2C.0Z6-DURA	03135013	2	D	■	3,0	3,0	9,0	9,0	50,0	0,035	3	6	Cylindrical	■
JC877040D2C.0Z6-DURA	03135014	2	D	■	4,0	4,0	12,0	12,0	54,0	0,045	3	6	Cylindrical	■
JC877060D2C.0Z8-DURA	03135015	2	D	■	6,0	6,0	18,0	18,0	62,0	0,075	4	8	Cylindrical	■
JC877060D2C.0Z10-DURA	03135016	2	D	■	6,0	6,0	18,0	18,0	62,0	0,075	5	10	Cylindrical	■
JC877080D2C.0Z10-DURA	03135018	2	D	■	8,0	8,0	24,0	24,0	70,0	0,1	5	10	Cylindrical	■
JC877100D2C.0Z12-DURA	03135020	2	D	■	10,0	10,0	30,0	30,0	82,0	0,125	6	12	Cylindrical	■
JC877120D2C.0Z14-DURA	03135021	2	D	■	12,0	12,0	36,0	36,0	95,0	0,15	7	14	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

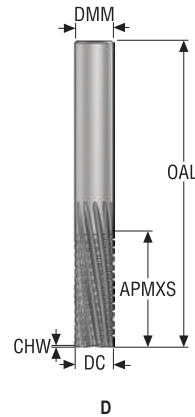
Graphite

X-Heads

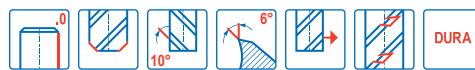
Minimaster

JC877

Composite – Square – 8-14 Flutes – Cylindrical – Chamfer – Inch



—Tolerances:
—DMM=h5
—DC= -.0008/- .0030 Inch
—Left hand helix



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	CHW	FCEDC	PCEDC	Shank	Stock standard
JC877.250D2C.0Z8-DURA	03135129	2	D	■	inch 0.250	inch 0.250	inch 0.750	inch 2.500	inch 0.003	4	8	Cylindrical	■

■ Stocked standard.

Cutting data – JC877 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z						v_c
				3	4	6	8	10	12	
TS2	E/A/D	0,334 0,334	2,0 2,0	0,0095 0,00038	0,013 0,00050	0,019 0,00075	0,026 0,0010	0,032 0,0013	0,038 0,0015	195 (170 — 220) 640 (560 — 720)
TS3	E/A/D	0,334 0,334	2,0 2,0	0,0095 0,00038	0,013 0,00050	0,019 0,00075	0,026 0,0010	0,032 0,0013	0,038 0,0015	130 (110 — 150) 425 (370 — 490)
TP2	E/A/D	0,334 0,334	2,0 2,0	0,0095 0,00038	0,013 0,00050	0,019 0,00075	0,026 0,0010	0,032 0,0013	0,038 0,0015	130 (98 — 160) 425 (330 — 520)
TP3	E/A/D	0,334 0,334	2,0 2,0	0,0095 0,00038	0,013 0,00050	0,019 0,00075	0,026 0,0010	0,032 0,0013	0,038 0,0015	65 (40 — 91) 215 (140 — 290)

Cutting data – JC877 Slot milling

SMG		a_p/DC	f_z						v_c
			3	4	6	8	10	12	
TS2	E/A/D	1,0 1,0	0,0060 0,0060	0,0080 0,0080	0,012 0,012	0,016 0,016	0,020 0,020	0,025 0,025	170 (150 — 200) 115 (92 — 130)
TP2	E/A/D	1,0 1,0	0,0060 0,0060	0,0080 0,0080	0,012 0,012	0,016 0,016	0,020 0,020	0,025 0,025	115 (86 — 140) 55 (35 — 80)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC877 Side milling roughing – Inch

SMG		a_e/DC	a_p/DC	f_z			v_c
				1/4	3/8	1/2	
TS2	E/A/D	0.334 0.334	2.0 2.0	0.020 0,00080	0.030 0,0012	0.040 0,0016	195 (170 — 220) 640 (560 — 720)
TS3	E/A/D	0.334 0.334	2.0 2.0	0.020 0,00080	0.030 0,0012	0.040 0,0016	130 (110 — 150) 425 (370 — 490)
TP2	E/A/D	0.334 0.334	2.0 2.0	0.020 0,00080	0.030 0,0012	0.040 0,0016	130 (98 — 160) 425 (330 — 520)
TP3	E/A/D	0.334 0.334	2.0 2.0	0.020 0,00080	0.030 0,0012	0.040 0,0016	65 (40 — 91) 215 (140 — 290)

Cutting data – JC877 Slot milling – Inch

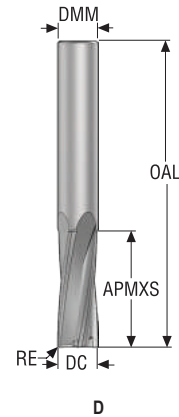
SMG		a_p/DC	f_z			v_c
			1/4	3/8	1/2	
TS2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	160 (140 — 180) 520 (460 — 590)
TS3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	105 (85 — 120) 345 (280 — 390)
TP2	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	105 (80 — 130) 345 (270 — 420)
TP3	E/A/D	1.0 1,0	0.013 0,00050	0.019 0,00075	0.026 0,0010	55 (32 — 74) 180 (110 — 240)

For cutting data recalculations, see pages 687 – 695

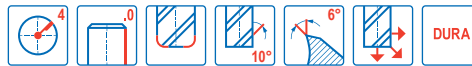
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm/tooth (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC880

Composite – Square – 4 Flutes – Cylindrical – Corner radius



—Tolerances:
—DMM=h5
—DC=−0,02/−0,04 mm
—RE=±0,01 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
880040R020Z4.0-DURA	02843012	2	D	4,0	4,0	12,0	50,0	0,2	4	Cylindrical	■
880050R020Z4.0-DURA	02843013	2	D	5,0	5,0	15,0	50,0	0,2	4	Cylindrical	■
880060R020Z4.0-DURA	02720258	2	D	6,0	6,0	18,0	65,0	0,2	4	Cylindrical	■
880080R020Z4.0-DURA	02720259	2	D	8,0	8,0	24,0	70,0	0,2	4	Cylindrical	■
880100R020Z4.0-DURA	02720260	2	D	10,0	10,0	30,0	80,0	0,2	4	Cylindrical	■
880120R020Z4.0-DURA	02720261	2	D	12,0	12,0	36,0	100,0	0,2	4	Cylindrical	■
880160R020Z4.0-DURA	02720262	2	D	16,0	16,0	48,0	110,0	0,2	4	Cylindrical	■
880200R020Z4.0-DURA	02720263	2	D	20,0	20,0	60,0	130,0	0,2	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC880 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z							v_c
				4	6	8	10	12	16	20	
TS2	E/A/D	0.400 0,400	1.9 1,9	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	190 (160 — 210) 620 (530 — 680)
TS3	E/A/D	0.300 0,300	2.0 2,0	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.070 0,0028	130 (93 — 170) 425 (310 — 550)
TP2	E/A/D	0.400 0,400	1.9 1,9	0.024 0,00095	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	125 (95 — 150) 410 (320 — 490)
TP3	E/A/D	0.300 0,300	2.0 2,0	0.017 0,00065	0.025 0,0010	0.034 0,0013	0.042 0,0017	0.050 0,0020	0.060 0,0024	0.070 0,0028	50 (40 — 92) 165 (140 — 300)

Cutting data – JC880 Slot milling

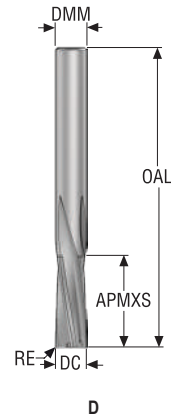
SMG		a_p/DC	f_z								v_c
			4	5	6	8	10	12	16	20	
TS2	E/A/D	1.0 1,0	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	150 (130 — 170) 490 (430 — 550)
TS3	E/A/D	1.0 1,0	0.015 0,00060	0.019 0,00075	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.055 0,0022	0.065 0,0026	100 (71 — 130) 330 (240 — 420)
TP2	E/A/D	1.0 1,0	0.024 0,00095	0.030 0,0012	0.036 0,0014	0.048 0,0019	0.060 0,0024	0.070 0,0028	0.090 0,0036	0.10 0,0040	100 (76 — 120) 330 (250 — 390)
TP3	E/A/D	1.0 1,0	0.015 0,00060	0.019 0,00075	0.022 0,00085	0.030 0,0012	0.038 0,0015	0.044 0,0017	0.055 0,0022	0.065 0,0026	40 (31 — 70) 130 (110 — 220)

For cutting data recalculations, see pages 687 – 695

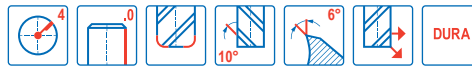
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC885

Composite – Square – 4 Flutes – Cylindrical – Corner radius



- Tolerances:
- DMM=h5
- DC=−0,02/−0,04 mm
- RE=±0,01 mm
- Left hand helix



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm			
JC885040D2R020.0Z4-DURA	02843014	2	D	4,0	4,0	12,0	50,0	0,2	4	Cylindrical	■
JC885060D2R020.0Z4-DURA	02843016	2	D	6,0	6,0	18,0	70,0	0,2	4	Cylindrical	■
JC885080D2R020.0Z4-DURA	02843017	2	D	8,0	8,0	24,0	80,0	0,2	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC885 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				4	6	8	10	
TS2	E/A/D	0.400 <i>0,400</i>	2.0 <i>2,0</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	190 (160 — 210) 620 (530 — 680)
TS3	E/A/D	0.300 <i>0,300</i>	2.0 <i>2,0</i>	0.017 <i>0,00065</i>	0.025 <i>0,0010</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	130 (99 — 170) 425 (330 — 550)
TP2	E/A/D	0.400 <i>0,400</i>	2.0 <i>2,0</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	125 (94 — 150) 410 (310 — 490)
TP3	E/A/D	0.300 <i>0,300</i>	2.0 <i>2,0</i>	0.017 <i>0,00065</i>	0.025 <i>0,0010</i>	0.034 <i>0,0013</i>	0.042 <i>0,0017</i>	50 (33 — 92) 165 (110 — 300)

Cutting data – JC885 Slot milling

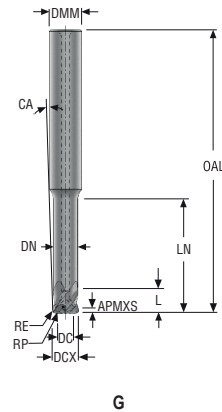
SMG		a_p/DC	f_z				v_c
			4	6	8	10	
TS2	E/A/D	1.0 <i>1,0</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	150 (130 — 170) 490 (430 — 550)
TS3	E/A/D	0.70 <i>0,70</i>	0.015 <i>0,00060</i>	0.022 <i>0,00085</i>	0.030 <i>0,0012</i>	0.038 <i>0,0015</i>	100 (76 — 130) 330 (250 — 420)
TP2	E/A/D	1.0 <i>1,0</i>	0.024 <i>0,00095</i>	0.036 <i>0,0014</i>	0.048 <i>0,0019</i>	0.060 <i>0,0024</i>	100 (75 — 120) 330 (250 — 390)
TP3	E/A/D	0.70 <i>0,70</i>	0.015 <i>0,00060</i>	0.022 <i>0,00085</i>	0.030 <i>0,0012</i>	0.038 <i>0,0015</i>	40 (26 — 70) 130 (86 — 220)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (*sf/min*)
 f_z = mm (*in/tooth*)
 a_p = mm/DC (*in/DC*) = factor
 a_e = mm/DC (*in/DC*) = factor
All cutting data are target values

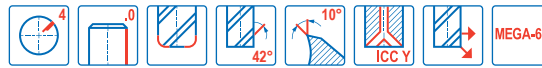
JC898

High feed – Stacked materials – Corner radius – 4 Flutes – Cylindrical – Corner radius



G

- Tolerances:
- DMM=h5
- DC= e7
- RE= ±0,1 mm



Designation	Item number	Length index	Tool shape	CSP	DCX	DC	DMM	L	APMXS	OAL	LN	DN	RE	RP	UTCN	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm				
JC898080G3HZ4A.0-M64	03245308	3	G	■	8,0	4,0	10,0	6,0	0,43	88,0	35,0	7,6	0,5	0,87	0,22	1,5	4	Cylindrical	■
JC898150G3HZ4A.0-M64	03245309	3	G	■	15,0	7,5	16,0	12,0	0,796	125,0	70,0	14,3	0,94	1,63	0,4	0,4	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JC898 Side milling

SMG		a_e/DCX		a_p/DCX		f_z		v_c	
						8	15		
S12+TS2/TP2	D	0,30 0,30	0,020 0,020	0,1 0,0040	0,15 0,0060	90 (80-120) 300 (270-400)			
TP2+TS2/TP2	D	0,30 0,30	0,034 0,034	0,12 0,0048	0,25 0,0100	120 (90-150) 400 (300-490)			

Cutting data – JC898 Slot milling

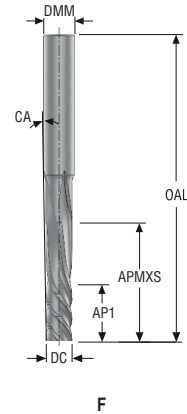
SMG		a_p/DCX		f_z		v_c	
				8	15		
S12+TP2/TS2	D	0.020 0.020	0.08 0.0032	0.10 0.0040	90 (80-120) 300 (270-400)		
N1+TP2/TS2	D	0.034 0.034	0.1 0.0040	0.10 0.0040	120 (90-150) 400 (300-490)		

For cutting data recalculations, see pages 687 – 695

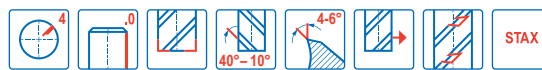
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

JC899

High performance – Stacked materials – Square – 4 Flutes – Cylindrical – Sharp



— Tolerances:
— DMM=h5
— DC= ±0,02 mm



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	OAL	LN	DN	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm				
JC899085F3S.0Z4-STAX	03245482	3	F	■	8,5	10,0	38,0	100,0	51,0	8,6	0,8	4	Cylindrical	■
JC899148F3S.0Z4-STAX	03245480	3	F	■	14,8	16,0	55,0	150,0	63,0	14,92	0,53	4	Cylindrical	■
JC899148F4S.0Z4-STAX	03245481	4	F	■	14,8	16,0	62,0	150,0	70,0	14,92	0,48	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

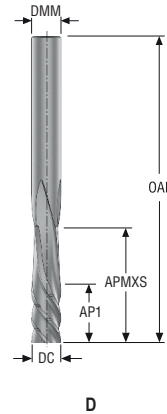
Graphite

X-Heads

Minimaster

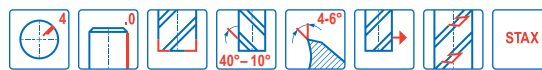
JC899

High performance – Stacked materials – Square – 4 Flutes – Cylindrical – Sharp – Inch



D

—Tolerances:
—DMM=h5
—DC= ±0,0008 Inch



Designation	Item number	Length index	Tool shape	Chip splitters	DC	DMM	APMXS	AP1	OAL	PCEDC	Shank	Stock standard
JC8990375D4S.0Z4-STAX	03245483	4	D	■	inch 0.373	inch 0.375	inch 1.500	inch 0.625	inch 4.000	4	Cylindrical	■

■ Stocked standard.

Cutting data – JC899 Finishing

SMG		a_e/DC	a_p/DC	f_z		v_c	
				8.5	14.8		
S12+TP2/TS2	D	0,025 0,025	4,0 4,0	0,04 0,0016	0,075 0,0030	40 (30 — 50) 140 (100 — 170)	
N1+TP2/TS2	D	0,025 0,025	4,0 4,0	0,06 0,0032	0,09 0,0036	60 (50 — 75) 200 (170 — 250)	

Cutting data – JC899 Finishing – Inch

SMG		a_e/DC	a_p/DC	f_z		v_c	
				3/8			
S12+TP2/TS2	D	0,025 0,025	4,0 4,0	0,05 0,0022		40 (30 — 50) 140 (100 — 170)	
N1+TP2/TS2	D	0,025 0,025	4,0 4,0	0,07 0,0028		60 (50 — 75) 200 (170 — 250)	

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

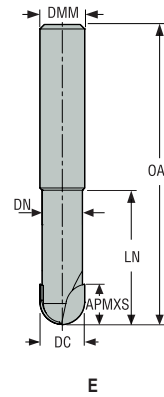
Graphite

X-Heads

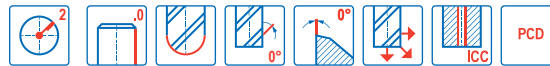
Minimaster

JPD850

Composite – Ball nose – 2 Flutes – Cylindrical



—Tolerances:
—DMM=h5
—DC= h10
—CSP= 2 straight channels



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
JPD850060E2B.0Z2A	02968184	2	E	■	6,0	6,0	7,0	58,0	18,0	5,4	3,0	2	Cylindrical	■
JPD850080E2B.0Z2A	02968185	2	E	■	8,0	8,0	8,0	64,0	24,0	7,2	4,0	2	Cylindrical	■
JPD850100E2B.0Z2A	02968186	2	E	■	10,0	10,0	10,0	73,0	30,0	9,0	5,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JPD850 Copy milling

SMG		a_e/DC	a_p/DC	f_z					v_c
				4	5	6	8	10	
TS2	E/A/D	0.200 0,200	0.50 0,50	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.080 0,0032	0.10 0,0040	550 (470 — 820) 1800 (1600 — 2600)
TS3	E/A/D	0.200 0,200	0.50 0,50	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.080 0,0032	0.10 0,0040	310 (270 — 460) 1025 (890 — 1500)
TP2	E/A/D	0.200 0,200	0.50 0,50	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.080 0,0032	0.10 0,0040	890 (750 — 1300) 2925 (2500 — 4200)
TP3	E/A/D	0.200 0,200	0.50 0,50	0.040 0,0016	0.048 0,0019	0.060 0,0024	0.080 0,0032	0.10 0,0040	580 (500 — 870) 1900 (1700 — 2800)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

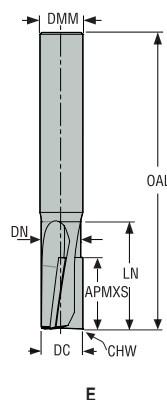
Plastic and cfrp

Graphite

X-Heads

Minimaster

Composite – Square – 3 Flutes – Cylindrical – Chamfer



Designation	Item number	Length index	Tool shape	Technical specifications								Geometric parameters			Stock standard
				CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank		
					mm	mm	mm	mm	mm	mm	mm				
JPD880060G2C.0Z3A	02968190	2	G	■	6,0	8,0	13,0	64,0	20,0	5,3	0,1	3	Cylindrical	■	
JPD880080E2C.0Z3A	02968191	2	E	■	8,0	8,0	15,0	64,0	20,0	7,3	0,1	3	Cylindrical	■	
JPD880100E2C.0Z3A	02968192	2	E	■	10,0	10,0	13,0	73,0	30,0	9,2	0,1	3	Cylindrical	■	
JPD880120E2C.0Z3A	02968194	2	E	■	12,0	12,0	13,0	83,0	30,0	11,0	0,1	3	Cylindrical	■	
JPD880160E2C.0Z3A	02968196	2	E	■	16,0	16,0	13,0	90,0	35,0	14,8	0,1	3	Cylindrical	■	
JPD880100E3C.0Z3A	02968193	3	E	■	10,0	10,0	20,0	73,0	30,0	9,2	0,1	3	Cylindrical	■	
JPD880160E3C.0Z3A	02968197	3	E	■	16,0	16,0	20,0	90,0	35,0	14,8	0,1	3	Cylindrical	■	

■ Stocked standard.

Cutting data – JPD880 Side milling

SMG		a_e/DC	a_p/DC	f_z					v_c
				6	8	10	12	16	
TS2	E/A/D	0.300 0,300	1.2 1,2	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	510 (430 — 750) 1675 (1500 — 2400)
TS3	E/A/D	0.300 0,300	1.2 1,2	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	275 (230 — 410) 900 (760 — 1300)
TP2	E/A/D	0.300 0,300	1.2 1,2	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	810 (680 — 940) 2650 (2300 — 3000)
TP3	E/A/D	0.300 0,300	1.2 1,2	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	520 (440 — 780) 1700 (1500 — 2500)

Cutting data – JPD880 Slot milling

SMG		a_p/DC	f_z					v_c
			6	8	10	12	16	
TS2	E/A/D	1.0 1,0	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.14 0,0055	385 (330 — 570) 1275 (1100 — 1800)
TS3	E/A/D	1.0 1,0	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.14 0,0055	210 (180 — 310) 690 (600 — 1000)
TP2	E/A/D	1.0 1,0	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.14 0,0055	620 (520 — 710) 2025 (1800 — 2300)
TP3	E/A/D	1.0 1,0	0.055 0,0022	0.075 0,0030	0.090 0,0036	0.11 0,0044	0.14 0,0055	395 (340 — 590) 1300 (1200 — 1900)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

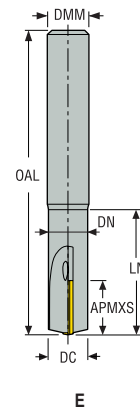
Graphite

X-Heads

Minimaster

JPD890

Composite – Square – 2 Flutes – Cylindrical – Chamfer



E

—Tolerances:
—DMM=h5
—DC=h10
—CSP=2 straight channels



Designation	Item number	Length index	Tool shape	CSP	DC	DMM	APMXS	OAL	LN	DN	CHW	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm			
JPD890060G2S.0Z2A	02791382	2	G	■	6,0	8,0	13,0	64,0	20,0	5,4	0,1	2	Cylindrical	■
JPD890080E2S.0Z2A	02791383	2	E	■	8,0	8,0	15,0	64,0	20,0	7,4	0,1	2	Cylindrical	■
JPD890100E2S.0Z2A	02791384	2	E	■	10,0	10,0	13,0	73,0	30,0	9,4	0,1	2	Cylindrical	■
JPD890120E2S.0Z2A	02791386	2	E	■	12,0	12,0	13,0	83,0	30,0	11,4	0,1	2	Cylindrical	■
JPD890100E3S.0Z2A	02791385	3	E	■	10,0	10,0	20,0	73,0	30,0	9,4	0,1	2	Cylindrical	■
JPD890120E3S.0Z2A	02791387	3	E	■	12,0	12,0	20,0	83,0	30,0	11,4	0,1	2	Cylindrical	■

■ Stocked standard.

Cutting data – JPD890 Side milling

SMG		a_e/DC	a_p/DC	f_z				v_c
				6	8	10	12	
TS2	E/A/D	0.300 0,300	1.2 1,2	0.12 0,0048	0.16 0,0065	0.20 0,0080	0.24 0,0095	415 (360 — 620) 1350 (1200 — 2000)
TS3	E/A/D	0.200 0,200	1.2 1,2	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	305 (260 — 450) 1000 (860 — 1400)
TP2	E/A/D	0.300 0,300	1.2 1,2	0.12 0,0048	0.16 0,0065	0.20 0,0080	0.24 0,0095	670 (560 — 770) 2200 (1900 — 2500)
TP3	E/A/D	0.200 0,200	1.2 1,2	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	580 (490 — 860) 1900 (1700 — 2800)

Universal
iron

Steel and cast
iron

Cutting data – JPD890 Slot milling

SMG		a_p/DC	f_z				v_c
			6	8	10	12	
TS2	E/A/D	1.0 1,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	375 (320 — 550) 1225 (1100 — 1800)
TS3	E/A/D	1.0 1,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	225 (190 — 330) 740 (630 — 1000)
TP2	E/A/D	1.0 1,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	600 (500 — 690) 1975 (1700 — 2200)
TP3	E/A/D	1.0 1,0	0.042 0,0017	0.055 0,0022	0.070 0,0028	0.085 0,0034	420 (360 — 630) 1375 (1200 — 2000)

Stainless steel
and S-materials

Non ferrous

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Hard

Plastic and cfrp

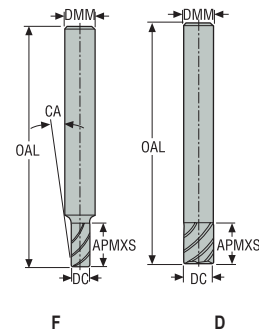
Graphite

X-Heads

Minimaster

J93F

General purpose – Plastic – Square – 2 Flutes – Cylindrical – Sharp



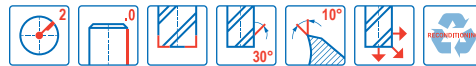
—Tolerances:

—DMM= h5

—DC= Ø1-Ø6= -0,02/-0,034 mm

—DC= Ø8-Ø20= -0,02/-0,044 mm

—Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm				
93015-F	02605874	2	F	1,5	3,0	6,0	40,0	7,0	1,5	4,0	2	Cylindrical	■
93020-F	02605888	2	F	2,0	3,0	9,0	40,0	10,0	2,0	2,5	2	Cylindrical	■
93030-F	02606060	2	D	3,0	3,0	12,0	40,0	—	—	—	2	Cylindrical	■
93040-F	02606061	2	D	4,0	4,0	14,0	50,0	—	—	—	2	Cylindrical	■
93060-F	02606063	2	D	6,0	6,0	20,0	65,0	—	—	—	2	Cylindrical	■
93080-F	02606064	2	D	8,0	8,0	20,0	70,0	—	—	—	2	Cylindrical	■
93100-F	02606065	2	D	10,0	10,0	25,0	80,0	—	—	—	2	Cylindrical	■
93120-F	02606066	2	D	12,0	12,0	25,0	90,0	—	—	—	2	Cylindrical	■
93160-F	02606068	2	D	16,0	16,0	30,0	90,0	—	—	—	2	Cylindrical	■
93L060-F	02606071	3	D	6,0	6,0	40,0	100,0	—	—	—	2	Cylindrical	■
93L080-F	02606072	3	D	8,0	8,0	40,0	100,0	—	—	—	2	Cylindrical	■
93L100-F	02606073	3	D	10,0	10,0	40,0	100,0	—	—	—	2	Cylindrical	■
93L120-F	02606074	3	D	12,0	12,0	45,0	100,0	—	—	—	2	Cylindrical	■
93L160-F	02606077	3	D	16,0	16,0	45,0	100,0	—	—	—	2	Cylindrical	■
93L200-F	02606078	3	D	20,0	20,0	55,0	125,0	—	—	—	2	Cylindrical	■
93XL120-F	02606079	4	D	12,0	12,0	30,0	150,0	—	—	—	2	Cylindrical	■
93XL160-F	02606080	4	D	16,0	16,0	65,0	150,0	—	—	—	2	Cylindrical	■
93XL200-F	02606081	4	D	20,0	20,0	65,0	150,0	—	—	—	2	Cylindrical	■

■ Stocked standard.

Cutting data – J93F Side milling

SMG		a_e/DC	a_p/DC	f_z										v_c
				1.5	2	3	4	6	8	10	12	16	20	
TS1	A	0.400 0.400	1.4 1.4	0.015 0,00060	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	590 (480 — 710) 1925 (1600 — 2300)
TP1	A	0.400 0.400	1.4 1.4	0.015 0,00060	0.020 0,00080	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	0.15 0,0060	0.17 0,0065	570 (460 — 680) 1875 (1600 — 2200)

Cutting data – J93F Slot milling

SMG		a_p/DC	f_z										v_c
			1.5	2	3	4	6	8	10	12	16	20	
TS1	A	0.50 0.50	0.012 0,00048	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	0.16 0,0065	500 (400 — 590) 1650 (1400 — 1900)
TP1	A	0.50 0.50	0.012 0,00048	0.016 0,00065	0.024 0,00095	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	0.13 0,0050	0.16 0,0065	485 (390 — 580) 1600 (1300 — 1900)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

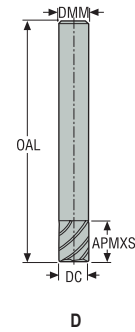
Graphite

X-Heads

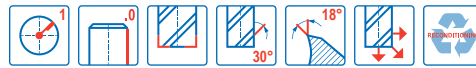
Minimaster

J28

General purpose – Plastic – Square – 1 Flute – Cylindrical – Sharp



—Tolerances:
 —DMM= h5
 —DC= Ø2-Ø6= -0,02/-0,034 mm
 —DC= Ø8-Ø12= -0,02/-0,044 mm
 —Regrind possible if DC is ≥Ø6



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	PCEDC	Shank	Stock standard
				mm	mm	mm	mm			
28030	00029353	2	D	3,0	3,0	10,0	40,0	1	Cylindrical	■
28040	00029361	2	D	4,0	4,0	14,0	50,0	1	Cylindrical	■
28050	00029363	2	D	5,0	5,0	16,0	60,0	1	Cylindrical	■
28060	00029366	2	D	6,0	6,0	20,0	65,0	1	Cylindrical	■
28080	00029369	2	D	8,0	8,0	25,0	75,0	1	Cylindrical	■
28100	00029370	2	D	10,0	10,0	25,0	75,0	1	Cylindrical	■
28120	00029372	2	D	12,0	12,0	25,0	75,0	1	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – J28 Side milling $a_e/DC=0,4$

SMG		a_e/DC	a_p/DC	f_z							v_c
				3	4	5	6	8	10	12	
TS1	A/D	0.300 0,300	1.5 1,5	0.040 0,0016	0.050 0,0020	0.065 0,0026	0.080 0,0032	0.10 0,0040	0.13 0,0050	0.16 0,0065	490 (370 — 610) 1600 (1300 — 2000)

Cutting data – J28 Slot milling

SMG		a_p/DC	f_z							v_c
			3	4	5	6	8	10	12	
TS1	A/D	1.0 1,0	0.026 0,0010	0.036 0,0014	0.044 0,0017	0.055 0,0022	0.070 0,0028	0.090 0,0036	0.11 0,0044	400 (310 — 490) 1300 (1100 — 1600)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster



GRAPHITE

Seco diamond-coated solid carbide end mills are designed specifically for machining graphite. They offer up to 10 times more tool life than milling cutters with conventional coatings. Available in a variety of geometries and an extensive diameter range, these tools feature the best possible substrate to ensure the perfect adhesion of the diamond coating across a range of cutting parameters.

- JD620, JD630, JD640 and JME642 for radius type.
- JD660, SMB614, SMB616 and JMB642 for ball-nose type.

Tool Selection Graphite

					
Name		JD620	JD630	JD640	JD660
Page(s)		587	589	591	593
Family name		DIAMOND	DIAMOND	DIAMOND	DIAMOND
Type of mill					
Shank	Cylindrical				
	Weldon				
Number of Flutes		2	3	4	2
CSP					
Diameter range	Metric	3-12	3-8	6-12	3-6
	Inch				
Length availability		2,3,4	2,3,4	2,3,4	1,2,3,4,5
Operation					
					
					
SMG					
GR		●	●	●	●

■ Stock standard □ Weldon available, delivery time is 3 days.

● Preferred choice ○ Alternative choice

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool Selection Graphite

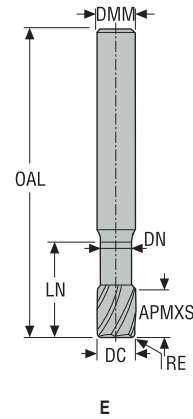
Universal				
Steel and cast iron				
Stainless steel and S-materials				
Non ferrous				
Hard				
Plastic and cfrp				
Graphite				
X-Heads				
Minimaster				
Name		SMB614/616	JME642	JMB642/JMB662
Page(s)		597	597	599
Family name		MINI DIAMOND	MINI DIAMOND	MINI DIAMOND
Type of mill				
Shank	Cylindrical	■	■	■
	Weldon			
Number of Flutes		2	2	2
CSP				
Diameter range	Metric	0,6-3	0,2-2,0	0,2-3,0
	Inch			
Length availability		1,3,5,6,7	1,3,5,6,7	1,3,5,6,7
Operation				
				
				
SMG				
GR		●	●	●

■ Stock standard □ Weldon available, delivery time is 3 days.

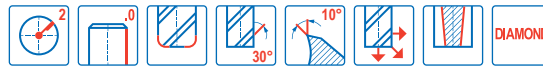
● Preferred choice ○ Alternative choice

JD620

Diamond – Graphite – Square – 2 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out= <0,01 mm
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,05 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
620V030R050-DIAMOND	00023425	2	E	3,0	3,0	5,0	60,0	30,0	2,85	0,5	2	Cylindrical	■
620V040R050-DIAMOND	00023427	2	E	4,0	4,0	5,0	60,0	30,0	3,85	0,5	2	Cylindrical	■
620V060R050-DIAMOND	00023429	2	E	6,0	6,0	10,0	80,0	40,0	5,8	0,5	2	Cylindrical	■
620V080R050-DIAMOND	00023431	2	E	8,0	8,0	10,0	80,0	40,0	7,7	0,5	2	Cylindrical	■
620V100R050-DIAMOND	00023435	2	E	10,0	10,0	10,0	80,0	40,0	9,7	0,5	2	Cylindrical	■
620V120R050-DIAMOND	00023437	2	E	12,0	12,0	10,0	80,0	40,0	11,7	0,5	2	Cylindrical	■
620VL060R050-DIAMOND	00023444	3	E	6,0	6,0	10,0	100,0	70,0	5,8	0,5	2	Cylindrical	■
620VL080R050-DIAMOND	00023446	3	E	8,0	8,0	10,0	100,0	70,0	7,8	0,5	2	Cylindrical	■
620VL080R100-DIAMOND	00023447	3	E	8,0	8,0	10,0	100,0	70,0	7,8	1,0	2	Cylindrical	■
620VL100R050-DIAMOND	00023448	3	E	10,0	10,0	10,0	100,0	70,0	9,8	0,5	2	Cylindrical	■
620VL100R100-DIAMOND	00023449	3	E	10,0	10,0	10,0	100,0	70,0	9,8	1,0	2	Cylindrical	■
620VL120R050-DIAMOND	00023450	3	E	12,0	12,0	10,0	100,0	70,0	11,8	0,5	2	Cylindrical	■
620VL120R100-DIAMOND	00023451	3	E	12,0	12,0	10,0	100,0	70,0	11,7	1,0	2	Cylindrical	■
620VSL100R100-DIAMOND	00023452	4	E	10,0	10,0	10,0	150,0	100,0	9,8	1,0	2	Cylindrical	■
620VSL120R100-DIAMOND	00023453	4	E	12,0	12,0	10,0	150,0	100,0	11,8	1,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JD620 Side milling

SMG		a_e/DC	a_p/DC	f_z						v_c
				3	4	6	8	10	12	
GR1	D	0.500 0,500	0.50 0,50	0.030 0,0012	0.040 0,0016	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	690 (580 — 800) 2275 (2000 — 2600)

Cutting data – JD620 Slot milling

SMG		a_p/DC	f_z						v_c
			3	4	6	8	10	12	
GR1	D	0.50 0,50	0.024 0,00095	0.032 0,0013	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038	610 (520 — 710) 2000 (1800 — 2300)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

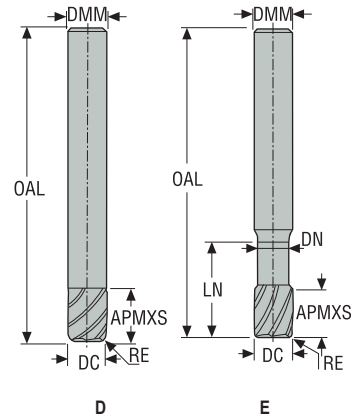
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

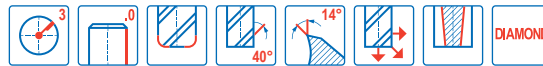
All cutting data are target values

JD630

Diamond – Graphite – Square – 3 Flutes – Cylindrical – Corner radius



- Tolerances:
- Run-out= <0,01 mm
- DMM= h5
- DC= -0,02/-0,04 mm
- RE= ±0,05 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
630030R015-DIAMOND	00023454	2	D	3,0	3,0	12,0	40,0	—	—	0,15	3	Cylindrical	■
630040R020-DIAMOND	00023456	2	D	4,0	4,0	14,0	50,0	—	—	0,2	3	Cylindrical	■
630050R030-DIAMOND	00023457	2	D	5,0	5,0	16,0	50,0	—	—	0,3	3	Cylindrical	■
630060R030-DIAMOND	00023458	2	D	6,0	6,0	20,0	65,0	—	—	0,3	3	Cylindrical	■
630080R050-DIAMOND	00023459	2	D	8,0	8,0	20,0	65,0	—	—	0,5	3	Cylindrical	■
630V030R030-DIAMOND	00023464	3	E	3,0	3,0	5,0	40,0	15,0	2,9	0,3	3	Cylindrical	■
630V040R030-DIAMOND	00023465	3	E	4,0	4,0	5,0	50,0	20,0	3,9	0,3	3	Cylindrical	■
630VL030R020-DIAMOND	00023467	4	E	3,0	3,0	5,0	60,0	25,0	2,9	0,2	3	Cylindrical	■
630VL040R020-DIAMOND	00023470	4	E	4,0	4,0	5,0	60,0	30,0	3,9	0,2	3	Cylindrical	■
630VL050R020-DIAMOND	00023471	4	E	5,0	5,0	6,0	70,0	40,0	4,9	0,2	3	Cylindrical	■
630VL060R050-DIAMOND	00023472	4	E	6,0	6,0	10,0	100,0	60,0	5,9	0,5	3	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JD630 Side milling

SMG		a_e/DC	a_p/DC	f_z					v_c
				3	4	5	6	8	
GR1	D	0.500 0,500	1.0 1,0	0.030 0,0012	0.040 0,0016	0.050 0,0020	0.060 0,0024	0.080 0,0032	680 (580 — 790) 2225 (2000 — 2500)

Cutting data – JD630 Slot milling

SMG		a_p/DC	f_z					v_c
			3	4	5	6	8	
GR1	D	0.50 0,50	0.024 0,00095	0.032 0,0013	0.040 0,0016	0.048 0,0019	0.065 0,0026	620 (520 — 720) 2025 (1800 — 2300)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

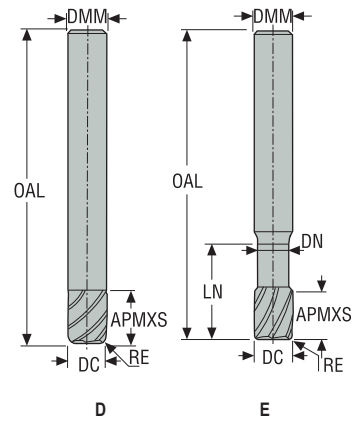
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

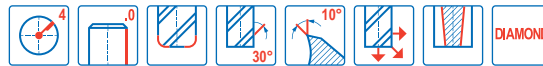
All cutting data are target values

JD640

Diamond – Graphite – Square – 4 Flutes – Cylindrical – Corner radius



—Tolerances:
—Run-out= <0,01 mm
—DMM= h5
—DC= -0,02/-0,04 mm
—RE= ±0,05 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
640100R050-DIAMOND	00023474	2	D	10,0	10,0	25,0	75,0	—	—	0,5	4	Cylindrical	■
640120R050-DIAMOND	00023475	2	D	12,0	12,0	25,0	80,0	—	—	0,5	4	Cylindrical	■
640V060R050-DIAMOND	00023479	3	E	6,0	6,0	10,0	80,0	40,0	5,9	0,5	4	Cylindrical	■
640V080R050-DIAMOND	00023480	3	E	8,0	8,0	10,0	80,0	40,0	7,8	0,5	4	Cylindrical	■
640V100R050-DIAMOND	00023481	3	E	10,0	10,0	12,0	80,0	40,0	9,8	0,5	4	Cylindrical	■
640V120R050-DIAMOND	00023483	3	E	12,0	12,0	15,0	80,0	40,0	11,8	0,5	4	Cylindrical	■
640VL100R050-DIAMOND	00023486	4	E	10,0	10,0	12,0	125,0	80,0	9,8	0,5	4	Cylindrical	■
640VL120R050-DIAMOND	02462698	4	E	12,0	12,0	15,0	125,0	80,0	11,7	0,5	4	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JD640 Side milling

SMG		a_p/DC		f_z				v_c
				6	8	10	12	
GR1	D	0.500 0,500	1.0 1,0	0.060 0,0024	0.080 0,0032	0.10 0,0040	0.12 0,0048	680 (570 — 780) 2225 (1900 — 2500)

Cutting data – JD640 Slot milling

SMG		a_p/DC		f_z				v_c
				6	8	10	12	
GR1	D	0.50 0,50	0.048 0,0019	0.065 0,0026	0.080 0,0032	0.095 0,0038		610 (520 — 710) 2000 (1800 — 2300)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

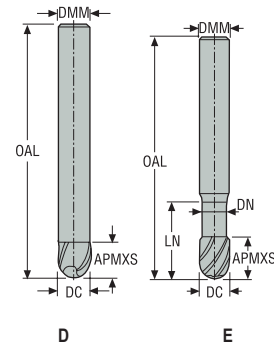
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

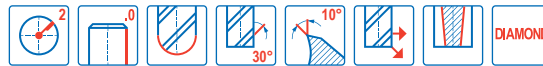
All cutting data are target values

JD660

Diamond – Graphite – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- Run-out=<0,01 mm
- DMM=h5
- DC= -0,02/-0,04 mm
- RE= ±0,01 mm
- B=0,9°



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm			
660030-DIAMOND	00023488	1	D	3,0	3,0	8,0	40,0	—	—	1,5	2	Cylindrical	■
660040-DIAMOND	00023489	1	D	4,0	4,0	14,0	50,0	—	—	2,0	2	Cylindrical	■
660060-DIAMOND	00023491	1	D	6,0	6,0	20,0	65,0	—	—	3,0	2	Cylindrical	■
660V030-DIAMOND	00023501	2	E	3,0	3,0	6,0	40,0	15,0	2,9	1,5	2	Cylindrical	■
660V040-DIAMOND	00023502	2	E	4,0	4,0	6,0	40,0	15,0	3,9	2,0	2	Cylindrical	■
660V060-DIAMOND	00023505	2	E	6,0	6,0	10,0	65,0	35,0	5,9	3,0	2	Cylindrical	■
660L030-DIAMOND	00023494	3	D	3,0	3,0	20,0	60,0	—	—	1,5	2	Cylindrical	■
660L040-DIAMOND	00023496	3	D	4,0	4,0	30,0	60,0	—	—	2,0	2	Cylindrical	■
660L060-DIAMOND	00023498	3	D	6,0	6,0	40,0	100,0	—	—	3,0	2	Cylindrical	■
660VL030-DIAMOND	00023511	4	E	3,0	3,0	6,0	60,0	30,0	2,9	1,5	2	Cylindrical	■
660VL040-DIAMOND	00023512	4	E	4,0	4,0	6,0	60,0	30,0	3,9	2,0	2	Cylindrical	■
660VL060-DIAMOND	00023516	4	E	6,0	6,0	10,0	100,0	70,0	5,8	3,0	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

Graphite

X-Heads

Minimaster

Cutting data – JD660 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z			v_c
				3	4	6	
GR1	D	0.400 0,400	2.4 2,4	0.024 0,00095	0.032 0,0013	0.046 0,0018	920 (780 — 1000) 3025 (2600 — 3200)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (*sf/min*)

f_z = mm (*in/tooth*)

a_p = mm/DC (*in/DC*) = factor

a_e = mm/DC (*in/DC*) = factor

All cutting data are target values

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

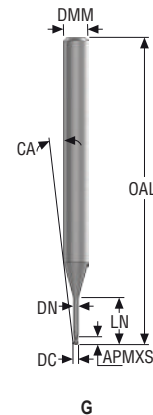
Graphite

X-Heads

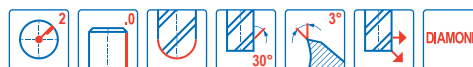
Minimaster

SMB614/616

Miniature – Graphite – Ball nose – 2 Flutes – Cylindrical



- Tolerances:
- Run-out = <0,005 mm
- DMM = h5
- DC Coated = -0,01/-0,025 mm
- DC Coated = 0/-0,015 mm
- RE = ±0,01 mm



Designation	Grade	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
					mm	mm	mm	mm	mm	mm	mm				
SMB614010G4B.022	—	10108702	4	G	1,0	4,0	1,0	50,0	7,5	0,95	0,5	6,54	2	Cylindrical	■
SMB614010G4B.022	DIA	10108776	4	G	1,0	4,0	1,0	50,0	7,5	0,95	0,5	6,54	2	Cylindrical	■
SMB614020G4B.022	—	10108703	4	G	2,0	4,0	2,0	50,0	12,0	1,9	1,0	3,74	2	Cylindrical	■
SMB614020G4B.022	DIA	10108777	4	G	2,0	4,0	2,0	50,0	12,0	1,9	1,0	3,74	2	Cylindrical	■
SMB616020G4B.022	—	10108768	4	G	2,0	6,0	2,0	50,0	12,0	1,9	1,0	5,99	2	Cylindrical	■
SMB614030G4B.022	—	10108704	4	G	3,0	4,0	3,0	50,0	20,0	2,85	1,5	1,36	2	Cylindrical	■
SMB614030G4B.022	DIA	10108778	4	G	3,0	4,0	3,0	50,0	20,0	2,85	1,5	1,36	2	Cylindrical	■
SMB616030G4B.022	—	10108769	4	G	3,0	6,0	3,0	55,0	20,0	2,85	1,5	3,47	2	Cylindrical	■
SMB614020G5B.022	—	10108705	5	G	2,0	4,0	2,0	50,0	16,0	1,9	1,0	2,96	2	Cylindrical	■
SMB614020G5B.022	DIA	10108779	5	G	2,0	4,0	2,0	50,0	16,0	1,9	1,0	3,13	2	Cylindrical	■
SMB616020G5B.022	—	10108770	5	G	2,0	6,0	2,0	50,0	16,0	1,9	1,0	4,96	2	Cylindrical	■
SMB614006G6B.022	—	10108706	6	G	0,6	4,0	0,6	50,0	6,0	0,55	0,3	7,72	2	Cylindrical	■
SMB614006G6B.022	DIA	10108780	6	G	0,6	4,0	0,6	50,0	6,0	0,55	0,3	7,72	2	Cylindrical	■
SMB616006G6B.022	—	10108771	6	G	0,6	6,0	0,6	50,0	6,0	0,55	0,3	9,43	2	Cylindrical	■
SMB614008G6B.022	—	10108707	6	G	0,8	4,0	0,8	50,0	10,0	0,75	0,4	5,69	2	Cylindrical	■
SMB614008G6B.022	DIA	10108781	6	G	0,8	4,0	0,8	50,0	10,0	0,75	0,4	5,69	2	Cylindrical	■
SMB614010G6B.022	—	10108708	6	G	1,0	4,0	0,5	50,0	12,0	0,95	0,5	4,88	2	Cylindrical	■
SMB614010G6B.022	DIA	10108782	6	G	1,0	4,0	0,5	50,0	12,0	0,95	0,5	4,88	2	Cylindrical	■
SMB616010G6B.022	—	10108772	6	G	1,0	6,0	1,0	50,0	12,0	0,95	0,5	6,69	2	Cylindrical	■
SMB614020G6B.022	—	10108709	6	G	2,0	4,0	2,0	50,0	20,0	1,9	1,0	2,46	2	Cylindrical	■
SMB614020G6B.022	DIA	10108783	6	G	2,0	4,0	2,0	50,0	20,0	1,9	1,0	2,46	2	Cylindrical	■
SMB616020G6B.022	—	10108773	6	G	2,0	6,0	2,0	55,0	20,0	1,9	1,0	4,23	2	Cylindrical	■
SMB614006G7B.022	—	10108710	7	G	0,6	4,0	0,6	50,0	10,0	0,55	0,3	5,87	2	Cylindrical	■
SMB614006G7B.022	DIA	10108784	7	G	0,6	4,0	0,6	50,0	10,0	0,55	0,3	5,87	2	Cylindrical	■
SMB616006G7B.022	—	10108774	7	G	0,6	6,0	0,6	50,0	10,0	0,55	0,3	7,59	2	Cylindrical	■
SMB614010G7B.022	—	10108711	7	G	1,0	4,0	1,0	50,0	18,0	0,95	0,5	3,64	2	Cylindrical	■
SMB614010G7B.022	DIA	10108785	7	G	1,0	4,0	1,0	50,0	18,0	0,95	0,5	3,64	2	Cylindrical	■
SMB616010G7B.022	—	10108775	7	G	1,0	6,0	1,0	55,0	18,0	0,95	0,5	5,23	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – SMB614 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z					v_c
				0.6	0.8	1	2	3	
GR1	D	0,0700 0.0700	0,10 0.10	0,018 0.00070	0,024 0.00095	0,030 0.0012	0,060 0.0024	0,090 0.0036	95 (54 — 120) 310 (180 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – SMB616 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z				v_c
				0.6	1	2	3	
GR1	D	0,0700 0.0700	0,10 0.10	0,018 0.00070	0,030 0.0012	0,060 0.0024	0,090 0.0036	95 (54 — 120) 310 (180 — 390)

For cutting data recalculations, see pages 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

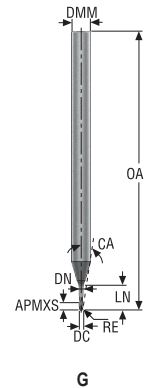
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

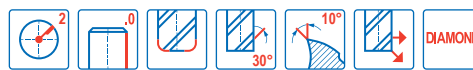
All cutting data are target values

JME642

Miniature – Graphite – Square – Diamond – 2 Flutes – DMM 4 – Cylindrical – Corner radius



— Tolerances:
— Run-out= <0,005 mm
— DMM= h5
— DC= 0/-0,015 mm
— RE= ±0,007 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JME642002G1R002.0Z2-DIA	03215524	1	G	0,2	4,0	0,3	40,0	0,4	0,18	0,02	14,32	2	Cylindrical	■
JME642003G1R002.0Z2-DIA	03215525	1	G	0,3	4,0	0,5	40,0	0,5	0,28	0,02	14,1	2	Cylindrical	■
JME642004G1R004.0Z2-DIA	03215526	1	G	0,4	4,0	0,6	40,0	2,0	0,37	0,04	11,67	2	Cylindrical	■
JME642005G3R005.0Z2-DIA	03215527	3	G	0,5	4,0	0,7	40,0	2,5	0,45	0,05	10,97	2	Cylindrical	■
JME642006G3R006.0Z2-DIA	03215528	3	G	0,6	4,0	1,0	60,0	3,0	0,55	0,06	10,31	2	Cylindrical	■
JME642008G3R008.0Z2-DIA	03215529	3	G	0,8	4,0	1,2	60,0	4,0	0,75	0,08	9,31	2	Cylindrical	■
JME642010G3R010.0Z2-DIA	03215530	3	G	1,0	4,0	1,6	60,0	5,0	0,95	0,1	8,04	2	Cylindrical	■
JME642012G3R012.0Z2-DIA	03215531	3	G	1,2	4,0	1,6	60,0	6,0	1,15	0,12	7,09	2	Cylindrical	■
JME642015G3R015.0Z2-DIA	03215532	3	G	1,5	4,0	2,4	60,0	7,5	1,4	0,15	5,8	2	Cylindrical	■
JME642020G3R015.0Z2-DIA	03236441	3	G	2,0	4,0	2,2	60,0	10,0	1,9	0,15	4,11	2	Cylindrical	■
JME642020G3R020.0Z2-DIA	03215533	3	G	2,0	4,0	3,0	60,0	10,0	1,9	0,2	4,11	2	Cylindrical	■
JME642005G5R005.0Z2-DIA	03215534	5	G	0,5	4,0	0,7	40,0	4,0	0,45	0,05	9,43	2	Cylindrical	■
JME642006G5R006.0Z2-DIA	03215535	5	G	0,6	4,0	1,0	60,0	5,0	0,55	0,06	8,5	2	Cylindrical	■
JME642008G5R008.0Z2-DIA	03215536	5	G	0,8	4,0	1,2	60,0	7,0	0,75	0,08	7,02	2	Cylindrical	■
JME642010G5R010.0Z2-DIA	03215537	5	G	1,0	4,0	1,6	60,0	8,5	0,95	0,1	6,06	2	Cylindrical	■
JME642012G5R012.0Z2-DIA	03215538	5	G	1,2	4,0	1,6	60,0	10,0	1,15	0,12	5,23	2	Cylindrical	■
JME642015G5R015.0Z2-DIA	03215539	5	G	1,5	4,0	2,4	60,0	12,0	1,4	0,15	4,25	2	Cylindrical	■
JME642020G5R015.0Z2-DIA	03236442	5	G	2,0	4,0	2,2	60,0	16,0	1,9	0,15	2,87	2	Cylindrical	■
JME642020G5R020.0Z2-DIA	03215540	5	G	2,0	4,0	3,0	60,0	16,0	1,9	0,2	2,87	2	Cylindrical	■
JME642010G6R010.0Z2-DIA	03215541	6	G	1,0	4,0	1,6	60,0	12,0	0,95	0,1	4,86	2	Cylindrical	■
JME642015G6R015.0Z2-DIA	03215542	6	G	1,5	4,0	2,4	50,0	18,0	1,4	0,15	3,13	2	Cylindrical	■
JME642020G6R020.0Z2-DIA	03215543	6	G	2,0	4,0	3,0	60,0	25,0	1,9	0,2	1,97	2	Cylindrical	■
JME642020G7R020.0Z2-DIA	03215544	7	G	2,0	4,0	3,0	60,0	30,0	1,9	0,2	1,68	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – JME642 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z										v_c
				0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	2	
GR1	D	0.300 0,300	0.80 0,80	0.024 0,00095	0.036 0,0014	0.044 0,0017	0.048 0,0019	0.055 0,0022	0.060 0,0024	0.065 0,0026	0.070 0,0028	0.075 0,0030	0.085 0,0034	175 (130 — 370) 570 (430 — 1200)

Cutting data – JME642 Slot milling

SMG		a_p/DC	f_z										v_c
			0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	2	
GR1	D	0.30 0,30	0.022 0,00085	0.032 0,0013	0.040 0,0016	0.046 0,0018	0.050 0,0020	0.055 0,0022	0.065 0,0026	0.065 0,0026	0.075 0,0030	0.080 0,0032	140 (110 — 300) 460 (370 — 980)

Table based on LV3, please recalc based on length version chosen. See page(s). 687 – 695

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

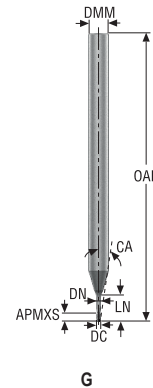
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

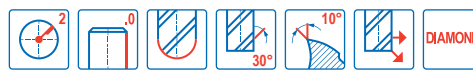
All cutting data are target values

JMB642/JMB662

Miniature – Graphite – Ball nose – Diamond – 2 Flutes – DMM 4-6 – Cylindrical



— Tolerances:
— Run-out= <0,005 mm
— DMM= h5
— DC= 0/-0,015 mm
— RE= ±0,007 mm



Designation	Item number	Length index	Tool shape	DC	DMM	APMXS	OAL	LN	DN	RE	CA°	PCEDC	Shank	Stock standard
				mm	mm	mm	mm	mm	mm	mm				
JMB642002G1B.0Z2-DIA	03215373	1	G	0,2	4,0	0,3	40,0	0,4	0,18	0,1	14,5	2	Cylindrical	■
JMB642003G1B.0Z2-DIA	03215374	1	G	0,3	4,0	0,5	40,0	0,6	0,28	0,15	14,17	2	Cylindrical	■
JMB642004G1B.0Z2-DIA	03215375	1	G	0,4	4,0	2,0	40,0	0,8	0,37	0,2	13,8	2	Cylindrical	■
JMB642005G3B.0Z2-DIA	03215376	3	G	0,5	4,0	0,7	40,0	2,5	0,45	0,25	11,19	2	Cylindrical	■
JMB642006G3B.0Z2-DIA	03215377	3	G	0,6	4,0	1,0	60,0	3,0	0,55	0,3	10,55	2	Cylindrical	■
JMB642008G3B.0Z2-DIA	03215378	3	G	0,8	4,0	1,2	60,0	4,0	0,75	0,4	9,38	2	Cylindrical	■
JMB642010G3B.0Z2-DIA	03215379	3	G	1,0	4,0	1,6	60,0	5,0	0,95	0,5	8,33	2	Cylindrical	■
JMB642012G3B.0Z2-DIA	03215380	3	G	1,2	4,0	1,6	60,0	6,0	1,15	0,6	7,38	2	Cylindrical	■
JMB642015G3B.0Z2-DIA	03215381	3	G	1,5	4,0	2,4	60,0	7,5	1,4	0,75	6,08	2	Cylindrical	■
JMB642020G3B.0Z2-DIA	03215382	3	G	2,0	4,0	3,0	60,0	10,0	1,9	1,0	4,35	2	Cylindrical	■
JMB662030G3B.0Z2-DIA	03215384	3	G	3,0	6,0	3,0	60,0	15,0	2,8	1,5	4,38	2	Cylindrical	■
JMB642005G5B.0Z2-DIA	03215387	5	G	0,5	4,0	0,7	40,0	4,0	0,45	0,25	9,6	2	Cylindrical	■
JMB642006G5B.0Z2-DIA	03215388	5	G	0,6	4,0	1,0	60,0	5,0	0,55	0,3	8,68	2	Cylindrical	■
JMB642008G5B.0Z2-DIA	03215389	5	G	0,8	4,0	1,2	60,0	7,0	0,75	0,4	7,18	2	Cylindrical	■
JMB642010G5B.0Z2-DIA	03215390	5	G	1,0	4,0	1,6	60,0	8,5	0,95	0,5	6,22	2	Cylindrical	■
JMB642012G5B.0Z2-DIA	03215391	5	G	1,2	4,0	1,6	60,0	10,0	1,15	0,6	5,4	2	Cylindrical	■
JMB642015G5B.0Z2-DIA	03215392	5	G	1,5	4,0	2,4	60,0	12,0	1,4	0,75	4,4	2	Cylindrical	■
JMB642020G5B.0Z2-DIA	03215393	5	G	2,0	4,0	3,0	60,0	16,0	1,9	1,0	2,99	2	Cylindrical	■
JMB662030G5B.0Z2-DIA	03215395	5	G	3,0	6,0	3,0	60,0	24,0	2,8	1,5	3,0	2	Cylindrical	■
JMB642010G6B.0Z2-DIA	03215396	6	G	1,0	4,0	1,6	60,0	12,0	0,95	0,5	4,96	2	Cylindrical	■
JMB642015G6B.0Z2-DIA	03215397	6	G	1,5	4,0	2,4	60,0	18,0	1,4	0,75	3,21	2	Cylindrical	■
JMB642020G6B.0Z2-DIA	03215398	6	G	2,0	4,0	3,0	60,0	25,0	1,9	1,0	2,03	2	Cylindrical	■
JMB642020G7B.0Z2-DIA	03215399	7	G	2,0	4,0	3,0	60,0	30,0	1,9	1,0	1,72	2	Cylindrical	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and CFRP

Graphite

X-Heads

Minimaster

Cutting data – JMB642/662 Side milling roughing

SMG		a_e/DC	a_p/DC	f_z										v_c
				0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	2	
GR1	D	0.300 0,300	0.50 0,50	0.0024 0,000095	0.0036 0,00014	0.0048 0,00019	0.0060 0,00024	0.0070 0,00028	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.017 0,00065	0.020 0,00080	250 (200 — 300) 820 (660 — 980)

Cutting data – JMB642/662 Copy milling roughing

SMG		a_e/DC	a_p/DC	f_z										v_c
				0.2	0.3	0.4	0.5	0.6	0.8	1	1.2	1.5	2	
GR1	D	0.300 0,300	0.50 0,50	0.0024 0,000095	0.0036 0,00014	0.0048 0,00019	0.0060 0,00024	0.0070 0,00028	0.0095 0,00038	0.012 0,00048	0.014 0,00055	0.017 0,00065	0.020 0,00080	250 (200 — 300) 820 (660 — 980)

Table based on LV3, please recalc based on length version chosen. See page(s) N/A-N/A

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values



SECO X-HEADS

The new Seco Tools Exchangeable Head range is a comprehensive offering to meet most customer demands. Utilizing our proven solid carbide geometries, we offer various types to machine most materials and complete various machining operations. The connection is a proven exchangeable head design to give high process security and reliability. The shanks offer many types for short reach up to long reach applications. Straight necking and tapered necks to give the best combination of stability depending on the needs for your machining operation.

- XSE550, XSE720, XSE450, XHF580, XHF780 XVE540 and XVE510 for chamfer or radius type.
- XSB540, XSB720 and XVB510 for ball-nose type.
- XVC506, XVC509 and XVC512 for conical type.
- XHT740 for barrel type.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Tool selection X-Heads

							
							
Name		XSE550	XSB540	XSE720	XSB720	XSE450	XHT740
Page(s)		612-620	629	631-632	637	643-644	409
Family name		X-HEADS SOLID ²	X-HEADS SOLID ²	X-HEADS SOLID ²	X-HEADS SOLID ²	X-HEADS SOLID ²	X-HEADS HSM/TORNADO
Type of mill							
Number of Flutes		3,4,5	4	6	6	3	4,6
CSP							
Diameter range	Metric	10-25	10-16	10-25	10-20	10-20	10-16
	Inch	3/8-1		3/8-1	3/8-1	3/8-1	
Length availability		1,2	1	3	3	2	2,3
Operation							
							
							
							
SMG							
P1-8		●	●	○	○		○
P11-12		●	○	●	●		●
M1-3		●	●	●	●		●
M4-5		●	●	●	●		
K1-7		●	●				
S1-3		●	○	●	●		○
S11-13		●	●	●	●		●
H3 H5 H7 H8 H11 H12 H21 H31		●	○				
N1		●	●			●	
N2-3		●	●			●	
N11		●	●			●	
TS1		●	●			●	
TP1		●	●			●	
GR		○	○				

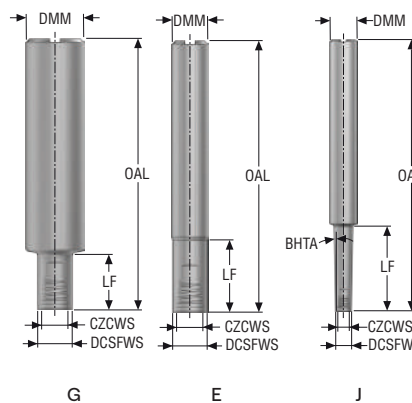
Tool selection X-Heads

								Universal
Name	XHF580	XHF780	XVE540	XVE510	XVB510	XVC506/509/512	XVK310	Steel and cast iron
Page(s)	650	655	668	673	676-677	680	684	Stainless steel and S-materials
Family name	X-HEADS HFM	X-HEADS HFM	X-HEADS VHM	X-HEADS VHM	X-HEADS VHM	X-HEADS VHM	X-HEADS VHM	Non ferrous
Type of mill								Hard
Number of Flutes	4	4	3,4	2	2	2	4	Plastic and cfrp
CSP	■		■					
Diameter range	Metric 10-16 Inch 3/8-5/8	Metric 10-16 Inch 3/8-5/8	Metric 10-20 Inch 3/8-3/4	Metric 10-12	Metric 10-16 Inch 3/8-5/8	Metric 10-16	Metric 12-20	
Length availability	1	1	1	1	1	1	1	
Operation								
								
								
								
SMG								
P1-8	●	○	●	●	●	●	●	Graphite
P11-12	●	○	●	●	●	●	●	
M1-3	●	●	●	●	●	●	●	
M4-5	●	●	●	●	●	●	●	
K1-7	●	●	●	●	●	●	●	
S1-3	○	●	○	○	○	○	○	
S11-13	○	●	○	○	○	○	○	
H3 H5 H7 H8 H11 H12 H21 H31	○	○	○				○	
N1			●	○	○	○	●	X-Heads
N2-3			●	○	○	○	●	
N11			●	○	○	○	●	
TS1			●	●	●	●	●	
TP1			●	●	●	●	●	
GR			○	○	○	○	○	Minimaster

■ Stocked standard.

● Preferred choice, ○ Alternative choice

Steel - Metric



—Tolerances:
—DMM= h6
—DCSFWS= ±0,05 mm
—BHTA= ±20'

Designation	Item number	Length index	Tool shape	DCSFWS	CZCWS	DMM	LF	OAL	BHTA°	Shank	Stock standard
				mm	mm	mm	mm	mm			
XE10160G1-065-00.0S	10138083	1	G	9,6	E10	16,0	5,0	65,0	0,0	Cylindrical	■
XE12160G1-065-00.0S	10138084	1	G	11,6	E12	16,0	5,0	65,0	0,0	Cylindrical	■
XE16200G1-070-00.0S	10138085	1	G	15,4	E16	20,0	5,0	70,0	0,0	Cylindrical	■
XE20250G1-080-00.0S	10138086	1	G	19,2	E20	25,0	5,0	80,0	0,0	Cylindrical	■
XE25320G1-080-00.0S	10138087	1	G	24,1	E25	32,0	5,0	80,0	0,0	Cylindrical	■
XE10100E2-055-00.0S	10138092	2	E	9,6	E10	10,0	10,0	55,0	0,0	Cylindrical	■
XE10100E2-075-00.0S	10138093	2	E	9,6	E10	10,0	20,0	75,0	0,0	Cylindrical	■
XE12120E2-065-00.0S	10138094	2	E	11,6	E12	12,0	12,0	65,0	0,0	Cylindrical	■
XE12120E2-100-00.0S	10138095	2	E	11,6	E12	12,0	22,0	100,0	0,0	Cylindrical	■
XE10160G2-075-00.0S	10138088	2	G	9,6	E10	16,0	15,0	75,0	0,0	Cylindrical	■
XE12160G2-080-00.0S	10138089	2	G	11,6	E12	16,0	18,0	80,0	0,0	Cylindrical	■
XE12160J2-140-05.0S	10138107	2	J	11,6	E12	16,0	25,1	140,0	5,0	Cylindrical	■
XE16160E2-070-00.0S	10138096	2	E	15,4	E16	16,0	16,0	70,0	0,0	Cylindrical	■
XE16200G2-090-00.0S	10138090	2	G	15,4	E16	20,0	24,0	90,0	0,0	Cylindrical	■
XE16200G2-110-00.0S	10138091	2	G	15,4	E16	20,0	25,0	110,0	0,0	Cylindrical	■
XE20200E2-120-00.0S	10138097	2	E	19,2	E20	20,0	30,0	120,0	0,0	Cylindrical	■
XE25250E2-140-00.0S	10138098	2	E	24,1	E25	25,0	40,0	140,0	0,0	Cylindrical	■
XE25320J2-200-05.0S	10138112	2	J	24,1	E25	32,0	45,1	200,0	5,0	Cylindrical	■
XE10160J3-120-01.0S	10138099	3	J	9,6	E10	16,0	35,0	120,0	1,0	Cylindrical	■
XE10160J3-140-05.0S	10138106	3	J	9,6	E10	16,0	36,6	140,0	5,0	Cylindrical	■
XE12160J3-155-01.0S	10138101	3	J	11,6	E12	16,0	42,0	155,0	1,0	Cylindrical	■
XE16200J3-190-01.0S	10138103	3	J	15,4	E16	20,0	56,0	190,0	1,0	Cylindrical	■
XE16250J3-170-05.0S	10138110	3	J	15,4	E16	25,0	54,9	170,0	5,0	Cylindrical	■
XE20320J3-180-05.0S	10138111	3	J	19,2	E20	32,0	73,2	180,0	5,0	Cylindrical	■
XE12200J4-155-05.0S	10138109	4	J	11,6	E12	20,0	48,0	155,0	5,0	Cylindrical	■
XE16200J4-190-01.0S	10138104	4	J	15,4	E16	20,0	75,0	190,0	1,0	Cylindrical	■
XE20250J4-200-01.0S	10138105	4	J	19,2	E20	25,0	80,0	200,0	1,0	Cylindrical	■
XE12320J4-250-10.0S	10138114	4	J	11,6	E12	32,0	57,8	250,0	10,0	Cylindrical	■
XE10160J5-160-01.0S	10138100	5	J	9,6	E10	16,0	50,0	160,0	1,0	Cylindrical	■
XE12160J5-170-01.0S	10138102	5	J	11,6	E12	16,0	60,0	170,0	1,0	Cylindrical	■
XE10200J5-140-05.0S	10138108	5	J	9,6	E10	20,0	59,4	140,0	5,0	Cylindrical	■
XE10320J6-250-10.0S	10138113	6	J	9,6	E10	32,0	63,5	250,0	10,0	Cylindrical	■

Spare Parts, included in delivery

Accessories

For cutter	Spanner	Replacement blade	Replacement blade 1	Torque key
				
E10	XW-E10	XTWH-E10.08	XTWH-E10.06	XTW-E10.E12
E12	XW-E12	XTWH-E12.10	XTWH-E12.08	XTW-E10.E12
E16	XW-E16	XTWH-E16.12	XTWH-E16.10	XTW-E16.E25
E20	XW-E20	XTWH-E20.16	–	XTW-E16.E25
E25	XW-E25	XTWH-E25.20	–	XTW-E16.E25

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

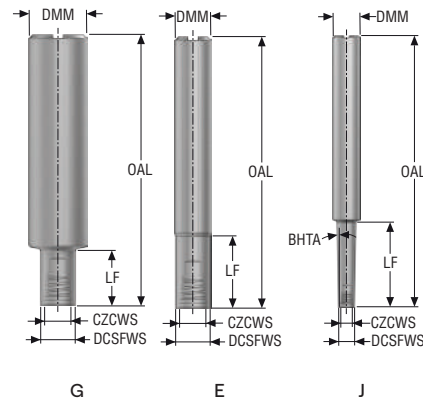
Plastic and cfrp

Graphite

X-Heads

Minimaster

Steel - Inch



—Tolerances:
 —DMM= h6
 —DCSFWS= ±.002 inch
 —BHTA= ±20°

Designation	Item number	Length index	Tool shape	DCSFWS		CZCWS	DMM	LF	OAL	BHTA°	Shank	Stock standard
				inch			inch	inch	inch			
XE10.500G1-2.50-00.0S	10138050	1	G	0.360	E10	0.500	0.250	2.500	0,0	Cylindrical	■	
XE12.500E1-3.00-00.0S	10138054	1	E	0.480	E12	0.500	0.250	3.000	0,0	Cylindrical	■	
XE16.625E1-3.00-00.0S	10138057	1	E	0.606	E16	0.625	0.250	3.000	0,0	Cylindrical	■	
XE20.750E1-3.00-00.0S	10138060	1	E	0.724	E20	0.750	0.250	3.000	0,0	Cylindrical	■	
XE251.00E1-3.50-00.0S	10138062	1	E	0.961	E25	1.000	0.250	3.500	0,0	Cylindrical	■	
XE10.375E2-2.50-00.0S	10138053	2	E	0.360	E10	0.375	0.402	2.500	0,0	Cylindrical	■	
XE10.500G2-3.00-00.0S	10138051	2	G	0.360	E10	0.500	1.000	3.000	0,0	Cylindrical	■	
XE12.500E2-2.50-00.0S	10138055	2	E	0.480	E12	0.500	0.500	2.500	0,0	Cylindrical	■	
XE12.500E2-4.50-00.0S	10138056	2	E	0.480	E12	0.500	1.000	4.500	0,0	Cylindrical	■	
XE12.625J2-6.50-05.0S	10138075	2	J	0.480	E12	0.625	0.827	6.500	5,0	Cylindrical	■	
XE16.625E2-3.00-00.0S	10138058	2	E	0.606	E16	0.625	0.650	3.000	0,0	Cylindrical	■	
XE16.625E2-4.50-00.0S	10138059	2	E	0.606	E16	0.625	1.000	4.500	0,0	Cylindrical	■	
XE16.750J2-6.50-05.0S	10138076	2	J	0.606	E16	0.750	0.821	6.500	5,0	Cylindrical	■	
XE20.750E2-4.50-00.0S	10138061	2	E	0.724	E20	0.750	1.000	4.500	0,0	Cylindrical	■	
XE251.00E2-4.50-00.0S	10218129	2	E	0.961	E25	1.000	1.500	4.500	0,0	CYLINDRICAL	■	
XE251.25G2-6.50-00.0S	10138052	2	G	0.961	E25	1.250	2.500	6.500	0,0	Cylindrical	■	
XE251.25J2-7.50-05.0S	10218130	2	J	0.961	E25	1.250	1.654	7.500	5,0	CYLINDRICAL	■	
XE10.625J3-4.50-01.0S	10138063	3	J	0.360	E10	0.625	1.402	4.500	1,0	Cylindrical	■	
XE12.625J3-6.00-01.0S	10138065	3	J	0.480	E12	0.625	1.650	6.000	1,0	Cylindrical	■	
XE16.750J3-7.50-01.0S	10138068	3	J	0.606	E16	0.750	2.252	7.500	1,0	Cylindrical	■	
XE161.00J3-7.00-05.0S	10138077	3	J	0.606	E16	1.000	2.250	7.000	5,0	Cylindrical	■	
XE10.625J4-4.00-03.0S	10138071	4	J	0.360	E10	0.625	1.799	4.000	3,0	Cylindrical	■	
XE12.625J4-7.50-01.0S	10138066	4	J	0.480	E12	0.625	2.400	7.500	1,0	Cylindrical	■	
XE12.750J4-4.50-03.0S	10138073	4	J	0.480	E12	0.750	2.201	4.500	3,0	Cylindrical	■	
XE16.750J4-7.50-01.0S	10138070	4	J	0.606	E16	0.750	3.000	7.500	1,0	Cylindrical	■	
XE10.625J5-6.50-01.0S	10138064	5	J	0.360	E10	0.625	2.000	6.500	1,0	Cylindrical	■	
XE12.750J5-6.00-03.0S	10138074	5	J	0.480	E12	0.750	2.575	6.000	3,0	Cylindrical	■	
XE12.750J5-6.50-01.0S	10138067	5	J	0.480	E12	0.750	2.850	6.500	1,0	Cylindrical	■	
XE16.750J6-7.50-01.0S	10138069	6	J	0.606	E16	0.750	3.748	7.500	1,0	Cylindrical	■	
XE10.750J9-6.00-03.0S	10138072	9	J	0.360	E10	0.750	3.720	6.000	3,0	Cylindrical	■	

Spare Parts, included in delivery

Accessories

For cutter	Spanner	Replacement blade	Replacement blade 1	Torque key
				
E10	XW-E10	XTWH-E10.08	XTWH-E10.06	XTW-E10.E12
E12	XW-E12	XTWH-E12.10	XTWH-E12.08	XTW-E10.E12
E16	XW-E16	XTWH-E16.12	XTWH-E16.10	XTW-E16.E25
E20	XW-E20	XTWH-E20.16	–	XTW-E16.E25
E25	XW-E25	XTWH-E25.20	–	XTW-E16.E25

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

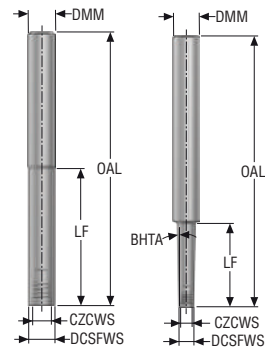
Plastic and cfrp

Graphite

X-Heads

Minimaster

Solid carbide - Metric



E

J



—Tolerances:
—DMM= h6
—DCSFWS= ±0,05 mm
—BHTA= ±20'

Designation	Item number	Length index	Tool shape	DCSFWS	CZCWS	DMM	LF	OAL	BHTA°	Shank	Stock standard
				mm	mm	mm	mm	mm			
XE20200E2-095-00.0E	10138123	2	E	19,2	E20	20,0	38,0	95,0	0,0	Cylindrical	■
XE25320J2-190-05.0E	10218127	2	J	24,1	E25	32,0	45,1	190,0	5,0	CYLINDRICAL	■
XE25320J2-215-05.0E	10218128	2	J	24,1	E25	32,0	45,1	215,0	5,0	CYLINDRICAL	■
XE12120E4-100-00.0E	10138121	4	E	11,6	E12	12,0	48,0	100,0	0,0	Cylindrical	■
XE20250J4-200-02.0E	10138129	4	J	19,2	E20	25,0	83,0	200,0	2,0	Cylindrical	■
XE25250E4-200-00.0E	10138125	4	E	24,1	E25	25,0	120,0	200,0	0,0	Cylindrical	■
XE10100E5-100-00.0E	10138120	5	E	9,6	E10	10,0	50,0	100,0	0,0	Cylindrical	■
XE16160E5-135-00.0E	10138122	5	E	15,4	E16	16,0	80,0	135,0	0,0	Cylindrical	■
XE20200E5-180-00.0E	10138124	5	E	19,2	E20	20,0	110,0	180,0	0,0	Cylindrical	■
XE12160J7-150-01.0E	10138127	7	J	11,6	E12	16,0	90,0	150,0	1,0	Cylindrical	■
XE16200J7-175-01.0E	10138128	7	J	15,4	E16	20,0	118,0	175,0	1,0	Cylindrical	■
XE10160J9-155-01.0E	10138126	9	J	9,6	E10	16,0	100,0	155,0	1,0	Cylindrical	■

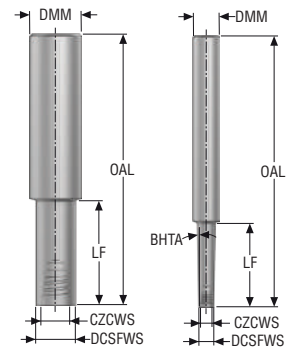
Spare Parts, included in delivery

Accessories

For cutter	Spanner	Replacement blade	Replacement blade 1	Torque key
				
E10	XW-E10	XTWH-E10.08	XTWH-E10.06	XTW-E10.E12
E12	XW-E12	XTWH-E12.10	XTWH-E12.08	XTW-E10.E12
E16	XW-E16	XTWH-E16.12	XTWH-E16.10	XTW-E16.E25
E20	XW-E20	XTWH-E20.16	—	XTW-E16.E25
E25	XW-E25	XTWH-E25.20	—	XTW-E16.E25

■ Stocked standard.

Solid carbide – inch



G

J



—Tolerances:
—DMM= h6
—DCSFWS= ±.002 inch
—BHTA= ±20'

Designation	Item number	Length index	Tool shape	DCSFWS	CZCWS	DMM	LF	OAL	BHTA°	Shank	Stock standard
				inch		inch	inch	inch			
XE251.25G2-6.50-00.0E	10138078	2	G	0.961	E25	1.250	2.500	6.500	0,0	Cylindrical	■
XE251.25J2-8.50-05.0E	10218131	2	J	0.961	E25	1.250	1.654	8.500	5,0	CYLINDRICAL	■
XE12.625J4-7.50-01.0E	10138080	4	J	0.480	E12	0.625	2.400	7.500	1,0	Cylindrical	■
XE16.750J4-7.50-01.0E	10138081	4	J	0.606	E16	0.750	3.000	7.500	1,0	Cylindrical	■
XE201.00J4-8.00-01.0E	10138082	4	J	0.724	E20	1.000	3.150	8.000	1,0	Cylindrical	■
XE10.625J5-6.50-01.0E	10138079	5	J	0.360	E10	0.625	2.000	6.500	1,0	Cylindrical	■

Spare Parts, included in delivery

Accessories

For cutter	Spanner	Replacement blade	Replacement blade 1	Torque key
				
E10	XW-E10	XTWH-E10.08	XTWH-E10.06	XTW-E10.E12
E12	XW-E12	XTWH-E12.10	XTWH-E12.08	XTW-E10.E12
E16	XW-E16	XTWH-E16.12	XTWH-E16.10	XTW-E16.E25
E20	XW-E20	XTWH-E20.16	—	XTW-E16.E25
E25	XW-E25	XTWH-E25.20	—	XTW-E16.E25

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

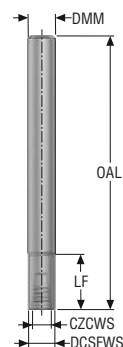
Plastic and cfrp

Graphite

X-Heads

Minimaster

Densimet – Metric



E

—Tolerances:
—DMM= h6
—DCSFWS= ±0,05 mm
—BHTA= ±20'



Designation	Item number	Length index	Tool shape	DCSFWS	CZCWS	DMM	LF	OAL	BHTA°	Shank	Stock standard
				mm	mm	mm	mm	mm			
XE10100E2-100-00.0DM	10138115	2	E	9,6	E10	10,0	20,0	100,0	0,0	Cylindrical	■
XE12120E2-110-00.0DM	10138116	2	E	11,6	E12	12,0	25,0	110,0	0,0	Cylindrical	■
XE16160E2-130-00.0DM	10138117	2	E	15,4	E16	16,0	35,0	130,0	0,0	Cylindrical	■
XE20200E2-160-00.0DM	10138118	2	E	19,2	E20	20,0	45,0	160,0	0,0	Cylindrical	■
XE25250E2-185-00.0DM	10138119	2	E	24,1	E25	25,0	65,0	185,0	0,0	Cylindrical	■

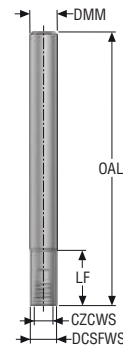
Spare Parts, included in delivery

Accessories

For cutter	Spanner	Replacement blade	Replacement blade 1	Torque key
				
E10	XW-E10	XTWH-E10.08	XTWH-E10.06	XTW-E10.E12
E12	XW-E12	XTWH-E12.10	XTWH-E12.08	XTW-E10.E12
E16	XW-E16	XTWH-E16.12	XTWH-E16.10	XTW-E16.E25
E20	XW-E20	XTWH-E20.16	—	XTW-E16.E25
E25	XW-E25	XTWH-E25.20	—	XTW-E16.E25

■ Stocked standard.

Densimet - Inch



E



—Tolerances:
—DMM= h6
—DCSFWS= ± 0.002 Inch

Designation	Item number	Length index	Tool shape	DCSFWS	DMM	LF	OAL	BHTA°	Shank	Stock standard
				inch	inch	inch	inch			
XE251.00E2-7.28-00.0DM	10218132	2	E	0.961 E25	1.000	2.559	7.283	0,0	CYLINDRICAL	■

Spare Parts, included in delivery

Accessories

For cutter	Spanner	Replacement blade	Torque key
			
E25	XW-E25	XTWH-E25.20	XTW-E16.E25

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

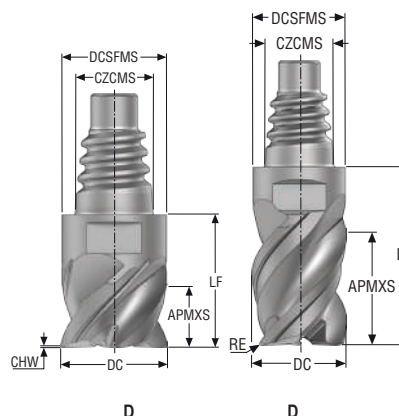
Graphite

X-Heads

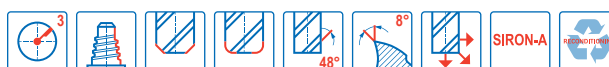
Minimaster

XSE550

High performance – Universal – Square – 3 Flutes – Corner radius or chamfer



- Tolerances:
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø12 mm

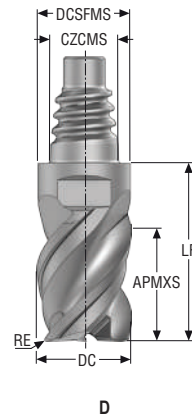


	Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	CHW	RE	PCEDC	SW	Grade
						mm	mm	mm	mm	mm	mm			SIRA
Universal	XSE550E10100D1R050Z3	10138138	1	D	E10	10,0	9,7	5,5	12,3	—	0,5	3	8	■
	XSE550E10100D1R100Z3	10219210	1	D	E10	10,0	9,7	5,5	12,3	—	1,0	3	8	■
Steel and cast iron	XSE550E10100D1R200Z3	10219211	1	D	E10	10,0	9,7	5,5	12,3	—	2,0	3	8	■
	XSE550E10100D2R050Z3	10138142	2	D	E10	10,0	9,7	12,0	18,7	—	0,5	3	8	■
Stainless steel and S-materials	XSE550E10100D2R100Z3	10219218	2	D	E10	10,0	9,7	12,0	18,7	—	1,0	3	8	■
	XSE550E10100D2R200Z3	10219219	2	D	E10	10,0	9,7	12,0	18,7	—	2,0	3	8	■
Non ferrous	XSE550E12120D1R050Z3	10138139	1	D	E12	12,0	11,7	6,6	14,4	—	0,5	3	10	■
	XSE550E12120D1R100Z3	10219212	1	D	E12	12,0	11,7	6,6	14,4	—	1,0	3	10	■
Hard	XSE550E12120D1R200Z3	10219213	1	D	E12	12,0	11,7	6,6	14,4	—	2,0	3	10	■
	XSE550E12120D2R050Z3	10138143	2	D	E12	12,0	11,7	14,4	22,1	—	0,5	3	10	■
Plastic and cfrp	XSE550E12120D2R100Z3	10219220	2	D	E12	12,0	11,7	14,4	22,1	—	1,0	3	10	■
	XSE550E12120D2R200Z3	10219221	2	D	E12	12,0	11,7	14,4	22,1	—	2,0	3	10	■
Graphite	XSE550E16160D1R050Z3	10138140	1	D	E16	16,0	15,5	8,8	18,6	—	0,5	3	12	■
	XSE550E16160D1R100Z3	10219214	1	D	E16	16,0	15,5	8,8	18,6	—	1,0	3	12	■
X-Heads	XSE550E16160D1R200Z3	10219215	1	D	E16	16,0	15,5	8,8	18,6	—	2,0	3	12	■
	XSE550E16160D2R050Z3	10138144	2	D	E16	16,0	15,5	19,2	29,2	—	0,5	3	12	■
Mini-master	XSE550E16160D2R100Z3	10219222	2	D	E16	16,0	15,5	19,2	29,2	—	1,0	3	12	■
	XSE550E16160D2R200Z3	10219223	2	D	E16	16,0	15,5	19,2	29,2	—	2,0	3	12	■
	XSE550E20200D1R050Z3	10138141	1	D	E20	20,0	19,3	11,0	21,2	—	0,5	3	16	■
	XSE550E20200D2R050Z3	10138145	2	D	E20	20,0	19,3	24,0	34,3	—	0,5	3	16	■
	XSE550E20200D1R100Z3	10219216	1	D	E20	20,0	19,7	11,0	21,2	—	1,0	3	16	■
	XSE550E20200D1R200Z3	10219217	1	D	E20	20,0	19,7	11,0	21,2	—	2,0	3	16	■
	XSE550E20200D2R100Z3	10219224	2	D	E20	20,0	19,7	24,0	34,3	—	1,0	3	16	■
	XSE550E20200D2R200Z3	10219225	2	D	E20	20,0	19,7	24,0	34,3	—	2,0	3	16	■
	XSE550E25250D1CZ3	10219207	1	D	E25	25,0	24,2	13,75	25,5	0,3125	—	3	20	■
	XSE550E25250D1R050Z3	10219208	1	D	E25	25,0	24,2	13,75	25,5	—	0,5	3	20	■
	XSE550E25250D1R100Z3	10219209	1	D	E25	25,0	24,2	13,75	25,5	—	1,0	3	20	■

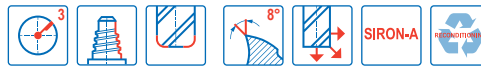
■ Stocked standard.

XSE550 – Inch

High performance – Universal – Square – 3 Flutes – Corner radius – Inch



- Tolerances:
- DC= e7
- RE= ±.0008 Inch
- Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			SIRA
XSE550E10.375D1R030Z3	10138146	1	D	E10	0.375	0.364	0.206	0.484	0.030	3	8	■
XSE550E10.375D2R030Z3	10138149	2	D	E10	0.375	0.364	0.450	0.720	0.030	3	8	■
XSE550E12.500D1R030Z3	10138147	1	D	E12	0.500	0.484	0.275	0.567	0.030	3	10	■
XSE550E12.500D2R030Z3	10138150	2	D	E12	0.500	0.484	0.600	0.906	0.030	3	10	■
XSE550E20.750D1R030Z3	10138148	1	D	E20	0.750	0.728	0.413	0.835	0.030	3	16	■
XSE550E20.750D2R030Z3	10138151	2	D	E20	0.750	0.728	0.900	1.295	0.030	3	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XSE550 – Side milling PCEDC 3

	SMG		a _e /DC	a _p /DC	f _z					v _c
					10	12	16	20	25	
Universal	P1	E/M/A/D	0,40 0.40	1,1 1.1	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	0,19 0.0075	185 (140 — 220) 610 (460 — 720)
	P2	E/M/A/D	0,40 0.40	1,1 1.1	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	0,19 0.0075	175 (140 — 210) 570 (460 — 680)
Steel and cast iron	P3	E/M/A/D	0,40 0.40	1,1 1.1	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	155 (120 — 190) 510 (400 — 620)
	P4	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	135 (110 — 170) 445 (370 — 550)
	P5	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	130 (98 — 160) 425 (330 — 520)
	P6	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	145 (110 — 180) 475 (370 — 590)
	P7	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	140 (110 — 170) 460 (370 — 550)
Stainless steel and S-materials	P8	E/M/A/D	0,40 0.40	1,1 1.1	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	130 (97 — 160) 425 (320 — 520)
	P11	E/M/A/D	0,30 0.30	1,1 1.1	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	95 (80 — 100) 310 (270 — 320)
	P12	E/M/A/D	0,30 0.30	1,1 1.1	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,075 0.0030	0,085 0.0034	60 (51 — 67) 195 (170 — 210)
	M1	E/M/A	0,30 0.30	1,1 1.1	0,070 0.0028	0,085 0.0034	0,11 0.0044	0,12 0.0048	0,14 0.0055	105 (92 — 120) 345 (310 — 390)
	M2	E/M/A	0,30 0.30	1,1 1.1	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,13 0.0050	90 (76 — 100) 295 (250 — 320)
Non ferrous	M3	E/M/A	0,30 0.30	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	55 (44 — 68) 180 (150 — 220)
	M4	E/M/A	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	43 (34 — 52) 140 (120 — 170)
	M5	E/M/A	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	36 (28 — 43) 120 (92 — 140)
	K1	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	160 (140 — 180) 520 (460 — 590)
	K2	E/M/A/D	0,40 0.40	1,1 1.1	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	140 (130 — 160) 460 (430 — 520)
Hard	K3	E/M/A/D	0,40 0.40	1,1 1.1	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	120 (110 — 130) 395 (370 — 420)
	K4	E/M/A/D	0,40 0.40	1,1 1.1	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	115 (97 — 120) 375 (320 — 390)
	K5	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	140 (120 — 150) 460 (400 — 490)
	K6	E/M/A/D	0,40 0.40	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	200 (170 — 220) 660 (560 — 720)
	K7	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	180 (150 — 200) 590 (500 — 650)
Plastic and cfrp	N1	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	600 (560 — 780) 1975 (1900 — 2500)
	N2	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	390 (360 — 500) 1275 (1200 — 1600)
	N3	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	260 (240 — 330) 850 (790 — 1000)
	N11	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	335 (280 — 380) 1100 (920 — 1200)
	S1	E	0,15 0.15	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	32 (26 — 40) 105 (86 — 130)
X-Heads	S2	E	0,15 0.15	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	28 (21 — 34) 90 (69 — 110)
	S3	E	0,15 0.15	0,95 0.95	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,16 0.0065	24 (19 — 30) 80 (63 — 98)
	S11	E	0,40 0.40	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	105 (77 — 130) 345 (260 — 420)
	S12	E	0,40 0.40	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	80 (59 — 100) 260 (200 — 320)
	S13	E	0,40 0.40	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	65 (47 — 83) 215 (160 — 270)
Minimaster	H5	M/A	0,050 0.050	0,95 0.95	0,090 0.0036	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	75 (62 — 92) 245 (210 — 300)
	H8	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,13 0.0050	80 (64 — 95) 260 (210 — 310)
	H21	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,13 0.0050	80 (64 — 95) 260 (210 — 310)
	H31	M/A	0,050 0.050	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	60 (50 — 74) 195 (170 — 240)
	TS1	A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	280 (170 — 390) 920 (560 — 1200)
	TP1	A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	280 (170 — 390) 920 (560 — 1200)

Cutting data – XSE550 – Slot milling PCEDC 3

SMG		a _p /DC	f _z					v _c	
			10	12	16	20	25		
P1	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	165 (130 — 200) 540 (430 — 650)	Universal
P2	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	160 (120 — 190) 520 (400 — 620)	
P3	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	135 (110 — 170) 445 (370 — 550)	Steel and cast iron
P4	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	120 (90 — 140) 395 (300 — 450)	
P5	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	115 (86 — 140) 375 (290 — 450)	
P6	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	130 (97 — 160) 425 (320 — 520)	
P7	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	120 (92 — 150) 395 (310 — 490)	Stainless steel and S-materials
P8	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	115 (86 — 140) 375 (290 — 450)	
P11	E/M/A/D	0,80 0,80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,11 0.0044	75 (64 — 84) 245 (210 — 270)	
P12	E/M/A/D	0,80 0,80	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,080 0.0032	45 (39 — 51) 150 (130 — 160)	
M1	E/M/A	0,80 0,80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	85 (75 — 99) 280 (250 — 320)	Non ferrous
M2	E/M/A	0,80 0,80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,11 0.0044	70 (60 — 79) 230 (200 — 250)	
M3	E/M/A	0,70 0,70	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,095 0.0038	45 (35 — 54) 150 (120 — 170)	
M4	E/M/A	0,70 0,70	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,075 0.0030	0,085 0.0034	34 (27 — 41) 110 (89 — 130)	
M5	E/M/A	0,70 0,70	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,075 0.0030	0,085 0.0034	28 (22 — 34) 90 (73 — 110)	Hard
K1	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	140 (120 — 160) 460 (400 — 520)	
K2	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	120 (110 — 130) 395 (370 — 420)	
K3	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	105 (88 — 110) 345 (290 — 360)	
K4	E/M/A/D	1,0 1,0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	0,15 0.0060	100 (84 — 110) 330 (280 — 360)	Plastic and cf/tp
K5	E/M/A/D	0,80 0,80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	125 (100 — 130) 410 (330 — 420)	
K6	E/M/A/D	0,80 0,80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	185 (150 — 200) 610 (500 — 650)	
K7	E/M/A/D	0,80 0,80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	160 (130 — 170) 520 (430 — 550)	
N1	E/M/A	0,70 0,70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	540 (500 — 690) 1775 (1700 — 2200)	Graphite
N2	E/M/A	0,70 0,70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	345 (330 — 440) 1125 (1100 — 1400)	
N3	E/M/A	0,70 0,70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	230 (220 — 290) 750 (730 — 950)	
N11	E/M/A	0,60 0,60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	300 (250 — 340) 980 (830 — 1100)	
S1	E	0,30 0,30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	27 (21 — 33) 90 (69 — 100)	X-Heads
S2	E	0,30 0,30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	23 (17 — 28) 75 (56 — 91)	
S3	E	0,30 0,30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	20 (15 — 25) 65 (50 — 82)	
S11	E	0,50 0,50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,12 0.0048	90 (66 — 110) 295 (220 — 360)	
S12	E	0,50 0,50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,12 0.0048	70 (50 — 89) 230 (170 — 290)	Minimaster
S13	E	0,50 0,50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	55 (39 — 69) 180 (130 — 220)	
H5	M/A	0,30 0,30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	50 (41 — 60) 165 (140 — 190)	
H8	M/A	0,30 0,30	0,030 0.0012	0,036 0.0014	0,044 0.0017	0,050 0.0020	0,060 0.0024	50 (41 — 60) 165 (140 — 190)	
H21	M/A	0,30 0,30	0,030 0.0012	0,036 0.0014	0,044 0.0017	0,050 0.0020	0,060 0.0024	50 (41 — 60) 165 (140 — 190)	
H31	M/A	0,30 0,30	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,044 0.0017	0,050 0.0020	39 (32 — 46) 130 (110 — 150)	
TS1	A/D	0,70 0,70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	250 (150 — 340) 820 (500 — 1100)	
TP1	A/D	0,70 0,70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	250 (150 — 340) 820 (500 — 1100)	

Cutting data – XSE550 – Side milling PCEDC 3 – inch

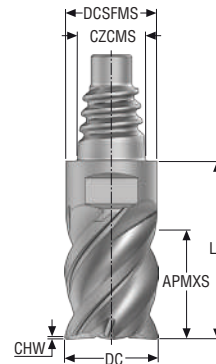
	SMG		a _g /DC	a _p /DC	f _z				v _c
					3/8	1/2	5/8	3/4	
Universal	P1	E/M/A/D	0,40 0.40	1,1 1.1	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	215 (190 – 240) 710 (630 – 780)
	P2	E/M/A/D	0,40 0.40	1,1 1.1	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	205 (180 – 230) 670 (600 – 750)
Steel and cast iron	P3	E/M/A/D	0,40 0.40	1,1 1.1	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	180 (160 – 200) 590 (530 – 650)
	P4	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,14 0.0055	0,16 0.0065	160 (140 – 180) 520 (460 – 590)
	P5	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	150 (140 – 170) 490 (460 – 550)
	P6	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	170 (150 – 190) 560 (500 – 620)
Stainless steel and S-materials	P7	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	160 (140 – 180) 520 (460 – 590)
	P8	E/M/A/D	0,40 0.40	1,1 1.1	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	150 (130 – 170) 490 (430 – 550)
	P11	E/M/A/D	0,30 0.30	1,1 1.1	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	105 (93 – 110) 345 (310 – 360)
	P12	E/M/A/D	0,30 0.30	1,1 1.1	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,075 0.0030	65 (60 – 75) 215 (200 – 240)
Non ferrous	M1	E/M/A	0,30 0.30	1,1 1.1	0,070 0.0028	0,085 0.0034	0,11 0.0044	0,12 0.0048	120 (110 – 130) 395 (370 – 420)
	M2	E/M/A	0,30 0.30	1,1 1.1	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	100 (88 – 110) 330 (290 – 360)
	M3	E/M/A	0,30 0.30	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	60 (50 – 74) 195 (170 – 240)
	M4	E/M/A	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	48 (39 – 57) 155 (130 – 180)
	M5	E/M/A	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	40 (32 – 47) 130 (110 – 150)
Hard	K1	E/M/A/D	0,40 0.40	1,1 1.1	0,090 0.0036	0,11 0.0044	0,14 0.0055	0,16 0.0065	170 (160 – 200) 560 (530 – 650)
	K2	E/M/A/D	0,40 0.40	1,1 1.1	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	150 (150 – 180) 490 (500 – 590)
Plastic and cfrp	K3	E/M/A/D	0,40 0.40	1,1 1.1	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	125 (120 – 150) 410 (400 – 490)
	K4	E/M/A/D	0,40 0.40	1,1 1.1	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	120 (120 – 140) 395 (400 – 450)
	K5	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	155 (140 – 170) 510 (460 – 550)
	K6	E/M/A/D	0,40 0.40	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	225 (200 – 250) 740 (660 – 820)
	K7	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	200 (180 – 220) 660 (600 – 720)
	N1	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	670 (560 – 780) 2200 (1900 – 2500)
	N2	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	430 (360 – 500) 1400 (1200 – 1600)
Graphite	N3	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	285 (240 – 330) 940 (790 – 1000)
	N11	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	335 (280 – 380) 1100 (920 – 1200)
X-Heads	S1	E	0,15 0.15	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	43 (26 – 60) 140 (86 – 190)
	S2	E	0,15 0.15	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	35 (21 – 48) 115 (69 – 150)
	S3	E	0,15 0.15	0,95 0.95	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	30 (19 – 42) 100 (63 – 130)
	S11	E	0,40 0.40	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	105 (77 – 130) 345 (260 – 420)
Minimaster	S12	E	0,40 0.40	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	80 (59 – 100) 260 (200 – 320)
	S13	E	0,40 0.40	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	65 (47 – 83) 215 (160 – 270)
	H5	M/A	0,050 0.050	0,95 0.95	0,090 0.0036	0,11 0.0044	0,14 0.0055	0,16 0.0065	75 (62 – 92) 245 (210 – 300)
	H8	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	80 (64 – 95) 260 (210 – 310)
	H21	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	80 (64 – 95) 260 (210 – 310)
	H31	M/A	0,050 0.050	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	60 (50 – 74) 195 (170 – 240)
	TS1	A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	280 (170 – 390) 920 (560 – 1200)
	TP1	A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	280 (170 – 390) 920 (560 – 1200)

Cutting data – XSE550 – Slot milling PCEDC 3 inch

SMG		a _p /DC	f _z				v _c	
			3/8	1/2	5/8	3/4		
P1	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	190 (170 – 210) 620 (560 – 680)	Universal
P2	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	185 (160 – 210) 610 (530 – 680)	
P3	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	160 (140 – 180) 520 (460 – 590)	Steel and cast iron
P4	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	140 (120 – 150) 460 (400 – 490)	
P5	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	135 (120 – 150) 445 (400 – 490)	
P6	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	150 (130 – 170) 490 (430 – 550)	
P7	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	140 (130 – 160) 460 (430 – 520)	Stainless steel and S-materials
P8	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	135 (120 – 150) 445 (400 – 490)	
P11	E/M/A/D	0,80 0.80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	85 (74 – 94) 280 (250 – 300)	
P12	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	50 (46 – 58) 165 (160 – 190)	
M1	E/M/A	0,80 0.80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	100 (87 – 110) 330 (290 – 360)	Non ferrous
M2	E/M/A	0,80 0.80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	80 (70 – 89) 260 (230 – 290)	
M3	E/M/A	0,70 0.70	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	50 (41 – 60) 165 (140 – 190)	
M4	E/M/A	0,70 0.70	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,075 0.0030	37 (30 – 45) 120 (99 – 140)	
M5	E/M/A	0,70 0.70	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,075 0.0030	31 (25 – 37) 100 (83 – 120)	Hard
K1	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	150 (140 – 180) 490 (460 – 590)	
K2	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	130 (130 – 150) 425 (430 – 490)	
K3	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	110 (110 – 130) 360 (370 – 420)	
K4	E/M/A/D	1,0 1.0	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,12 0.0048	105 (99 – 120) 345 (330 – 390)	Plastic and cf/p
K5	E/M/A/D	0,80 0.80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	140 (120 – 150) 460 (400 – 490)	
K6	E/M/A/D	0,80 0.80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	205 (180 – 230) 670 (600 – 750)	
K7	E/M/A/D	0,80 0.80	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	180 (160 – 200) 590 (530 – 650)	
N1	E/M/A	0,70 0.70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	600 (510 – 690) 1975 (1700 – 2200)	Graphite
N2	E/M/A	0,70 0.70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	385 (330 – 440) 1275 (1100 – 1400)	
N3	E/M/A	0,70 0.70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	255 (220 – 290) 840 (730 – 950)	
N11	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	300 (250 – 340) 980 (830 – 1100)	
S1	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	36 (22 – 50) 120 (73 – 160)	X-Heads
S2	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	29 (18 – 40) 95 (60 – 130)	
S3	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	25 (15 – 34) 80 (50 – 110)	
S11	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	90 (66 – 110) 295 (220 – 360)	
S12	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	70 (50 – 89) 230 (170 – 290)	Minimaster
S13	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	55 (39 – 69) 180 (130 – 220)	
H5	M/A	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	50 (41 – 60) 165 (140 – 190)	
H8	M/A	0,30 0.30	0,030 0.0012	0,036 0.0014	0,044 0.0017	0,050 0.0020	50 (41 – 60) 165 (140 – 190)	
H21	M/A	0,30 0.30	0,030 0.0012	0,036 0.0014	0,044 0.0017	0,050 0.0020	50 (41 – 60) 165 (140 – 190)	
H31	M/A	0,30 0.30	0,026 0.0010	0,032 0.0013	0,038 0.0015	0,044 0.0017	39 (32 – 46) 130 (110 – 150)	
TS1	A/D	0,70 0.70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	250 (150 – 340) 820 (500 – 1100)	
TP1	A/D	0,70 0.70	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	250 (150 – 340) 820 (500 – 1100)	

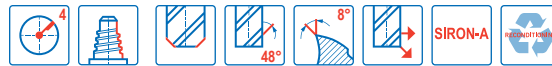
XSE550

High performance – Universal – Square – 4 Flutes – Chamfer



D

- Tolerances:
- DC= e7
- Regrind possible if DC is ≥Ø12 mm

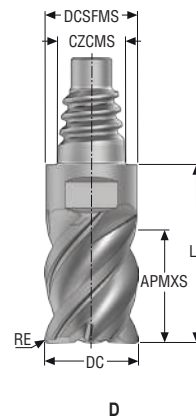


Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	CHW	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XSE550E10100D1CZ4	10219229	1	D	E10	10,0	9,7	5,5	12,3	0,125	4	8	■
XSE550E10100D2CZ4	10138152	2	D	E10	10,0	9,7	12,0	18,7	0,125	4	8	■
XSE550E12120D1CZ4	10219230	1	D	E12	12,0	11,7	6,6	14,4	0,15	4	10	■
XSE550E12120D2CZ4	10138153	2	D	E12	12,0	11,7	14,4	22,1	0,15	4	10	■
XSE550E16160D1CZ4	10219231	1	D	E16	16,0	15,5	8,8	18,6	0,2	4	12	■
XSE550E16160D2CZ4	10138154	2	D	E16	16,0	15,5	19,2	29,2	0,2	4	12	■
XSE550E20200D2CZ4	10138155	2	D	E20	20,0	19,3	24,0	34,3	0,25	4	16	■
XSE550E20200D1CZ4	10219232	1	D	E20	20,0	19,7	11,0	21,2	0,25	4	16	■
XSE550E25250D1CZ4	10219226	1	D	E25	25,0	24,2	13,75	25,5	0,3125	4	20	■

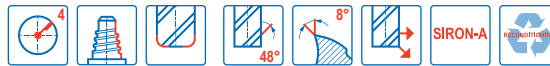
■ Stocked standard.

XSE550

High performance – Universal – Square – 4 Flutes – Corner radius



- Tolerances:
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XSE550E10100D1R100Z4	10219233	1	D	E10	10,0	9,7	5,5	12,3	1,0	4	8	■
XSE550E10100D1R200Z4	10219234	1	D	E10	10,0	9,7	5,5	12,3	2,0	4	8	■
XSE550E10100D1R050Z4	10138156	1	D	E10	10,0	9,7	5,5	12,3	0,5	4	8	■
XSE550E10100D2R100Z4	10138161	2	D	E10	10,0	9,7	12,0	18,7	1,0	4	8	■
XSE550E10100D2R050Z4	10138160	2	D	E10	10,0	9,7	12,0	18,7	0,5	4	8	■
XSE550E10100D2R200Z4	10138162	2	D	E10	10,0	9,7	12,0	18,7	2,0	4	8	■
XSE550E10100D2R250Z4	10138163	2	D	E10	10,0	9,7	12,0	18,7	2,5	4	8	■
XSE550E12120D1R100Z4	10219235	1	D	E12	12,0	11,7	6,6	14,4	1,0	4	10	■
XSE550E12120D1R200Z4	10219236	1	D	E12	12,0	11,7	6,6	14,4	2,0	4	10	■
XSE550E12120D1R050Z4	10138157	1	D	E12	12,0	11,7	6,6	14,4	0,5	4	10	■
XSE550E12120D2R100Z4	10138165	2	D	E12	12,0	11,7	14,4	22,1	1,0	4	10	■
XSE550E12120D2R050Z4	10138164	2	D	E12	12,0	11,7	14,4	22,1	0,5	4	10	■
XSE550E12120D2R200Z4	10138166	2	D	E12	12,0	11,7	14,4	22,1	2,0	4	10	■
XSE550E12120D2R300Z4	10138167	2	D	E12	12,0	11,7	14,4	22,1	3,0	4	10	■
XSE550E16160D1R100Z4	10219237	1	D	E16	16,0	15,5	8,8	18,6	1,0	4	12	■
XSE550E16160D1R200Z4	10219238	1	D	E16	16,0	15,5	8,8	18,6	2,0	4	12	■
XSE550E16160D1R050Z4	10138158	1	D	E16	16,0	15,5	8,8	18,6	0,5	4	12	■
XSE550E16160D2R100Z4	10138169	2	D	E16	16,0	15,5	19,2	29,2	1,0	4	12	■
XSE550E16160D2R050Z4	10138168	2	D	E16	16,0	15,5	19,2	29,2	0,5	4	12	■
XSE550E16160D2R200Z4	10138170	2	D	E16	16,0	15,5	19,2	29,2	2,0	4	12	■
XSE550E16160D2R300Z4	10138171	2	D	E16	16,0	15,5	19,2	29,2	3,0	4	12	■
XSE550E20200D1R100Z4	10138159	1	D	E20	20,0	19,3	11,0	21,2	1,0	4	16	■
XSE550E20200D2R100Z4	10138172	2	D	E20	20,0	19,3	24,0	34,3	1,0	4	16	■
XSE550E20200D2R200Z4	10138173	2	D	E20	20,0	19,3	24,0	34,3	2,0	4	16	■
XSE550E20200D2R300Z4	10138174	2	D	E20	20,0	19,3	24,0	34,3	3,0	4	16	■
XSE550E20200D2R400Z4	10138175	2	D	E20	20,0	19,3	24,0	34,3	4,0	4	16	■
XSE550E20200D1R200Z4	10219239	1	D	E20	20,0	19,7	11,0	21,2	2,0	4	16	■
XSE550E25250D1R100Z4	10219227	1	D	E25	25,0	24,2	13,75	25,5	1,0	4	20	■
XSE550E25250D1R200Z4	10219228	1	D	E25	25,0	24,2	13,75	25,5	2,0	4	20	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

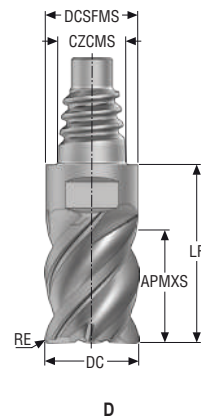
Graphite

X-Heads

Minimaster

XSE550 – Inch

High performance – Universal – Square – 4 Flutes – Corner radius – Inch

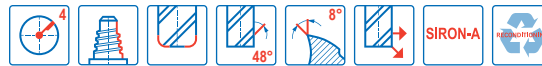


—Tolerances:

—DC= e7

—RE= ±.0008 Inch

—Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			SIRA
XSE550E10.375D1R030Z4	10138176	1	D	E10	0.375	0.364	0.206	0.484	0.030	4	8	■
XSE550E10.375D2R030Z4	10138179	2	D	E10	0.375	0.364	0.450	0.720	0.030	4	8	■
XSE550E12.500D1R030Z4	10138177	1	D	E12	0.500	0.484	0.275	0.567	0.030	4	10	■
XSE550E12.500D2R030Z4	10138180	2	D	E12	0.500	0.484	0.600	0.906	0.030	4	10	■
XSE550E20.750D1R030Z4	10138178	1	D	E20	0.750	0.728	0.413	0.835	0.030	4	16	■
XSE550E20.750D2R030Z4	10138181	2	D	E20	0.750	0.728	0.900	1.295	0.030	4	16	■

■ Stocked standard.

Cutting data – XSE550 – Side milling PCEDC 4

SMG		a_e/DC	a_p/DC	f_z					v_c	
				10	12	16	20	25		
P1	E/M/A/D	0,40 0,40	0,95 0,95	0,085 0,0034	0,10 0,0040	0,13 0,0050	0,15 0,0060	0,17 0,0065	170 (130 — 210) 560 (430 — 680)	Universal
P2	E/M/A/D	0,40 0,40	0,95 0,95	0,090 0,0036	0,10 0,0040	0,13 0,0050	0,15 0,0060	0,17 0,0065	165 (130 — 200) 540 (430 — 650)	
P3	E/M/A/D	0,40 0,40	0,95 0,95	0,085 0,0034	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	145 (110 — 180) 475 (370 — 590)	Steel and cast iron
P4	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	130 (97 — 160) 425 (320 — 520)	
P5	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,15 0,0060	125 (93 — 150) 410 (310 — 490)	Steel and stainless steel
P6	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,13 0,0050	0,15 0,0060	140 (110 — 170) 460 (370 — 550)	
P7	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,13 0,0050	0,15 0,0060	130 (98 — 160) 425 (330 — 520)	Stainless steel and S-materials
P8	E/M/A/D	0,40 0,40	0,95 0,95	0,085 0,0034	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	120 (91 — 150) 395 (300 — 490)	
P11	E/M/A/D	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	85 (72 — 100) 280 (240 — 320)	Non ferrous
P12	E/M/A/D	0,30 0,30	0,95 0,95	0,044 0,0017	0,055 0,0022	0,065 0,0026	0,075 0,0030	0,085 0,0034	55 (46 — 68) 180 (160 — 220)	
M1	E/M/A	0,30 0,30	0,95 0,95	0,070 0,0028	0,085 0,0034	0,11 0,0044	0,12 0,0048	0,14 0,0055	95 (83 — 120) 310 (280 — 390)	Hard
M2	E/M/A	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,13 0,0050	80 (69 — 100) 260 (230 — 320)	
M3	E/M/A	0,30 0,30	0,95 0,95	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	47 (36 — 58) 155 (120 — 190)	Plastic and cf/np
M4	E/M/A	0,30 0,30	0,95 0,95	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	36 (28 — 45) 120 (92 — 140)	
M5	E/M/A	0,30 0,30	0,95 0,95	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	30 (23 — 37) 100 (76 — 120)	Graphite
K1	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	150 (130 — 170) 490 (430 — 550)	
K2	E/M/A/D	0,40 0,40	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	130 (120 — 150) 425 (400 — 490)	X-Heads
K3	E/M/A/D	0,40 0,40	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	110 (96 — 120) 360 (320 — 390)	
K4	E/M/A/D	0,40 0,40	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	105 (92 — 120) 345 (310 — 390)	Minimaster
K5	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	150 (130 — 170) 490 (430 — 550)	
K6	E/M/A/D	0,40 0,40	0,95 0,95	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,15 0,0060	0,17 0,0065	215 (190 — 240) 710 (630 — 780)	Universal
K7	E/M/A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	190 (170 — 210) 620 (560 — 680)	
N1	E/M/A	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	550 (450 — 660) 1800 (1500 — 2100)	X-Heads
N2	E/M/A	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	355 (290 — 420) 1175 (960 — 1300)	
N3	E/M/A	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	240 (200 — 280) 790 (660 — 910)	Minimaster
N11	E/M/A	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	310 (280 — 380) 1025 (920 — 1200)	
S1	E	0,15 0,15	0,95 0,95	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,15 0,0060	0,17 0,0065	32 (26 — 40) 105 (86 — 130)	Universal
S2	E	0,15 0,15	0,95 0,95	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,15 0,0060	0,17 0,0065	28 (21 — 34) 90 (69 — 110)	
S3	E	0,15 0,15	0,95 0,95	0,085 0,0034	0,10 0,0040	0,12 0,0048	0,14 0,0055	0,16 0,0065	24 (19 — 30) 80 (63 — 98)	X-Heads
S11	E	0,40 0,40	0,95 0,95	0,060 0,0024	0,070 0,0028	0,090 0,0036	0,10 0,0040	0,12 0,0048	90 (77 — 120) 295 (260 — 390)	
S12	E	0,40 0,40	0,95 0,95	0,060 0,0024	0,070 0,0028	0,090 0,0036	0,10 0,0040	0,12 0,0048	70 (59 — 93) 230 (200 — 300)	Minimaster
S13	E	0,40 0,40	0,95 0,95	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	55 (47 — 74) 180 (160 — 240)	
H5	M/A	0,050 0,050	0,95 0,95	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,15 0,0060	0,17 0,0065	75 (59 — 73) 245 (200 — 230)	Universal
H8	M/A	0,050 0,050	0,95 0,95	0,070 0,0028	0,085 0,0034	0,10 0,0040	0,12 0,0048	0,13 0,0050	75 (62 — 76) 245 (210 — 240)	
H21	M/A	0,050 0,050	0,95 0,95	0,070 0,0028	0,085 0,0034	0,10 0,0040	0,12 0,0048	0,13 0,0050	75 (62 — 76) 245 (210 — 240)	X-Heads
H31	M/A	0,050 0,050	0,95 0,95	0,060 0,0024	0,070 0,0028	0,090 0,0036	0,10 0,0040	0,12 0,0048	60 (48 — 59) 195 (160 — 190)	
TS1	A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	275 (170 — 380) 900 (560 — 1200)	Universal
TP1	A/D	0,40 0,40	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	275 (170 — 380) 900 (560 — 1200)	

Cutting data – XSE550 – Slot milling PCEDC 4

	SMG		a _p /DC	f _z					v _c
				10	12	16	20	25	
Universal	P1	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	165 (130 — 200) 540 (430 — 650)
	P2	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	160 (120 — 190) 520 (400 — 620)
Steel and cast iron	P3	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	135 (110 — 170) 445 (370 — 550)
	P4	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	120 (90 — 140) 395 (300 — 450)
	P5	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	115 (86 — 140) 375 (290 — 450)
	P6	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	130 (97 — 160) 425 (320 — 520)
Stainless steel and S-materials	P7	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	120 (92 — 150) 395 (310 — 490)
	P8	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	115 (86 — 140) 375 (290 — 450)
	P11	E/M/A/D	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	75 (64 — 94) 245 (210 — 300)
	P12	E/M/A/D	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	44 (38 — 55) 145 (130 — 180)
Non ferrous	M1	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	85 (75 — 110) 280 (250 — 360)
	M2	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	70 (60 — 90) 230 (200 — 290)
	M3	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	40 (30 — 50) 130 (99 — 160)
	M4	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	30 (23 — 37) 100 (76 — 120)
	M5	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	25 (19 — 31) 80 (63 — 100)
Hard	K1	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	140 (120 — 160) 460 (400 — 520)
	K2	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	120 (110 — 130) 395 (370 — 420)
Plastic and cfrp	K3	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	105 (88 — 110) 345 (290 — 360)
	K4	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	100 (84 — 110) 330 (280 — 360)
	K5	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	140 (120 — 160) 460 (400 — 520)
	K6	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	205 (180 — 230) 670 (600 — 750)
	K7	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	0,10 0.0040	180 (160 — 200) 590 (530 — 650)
Graphite	N1	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	500 (410 — 590) 1650 (1400 — 1900)
	N2	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	320 (260 — 380) 1050 (860 — 1200)
	N3	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	215 (180 — 250) 710 (600 — 820)
	N11	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	280 (250 — 340) 920 (830 — 1100)
X-Heads	S1	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	27 (21 — 33) 90 (69 — 100)
	S2	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	23 (17 — 28) 75 (56 — 91)
	S3	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	0,075 0.0030	20 (15 — 24) 65 (50 — 78)
	S11	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,12 0.0048	80 (65 — 100) 260 (220 — 320)
Minimaster	S12	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,12 0.0048	60 (50 — 79) 195 (170 — 250)
	S13	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	46 (39 — 61) 150 (130 — 200)
	H5	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,065 0.0026	50 (41 — 50) 165 (140 — 160)
	H8	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,060 0.0024	50 (41 — 50) 165 (140 — 160)
	H21	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,040 0.0016	0,050 0.0020	0,060 0.0024	50 (41 — 50) 165 (140 — 160)
	H31	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,038 0.0015	0,044 0.0017	0,050 0.0020	38 (31 — 38) 125 (110 — 120)
	TS1	A/D	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	250 (150 — 340) 820 (500 — 1100)
	TP1	A/D	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	0,13 0.0050	250 (150 — 340) 820 (500 — 1100)

Cutting data – XSE550 – Side milling PCEDC 4 inch

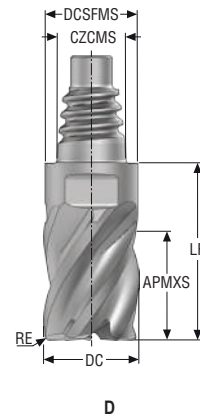
SMG		a _e /DC	a _p /DC	f _z				v _c	
				3/8	1/2	5/8	3/4		
P1	E/M/A/D	0,40 0.40	0,95 0.95	0,085 0.0034	0,10 0.0040	0,13 0.0050	0,15 0.0060	200 (180 — 220) 660 (600 — 720)	Universal
P2	E/M/A/D	0,40 0.40	0,95 0.95	0,090 0.0036	0,10 0.0040	0,13 0.0050	0,15 0.0060	195 (170 — 220) 640 (560 — 720)	
P3	E/M/A/D	0,40 0.40	0,95 0.95	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	170 (150 — 190) 560 (500 — 620)	Steel and cast iron
P4	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	150 (130 — 170) 490 (430 — 550)	
P5	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	145 (130 — 160) 475 (430 — 520)	Stainless steel and S-materials
P6	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,13 0.0050	160 (140 — 180) 520 (460 — 590)	
P7	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,13 0.0050	150 (140 — 170) 490 (460 — 550)	Non ferrous
P8	E/M/A/D	0,40 0.40	0,95 0.95	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	140 (130 — 160) 460 (430 — 520)	
P11	E/M/A/D	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	95 (84 — 100) 310 (280 — 320)	Hard
P12	E/M/A/D	0,30 0.30	0,95 0.95	0,044 0.0017	0,055 0.0022	0,065 0.0026	0,075 0.0030	60 (54 — 68) 195 (180 — 220)	
M1	E/M/A	0,30 0.30	0,95 0.95	0,070 0.0028	0,085 0.0034	0,11 0.0044	0,12 0.0048	110 (97 — 120) 360 (320 — 390)	Plastic and cf/np
M2	E/M/A	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	90 (80 — 100) 295 (270 — 320)	
M3	E/M/A	0,30 0.30	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	60 (47 — 70) 195 (160 — 220)	Graphite
M4	E/M/A	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	45 (37 — 54) 150 (130 — 170)	
M5	E/M/A	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	38 (31 — 45) 125 (110 — 140)	X-Heads
K1	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	160 (160 — 190) 520 (530 — 620)	
K2	E/M/A/D	0,40 0.40	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	140 (140 — 170) 460 (460 — 550)	Minimaster
K3	E/M/A/D	0,40 0.40	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	120 (120 — 140) 395 (400 — 450)	
K4	E/M/A/D	0,40 0.40	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	115 (110 — 130) 375 (370 — 420)	X-Heads
K5	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	150 (130 — 170) 490 (430 — 550)	
K6	E/M/A/D	0,40 0.40	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	215 (190 — 240) 710 (630 — 780)	X-Heads
K7	E/M/A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	190 (170 — 210) 620 (560 — 680)	
N1	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	670 (560 — 770) 2200 (1900 — 2500)	X-Heads
N2	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	430 (360 — 490) 1400 (1200 — 1600)	
N3	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	285 (240 — 330) 940 (790 — 1000)	X-Heads
N11	E/M/A	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	335 (280 — 380) 1100 (920 — 1200)	
S1	E	0,15 0.15	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	43 (26 — 60) 140 (86 — 190)	X-Heads
S2	E	0,15 0.15	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	35 (21 — 48) 115 (69 — 150)	
S3	E	0,15 0.15	0,95 0.95	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	30 (19 — 42) 100 (63 — 130)	X-Heads
S11	E	0,40 0.40	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	105 (77 — 130) 345 (260 — 420)	
S12	E	0,40 0.40	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	80 (59 — 100) 260 (200 — 320)	X-Heads
S13	E	0,40 0.40	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	65 (47 — 83) 215 (160 — 270)	
H5	M/A	0,050 0.050	0,95 0.95	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	75 (59 — 73) 245 (200 — 230)	X-Heads
H8	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	75 (62 — 76) 245 (210 — 240)	
H21	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	75 (62 — 76) 245 (210 — 240)	X-Heads
H31	M/A	0,050 0.050	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	60 (48 — 59) 195 (160 — 190)	
TS1	A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	275 (170 — 380) 900 (560 — 1200)	X-Heads
TP1	A/D	0,40 0.40	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	275 (170 — 380) 900 (560 — 1200)	

Cutting data – XSE550 – Slot milling PCEDC 4 inch

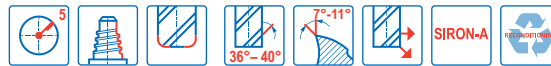
	SMG		a _p /DC	f _z				v _c
				3/8	1/2	5/8	3/4	
Universal	P1	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	190 (170 — 210) 620 (560 — 680)
	P2	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	185 (160 — 210) 610 (530 — 680)
Steel and cast iron	P3	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	160 (140 — 180) 520 (460 — 590)
	P4	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	140 (120 — 150) 460 (400 — 490)
	P5	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	135 (120 — 150) 445 (400 — 490)
	P6	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	150 (130 — 170) 490 (430 — 550)
Stainless steel and S-materials	P7	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	140 (130 — 160) 460 (430 — 520)
	P8	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	135 (120 — 150) 445 (400 — 490)
	P11	E/M/A/D	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	85 (74 — 94) 280 (250 — 300)
	P12	E/M/A/D	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	50 (44 — 55) 165 (150 — 180)
Non ferrous	M1	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	100 (87 — 110) 330 (290 — 360)
	M2	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	80 (70 — 90) 260 (230 — 290)
	M3	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	50 (40 — 60) 165 (140 — 190)
	M4	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	37 (30 — 45) 120 (99 — 140)
Hard	M5	E/M/A	0,60 0.60	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	31 (25 — 37) 100 (83 — 120)
Plastic and cfrp	K1	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	150 (150 — 180) 490 (500 — 590)
	K2	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	130 (130 — 150) 425 (430 — 490)
	K3	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	110 (110 — 130) 360 (370 — 420)
	K4	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	105 (99 — 120) 345 (330 — 390)
	K5	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	140 (120 — 160) 460 (400 — 520)
	K6	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	205 (180 — 230) 670 (600 — 750)
	K7	E/M/A/D	0,80 0.80	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,080 0.0032	180 (160 — 200) 590 (530 — 650)
Graphite	N1	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	600 (510 — 700) 1975 (1700 — 2200)
	N2	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	385 (330 — 450) 1275 (1100 — 1400)
	N3	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	255 (220 — 300) 840 (730 — 980)
	N11	E/M/A	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	300 (250 — 350) 980 (830 — 1100)
X-Heads	S1	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	36 (22 — 50) 120 (73 — 160)
	S2	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	29 (18 — 40) 95 (60 — 130)
	S3	E	0,30 0.30	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,060 0.0024	25 (15 — 34) 80 (50 — 110)
	S11	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	90 (65 — 110) 295 (220 — 360)
Minimaster	S12	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	70 (50 — 90) 230 (170 — 290)
	S13	E	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	55 (39 — 69) 180 (130 — 220)
	H5	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,040 0.0016	0,050 0.0020	50 (41 — 50) 165 (140 — 160)
	H8	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,040 0.0016	0,050 0.0020	50 (41 — 50) 165 (140 — 160)
	H21	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,040 0.0016	0,050 0.0020	50 (41 — 50) 165 (140 — 160)
	H31	M/A	0,26 0.26	0,025 0.0010	0,030 0.0012	0,038 0.0015	0,044 0.0017	38 (31 — 38) 125 (110 — 120)
	TS1	A/D	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	250 (150 — 340) 820 (500 — 1100)
	TP1	A/D	0,60 0.60	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,10 0.0040	250 (150 — 340) 820 (500 — 1100)

XSE550

High performance – Universal – Square – 5 Flutes – Corner radius



- Tolerances:
- DC= 0/-0,0508 mm
- RE= ±0,0254 mm
- Regrind possible if DC is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XSE550E10100D2R050Z5	10138337	2	D	E10	10,0	9,7	12,0	18,7	0,5	5	8	■
XSE550E10100D2R100Z5	10138338	2	D	E10	10,0	9,7	12,0	18,7	1,0	5	8	■
XSE550E12120D2R050Z5	10138339	2	D	E12	12,0	11,7	14,4	22,1	0,5	5	10	■
XSE550E12120D2R100Z5	10138340	2	D	E12	12,0	11,7	14,4	22,1	1,0	5	10	■
XSE550E16160D2R050Z5	10138341	2	D	E16	16,0	15,5	19,2	29,2	0,5	5	12	■
XSE550E16160D2R100Z5	10138342	2	D	E16	16,0	15,5	19,2	29,2	1,0	5	12	■
XSE550E20200D2R050Z5	10138343	2	D	E20	20,0	19,3	24,0	34,3	0,5	5	16	■
XSE550E20200D2R100Z5	10138344	2	D	E20	20,0	19,3	24,0	34,3	1,0	5	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrrp

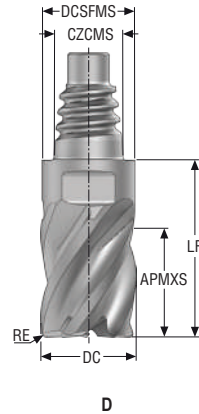
Graphite

X-Heads

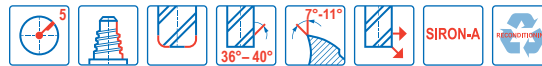
Minimaster

XSE550

High performance – Universal – Square – 5 Flutes – Corner radius – Inch



- Tolerances:
 —DC= 0/-0.002 Inch
 —RE= ±0.001 Inch
 —Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
												SIRA
XSE550E10.375D2R015Z5	10138345	2	D	E10	0.375	0.364	0.450	0.720	0.015	5	8	■
XSE550E10.375D2R030Z5	10138346	2	D	E10	0.375	0.364	0.450	0.720	0.030	5	8	■
XSE550E10.375D2R045Z5	10138347	2	D	E10	0.375	0.364	0.450	0.720	0.044	5	8	■
XSE550E12.500D2R030Z5	10138348	2	D	E12	0.500	0.484	0.600	0.906	0.030	5	10	■
XSE550E12.500D2R060Z5	10138349	2	D	E12	0.500	0.484	0.600	0.906	0.060	5	10	■
XSE550E12.500D2R120Z5	10138350	2	D	E12	0.500	0.484	0.600	0.906	0.120	5	10	■
XSE550E16.625D2R030Z5	10138351	2	D	E16	0.625	0.610	0.750	1.150	0.030	5	12	■
XSE550E16.625D2R060Z5	10138352	2	D	E16	0.625	0.610	0.750	1.150	0.060	5	12	■
XSE550E16.625D2R120Z5	10138353	2	D	E16	0.625	0.610	0.750	1.150	0.120	5	12	■
XSE550E20.750D2R030Z5	10138354	2	D	E20	0.750	0.728	0.900	1.295	0.030	5	16	■
XSE550E20.750D2R060Z5	10138355	2	D	E20	0.750	0.728	0.900	1.295	0.060	5	16	■
XSE550E20.750D2R120Z5	10138356	2	D	E20	0.750	0.728	0.900	1.295	0.120	5	16	■
XSE550E251.00D2R030Z5	10138357	2	D	E25	1.000	0.965	1.200	1.673	0.030	5	20	■
XSE550E251.00D2R060Z5	10138358	2	D	E25	1.000	0.965	1.200	1.673	0.060	5	20	■
XSE550E251.00D2R120Z5	10138359	2	D	E25	1.000	0.965	1.200	1.673	0.120	5	20	■

■ Stocked standard.

Cutting data – XSE550 – Side milling PCEDC 5

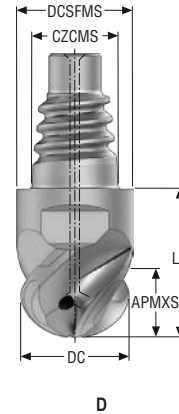
SMG		a_e/DC	a_p/DC	f_z					v_c	
				10	12	16	20	25		
P1	E/M/A/D	0,30 0,30	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,15 0,0060	165 (130 — 190) 540 (430 — 620)	Universal
P2	E/M/A/D	0,30 0,30	0,95 0,95	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	0,16 0,0065	160 (130 — 190) 520 (430 — 620)	
P3	E/M/A/D	0,30 0,30	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,15 0,0060	140 (110 — 160) 460 (370 — 520)	Steel and cast iron
P4	E/M/A/D	0,30 0,30	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	125 (97 — 140) 410 (320 — 450)	
P5	E/M/A/D	0,30 0,30	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	110 (97 — 130) 360 (320 — 420)	Stainless steel and S-materials
P6	E/M/A/D	0,30 0,30	0,95 0,95	0,075 0,0030	0,085 0,0034	0,11 0,0044	0,12 0,0048	0,14 0,0055	125 (110 — 150) 410 (370 — 490)	
P7	E/M/A/D	0,30 0,30	0,95 0,95	0,075 0,0030	0,085 0,0034	0,11 0,0044	0,12 0,0048	0,14 0,0055	120 (110 — 140) 395 (370 — 450)	Non ferrous
P8	E/M/A/D	0,30 0,30	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,15 0,0060	110 (97 — 130) 360 (320 — 420)	
P11	E/M/A/D	0,20 0,20	0,95 0,95	0,060 0,0024	0,070 0,0028	0,090 0,0036	0,10 0,0040	0,12 0,0048	100 (89 — 110) 330 (300 — 360)	Hard
P12	E/M/A/D	0,20 0,20	0,95 0,95	0,042 0,0017	0,050 0,0020	0,060 0,0024	0,070 0,0028	0,080 0,0032	65 (56 — 71) 215 (190 — 230)	
M1	E/M/A	0,20 0,20	0,95 0,95	0,070 0,0028	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,13 0,0050	115 (110 — 120) 375 (370 — 390)	Plastic and cf/p
M2	E/M/A	0,20 0,20	0,95 0,95	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	95 (84 — 100) 310 (280 — 320)	
M3	E/M/A	0,20 0,20	0,95 0,95	0,060 0,0024	0,075 0,0030	0,090 0,0036	0,10 0,0040	0,12 0,0048	60 (47 — 69) 195 (160 — 220)	Graphite
M4	E/M/A	0,20 0,20	0,95 0,95	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	44 (36 — 53) 145 (120 — 170)	
M5	E/M/A	0,20 0,20	0,95 0,95	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	37 (30 — 44) 120 (99 — 140)	X-Heads
K1	E/M/A/D	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	130 (120 — 150) 425 (400 — 490)	
K2	E/M/A/D	0,30 0,30	0,95 0,95	0,060 0,0024	0,070 0,0028	0,085 0,0034	0,10 0,0040	0,11 0,0044	115 (98 — 130) 375 (330 — 420)	Minimaster
K3	E/M/A/D	0,30 0,30	0,95 0,95	0,060 0,0024	0,070 0,0028	0,085 0,0034	0,10 0,0040	0,11 0,0044	100 (83 — 110) 330 (280 — 360)	
K4	E/M/A/D	0,30 0,30	0,95 0,95	0,060 0,0024	0,070 0,0028	0,085 0,0034	0,10 0,0040	0,11 0,0044	95 (79 — 100) 310 (260 — 320)	X-Heads
K5	E/M/A/D	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	105 (89 — 130) 345 (300 — 420)	
K6	E/M/A/D	0,30 0,30	0,95 0,95	0,070 0,0028	0,085 0,0034	0,11 0,0044	0,12 0,0048	0,14 0,0055	155 (130 — 190) 510 (430 — 620)	Graphite
K7	E/M/A/D	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	135 (120 — 160) 445 (400 — 520)	
N1	E/M/A	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	690 (580 — 800) 2275 (2000 — 2600)	X-Heads
N2	E/M/A	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	445 (380 — 520) 1450 (1300 — 1700)	
N3	E/M/A	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	300 (250 — 340) 980 (830 — 1100)	Minimaster
N11	E/M/A	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	345 (290 — 400) 1125 (960 — 1300)	
S1	E	0,15 0,15	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	27 (24 — 41) 90 (79 — 130)	X-Heads
S2	E	0,15 0,15	0,95 0,95	0,075 0,0030	0,090 0,0036	0,11 0,0044	0,13 0,0050	0,14 0,0055	26 (21 — 35) 85 (69 — 110)	
S3	E	0,15 0,15	0,95 0,95	0,070 0,0028	0,080 0,0032	0,10 0,0040	0,12 0,0048	0,13 0,0050	25 (19 — 30) 80 (63 — 98)	Minimaster
S11	E	0,30 0,30	0,95 0,95	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	65 (52 — 88) 215 (180 — 280)	
S12	E	0,30 0,30	0,95 0,95	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	0,10 0,0040	50 (40 — 68) 165 (140 — 220)	Minimaster
S13	E	0,30 0,30	0,95 0,95	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	0,090 0,0036	41 (32 — 54) 135 (110 — 170)	
H5	M/A	0,050 0,050	0,95 0,95	0,090 0,0036	0,10 0,0040	0,13 0,0050	0,15 0,0060	0,17 0,0065	70 (56 — 83) 230 (190 — 270)	Minimaster
H8	M/A	0,050 0,050	0,95 0,95	0,070 0,0028	0,080 0,0032	0,10 0,0040	0,11 0,0044	0,13 0,0050	70 (58 — 86) 230 (200 — 280)	
H21	M/A	0,050 0,050	0,95 0,95	0,070 0,0028	0,080 0,0032	0,10 0,0040	0,11 0,0044	0,13 0,0050	70 (58 — 86) 230 (200 — 280)	Minimaster
H31	M/A	0,050 0,050	0,95 0,95	0,060 0,0024	0,070 0,0028	0,085 0,0034	0,10 0,0040	0,11 0,0044	55 (45 — 67) 180 (150 — 210)	
TS1	A/D	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	290 (180 — 400) 950 (600 — 1300)	Minimaster
TP1	A/D	0,30 0,30	0,95 0,95	0,065 0,0026	0,075 0,0030	0,095 0,0038	0,11 0,0044	0,12 0,0048	290 (180 — 400) 950 (600 — 1300)	

Cutting data – XSE550 – Side milling PCEDC 5 inch

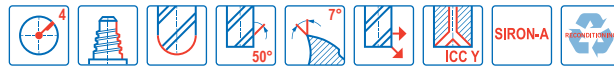
	SMG		a _e /DC	a _p /DC	f _z					v _c
					3/8	1/2	5/8	3/4	1	
Universal	P1	E/M/A/D	0,30 0.30	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,15 0.0060	200 (180 — 220) 660 (600 — 720)
	P2	E/M/A/D	0,30 0.30	0,95 0.95	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,16 0.0065	195 (170 — 220) 640 (560 — 720)
Steel and cast iron	P3	E/M/A/D	0,30 0.30	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	170 (150 — 190) 560 (500 — 620)
	P4	E/M/A/D	0,30 0.30	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,14 0.0055	150 (130 — 170) 490 (430 — 550)
	P5	E/M/A/D	0,30 0.30	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,14 0.0055	145 (130 — 160) 475 (430 — 520)
	P6	E/M/A/D	0,30 0.30	0,95 0.95	0,075 0.0030	0,085 0.0034	0,11 0.0044	0,12 0.0048	0,14 0.0055	160 (140 — 180) 520 (460 — 590)
	P7	E/M/A/D	0,30 0.30	0,95 0.95	0,075 0.0030	0,085 0.0034	0,11 0.0044	0,12 0.0048	0,14 0.0055	150 (130 — 170) 490 (430 — 550)
Stainless steel and S-materials	P8	E/M/A/D	0,30 0.30	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	145 (130 — 160) 475 (430 — 520)
	P11	E/M/A/D	0,20 0.20	0,95 0.95	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	100 (89 — 110) 330 (300 — 360)
	P12	E/M/A/D	0,20 0.20	0,95 0.95	0,042 0.0017	0,050 0.0020	0,060 0.0024	0,070 0.0028	0,080 0.0032	65 (56 — 71) 215 (190 — 230)
	M1	E/M/A	0,20 0.20	0,95 0.95	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,12 0.0048	0,13 0.0050	115 (110 — 120) 375 (370 — 390)
	M2	E/M/A	0,20 0.20	0,95 0.95	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	0,12 0.0048	95 (84 — 100) 310 (280 — 320)
Non ferrous	M3	E/M/A	0,20 0.20	0,95 0.95	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	0,12 0.0048	60 (47 — 69) 195 (160 — 220)
	M4	E/M/A	0,20 0.20	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	44 (36 — 53) 145 (120 — 170)
	M5	E/M/A	0,20 0.20	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	37 (30 — 44) 120 (99 — 140)
	K1	E/M/A/D	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	165 (160 — 190) 540 (530 — 620)
	K2	E/M/A/D	0,30 0.30	0,95 0.95	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	145 (140 — 170) 475 (460 — 550)
Hard	K3	E/M/A/D	0,30 0.30	0,95 0.95	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	125 (120 — 140) 410 (400 — 450)
	K4	E/M/A/D	0,30 0.30	0,95 0.95	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	120 (110 — 140) 395 (370 — 450)
	K5	E/M/A/D	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	155 (140 — 170) 510 (460 — 550)
	K6	E/M/A/D	0,30 0.30	0,95 0.95	0,070 0.0028	0,085 0.0034	0,11 0.0044	0,12 0.0048	0,14 0.0055	225 (200 — 250) 740 (660 — 820)
	K7	E/M/A/D	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	200 (170 — 220) 660 (560 — 720)
Plastic and cfrrp	N1	E/M/A	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	690 (580 — 800) 2275 (2000 — 2600)
	N2	E/M/A	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	445 (380 — 520) 1450 (1300 — 1700)
	N3	E/M/A	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	300 (250 — 340) 980 (830 — 1100)
	N11	E/M/A	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	345 (290 — 400) 1125 (960 — 1300)
	S1	E	0,15 0.15	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,14 0.0055	44 (27 — 61) 145 (89 — 200)
X-Heads	S2	E	0,15 0.15	0,95 0.95	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,14 0.0055	35 (22 — 49) 115 (73 — 160)
	S3	E	0,15 0.15	0,95 0.95	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,12 0.0048	0,13 0.0050	31 (19 — 43) 100 (63 — 140)
	S11	E	0,30 0.30	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	105 (75 — 130) 345 (250 — 420)
	S12	E	0,30 0.30	0,95 0.95	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	80 (58 — 100) 260 (200 — 320)
	S13	E	0,30 0.30	0,95 0.95	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	65 (46 — 81) 215 (160 — 260)
Minimaster	H5	M/A	0,050 0.050	0,95 0.95	0,090 0.0036	0,10 0.0040	0,13 0.0050	0,15 0.0060	0,17 0.0065	70 (56 — 83) 230 (190 — 270)
	H8	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,11 0.0044	0,13 0.0050	70 (58 — 86) 230 (200 — 280)
	H21	M/A	0,050 0.050	0,95 0.95	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,11 0.0044	0,13 0.0050	70 (58 — 86) 230 (200 — 280)
	H31	M/A	0,050 0.050	0,95 0.95	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	55 (45 — 67) 180 (150 — 210)
	TS1	A/D	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	290 (180 — 400) 950 (600 — 1300)
	TP1	A/D	0,30 0.30	0,95 0.95	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	290 (180 — 400) 950 (600 — 1300)

XSB540

High performance – Universal – Ball nose – 4 Flutes



- Tolerances:
- DC= e8
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CSP	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
						mm	mm	mm	mm	mm			SIRA
XSB540E10100D1BZ4A	10138334	1	D	■	E10	10,0	9,7	5,5	12,3	5,0	4	8	■
XSB540E12120D1BZ4A	10138335	1	D	■	E12	12,0	11,7	6,6	14,4	6,0	4	10	■
XSB540E16160D1BZ4A	10138336	1	D	■	E16	16,0	15,5	8,8	18,6	8,0	4	12	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

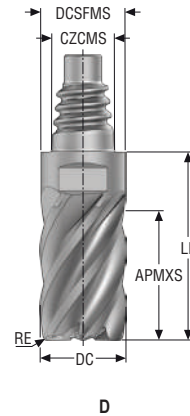
Minimaster

Cutting data – XSB540 Copy milling roughing

	SMG		a _e /DC	a _p /DC	f _z			v _c
					10	12	16	
Universal	P1	E/M/A/D	0,10 0.10	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	210 (190 — 240) 690 (630 — 780)
	P2	E/M/A/D	0,10 0.10	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	205 (180 — 230) 670 (600 — 750)
Steel and cast iron	P3	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	180 (160 — 200) 590 (530 — 650)
	P4	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	155 (140 — 170) 510 (460 — 550)
	P5	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	150 (130 — 170) 490 (430 — 550)
	P6	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	170 (150 — 190) 560 (500 — 620)
Stainless steel and S-materials	P7	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	160 (140 — 180) 520 (460 — 590)
	P8	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	150 (130 — 170) 490 (430 — 550)
	P11	E/M/A/D	0,10 0.10	0,50 0.50	0,070 0.0028	0,085 0.0034	0,11 0.0044	190 (160 — 220) 620 (530 — 720)
	P12	E/M/A/D	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	115 (97 — 130) 375 (320 — 420)
Non ferrous	M1	E/M/A	0,10 0.10	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	145 (120 — 170) 475 (400 — 550)
	M2	E/M/A	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	115 (97 — 130) 375 (320 — 420)
	M3	E/M/A	0,10 0.10	0,50 0.50	0,040 0.0016	0,048 0.0019	0,060 0.0024	95 (75 — 110) 310 (250 — 360)
	M4	E/M/A	0,10 0.10	0,50 0.50	0,036 0.0014	0,042 0.0017	0,050 0.0020	75 (57 — 88) 245 (190 — 280)
Hard	M5	E/M/A	0,10 0.10	0,50 0.50	0,036 0.0014	0,042 0.0017	0,050 0.0020	60 (48 — 74) 195 (160 — 240)
	K1	E/M/A/D	0,15 0.15	0,50 0.50	0,040 0.0016	0,048 0.0019	0,060 0.0024	205 (190 — 220) 670 (630 — 720)
	K2	E/M/A/D	0,15 0.15	0,50 0.50	0,036 0.0014	0,044 0.0017	0,055 0.0022	180 (160 — 190) 590 (530 — 620)
	K3	E/M/A/D	0,15 0.15	0,50 0.50	0,036 0.0014	0,044 0.0017	0,055 0.0022	150 (140 — 160) 490 (460 — 520)
Plastic and cfrp	K4	E/M/A/D	0,10 0.10	0,50 0.50	0,040 0.0016	0,048 0.0019	0,060 0.0024	170 (150 — 190) 560 (500 — 620)
	K5	E/M/A/D	0,10 0.10	0,50 0.50	0,036 0.0014	0,042 0.0017	0,055 0.0022	105 (90 — 110) 345 (300 — 360)
	K6	E/M/A/D	0,10 0.10	0,50 0.50	0,040 0.0016	0,048 0.0019	0,060 0.0024	150 (140 — 160) 490 (460 — 520)
	K7	E/M/A/D	0,10 0.10	0,50 0.50	0,036 0.0014	0,042 0.0017	0,055 0.0022	130 (120 — 140) 425 (400 — 450)
Graphite	N1	E/M/A	0,20 0.20	0,50 0.50	0,070 0.0028	0,085 0.0034	0,10 0.0040	640 (540 — 740) 2100 (1800 — 2400)
	N2	E/M/A	0,20 0.20	0,50 0.50	0,070 0.0028	0,085 0.0034	0,10 0.0040	415 (350 — 480) 1350 (1200 — 1500)
	N3	E/M/A	0,20 0.20	0,50 0.50	0,070 0.0028	0,085 0.0034	0,10 0.0040	275 (230 — 320) 900 (760 — 1000)
	N11	E/M/A	0,15 0.15	0,50 0.50	0,070 0.0028	0,085 0.0034	0,10 0.0040	430 (380 — 480) 1400 (1300 — 1500)
X-Heads	S1	E	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	65 (54 — 74) 215 (180 — 240)
	S2	E	0,10 0.10	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	65 (59 — 75) 215 (200 — 240)
	S3	E	0,10 0.10	0,50 0.50	0,020 0.00080	0,024 0.00095	0,030 0.0012	32 (22 — 42) 105 (73 — 130)
	S11	E	0,15 0.15	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	110 (98 — 120) 360 (330 — 390)
Minimaster	S12	E	0,15 0.15	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	85 (75 — 96) 280 (250 — 310)
	S13	E	0,15 0.15	0,50 0.50	0,044 0.0017	0,050 0.0020	0,065 0.0026	65 (59 — 75) 215 (200 — 240)
	H5	M/A	0,030 0.030	0,44 0.44	0,050 0.0020	0,060 0.0024	0,075 0.0030	135 (120 — 150) 445 (400 — 490)
	H8	M/A	0,030 0.030	0,44 0.44	0,038 0.0015	0,046 0.0018	0,055 0.0022	135 (120 — 150) 445 (400 — 490)
	H21	M/A	0,030 0.030	0,44 0.44	0,038 0.0015	0,046 0.0018	0,055 0.0022	135 (120 — 150) 445 (400 — 490)
	H31	M/A	0,030 0.030	0,44 0.44	0,034 0.0013	0,040 0.0016	0,048 0.0019	100 (86 — 110) 330 (290 — 360)
	TS1	A/D	0,15 0.15	0,50 0.50	0,10 0.0040	0,12 0.0048	0,15 0.0060	270 (170 — 370) 890 (560 — 1200)
	TP1	A/D	0,15 0.15	0,50 0.50	0,10 0.0040	0,12 0.0048	0,15 0.0060	270 (170 — 370) 890 (560 — 1200)

XSE720

High performance – Superalloy – Square – 6 Flutes – Corner radius



- Tolerances:
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			HXT
XSE720E10100D3R050Z6	10138187	3	D	E10	10,0	9,7	15,0	21,8	0,5	6	8	■
XSE720E10100D3R100Z6	10138188	3	D	E10	10,0	9,7	15,0	21,8	1,0	6	8	■
XSE720E12120D3R050Z6	10138189	3	D	E12	12,0	11,7	18,0	25,9	0,5	6	10	■
XSE720E12120D3R100Z6	10138190	3	D	E12	12,0	11,7	18,0	25,9	1,0	6	10	■
XSE720E12120D3R200Z6	10138191	3	D	E12	12,0	11,7	18,0	25,9	2,0	6	10	■
XSE720E12120D3R300Z6	10138192	3	D	E12	12,0	11,7	18,0	25,9	3,0	6	10	■
XSE720E16160D3R050Z6	10138193	3	D	E16	16,0	15,5	24,0	34,1	0,5	6	12	■
XSE720E16160D3R100Z6	10138194	3	D	E16	16,0	15,5	24,0	34,1	1,0	6	12	■
XSE720E16160D3R200Z6	10138195	3	D	E16	16,0	15,5	24,0	34,1	2,0	6	12	■
XSE720E16160D3R300Z6	10138196	3	D	E16	16,0	15,5	24,0	34,1	3,0	6	12	■
XSE720E20200D3R050Z6	10138197	3	D	E20	20,0	19,3	30,0	40,2	0,5	6	16	■
XSE720E20200D3R100Z6	10138198	3	D	E20	20,0	19,3	30,0	40,2	1,0	6	16	■
XSE720E20200D3R200Z6	10138199	3	D	E20	20,0	19,3	30,0	40,2	2,0	6	16	■
XSE720E20200D3R300Z6	10138200	3	D	E20	20,0	19,3	30,0	40,2	3,0	6	16	■
XSE720E25250D3R200Z6	10138201	3	D	E25	25,0	24,2	37,5	49,5	2,0	6	20	■
XSE720E25250D3R300Z6	10138202	3	D	E25	25,0	24,2	37,5	49,5	3,0	6	20	■
XSE720E25250D3R400Z6	10138203	3	D	E25	25,0	24,2	37,5	49,5	4,0	6	20	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

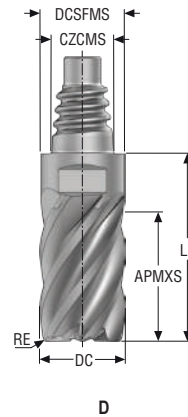
Graphite

X-Heads

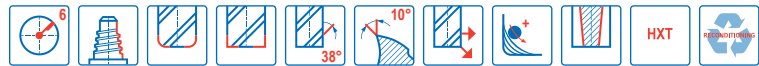
Minimaster

XSE720

High performance – Superalloy – Square – 6 Flutes – Corner radius or sharp – Inch



- Tolerances:
- DC= e7
- RE= ±.0008 Inch
- Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			HXT
XSE720E10.375D3SZ6	10138204	3	D	E10	0.375	0.364	0.563	0.827	—	6	8	■
XSE720E10.375D3R030Z6	10138209	3	D	E10	0.375	0.364	0.563	0.827	0.030	6	8	■
XSE720E12.500D3SZ6	10138205	3	D	E12	0.500	0.484	0.750	1.055	—	6	10	■
XSE720E12.500D3R030Z6	10138210	3	D	E12	0.500	0.484	0.750	1.055	0.030	6	10	■
XSE720E12.500D3R060Z6	10138211	3	D	E12	0.500	0.484	0.750	1.055	0.060	6	10	■
XSE720E12.500D3R120Z6	10138212	3	D	E12	0.500	0.484	0.750	1.055	0.120	6	10	■
XSE720E16.625D3SZ6	10138206	3	D	E16	0.625	0.610	0.938	1.343	—	6	12	■
XSE720E16.625D3R030Z6	10138213	3	D	E16	0.625	0.610	0.938	1.343	0.030	6	12	■
XSE720E16.625D3R060Z6	10138214	3	D	E16	0.625	0.610	0.938	1.343	0.060	6	12	■
XSE720E16.625D3R120Z6	10138215	3	D	E16	0.625	0.610	0.938	1.343	0.120	6	12	■
XSE720E20.750D3SZ6	10138207	3	D	E20	0.750	0.728	1.125	1.524	—	6	16	■
XSE720E20.750D3R030Z6	10138216	3	D	E20	0.750	0.728	1.125	1.524	0.030	6	16	■
XSE720E20.750D3R060Z6	10138217	3	D	E20	0.750	0.728	1.125	1.524	0.060	6	16	■
XSE720E20.750D3R120Z6	10138218	3	D	E20	0.750	0.728	1.125	1.524	0.120	6	16	■
XSE720E251.00D3SZ6	10138208	3	D	E25	1.000	0.965	1.500	1.980	—	6	20	■
XSE720E251.00D3R030Z6	10138219	3	D	E25	1.000	0.965	1.500	1.980	0.030	6	20	■
XSE720E251.00D3R060Z6	10138220	3	D	E25	1.000	0.965	1.500	1.980	0.060	6	20	■
XSE720E251.00D3R120Z6	10138221	3	D	E25	1.000	0.965	1.500	1.980	0.120	6	20	■

■ Stocked standard.

Cutting data – XSE720 Side milling

SMG		a_e/DC	a_p/DC	f_z					v_c	
				10	12	16	20	25		
P1	E/M/A/D	0,12 0,12	1,4 1,4	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,13 0.0050	0,15 0.0060	230 (180 — 280) 750 (600 — 910)	Universal
P2	E/M/A/D	0,12 0,12	1,4 1,4	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,15 0.0060	220 (170 — 270) 720 (560 — 880)	
P3	E/M/A/D	0,12 0,12	1,4 1,4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	195 (150 — 230) 640 (500 — 750)	Steel and cast iron
P4	E/M/A/D	0,12 0,12	1,4 1,4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,14 0.0055	170 (130 — 200) 560 (430 — 650)	
P5	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,11 0.0044	130 (100 — 160) 425 (330 — 520)	Steel and stainless steel
P6	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	145 (120 — 190) 475 (400 — 620)	
P7	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	140 (110 — 180) 460 (370 — 590)	Stainless steel and S-materials
P8	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,12 0.0048	130 (100 — 160) 425 (330 — 520)	
P11	E/M/A/D	0,12 0,12	1,4 1,4	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,12 0.0048	0,13 0.0050	130 (110 — 170) 425 (370 — 550)	Non ferrous
P12	E/M/A/D	0,12 0,12	1,4 1,4	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	95 (80 — 100) 310 (270 — 320)	
M1	E/M/A	0,12 0,12	1,4 1,4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	170 (150 — 190) 560 (500 — 620)	Hard
M2	E/M/A	0,12 0,12	1,4 1,4	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,13 0.0050	140 (120 — 150) 460 (400 — 490)	
M3	E/M/A	0,10 0,10	1,4 1,4	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	0,12 0.0048	120 (100 — 130) 395 (330 — 420)	Plastic and cf/p
M4	E/M/A	0,10 0,10	1,4 1,4	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	90 (77 — 100) 295 (260 — 320)	
M5	E/M/A	0,10 0,10	1,4 1,4	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	75 (64 — 88) 245 (210 — 280)	Graphite
S1	E	0,060 0.060	1,4 1,4	0,046 0.0018	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	45 (35 — 54) 150 (120 — 170)	
S2	E	0,060 0.060	1,4 1,4	0,042 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,080 0.0032	35 (25 — 44) 115 (83 — 140)	X-Heads
S3	E	0,060 0.060	1,4 1,4	0,042 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,080 0.0032	30 (20 — 39) 100 (66 — 120)	
S11	E	0,10 0,10	1,4 1,4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,11 0.0044	105 (78 — 120) 345 (260 — 390)	Minimaster
S12	E	0,10 0,10	1,4 1,4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,11 0.0044	80 (60 — 99) 260 (200 — 320)	
S13	E	0,10 0,10	1,4 1,4	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	65 (48 — 79) 215 (160 — 250)	

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 v_c = m/min (sf/min)

 f_z = mm (in/tooth)

 a_p = mm/DC (in/DC) = factor

 a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – XSE720 advanced roughing

SMG		a _p /DC	f _z					v _c
			10	12	16	20	25	
P1	E/M/A/D	1,4 1.4	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	0,19 0.0075	245 (190 — 300) 800 (630 — 980)
P2	E/M/A/D	1,4 1.4	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,18 0.0070	0,20 0.0080	240 (190 — 290) 790 (630 — 950)
P3	E/M/A/D	1,4 1.4	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,17 0.0065	0,19 0.0075	205 (160 — 250) 670 (530 — 820)
P4	E/M/A/D	1,4 1.4	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	185 (140 — 220) 610 (460 — 720)
P5	E/M/A/D	1,4 1.4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	140 (110 — 180) 460 (370 — 590)
P6	E/M/A/D	1,4 1.4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	155 (130 — 200) 510 (430 — 650)
P7	E/M/A/D	1,4 1.4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	150 (120 — 190) 490 (400 — 620)
P8	E/M/A/D	1,4 1.4	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,15 0.0060	140 (110 — 180) 460 (370 — 590)
P11	E/M/A/D	1,4 1.4	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	140 (110 — 180) 460 (370 — 590)
P12	E/M/A/D	1,4 1.4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	100 (86 — 110) 330 (290 — 360)
M1	E/M/A	1,4 1.4	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	0,19 0.0075	180 (160 — 200) 590 (530 — 650)
M2	E/M/A	1,4 1.4	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	150 (130 — 170) 490 (430 — 550)
M3	E/M/A	1,4 1.4	0,075 0.0030	0,085 0.0034	0,11 0.0044	0,12 0.0048	0,14 0.0055	125 (110 — 140) 410 (370 — 450)
M4	E/M/A	1,4 1.4	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	95 (80 — 110) 310 (270 — 360)
M5	E/M/A	1,4 1.4	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	80 (67 — 92) 260 (220 — 300)
S1	E	1,4 1.4	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,085 0.0034	44 (35 — 53) 145 (120 — 170)
S2	E	1,4 1.4	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	34 (25 — 43) 110 (83 — 140)
S3	E	1,4 1.4	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	29 (20 — 39) 95 (66 — 120)
S11	E	1,4 1.4	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	110 (82 — 130) 360 (270 — 420)
S12	E	1,4 1.4	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	85 (63 — 100) 280 (210 — 320)
S13	E	1,4 1.4	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	0,12 0.0048	65 (50 — 83) 215 (170 — 270)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – XSE720 Side milling inch

SMG		a _e /DC	a _p /DC	f _z					v _c	Universal iron
				3/8	1/2	5/8	3/4	1		
P1	E/M/A/D	0,12 0,12	1,4 1,4	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,13 0.0050	0,15 0.0060	265 (200 — 320) 870 (660 — 1000)	Steel and cast iron
P2	E/M/A/D	0,12 0,12	1,4 1,4	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,15 0.0060	255 (200 — 320) 840 (660 — 1000)	
P3	E/M/A/D	0,12 0,12	1,4 1,4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	225 (170 — 270) 740 (560 — 880)	
P4	E/M/A/D	0,12 0,12	1,4 1,4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,14 0.0055	195 (150 — 240) 640 (500 — 780)	
P5	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,11 0.0044	160 (120 — 190) 520 (400 — 620)	
P6	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	180 (140 — 220) 590 (460 — 720)	Stainless steel and S-materials
P7	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,11 0.0044	170 (130 — 210) 560 (430 — 680)	
P8	E/M/A/D	0,12 0,12	1,4 1,4	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,12 0.0048	160 (120 — 190) 520 (400 — 620)	
P11	E/M/A/D	0,12 0,12	1,4 1,4	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,12 0.0048	0,13 0.0050	160 (130 — 200) 520 (430 — 650)	
P12	E/M/A/D	0,12 0,12	1,4 1,4	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	95 (80 — 100) 310 (270 — 320)	
M1	E/M/A	0,12 0,12	1,4 1,4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	170 (150 — 190) 560 (500 — 620)	Non ferrous
M2	E/M/A	0,12 0,12	1,4 1,4	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,13 0.0050	140 (120 — 150) 460 (400 — 490)	
M3	E/M/A	0,10 0,10	1,4 1,4	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	0,12 0.0048	120 (100 — 110) 395 (330 — 360)	
M4	E/M/A	0,10 0,10	1,4 1,4	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	90 (77 — 91) 295 (260 — 290)	
M5	E/M/A	0,10 0,10	1,4 1,4	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	0,10 0.0040	75 (64 — 76) 245 (210 — 240)	
S1	E	0,060 0.060	1,4 1,4	0,046 0.0018	0,055 0.0022	0,070 0.0028	0,080 0.0032	0,090 0.0036	45 (35 — 54) 150 (120 — 170)	Hard
S2	E	0,060 0.060	1,4 1,4	0,042 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,080 0.0032	35 (25 — 44) 115 (83 — 140)	
S3	E	0,060 0.060	1,4 1,4	0,042 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,080 0.0032	30 (20 — 39) 100 (66 — 120)	
S11	E	0,10 0,10	1,4 1,4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,11 0.0044	105 (78 — 120) 345 (260 — 390)	
S12	E	0,10 0,10	1,4 1,4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,11 0.0044	80 (60 — 99) 260 (200 — 320)	
S13	E	0,10 0,10	1,4 1,4	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	65 (48 — 79) 215 (160 — 250)	Plastic and cfnp

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfnp

Graphite

X-Heads

Minimaster

Cutting data – XSE720 advanced roughing inch

	SMG		a _p /DC	f _z					v _c
				3/8	1/2	5/8	3/4	1	
Universal	P1	E/M/A/D	1,4 1.4	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	0,19 0.0075	285 (220 — 350) 940 (730 — 1100)
	P2	E/M/A/D	1,4 1.4	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,18 0.0070	0,20 0.0080	275 (210 — 340) 900 (690 — 1100)
Steel and cast iron	P3	E/M/A/D	1,4 1.4	0,10 0.0040	0,12 0.0048	0,14 0.0055	0,17 0.0065	0,19 0.0075	240 (180 — 290) 790 (600 — 950)
	P4	E/M/A/D	1,4 1.4	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	0,18 0.0070	210 (160 — 260) 690 (530 — 850)
	P5	E/M/A/D	1,4 1.4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	175 (130 — 210) 570 (430 — 680)
	P6	E/M/A/D	1,4 1.4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	195 (150 — 240) 640 (500 — 780)
Stainless steel and S-materials	P7	E/M/A/D	1,4 1.4	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	185 (140 — 220) 610 (460 — 720)
	P8	E/M/A/D	1,4 1.4	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	0,15 0.0060	170 (130 — 210) 560 (430 — 680)
	P11	E/M/A/D	1,4 1.4	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	170 (130 — 210) 560 (430 — 680)
	P12	E/M/A/D	1,4 1.4	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	0,12 0.0048	100 (86 — 110) 330 (290 — 360)
Non ferrous	M1	E/M/A	1,4 1.4	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	0,19 0.0075	180 (160 — 200) 590 (530 — 650)
	M2	E/M/A	1,4 1.4	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	0,17 0.0065	150 (130 — 170) 490 (430 — 550)
	M3	E/M/A	1,4 1.4	0,075 0.0030	0,085 0.0034	0,11 0.0044	0,12 0.0048	0,14 0.0055	125 (110 — 120) 410 (370 — 390)
	M4	E/M/A	1,4 1.4	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	95 (80 — 95) 310 (270 — 310)
Hard	M5	E/M/A	1,4 1.4	0,065 0.0026	0,075 0.0030	0,095 0.0038	0,11 0.0044	0,12 0.0048	80 (67 — 79) 260 (220 — 250)
	S1	E	1,4 1.4	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	0,085 0.0034	44 (35 — 53) 145 (120 — 170)
	S2	E	1,4 1.4	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	34 (25 — 43) 110 (83 — 140)
	S3	E	1,4 1.4	0,040 0.0016	0,048 0.0019	0,060 0.0024	0,070 0.0028	0,075 0.0030	29 (20 — 39) 95 (66 — 120)
Plastic and cfrp	S11	E	1,4 1.4	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	110 (82 — 130) 360 (270 — 420)
	S12	E	1,4 1.4	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	0,14 0.0055	85 (63 — 100) 280 (210 — 320)
	S13	E	1,4 1.4	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	0,12 0.0048	65 (50 — 83) 215 (170 — 270)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

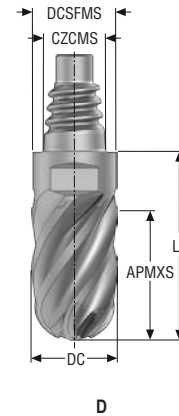
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

XSB720

High performance – Superalloy – Ball nose – 6 Flutes



- Tolerances:
- DC= e7
- RE= ±0,02 mm
- Regrind possible if DC is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			HXT
XSB720E10100D3BZ6	10138222	3	D	E10	10,0	9,7	15,0	21,8	5,0	6	8	■
XSB720E12120D3BZ6	10138223	3	D	E12	12,0	11,7	18,0	25,9	6,0	6	10	■
XSB720E16160D3BZ6	10138224	3	D	E16	16,0	15,5	24,0	34,1	8,0	6	12	■
XSB720E20200D3BZ6	10138225	3	D	E20	20,0	19,3	30,0	40,2	10,0	6	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

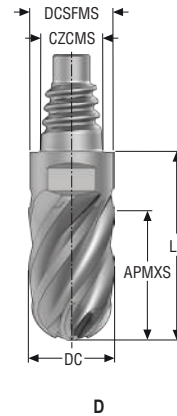
Graphite

X-Heads

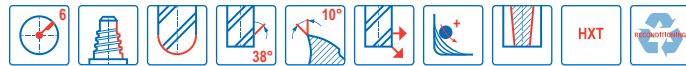
Minimaster

XSB720

High performance – Superalloy – Ball nose – 6 Flutes – Inch



—Tolerances:
—DC= e7
—RE= ±.0008 Inch
—Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			HXT
XSB720E10.375D3BZ6	10138226	3	D	E10	0.375	0.364	0.563	0.827	0.188	6	8	■
XSB720E12.500D3BZ6	10138227	3	D	E12	0.500	0.484	0.750	1.055	0.250	6	10	■
XSB720E16.625D3BZ6	10138228	3	D	E16	0.625	0.610	0.938	1.343	0.313	6	12	■
XSB720E20.750D3BZ6	10138229	3	D	E20	0.750	0.728	1.125	1.524	0.375	6	16	■
XSB720E25.100D3BZ6	10138230	3	D	E25	1.000	0.965	1.500	1.980	0.500	6	20	■

■ Stocked standard.

Cutting data – XSB720 Side milling

SMG		a _e /DC	a _p /DC	f _z				v _c	
				10	12	16	20		
P1	E/M/A/D	0,12 0.12	1,2 1.2	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	185 (150 — 140) 610 (500 — 450)	Universal
P2	E/M/A/D	0,12 0.12	1,2 1.2	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	175 (140 — 130) 570 (460 — 420)	
P3	E/M/A/D	0,12 0.12	1,2 1.2	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	155 (120 — 110) 510 (400 — 360)	Steel and cast iron
P4	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,16 0.0065	135 (110 — 100) 445 (370 — 320)	
P5	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	130 (110 — 100) 425 (370 — 320)	Stainless steel and S-materials
P6	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	145 (120 — 110) 475 (400 — 360)	
P7	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	140 (110 — 100) 460 (370 — 320)	Non ferrous
P8	E/M/A/D	0,12 0.12	1,2 1.2	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	130 (99 — 98) 425 (330 — 320)	
P11	E/M/A/D	0,12 0.12	1,2 1.2	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,12 0.0048	140 (110 — 100) 460 (370 — 320)	Hard
P12	E/M/A/D	0,12 0.12	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	85 (68 — 67) 280 (230 — 210)	
M1	E/M/A	0,12 0.12	1,2 1.2	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	170 (150 — 190) 560 (500 — 620)	Plastic and cf/rp
M2	E/M/A	0,12 0.12	1,2 1.2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	140 (120 — 160) 460 (400 — 520)	
M3	E/M/A	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	120 (110 — 140) 395 (370 — 450)	Graphite
M4	E/M/A	0,10 0.10	1,2 1.2	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	90 (77 — 100) 295 (260 — 320)	
M5	E/M/A	0,10 0.10	1,2 1.2	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	75 (65 — 89) 245 (220 — 290)	X-Heads
S1	E	0,070 0.070	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	45 (35 — 54) 150 (120 — 170)	
S2	E	0,070 0.070	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	35 (5 — 45) 115 (17 — 140)	Minimaster
S3	E	0,070 0.070	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	30 (20 — 40) 100 (66 — 130)	
S11	E	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	105 (79 — 130) 345 (260 — 420)	X-Heads
S12	E	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	80 (61 — 100) 260 (210 — 320)	
S13	E	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	60 (47 — 77) 195 (160 — 250)	

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – XSB720 Side milling advanced roughing $a_e/DC=0,07$

SMG		a_p/DC	f_z				v_c
			10	12	16	20	
P1	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,18 0.0070	0,22 0.0085	195 (160 — 150) 640 (530 — 490)
P2	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,19 0.0075	0,22 0.0085	190 (150 — 140) 620 (500 — 450)
P3	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,18 0.0070	0,20 0.0080	165 (130 — 120) 540 (430 — 390)
P4	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,17 0.0065	0,20 0.0080	145 (120 — 110) 475 (400 — 360)
P5	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,17 0.0065	0,20 0.0080	140 (110 — 100) 460 (370 — 320)
P6	E/M/A/D	1,2 1,2	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,19 0.0075	160 (130 — 120) 520 (430 — 390)
P7	E/M/A/D	1,2 1,2	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,19 0.0075	150 (120 — 110) 490 (400 — 360)
P8	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,18 0.0070	0,20 0.0080	140 (110 — 100) 460 (370 — 320)
P11	E/M/A/D	1,2 1,2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	150 (120 — 110) 490 (400 — 360)
P12	E/M/A/D	1,2 1,2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	95 (73 — 72) 310 (240 — 230)
M1	E/M/A	1,2 1,2	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	185 (160 — 200) 610 (530 — 650)
M2	E/M/A	1,2 1,2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	150 (130 — 170) 490 (430 — 550)
M3	E/M/A	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	125 (110 — 140) 410 (370 — 450)
M4	E/M/A	1,2 1,2	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	95 (81 — 110) 310 (270 — 360)
M5	E/M/A	1,2 1,2	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	80 (68 — 93) 260 (230 — 300)
S1	E	1,2 1,2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	45 (35 — 54) 150 (120 — 170)
S2	E	1,2 1,2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	35 (5 — 45) 115 (17 — 140)
S3	E	1,2 1,2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	30 (20 — 40) 100 (66 — 130)
S11	E	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	110 (82 — 130) 360 (270 — 420)
S12	E	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	85 (63 — 100) 280 (210 — 320)
S13	E	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	65 (49 — 81) 215 (170 — 260)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

 $v_c = m/min (sf/min)$
 $f_z = mm (in/tooth)$
 $a_p = mm/DC (in/DC) = factor$
 $a_e = mm/DC (in/DC) = factor$

All cutting data are target values

Cutting data – XSB720 Side milling inch

SMG		a _e /DC	a _p /DC	f _z				v _c	
				3/8	1/2	5/8	3/4		
P1	E/M/A/D	0,12 0.12	1,2 1.2	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	195 (170 — 220) 640 (560 — 720)	Universal
P2	E/M/A/D	0,12 0.12	1,2 1.2	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	190 (170 — 210) 620 (560 — 680)	Steel and cast iron
P3	E/M/A/D	0,12 0.12	1,2 1.2	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	165 (150 — 180) 540 (500 — 590)	
P4	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,16 0.0065	145 (130 — 160) 475 (430 — 520)	
P5	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	140 (130 — 160) 460 (430 — 520)	
P6	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	155 (140 — 170) 510 (460 — 550)	Stainless steel and S-materials
P7	E/M/A/D	0,12 0.12	1,2 1.2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	150 (130 — 160) 490 (430 — 520)	
P8	E/M/A/D	0,12 0.12	1,2 1.2	0,095 0.0038	0,11 0.0044	0,14 0.0055	0,16 0.0065	140 (120 — 150) 460 (400 — 490)	
P11	E/M/A/D	0,12 0.12	1,2 1.2	0,070 0.0028	0,080 0.0032	0,10 0.0040	0,12 0.0048	150 (130 — 170) 490 (430 — 550)	
P12	E/M/A/D	0,12 0.12	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	95 (81 — 100) 310 (270 — 320)	Non ferrous
M1	E/M/A	0,12 0.12	1,2 1.2	0,075 0.0030	0,090 0.0036	0,11 0.0044	0,13 0.0050	220 (180 — 260) 720 (600 — 850)	
M2	E/M/A	0,12 0.12	1,2 1.2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	180 (140 — 220) 590 (460 — 720)	
M3	E/M/A	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	160 (120 — 200) 520 (400 — 650)	
M4	E/M/A	0,10 0.10	1,2 1.2	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	125 (93 — 150) 410 (310 — 490)	Hard
M5	E/M/A	0,10 0.10	1,2 1.2	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	105 (77 — 120) 345 (260 — 390)	
S1	E	0,070 0.070	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	45 (35 — 54) 150 (120 — 170)	
S2	E	0,070 0.070	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	37 (27 — 47) 120 (89 — 150)	
S3	E	0,070 0.070	1,2 1.2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	30 (20 — 40) 100 (66 — 130)	Plastic and cf/p
S11	E	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	80 (61 — 100) 260 (210 — 320)	
S12	E	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	80 (61 — 100) 260 (210 — 320)	
S13	E	0,10 0.10	1,2 1.2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	80 (61 — 100) 260 (210 — 320)	

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Graphite

X-Heads

Minimaster

Cutting data – XSB720 Side milling advanced roughing $a_e/DC=0,07$ inch

SMG		a_p/DC	f_z				v_c
			3/8	1/2	5/8	3/4	
P1	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,18 0.0070	0,22 0.0085	210 (190 — 240) 690 (630 — 780)
P2	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,19 0.0075	0,22 0.0085	205 (180 — 230) 670 (600 — 750)
P3	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,18 0.0070	0,20 0.0080	180 (160 — 200) 590 (530 — 650)
P4	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,17 0.0065	0,20 0.0080	155 (140 — 170) 510 (460 — 550)
P5	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,17 0.0065	0,20 0.0080	150 (130 — 170) 490 (430 — 550)
P6	E/M/A/D	1,2 1,2	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,19 0.0075	170 (150 — 190) 560 (500 — 620)
P7	E/M/A/D	1,2 1,2	0,11 0.0044	0,14 0.0055	0,17 0.0065	0,19 0.0075	160 (140 — 180) 520 (460 — 590)
P8	E/M/A/D	1,2 1,2	0,12 0.0048	0,14 0.0055	0,18 0.0070	0,20 0.0080	150 (130 — 170) 490 (430 — 550)
P11	E/M/A/D	1,2 1,2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	160 (140 — 180) 520 (460 — 590)
P12	E/M/A/D	1,2 1,2	0,060 0.0024	0,070 0.0028	0,090 0.0036	0,10 0.0040	100 (87 — 110) 330 (290 — 360)
M1	E/M/A	1,2 1,2	0,10 0.0040	0,12 0.0048	0,15 0.0060	0,17 0.0065	235 (190 — 280) 770 (630 — 910)
M2	E/M/A	1,2 1,2	0,090 0.0036	0,11 0.0044	0,13 0.0050	0,15 0.0060	195 (160 — 230) 640 (530 — 750)
M3	E/M/A	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	170 (130 — 200) 560 (430 — 650)
M4	E/M/A	1,2 1,2	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	130 (97 — 160) 425 (320 — 520)
M5	E/M/A	1,2 1,2	0,060 0.0024	0,075 0.0030	0,090 0.0036	0,10 0.0040	105 (81 — 130) 345 (270 — 420)
S1	E	1,2 1,2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	45 (35 — 54) 150 (120 — 170)
S2	E	1,2 1,2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	37 (27 — 47) 120 (89 — 150)
S3	E	1,2 1,2	0,048 0.0019	0,055 0.0022	0,070 0.0028	0,080 0.0032	30 (20 — 40) 100 (66 — 130)
S11	E	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	85 (63 — 100) 280 (210 — 320)
S12	E	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	85 (63 — 100) 280 (210 — 320)
S13	E	1,2 1,2	0,070 0.0028	0,085 0.0034	0,10 0.0040	0,12 0.0048	85 (63 — 100) 280 (210 — 320)

SMG = Seco material group

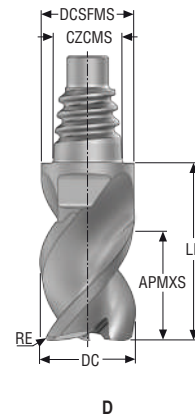
Coolant = A=air D=dry E=emulsion M=mist spray

 $v_c = m/min (sf/min)$
 $f_z = mm (in/tooth)$
 $a_p = mm/DC (in/DC) = factor$
 $a_e = mm/DC (in/DC) = factor$

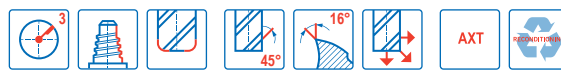
All cutting data are target values

XSE450

High performance – Aluminium – Square – 3 Flutes – Corner radius



- Tolerances:
- DC= 0/-0,0508 mm
- RE= ±0,0254 mm
- Regrind possible if DC is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			AXT
XSE450E10100D2R050Z3	10138362	2	D	E10	10,0	9,7	12,0	18,7	0,5	3	8	■
XSE450E12120D2R050Z3	10138363	2	D	E12	12,0	11,7	14,4	22,1	0,5	3	10	■
XSE450E12120D2R100Z3	10138364	2	D	E12	12,0	11,7	14,4	22,1	1,0	3	10	■
XSE450E16160D2R050Z3	10138365	2	D	E16	16,0	15,5	19,2	29,2	0,5	3	12	■
XSE450E16160D2R100Z3	10138366	2	D	E16	16,0	15,5	19,2	29,2	1,0	3	12	■
XSE450E20200D2R050Z3	10138367	2	D	E20	20,0	19,3	24,0	34,3	0,5	3	16	■
XSE450E20200D2R100Z3	10138369	2	D	E20	20,0	19,3	24,0	34,3	1,0	3	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

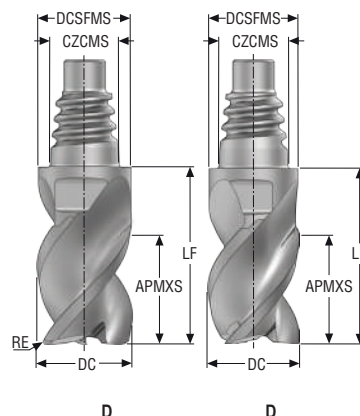
Graphite

X-Heads

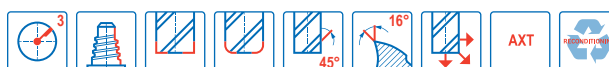
Minimaster

XSE450

High performance – Aluminium – Square – 3 Flutes – Corner radius – Inch



—Tolerances:
—DC= 0/-0.002 Inch
—RE= ±0.001 Inch
—Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			AXT
XSE450E10.375D2SZ3	10138370	2	D	E10	0.375	0.364	0.450	0.720	—	3	8	■
XSE450E10.375D2R030Z3	10138375	2	D	E10	0.375	0.364	0.450	0.720	0.030	3	8	■
XSE450E12.500D2SZ3	10138371	2	D	E12	0.500	0.484	0.600	0.906	—	3	10	■
XSE450E12.500D2R030Z3	10138376	2	D	E12	0.500	0.484	0.600	0.906	0.030	3	10	■
XSE450E12.500D2R060Z3	10138377	2	D	E12	0.500	0.484	0.600	0.906	0.060	3	10	■
XSE450E16.625D2SZ3	10138372	2	D	E16	0.625	0.610	0.750	1.150	—	3	12	■
XSE450E16.625D2R030Z3	10138378	2	D	E16	0.625	0.610	0.750	1.150	0.030	3	12	■
XSE450E16.625D2R060Z3	10138379	2	D	E16	0.625	0.610	0.750	1.150	0.060	3	12	■
XSE450E16.625D2R120Z3	10138380	2	D	E16	0.625	0.610	0.750	1.150	0.120	3	12	■
XSE450E20.750D2SZ3	10138373	2	D	E20	0.750	0.728	0.900	1.295	—	3	16	■
XSE450E20.750D2R030Z3	10138381	2	D	E20	0.750	0.728	0.900	1.295	0.030	3	16	■
XSE450E20.750D2R060Z3	10138382	2	D	E20	0.750	0.728	0.900	1.295	0.060	3	16	■
XSE450E20.750D2R120Z3	10138383	2	D	E20	0.750	0.728	0.900	1.295	0.120	3	16	■
XSE450E251.00D2SZ3	10138374	2	D	E25	1.000	0.965	1.200	1.673	—	3	20	■
XSE450E251.00D2R030Z3	10138384	2	D	E25	1.000	0.965	1.200	1.673	0.030	3	20	■
XSE450E251.00D2R060Z3	10138385	2	D	E25	1.000	0.965	1.200	1.673	0.060	3	20	■
XSE450E251.00D2R120Z3	10138386	2	D	E25	1.000	0.965	1.200	1.673	0.120	3	20	■

■ Stocked standard.

Cutting data – XSE450 Side milling

SMG		a_e/DC	a_p/DC	f_z					v_c
				10	12	16	20		
N1	E/M/A	0,40 0,40	1,1 1,1	0,15 0,0060	0,18 0,0070	0,22 0,0085	0,26 0,010	0,30 0,012	405 (340 — 450) 1325 (1200 — 1400)
N2	E/M/A	0,40 0,40	1,1 1,1	0,13 0,0050	0,16 0,0065	0,20 0,0080	0,22 0,0085	0,25 0,010	275 (230 — 330) 900 (760 — 1000)
N3	E/M/A	0,40 0,40	1,1 1,1	0,13 0,0050	0,16 0,0065	0,20 0,0080	0,22 0,0085	0,25 0,010	185 (150 — 220) 610 (500 — 720)
N11	E/M/A	0,40 0,40	1,1 1,1	0,13 0,0050	0,16 0,0065	0,20 0,0080	0,22 0,0085	0,25 0,010	245 (200 — 290) 800 (660 — 950)
TS1	A/D	0,40 0,40	1,1 1,1	0,15 0,0060	0,18 0,0070	0,22 0,0085	0,26 0,010	0,30 0,012	280 (170 — 390) 920 (560 — 1200)
TP1	A/D	0,40 0,40	1,1 1,1	0,15 0,0060	0,18 0,0070	0,22 0,0085	0,26 0,010	0,30 0,012	280 (170 — 390) 920 (560 — 1200)

Cutting data – XSE450 Slot milling

SMG		a_p/DC	f_z					v_c
			10	12	16	20		
N1	E/M/A	0,90 0,90	0,10 0,0040	0,12 0,0048	0,16 0,0065	0,20 0,0080	0,25 0,010	360 (310 — 410) 1175 (1100 — 1300)
N2	E/M/A	0,90 0,90	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,16 0,0065	0,20 0,0080	250 (200 — 300) 820 (660 — 980)
N3	E/M/A	0,90 0,90	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,16 0,0065	0,20 0,0080	165 (140 — 200) 540 (460 — 650)
N11	E/M/A	0,90 0,90	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,16 0,0065	0,20 0,0080	220 (180 — 260) 720 (600 — 850)
TS1	A/D	0,90 0,90	0,10 0,0040	0,12 0,0048	0,16 0,0065	0,20 0,0080	0,25 0,010	250 (150 — 340) 820 (500 — 1100)
TP1	A/D	0,90 0,90	0,10 0,0040	0,12 0,0048	0,16 0,0065	0,20 0,0080	0,25 0,010	250 (150 — 340) 820 (500 — 1100)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XSE450 Side milling inch

SMG		a _e /DC	a _p /DC	f _z					v _c
				3/8	1/2	5/8	3/4	1	
N1	E/M/A	0,40 0.40	1,1 1.1	0,15 0.0060	0,18 0.0070	0,22 0.0085	0,26 0.010	0,30 0.012	560 (450 — 670) 1825 (1500 — 2100)
N2	E/M/A	0,40 0.40	1,1 1.1	0,13 0.0050	0,16 0.0065	0,20 0.0080	0,22 0.0085	0,25 0.010	445 (340 — 550) 1450 (1200 — 1800)
N3	E/M/A	0,40 0.40	1,1 1.1	0,13 0.0050	0,16 0.0065	0,20 0.0080	0,22 0.0085	0,25 0.010	295 (230 — 360) 970 (760 — 1100)
N11	E/M/A	0,40 0.40	1,1 1.1	0,13 0.0050	0,16 0.0065	0,20 0.0080	0,22 0.0085	0,25 0.010	395 (300 — 490) 1300 (990 — 1600)
TS1	A/D	0,40 0.40	1,1 1.1	0,15 0.0060	0,18 0.0070	0,22 0.0085	0,26 0.010	0,30 0.012	280 (170 — 390) 920 (560 — 1200)
TP1	A/D	0,40 0.40	1,1 1.1	0,15 0.0060	0,18 0.0070	0,22 0.0085	0,26 0.010	0,30 0.012	280 (170 — 390) 920 (560 — 1200)

Cutting data – XSE450 Slot milling inch

SMG		a _p /DC	f _z					v _c
			3/8	1/2	5/8	3/4	1	
N1	E/M/A	1,1 1.1	0,10 0.0040	0,12 0.0048	0,16 0.0065	0,20 0.0080	0,25 0.010	500 (400 — 590) 1650 (1400 — 1900)
N2	E/M/A	1,1 1.1	0,080 0.0032	0,095 0.0038	0,13 0.0050	0,16 0.0065	0,20 0.0080	400 (300 — 490) 1300 (990 — 1600)
N3	E/M/A	1,1 1.1	0,080 0.0032	0,095 0.0038	0,13 0.0050	0,16 0.0065	0,20 0.0080	265 (200 — 330) 870 (660 — 1000)
N11	E/M/A	1,1 1.1	0,080 0.0032	0,095 0.0038	0,13 0.0050	0,16 0.0065	0,20 0.0080	355 (270 — 440) 1175 (890 — 1400)
TS1	A/D	1,1 1.1	0,10 0.0040	0,12 0.0048	0,16 0.0065	0,20 0.0080	0,25 0.010	250 (150 — 340) 820 (500 — 1100)
TP1	A/D	1,1 1.1	0,10 0.0040	0,12 0.0048	0,16 0.0065	0,20 0.0080	0,25 0.010	250 (150 — 340) 820 (500 — 1100)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

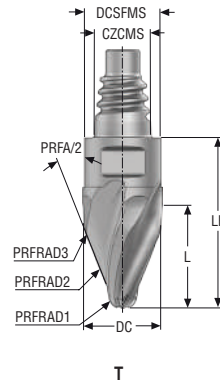
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

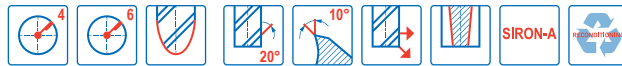
All cutting data are target values

XHT740

High speed – ISO– M and ISO– S – Taper Shape – 4-6 Flutes



- Tolerances:
- PRFRAD1= $\pm 0,03$ mm
- Form tolerance PRFRAD2= 0,02 mm
- Regrind possible if DC is $\geq \varnothing 12$ mm and PRFRAD1 is $\geq 1,5$ mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	L	PRFRAD1	PRFRAD2	PRFRAD3	PRFA/2°	PCEDC	SW	Grade
					mm	mm	mm	mm	mm	mm	mm	mm				SIRA
XHT740E10100T2R1.5R250Z4	10138388	2	T	E10	10,0	9,7	1,62	18,7	5,4	1,5	250,0	2,0	65,0	4	8	■
XHT740E10100T3R2R250Z4	10138391	3	T	E10	10,0	9,7	9,04	21,8	12,7	2,0	250,0	5,0	20,0	4	8	■
XHT740E10100T3R2R250Z6	10138395	3	T	E10	10,0	9,7	9,04	21,8	12,7	2,0	250,0	5,0	20,0	6	8	■
XHT740E12120T3R3R250Z4	10138389	2	T	E12	12,0	11,7	5,33	22,1	10,5	3,0	250,0	6,0	32,5	4	10	■
XHT740E12120T3R3R250Z4	10138392	3	T	E12	12,0	11,7	9,71	25,9	13,7	3,0	250,0	6,0	20,0	4	10	■
XHT740E12120T3R3R250Z6	10138396	3	T	E12	12,0	11,7	9,71	25,9	13,7	3,0	250,0	6,0	20,0	6	10	■
XHT740E16160T2R4R500Z4	10138390	2	T	E16	16,0	15,5	8,95	29,2	14,6	4,0	500,0	8,0	27,5	4	12	■
XHT740E16160T3R4R1000Z4	10138394	3	T	E16	16,0	15,5	21,02	34,1	24,0	4,0	1000,0	5,0	20,0	4	12	■
XHT740E16160T3R4R500Z4	10138393	3	T	E16	16,0	15,5	12,94	34,1	17,6	4,0	500,0	8,0	20,0	4	12	■
XHT740E16160T3R4R500Z6	10138397	3	T	E16	16,0	15,5	12,94	34,1	17,6	4,0	500,0	8,0	20,0	6	12	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XHT740 – Copy milling PCEDC 4

SMG		a_p/DC	f_z			v_c
			10	12	16	
P8	E/M/A/D	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	170 (150 - 195) 560 (490 - 640)
P12	E/M/A/D	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	120 (95 - 135) 400 (310 - 445)
M1	E/M/A	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	150 (125 - 155) 490 (410 - 510)
M2	E/M/A	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	145 (120 - 150) 475 (400 - 490)
M3	E/M/A	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	130 (90 - 140) 425 (295 - 460)
S2	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	60 (50 - 70) 195 (165 - 230)
S11	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	100 (85 - 105) 320 (280 - 345)
S12	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	95 (80 - 100) 310 (260 - 320)
S13	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	90 (75 - 95) 295 (245 - 310)

Cutting data – XHT740 – Copy milling PCEDC 6

SMG		a_p/DC	f_z			v_c
			10	12	16	
P8	E/M/A/D	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	170 (150 - 195) 560 (490 - 640)
P12	E/M/A/D	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	120 (95 - 135) 400 (310 - 445)
M1	E/M/A	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	150 (125 - 155) 490 (410 - 510)
M2	E/M/A	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	145 (120 - 150) 475 (400 - 490)
M3	E/M/A	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	130 (90 - 140) 425 (295 - 460)
S2	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	60 (50 - 70) 195 (165 - 230)
S11	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	100 (85 - 105) 320 (280 - 345)
S12	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	95 (80 - 100) 310 (260 - 320)
S13	E	0,010 0.010	0,05 0.0022	0,06 0.0024	0,08 0.0032	90 (75 - 95) 295 (245 - 310)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

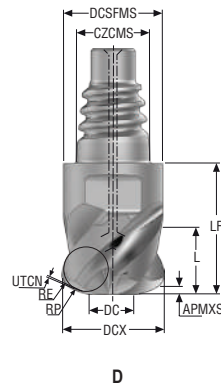
a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

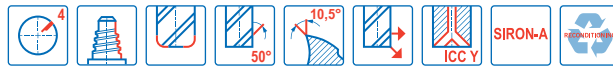
All cutting data are target values

XHF580

High feed – Universal – 4 Flutes – Corner radius



- Tolerances:
- DCX= h9
- RE= ±0,03 mm
- Regrind possible if DCX is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CSP	CZCMS	DCX	DC	DCSFMS	APMXS	L	LF	RE	RP	UTCN	PCEDC	SW	Grades
						mm	mm	mm	mm	mm	mm	mm	mm	mm			SIRA
XHF580E10100D1HZ4A	10137971	1	D	■	E10	10,0	3,4	9,7	0,7	6,0	12,4	1,5	1,99	0,27	4	8	■
XHF580E12120D1HZ4A	10137972	1	D	■	E12	12,0	4,5	11,7	0,8	7,5	14,5	1,5	2,1	0,323	4	10	■
XHF580E16160D1HZ4A	10137973	1	D	■	E16	16,0	6,2	15,5	1,0	10,0	18,7	2,0	2,747	0,426	4	12	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

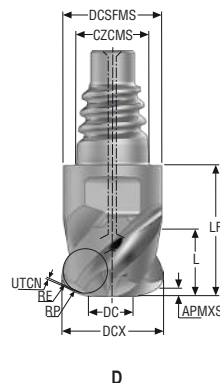
Graphite

X-Heads

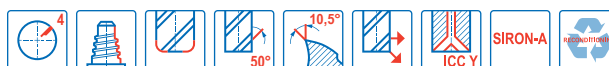
Minimaster

XHF580

High feed – Universal – 4 Flutes – Corner radius – Inch



—Tolerances:
—DCX= h9
—RE= ±.0012 Inch
—Regrind possible if DCX is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CSP	CZCMS	DCX	DC	DCSFMS	APMXS	L	LF	RE	RP	UTCN	PCEDC	SW	Grades
						Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch			SIRA
XHF580E10.375D1HZ4A	10137974	1	D	■	E10	0.375	0.134	0.364	0.024	0.236	0.488	0.060	0.076	0.008	4	8	■
XHF580E12.500D1HZ4A	10137975	1	D	■	E12	0.500	0.197	0.484	0.033	0.315	0.571	0.060	0.086	0.014	4	10	■
XHF580E16.625D1HZ4A	10137976	1	D	■	E16	0.614	0.236	0.610	0.039	0.394	0.736	0.080	0.110	0.016	4	12	■

■ Stocked standard.

Cutting data – XHF580 Side milling

SMG		a_e/DCX	a_p/DCX	f_z			v_c	
				10	12	16		
P1	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	350 (330 — 400) 1150 (1100 — 1300)	Universal
P2	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	340 (320 — 390) 1125 (1100 — 1200)	
P3	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	295 (280 — 340) 970 (920 — 1100)	Steel and cast iron
P4	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	260 (250 — 300) 850 (830 — 980)	
P5	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	260 (250 — 300) 850 (830 — 980)	Steel and stainless steel and S-materials
P6	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	190 (180 — 230) 620 (600 — 750)	
P7	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	180 (170 — 220) 590 (560 — 720)	Stainless steel and S-materials
P8	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	170 (160 — 200) 560 (530 — 650)	
P11	E/M/A/D	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	145 (150 — 170) 475 (500 — 550)	Non ferrous
P12	E/M/A/D	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	85 (83 — 100) 280 (280 — 320)	
M1	E/M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	170 (170 — 200) 560 (560 — 650)	Non ferrous
M2	E/M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	140 (140 — 160) 460 (460 — 520)	
M3	E/M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	105 (97 — 130) 345 (320 — 420)	Hard
M4	E/M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	75 (73 — 99) 245 (240 — 320)	
M5	E/M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	65 (61 — 83) 215 (210 — 270)	Hard
K1	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	345 (330 — 400) 1125 (1100 — 1300)	
K2	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	300 (280 — 340) 980 (920 — 1100)	Plastic and cfrp
K3	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	250 (240 — 290) 820 (790 — 950)	
K4	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	240 (230 — 280) 790 (760 — 910)	Plastic and cfrp
K5	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	145 (140 — 160) 475 (460 — 520)	
K6	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	210 (200 — 240) 690 (660 — 780)	Plastic and cfrp
K7	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	185 (180 — 210) 610 (600 — 680)	
S1	E	0,30 0.30	0,034 0.034	0,24 0.0095	0,28 0.011	0,38 0.015	45 (36 — 71) 150 (120 — 230)	Graphite
S2	E	0,30 0.30	0,034 0.034	0,24 0.0095	0,28 0.011	0,38 0.015	36 (29 — 57) 120 (96 — 180)	
S3	E	0,30 0.30	0,034 0.034	0,24 0.0095	0,28 0.011	0,38 0.015	31 (25 — 49) 100 (83 — 160)	Graphite
S11	E	0,30 0.30	0,060 0.060	0,36 0.014	0,42 0.017	0,55 0.022	160 (160 — 190) 520 (530 — 620)	
S12	E	0,30 0.30	0,060 0.060	0,36 0.014	0,42 0.017	0,55 0.022	125 (120 — 150) 410 (400 — 490)	X-Heads
S13	E	0,30 0.30	0,060 0.060	0,36 0.014	0,42 0.017	0,55 0.022	95 (91 — 110) 310 (300 — 360)	
H5	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	105 (98 — 130) 345 (330 — 420)	X-Heads
H8	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	105 (98 — 130) 345 (330 — 420)	
H21	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	105 (98 — 130) 345 (330 — 420)	Minimaster
H31	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	80 (74 — 100) 260 (250 — 320)	

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – XHF580 Slot milling

	SMG		a _p /DCX	f _z			v _c
				10	12	16	
Universal	P1	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	320 (300 — 360) 1050 (990 — 1100)
	P2	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	310 (290 — 350) 1025 (960 — 1100)
Steel and cast iron	P3	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	265 (250 — 300) 870 (830 — 980)
	P4	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	235 (220 — 270) 770 (730 — 880)
	P5	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	235 (220 — 270) 770 (730 — 880)
	P6	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	175 (160 — 210) 570 (530 — 680)
	P7	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	165 (150 — 200) 540 (500 — 650)
Stainless steel and S-materials	P8	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	155 (150 — 180) 510 (500 — 590)
	P11	E/M/A/D	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	130 (130 — 160) 425 (430 — 520)
	P12	E/M/A/D	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	80 (75 — 94) 260 (250 — 300)
	M1	E/M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	155 (150 — 180) 510 (500 — 590)
	M2	E/M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	125 (120 — 150) 410 (400 — 490)
Non ferrous	M3	E/M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	95 (88 — 110) 310 (290 — 360)
	M4	E/M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	70 (66 — 89) 230 (220 — 290)
	M5	E/M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	60 (55 — 74) 195 (190 — 240)
	K1	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	310 (300 — 360) 1025 (990 — 1100)
	K2	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	270 (260 — 310) 890 (860 — 1000)
Hard	K3	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	230 (220 — 260) 750 (730 — 850)
	K4	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	220 (210 — 250) 720 (690 — 820)
	K5	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	130 (130 — 150) 425 (430 — 490)
	K6	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	190 (180 — 220) 620 (600 — 720)
	K7	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	165 (160 — 190) 540 (530 — 620)
Plastic and cfrp	S1	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	39 (32 — 62) 130 (110 — 200)
	S2	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	31 (26 — 50) 100 (86 — 160)
	S3	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	27 (22 — 43) 90 (73 — 140)
	S11	E	0,060 0.060	0,18 0.0070	0,22 0.0085	0,28 0.011	150 (150 — 180) 490 (500 — 590)
	S12	E	0,060 0.060	0,18 0.0070	0,22 0.0085	0,28 0.011	115 (110 — 140) 375 (370 — 450)
X-Heads	S13	E	0,060 0.060	0,18 0.0070	0,22 0.0085	0,28 0.011	90 (85 — 100) 295 (280 — 320)
	H5	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	95 (88 — 120) 310 (290 — 390)
	H8	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	95 (88 — 120) 310 (290 — 390)
	H21	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	95 (88 — 120) 310 (290 — 390)
	H31	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	70 (67 — 91) 230 (220 — 290)

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – XHF580 Side milling inch

SMG		a_e/DCX	a_p/DCX	f_z			v_c	
				3/8	1/2	5/8		
P1	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	485 (440 — 530) 1600 (1500 — 1700)	Universal
P2	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	475 (430 — 520) 1550 (1500 — 1700)	
P3	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	405 (370 — 450) 1325 (1300 — 1400)	Steel and cast iron
P4	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	360 (320 — 390) 1175 (1100 — 1200)	
P5	E/M/A/D	0,34 0.34	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	260 (240 — 290) 850 (790 — 950)	Steel and stainless steel and S-materials
P6	E/M/A/D	0,34 0.34	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	295 (270 — 320) 970 (890 — 1000)	
P7	E/M/A/D	0,34 0.34	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	280 (250 — 300) 920 (830 — 980)	Stainless steel and S-materials
P8	E/M/A/D	0,34 0.34	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	260 (240 — 290) 850 (790 — 950)	
P11	E/M/A/D	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	160 (140 — 170) 520 (460 — 550)	Non ferrous
P12	E/M/A/D	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	95 (83 — 100) 310 (280 — 320)	
M1	E/M/A	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	185 (170 — 200) 610 (560 — 650)	Hard
M2	E/M/A	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	150 (140 — 160) 490 (460 — 520)	
M3	E/M/A	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	115 (97 — 130) 375 (320 — 420)	Plastic and cfrp
M4	E/M/A	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	85 (73 — 99) 280 (240 — 320)	
M5	E/M/A	0,30 0.30	0,055 0.055	0,40 0.016	0,48 0.019	0,65 0.026	70 (61 — 82) 230 (210 — 260)	Graphite
K1	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	475 (430 — 520) 1550 (1500 — 1700)	
K2	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	415 (370 — 450) 1350 (1300 — 1400)	X-Heads
K3	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	350 (320 — 380) 1150 (1100 — 1200)	
K4	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	335 (300 — 370) 1100 (990 — 1200)	Minimaster
K5	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	200 (180 — 220) 660 (600 — 720)	
K6	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	295 (270 — 320) 970 (890 — 1000)	
K7	E/M/A/D	0,30 0.30	0,060 0.060	0,50 0.020	0,60 0.024	0,80 0.032	255 (230 — 280) 840 (760 — 910)	
S1	E	0,30 0.30	0,034 0.034	0,24 0.0095	0,28 0.011	0,38 0.015	55 (36 — 71) 180 (120 — 230)	
S2	E	0,30 0.30	0,034 0.034	0,24 0.0095	0,28 0.011	0,38 0.015	43 (29 — 57) 140 (96 — 180)	
S3	E	0,30 0.30	0,034 0.034	0,24 0.0095	0,28 0.011	0,38 0.015	37 (25 — 49) 120 (83 — 160)	
S11	E	0,30 0.30	0,034 0.034	0,36 0.014	0,42 0.017	0,55 0.022	170 (150 — 190) 560 (500 — 620)	
S12	E	0,30 0.30	0,034 0.034	0,36 0.014	0,42 0.017	0,55 0.022	130 (120 — 140) 425 (400 — 450)	
S13	E	0,30 0.30	0,034 0.034	0,36 0.014	0,42 0.017	0,55 0.022	100 (89 — 110) 330 (300 — 360)	
H5	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	115 (98 — 130) 375 (330 — 420)	
H8	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	115 (98 — 130) 375 (330 — 420)	
H21	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	115 (98 — 130) 375 (330 — 420)	
H31	M/A	0,30 0.30	0,060 0.060	0,40 0.016	0,48 0.019	0,65 0.026	90 (74 — 100) 295 (250 — 320)	

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

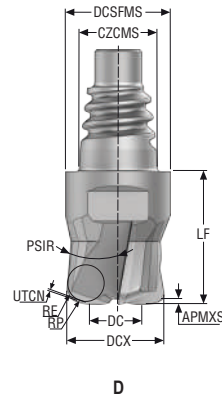
Cutting data – XHF580 Slot milling inch

	SMG		a_p/DCX	f_z			v_c
				3/8	1/2	5/8	
Universal	P1	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	440 (400 — 480) 1450 (1400 — 1500)
	P2	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	430 (390 — 470) 1400 (1300 — 1500)
Steel and cast iron	P3	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	370 (330 — 400) 1225 (1100 — 1300)
	P4	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	325 (290 — 360) 1075 (960 — 1100)
	P5	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	245 (220 — 270) 800 (730 — 880)
	P6	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	275 (250 — 300) 900 (830 — 980)
Stainless steel and S-materials	P7	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	260 (240 — 280) 850 (790 — 910)
	P8	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	245 (220 — 270) 800 (730 — 880)
	P11	E/M/A/D	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	145 (130 — 160) 475 (430 — 520)
	P12	E/M/A/D	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	85 (75 — 94) 280 (250 — 300)
Non ferrous	M1	E/M/A	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	170 (150 — 180) 560 (500 — 590)
	M2	E/M/A	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	135 (120 — 150) 445 (400 — 490)
	M3	E/M/A	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	105 (88 — 110) 345 (290 — 360)
	M4	E/M/A	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	80 (66 — 89) 260 (220 — 290)
Hard	M5	E/M/A	0,055 0.055	0,24 0.0095	0,28 0.011	0,38 0.015	65 (55 — 74) 215 (190 — 240)
	K1	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	430 (390 — 480) 1400 (1300 — 1500)
	K2	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	375 (340 — 410) 1225 (1200 — 1300)
	K3	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	315 (290 — 350) 1025 (960 — 1100)
Plastic and cfrp	K4	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	305 (270 — 330) 1000 (890 — 1000)
	K5	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	180 (170 — 200) 590 (560 — 650)
	K6	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	265 (240 — 290) 870 (790 — 950)
	K7	E/M/A/D	0,060 0.060	0,30 0.012	0,36 0.014	0,48 0.019	230 (210 — 250) 750 (690 — 820)
Graphite	S1	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	47 (32 — 62) 155 (110 — 200)
	S2	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	38 (26 — 50) 125 (86 — 160)
	S3	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	32 (22 — 43) 105 (73 — 140)
	S11	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	160 (150 — 180) 520 (500 — 590)
X-Heads	S12	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	125 (110 — 140) 410 (370 — 450)
	S13	E	0,034 0.034	0,18 0.0070	0,22 0.0085	0,28 0.011	95 (84 — 100) 310 (280 — 320)
	H5	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	105 (88 — 120) 345 (290 — 390)
	H8	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	105 (88 — 120) 345 (290 — 390)
Minimaster	H21	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	105 (88 — 120) 345 (290 — 390)
	H31	M/A	0,060 0.060	0,24 0.0095	0,28 0.011	0,38 0.015	80 (67 — 91) 260 (220 — 290)

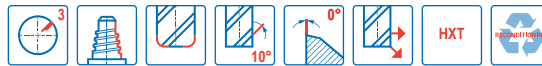
SMG = Seco material group
 Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
 All cutting data are target values

XHF780

High feed – ISO– M and ISO– S – 3 Flutes – Corner radius



- Tolerances:
- DCX= -0,02/-0,04 mm
- RE= ±0,05 mm
- Regrind possible if DCX is ≥Ø12 mm



Designation	Item number	Length index	Tool shape	CZCMS	DCX	DC	DCSFMS	APMXS	L	LF	RE	RP	UTCN	PCEDC	SW	Grades
					mm	mm	mm	mm	mm	mm	mm	mm	mm			HXT
XHF780E10100D1HZ3	10137957	1	D	E10	10,0	5,0	9,7	0,45	5,5	12,3	0,8	1,175	0,232	3	8	■
XHF780E12120D1HZ3	10137958	1	D	E12	12,0	6,0	11,7	0,5	6,6	14,4	1,0	1,416	0,262	3	10	■
XHF780E16160D1HZ3	10137959	1	D	E16	16,0	8,0	15,5	0,6	8,8	18,6	1,5	1,989	0,32	3	12	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

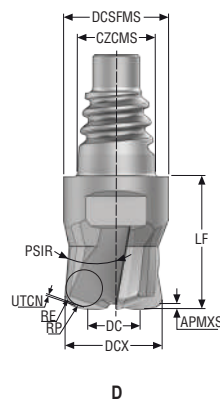
Graphite

X-Heads

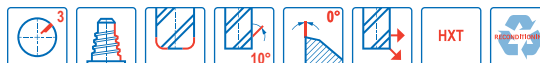
Minimaster

XHF780

High feed – ISO– M and ISO– S – 3 Flutes – Corner radius – Inch



—Tolerances:
 —DCX= -.0008/-0.0016 Inch
 —RE= ±.002 Inch
 —Reground possible if DCX is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DCX	DC	DCSFMS	APMXS	L	LF	RE	RP	UTCN	PCEDC	SW	Grades
					Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch	Inch			HXT
XHF780E10.375D1HZ3	10137960	1	D	E10	0.375	0.188	0.364	0.018	0.206	0.484	0.028	0.043	0.009	3	8	■
XHF780E12.500D1HZ3	10137961	1	D	E12	0.500	0.250	0.484	0.020	0.276	0.567	0.045	0.061	0.010	3	10	■
XHF780E16.625D1HZ3	10137962	1	D	E16	0.625	0.313	0.610	0.024	0.343	0.732	0.061	0.080	0.012	3	12	■

■ Stocked standard.

Cutting data – XHF780 Side milling

SMG		a_e/DCX	a_p/DCX	f_z			v_c	
				10	12	16		
P1	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	355 (330 — 410) 1175 (1100 — 1300)	Universal
P2	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	345 (320 — 390) 1125 (1100 — 1200)	
P3	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	295 (280 — 340) 970 (920 — 1100)	Steel and cast iron
P4	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	260 (250 — 300) 850 (830 — 980)	
P5	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	260 (250 — 300) 850 (830 — 980)	
P6	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	195 (180 — 230) 640 (600 — 750)	
P7	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	185 (170 — 220) 610 (560 — 720)	
P8	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	175 (160 — 210) 570 (530 — 680)	Stainless steel and S-materials
P11	E/M/A/D	0,30 0,30	0,040 0,040	0,50 0,020	0,60 0,024	0,80 0,032	180 (170 — 210) 590 (560 — 680)	
P12	E/M/A/D	0,30 0,30	0,036 0,036	0,40 0,016	0,48 0,019	0,65 0,026	85 (83 — 100) 280 (280 — 320)	
M1	E/M/A	0,30 0,30	0,036 0,036	0,40 0,016	0,48 0,019	0,65 0,026	175 (170 — 210) 570 (560 — 680)	Non ferrous
M2	E/M/A	0,30 0,30	0,036 0,036	0,40 0,016	0,48 0,019	0,65 0,026	140 (140 — 160) 460 (460 — 520)	
M3	E/M/A	0,30 0,30	0,036 0,036	0,40 0,016	0,48 0,019	0,65 0,026	105 (97 — 130) 345 (320 — 420)	
M4	E/M/A	0,30 0,30	0,036 0,036	0,40 0,016	0,48 0,019	0,65 0,026	75 (73 — 100) 245 (240 — 320)	
M5	E/M/A	0,30 0,30	0,036 0,036	0,40 0,016	0,48 0,019	0,65 0,026	65 (61 — 83) 215 (210 — 270)	
S1	E	0,30 0,30	0,022 0,022	0,24 0,0095	0,28 0,011	0,38 0,015	45 (36 — 71) 150 (120 — 230)	Hard
S2	E	0,30 0,30	0,022 0,022	0,24 0,0095	0,28 0,011	0,38 0,015	36 (29 — 57) 120 (96 — 180)	
S3	E	0,30 0,30	0,022 0,022	0,24 0,0095	0,28 0,011	0,38 0,015	31 (25 — 49) 100 (83 — 160)	Plastic and cfzp
S11	E	0,30 0,30	0,022 0,022	0,36 0,014	0,42 0,017	0,55 0,022	160 (160 — 190) 520 (530 — 620)	
S12	E	0,30 0,30	0,022 0,022	0,36 0,014	0,42 0,017	0,55 0,022	120 (120 — 150) 395 (400 — 490)	
S13	E	0,30 0,30	0,022 0,022	0,36 0,014	0,42 0,017	0,55 0,022	95 (90 — 110) 310 (300 — 360)	
H5	M/A	0,30 0,30	0,040 0,040	0,40 0,016	0,48 0,019	0,65 0,026	105 (99 — 130) 345 (330 — 420)	
H8	M/A	0,30 0,30	0,040 0,040	0,40 0,016	0,48 0,019	0,65 0,026	105 (99 — 130) 345 (330 — 420)	Graphite
H11	M/A	0,30 0,30	0,040 0,040	0,40 0,016	0,48 0,019	0,65 0,026	135 (130 — 170) 445 (430 — 550)	
H21	M/A	0,30 0,30	0,040 0,040	0,40 0,016	0,48 0,019	0,65 0,026	105 (99 — 130) 345 (330 — 420)	
H31	M/A	0,30 0,30	0,040 0,040	0,40 0,016	0,48 0,019	0,65 0,026	80 (75 — 100) 260 (250 — 320)	

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

Cutting data – XHF780 Slot milling

	SMG		a_p/DCX	f_z			v_c
				10	12	16	
Universal	P1	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	310 (290 — 350) 1025 (960 — 1100)
	P2	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	300 (290 — 350) 980 (960 — 1100)
Steel and cast iron	P3	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	260 (250 — 300) 850 (830 — 980)
	P4	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	230 (220 — 260) 750 (730 — 850)
	P5	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	230 (220 — 260) 750 (730 — 850)
	P6	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	170 (160 — 200) 560 (530 — 650)
	P7	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	160 (150 — 190) 520 (500 — 620)
Stainless steel and S-materials	P8	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	150 (140 — 180) 490 (460 — 590)
	P11	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	155 (150 — 180) 510 (500 — 590)
	P12	E/M/A/D	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	75 (73 — 92) 245 (240 — 300)
	M1	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	150 (150 — 180) 490 (500 — 590)
	M2	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	120 (120 — 140) 395 (400 — 450)
Non ferrous	M3	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	90 (85 — 110) 295 (280 — 360)
	M4	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	65 (64 — 87) 215 (210 — 280)
	M5	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	55 (53 — 72) 180 (180 — 230)
	S1	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	38 (31 — 60) 125 (110 — 190)
	S2	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	30 (25 — 48) 100 (83 — 150)
Hard	S3	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	26 (21 — 41) 85 (69 — 130)
	S11	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	145 (140 — 170) 475 (460 — 550)
	S12	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	110 (110 — 130) 360 (370 — 420)
	S13	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	85 (82 — 100) 280 (270 — 320)
	H5	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	90 (86 — 110) 295 (290 — 360)
Plastic and cfrp	H8	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	90 (86 — 110) 295 (290 — 360)
	H11	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	115 (110 — 140) 375 (370 — 450)
	H21	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	90 (86 — 110) 295 (290 — 360)
	H31	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	70 (65 — 88) 230 (220 — 280)

SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

Cutting data – XHF780 Side milling inch

SMG		a_e/DCX	a_p/DCX	f_z			v_c	Universal
				3/8	1/2	5/8		
P1	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	370 (330 — 410) 1225 (1100 — 1300)	Steel and cast iron
P2	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	360 (320 — 390) 1175 (1100 — 1200)	
P3	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	310 (280 — 340) 1025 (920 — 1100)	
P4	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	270 (250 — 300) 890 (830 — 980)	
P5	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	270 (250 — 300) 890 (830 — 980)	
P6	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	305 (280 — 330) 1000 (920 — 1000)	Stainless steel and S-materials
P7	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	290 (260 — 320) 950 (860 — 1000)	
P8	E/M/A/D	0,30 0.30	0,040 0.040	0,50 0.020	0,60 0.024	0,80 0.032	270 (250 — 300) 890 (830 — 980)	
P11	E/M/A/D	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	160 (150 — 170) 520 (500 — 550)	
P12	E/M/A/D	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	95 (83 — 100) 310 (280 — 320)	
M1	E/M/A	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	190 (170 — 210) 620 (560 — 680)	Non ferrous
M2	E/M/A	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	150 (140 — 160) 490 (460 — 520)	
M3	E/M/A	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	115 (97 — 130) 375 (320 — 420)	
M4	E/M/A	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	85 (73 — 100) 280 (240 — 320)	
M5	E/M/A	0,30 0.30	0,036 0.036	0,40 0.016	0,48 0.019	0,65 0.026	70 (61 — 83) 230 (210 — 270)	
S1	E	0,30 0.30	0,022 0.022	0,24 0.0095	0,28 0.011	0,38 0.015	55 (36 — 71) 180 (120 — 230)	Hard
S2	E	0,30 0.30	0,022 0.022	0,24 0.0095	0,28 0.011	0,38 0.015	43 (29 — 57) 140 (96 — 180)	
S3	E	0,30 0.30	0,022 0.022	0,24 0.0095	0,28 0.011	0,38 0.015	37 (25 — 49) 120 (83 — 160)	
S11	E	0,30 0.30	0,022 0.022	0,36 0.014	0,42 0.017	0,55 0.022	175 (160 — 190) 570 (530 — 620)	
S12	E	0,30 0.30	0,022 0.022	0,36 0.014	0,42 0.017	0,55 0.022	135 (120 — 150) 445 (400 — 490)	
S13	E	0,30 0.30	0,022 0.022	0,36 0.014	0,42 0.017	0,55 0.022	105 (90 — 110) 345 (300 — 360)	Plastic and cfzp
H5	M/A	0,30 0.30	0,040 0.040	0,40 0.016	0,48 0.019	0,65 0.026	115 (99 — 130) 375 (330 — 420)	
H8	M/A	0,30 0.30	0,040 0.040	0,40 0.016	0,48 0.019	0,65 0.026	115 (99 — 130) 375 (330 — 420)	
H11	M/A	0,30 0.30	0,040 0.040	0,40 0.016	0,48 0.019	0,65 0.026	150 (130 — 170) 490 (430 — 550)	
H21	M/A	0,30 0.30	0,040 0.040	0,40 0.016	0,48 0.019	0,65 0.026	115 (99 — 130) 375 (330 — 420)	
H31	M/A	0,30 0.30	0,040 0.040	0,40 0.016	0,48 0.019	0,65 0.026	90 (75 — 100) 295 (250 — 320)	Graphite

SMG = Seco material group

Coolant = A=air D=dry E=emulsion M=mist spray

v_c = m/min (sf/min)

f_z = mm (in/tooth)

a_p = mm/DC (in/DC) = factor

a_e = mm/DC (in/DC) = factor

All cutting data are target values

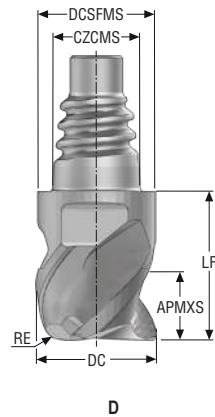
Cutting data – XHF780 Slot milling inch

Universal	SMG		a_p/DCX	f_z			v_c
				3/8	1/2	5/8	
Steel and cast iron	P1	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	325 (290 — 350) 1075 (960 — 1100)
	P2	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	315 (290 — 350) 1025 (960 — 1100)
	P3	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	270 (250 — 300) 890 (830 — 980)
	P4	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	240 (220 — 260) 790 (730 — 850)
	P5	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	240 (220 — 260) 790 (730 — 850)
Stainless steel and S-materials	P6	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	270 (240 — 290) 890 (790 — 950)
	P7	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	255 (230 — 280) 840 (760 — 910)
	P8	E/M/A/D	0,040 0.040	0,30 0.012	0,36 0.014	0,48 0.019	240 (220 — 260) 790 (730 — 850)
	P11	E/M/A/D	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	140 (130 — 150) 460 (430 — 490)
	P12	E/M/A/D	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	80 (73 — 92) 260 (240 — 300)
Non ferrous	M1	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	165 (150 — 180) 540 (500 — 590)
	M2	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	130 (120 — 140) 425 (400 — 450)
	M3	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	100 (85 — 110) 330 (280 — 360)
	M4	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	75 (64 — 87) 245 (210 — 280)
	M5	E/M/A	0,036 0.036	0,24 0.0095	0,28 0.011	0,38 0.015	65 (53 — 72) 215 (180 — 230)
Hard	S1	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	45 (31 — 60) 150 (110 — 190)
	S2	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	36 (25 — 48) 120 (83 — 150)
	S3	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	31 (21 — 41) 100 (69 — 130)
	S11	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	155 (140 — 170) 510 (460 — 550)
	S12	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	120 (110 — 130) 395 (370 — 420)
Plastic and cfrp	S13	E	0,022 0.022	0,18 0.0070	0,22 0.0085	0,28 0.011	95 (82 — 100) 310 (270 — 320)
Graphite	H5	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	100 (86 — 110) 330 (290 — 360)
	H8	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	100 (86 — 110) 330 (290 — 360)
	H11	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	130 (110 — 140) 425 (370 — 450)
	H21	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	100 (86 — 110) 330 (290 — 360)
	H31	M/A	0,040 0.040	0,24 0.0095	0,28 0.011	0,38 0.015	75 (65 — 88) 245 (220 — 280)

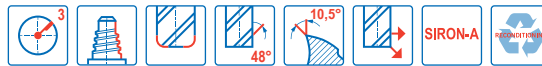
SMG = Seco material group
Coolant = A=air D=dry E=emulsion M=mist spray
 v_c = m/min (sf/min)
 f_z = mm (in/tooth)
 a_p = mm/DC (in/DC) = factor
 a_e = mm/DC (in/DC) = factor
All cutting data are target values

XVE540

General purpose – Universal – Square – 3 Flutes – Corner radius



- Tolerances:
- DC= h9
- RE= $\pm 0,015$ mm
- Regrind possible if DC is $\geq \varnothing 12$ mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XVE540E10100D1R050Z3	10137981	1	D	E10	10,0	9,7	5,5	12,4	0,5	3	8	■
XVE540E12120D1R050Z3	10137982	1	D	E12	12,0	11,7	6,5	14,5	0,5	3	10	■
XVE540E16160D1R050Z3	10137983	1	D	E16	16,0	15,5	8,5	18,7	0,5	3	12	■
XVE540E20200D1R050Z3	10137984	1	D	E20	20,0	19,3	11,0	21,3	0,5	3	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

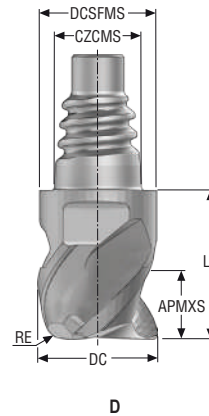
Graphite

X-Heads

Minimaster

XVE540

General purpose – Universal – Square – 3 Flutes – Corner radius



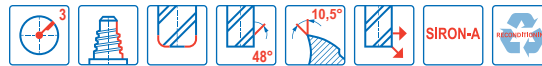
—Tolerances:

—DC= h9

—RE= .015 Inch= ±.0006 Inch

—RE= .031 Inch= ±.0012 Inch

—Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			SIRA
XVE540E10.375D1R015Z3	10137985	1	D	E10	0.375	0.364	0.209	0.488	0.015	3	8	■
XVE540E12.500D1R015Z3	10137986	1	D	E12	0.500	0.484	0.276	0.575	0.015	3	10	■
XVE540E16.625D1R015Z3	10137987	1	D	E16	0.625	0.610	0.335	0.736	0.015	3	12	■
XVE540E20.750D1R031Z3	10137988	1	D	E20	0.750	0.728	0.413	0.839	0.031	3	16	■

■ Stocked standard.

Cutting data – XVE540 – Side milling PCEDC 3

SMG		a_e/DC	a_p/DC	f_z				v_c	
				10	12	16	20		
P1	E/M/A/D	0,50 0,50	0,50 0,50	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	175 (140 — 220) 570 (460 — 720)	Universal
P2	E/M/A/D	0,50 0,50	0,50 0,50	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	170 (130 — 210) 560 (430 — 680)	
P3	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	150 (120 — 180) 490 (400 — 590)	Steel and cast iron
P4	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	135 (100 — 160) 445 (330 — 520)	
P5	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,070 0,0028	0,085 0,0034	125 (96 — 150) 410 (320 — 490)	Stainless steel and S-materials
P6	E/M/A/D	0,50 0,50	0,50 0,50	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	145 (110 — 170) 475 (370 — 550)	
P7	E/M/A/D	0,50 0,50	0,50 0,50	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	135 (110 — 160) 445 (370 — 520)	Non ferrous
P8	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	125 (96 — 150) 410 (320 — 490)	
P11	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	80 (70 — 93) 260 (230 — 300)	Hard
P12	E/M/A/D	0,50 0,50	0,50 0,50	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	50 (45 — 59) 165 (150 — 190)	
M1	E/M/A	0,50 0,50	0,50 0,50	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,095 0,0038	95 (81 — 100) 310 (270 — 320)	Plastic and cf/p
M2	E/M/A	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	75 (67 — 88) 245 (220 — 280)	
M3	E/M/A	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	50 (39 — 60) 165 (130 — 190)	Graphite
M4	E/M/A	0,50 0,50	0,50 0,50	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	38 (30 — 46) 125 (99 — 150)	
M5	E/M/A	0,50 0,50	0,50 0,50	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	32 (25 — 39) 105 (83 — 120)	X-Heads
K1	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	155 (140 — 170) 510 (460 — 550)	
K2	E/M/A/D	0,50 0,50	0,50 0,50	0,046 0,0018	0,055 0,0022	0,065 0,0026	0,075 0,0030	135 (120 — 150) 445 (400 — 490)	Minimaster
K3	E/M/A/D	0,50 0,50	0,50 0,50	0,046 0,0018	0,055 0,0022	0,065 0,0026	0,075 0,0030	115 (99 — 130) 375 (330 — 420)	
K4	E/M/A/D	0,50 0,50	0,50 0,50	0,046 0,0018	0,055 0,0022	0,065 0,0026	0,075 0,0030	110 (95 — 120) 360 (320 — 390)	X-Heads
K5	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	140 (120 — 150) 460 (400 — 490)	
K6	E/M/A/D	0,50 0,50	0,50 0,50	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,095 0,0038	200 (170 — 220) 660 (560 — 720)	Graphite
K7	E/M/A/D	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	175 (150 — 190) 570 (500 — 620)	
N1	E/M/A	0,40 0,40	0,50 0,50	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	550 (510 — 710) 1800 (1700 — 2300)	X-Heads
N2	E/M/A	0,40 0,40	0,50 0,50	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	355 (330 — 450) 1175 (1100 — 1400)	
N3	E/M/A	0,40 0,40	0,50 0,50	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	235 (220 — 300) 770 (730 — 980)	Minimaster
N11	E/M/A	0,50 0,50	0,50 0,50	0,070 0,0028	0,080 0,0032	0,11 0,0044	0,13 0,0050	300 (250 — 340) 980 (830 — 1100)	
S1	E	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	30 (24 — 37) 100 (79 — 120)	X-Heads
S2	E	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	25 (19 — 32) 80 (63 — 100)	
S3	E	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	22 (17 — 27) 70 (56 — 88)	Minimaster
S11	E	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	100 (72 — 120) 330 (240 — 390)	
S12	E	0,50 0,50	0,50 0,50	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	75 (56 — 99) 245 (190 — 320)	Minimaster
S13	E	0,50 0,50	0,50 0,50	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	60 (44 — 79) 195 (150 — 250)	
TS1	A/D	0,40 0,40	0,50 0,50	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	255 (160 — 350) 840 (530 — 1100)	Minimaster
TP1	A/D	0,40 0,40	0,50 0,50	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	255 (160 — 350) 840 (530 — 1100)	
GR1	A/D	0,40 0,40	0,50 0,50	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	610 (510 — 710) 2000 (1700 — 2300)	

Cutting data – XVE540 – Slot milling PCEDC 3

	SMG		a_p/DC	f_z				v_c
				10	12	16	20	
Universal	P1	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	165 (130 — 200) 540 (430 — 650)
	P2	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	160 (120 — 190) 520 (400 — 620)
Steel and cast iron	P3	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	135 (110 — 170) 445 (370 — 550)
	P4	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	120 (90 — 140) 395 (300 — 450)
	P5	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	115 (86 — 140) 375 (290 — 450)
	P6	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	130 (97 — 160) 425 (320 — 520)
Stainless steel and S-materials	P7	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	120 (92 — 150) 395 (310 — 490)
	P8	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	115 (86 — 140) 375 (290 — 450)
	P11	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	75 (64 — 84) 245 (210 — 270)
	P12	E/M/A/D	0,50 0,50	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	44 (38 — 49) 145 (130 — 160)
Non ferrous	M1	E/M/A	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	85 (75 — 99) 280 (250 — 320)
	M2	E/M/A	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	70 (60 — 79) 230 (200 — 250)
	M3	E/M/A	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	45 (35 — 55) 150 (120 — 180)
	M4	E/M/A	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	34 (27 — 41) 110 (89 — 130)
Hard	M5	E/M/A	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	28 (22 — 34) 90 (73 — 110)
Plastic and cfrp	K1	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	140 (120 — 150) 460 (400 — 490)
	K2	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	120 (110 — 130) 395 (370 — 420)
	K3	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	105 (89 — 110) 345 (300 — 360)
	K4	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	100 (85 — 110) 330 (280 — 360)
	K5	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	125 (110 — 140) 410 (370 — 450)
	K6	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	185 (150 — 200) 610 (500 — 650)
	K7	E/M/A/D	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	160 (130 — 170) 520 (430 — 550)
Graphite	N1	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	540 (510 — 700) 1775 (1700 — 2200)
	N2	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	345 (330 — 450) 1125 (1100 — 1400)
	N3	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	230 (220 — 300) 750 (730 — 980)
	N11	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	300 (260 — 350) 980 (860 — 1100)
X-Heads	S1	E	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	27 (22 — 34) 90 (73 — 110)
	S2	E	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	23 (18 — 29) 75 (60 — 95)
	S3	E	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	20 (15 — 24) 65 (50 — 78)
	S11	E	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	90 (66 — 110) 295 (220 — 360)
Minimaster	S12	E	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	70 (51 — 90) 230 (170 — 290)
	S13	E	0,50 0,50	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	55 (39 — 69) 180 (130 — 220)
	TS1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	250 (150 — 350) 820 (500 — 1100)
	TP1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	250 (150 — 350) 820 (500 — 1100)
	GR1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	600 (500 — 700) 1975 (1700 — 2200)

Cutting data – XVE540 – Side milling PCEDC 3 inch

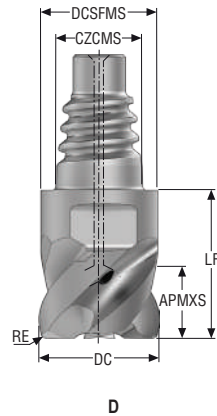
SMG		a_e/DC	a_p/DC	f_z				v_c	
				3/8	1/2	5/8	3/4		
P1	E/M/A/D	0,50 0.50	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	185 (150 — 210) 610 (500 — 680)	Universal
P2	E/M/A/D	0,50 0.50	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	180 (150 — 200) 590 (500 — 650)	
P3	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	155 (130 — 180) 510 (430 — 590)	Steel and cast iron
P4	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	140 (120 — 160) 460 (400 — 520)	
P5	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	110 (89 — 130) 360 (300 — 420)	Stainless steel and S-materials
P6	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	125 (100 — 140) 410 (330 — 450)	
P7	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	115 (94 — 140) 375 (310 — 450)	Stainless steel and S-materials
P8	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	110 (89 — 130) 360 (300 — 420)	
P11	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	95 (70 — 110) 310 (230 — 360)	Non ferrous
P12	E/M/A/D	0,50 0.50	0,50 0.50	0,034 0.0013	0,040 0.0016	0,050 0.0020	0,060 0.0024	60 (45 — 73) 195 (150 — 230)	
M1	E/M/A	0,50 0.50	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	105 (81 — 130) 345 (270 — 420)	Non ferrous
M2	E/M/A	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	90 (67 — 110) 295 (220 — 360)	
M3	E/M/A	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	75 (56 — 99) 245 (190 — 320)	Hard
M4	E/M/A	0,50 0.50	0,50 0.50	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	60 (43 — 76) 195 (150 — 240)	
M5	E/M/A	0,50 0.50	0,50 0.50	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	50 (36 — 63) 165 (120 — 200)	Plastic and cf/p
K1	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	140 (120 — 160) 460 (400 — 520)	
K2	E/M/A/D	0,50 0.50	0,50 0.50	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	120 (110 — 140) 395 (370 — 450)	Graphite
K3	E/M/A/D	0,50 0.50	0,50 0.50	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	105 (87 — 110) 345 (290 — 360)	
K4	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	110 (89 — 130) 360 (300 — 420)	X-Heads
K5	E/M/A/D	0,50 0.50	0,50 0.50	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	65 (54 — 80) 215 (180 — 260)	
K6	E/M/A/D	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	95 (78 — 110) 310 (260 — 360)	Minimaster
K7	E/M/A/D	0,50 0.50	0,50 0.50	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	85 (69 — 100) 280 (230 — 320)	
N1	E/M/A	0,40 0.40	0,50 0.50	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	610 (510 — 710) 2000 (1700 — 2300)	X-Heads
N2	E/M/A	0,40 0.40	0,50 0.50	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	395 (330 — 450) 1300 (1100 — 1400)	
N3	E/M/A	0,40 0.40	0,50 0.50	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	260 (220 — 300) 850 (730 — 980)	Minimaster
N11	E/M/A	0,50 0.50	0,50 0.30	0,070 0.0028	0,080 0.0032	0,11 0.0044	0,13 0.0055	300 (250 — 340) 1025 (860 — 1100)	
S1	E	0,50 0.50	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	39 (32 — 46) 130 (110 — 150)	X-Heads
S2	E	0,50 0.50	0,50 0.50	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	31 (26 — 37) 100 (86 — 120)	
S3	E	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	28 (23 — 33) 90 (76 — 100)	Minimaster
S11	E	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	115 (87 — 140) 375 (290 — 450)	
S12	E	0,50 0.50	0,50 0.50	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	90 (67 — 110) 295 (220 — 360)	Minimaster
S13	E	0,50 0.50	0,50 0.50	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	70 (53 — 87) 230 (180 — 280)	
TS1	A/D	0,40 0.40	0,50 0.50	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	255 (160 — 350) 840 (530 — 1100)	Minimaster
TP1	A/D	0,40 0.40	0,50 0.50	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	255 (160 — 350) 840 (530 — 1100)	
GR1	A/D	0,40 0.40	0,50 0.50	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	610 (510 — 710) 2000 (1700 — 2300)	

Cutting data – XVE540 – Slot milling PCEDC 3 inch

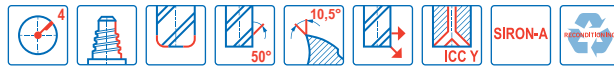
	SMG		a _p /DC	f _z				v _c
				3/8	1/2	5/8	3/4	
Universal	P1	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	170 (140 — 190) 560 (460 — 620)
	P2	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	165 (140 — 190) 540 (460 — 620)
Steel and cast iron	P3	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	140 (120 — 160) 460 (400 — 520)
	P4	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	125 (100 — 140) 410 (330 — 450)
	P5	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	100 (81 — 120) 330 (270 — 390)
	P6	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	110 (90 — 130) 360 (300 — 420)
Stainless steel and S-materials	P7	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	105 (85 — 120) 345 (280 — 390)
	P8	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	100 (81 — 120) 330 (270 — 390)
	P11	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	85 (64 — 100) 280 (210 — 320)
	P12	E/M/A/D	0,50 0.50	0,034 0.0013	0,040 0.0016	0,050 0.0020	0,060 0.0024	50 (38 — 62) 165 (130 — 200)
Non ferrous	M1	E/M/A	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	100 (75 — 120) 330 (250 — 390)
	M2	E/M/A	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	80 (61 — 100) 260 (210 — 320)
	M3	E/M/A	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	70 (50 — 89) 230 (170 — 290)
	M4	E/M/A	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	50 (38 — 67) 165 (130 — 210)
Hard	M5	E/M/A	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	44 (32 — 56) 145 (110 — 180)
Plastic and cfrp	K1	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	125 (110 — 140) 410 (370 — 450)
	K2	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	110 (92 — 120) 360 (310 — 390)
	K3	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	90 (78 — 100) 295 (260 — 320)
	K4	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	100 (81 — 120) 330 (270 — 390)
	K5	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	60 (48 — 71) 195 (160 — 230)
	K6	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	90 (71 — 100) 295 (240 — 320)
	K7	E/M/A/D	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	75 (61 — 91) 245 (210 — 290)
Graphite	N1	E/M/A	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	600 (500 — 700) 1975 (1700 — 2200)
	N2	E/M/A	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	385 (330 — 450) 1275 (1100 — 1400)
	N3	E/M/A	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	255 (220 — 300) 840 (730 — 980)
	N11	E/M/A	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	300 (260 — 340) 980 (860 — 1100)
X-Heads	S1	E	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	36 (29 — 43) 120 (96 — 140)
	S2	E	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	29 (24 — 34) 95 (79 — 110)
	S3	E	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	25 (20 — 30) 80 (66 — 98)
	S11	E	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	105 (79 — 130) 345 (260 — 420)
Minimaster	S12	E	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	80 (61 — 100) 260 (210 — 320)
	S13	E	0,50 0.50	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	60 (47 — 77) 195 (160 — 250)
	TS1	A/D	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	250 (150 — 350) 820 (500 — 1100)
	TP1	A/D	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	250 (150 — 350) 820 (500 — 1100)
	GR1	A/D	0,30 0.30	0,034 0.0013	0,042 0.0017	0,055 0.0022	0,070 0.0028	600 (500 — 700) 1975 (1700 — 2200)

XVE540

General purpose – Universal – Square – 4 Flutes – Corner radius



- Tolerances:
- DC= h9
- RE= $\pm 0,015$ mm
- Regrind possible if DC is $\geq \varnothing 12$ mm



Designation	Item number	Length index	Tool shape	CSP	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
						mm	mm	mm	mm	mm			SRA
XVE540E10100D1R050Z4A	10137989	1	D	■	E10	10,0	9,7	6,0	12,4	0,5	4	8	■
XVE540E12120D1R050Z4A	10137990	1	D	■	E12	12,0	11,7	7,5	14,5	0,5	4	10	■
XVE540E16160D1R050Z4A	10137991	1	D	■	E16	16,0	15,5	10,0	18,7	0,5	4	12	■
XVE540E20200D1R050Z4A	10137992	1	D	■	E20	20,0	19,3	12,0	21,3	0,5	4	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

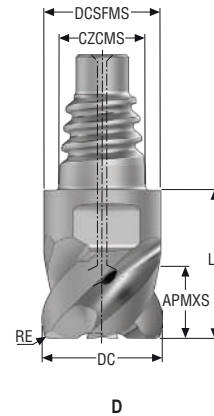
Graphite

X-Heads

Minimaster

XVE540

General purpose – Universal – Square – 4 Flutes – Corner radius – Inch



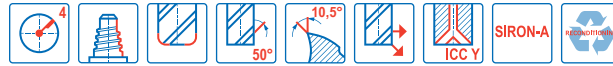
—Tolerances:

—DC= h9

—RE= .015 Inch= ±.0006 Inch

—RE= .031 Inch= ±.0012 Inch

—Regrind possible if DC is ≥Ø.500 Inch



Designation	Item number	Length index	Tool shape	CSP	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
						Inch	Inch	Inch	Inch	Inch			SIRA
XVE540E10.375D1R015Z4A	10137993	1	D	■	E10	0.375	0.364	0.236	0.488	0.015	4	8	■
XVE540E12.500D1R031Z4A	10137994	1	D	■	E12	0.500	0.484	0.315	0.571	0.031	4	12	■
XVE540E16.625D1R031Z4A	10137995	1	D	■	E16	0.625	0.610	0.394	0.736	0.031	4	16	■
XVE540E20.750D1R031Z4A	10137996	1	D	■	E20	0.750	0.728	0.453	0.839	0.031	4	18	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XVE540 – Side milling PCEDC 4

SMG		a_e/DC	a_p/DC	f_z				v_c	
				10	12	16	20		
P1	E/M/A/D	0,50 0,50	0,55 0,55	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	175 (140 — 210) 570 (460 — 680)	Universal
P2	E/M/A/D	0,50 0,50	0,55 0,55	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,090 0,0036	170 (130 — 210) 560 (430 — 680)	
P3	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	150 (120 — 180) 490 (400 — 590)	Steel and cast iron
P4	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	130 (99 — 160) 425 (330 — 520)	
P5	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,070 0,0028	0,085 0,0034	125 (95 — 150) 410 (320 — 490)	
P6	E/M/A/D	0,50 0,50	0,55 0,55	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	140 (110 — 170) 460 (370 — 550)	
P7	E/M/A/D	0,50 0,50	0,55 0,55	0,048 0,0019	0,055 0,0022	0,070 0,0028	0,080 0,0032	135 (110 — 160) 445 (370 — 520)	Stainless steel and S-materials
P8	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	125 (95 — 150) 410 (320 — 490)	
P11	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	80 (70 — 92) 260 (230 — 300)	
P12	E/M/A/D	0,50 0,50	0,55 0,55	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	50 (44 — 58) 165 (150 — 190)	
M1	E/M/A	0,50 0,50	0,55 0,55	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,095 0,0038	95 (80 — 100) 310 (270 — 320)	Non ferrous
M2	E/M/A	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	75 (66 — 87) 245 (220 — 280)	
M3	E/M/A	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	49 (39 — 60) 160 (130 — 190)	
M4	E/M/A	0,50 0,50	0,55 0,55	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	38 (30 — 46) 125 (99 — 150)	
M5	E/M/A	0,50 0,50	0,55 0,55	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	32 (25 — 38) 105 (83 — 120)	Hard
K1	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	155 (140 — 170) 510 (460 — 550)	
K2	E/M/A/D	0,50 0,50	0,55 0,55	0,046 0,0018	0,055 0,0022	0,065 0,0026	0,075 0,0030	135 (120 — 150) 445 (400 — 490)	
K3	E/M/A/D	0,50 0,50	0,55 0,55	0,046 0,0018	0,055 0,0022	0,065 0,0026	0,075 0,0030	115 (99 — 130) 375 (330 — 420)	
K4	E/M/A/D	0,50 0,50	0,55 0,55	0,046 0,0018	0,055 0,0022	0,065 0,0026	0,075 0,0030	110 (94 — 120) 360 (310 — 390)	Plastic and cf/rp
K5	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	135 (110 — 150) 445 (370 — 490)	
K6	E/M/A/D	0,50 0,50	0,55 0,55	0,055 0,0022	0,065 0,0026	0,080 0,0032	0,095 0,0038	200 (160 — 220) 660 (530 — 720)	
K7	E/M/A/D	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	175 (150 — 190) 570 (500 — 620)	
N1	E/M/A	0,40 0,40	0,55 0,55	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	540 (510 — 700) 1775 (1700 — 2200)	Graphite
N2	E/M/A	0,40 0,40	0,55 0,55	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	350 (330 — 450) 1150 (1100 — 1400)	
N3	E/M/A	0,40 0,40	0,55 0,55	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	235 (220 — 300) 770 (730 — 980)	
N11	E/M/A	0,50 0,50	0,55 0,55	0,070 0,0028	0,080 0,0032	0,11 0,0044	0,13 0,0050	295 (250 — 340) 970 (830 — 1100)	
S1	E	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	30 (24 — 37) 100 (79 — 120)	X-Heads
S2	E	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	25 (19 — 31) 80 (63 — 100)	
S3	E	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	22 (17 — 27) 70 (56 — 88)	
S11	E	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	100 (72 — 120) 330 (240 — 390)	
S12	E	0,50 0,50	0,55 0,55	0,050 0,0020	0,060 0,0024	0,075 0,0030	0,085 0,0034	75 (55 — 98) 245 (190 — 320)	Minimaster
S13	E	0,50 0,50	0,55 0,55	0,044 0,0017	0,050 0,0020	0,065 0,0026	0,075 0,0030	60 (44 — 78) 195 (150 — 250)	
TS1	A/D	0,40 0,40	0,55 0,55	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	250 (160 — 350) 820 (530 — 1100)	
TP1	A/D	0,40 0,40	0,55 0,55	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	250 (160 — 350) 820 (530 — 1100)	
GR1	A/D	0,40 0,40	0,55 0,55	0,080 0,0032	0,095 0,0038	0,12 0,0048	0,14 0,0055	610 (510 — 700) 2000 (1700 — 2200)	

Cutting data – XVE540 – Slot milling PCEDC 4

	SMG		a_p/DC	f_z				v_c
				10	12	16	20	
Universal	P1	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	160 (130 — 200) 520 (430 — 650)
	P2	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	155 (120 — 190) 510 (400 — 620)
Steel and cast iron	P3	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	135 (110 — 160) 445 (370 — 520)
	P4	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	120 (90 — 140) 395 (300 — 450)
	P5	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	115 (86 — 140) 375 (290 — 450)
	P6	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	125 (96 — 150) 410 (320 — 490)
Stainless steel and S-materials	P7	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	120 (91 — 150) 395 (300 — 490)
	P8	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	115 (86 — 140) 375 (290 — 450)
	P11	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	75 (63 — 83) 245 (210 — 270)
	P12	E/M/A/D	0,55 0,55	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	43 (37 — 49) 140 (130 — 160)
Non ferrous	M1	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	85 (74 — 98) 280 (250 — 320)
	M2	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	70 (60 — 79) 230 (200 — 250)
	M3	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	45 (35 — 54) 150 (120 — 170)
	M4	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	33 (26 — 40) 110 (86 — 130)
Hard	M5	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	28 (22 — 34) 90 (73 — 110)
Plastic and cfrp	K1	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	140 (120 — 150) 460 (400 — 490)
	K2	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	120 (110 — 130) 395 (370 — 420)
	K3	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	100 (88 — 110) 330 (290 — 360)
	K4	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	95 (84 — 110) 310 (280 — 360)
	K5	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	125 (100 — 130) 410 (330 — 420)
	K6	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	185 (150 — 200) 610 (500 — 650)
	K7	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	160 (130 — 170) 520 (430 — 550)
Graphite	N1	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	530 (500 — 690) 1750 (1700 — 2200)
	N2	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	345 (320 — 440) 1125 (1100 — 1400)
	N3	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	230 (220 — 290) 750 (730 — 950)
	N11	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	295 (250 — 340) 970 (830 — 1100)
X-Heads	S1	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	27 (21 — 33) 90 (69 — 100)
	S2	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	23 (17 — 28) 75 (56 — 91)
	S3	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	20 (15 — 24) 65 (50 — 78)
	S11	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	90 (65 — 110) 295 (220 — 360)
Minimaster	S12	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	70 (50 — 89) 230 (170 — 290)
	S13	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	55 (39 — 69) 180 (130 — 220)
	TS1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	250 (150 — 340) 820 (500 — 1100)
	TP1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	250 (150 — 340) 820 (500 — 1100)
	GR1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	590 (500 — 690) 1925 (1700 — 2200)

Cutting data – XVE540 – Side milling PCEDC 4 inch

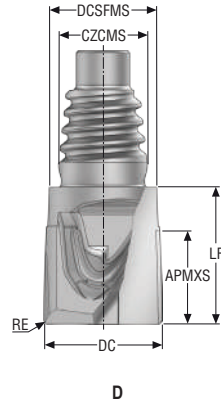
SMG		a_e/DC	a_p/DC	f_z				v_c	
				3/8	1/2	5/8	3/4		
P1	E/M/A/D	0,50 0.50	0,55 0.55	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	180 (150 — 210) 590 (500 — 680)	Universal
P2	E/M/A/D	0,50 0.50	0,55 0.55	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	175 (150 — 200) 570 (500 — 650)	
P3	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	155 (130 — 180) 510 (430 — 590)	Steel and cast iron
P4	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	135 (110 — 150) 445 (370 — 490)	
P5	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	110 (88 — 130) 360 (290 — 420)	
P6	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	125 (99 — 140) 410 (330 — 450)	
P7	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	115 (93 — 130) 375 (310 — 420)	Stainless steel and S-materials
P8	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,090 0.0036	110 (88 — 130) 360 (290 — 420)	
P11	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	90 (70 — 110) 295 (230 — 360)	
P12	E/M/A/D	0,50 0.50	0,55 0.55	0,034 0.0013	0,040 0.0016	0,050 0.0020	0,060 0.0024	60 (44 — 73) 195 (150 — 230)	
M1	E/M/A	0,50 0.50	0,55 0.55	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,095 0.0038	105 (80 — 130) 345 (270 — 420)	Non ferrous
M2	E/M/A	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	90 (66 — 100) 295 (220 — 320)	
M3	E/M/A	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	75 (55 — 98) 245 (190 — 320)	
M4	E/M/A	0,50 0.50	0,55 0.55	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	60 (43 — 75) 195 (150 — 240)	
M5	E/M/A	0,50 0.50	0,55 0.55	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	49 (36 — 63) 160 (120 — 200)	Hard
K1	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	135 (120 — 150) 445 (400 — 490)	
K2	E/M/A/D	0,50 0.50	0,55 0.55	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	120 (110 — 130) 395 (370 — 420)	
K3	E/M/A/D	0,50 0.50	0,55 0.55	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	100 (86 — 110) 330 (290 — 360)	
K4	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	110 (88 — 130) 360 (290 — 420)	Plastic and cf/p
K5	E/M/A/D	0,50 0.50	0,55 0.55	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	65 (54 — 79) 215 (180 — 250)	
K6	E/M/A/D	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	95 (78 — 110) 310 (260 — 360)	
K7	E/M/A/D	0,50 0.50	0,55 0.55	0,046 0.0018	0,055 0.0022	0,065 0.0026	0,075 0.0030	85 (68 — 100) 280 (230 — 320)	
N1	E/M/A	0,40 0.40	0,55 0.55	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	610 (510 — 700) 2000 (1700 — 2200)	Graphite
N2	E/M/A	0,40 0.40	0,55 0.55	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	390 (330 — 450) 1275 (1100 — 1400)	
N3	E/M/A	0,40 0.40	0,55 0.55	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	260 (220 — 300) 850 (730 — 980)	
N11	E/M/A	0,50 0.50	0,55 0.30	0,070 0.0028	0,080 0.0032	0,11 0.0044	0,13 0.0055	295 (250 — 340) 1000 (860 — 1100)	
S1	E	0,50 0.50	0,55 0.55	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	39 (31 — 46) 130 (110 — 150)	X-Heads
S2	E	0,50 0.50	0,55 0.55	0,055 0.0022	0,065 0.0026	0,080 0.0032	0,090 0.0036	31 (25 — 37) 100 (83 — 120)	
S3	E	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	27 (22 — 32) 90 (73 — 100)	
S11	E	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	115 (86 — 140) 375 (290 — 450)	
S12	E	0,50 0.50	0,55 0.55	0,050 0.0020	0,060 0.0024	0,075 0.0030	0,085 0.0034	90 (66 — 100) 295 (220 — 320)	Minimaster
S13	E	0,50 0.50	0,55 0.55	0,044 0.0017	0,050 0.0020	0,065 0.0026	0,075 0.0030	70 (53 — 87) 230 (180 — 280)	
TS1	A/D	0,40 0.40	0,55 0.55	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	250 (160 — 350) 820 (530 — 1100)	
TP1	A/D	0,40 0.40	0,55 0.55	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	250 (160 — 350) 820 (530 — 1100)	
GR1	A/D	0,40 0.40	0,55 0.55	0,080 0.0032	0,095 0.0038	0,12 0.0048	0,14 0.0055	610 (510 — 700) 2000 (1700 — 2200)	

Cutting data – XVE540 – Slot milling PCEDC 4 inch

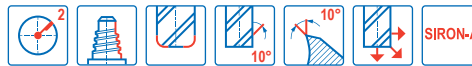
	SMG		a _p /DC	f _z				v _c
				3/8	1/2	5/8	3/4	
Universal	P1	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	170 (140 — 190) 560 (460 — 620)
	P2	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	165 (140 — 180) 540 (460 — 590)
Steel and cast iron	P3	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	140 (120 — 160) 460 (400 — 520)
	P4	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	125 (100 — 140) 410 (330 — 450)
	P5	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	100 (80 — 110) 330 (270 — 360)
	P6	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	110 (89 — 130) 360 (300 — 420)
Stainless steel and S-materials	P7	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	105 (84 — 120) 345 (280 — 390)
	P8	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	100 (80 — 110) 330 (270 — 360)
	P11	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	85 (63 — 100) 280 (210 — 320)
	P12	E/M/A/D	0,55 0,55	0,034 0,0013	0,040 0,0016	0,050 0,0020	0,060 0,0024	49 (37 — 61) 160 (130 — 200)
Non ferrous	M1	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	100 (74 — 120) 330 (250 — 390)
	M2	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	80 (60 — 99) 260 (200 — 320)
	M3	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	70 (50 — 89) 230 (170 — 290)
	M4	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	50 (38 — 66) 165 (130 — 210)
Hard	M5	E/M/A	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	43 (31 — 55) 140 (110 — 180)
Plastic and cfrp	K1	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	125 (110 — 140) 410 (370 — 450)
	K2	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	105 (91 — 120) 345 (300 — 390)
	K3	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	90 (77 — 100) 295 (260 — 320)
	K4	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	100 (80 — 110) 330 (270 — 360)
	K5	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	60 (48 — 70) 195 (160 — 220)
	K6	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	85 (70 — 100) 280 (230 — 320)
	K7	E/M/A/D	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	75 (61 — 90) 245 (210 — 290)
Graphite	N1	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	590 (500 — 690) 1925 (1700 — 2200)
	N2	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	380 (320 — 440) 1250 (1100 — 1400)
	N3	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	255 (220 — 290) 840 (730 — 950)
	N11	E/M/A	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	295 (250 — 340) 970 (830 — 1100)
X-Heads	S1	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	36 (29 — 42) 120 (96 — 130)
	S2	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	29 (23 — 34) 95 (76 — 110)
	S3	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	25 (20 — 29) 80 (66 — 95)
	S11	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	105 (78 — 120) 345 (260 — 390)
Minimaster	S12	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	80 (60 — 99) 260 (200 — 320)
	S13	E	0,55 0,55	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	60 (47 — 76) 195 (160 — 240)
	TS1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	250 (150 — 340) 820 (500 — 1100)
	TP1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	250 (150 — 340) 820 (500 — 1100)
	GR1	A/D	0,30 0,30	0,034 0,0013	0,042 0,0017	0,055 0,0022	0,070 0,0028	590 (500 — 690) 1925 (1700 — 2200)

XVE510

General purpose – Universal – Square – 2 Flutes – Corner radius



— Tolerances:
— DC= h10
— RE= $\pm 0,015$ mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XVE510E10100D1R050Z2	10138003	1	D	E10	10,0	9,7	8,0	11,8	0,5	2	6	■
XVE510E12120D1R050Z2	10138004	1	D	E12	12,0	11,7	10,0	14,0	0,5	2	8	■

■ Stocked standard.

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XVE510 Side milling

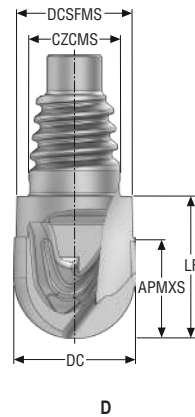
	SMG		a_e/DC	a_p/DC	f_z		v_c
					10	12	
Universal	P1	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	210 (170 — 250) 690 (560 — 820)
	P2	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	205 (170 — 240) 670 (560 — 780)
Steel and cast iron	P3	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	175 (150 — 210) 570 (500 — 680)
	P4	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	155 (130 — 180) 510 (430 — 590)
	P5	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	155 (130 — 180) 510 (430 — 590)
	P6	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	175 (140 — 200) 570 (460 — 650)
Stainless steel and S-materials	P7	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	165 (140 — 190) 540 (460 — 620)
	P8	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	155 (130 — 180) 510 (430 — 590)
	P11	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	115 (82 — 140) 375 (270 — 450)
	P12	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,080 0.0032	70 (50 — 89) 230 (170 — 290)
Non ferrous	M1	E/M/A	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	135 (97 — 170) 445 (320 — 550)
	M2	E/M/A	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	110 (78 — 130) 360 (260 — 420)
	M3	E/M/A	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	70 (55 — 85) 230 (190 — 270)
	M4	E/M/A	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	50 (41 — 64) 165 (140 — 200)
Hard	M5	E/M/A	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	44 (35 — 53) 145 (120 — 170)
	K1	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	185 (160 — 210) 610 (530 — 680)
	K2	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	160 (140 — 180) 520 (460 — 590)
	K3	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	135 (120 — 150) 445 (400 — 490)
Plastic and cfrp	K4	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	130 (110 — 150) 425 (370 — 490)
	K5	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	155 (130 — 180) 510 (430 — 590)
	K6	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	230 (190 — 270) 750 (630 — 880)
	K7	E/M/A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	100 (83 — 110) 330 (280 — 360)
Graphite	N1	E/M/A	0,20 0.20	0,65 0.65	0,075 0.0030	0,090 0.0036	470 (410 — 530) 1550 (1400 — 1700)
	N2	E/M/A	0,20 0.20	0,65 0.65	0,075 0.0030	0,090 0.0036	305 (270 — 340) 1000 (890 — 1100)
	N3	E/M/A	0,20 0.20	0,65 0.65	0,075 0.0030	0,090 0.0036	200 (180 — 230) 660 (600 — 750)
	N11	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	370 (300 — 440) 1225 (990 — 1400)
X-Heads	S1	E	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	60 (39 — 85) 195 (130 — 270)
	S2	E	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	55 (32 — 77) 180 (110 — 250)
	S3	E	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	39 (24 — 54) 130 (79 — 170)
	S11	E	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	120 (110 — 140) 395 (370 — 450)
Minimaster	S12	E	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	95 (78 — 100) 310 (260 — 320)
	S13	E	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	70 (61 — 84) 230 (210 — 270)
	TS1	A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	540 (470 — 620) 1775 (1600 — 2000)
	TP1	A/D	0,10 0.10	0,65 0.65	0,080 0.0032	0,095 0.0038	540 (470 — 620) 1775 (1600 — 2000)
	GR1	A/D	0,20 0.20	0,65 0.65	0,10 0.0040	0,12 0.0048	570 (510 — 630) 1875 (1700 — 2000)

Cutting data – XVE510 Slot milling

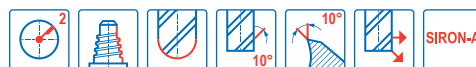
SMG		a_p/DC	f_z		v_c	
			10	12		
P1	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	135 (110 — 160) 445 (370 — 520)	Universal
P2	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	130 (110 — 150) 425 (370 — 490)	
P3	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	115 (91 — 130) 375 (300 — 420)	Steel and cast iron
P4	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	100 (80 — 110) 330 (270 — 360)	
P5	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	100 (81 — 120) 330 (270 — 390)	
P6	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	110 (90 — 130) 360 (300 — 420)	
P7	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	105 (85 — 120) 345 (280 — 390)	
P8	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	100 (81 — 120) 330 (270 — 390)	Stainless steel and S-materials
P11	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	75 (53 — 94) 245 (180 — 300)	
P12	E/M/A/D	0,40 0,40	0,040 0,0016	0,048 0,0019	46 (33 — 58) 150 (110 — 190)	
M1	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	85 (62 — 110) 280 (210 — 360)	Non ferrous
M2	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	70 (50 — 89) 230 (170 — 290)	
M3	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	45 (35 — 54) 150 (120 — 170)	
M4	E/M/A	0,38 0,38	0,050 0,0020	0,060 0,0024	34 (27 — 41) 110 (89 — 130)	
M5	E/M/A	0,38 0,38	0,050 0,0020	0,060 0,0024	28 (23 — 34) 90 (76 — 110)	
K1	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	120 (100 — 130) 395 (330 — 420)	Hard
K2	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	105 (87 — 120) 345 (290 — 390)	
K3	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	90 (74 — 100) 295 (250 — 320)	Plastic and cfrp
K4	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	85 (70 — 97) 280 (230 — 310)	
K5	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	100 (80 — 120) 330 (270 — 390)	
K6	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	150 (120 — 170) 490 (400 — 550)	
K7	E/M/A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	65 (54 — 74) 215 (180 — 240)	
N1	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	350 (300 — 390) 1150 (990 — 1200)	Graphite
N2	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	225 (200 — 250) 740 (660 — 820)	
N3	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	150 (130 — 170) 490 (430 — 550)	
N11	E/M/A	0,50 0,50	0,050 0,0020	0,060 0,0024	250 (200 — 290) 820 (660 — 950)	
S1	E	0,50 0,50	0,050 0,0020	0,060 0,0024	40 (25 — 54) 130 (83 — 170)	X-Heads
S2	E	0,50 0,50	0,050 0,0020	0,060 0,0024	35 (20 — 49) 115 (66 — 160)	
S3	E	0,50 0,50	0,050 0,0020	0,060 0,0024	25 (15 — 34) 80 (50 — 110)	
S11	E	0,50 0,50	0,050 0,0020	0,060 0,0024	80 (65 — 90) 260 (220 — 290)	
S12	E	0,50 0,50	0,050 0,0020	0,060 0,0024	60 (50 — 69) 195 (170 — 220)	
S13	E	0,42 0,42	0,050 0,0020	0,060 0,0024	47 (39 — 54) 155 (130 — 170)	
TS1	A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	350 (300 — 390) 1150 (990 — 1200)	Minimaster
TP1	A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	350 (300 — 390) 1150 (990 — 1200)	
GR1	A/D	0,50 0,50	0,050 0,0020	0,060 0,0024	450 (400 — 490) 1475 (1400 — 1600)	

XVB510

General purpose – Universal – Ball nose – 2 Flutes



—Tolerances:
—DC= h9
—RE= ±0,01 mm

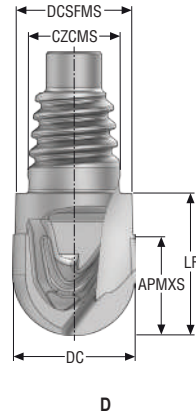


Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XVB510E10100D1BZ2	10138005	1	D	E10	10,0	9,7	8,0	11,8	5,0	2	6	■
XVB510E12120D1BZ2	10138006	1	D	E12	12,0	11,7	10,0	14,0	6,0	2	8	■
XVB510E16160D1BZ2	10138007	1	D	E16	16,0	15,5	13,0	18,1	8,0	2	10	■

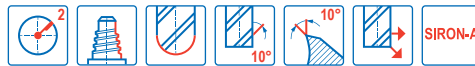
■ Stocked standard.

XVB510

General purpose – Universal – Ball nose – 2 Flutes – Inch



—Tolerances:
—DC= h9
—RE= ± 0.004 Inch



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					Inch	Inch	Inch	Inch	Inch			SIRA
XVB510E10.375D1BZ2	10138008	1	D	E10	0.375	0.364	0.315	0.465	0.187	2	6	■
XVB510E12.500D1BZ2	10138009	1	D	E12	0.500	0.484	0.413	0.551	0.250	2	8	■
XVB510E16.625D1BZ2	10138010	1	D	E16	0.624	0.610	0.512	0.713	0.313	2	10	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XVB510 Copy milling roughing

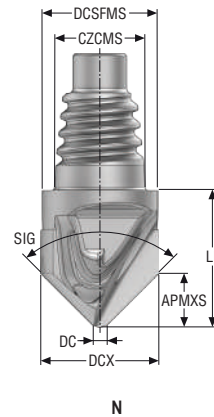
	SMG		a_e/DC	a_p/DC	f_z			v_c
					10	12	16	
Universal	P1	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	185 (150 — 210) 610 (500 — 680)
Steel and cast iron	P2	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	180 (150 — 210) 590 (500 — 680)
	P3	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	155 (130 — 180) 510 (430 — 590)
	P4	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	135 (110 — 160) 445 (370 — 520)
	P5	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	135 (110 — 160) 445 (370 — 520)
	P6	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	150 (130 — 180) 490 (430 — 590)
Stainless steel and S-materials	P7	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	145 (120 — 170) 475 (400 — 550)
	P8	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	135 (110 — 160) 445 (370 — 520)
	P11	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	65 (50 — 78) 215 (170 — 250)
	P12	E/M/A/D	0,10 0.10	0,65 0.65	0,060 0.0024	0,075 0.0030	0,090 0.0036	39 (30 — 47) 130 (99 — 150)
	M1	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	75 (59 — 91) 245 (200 — 290)
Non ferrous	M2	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	60 (48 — 74) 195 (160 — 240)
	M3	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	60 (48 — 74) 195 (160 — 240)
	M4	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	46 (36 — 55) 150 (120 — 180)
	M5	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	38 (30 — 46) 125 (99 — 150)
	K1	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	180 (150 — 210) 590 (500 — 680)
Hard	K2	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	155 (130 — 180) 510 (430 — 590)
	K3	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	130 (110 — 150) 425 (370 — 490)
	K4	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	125 (110 — 150) 410 (370 — 490)
	K5	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	80 (63 — 94) 260 (210 — 300)
	K6	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	115 (93 — 130) 375 (310 — 420)
Plastic and cfrp	K7	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	100 (81 — 120) 330 (270 — 390)
	N1	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	445 (390 — 500) 1450 (1300 — 1600)
	N2	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	285 (250 — 320) 940 (830 — 1000)
	N3	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	190 (170 — 210) 620 (560 — 680)
	N11	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	335 (270 — 400) 1100 (890 — 1300)
X-Heads	S1	E	0,050 0.050	0,65 0.65	0,060 0.0024	0,070 0.0028	0,095 0.0038	55 (33 — 76) 180 (110 — 240)
	S2	E	0,050 0.050	0,65 0.65	0,060 0.0024	0,070 0.0028	0,095 0.0038	44 (27 — 61) 145 (89 — 200)
	S3	E	0,050 0.050	0,65 0.65	0,060 0.0024	0,070 0.0028	0,095 0.0038	38 (23 — 52) 125 (76 — 170)
	S11	E	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	105 (88 — 120) 345 (290 — 390)
	S12	E	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	80 (68 — 94) 260 (230 — 300)
Minimaster	S13	E	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	65 (53 — 73) 215 (180 — 230)
	TS1	A/D	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	445 (390 — 500) 1450 (1300 — 1600)
	TP1	A/D	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	445 (390 — 500) 1450 (1300 — 1600)
	GR1	A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	630 (570 — 700) 2075 (1900 — 2200)

Cutting data – XVB510 Copy milling roughing inch

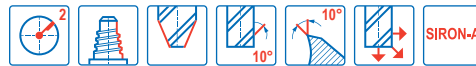
SMG		a _e /DC	a _p /DC	f _z			v _c	
				3/8	1/2	5/8		
P1	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	365 (320 — 420) 1200 (1100 — 1300)	Universal
P2	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	355 (310 — 400) 1175 (1100 — 1300)	
P3	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	305 (270 — 350) 1000 (890 — 1100)	Steel and cast iron
P4	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	270 (230 — 310) 890 (760 — 1000)	
P5	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	175 (140 — 210) 570 (460 — 680)	
P6	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	195 (160 — 240) 640 (530 — 780)	
P7	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	185 (150 — 220) 610 (500 — 720)	Stainless steel and S-materials
P8	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	175 (140 — 210) 570 (460 — 680)	
P11	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	155 (130 — 180) 510 (430 — 590)	
P12	E/M/A/D	0,10 0.10	0,65 0.65	0,060 0.0024	0,075 0.0030	0,090 0.0036	95 (78 — 110) 310 (260 — 360)	
M1	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	185 (160 — 210) 610 (530 — 680)	Non ferrous
M2	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	150 (130 — 170) 490 (430 — 550)	
M3	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	120 (95 — 140) 395 (320 — 450)	
M4	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	90 (71 — 110) 295 (240 — 360)	
M5	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	75 (59 — 92) 245 (200 — 300)	Hard
K1	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	360 (310 — 410) 1175 (1100 — 1300)	
K2	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	310 (270 — 350) 1025 (890 — 1100)	
K3	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	265 (230 — 300) 870 (760 — 980)	
K4	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	250 (220 — 280) 820 (730 — 910)	Plastic and cf/np
K5	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	100 (79 — 120) 330 (260 — 390)	
K6	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	150 (120 — 180) 490 (400 — 590)	
K7	E/M/A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	130 (110 — 160) 425 (370 — 520)	
N1	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	510 (390 — 630) 1675 (1300 — 2000)	Graphite
N2	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	330 (250 — 400) 1075 (830 — 1300)	
N3	E/M/A	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	220 (170 — 270) 720 (560 — 880)	
N11	E/M/A	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	405 (270 — 530) 1325 (890 — 1700)	
S1	E	0,050 0.050	0,65 0.65	0,060 0.0024	0,070 0.0028	0,095 0.0038	110 (66 — 150) 360 (220 — 490)	X-Heads
S2	E	0,050 0.050	0,65 0.65	0,060 0.0024	0,070 0.0028	0,095 0.0038	90 (53 — 120) 295 (180 — 390)	
S3	E	0,050 0.050	0,65 0.65	0,060 0.0024	0,070 0.0028	0,095 0.0038	75 (46 — 100) 245 (160 — 320)	
S11	E	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	175 (130 — 220) 570 (430 — 720)	
S12	E	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	135 (95 — 170) 445 (320 — 550)	Minimaster
S13	E	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	105 (74 — 130) 345 (250 — 420)	
TS1	A/D	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	320 (200 — 440) 1050 (660 — 1400)	
TP1	A/D	0,10 0.10	0,65 0.65	0,10 0.0040	0,12 0.0048	0,15 0.0060	320 (200 — 440) 1050 (660 — 1400)	
GR1	A/D	0,10 0.10	0,65 0.65	0,070 0.0028	0,085 0.0034	0,11 0.0044	850 (710 — 980) 2800 (2400 — 3200)	

XVC506/509/512

General purpose – Universal – Chamfer – 2 Flutes



—Tolerances:
—SIG= $\pm 1^\circ$



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	PCEDC	SW	Grade
					mm	mm	mm	mm			SIRA
XVC506E10100N1SZ2	10138012	1	N	E10	1,5	9,7	7,23	11,8	2	6	■
XVC509E10100N1SZ2	10138014	1	N	E10	1,5	9,7	4,23	11,8	2	6	■
XVC506E12120N1SZ2	10138013	1	N	E12	1,5	11,7	7,73	14,0	2	8	■
XVC509E12120N1SZ2	10138015	1	N	E12	1,5	11,7	5,23	14,0	2	8	■
XVC512E12120N1SZ2	10138017	1	N	E12	1,5	11,7	3,03	14,0	2	8	■
XVC509E16160N1SZ2	10138016	1	N	E16	1,5	15,5	7,23	18,1	2	10	■

■ Stocked standard.

Cutting data – XVC506 Chamfering

SMG		a _e /DC	a _p /DC	f _z		v _c	
				10	12		
P1	E/M/A/D	0,10 0.10	2,0 2.0	0,25 0.010	0,26 0.010	200 (180 — 220) 660 (600 — 720)	Universal
P2	E/M/A/D	0,10 0.10	2,0 2.0	0,25 0.010	0,26 0.010	195 (180 — 220) 640 (600 — 720)	
P3	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	170 (150 — 190) 560 (500 — 620)	Steel and cast iron
P4	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	150 (130 — 160) 490 (430 — 520)	
P5	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	150 (140 — 170) 490 (460 — 550)	
P6	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,24 0.0095	170 (150 — 190) 560 (500 — 620)	
P7	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,24 0.0095	160 (140 — 180) 520 (460 — 590)	Stainless steel and S-materials
P8	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,26 0.010	150 (140 — 170) 490 (460 — 550)	
P11	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,24 0.0095	105 (86 — 120) 345 (290 — 390)	
P12	E/M/A/D	0,10 0.10	1,6 1.6	0,15 0.0060	0,16 0.0065	65 (52 — 76) 215 (180 — 240)	
M1	E/M/A	0,10 0.10	2,0 2.0	0,26 0.010	0,28 0.011	125 (99 — 140) 410 (330 — 450)	Non ferrous
M2	E/M/A	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	100 (80 — 120) 330 (270 — 390)	
M3	E/M/A	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	65 (45 — 84) 215 (150 — 270)	
M4	E/M/A	0,10 0.10	1,5 1.5	0,19 0.0075	0,20 0.0080	47 (33 — 60) 155 (110 — 190)	
M5	E/M/A	0,10 0.10	1,5 1.5	0,19 0.0075	0,20 0.0080	39 (27 — 50) 130 (89 — 160)	Hard
K1	E/M/A/D	0,10 0.10	2,0 2.0	0,25 0.010	0,26 0.010	200 (180 — 220) 660 (600 — 720)	
K2	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	175 (160 — 190) 570 (530 — 620)	Plastic and cfrrp
K3	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	150 (130 — 160) 490 (430 — 520)	
K4	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	140 (130 — 150) 460 (430 — 490)	
K5	E/M/A/D	0,10 0.10	2,0 2.0	0,20 0.0080	0,22 0.0085	85 (74 — 95) 280 (250 — 310)	
K6	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	125 (110 — 140) 410 (370 — 450)	Graphite
K7	E/M/A/D	0,10 0.10	2,0 2.0	0,20 0.0080	0,22 0.0085	110 (94 — 120) 360 (310 — 390)	
N1	E/M/A	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	600 (500 — 690) 1975 (1700 — 2200)	
N2	E/M/A	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	385 (330 — 440) 1275 (1100 — 1400)	
N3	E/M/A	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	255 (220 — 290) 840 (730 — 950)	X-Heads
N11	E/M/A	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	400 (350 — 450) 1300 (1200 — 1400)	
S1	E	0,10 0.10	2,0 2.0	0,12 0.0048	0,13 0.0050	43 (15 — 71) 140 (50 — 230)	
S2	E	0,10 0.10	2,0 2.0	0,12 0.0048	0,13 0.0050	35 (12 — 57) 115 (40 — 180)	Minimaster
S3	E	0,10 0.10	2,0 2.0	0,12 0.0048	0,12 0.0048	30 (10 — 49) 100 (33 — 160)	
S11	E	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	95 (72 — 120) 310 (240 — 390)	
S12	E	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	75 (55 — 94) 245 (190 — 300)	
S13	E	0,10 0.10	1,7 1.7	0,19 0.0075	0,20 0.0080	55 (43 — 72) 180 (150 — 230)	
H5	M/A	0,050 0.050	2,0 2.0	0,11 0.0044	0,12 0.0048	120 (110 — 140) 395 (370 — 450)	
H8	M/A	0,050 0.050	1,8 1.8	0,080 0.0032	0,085 0.0034	120 (99 — 130) 395 (330 — 420)	
H21	M/A	0,050 0.050	1,8 1.8	0,080 0.0032	0,085 0.0034	120 (99 — 130) 395 (330 — 420)	
H31	M/A	0,050 0.050	1,8 1.8	0,070 0.0028	0,075 0.0030	90 (75 — 100) 295 (250 — 320)	
TS1	A/D	0,10 0.10	2,0 2.0	0,17 0.0065	0,18 0.0070	260 (160 — 360) 850 (530 — 1100)	
TP1	A/D	0,10 0.10	2,0 2.0	0,17 0.0065	0,18 0.0070	260 (160 — 360) 850 (530 — 1100)	

Cutting data – XVC509 Chamfering

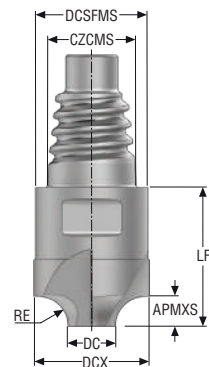
	SMG		a_e/DC	a_p/DC	f_z			v_c
					10	12	16	
Universal	P1	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	0,28 0.011	200 (180 — 220) 660 (600 — 720)
	P2	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,26 0.010	0,28 0.011	195 (180 — 220) 640 (600 — 720)
Steel and cast iron	P3	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,24 0.0095	0,26 0.010	170 (150 — 190) 560 (500 — 620)
	P4	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	150 (130 — 160) 490 (430 — 520)
	P5	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	150 (140 — 170) 490 (460 — 550)
	P6	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	170 (150 — 190) 560 (500 — 620)
Stainless steel and S-materials	P7	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	160 (140 — 180) 520 (460 — 590)
	P8	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,25 0.010	0,28 0.011	150 (130 — 160) 490 (430 — 520)
	P11	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	105 (85 — 120) 345 (280 — 390)
	P12	E/M/A/D	0,10 0.10	1,6 1.6	0,14 0.0055	0,15 0.0060	0,17 0.0065	60 (50 — 74) 195 (170 — 240)
Non ferrous	M1	E/M/A	0,10 0.10	2,0 2.0	0,25 0.010	0,26 0.010	0,28 0.011	120 (98 — 140) 395 (330 — 450)
	M2	E/M/A	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	100 (80 — 120) 330 (270 — 390)
	M3	E/M/A	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	65 (45 — 84) 215 (150 — 270)
	M4	E/M/A	0,10 0.10	1,5 1.5	0,18 0.0070	0,19 0.0075	0,20 0.0080	46 (33 — 60) 150 (110 — 190)
Hard	M5	E/M/A	0,10 0.10	1,5 1.5	0,18 0.0070	0,19 0.0075	0,20 0.0080	39 (27 — 50) 130 (89 — 160)
Plastic and cfrp	K1	E/M/A/D	0,10 0.10	2,0 2.0	0,24 0.0095	0,26 0.010	0,28 0.011	200 (180 — 220) 660 (600 — 720)
	K2	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	175 (160 — 190) 570 (530 — 620)
	K3	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	145 (130 — 160) 475 (430 — 520)
	K4	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	140 (130 — 150) 460 (430 — 490)
	K5	E/M/A/D	0,10 0.10	2,0 2.0	0,20 0.0080	0,22 0.0085	0,24 0.0095	85 (74 — 95) 280 (250 — 310)
	K6	E/M/A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	125 (110 — 130) 410 (370 — 420)
	K7	E/M/A/D	0,10 0.10	2,0 2.0	0,20 0.0080	0,22 0.0085	0,24 0.0095	110 (94 — 120) 360 (310 — 390)
Graphite	N1	E/M/A	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	600 (500 — 700) 1975 (1700 — 2200)
	N2	E/M/A	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	385 (330 — 450) 1275 (1100 — 1400)
	N3	E/M/A	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	255 (220 — 300) 840 (730 — 980)
	N11	E/M/A	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	400 (350 — 450) 1300 (1200 — 1400)
X-Heads	S1	E	0,10 0.10	2,0 2.0	0,13 0.0050	0,13 0.0050	0,15 0.0060	43 (15 — 71) 140 (50 — 230)
	S2	E	0,10 0.10	2,0 2.0	0,13 0.0050	0,13 0.0050	0,15 0.0060	35 (12 — 57) 115 (40 — 180)
	S3	E	0,10 0.10	2,0 2.0	0,12 0.0048	0,12 0.0048	0,14 0.0055	30 (10 — 50) 100 (33 — 160)
	S11	E	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	100 (72 — 120) 330 (240 — 390)
Minimaster	S12	E	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	75 (55 — 94) 245 (190 — 300)
	S13	E	0,10 0.10	1,7 1.7	0,19 0.0075	0,20 0.0080	0,22 0.0085	55 (42 — 72) 180 (140 — 230)
	H5	M/A	0,10 0.10	2,0 2.0	0,12 0.0048	0,12 0.0048	0,14 0.0055	120 (110 — 140) 395 (370 — 450)
	H8	M/A	0,10 0.10	1,8 1.8	0,085 0.0034	0,090 0.0036	0,10 0.0040	120 (99 — 130) 395 (330 — 420)
	H21	M/A	0,10 0.10	1,8 1.8	0,085 0.0034	0,090 0.0036	0,10 0.0040	120 (99 — 130) 395 (330 — 420)
	H31	M/A	0,10 0.10	1,8 1.8	0,075 0.0030	0,080 0.0032	0,085 0.0034	90 (75 — 100) 295 (250 — 320)
	TS1	A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	250 (150 — 350) 820 (500 — 1100)
	TP1	A/D	0,10 0.10	2,0 2.0	0,22 0.0085	0,24 0.0095	0,26 0.010	250 (150 — 350) 820 (500 — 1100)

Cutting data – XVC512 Chamfering

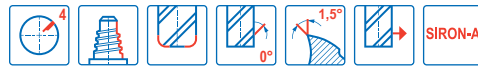
SMG		a_e/DC	a_p/DC	f_z	v_c	
				12		Universal
P1	E/M/A/D	0,10 0.10	1,3 1.3	0,36 0.014	165 (150 — 180) 540 (500 — 590)	Steel and cast iron
P2	E/M/A/D	0,10 0.10	1,3 1.3	0,36 0.014	160 (140 — 170) 520 (460 — 550)	
P3	E/M/A/D	0,10 0.10	1,3 1.3	0,34 0.013	135 (120 — 150) 445 (400 — 490)	
P4	E/M/A/D	0,10 0.10	1,3 1.3	0,34 0.013	120 (110 — 130) 395 (370 — 420)	
P5	E/M/A/D	0,10 0.10	1,3 1.3	0,34 0.013	120 (110 — 130) 395 (370 — 420)	
P6	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	135 (120 — 150) 445 (400 — 490)	Stainless steel and S-materials
P7	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	125 (120 — 140) 410 (400 — 450)	
P8	E/M/A/D	0,10 0.10	1,3 1.3	0,34 0.013	120 (110 — 130) 395 (370 — 420)	
P11	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	85 (68 — 100) 280 (230 — 320)	
P12	E/M/A/D	0,10 0.10	1,3 1.3	0,22 0.0085	50 (41 — 61) 165 (140 — 200)	
M1	E/M/A	0,10 0.10	1,3 1.3	0,36 0.014	100 (80 — 110) 330 (270 — 360)	Non ferrous
M2	E/M/A	0,10 0.10	1,3 1.3	0,34 0.013	80 (65 — 96) 260 (220 — 310)	
M3	E/M/A	0,10 0.10	1,3 1.3	0,34 0.013	50 (37 — 68) 165 (130 — 220)	
M4	E/M/A	0,10 0.10	1,3 1.3	0,30 0.012	39 (28 — 51) 130 (92 — 160)	
M5	E/M/A	0,10 0.10	1,3 1.3	0,30 0.012	33 (23 — 42) 110 (76 — 130)	
K1	E/M/A/D	0,10 0.10	1,3 1.3	0,36 0.014	160 (140 — 180) 520 (460 — 590)	Hard
K2	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	140 (130 — 150) 460 (430 — 490)	
K3	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	115 (110 — 130) 375 (370 — 420)	
K4	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	110 (98 — 120) 360 (330 — 390)	
K5	E/M/A/D	0,10 0.10	1,3 1.3	0,30 0.012	65 (58 — 75) 215 (200 — 240)	
K6	E/M/A/D	0,10 0.10	1,3 1.3	0,32 0.013	100 (86 — 110) 330 (290 — 360)	Plastic and cfrp
K7	E/M/A/D	0,10 0.10	1,3 1.3	0,30 0.012	85 (74 — 96) 280 (250 — 310)	
N1	E/M/A	0,10 0.10	1,3 1.3	0,34 0.013	480 (410 — 560) 1575 (1400 — 1800)	
N2	E/M/A	0,10 0.10	1,3 1.3	0,34 0.013	310 (260 — 360) 1025 (860 — 1100)	
N3	E/M/A	0,10 0.10	1,3 1.3	0,34 0.013	205 (180 — 240) 670 (600 — 780)	
N11	E/M/A	0,10 0.10	1,3 1.3	0,34 0.013	320 (290 — 360) 1050 (960 — 1100)	Graphite
S1	E	0,10 0.10	1,3 1.3	0,19 0.0075	35 (12 — 58) 115 (40 — 190)	
S2	E	0,10 0.10	1,3 1.3	0,19 0.0075	29 (9,6 — 47) 95 (32 — 150)	
S3	E	0,10 0.10	1,3 1.3	0,17 0.0065	25 (8,3 — 41) 80 (28 — 130)	
S11	E	0,10 0.10	1,3 1.3	0,34 0.013	80 (58 — 98) 260 (200 — 320)	
S12	E	0,10 0.10	1,3 1.3	0,34 0.013	60 (45 — 76) 195 (150 — 240)	X-Heads
S13	E	0,10 0.10	1,3 1.3	0,30 0.012	47 (35 — 59) 155 (120 — 190)	
H5	M/A	0,10 0.10	1,3 1.3	0,17 0.0065	100 (83 — 110) 330 (280 — 360)	
H8	M/A	0,10 0.10	1,3 1.3	0,13 0.0050	100 (84 — 110) 330 (280 — 360)	
H21	M/A	0,10 0.10	1,3 1.3	0,13 0.0050	100 (84 — 110) 330 (280 — 360)	
H31	M/A	0,10 0.10	1,3 1.3	0,11 0.0044	75 (64 — 88) 245 (210 — 280)	Minimaster
TS1	A/D	0,10 0.10	1,3 1.3	0,34 0.013	200 (130 — 280) 660 (430 — 910)	
TP1	A/D	0,10 0.10	1,3 1.3	0,34 0.013	200 (130 — 280) 660 (430 — 910)	

XVK310

General purpose – Universal – Concave – 4 Flutes



—Tolerances:
—RE= ≤5= ±0,05 mm
—RE= >5= ±0,1 mm



Designation	Item number	Length index	Tool shape	CZCMS	DC	DCSFMS	APMXS	LF	RE	PCEDC	SW	Grade
					mm	mm	mm	mm	mm			SIRA
XVK310E12120D1K400Z4	10137999	1	D	E12	4,0	11,7	4,0	14,5	4,0	4	10	■
XVK310E12120D1K300Z4	10137998	1	D	E12	5,0	11,7	3,0	14,5	3,0	4	10	■
XVK310E16160D1K500Z4	10138000	1	D	E16	6,0	15,5	5,0	18,7	5,0	4	12	■
XVK310E20200D1K600Z4	10138001	1	D	E20	8,0	19,3	6,0	21,3	6,0	4	16	■

■ Stocked standard.

Universal

Steel and cast iron

Stainless steel and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

Cutting data – XVK310 Side milling roughing

SMG		a _p /D_c	f _z			v _c		
			12	16	20			
P1	E/M/A/D	0,24	0,048	0,065	0,080	290	(195 — 310)	Universal
		0,24	0,0019	0,0026	0,0032	950	(640 — 1100)	
P2	E/M/A/D	0,24	0,050	0,065	0,080	280	(190 — 305)	Steel and cast iron
		0,24	0,0022	0,0026	0,0032	910	(620 — 1000)	
P3	E/M/A/D	0,24	0,046	0,060	0,075	240	(165 — 260)	
		0,24	0,0018	0,0024	0,003	790	(540 — 850)	
P4	E/M/A/D	0,24	0,046	0,060	0,075	210	(145 — 230)	
		0,24	0,0018	0,0024	0,003	680	(475 — 760)	
P5	E/M/A/D	0,24	0,046	0,060	0,075	205	(135 — 220)	Stainless steel and S-materials
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
P6	E/M/A/D	0,24	0,044	0,060	0,075	230	(155 — 245)	
		0,24	0,0017	0,0024	0,003	760	(510 — 800)	
P7	E/M/A/D	0,24	0,044	0,060	0,075	215	(145 — 230)	
		0,24	0,0017	0,0024	0,003	710	(475 — 760)	
P8	E/M/A/D	0,24	0,046	0,060	0,075	205	(140 — 220)	Non ferrous
		0,24	0,0018	0,0024	0,003	670	(460 — 730)	
P11	E/M/A/D	0,24	0,044	0,060	0,075	210	(140 — 225)	
		0,24	0,0017	0,0024	0,003	680	(460 — 740)	
M1	E/M/A	0,24	0,050	0,065	0,080	255	(170 — 270)	Hard
		0,24	0,0022	0,0026	0,0032	840	(560 — 890)	
M2	E/M/A	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
M3	E/M/A	0,24	0,036	0,048	0,060	150	(105 — 165)	
		0,24	0,0014	0,0019	0,0024	490	(345 — 540)	
M4	E/M/A	0,24	0,032	0,042	0,050	110	(75 — 120)	Plastic and cf rp
		0,24	0,0013	0,0017	0,0022	360	(250 — 400)	
M5	E/M/A	0,24	0,032	0,042	0,050	95	(65 — 100)	
		0,24	0,0013	0,0017	0,0022	310	(220 — 320)	
K1	E/M/A/D	0,24	0,046	0,060	0,075	205	(135 — 220)	Graphite
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
K2	E/M/A/D	0,24	0,040	0,055	0,065	175	(120 — 190)	
		0,24	0,0016	0,0022	0,0026	570	(400 — 620)	
K3	E/M/A/D	0,24	0,040	0,055	0,065	150	(100 — 160)	
		0,24	0,0016	0,0022	0,0026	490	(320 — 530)	
K4	E/M/A/D	0,24	0,040	0,055	0,065	140	(95 — 150)	X-Heads
		0,24	0,0016	0,0022	0,0026	460	(310 — 490)	
K5	E/M/A/D	0,24	0,036	0,050	0,060	85	(55 — 90)	
		0,24	0,0014	0,0022	0,0024	280	(180 — 300)	
K6	E/M/A/D	0,24	0,040	0,055	0,065	125	(85 — 135)	
		0,24	0,0016	0,0022	0,0026	410	(280 — 445)	
K7	E/M/A/D	0,24	0,036	0,050	0,060	105	(70 — 115)	Minimaster
		0,24	0,0014	0,0022	0,0024	345	(220 — 375)	
N1	E/M/A	0,24	0,046	0,060	0,075	315	(215 — 340)	
		0,24	0,0018	0,0024	0,003	1025	(710 — 1125)	
N2	E/M/A	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
N3	E/M/A	0,24	0,046	0,060	0,075	135	(90 — 145)	X-Heads
		0,24	0,0018	0,0024	0,003	445	(300 — 475)	
N11	E/M/A	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
S1	E	0,24	0,048	0,065	0,080	205	(140 — 220)	X-Heads
		0,24	0,0019	0,0026	0,0032	670	(460 — 730)	
S2	E	0,24	0,048	0,065	0,080	205	(140 — 220)	
		0,24	0,0019	0,0026	0,0032	670	(460 — 730)	
S3	E	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
S11	E	0,24	0,046	0,060	0,075	265	(180 — 285)	Minimaster
		0,24	0,0018	0,0024	0,003	870	(590 — 940)	
S12	E	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
S13	E	0,24	0,040	0,050	0,065	155	(105 — 165)	
		0,24	0,0016	0,0022	0,0026	510	(345 — 540)	
TS1	A/D	0,24	0,046	0,060	0,075	205	(135 — 220)	Minimaster
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
TP1	A/D	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	
GR1	A/D	0,24	0,046	0,060	0,075	205	(135 — 220)	
		0,24	0,0018	0,0024	0,003	670	(445 — 730)	

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!				
Straight	Slotting		Side rough			Side finish				Ramping		Helical		
														
	a_p	f_z	a_e	f_z	a_p	v_c	a_e	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)
										$\leq 30^\circ$ *				
C5121														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	70%	80%	100%	80%	100%	80%	100%	80%	100%	100%	100%	100%	100%	170%
LV3	60%	64%	100%	64%	100%	64%	100%	64%	100%	100%	85%	85%	100%	170%
LV4	x	x	100%	52%	100%	52%	100%	52%	100%	100%	75%	75%	100%	170%
LV5	x	x	100%	40%	100%	40%	100%	40%	100%	100%	65%	65%	100%	170%
LV6	x	x	100%	33%	100%	33%	100%	33%	100%	100%	55%	55%	100%	170%
LV7	x	x	100%	26%	100%	26%	100%	26%	100%	100%	45%	45%	100%	170%
LV8	x	x	100%	21%	100%	21%	100%	21%	100%	100%	35%	35%	100%	170%
										$\leq 10^\circ$ *				
C5131														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	70%	80%	100%	80%	100%	80%	100%	80%	100%	100%	100%	100%	100%	170%
LV3	60%	64%	100%	64%	100%	64%	100%	64%	100%	100%	85%	85%	100%	170%
LV4	x	x	100%	52%	100%	52%	100%	52%	100%	100%	75%	75%	100%	170%
										$\leq 30^\circ$ *				
C5141														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	70%	80%	100%	80%	100%	80%	100%	80%	100%	100%	100%	100%	100%	170%
LV3	60%	64%	100%	64%	100%	64%	100%	64%	100%	100%	85%	85%	100%	170%
LV4	x	x	100%	52%	100%	52%	100%	52%	100%	100%	75%	75%	100%	170%
LV5	x	x	100%	40%	100%	40%	100%	40%	100%	100%	65%	65%	100%	170%
LV6	x	x	100%	33%	100%	33%	100%	33%	100%	100%	55%	55%	100%	170%
LV7	x	x	100%	26%	100%	26%	100%	26%	100%	100%	45%	45%	100%	170%
LV8	x	x	100%	21%	100%	21%	100%	21%	100%	100%	35%	35%	100%	170%
LV9	x	x	100%	17%	100%	17%	100%	17%	100%	100%	25%	25%	100%	170%
										$\leq 10^\circ$ *				
C5231														
LV2	100%	100%	100%	100%	100%	100%	80%	100%	80%	100%	100%	100%	100%	100%
LV3	70%	80%	100%	80%	100%	80%	64%	100%	64%	100%	100%	85%	85%	100%
										$\leq 10^\circ$ *				
ST5541														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	70%	90%	100%	85%	70%	90%	100%	85%	100%	100%	85%	85%	100%	170%
LV3	50%	70%	100%	75%	50%	80%	100%	75%	100%	100%	75%	75%	100%	170%
LV4	x	x	100%	65%	40%	70%	100%	65%	100%	100%	65%	65%	100%	170%
										$\leq 10^\circ$ *				
ST5551														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	75%	80%	100%	85%	75%	90%	100%	85%	100%	100%	85%	85%	100%	170%
LV3	x	x	100%	70%	55%	85%	100%	70%	100%	100%	70%	70%	100%	170%
LV4	x	x	100%	55%	25%	75%	100%	55%	100%	100%	55%	55%	100%	170%
LV5	x	x	100%	40%	20%	70%	100%	40%	100%	100%	40%	40%	100%	170%
LV6	x	x	100%	30%	15%	65%	100%	35%	100%	100%	35%	35%	100%	170%
LV8	x	x	100%	15%	10%	60%	100%	25%	100%	100%	25%	25%	100%	170%

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!						
Straight	Slotting		Side rough			Side finish				Ramping		Helical			Drilling	
																
	a_p	f_z	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)	f_z	a_p (% of DC)
										$\leq 30^\circ$ *						
JS412	100	100	100	100	100	140	3	40	120	80	100	50	10	130	50	100
LV2										$\leq 10^\circ$ *						
JS413	100	100	100	100	100	150	3	40	120	70	50	50	10	130	X	X
LV3	X	X	25	60	240	120	3	40	230	70	50	50	10	130	X	X
										$\leq 30^\circ$ *						
JS452	100	100	100	100	100	140	3	35	120	70	100	50	10	130	50	100
LV3	50	60	75	60	50	120	3	40	100	70	70	50	10	130	20	10
										$\leq 10^\circ$ *						
JS453	100	100	100	100	100	140	3	35	120	70	50	50	10	130	20	10
LV3	X	X	25	60	240	120	3	40	230	70	70	50	10	130	20	10
										$\leq 30^\circ$ *						
S4521	100	100	100	100	100	140	3	35	120	70	100	50	10	130	50	100
LV3	50	60	75	60	50	120	3	40	100	70	70	50	10	130	20	10
										$\leq 30^\circ$ *						
S4531	100	100	100	100	100	140	3	35	120	70	100	50	10	130	50	100
LV3	X	X	25	60	240	120	3	40	100	70	70	50	10	130	20	10
										$\leq 30^\circ$ *						
S4651	X	X	100	100	100	140	3	35	100	X	X	100	2	130	X	X
LV4	X	X	100	85	200	120	3	40	200	X	X	60	1,5	130	X	X
										$\leq 30^\circ$ *						
JSE512	100	100	100	100	100	110	3	65	125	40	40	100	5	130	40	40
										$\leq 5^\circ$ *						
JSE513	100	100	100	100	100	110	3	85	150	100	100	100	5	130	50	40
LV3	30	100	30	50	200	110	3	85	250	X	X	X	X	X	X	X
LV4	X	X	X	X	X	60	3	80	350	X	X	X	X	X	X	X
										$\leq 5^\circ$ *						
JSE514	100	100	100	100	100	110	3	60	150	100	100	100	5	130	X	X
LV2	100	100	100	100	100	110	3	60	150	100	100	100	5	130	X	X
LV3	X	X	25	50	200	110	3	60	250	X	X	X	X	X	X	X
LV4	X	X	X	X	X	60	3	80	350	X	X	X	X	X	X	X
										$\leq 45^\circ$ *						
JS553	100	100	100	100	100	110	3	55	150	50	55	35	3	130	35	50
LV2	100	100	100	100	100	110	3	55	150	50	55	35	3	130	35	50
LV3	40	60	40	105	200	110	3	55	250	50	15	35	3	130	35	50
										$\leq 5^\circ$ *						
JS554	100	100	100	100	100	110	3	53	150	100	100	100	3	130	X	X
LV2	100	100	100	100	100	110	3	53	150	100	100	100	3	130	X	X
LV3	40	60	38	105	200	110	3	53	250	50	50	60	3	130	X	X
JS564	X	X	100	100	100	110	3	55	100	X	X	100	2	130	X	X
LV3	X	X	38	105	140	110	3	55	140	X	X	60	1,5	130	X	X
LV4	X	X	38	100	200	110	3	55	200	X	X	X	X	X	X	X
JS565	X	X	100	100	100	110	3	55	100	X	X	100	2	130	X	X
LV3	X	X	38	100	140	110	3	55	140	X	X	60	1,5	130	X	X
LV4	X	X	38	100	200	110	3	55	200	X	X	X	X	X	X	X

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!								
Straight	Slotting		Side rough			Side finish				Ramping		Helical			Drilling			
																		
	a_p	f_z	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)	f_z	a_p (% of DC)		
J28 LV2	100	100	100	100	100	140	3	100	135	$\leq 45^\circ$ *		40	25	100	10	130	25	60
J36 LV2	X	X	100	100	100	120	3	85	150	$\leq X^\circ$ *		X	X	X	X	X	X	X
J93F LV2	100	100	100	100	100	133	3	40	100	$\leq 20^\circ$ *		100	100	100	3	130	25	30
JH120 LV2	100	100	100	100	100	120	3	120	80	$\leq 1^\circ$		17	100	100	2	130	X	X
JH130 LV2	X	X	100	100	100	120	3	120	80	$\leq X^\circ$ *		X	X	X	X	X	X	X
JH142 LV2	X	X	100	100	100	110	3	80	70	$\leq X^\circ$ *		X	X	30	2	130	X	X
JH142 LV3	X	X	100	100	100	110	3	80	70	$\leq 45^\circ$ *		X	X	20	1	130	X	X
JH142 LV6	X	X	100	100	100	110	3	80	70	$\leq 45^\circ$ *		X	X	10	1	130	X	X
JH830 LV2	100	100	100	100	100	110	3	110	80	$\leq 45^\circ$ *		9	135	135	3	130	X	X
JH910 LV2	100	100	100	100	100	125	4	100	80	$\leq X^\circ$ *		15	140	140	3	130	X	X
JH910 LV3	80	80	100	80	80	125	4	80	65	$\leq X^\circ$ *		10	110	110	3	130	X	X
JH930 LV2	X	X	100	100	100	125	2	30	100	$\leq X^\circ$ *		X	X	X	X	X	X	X

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!						
Straight	Slotting		Side rough			Side finish				Ramping		Helical			Drilling	
																
	a_p	f_z	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)	f_z	a_p (% of DC)
										$\leq 5^\circ$ *						
JH40	100	100	100	100	100	100	3	35	100	83	55	55	25	130	55	80
LV2	100	100	100	100	100	100	3	35	100	83	55	55	25	130	55	80
LV3	100	100	100	100	100	100	3	35	100	83	55	55	25	130	55	80
										$\leq 45^\circ$ *						
JH410	100	100	100	100	100	125	2	25	100	100	67	67	40	130	67	80
LV2	75	60	80	60	100	125	2	25	100	60	40	40	40	130	40	50
LV2 (ML)	125	100	100	100	100	100	2	100	100	100	50	100	40	130	150	80
LV2 (TL)	125	100	100	100	100	100	2	100	100	100	50	100	40	130	150	80
LV2 (RS)	125	100	100	100	100	100	2	100	100	100	50	100	40	130	150	80
LV3 (RS)	95	95	80	100	100	100	2	100	100	50	50	50	40	130	75	40
										$\leq 45^\circ$ *						
JH421	100	100	100	100	100	100	4	35	100	100	100	100	25	130	45	80
LV2	100	100	100	100	100	100	4	35	100	100	100	100	25	130	45	80
										$\leq 30^\circ$ *						
JH440	100	100	100	100	100	125	3	40	100	100	100	100	5	130	X	X
LV2	100	100	100	100	100	125	3	40	100	100	100	100	5	130	X	X
										$\leq 5^\circ$ *						
JHP750	115	120	115	115	100	100	2	145	100	100	120	120	3	130	10	70
LV1	100	100	100	100	100	100	2	145	100	100	100	100	3	130	10	60
LV2	100	100	100	100	100	100	2	145	100	100	100	100	3	130	10	60
										$\leq 5^\circ$ *						
JHP951	100	100	100	100	100	158	2	50	113	20	100	125	3	130	6	20
LV2	100	100	100	100	100	158	2	50	113	20	100	125	3	130	6	20
										$\leq 10^\circ$ *						
JHP993	100	100	100	100	100	X	X	X	X	30	100	100	3	130	4	40
LV2	80	80	80	80	80	X	X	X	X	20	80	80	3	130	3	30
LV3	80	80	80	80	80	X	X	X	X	20	80	80	3	130	3	30
										$\leq X^\circ$ *						
JS520	X	X	100	100	100	133	2	65	100	X	X	X	X	X	X	X
LV2	X	X	X	X	X	133	2	65	175	X	X	X	X	X	X	X
LV3	X	X	X	X	X	133	2	65	175	X	X	X	X	X	X	X
										$\leq X^\circ$ *						
JS522	X	X	100	100	100	129	2	140	100	X	X	X	X	X	X	X
LV4	X	X	100	100	100	129	2	140	100	X	X	X	X	X	X	X
JS720	X	X	100	100	100	110	2	65	100	X	X	100	2	130	X	X
LV2	X	X	100	100	100	110	2	65	100	X	X	100	2	130	X	X
LV3	X	X	100	100	100	110	2	65	100	X	X	100	2	130	X	X
JS754	100	100	100	100	100	110	3	55	150	100	100	100	3	130	X	X
LV1	100	100	100	100	100	110	3	55	150	100	100	100	3	130	X	X
LV2	100	100	100	100	100	110	3	55	150	100	100	100	3	130	X	X
LV3	40	60	38	105	200	110	3	55	250	50	50	60	3	130	X	X
JS755	100	100	100	100	100	110	3	55	150	100	100	100	3	130	X	X
LV2	100	100	100	100	100	110	3	55	150	100	100	100	3	130	X	X
LV3	40	60	38	105	100	110	3	55	250	50	50	60	3	130	X	X

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version side milling cutting data then recalculate parameters!						
Straight	Slotting		Side rough			Side finish				Ramping		Helical			Drilling	
																
	a_p	f_z	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)	f_z	a_p (% of DC)
										$\leq X^\circ$						
JME542-JME562-JME564																
LV1	100	100	100	100	100	125	2	150	5	X	X	X	X	X	X	X
LV2	63	100	100	100	65	125	2	150	3	X	X	X	X	X	X	X
LV3	25	100	100	100	25	125	2	150	1	X	X	X	X	X	X	X
LV4 (TL)	18	100	100	100	20	125	2	150	1	X	X	X	X	X	X	X
LV4 (XL)	12	100	100	100	10	125	2	150	1	X	X	X	X	X	X	X
LV5	10	100	100	100	10	125	2	150	1	X	X	X	X	X	X	X
LV6	4	100	100	100	5	125	2	150	1	X	X	X	X	X	X	X
LV7	2	100	100	100	2	125	2	150	1	X	X	X	X	X	X	X
										$\leq X^\circ$						
JME142-JME144																
LV1	100	100	100	100	100	100	2	150	5	X	X	X	X	X	X	X
LV2	85	85	100	100	63	100	2	150	3	X	X	X	X	X	X	X
LV3	75	75	100	100	25	100	2	150	1	X	X	X	X	X	X	X
LV4	60	60	100	100	20	100	2	150	1	X	X	X	X	X	X	X
LV5	50	50	100	100	10	100	2	150	1	X	X	X	X	X	X	X
LV6	40	40	100	100	5	100	2	150	1	X	X	X	X	X	X	X
										$\leq X^\circ$						
JM403-JM404-JM406																
LV1	100	100	100	100	100	X	X	X	X	X	X	X	X	X	X	X
LV2	100	75	100	75	100	X	X	X	X	X	X	X	X	X	X	X
LV3 (L)	100	75	100	75	90	X	X	X	X	X	X	X	X	X	X	X
LV3 (TL)	90	75	100	75	70	X	X	X	X	X	X	X	X	X	X	X
LV4 (XL)	75	75	100	75	70	X	X	X	X	X	X	X	X	X	X	X
LV4 (SL)	75	75	100	75	45	X	X	X	X	X	X	X	X	X	X	X
LV5	50	50	100	50	30	X	X	X	X	X	X	X	X	X	X	X
JME642																
LV1	100	100	100	100	100	100	2	85	200	X	X	X	X	X	X	X
LV3	100	100	100	100	100	100	2	85	200	X	X	X	X	X	X	X
LV5	30	100	60	100	100	100	2	85	200	X	X	X	X	X	X	X
LV6	30	100	60	100	100	100	2	85	200	X	X	X	X	X	X	X
LV7	30	100	60	100	100	100	2	85	200	X	X	X	X	X	X	X
										≤ 2						
JC898																
LV3	X	X	100	100	100	X	X	X	X	X	50	80	3	130-160	X	X
										$\leq 5^\circ$						
JC899																
LV3	X	X	100	100	100	100	3	50	100	X	X	X	X	X	X	X

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!						
Straight	Slotting		Side rough			Side finish				Ramping		Helical			Drilling	
																
	a_p	f_z	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)	f_z	a_p (% of DC)
JHP170										$\leq 1^\circ$						
LV2	100	100	100	100	100	130	3	175	80	100	100	100	2	130	X	X
JHP490										$\leq 30^\circ$						
LV2	100	100	100	100	100	X	X	X	X	50	50	35	5	130	30	50
LV2 (E-Shape)	100	75	100	100	100	X	X	X	X	50	50	35	5	130	30	50
LV3	100	75	80	100	100	X	X	X	X	50	50	35	5	130	30	50
LV4	150	75	80	100	100	X	X	X	X	50	50	35	5	130	30	50
JHP760										$\leq 5^\circ$						
LV2	100	100	100	100	100	140	2	125	15	30	100	100	3	130	10	50
LV3	50	50	100	50	50	140	2	125	15	15	50	50	3	130	5	25
JHP770										$\leq 15^\circ$						
LV2	100	100	100	100	100	170	3	125	100	100	40	40	3	130	X	X
JHP780										$\leq 5^\circ$						
LV1	100	100	100	100	100	160	2	135	140	100	100	35	3	130	35	50
LV2	100	100	100	100	100	160	2	135	140	100	100	35	3	130	35	50
JD620										$\leq X^\circ$						
LV2	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
LV3	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
LV4	20	100	60	100	60	100	2	110	4	X	X	X	X	X	X	X
JD630										$\leq X^\circ$						
LV2	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
LV3	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
LV4	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
JD640										$\leq X^\circ$						
LV2	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
LV3	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X
LV4	100	100	100	100	100	100	2	110	4	X	X	X	X	X	X	X

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!								
Straight	Slotting		Side rough			Side finish				Ramping		Helical			Plunging			
																		
	a _p	f _z	a _e	f _z	a _p	v _c	a _e (% of DC)	f _z	a _p	a _p	f _z	f _z	a _p /360° (% of DC)	hole Ø (≥ % of DC)	v _c	a _e (% of DC)	f _z	a _e -sd (% of DC)
JHF181																		
LV1	100	100	100	100	100	X	X	X	X	X	X	100	3,4	130	X	X	X	X
LV2	80	85	100	85	80	X	X	X	X	X	X	85	3,0	130	X	X	X	X
LV3	60	70	100	70	60	X	X	X	X	X	X	70	2,5	130	X	X	X	X
										≤ 1,5° *								
JHF980																		
LV1	100	100	100	100	100	X	X	X	X	100	100	100	3	130	70	30	33	200
LV2	100	100	100	100	100	X	X	X	X	100	100	100	3	130	70	30	33	200
LV3	80	85	80	85	80	X	X	X	X	80	85	85	3	130	70	30	33	200
LV4	50	70	50	70	60	X	X	X	X	60	70	70	3	130	70	30	33	200

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!									
BALL	Slotting		Side rough			Side finish				Copy milling roughing			Copy milling finishing				Helical		
																			
	a _p	f _z	a _e	f _z	a _p	v _c	a _e (% of DC)	f _z	a _p	a _e	f _z	a _p	v _c	a _e (% of DC)	f _z	a _p	f _z	a _p /360° (% of DC)	hole Ø (≥ % of DC)
JSB512 LV2	X	X	100	100	100	125	3	125	10	X	X	X	X	X	X	X	100	5	130
JS532 LV1	X	X	100	100	100	125	3	125	10	X	X	X	X	X	X	X	75	5	130
JS532 LV2	X	X	70	100	70	125	3	125	10	X	X	X	X	X	X	X	75	5	130
JS532 LV3	X	X	X	X	X	125	3	125	10	X	X	X	X	X	X	X	X	X	X
JS533 LV1	X	X	100	100	100	125	3	125	15	X	X	X	X	X	X	X	75	5	130
JS533 LV2	X	X	75	75	75	125	3	125	15	X	X	X	X	X	X	X	75	5	130
JS534 LV1	X	X	100	100	100	125	3	170	20	X	X	X	X	X	X	X	100	3	130
JS534 LV2	X	X	70	100	70	125	3	170	20	X	X	X	X	X	X	X	100	3	130
JS534 LV3	X	X	70	100	70	125	3	170	20	X	X	X	X	X	X	X	100	3	130
JHB970 LV1	X	X	100	100	100	155	2	30	15	X	X	X	X	X	X	X	40	3	130
JHB970 LV2	X	X	100	100	100	155	2	30	15	X	X	X	X	X	X	X	40	3	130
JHB970 LV3	X	X	100	100	100	155	2	30	15	X	X	X	X	X	X	X	40	3	130
JHB720 LV2	X	X	100	100	100	125	2	90	75	X	X	X	X	X	X	X	40	3	130
JH112 LV1	X	X	100	100	100	110	2	70	100	X	X	X	X	X	X	X	20	2	130
JH112 LV2	X	X	100	100	100	110	2	70	100	X	X	X	X	X	X	X	20	2	130
JH112 LV3	X	X	100	100	100	110	1,6	55	100	X	X	X	X	X	X	X	X	X	X
JH112 LV4	X	X	100	100	100	130	1,4	55	100	X	X	X	X	X	X	X	X	X	X
JH112 LV5	X	X	100	100	100	130	1,4	50	100	X	X	X	X	X	X	X	X	X	X
JH112 LV6	X	X	100	100	100	130	1	35	100	X	X	X	X	X	X	X	X	X	X
JH150 LV2	X	X	100	100	100	165	1	90	35	X	X	X	X	X	X	X	30	2	130

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!				
BALL	Slotting		Side rough			Side finish				Ramping		Helical		
														
	a_p	f_z	a_e	f_z	a_p	v_c	a_e	f_z	a_p	a_p	f_z	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)
C5321														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	100%	80%	100%	80%	100%	80%	100%	80%	100%	70%	100%	85%	90%	170%
LV3	100%	64%	100%	64%	100%	64%	100%	64%	100%	65%	100%	85%	75%	160%
LV4	x	x	100%	52%	100%	52%	100%	52%	100%	65%	65%	70%	75%	160%
LV5	x	x	100%	40%	100%	40%	100%	40%	100%	x	x	65%	75%	160%
LV6	x	x	100%	33%	100%	33%	100%	33%	100%	x	x	60%	75%	160%
LV7	x	x	100%	26%	100%	26%	100%	26%	100%	x	x	55%	75%	160%
C5341														
LV1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	170%
LV2	100%	80%	100%	80%	100%	80%	100%	80%	100%	70%	100%	85%	90%	170%
LV3	100%	64%	100%	64%	100%	64%	100%	64%	100%	65%	100%	85%	75%	160%
LV4	x	x	100%	52%	100%	52%	100%	52%	100%	65%	65%	70%	75%	160%
LV5	x	x	100%	40%	100%	40%	100%	40%	100%	x	x	65%	75%	160%
LV6	x	x	100%	33%	100%	33%	100%	33%	100%	x	x	60%	75%	160%
LV7	x	x	100%	26%	100%	26%	100%	26%	100%	x	x	55%	75%	160%
LV8	x	x	100%	21%	100%	21%	100%	21%	100%	x	x	50%	75%	160%
ST5341														
LV2	x	x	100%	100%	100%	100%	100%	100%	100%	x	x	x	x	x
LV3	x	x	100%	85%	100%	85%	100%	85%	100%	x	x	x	x	x

*Max ramping angle

All values are percentages of original (100%) cutting data.

Recalculation

Use original standard version side rough cutting data then recalculate parameters!										Use original standard version slotting cutting data then recalculate parameters!									
BALL	Slotting		Side rough			Side finish				Copy milling roughing			Copy milling finishing				Helical		
																			
	a_p	f_z	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	a_e	f_z	a_p	v_c	a_e (% of DC)	f_z	a_p	f_z	$a_p/360^\circ$ (% of DC)	hole $\varnothing$ ($\geq$ % of DC)
JH160 Standard (2)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
JH450 Standard (2)	X	X	100	100	100	120	5	90	25	X	X	X	X	X	X	X	45	5	130
JH460 Standard (2)	X	X	100	100	100	120	5	90	25	X	X	X	X	X	X	X	X	X	X
JMB542-JMB562- JMB563																			
LV1	100	100	X	X	X	X	X	X	X	100	100	100	125	2	150	5	X	X	X
LV2	65	100	X	X	X	X	X	X	X	100	100	63	125	2	150	3	X	X	X
LV3	26	100	X	X	X	X	X	X	X	100	100	25	125	2	150	1	X	X	X
LV4 (TL)	20	100	X	X	X	X	X	X	X	100	100	19	125	2	150	1	X	X	X
LV4 (XL)	12	100	X	X	X	X	X	X	X	100	100	12	125	2	150	1	X	X	X
LV5	10	100	X	X	X	X	X	X	X	100	100	10	125	2	150	1	X	X	X
LV6	4	100	X	X	X	X	X	X	X	100	100	4	125	2	150	1	X	X	X
LV7	2	100	X	X	X	X	X	X	X	100	100	2	125	2	150	1	X	X	X
JMB112																			
LV1	100	100	X	X	X	X	X	X	X	100	100	100	118	2	120	5	X	X	X
LV2	65	100	X	X	X	X	X	X	X	64	85	85	118	2	120	3	X	X	X
LV3	26	100	X	X	X	X	X	X	X	56	75	75	118	2	120	1	X	X	X
LV4	20	100	X	X	X	X	X	X	X	45	60	60	118	2	120	1	X	X	X
LV5	10	100	X	X	X	X	X	X	X	38	50	50	118	2	120	1	X	X	X
LV6	4	100	X	X	X	X	X	X	X	30	40	40	118	2	120	1	X	X	X
JM413-JM416																			
LV1	X	X	100	100	100	100	5	40	35	X	X	X	X	X	X	X	X	X	X
LV2	X	X	100	60	100	100	5	40	15	X	X	X	X	X	X	X	X	X	X
LV3	X	X	100	80	100	100	5	40	15	X	X	X	X	X	X	X	X	X	X
LV4	X	X	100	60	75	100	5	40	10	X	X	X	X	X	X	X	X	X	X
JMB642																			
LV1	100	100	100	100	100	100	2	85	200	X	X	X	X	X	X	X	X	X	X
LV3	100	100	100	100	100	100	2	85	200	X	X	X	X	X	X	X	X	X	X
LV5	30	100	60	100	100	100	2	85	200	X	X	X	X	X	X	X	X	X	X
LV6	30	100	60	100	100	100	2	85	200	X	X	X	X	X	X	X	X	X	X
LV7	30	100	60	100	100	100	2	85	200	X	X	X	X	X	X	X	X	X	X
JD660										≤ 2									
LV1	X	X	100	100	100	100	2	100	100	X	X	X	X	X	X	X	X	X	X
LV2	X	X	100	100	100	100	2	100	100	X	X	X	X	X	X	X	X	X	X
LV3	X	X	100	100	100	100	2	100	100	X	X	X	X	X	X	X	X	X	X
LV4	X	X	100	100	100	100	2	100	100	X	X	X	X	X	X	X	X	X	X
LV5	X	X	100	100	100	100	2	100	100	X	X	X	X	X	X	X	X	X	X

*Max ramping angle

All values are percentages of original (100%) cutting data.

Nomenclature and formulae

RPM	
$n = \frac{v_c \cdot 1000}{\pi \cdot D_c}$	(rev/min)
Cutting speed	
$v_c = \frac{n \cdot \pi \cdot D_c}{1000}$	(m/min)
Feed speed	
$v_f = n \cdot Z_n \cdot f_z$	(mm/min)
Feed per revolution	
$f = Z_n \cdot f_z$	(mm/rev)
Metal removal rate	
$Q = \frac{a_e \cdot a_p \cdot v_f}{1000}$	(cm ³ /min)
Cutting speed and RPM for copying	
$v_c = \frac{n \cdot \pi \cdot D_w}{1000}$	(m/min)
$n = \frac{v_c \cdot 1000}{\pi \cdot D_w}$	(RPM)
$D_w = 2 \cdot \sqrt{a_p (D_c - a_p)}$	(mm)

Calculation of a_p vs. overhang length:

If the overhang length (XS) is longer than 4 x DC and Cylindrical shanks are used it is important to adopt another depth of cut (a_p) value than that indicated in the table.

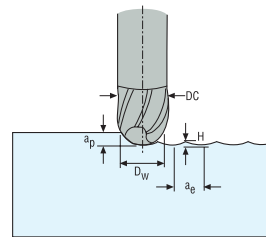
Use the following formula to calculate the new a_p value

$$a_{p, \text{new}} = a_p \times (4 \times \text{DC} / \text{XS})^2$$

Profile height

$$H = \frac{D_c}{2} - \sqrt{\frac{D_c^2 - a_e^2}{2}}$$

$$D_w = 2 \cdot \sqrt{a_p (D_c - a_p)} \quad (\text{mm})$$



Profile height H (μm)

DC	Pitch a_e (μm)						
	0,06	0,08	0,11	0,15	0,20	0,3	0,45
1	0,90	1,60	3,00	5,70	10,0	23,0	53,0
2	0,45	0,80	1,50	2,80	5,0	11,0	26,0
4	0,23	0,40	0,76	1,40	2,5	5,60	13,0
6	0,15	0,27	0,50	0,94	1,7	3,80	8,40
8	0,11	0,20	0,38	0,70	1,3	2,80	6,30
10	0,09	0,16	0,30	0,56	1,0	2,30	5,10
12	0,08	0,13	0,25	0,47	0,83	1,90	4,20

a_p = Depth of cut mm/axial depth of cut (mm)
 a_e = Width of cut mm/radial depth of cut (mm)
DC = Cutter diameter
 f = Feed per revolution (mm/rev)
 f_z = Feed per tooth (mm/tooth)
 Z_n = No. of teeth
 n = RPM (rev/min)
 Q = Material removal rate (cm³/min)
 v_c = Cutting speed (m/min)
 v_f = Feed speed (mm/min)
 D_w = Working diameter

Operation recommendations

Helical interpolation ramping

The table below shows the diameter recommendations for Helical interpolation ramping

Recommended diameter of hole for helical interpolation ramping

Diameter of end mill DC	Diameter of hole
1-2,5	1,4 x DC
3-6	1,3 x DC
8-12	1,2 x DC
16-32	1,15 x DC

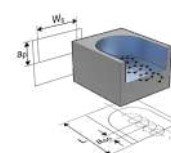


Trochoidal method

The figure below shows a method often called the trochoidal method for milling slots

Recommendation of width of slot

Diameter of end mill DC	Slot width
1-2,5	1,8 x DC
3-6	1,6 x DC
8-12	1,4 x DC
16-32	1,2 x DC





MINIMASTER™

Minimaster™ is a unique, versatile end milling system that can combine different solutions for optimum accessibility and maximum stability and security.

The flexible two-piece design combines shanks and inserts to save time, money and create a versatile tool that enables users to find a solution for almost every application – whether they need to minimize the overhang, attain maximum stability, or more.

- Square Shoulder range: 6-20 mm (.25 - .75 inch)
- Ballnose range: 6-20 mm (.25 - .75 inch)
- Center Drilling/Chamfering range: 6-19,05mm (.25 - .750 inch)
- High Feed range: 8-12 mm (.375 - .625 inch)
- Plunging range: 6-16 mm (.25 - .625 inch)
- Concave Radius range: 12 mm (.472 inch)

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

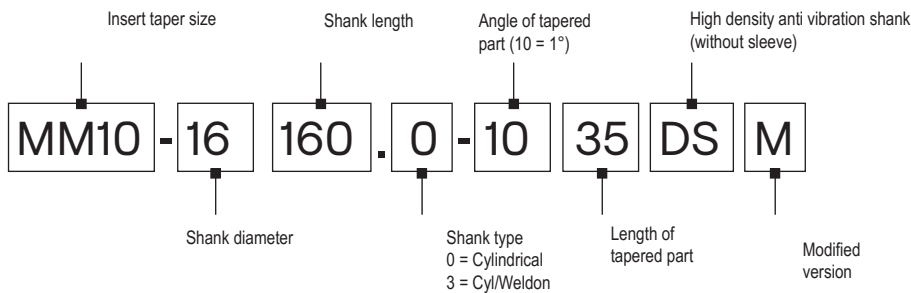
Graphite

X-Heads

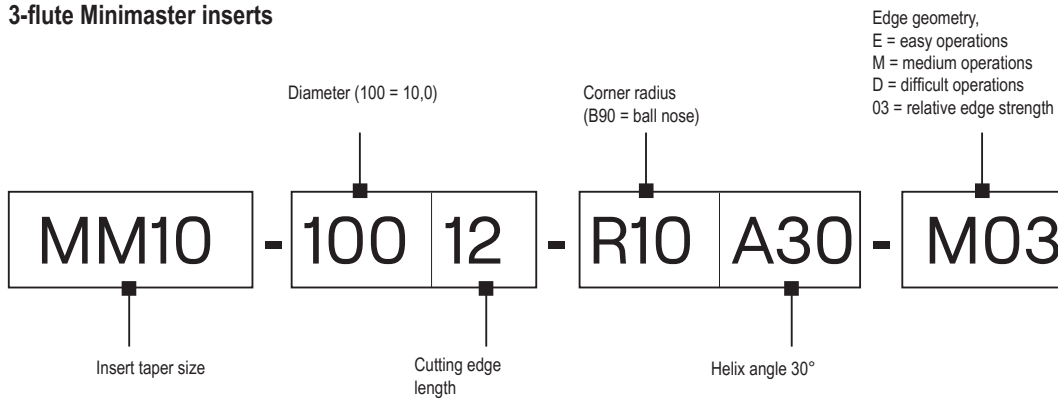
Minimaster

Code keys

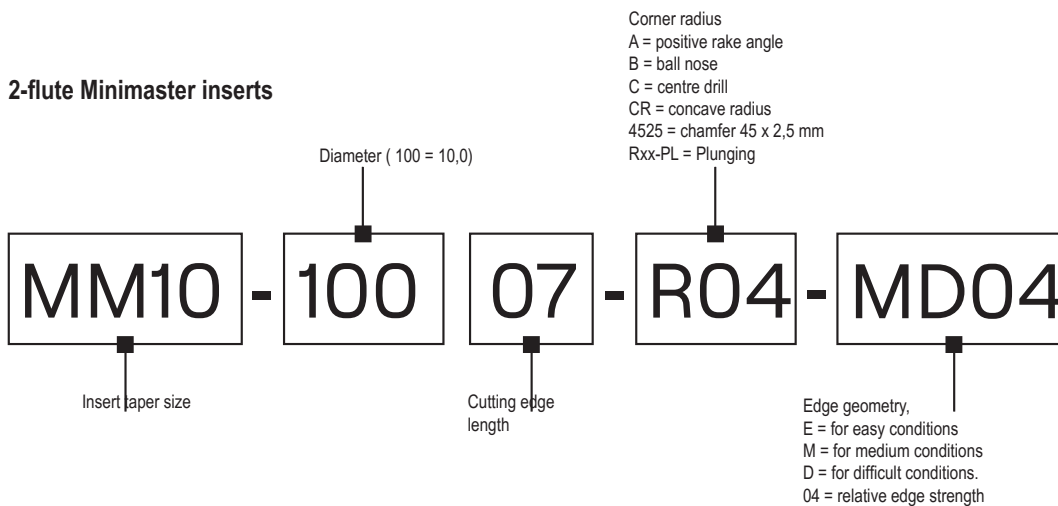
Shanks



3-flute Minimaster inserts



2-flute Minimaster inserts



Note that parts of the code can vary for different types of insert or shanks

Internal through coolant



Universal

Steel and cast iron

Stainless steel and S-materials

Stainless steel and S-materials

Non ferrous

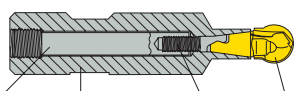
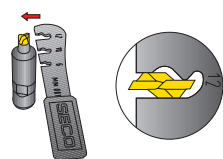
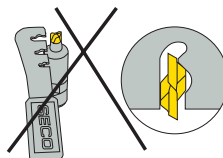
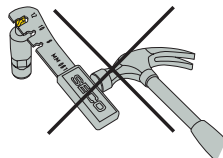
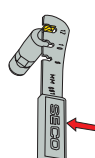
Hard

Graphite

X-Heads

Minimaster

Mounting instructions for 2-flute Minimaster

Torque wrench	
 Sleeve Shank Tension screw Insert	The sleeve must be securely tightened in the shank before the tension screw and insert are fitted. If the wrench cannot be used for changing the insert (If the insert has broken off or jammed in the shank) , the sleeve can be released, which will also release the insert. Use Allen key (turn it anti-clockwise) to back off the sleeve until the insert is free. Re-tighten the sleeve in the shank before fitting the tension screw and the new insert. For 3-flute Minimaster another key (MM0416) must be used (Key grip on hexagonal part of the insert.)
	Make sure that the wrench is used correctly
	If the wrench is used on the wrong side, it will cause damage
	Do not use excessive force
	Normal hand-power is quite sufficient

Selection guide

1. Select taper size

The design of the workpiece and the machining operations determines suitable taper size. Select the largest possible taper size for best strength and stability.

2. Select insert

- Use the tables beginning on page 790 to classify the workpiece material into a Seco material group.
- Look up the pages for the selected taper size and choose a suitable insert in the insert selection table.

3. Select shank

- Look up the pages for the selected taper size and choose a suitable shank in the tool data table.
- Always choose the shortest shank possible to achieve the best possible stability.

4. Select cutting data

- Cutting speed recommendations are found in the cutting data tables for each selected taper size. Cutting data recommendations are based on stable conditions and might therefore need to be adjusted depending on the stability in the application (tooling, machine & workpiece fixturing). General rule for max ap in slotting is $DC \cdot 0.3 = \text{Max APMXS}$. (See figure 1)
- Feed and cutting speed recommendations are found in the cutting data conversion table.
- Maximum RPM that for safety reasons should never be exceeded, are shown on page N/A.
- If the cutter is not fully engaged the feed per tooth and the cutting speed should be increased compared to the recommendations for a fully engaged cutter. The reason for that is to keep the average chip thickness and the working temperature in the cutting zone.
- Divide the radial depth of cut with the cutter diameter to get the actual cutter engagement percentage ($a_e/DC\%$), for ball nose cutters use the effective working diameter D_w instead of DC (See figure 2 & 6)
- Use the percentage to get a correct feed per tooth and cutting speed recommendation for the actual cutter engagement.

5. General

- When milling in corners and bottoms of cavities the feed rate should be reduced due to the increase of the average chip thickness. Use the feed per tooth recommendations for a fully engaged cutter.
- When steep down copying with an angle bigger than 40° or steep up copying with an angle bigger than 30° in combination with small depths of cut, use the diameter (DC) as working diameter instead of D_w .
- When calculating feed per revolution and feed speed, always use the ZEFP-value. That is the effective number of teeth to use for cutting data calculations. The ZEFP-value can be found in the insert selection table.

Note! There will be a deterioration in the surface finish on the workpiece when the feed rate is increased. (See figure 3 & 5)

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

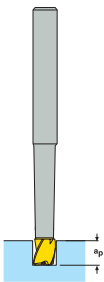
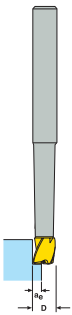
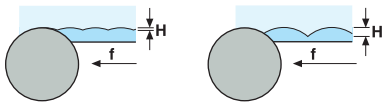
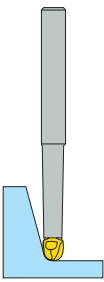
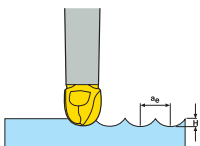
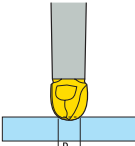
Hard

Graphite

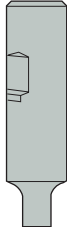
X-Heads

Minimaster

Minimaster figures

Universal	Figure 1	Figure 2
Steel and cast iron		
Stainless steel and S-materials	Figure 3	Figure 4
Non ferrous		
Hard	Figure 5	Figure 6
Plastic and cfrp		
Graphite		
X-Heads		
Minimaster		

Shank design

Design 1, Keyway shank	Design 2, Cylindrical/Weldon back end and 90° front
	
Design 3, Cylindrical/Weldon back end tapered front 87°/89°	Design 4, Cylindrical/Weldon back end tapered front 80°/85°/87°
	
Design 5, Cylindrical back end double tapered front end 89°/85°	
	

Universal

 Steel and cast
iron

 Stainless steel
and S-materials

 Stainless steel
and S-materials

Non ferrous

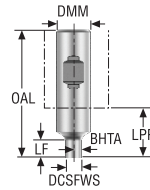
Hard

Graphite

X-Heads

Minimaster

MM06 Shank – Metric



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		mm	mm	mm	mm	mm					kg	
MM06-10040.0-0007	00094747	5,75	10,0	7,0	7,0	40,0	0,0	2	■	80000	0,1	2
MM06-10050.0-0007DS	02580666	5,75	10,0	7,0	7,0	50,0	0,0	2	■	80000	0,1	3
MM06-10075.0-3041DS	02580701	5,75	10,0	40,5	35,0	75,0	3,0	4	■	80000	0,1	3
MM06-10100.0-1035DS	02580713	5,75	10,0	35,0	60,0	100,0	1,0	3	■	80000	0,1	3
MM06-12070.3-0005	75080695	5,75	12,0	5,0	25,0	70,0	0,0	2	■	80000	0,1	1
MM06-12065.0-0000	75080694	5,7	12,0	0,0	15,0	65,0	60,0	1	■	80000	0,1	1
MM06-12120.0-1050DS	02580714	5,75	12,0	50,0	75,0	120,0	1,0	3	■	80000	0,2	3
MM06-16075.3-3009	75080696	5,75	16,0	9,0	27,0	75,0	3,0	3	■	80000	0,1	1
MM06-16110.3-5058	75080697	5,75	16,0	58,6	62,0	110,0	5,0	4	■	80000	0,2	4
MM06-16140.0-1020M	00027102	5,75	16,0	20,0	92,0	140,0	1,0	3	■	80000	0,2	5
MM06-16140.0-1035M	00027103	5,75	16,0	35,0	92,0	140,0	1,0	3	■	80000	0,2	6
MM06-16140.0-1050M	00094748	5,75	16,0	50,0	92,0	140,0	1,0	3	■	80000	0,2	6
MM06-16090.0-0012DS	02580670	5,75	16,0	12,0	42,0	90,0	0,0	2	■	80000	0,3	3
MM06-16095.0-0024DS	02580673	5,75	16,0	24,0	47,0	95,0	0,0	2	■	80000	0,3	3
MM06-16140.0-1050DS	02580717	5,75	16,0	50,0	92,0	140,0	1,0	3	■	80000	0,3	3
MM06-16140.0-1035DS	02580716	5,75	16,0	35,0	92,0	140,0	1,0	3	■	80000	0,4	3
MM06-20250.0-1035DS	02580718	5,75	20,0	35,0	190,0	250,0	1,0	5	■	80000	0,9	3

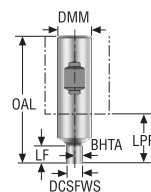
Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-035046	MM06-03518	H05-4
2	MM-035023	MM06-03518	H05-4
3	–	MM06-03518	–
4	MM-035091	MM06-03518	H05-4
5	MM-035046	MM06-03544	H05-4
6	MM-035046	MM06-03564	H05-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

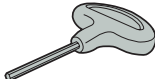
MM06 Shank – Inch



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		inch	inch	inch	inch	inch					lbs	
MM06-0.38-1.6-0-0002	00096107	0.224	0.375	0.276	0.276	1.575	0,0	2	■	80000	0.220	2
MM06-0.50-2.8-3-0002	00096108	0.224	0.500	0.197	0.984	2.756	0,0	2	■	80000	0.220	1
MM06-0.50-2.6-0-0000	00096106	0.224	0.500	0	0.787	2.559	60,0	1	■	80000	0.220	1
MM06-0.62-3.0-3-3003	00096116	0.224	0.625	0.354	1.063	2.953	3,0	1	■	80000	0.220	1
MM06-0.62-4.3-3-5022	00096117	0.224	0.625	2.291	2.441	4.331	5,0	2	■	80000	0.440	4
MM06-0.62-5.5-0-1007	00096111	0.224	0.625	0.787	3.622	5.512	1,0	3	■	80000	0.440	5
MM06-0.62-5.5-0-1013	00096112	0.224	0.625	1.378	3.622	5.512	1,0	3	■	80000	0.440	6
MM06-0.62-5.5-0-1019	00096114	0.224	0.625	1.969	3.622	5.512	1,0	3	■	80000	0.440	6
MM06-0.62-3.5-0-0004DS	02593394	0.224	0.625	0.472	1.654	3.543	0,0	2	■	80000	0.660	3
MM06-0.62-3.7-0-0009DS	02593395	0.224	0.625	0.945	1.850	3.740	0,0	2	■	80000	0.660	3
MM06-0.62-5.5-0-1013DS	02593396	0.224	0.625	1.378	3.622	5.512	1,0	3	■	80000	0.880	3
MM06-0.62-5.5-0-1019DS	02593397	0.224	0.625	1.969	3.622	5.512	1,0	3	■	80000	0.660	3
MM06-0.75-10.0-0-1013DS	02593399	0.224	0.750	1.378	7.874	9.843	1,0	5	■	80000	1.760	3

Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-035046	MM06-03518	H05-4
2	MM-035023	MM06-03518	H05-4
3	–	MM06-03518	–
4	MM-035091	MM06-03518	H05-4
5	MM-035046	MM06-03544	H05-4
6	MM-035046	MM06-03564	H05-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

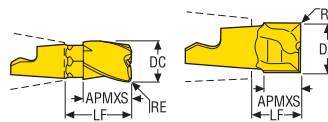
Hard

Graphite

X-Heads

Minimaster

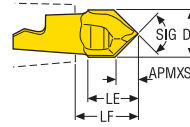
Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench		Grades			
												Coated			
	mm Inch	mm Inch	mm Inch	mm Inch								T60M	F15M	F30M	F40M
MM06-05804T-R02-D02	5,8 0.228	4,1 0.161	0,2 0.008	5,1 0.201	15,0	7,2	11,0	0	2	MM0612		■			
MM06-05807-R02A30-M02	5,8 0.228	7,5 0.295	0,2 0.008	9,9 0.390	15,0	7,2	11,0	30	3	MM0416	✓				■
MM06-06004-M02	6,0 0.236	4,1 0.161	—	5,1 0.201	15,0	7,4	11,8	0	2	MM0612		■			
MM06-06004-R04-MD02	6,0 0.236	4,1 0.161	0,4 0.016	5,1 0.201	15,0	7,4	11,0	0	2	MM0612		■		■	
MM06-06004-R10-MD02	6,0 0.236	4,1 0.161	1,0 0.039	5,1 0.201	15,0	7,4	9,8	0	2	MM0612				■	
MM06-06007-A30-E02	6,0 0.236	7,5 0.295	—	9,9 0.390	15,0	7,4	11,8	30	3	MM0416	✓			■	
MM06-06007-R05A30-M02	6,0 0.236	7,5 0.295	0,5 0.020	9,9 0.390	15,0	7,4	10,8	30	3	MM0416	✓				■
MM06-06007-R10A30-D02	6,0 0.236	7,5 0.295	1,0 0.039	9,9 0.390	15,0	7,4	9,8	30	3	MM0416	✓			■	
MM06-06007-R10A30-E02	6,0 0.236	7,5 0.295	1,0 0.039	9,9 0.390	15,0	7,4	9,8	30	3	MM0416	✓			■	
MM06-06007-R10A30-M02	6,0 0.236	7,5 0.295	1,0 0.039	9,9 0.390	15,0	7,4	9,8	30	3	MM0416	✓				■
MM06-06007-R20A30-M02	6,0 0.236	7,5 0.295	2,0 0.079	9,9 0.390	15,0	7,4	7,8	30	3	MM0416	✓				■
MM06-06407-A30-E02	6,35 0.250	7,5 0.295	—	9,9 0.390	15,0	7,8	12,5	30	3	MM0416	✓			■	
MM06-06407-R04A30-M02	6,35 0.250	7,5 0.295	0,4 0.016	9,9 0.390	15,0	7,8	11,7	30	3	MM0416	✓				■
MM06-06407-R08A30-M02	6,35 0.250	7,5 0.295	0,8 0.031	9,9 0.390	15,0	7,8	10,9	30	3	MM0416	✓				■

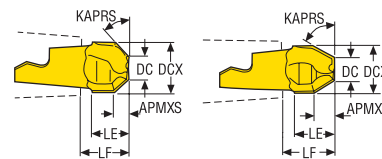
Centre drilling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	LE	LF	SIG°	ZEFP	Wrench	Grades			
								Coated			
	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM06-06003-C120-M02	6,0 0.236	1,6 0.063	6,27 0.247	7,19 0.283	120,0	2	MM0612	■			
MM06-06003-C90-M02	6,0 0.236	2,86 0.113	6,0 0.236	7,12 0.280	90,0	2	MM0612	■			

Chamfering



—For Torque keys and torque values, see page 787

Designation	DCX	DC	APMXS	RE	LE	LF	KAPRS°	ZEFP	Wrench	Grades			
										Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM06-06004-4515-E02	6,0 0.236	1,8 0.071	2,1 0.083	0,2 0.008	4,0 0.157	5,1 0.201	45,0	2	MM0612	■			
MM06-06004-6015-E02	6,0 0.236	3,14 0.124	2,4 0.094	0,2 0.008	4,6 0.181	5,75 0.226	60,0	2	MM0612	■			

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

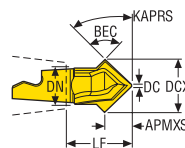
Hard

Graphite

X-Heads

Minimaster

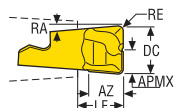
Double chamfering



—For Torque keys and torque values, see page 787

Designation	DCX	DC	APMXS	DN	LF	BEC°	KAPRS°	ZEFP	Wrench	Grades			
										Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch					T60M	F15M	F30M	F40M
MM06-08008-D4510P-M02	8,0 0.315	0,6 0.024	3,7 0.146	6,0 0.236	8,5 0.335	90,0	45,0	2	MM0612		■		

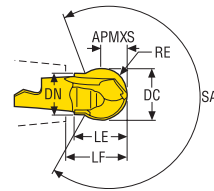
Plunge milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXE	RE	AZ	LF	RA°	ZEFP	Wrench	Grades			
									Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM06-06004-R10-PL-MD02	6,0 0.236	3,0 0.118	1,0 0.039	4,3 0.169	5,08 0.200	5,0	2	MM0612			■	

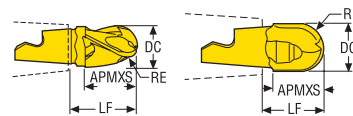
Precision inserts for semi-finishing in all materials



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LE	DN	LF	SA°	ZEFP	Wrench	Grades			
										Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM06-08008-B120PF-M01	8,0 0.315	4,0 0.157	4,0 0.157	8,0 0.315	6,0 0.236	8,73 0.344	263,0	2	MM0612		■		
MM06-08008-B120P-M03	8,0 0.315	4,0 0.157	4,0 0.157	8,0 0.315	6,0 0.236	8,73 0.344	263,0	2	MM0612			■	

Copy milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	FHA°	ZEFP	Wrench		Grades			
									Coated			
	mm Inch	mm Inch	mm Inch	mm Inch					T60M	F15M	F30M	F40M
MM06-06006-B90-MD02	6,0 0.236	6,1 0.240	3,0 0.118	7,06 0.278		2	MM0612		■		■	
MM06-06006-B90PF-M01	6,0 0.236	5,2 0.205	3,0 0.118	7,04 0.277		2	MM0612			■		
MM06-06006-B90P-M02	6,0 0.236	5,2 0.205	3,0 0.118	7,04 0.277		2	MM0612				■	
MM06-06006-B90S-E02	6,0 0.236	6,1 0.240	3,0 0.118	7,06 0.278		2	MM0612				■	
MM06-06007-B90A30-E02	6,0 0.236	7,4 0.291	3,0 0.118	9,85 0.388	30,0	3	MM0416	✓			■	
MM06-06007-B90A30-M02	6,0 0.236	7,4 0.291	3,0 0.118	9,85 0.388	30,0	3	MM0416	✓				■
MM06-06406-B90P-M02	6,35 0.250	5,4 0.213	3,175 0.125	7,22 0.284		2	MM0612				■	
MM06-06406-B90S-E02	6,35 0.250	6,3 0.248	3,175 0.125	7,24 0.285		2	MM0612				■	

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster

MM06 – Slot and Side milling – Insert selection – Metric/ Inch

	SMG		a_p	f_z			
				100%	40%	20%	10%
Universal	P1	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,030 0,0012	0,030 0,0012	0,036 0,0014	0,048 0,0019
	P2	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,030 0,0012	0,030 0,0012	0,036 0,0014	0,048 0,0019
Steel and cast iron	P3	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,034 0,0013	0,046 0,0018
	P4	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,034 0,0013	0,044 0,0017
	P5	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,032 0,0013	0,044 0,0017
	P6	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,032 0,0013	0,044 0,0017
	P7	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,032 0,0013	0,044 0,0017
	P8	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,032 0,0013	0,044 0,0017
Stainless steel and S-materials	P11	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,032 0,0013	0,044 0,0017
	P12	MM06-06007-R05A30-M02 F40M	1,0 0,040	0,020 0,00080	0,020 0,00080	0,022 0,00085	0,030 0,0012
	M1	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,030 0,0012	0,030 0,0012	0,036 0,0014	0,048 0,0019
	M2	MM06-06007-R05A30-M02 F40M	1,3 0,050	0,028 0,0011	0,028 0,0011	0,032 0,0013	0,044 0,0017
Non ferrous	M3	MM06-06007-R05A30-M02 F40M	1,0 0,040	0,024 0,00095	0,024 0,00095	0,026 0,0010	0,036 0,0014
	M4	MM06-06007-R05A30-M02 F40M	0,80 0,032	0,022 0,00085	0,022 0,00080	0,024 0,00095	0,030 0,0012
	M5	MM06-06007-R05A30-M02 F40M	0,80 0,032	0,022 0,00085	0,020 0,00080	0,024 0,00095	0,030 0,0012
	K1	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,036 0,0014	0,034 0,0013	0,038 0,0015	0,050 0,0020
	K2	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
Hard	K3	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	K4	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	K5	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,030 0,0012	0,028 0,0011	0,030 0,0012	0,040 0,0016
	K6	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	K7	MM06-06007-R10A30-D02 F30M	1,3 0,050	0,030 0,0012	0,028 0,0011	0,030 0,0012	0,040 0,0016
Plastic and cfrp	N1	MM06-06007-R10A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,048 0,0019	0,065 0,0026
	N2	MM06-06007-R10A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,048 0,0019	0,065 0,0026
	N3	MM06-06007-R10A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,048 0,0019	0,065 0,0026
	N11	MM06-06007-R10A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,048 0,0019	0,065 0,0026
Graphite	S1	MM06-06007-R10A30-D02 F30M	0,80 0,032	0,028 0,0011	0,026 0,0010	0,025 0,0010	0,032 0,0013
	S2	MM06-06007-R10A30-D02 F30M	0,80 0,032	0,028 0,0011	0,026 0,0010	0,025 0,0010	0,032 0,0013
	S3	MM06-06007-R10A30-D02 F30M	0,80 0,032	0,026 0,0010	0,025 0,0010	0,024 0,00095	0,028 0,0012
	S11	MM06-06007-R05A30-M02 F40M	0,90 0,036	0,024 0,00095	0,024 0,00095	0,026 0,0010	0,036 0,0014
X-Heads	S12	MM06-06007-R05A30-M02 F40M	0,90 0,036	0,024 0,00095	0,024 0,00095	0,026 0,0010	0,036 0,0014
	S13	MM06-06007-R05A30-M02 F40M	0,80 0,032	0,022 0,00085	0,020 0,00080	0,024 0,00095	0,030 0,0012
	H5	MM06-06007-R10A30-D02 F30M	1,0 0,040	0,025 0,0010	0,024 0,00095	0,024 0,00095	0,030 0,0012
	H8	MM06-06007-R10A30-D02 F30M	0,90 0,036	0,020 0,00080	0,019 0,00075	0,018 0,00070	0,024 0,00095
Minimaster	H11	MM06-06007-R10A30-D02 F30M	1,0 0,040	0,025 0,0010	0,024 0,00095	0,024 0,00095	0,030 0,0012
	H12	MM06-06007-R10A30-D02 F30M	0,90 0,036	0,020 0,00080	0,019 0,00075	0,018 0,00070	0,024 0,00095
	H21	MM06-06007-R10A30-D02 F30M	0,90 0,036	0,020 0,00080	0,019 0,00075	0,018 0,00070	0,024 0,00095

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM06 – Slot and Side milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F30M				F40M				T60M				
	100%	40%	20%	10%	100%	40%	20%	10%	100%	40%	20%	10%	
P1	280	350	395	435	270	335	375	415	220	270	300	330	Universal
	920	1150	1300	1425	890	1100	1225	1350	720	890	980	1075	
P2	275	340	380	420	260	325	365	400	210	260	295	320	Steel and cast iron
	900	1125	1250	1375	850	1075	1200	1300	690	850	970	1050	
P3	240	295	330	365	225	285	315	350	185	230	255	280	Steel and cast iron
	790	970	1075	1200	740	940	1025	1150	610	750	840	920	
P4	210	260	295	320	200	250	280	305	160	200	225	245	Steel and cast iron
	690	850	970	1050	660	820	920	1000	520	660	740	800	
P5	200	250	280	310	190	240	265	295	155	190	215	235	Steel and cast iron
	660	820	920	1025	620	790	870	970	510	620	710	770	
P6	225	285	315	345	215	270	300	330	175	215	240	265	Stainless steel and S-materials
	740	940	1025	1125	710	890	980	1075	570	710	790	870	
P7	215	265	295	325	205	255	285	310	165	205	230	250	Stainless steel and S-materials
	710	870	970	1075	670	840	940	1025	540	670	750	820	
P8	200	250	280	305	190	240	265	290	155	190	215	235	Stainless steel and S-materials
	660	820	920	1000	620	790	870	950	510	620	710	770	
P11	210	260	290	320	200	245	275	305	160	200	220	245	Stainless steel and S-materials
	690	850	950	1050	660	800	900	1000	520	660	720	800	
P12	130	160	175	195	125	150	170	185	100	125	135	150	Stainless steel and S-materials
	425	520	570	640	410	490	560	610	330	410	445	490	
M1	—	—	—	—	210	265	295	320	170	210	235	260	Stainless steel and S-materials
	—	—	—	—	690	870	970	1050	560	690	770	850	
M2	—	—	—	—	175	215	240	265	140	170	195	210	Stainless steel and S-materials
	—	—	—	—	570	710	790	870	460	560	640	690	
M3	—	—	—	—	135	165	190	205	110	135	150	165	Stainless steel and S-materials
	—	—	—	—	445	540	620	670	360	445	490	540	
M4	—	—	—	—	105	130	145	155	85	105	115	125	Stainless steel and S-materials
	—	—	—	—	345	425	475	510	280	345	375	410	
M5	—	—	—	—	85	105	120	130	70	85	95	105	Non ferrous
	—	—	—	—	280	345	395	425	230	280	310	345	
K1	215	270	305	335	205	260	290	315	165	210	230	255	Non ferrous
	710	890	1000	1100	670	850	950	1025	540	690	750	840	
K2	190	235	265	295	180	225	255	280	150	180	205	225	Non ferrous
	620	770	870	970	590	740	840	920	490	590	670	740	
K3	160	200	225	250	155	190	215	235	125	155	175	190	Non ferrous
	520	660	740	820	510	620	710	770	410	510	570	620	
K4	155	190	215	235	145	180	205	225	120	145	165	180	Hard
	510	620	710	770	475	590	670	740	395	475	540	590	
K5	95	115	130	145	90	110	125	135	70	90	100	110	Hard
	310	375	425	475	295	360	410	445	230	295	330	360	
K6	135	170	190	210	130	160	180	200	105	130	145	160	Hard
	445	560	620	690	425	520	590	660	345	425	475	520	
K7	120	150	165	180	115	140	160	175	90	115	125	140	Hard
	395	490	540	590	375	460	520	570	295	375	410	460	
N1	1650	2050	2325	2525	1575	1975	2200	2400	1275	1575	1775	1950	Graphite
	5425	6725	7625	8275	5175	6475	7225	7875	4175	5175	5825	6400	
N2	670	830	930	1025	640	790	890	970	510	640	710	790	Graphite
	2200	2725	3050	3375	2100	2600	2925	3175	1675	2100	2325	2600	
N3	445	560	620	680	425	530	590	650	340	425	475	530	Graphite
	1450	1825	2025	2225	1400	1750	1925	2125	1125	1400	1550	1750	
N11	510	630	710	780	485	600	680	740	390	485	540	600	Graphite
	1675	2075	2325	2550	1600	1975	2225	2425	1275	1600	1775	1975	
S1	50	65	70	75	49	60	65	75	39	49	55	60	X-Heads
	165	215	230	245	160	195	215	245	130	160	180	195	
S2	41	50	55	60	39	48	55	60	32	39	44	48	X-Heads
	135	165	180	195	130	155	180	195	105	130	145	155	
S3	36	44	49	55	34	42	47	50	27	34	38	41	X-Heads
	120	145	160	180	110	140	155	165	90	110	125	135	
S11	—	—	—	—	70	85	95	105	55	70	75	85	X-Heads
	—	—	—	—	230	280	310	345	180	230	245	280	
S12	—	—	—	—	48	60	65	70	38	48	55	60	X-Heads
	—	—	—	—	155	195	215	245	125	155	180	195	
S13	—	—	—	—	27	34	38	41	22	27	30	33	X-Heads
	—	—	—	—	90	110	125	135	70	90	100	110	
H5	43	55	60	65	41	50	55	60	33	41	45	50	Minimaster
	140	180	195	215	135	165	180	195	110	135	150	165	
H8	44	55	60	65	42	50	60	65	34	42	47	50	Minimaster
	145	180	195	215	140	165	195	215	110	140	155	165	
H11	55	65	75	85	50	65	70	80	42	50	60	65	Minimaster
	180	215	245	280	165	215	230	260	140	165	195	215	
H12	80	95	110	120	75	90	105	115	60	75	85	90	Minimaster
	260	310	360	395	245	295	345	375	195	245	280	295	
H21	44	55	60	65	42	50	60	65	34	42	47	50	Minimaster
	145	180	195	215	140	165	195	215	110	140	155	165	

MM06 Z3-Copy milling – Insert selection – Roughing – mm/Inch

	SMG		a_p	f_z			
				100%	40%	20%	10%
Universal	P1	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,036 0,0014	0,034 0,0013	0,036 0,0014	0,048 0,0019
	P2	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,036 0,0014	0,034 0,0013	0,036 0,0014	0,048 0,0019
Steel and cast iron	P3	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,034 0,0013	0,034 0,0013	0,034 0,0013	0,046 0,0018
	P4	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,034 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	P5	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	P6	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	P7	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	P8	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0018
Stainless steel and S-materials	P11	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	P12	MM06-06007-B90A30-M02 F40M	1,0 0,040	0,024 0,00095	0,022 0,00085	0,024 0,00095	0,030 0,0012
	M1	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,036 0,0014	0,034 0,0013	0,036 0,0014	0,048 0,0019
	M2	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
Non ferrous	M3	MM06-06007-B90A30-M02 F40M	1,0 0,040	0,028 0,0011	0,026 0,0010	0,028 0,0011	0,036 0,0014
	M4	MM06-06007-B90A30-M02 F40M	0,80 0,032	0,025 0,0010	0,025 0,0010	0,025 0,0010	0,030 0,0013
	M5	MM06-06007-B90A30-M02 F40M	0,80 0,032	0,025 0,0010	0,025 0,0010	0,025 0,0010	0,030 0,0013
	K1	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,036 0,0014	0,034 0,0013	0,036 0,0014	0,048 0,0019
	K2	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
Hard	K3	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	K4	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	K5	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,030 0,0012	0,028 0,0011	0,030 0,0012	0,040 0,0016
	K6	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,032 0,0013	0,032 0,0013	0,034 0,0013	0,044 0,0017
	K7	MM06-06007-B90A30-M02 F40M	1,3 0,050	0,030 0,0012	0,028 0,0011	0,030 0,0012	0,040 0,0016
Plastic and cfrp	N1	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,046 0,0018	0,060 0,0024
	N2	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,046 0,0018	0,060 0,0024
	N3	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,046 0,0018	0,060 0,0024
	N11	MM06-06007-B90A30-E02 F30M	1,3 0,050	0,046 0,0018	0,044 0,0017	0,046 0,0018	0,060 0,0024
Graphite	S1	MM06-06007-B90A30-M02 F40M	0,80 0,032	0,025 0,0010	0,025 0,0010	0,025 0,0010	0,030 0,0013
	S2	MM06-06007-B90A30-M02 F40M	0,80 0,032	0,025 0,0010	0,025 0,0010	0,025 0,0010	0,030 0,0013
	S3	MM06-06007-B90A30-M02 F40M	0,80 0,032	0,024 0,00095	0,022 0,00085	0,022 0,00085	0,028 0,0012
	S11	MM06-06007-B90A30-M02 F40M	0,90 0,036	0,028 0,0011	0,028 0,0011	0,028 0,0011	0,036 0,0014
X-Heads	S12	MM06-06007-B90A30-M02 F40M	0,90 0,036	0,028 0,0011	0,028 0,0011	0,028 0,0011	0,036 0,0014
	S13	MM06-06007-B90A30-M02 F40M	0,80 0,032	0,025 0,0010	0,025 0,0010	0,025 0,0010	0,030 0,0013
	H5	MM06-06007-B90A30-E02 F30M	1,0 0,040	0,024 0,00095	0,022 0,00085	0,024 0,00095	0,030 0,0012
	H8	MM06-06007-B90A30-E02 F30M	0,90 0,036	0,018 0,00070	0,018 0,00070	0,018 0,00070	0,022 0,00095
Minimaster	H11	MM06-06007-B90A30-E02 F30M	1,0 0,040	0,024 0,00095	0,022 0,00085	0,024 0,00095	0,030 0,0012
	H12	MM06-06007-B90A30-E02 F30M	0,90 0,036	0,018 0,00070	0,018 0,00070	0,018 0,00070	0,022 0,00095
	H21	MM06-06007-B90A30-E02 F30M	0,90 0,036	0,018 0,00070	0,018 0,00070	0,018 0,00070	0,022 0,00095

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM06 Z3-Copy milling – Insert selection – Finishing – mm/Inch

SMG		a_p	f_z				
			15%	10%	5%	2%	
P1	MM06-06007-B90A30-E02 F30M	1,3	0,040	0,048	0,065	0,11	Universal
		0,050	0,0016	0,0019	0,0026	0,0044	
P2	MM06-06007-B90A30-E02 F30M	1,3	0,040	0,048	0,065	0,11	Steel and cast iron
		0,050	0,0016	0,0019	0,0026	0,0044	
P3	MM06-06007-B90A30-E02 F30M	1,3	0,038	0,046	0,065	0,10	Steel and cast iron
		0,050	0,0015	0,0018	0,0026	0,0040	
P4	MM06-06007-B90A30-E02 F30M	1,3	0,038	0,044	0,060	0,10	Steel and cast iron
		0,050	0,0015	0,0017	0,0024	0,0040	
P5	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Steel and cast iron
		0,050	0,0014	0,0017	0,0024	0,0040	
P6	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Steel and cast iron
		0,050	0,0014	0,0017	0,0024	0,0040	
P7	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Stainless steel and S-materials
		0,050	0,0014	0,0017	0,0024	0,0040	
P8	MM06-06007-B90A30-E02 F30M	1,3	0,038	0,046	0,065	0,10	Stainless steel and S-materials
		0,050	0,0015	0,0018	0,0026	0,0040	
P11	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Stainless steel and S-materials
		0,050	0,0014	0,0017	0,0024	0,0040	
P12	MM06-06007-B90A30-E02 F30M	1,0	0,026	0,030	0,042	0,065	Stainless steel and S-materials
		0,040	0,0010	0,0012	0,0017	0,0026	
M1	MM06-06007-B90A30-E02 F30M	1,3	0,040	0,048	0,065	0,11	Stainless steel and S-materials
		0,050	0,0016	0,0019	0,0026	0,0044	
M2	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Stainless steel and S-materials
		0,050	0,0014	0,0017	0,0024	0,0040	
M3	MM06-06007-B90A30-E02 F30M	1,0	0,030	0,036	0,048	0,080	Stainless steel and S-materials
		0,040	0,0012	0,0014	0,0019	0,0032	
M4	MM06-06007-B90A30-E02 F30M	0,80	0,026	0,030	0,042	0,070	Stainless steel and S-materials
		0,032	0,0010	0,0013	0,0017	0,0028	
M5	MM06-06007-B90A30-E02 F30M	0,80	0,026	0,030	0,042	0,070	Stainless steel and S-materials
		0,032	0,0010	0,0013	0,0017	0,0028	
K1	MM06-06007-B90A30-E02 F30M	1,3	0,040	0,048	0,065	0,11	Non ferrous
		0,050	0,0016	0,0019	0,0026	0,0044	
K2	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Non ferrous
		0,050	0,0014	0,0017	0,0024	0,0040	
K3	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Non ferrous
		0,050	0,0014	0,0017	0,0024	0,0040	
K4	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Non ferrous
		0,050	0,0014	0,0017	0,0024	0,0040	
K5	MM06-06007-B90A30-E02 F30M	1,3	0,034	0,040	0,055	0,090	Non ferrous
		0,050	0,0013	0,0016	0,0022	0,0036	
K6	MM06-06007-B90A30-E02 F30M	1,3	0,036	0,044	0,060	0,10	Non ferrous
		0,050	0,0014	0,0017	0,0024	0,0040	
K7	MM06-06007-B90A30-E02 F30M	1,3	0,034	0,040	0,055	0,090	Hard
		0,050	0,0013	0,0016	0,0022	0,0036	
N1	MM06-06007-B90A30-E02 F30M	1,3	0,050	0,060	0,085	0,14	Hard
		0,050	0,0020	0,0024	0,0034	0,0055	
N2	MM06-06007-B90A30-E02 F30M	1,3	0,050	0,060	0,085	0,14	Hard
		0,050	0,0020	0,0024	0,0034	0,0055	
N3	MM06-06007-B90A30-E02 F30M	1,3	0,050	0,060	0,085	0,14	Hard
		0,050	0,0020	0,0024	0,0034	0,0055	
N11	MM06-06007-B90A30-E02 F30M	1,3	0,050	0,060	0,085	0,14	Graphite
		0,050	0,0020	0,0024	0,0034	0,0055	
S1	MM06-06007-B90A30-E02 F30M	0,80	0,026	0,030	0,042	0,070	Graphite
		0,032	0,0010	0,0013	0,0017	0,0028	
S2	MM06-06007-B90A30-E02 F30M	0,80	0,026	0,030	0,042	0,070	Graphite
		0,032	0,0010	0,0013	0,0017	0,0028	
S3	MM06-06007-B90A30-E02 F30M	0,80	0,025	0,028	0,040	0,065	Graphite
		0,032	0,0010	0,0012	0,0016	0,0026	
S11	MM06-06007-B90A30-E02 F30M	0,90	0,030	0,036	0,048	0,080	Graphite
		0,036	0,0012	0,0014	0,0019	0,0032	
S12	MM06-06007-B90A30-E02 F30M	0,90	0,030	0,036	0,048	0,080	X-Heads
		0,036	0,0012	0,0014	0,0019	0,0032	
S13	MM06-06007-B90A30-E02 F30M	0,80	0,026	0,030	0,042	0,070	X-Heads
		0,032	0,0010	0,0013	0,0017	0,0028	
H5	MM06-06007-B90A30-E02 F30M	1,0	0,026	0,030	0,042	0,065	Minimaster
		0,040	0,0010	0,0012	0,0017	0,0026	
H8	MM06-06007-B90A30-E02 F30M	0,90	0,020	0,022	0,032	0,050	Minimaster
		0,036	0,00080	0,00095	0,0013	0,0020	
H11	MM06-06007-B90A30-E02 F30M	1,0	0,026	0,030	0,042	0,065	Minimaster
		0,040	0,0010	0,0012	0,0017	0,0026	
H12	MM06-06007-B90A30-E02 F30M	0,90	0,020	0,022	0,032	0,050	Minimaster
		0,036	0,00080	0,00095	0,0013	0,0020	
H21	MM06-06007-B90A30-E02 F30M	0,90	0,020	0,022	0,032	0,050	Minimaster
		0,036	0,00080	0,00095	0,0013	0,0020	

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %

All cutting data are start values

MM06 Z3-Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F30M					F40M				
		100%	20%	10%	5%	2%	100%	20%	10%	5%	2%
Universal	P1	295	350	370	405	400	280	330	355	385	380
		970	1150	1225	1325	1300	920	1075	1175	1275	1250
Steel and cast iron	P2	285	340	360	395	390	275	325	345	375	370
		940	1125	1175	1300	1275	900	1075	1125	1225	1225
	P3	250	295	315	340	340	235	280	300	320	325
		820	970	1025	1125	1125	770	920	980	1050	1075
	P4	220	260	275	300	300	210	245	265	285	285
		720	850	900	980	980	690	800	870	940	940
	P5	210	245	265	285	285	200	235	250	275	270
		690	800	870	940	940	660	770	820	900	890
	P6	235	275	295	320	320	225	265	285	305	305
		770	900	970	1050	1050	740	870	940	1000	1000
	P7	225	260	280	305	300	210	250	265	290	285
		740	850	920	1000	980	690	820	870	950	940
Stainless steel and S-materials	P8	210	245	265	285	285	200	235	250	270	270
		690	800	870	940	940	660	770	820	890	890
	P11	215	255	270	295	295	205	240	260	280	280
		710	840	890	970	970	670	790	850	920	920
	P12	135	160	165	180	180	125	150	160	170	170
		445	520	560	590	590	410	490	520	560	560
Non ferrous	M1	230	275	290	315	315	220	260	280	300	300
		750	900	950	1025	1025	720	850	920	980	980
	M2	190	220	240	260	255	180	210	225	245	245
		620	720	790	850	840	590	690	740	800	800
	M3	150	180	185	200	200	140	170	175	190	190
		490	590	610	660	660	460	560	590	620	620
	M4	105	145	140	150	150	100	135	135	145	145
		345	475	490	490	490	330	445	460	475	475
	M5	85	120	115	125	125	85	115	110	120	120
		280	395	410	410	410	280	375	395	395	395
Hard	K1	230	270	285	310	310	215	255	275	295	295
		750	890	940	1025	1025	710	840	900	970	970
	K2	200	235	250	270	270	190	225	240	260	255
		660	770	820	890	890	620	740	790	850	840
	K3	170	200	210	230	230	160	190	200	220	220
		560	660	690	750	750	520	620	660	720	720
	K4	160	190	205	220	220	155	180	195	210	210
		520	620	670	720	720	510	590	640	690	690
	K5	95	115	120	130	130	90	110	115	125	125
		310	375	395	425	425	295	360	375	410	410
	K6	140	165	180	195	190	135	160	170	185	185
		460	540	590	640	620	445	520	560	610	610
	K7	125	145	155	170	170	120	140	150	160	160
		410	475	510	560	560	395	460	490	520	520
Graphite	N1	1750	2075	2200	2375	2375	1675	1975	2100	2275	2250
		5750	6800	7225	7800	7800	5500	6475	6900	7475	7375
	N2	710	830	890	960	950	670	790	850	920	910
		2325	2725	2925	3150	3125	2200	2600	2800	3025	2975
	N3	470	560	590	640	640	450	530	570	610	610
		1550	1825	1925	2100	2100	1475	1750	1875	2000	2000
	N11	540	630	680	730	730	510	600	650	700	690
		1775	2075	2225	2400	2400	1675	1975	2125	2300	2275
X-Heads	S1	49	65	65	70	70	46	65	65	70	65
		160	215	230	230	230	150	215	215	230	215
	S2	39	55	55	55	55	37	50	50	55	55
		130	180	180	180	180	120	165	180	180	180
	S3	34	47	46	50	49	32	44	44	47	47
		110	155	155	165	160	105	145	150	155	155
	S11	75	95	95	100	100	70	90	90	95	95
		245	310	310	330	330	230	295	295	310	310
	S12	50	65	65	70	70	48	60	60	65	65
		165	215	215	230	230	155	195	215	215	215
	S13	27	38	37	40	40	26	36	35	38	38
		90	125	130	130	130	85	120	120	125	125
Minimaster	H5	44	55	55	60	60	42	50	55	55	55
		145	180	180	195	195	140	165	180	180	180
	H8	44	55	55	60	60	42	55	55	60	60
		145	180	195	195	195	140	180	180	195	195
	H11	55	70	70	75	75	55	65	65	70	75
		180	230	230	245	245	180	215	230	230	245
	H12	80	100	100	110	110	75	95	95	105	105
		260	330	345	360	360	245	310	330	345	345
	H21	44	55	55	60	60	42	55	55	60	60
		145	180	195	195	195	140	180	180	195	195

MM06 Z2-Copy milling – Insert selection – Roughing – mm/Inch

SMG		a_p	f_z			
			100%	40%	20%	10%
P1	MM06-06006-B90S-E02 F30M	2,5	0,030	0,032	0,036	0,048
		0.10	0.0012	0.0013	0.0014	0.0019
P2	MM06-06006-B90S-E02 F30M	2,5	0,032	0,032	0,036	0,048
		0.10	0.0013	0.0013	0.0014	0.0019
P3	MM06-06006-B90S-E02 F30M	2,5	0,030	0,030	0,034	0,046
		0.10	0.0012	0.0012	0.0013	0.0018
P4	MM06-06006-B90-MD02 F30M	2,5	0,030	0,030	0,034	0,044
		0.10	0.0012	0.0012	0.0013	0.0017
P5	MM06-06006-B90-MD02 F30M	2,5	0,028	0,028	0,034	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
P6	MM06-06006-B90-MD02 F30M	2,5	0,028	0,028	0,032	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
P7	MM06-06006-B90-MD02 F30M	2,5	0,028	0,028	0,032	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
P8	MM06-06006-B90-MD02 F30M	2,5	0,030	0,030	0,034	0,046
		0.10	0.0012	0.0012	0.0013	0.0018
P11	MM06-06006-B90-MD02 F30M	2,5	0,028	0,028	0,032	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
P12	MM06-06006-B90-MD02 F30M	2,0	0,020	0,020	0,024	0,030
		0.080	0.00080	0.00080	0.00095	0.0012
M1	MM06-06006-B90S-E02 F30M	2,5	0,032	0,032	0,036	0,048
		0.10	0.0013	0.0013	0.0014	0.0019
M2	MM06-06006-B90S-E02 F30M	2,5	0,028	0,028	0,034	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
M3	MM06-06006-B90S-E02 F30M	2,0	0,024	0,024	0,028	0,036
		0.080	0.00095	0.00095	0.0011	0.0014
M4	MM06-06006-B90-MD02 F30M	1,5	0,022	0,022	0,024	0,030
		0.060	0.00085	0.00085	0.00095	0.0013
M5	MM06-06006-B90-MD02 F30M	1,5	0,022	0,022	0,024	0,030
		0.060	0.00085	0.00085	0.00095	0.0013
K1	MM06-06006-B90S-E02 F30M	2,5	0,032	0,032	0,036	0,048
		0.10	0.0013	0.0013	0.0014	0.0019
K2	MM06-06006-B90S-E02 F30M	2,5	0,028	0,028	0,034	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
K3	MM06-06006-B90S-E02 F30M	2,5	0,028	0,028	0,034	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
K4	MM06-06006-B90S-E02 F30M	2,5	0,028	0,028	0,034	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
K5	MM06-06006-B90S-E02 F30M	2,5	0,026	0,026	0,030	0,040
		0.10	0.0010	0.0010	0.0012	0.0016
K6	MM06-06006-B90-MD02 F30M	2,5	0,028	0,028	0,034	0,044
		0.10	0.0011	0.0011	0.0013	0.0017
K7	MM06-06006-B90-MD02 F30M	2,5	0,026	0,026	0,030	0,040
		0.10	0.0010	0.0010	0.0012	0.0016
N1	MM06-06006-B90S-E02 F30M	2,5	0,040	0,040	0,046	0,060
		0.10	0.0016	0.0016	0.0018	0.0024
N2	MM06-06006-B90S-E02 F30M	2,5	0,040	0,040	0,046	0,060
		0.10	0.0016	0.0016	0.0018	0.0024
N3	MM06-06006-B90S-E02 F30M	2,5	0,040	0,040	0,046	0,060
		0.10	0.0016	0.0016	0.0018	0.0024
N11	MM06-06006-B90S-E02 F30M	2,5	0,040	0,040	0,046	0,060
		0.10	0.0016	0.0016	0.0018	0.0024
S1	MM06-06006-B90-MD02 F30M	1,5	0,022	0,022	0,024	0,030
		0.060	0.00085	0.00085	0.00095	0.0013
S2	MM06-06006-B90-MD02 F30M	1,5	0,022	0,022	0,024	0,030
		0.060	0.00085	0.00085	0.00095	0.0013
S3	MM06-06006-B90-MD02 F30M	1,5	0,020	0,020	0,022	0,028
		0.060	0.00080	0.00080	0.00085	0.0012
S11	MM06-06006-B90-MD02 F30M	1,7	0,025	0,024	0,028	0,036
		0.065	0.0010	0.00095	0.0011	0.0014
S12	MM06-06006-B90-MD02 F30M	1,7	0,025	0,024	0,028	0,036
		0.065	0.0010	0.00095	0.0011	0.0014
S13	MM06-06006-B90-MD02 F30M	1,5	0,022	0,022	0,024	0,030
		0.060	0.00085	0.00085	0.00095	0.0013
H5	MM06-06006-B90-MD02 F30M	2,0	0,020	0,020	0,024	0,030
		0.080	0.00080	0.00080	0.00095	0.0012
H8	MM06-06006-B90-MD02 F30M	1,7	0,016	0,016	0,018	0,022
		0.065	0.00065	0.00065	0.00070	0.00095
H11	MM06-06006-B90-MD02 F30M	2,0	0,020	0,020	0,024	0,030
		0.080	0.00080	0.00080	0.00095	0.0012
H12	MM06-06006-B90-MD02 F30M	1,7	0,016	0,016	0,018	0,022
		0.065	0.00065	0.00065	0.00070	0.00095
H21	MM06-06006-B90-MD02 F30M	1,7	0,016	0,016	0,018	0,022
		0.065	0.00065	0.00065	0.00070	0.00095

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %
 All cutting data are start values

Universal
 Steel and cast iron
 Stainless steel and S-materials
 Stainless steel and S-materials
 Non ferrous
 Hard
 Graphite
 X-Heads
 Minimaster

MM06 Z2-Copy milling – Insert selection – Finishing – mm/Inch

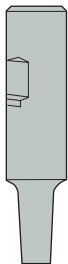
	SMG		a_p	f_z			
				15%	10%	5%	2%
Universal	P1	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,020 0.00080	0,024 0.00095	0,034 0.0013	0,055 0.0022
	P2	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,020 0.00080	0,024 0.00095	0,034 0.0013	0,055 0.0022
Steel and cast iron	P3	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,020 0.00080	0,024 0.00095	0,032 0.0013	0,050 0.0020
	P4	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,032 0.0013	0,050 0.0020
	P5	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	P6	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	P7	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	P8	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
Stainless steel and S-materials	P11	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	P12	MM06-06006-B90PF-M01 F15M	1,7 0,065	0,013 0.00050	0,015 0.00060	0,020 0.00080	0,032 0.0013
	M1	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,020 0.00080	0,024 0.00095	0,034 0.0013	0,055 0.0022
	M2	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
Non ferrous	M3	MM06-06006-B90PF-M01 F15M	1,7 0,065	0,015 0.00060	0,018 0.00070	0,025 0.0010	0,038 0.0015
	M4	MM06-06006-B90PF-M01 F15M	1,2 0,048	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,034 0.0013
	M5	MM06-06006-B90PF-M01 F15M	1,2 0,048	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,034 0.0013
	K1	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,020 0.00080	0,024 0.00095	0,034 0.0013	0,055 0.0022
	K2	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
Hard	K3	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	K4	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	K5	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,017 0.00065	0,020 0.00080	0,028 0.0011	0,044 0.0017
	K6	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,019 0.00075	0,022 0.00085	0,030 0.0012	0,048 0.0019
	K7	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,017 0.00065	0,020 0.00080	0,028 0.0011	0,044 0.0017
Plastic and cfrp	N1	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,026 0.0010	0,032 0.0013	0,044 0.0017	0,070 0.0028
	N2	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,026 0.0010	0,032 0.0013	0,044 0.0017	0,070 0.0028
	N3	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,026 0.0010	0,032 0.0013	0,044 0.0017	0,070 0.0028
	N11	MM06-06006-B90PF-M01 F15M	2,0 0,080	0,026 0.0010	0,032 0.0013	0,044 0.0017	0,070 0.0028
Graphite	S1	MM06-06006-B90PF-M01 F15M	1,2 0,048	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,034 0.0013
	S2	MM06-06006-B90PF-M01 F15M	1,2 0,048	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,034 0.0013
	S3	MM06-06006-B90PF-M01 F15M	1,2 0,048	0,013 0.00050	0,014 0.00060	0,020 0.00080	0,032 0.0013
	S11	MM06-06006-B90PF-M01 F15M	1,5 0,060	0,015 0.00060	0,018 0.00070	0,025 0.0010	0,038 0.0015
X-Heads	S12	MM06-06006-B90PF-M01 F15M	1,5 0,060	0,015 0.00060	0,018 0.00070	0,025 0.0010	0,038 0.0015
	S13	MM06-06006-B90PF-M01 F15M	1,2 0,048	0,014 0.00055	0,016 0.00065	0,022 0.00085	0,034 0.0013
	H5	MM06-06006-B90PF-M01 F15M	1,7 0,065	0,013 0.00050	0,015 0.00060	0,020 0.00080	0,032 0.0013
	H8	MM06-06006-B90PF-M01 F15M	1,5 0,060	0,010 0.00040	0,012 0.00048	0,016 0.00065	0,025 0.0010
Minimaster	H11	MM06-06006-B90PF-M01 F15M	1,7 0,065	0,013 0.00050	0,015 0.00060	0,020 0.00080	0,032 0.0013
	H12	MM06-06006-B90PF-M01 F15M	1,5 0,060	0,010 0.00040	0,012 0.00048	0,016 0.00065	0,025 0.0010
	H21	MM06-06006-B90PF-M01 F15M	1,5 0,060	0,010 0.00040	0,012 0.00048	0,016 0.00065	0,025 0.0010

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

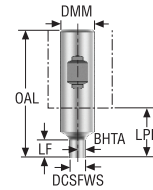
MM06 Z2-Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F15M					F30M					T60M					Universal
	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	
P1	325	415	430	470	465	275	345	375	405	405	225	280	305	330	325	Steel and cast iron
	1075	1350	1400	1550	1525	900	1125	1225	1325	1325	740	920	1000	1075	1075	
P2	320	400	420	455	455	265	335	365	395	395	215	270	295	320	320	Steel and cast iron
	1050	1300	1375	1500	1500	870	1100	1200	1300	1300	710	890	970	1050	1050	
P3	275	345	360	395	395	230	290	315	340	340	190	235	255	275	275	Steel and cast iron
	900	1125	1175	1300	1300	750	950	1025	1125	1125	620	770	840	900	900	
P4	240	305	320	345	345	205	255	280	305	300	165	205	225	245	245	Steel and cast iron
	790	1000	1050	1125	1125	670	840	920	1000	980	540	670	740	800	800	
P5	230	290	305	330	330	195	245	265	290	290	160	200	215	235	235	Steel and cast iron
	750	950	1000	1075	1075	640	800	870	950	950	520	660	710	770	770	
P6	260	330	345	370	370	220	275	300	325	325	180	225	245	265	260	Steel and cast iron
	850	1075	1125	1225	1225	720	900	980	1075	1075	590	740	800	870	850	
P7	245	310	325	350	350	210	260	285	305	305	170	210	230	250	245	Stainless steel and S-materials
	800	1025	1075	1150	1150	690	850	940	1000	1000	560	690	750	820	800	
P8	230	290	305	330	330	195	245	265	285	290	160	200	215	230	235	Stainless steel and S-materials
	750	950	1000	1075	1075	640	800	870	940	950	520	660	710	750	770	
P11	240	300	315	340	340	200	255	275	300	295	165	205	220	240	240	Stainless steel and S-materials
	790	980	1025	1125	1125	660	840	900	980	970	540	670	720	790	790	
P12	145	185	190	205	205	130	160	170	180	180	105	130	135	145	145	Stainless steel and S-materials
	475	610	620	670	670	425	520	560	590	590	345	425	445	475	475	
M1	255	325	340	365	365	215	270	295	320	315	175	220	240	260	255	Stainless steel and S-materials
	840	1075	1125	1200	1200	710	890	970	1050	1025	570	720	790	850	840	
M2	210	265	275	300	300	175	220	240	260	260	145	180	195	210	210	Stainless steel and S-materials
	690	870	900	980	980	570	720	790	850	850	475	590	640	690	690	
M3	165	210	210	230	230	140	180	185	205	200	115	145	150	165	165	Stainless steel and S-materials
	540	690	710	750	750	460	590	620	670	660	375	475	510	540	540	
M4	125	160	160	170	170	110	140	140	155	155	90	115	115	125	125	Stainless steel and S-materials
	410	520	560	560	560	360	460	490	510	510	295	375	395	410	410	
M5	105	135	130	145	145	95	120	120	130	130	75	95	95	105	105	Non ferrous
	345	445	475	475	475	310	395	410	425	425	245	310	330	345	345	
K1	250	320	335	360	360	210	265	290	315	310	170	215	235	255	250	Non ferrous
	820	1050	1100	1175	1175	690	870	950	1025	1025	560	710	770	840	820	
K2	220	275	290	315	315	185	230	255	275	275	150	190	205	220	220	Non ferrous
	720	900	950	1025	1025	610	750	840	900	900	490	620	670	720	720	
K3	185	235	245	265	265	160	195	215	230	230	130	160	175	190	185	Non ferrous
	610	770	800	870	870	520	640	710	750	750	425	520	570	620	610	
K4	175	225	235	255	255	150	185	205	220	220	120	150	165	180	180	Non ferrous
	570	740	770	840	840	490	610	670	720	720	395	490	540	590	590	
K5	105	135	140	150	150	90	115	125	135	135	75	90	100	110	105	Hard
	345	445	460	490	490	295	375	410	445	445	245	295	330	360	345	
K6	155	195	205	225	225	135	165	180	195	195	105	135	145	160	155	Hard
	510	640	670	740	740	445	540	590	640	640	345	445	475	520	510	
K7	135	170	180	195	195	115	145	155	170	170	95	115	125	140	140	Hard
	445	560	590	640	640	375	475	510	560	560	310	375	410	460	460	
N1	1975	2475	2600	2800	2800	1625	2050	2225	2400	2375	1325	1650	1800	1950	1925	Graphite
	6475	8125	8525	9175	9175	5325	6725	7300	7875	7800	4350	5425	5900	6400	6325	
N2	790	1000	1050	1125	1125	660	820	900	970	960	530	670	730	790	780	Graphite
	2600	3275	3450	3700	3700	2175	2700	2950	3175	3150	1750	2200	2400	2600	2550	
N3	530	670	700	760	750	440	550	600	650	640	355	445	485	520	520	Graphite
	1750	2200	2300	2500	2450	1450	1800	1975	2125	2100	1175	1450	1600	1700	1700	
N11	600	760	800	860	860	500	630	680	740	730	405	510	550	600	590	Graphite
	1975	2500	2625	2825	2825	1650	2075	2225	2425	2400	1325	1675	1800	1975	1925	
S1	60	75	75	80	80	50	65	65	70	70	42	55	55	60	60	X-Heads
	195	245	260	260	260	165	215	230	230	230	140	180	180	195	195	
S2	47	60	60	65	65	42	55	55	60	60	34	43	43	47	47	X-Heads
	155	195	215	215	215	140	180	180	195	195	110	140	150	155	155	
S3	41	50	50	55	55	36	46	46	50	50	29	37	38	40	40	X-Heads
	135	165	180	180	180	120	150	160	165	165	95	120	130	130	130	
S11	85	105	105	115	115	75	95	95	105	100	60	75	75	85	85	X-Heads
	280	345	360	375	375	245	310	310	345	330	195	245	260	280	280	
S12	55	75	75	80	80	50	65	65	70	70	41	55	55	55	55	Minimaster
	180	245	245	260	260	165	215	215	230	230	135	180	180	180	180	
S13	33	42	42	45	45	29	37	37	40	40	24	30	30	33	33	Minimaster
	110	140	150	150	150	95	120	130	130	130	80	100	105	110	110	
H5	48	60	60	65	65	42	55	55	60	60	34	43	45	49	49	Minimaster
	155	195	215	215	215	140	180	180	195	195	110	140	150	160	160	
H8	48	60	60	65	65	44	55	55	60	60	36	46	46	50	50	Minimaster
	155	195	215	215	215	145	180	195	195	195	120	150	155	165	165	
H11	60	80	80	85	85	55	70	70	75	75	44	55	55	60	60	Minimaster
	195	260	260	280	280	180	230	230	245	245	145	180	195	195	195	
H12	85	110	110	120	120	80	100	100	110	110	65	80	85	90	90	Minimaster
	280	360	375	395	395	260	330	345	360	360	215	260	280	295	295	
H21	48	60	60	65	65	44	55	55	60	60	36	46	46	50	50	Minimaster
	155	195	215	215	215	145	180	195	195	195	120	150	155	165	165	

Shank design

Universal Steel and cast iron Stainless steel and S-materials Non ferrous Hard Plastic and cfrp Graphite X-Heads	Design 1, Keyway shank	Design 2, Cylindrical/Weldon back end and 90° front
		
	Design 3, Cylindrical/Weldon back end tapered front 87°/89°	Design 4, Cylindrical/Weldon back end tapered front 80°/85°/87°
		
	Design 5, Cylindrical back end double tapered front end 89°/85°	
		

MM08 Shank – Metric



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		mm	mm	mm	mm	mm					kg	
MM08-10040.0-0007	00083980	7,6	10,0	7,0	7,0	40,0	0,0	2	■	80000	0,1	2
MM08-10050.0-0007DS	02580665	7,6	10,0	7,0	10,0	50,0	0,0	2	■	80000	0,1	3
MM08-10080.0-3023DS	02580702	7,6	10,0	22,9	40,0	80,0	3,0	4	■	80000	0,1	3
MM08-12065.0-0000	75034240	7,6	12,0	0,0	20,0	65,0	60,0	1	■	80000	0,1	1
MM08-12100.0-1035DS	02580719	7,6	12,0	35,0	55,0	100,0	1,0	3	■	80000	0,2	3
MM08-12120.0-1050DS	02580720	7,6	12,0	50,0	75,0	120,0	1,0	3	■	80000	0,2	3
MM08-16070.3-0007	75034241	7,6	16,0	7,6	22,0	70,0	0,0	2	■	80000	0,1	1
MM08-16075.3-3012	75034242	7,6	16,0	12,0	27,0	75,0	3,0	3	■	80000	0,1	1
MM08-16120.3-5048M	00042863	7,6	16,0	48,0	72,0	120,0	5,0	4	■	80000	0,2	5
MM08-16150.0-1030M	00094751	7,6	16,0	30,0	102,0	150,0	1,0	3	■	80000	0,2	5
MM08-16150.0-1050M	00094752	7,6	16,0	50,0	102,0	150,0	1,0	3	■	80000	0,2	4
MM08-16150.0-1070M	00094754	7,6	16,0	70,0	102,0	150,0	1,0	3	■	80000	0,2	4
MM08-16085.0-0016DS	02580675	7,6	16,0	16,0	37,0	85,0	0,0	2	■	80000	0,3	3
MM08-16100.0-0032DS	02580687	7,6	16,0	32,0	52,0	100,0	0,0	2	■	80000	0,3	3
MM08-16150.0-1050DS	02580722	7,6	16,0	50,0	102,0	150,0	1,0	3	■	80000	0,4	3
MM08-16150.0-1070DS	02580727	7,6	16,0	70,0	102,0	150,0	1,0	3	■	80000	0,3	3

Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-05044	MM08-0524	H05-4
2	MM-05019	MM08-0524	H05-4
3	–	MM08-0524	–
4	MM-05044	MM08-0582	H05-4
5	MM-05044	MM08-0543	H05-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Universal

Steel and cast iron

Stainless steel and S-materials

Stainless steel and S-materials

Non ferrous

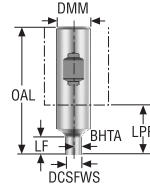
Hard

Graphite

X-Heads

Minimaster

MM08 Shank – Inch



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		inch	inch	inch	inch	inch					lbs	
MM08-0.38-1.6-0-0002	00096119	0.299	0.375	0.276	0.276	1.575	0,0	2	■	80000	0.220	3
MM08-0.50-2.6-0-0000	75054599	0.299	0.500	0	0.787	2.559	60,0	1	■	80000	0.220	1
MM08-0.62-2.8-3-0003	75054600	0.299	0.625	0.299	0.866	2.756	0,0	2	■	80000	0.220	1
MM08-0.62-3.0-3-3004	75054601	0.299	0.625	0.472	1.063	2.953	3,0	3	■	80000	0.220	1
MM08-0.62-4.7-3-5018	75054602	0.299	0.625	1.850	2.835	4.724	5,0	4	■	80000	0.440	2
MM08-0.62-5.9-0-1011	75054604	0.299	0.625	1.181	4.016	5.906	1,0	3	■	80000	0.440	2
MM08-0.62-3.3-0-0006DS	02593402	0.299	0.625	0.630	1.457	3.346	0,0	2	■	80000	0.660	4
MM08-0.62-4.0-0-0012DS	02593403	0.299	0.625	1.260	2.047	3.937	0,0	2	■	80000	0.660	4
MM08-0.62-5.9-0-1019DS	02593407	0.299	0.625	1.969	4.016	5.906	1,0	3	■	80000	0.880	4
MM08-0.62-5.9-0-1027DS	02593410	0.299	0.625	2.756	4.016	5.906	1,0	3	■	80000	0.660	4
MM08-0.75-10.0-0-1019DS	02593413	0.299	0.750	1.969	7.874	9.843	1,0	5	■	80000	1.980	4

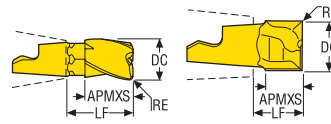
Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-05044	MM08-0524	H05-4
2	MM-05044	MM08-0543	H05-4
3	MM-05019	MM08-0524	H05-4
4	–	MM08-0524	–

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

Designation											Grades			
	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench 	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch							T60M	F15M	F30M	F40M
MM08-07805T-R02-D03	7,8 0.307	5,4 0.213	0,2 0.008	6,8 0.268	15,0	9,6	15,0	0	2	MM0612	■			
MM08-07809-R02A30-M03	7,8 0.307	10,0 0.394	0,2 0.008	13,0 0.512	15,0	9,6	15,0	30	3	MM0416 ✓				■
MM08-08005-M03	8,0 0.315	5,5 0.217	—	6,8 0.268	15,0	9,8	15,8	0	2	MM0612	■			
MM08-08005-R04A8-E03	8,0 0.315	5,4 0.213	0,4 0.016	6,7 0.264	15,0	9,8	15,0	8	2	MM0612	■		■	
MM08-08005-R04-MD03	8,0 0.315	5,5 0.217	0,4 0.016	6,8 0.268	15,0	9,8	15,0	0	2	MM0612	■		■	
MM08-08005-R04P-M02	8,0 0.315	5,4 0.213	0,4 0.016	6,7 0.264	15,0	9,8	15,0	0	2	MM0612			■	
MM08-08005-R10-MD03	8,0 0.315	5,4 0.213	1,0 0.039	6,8 0.268	15,0	9,8	13,8	0	2	MM0612			■	
MM08-08009-A30-E03	8,0 0.315	10,0 0.394	—	13,0 0.512	15,0	9,8	15,0	30	3	MM0416 ✓			■	
MM08-08009-R05A30-M03	8,0 0.315	10,0 0.394	0,5 0.020	13,0 0.512	15,0	9,8	14,8	30	3	MM0416 ✓				■
MM08-08009-R10A30-D03	8,0 0.315	10,0 0.394	1,0 0.039	13,0 0.512	15,0	9,8	13,8	30	3	MM0416 ✓			■	
MM08-08009-R10A30-E03	8,0 0.315	10,0 0.394	1,0 0.039	13,0 0.512	15,0	9,8	13,8	30	3	MM0416 ✓			■	
MM08-08009-R10A30-M03	8,0 0.315	10,0 0.394	1,0 0.039	13,0 0.512	15,0	9,8	13,8	30	3	MM0416 ✓				■
MM08-08009-R20A30-M03	8,0 0.315	10,0 0.394	2,0 0.079	13,0 0.512	15,0	9,8	11,8	30	3	MM0416 ✓				■
MM08-08009-R30A30-M03	8,0 0.315	10,0 0.394	3,0 0.118	13,0 0.512	15,0	9,8	9,8	30	3	MM0416 ✓				■

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

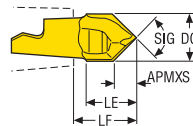
Hard

Graphite

X-Heads

Minimaster

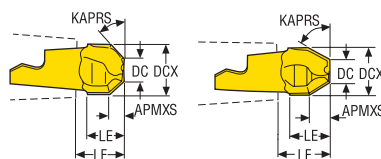
Centre drilling



—For Torque keys and torque values, see page 787

Grades											
Designation	DC	APMXS	LE	LF	SIG°	ZEFP	Wrench	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM08-08004-C90-M03	8,0 0.315	3,79 0.149	8,0 0.315	9,5 0.374	90,0	2	MM0612	■			
MM08-08006-C120-M03	8,0 0.315	2,15 0.085	8,32 0.328	9,46 0.372	120,0	2	MM0612	■			

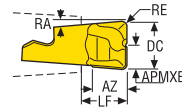
Chamfering



—For Torque keys and torque values, see page 787

Grades													
Designation	DCX	DC	APMXS	RE	LE	LF	KAPRS°	ZEFP	Wrench	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM08-08005-4520-E03	8,0 0.315	3,87 0.152	2,1 0.083	0,2 0.008	5,5 0.217	6,7 0.264	45,0	2	MM0612	■			
MM08-08006-6030-E03	8,0 0.315	4,19 0.165	3,3 0.130	0,24 0.009	6,45 0.254	7,66 0.302	60,0	2	MM0612	■			

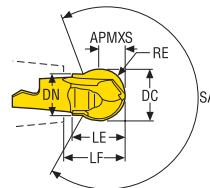
Plunge milling



—For Torque keys and torque values, see page 787

Designation									Grades			
	DC	APMXE	RE	AZ	LF	RA°	ZEFP	Wrench	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM08-08005-R10-PL-MD03	8,0 0.315	4,0 0.157	1,0 0.039	5,7 0.224	6,78 0.267	5,0	2	MM0612			■	

Precision inserts for semi-finishing in all materials



—For Torque keys and torque values, see page 787

											Grades			
Designation	DC	APMXS	RE	LE	DN	LF	SA°	ZEFP	Wrench	Coated				
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M	
MM08-10010-B120PF-M02	10,0 0.394	5,0 0.197	5,0 0.197	10,0 0.394	8,0 0.315	10,97 0.432	254,0	2	MM0612		■			
MM08-10010-B120P-M04	10,0 0.394	5,0 0.197	5,0 0.197	10,0 0.394	8,0 0.315	10,97 0.432	254,0	2	MM0612			■		

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

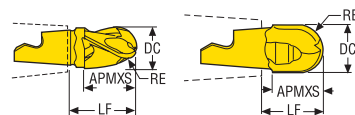
Hard

Graphite

X-Heads

Minimaster

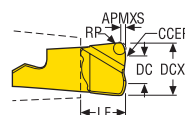
Copy milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	FHA°	ZEFP	Wrench	Grades			
								Coated			
	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM08-08008-B90-MD03	8,0 0.315	8,1 0.319	4,0 0.157	9,42 0.371		2	MM0612	■		■	
MM08-08008-B90PF-M01	8,0 0.315	6,9 0.272	4,0 0.157	9,39 0.370		2	MM0612		■		
MM08-08008-B90P-M03	8,0 0.315	6,9 0.272	4,0 0.157	9,39 0.370		2	MM0612			■	
MM08-08008-B90S-E03	8,0 0.315	8,1 0.319	4,0 0.157	9,42 0.371		2	MM0612			■	
MM08-08009-B90A30-E03	8,0 0.315	10,0 0.394	4,0 0.157	13,0 0.512	30,0	3	MM0416	✓		■	
MM08-08009-B90A30-M03	8,0 0.315	10,0 0.394	4,0 0.157	13,0 0.512	30,0	3	MM0416	✓			■

High feed



—For Torque keys and torque values, see page 787

Designation	DCX	DC	APMXS	RP	CCER	LF	RMPX°	C min	C max	ZEFP	Wrench	Grades			
												Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch						T60M	F15M	F30M	F40M
MM08-08.40-HF-MD06	8,0 0.315	4,0 0.157	0,37 0.015	0,88 0.035	4,0 0.157	6,84 0.269	5,0	9,8	14,6	2	MM0612			■	

MM08 – Slot and Side milling – Insert selection – mm/Inch

SMG		a_p	f_z			
			100%	40%	20%	10%
P1	MM08-08009-R05A30-M03 F40M	1,8	0,044	0,044	0,055	0,070
		0,070	0,0017	0,0017	0,0022	0,0028
P2	MM08-08009-R05A30-M03 F40M	1,8	0,044	0,046	0,055	0,070
		0,070	0,0017	0,0018	0,0022	0,0028
P3	MM08-08009-R05A30-M03 F40M	1,8	0,042	0,042	0,050	0,070
		0,070	0,0017	0,0017	0,0020	0,0028
P4	MM08-08009-R05A30-M03 F40M	1,8	0,042	0,042	0,050	0,065
		0,070	0,0017	0,0017	0,0020	0,0026
P5	MM08-08009-R05A30-M03 F40M	1,8	0,040	0,042	0,050	0,065
		0,070	0,0016	0,0017	0,0020	0,0026
P6	MM08-08009-R05A30-M03 F40M	1,8	0,040	0,040	0,048	0,065
		0,070	0,0016	0,0016	0,0019	0,0026
P7	MM08-08009-R05A30-M03 F40M	1,8	0,040	0,040	0,048	0,065
		0,070	0,0016	0,0016	0,0019	0,0026
P8	MM08-08009-R05A30-M03 F40M	1,8	0,042	0,042	0,050	0,070
		0,070	0,0017	0,0017	0,0020	0,0028
P11	MM08-08009-R05A30-M03 F40M	1,8	0,040	0,040	0,048	0,065
		0,070	0,0016	0,0016	0,0019	0,0026
P12	MM08-08009-R05A30-M03 F40M	1,4	0,028	0,028	0,034	0,044
		0,055	0,0011	0,0011	0,0013	0,0017
M1	MM08-08009-R05A30-M03 F40M	1,8	0,044	0,046	0,055	0,070
		0,070	0,0017	0,0018	0,0022	0,0028
M2	MM08-08009-R05A30-M03 F40M	1,8	0,040	0,042	0,050	0,065
		0,070	0,0016	0,0017	0,0020	0,0026
M3	MM08-08009-R05A30-M03 F40M	1,4	0,034	0,034	0,040	0,055
		0,055	0,0013	0,0013	0,0016	0,0022
M4	MM08-08009-R05A30-M03 F40M	1,0	0,030	0,030	0,034	0,046
		0,040	0,0012	0,0012	0,0013	0,0018
M5	MM08-08009-R05A30-M03 F40M	1,0	0,030	0,030	0,034	0,046
		0,040	0,0012	0,0012	0,0013	0,0018
K1	MM08-08009-R10A30-E03 F30M	1,8	0,050	0,048	0,055	0,075
		0,070	0,0020	0,0019	0,0022	0,0030
K2	MM08-08009-R10A30-E03 F30M	1,8	0,044	0,044	0,050	0,065
		0,070	0,0017	0,0017	0,0020	0,0026
K3	MM08-08009-R10A30-E03 F30M	1,8	0,044	0,044	0,050	0,065
		0,070	0,0017	0,0017	0,0020	0,0026
K4	MM08-08009-R10A30-E03 F30M	1,8	0,044	0,044	0,050	0,065
		0,070	0,0017	0,0017	0,0020	0,0026
K5	MM08-08009-R10A30-D03 F30M	1,8	0,040	0,040	0,046	0,060
		0,070	0,0016	0,0016	0,0018	0,0024
K6	MM08-08009-R10A30-D03 F30M	1,8	0,044	0,044	0,050	0,065
		0,070	0,0017	0,0017	0,0020	0,0026
K7	MM08-08009-R10A30-D03 F30M	1,8	0,040	0,040	0,046	0,060
		0,070	0,0016	0,0016	0,0018	0,0024
N1	MM08-08009-R10A30-E03 F30M	1,8	0,060	0,060	0,070	0,095
		0,070	0,0024	0,0024	0,0028	0,0038
N2	MM08-08009-R10A30-E03 F30M	1,8	0,060	0,060	0,070	0,095
		0,070	0,0024	0,0024	0,0028	0,0038
N3	MM08-08009-R10A30-E03 F30M	1,8	0,060	0,060	0,070	0,095
		0,070	0,0024	0,0024	0,0028	0,0038
N11	MM08-08009-R10A30-E03 F30M	1,8	0,060	0,060	0,070	0,095
		0,070	0,0024	0,0024	0,0028	0,0038
S1	MM08-08009-R10A30-D03 F30M	1,0	0,038	0,036	0,036	0,046
		0,040	0,0015	0,0014	0,0014	0,0019
S2	MM08-08009-R10A30-D03 F30M	1,0	0,038	0,036	0,036	0,046
		0,040	0,0015	0,0014	0,0014	0,0019
S3	MM08-08009-R10A30-D03 F30M	1,0	0,036	0,034	0,034	0,042
		0,040	0,0014	0,0013	0,0013	0,0017
S11	MM08-08009-R05A30-M03 F40M	1,2	0,034	0,034	0,040	0,055
		0,048	0,0013	0,0013	0,0016	0,0022
S12	MM08-08009-R05A30-M03 F40M	1,2	0,034	0,034	0,040	0,055
		0,048	0,0013	0,0013	0,0016	0,0022
S13	MM08-08009-R05A30-M03 F40M	1,0	0,030	0,030	0,034	0,046
		0,040	0,0012	0,0012	0,0013	0,0018
H5	MM08-08009-R10A30-E03 F30M	1,4	0,032	0,032	0,034	0,044
		0,055	0,0013	0,0013	0,0013	0,0018
H8	MM08-08009-R10A30-E03 F30M	1,2	0,026	0,025	0,026	0,034
		0,048	0,0010	0,0010	0,0010	0,0013
H11	MM08-08009-R10A30-E03 F30M	1,4	0,032	0,032	0,034	0,044
		0,055	0,0013	0,0013	0,0013	0,0018
H12	MM08-08009-R10A30-E03 F30M	1,2	0,026	0,025	0,026	0,034
		0,048	0,0010	0,0010	0,0010	0,0013
H21	MM08-08009-R10A30-E03 F30M	1,2	0,026	0,025	0,026	0,034
		0,048	0,0010	0,0010	0,0010	0,0013

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %
 All cutting data are start values

Universal
 Steel and cast iron
 Stainless steel and S-materials
 Stainless steel and S-materials
 Non ferrous
 Hard
 Graphite
 X-Heads
 Minimaster

MM08 – Slot and Side milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F30M				F40M				T60M			
		100%	40%	20%	10%	100%	40%	20%	10%	100%	40%	20%	10%
Universal	P1	265	330	370	410	255	315	350	385	205	250	280	310
		870	1075	1225	1350	840	1025	1150	1275	670	820	920	1025
Steel and cast iron	P2	255	320	360	390	245	305	340	375	195	245	275	300
		840	1050	1175	1275	800	1000	1125	1225	640	800	900	980
	P3	225	280	315	340	215	265	295	325	170	210	240	260
		740	920	1025	1125	710	870	970	1075	560	690	790	850
	P4	195	245	275	300	190	235	260	290	150	185	210	230
		640	800	900	980	620	770	850	950	490	610	690	750
	P5	190	235	265	290	180	225	250	275	145	180	200	220
		620	770	870	950	590	740	820	900	475	590	660	720
	P6	215	265	295	325	205	255	280	310	160	200	225	250
		710	870	970	1075	670	840	920	1025	520	660	740	820
Stainless steel and S-materials	P7	200	250	280	310	190	240	265	290	155	190	215	235
		660	820	920	1025	620	790	870	950	510	620	710	770
	P8	190	235	265	285	180	225	250	270	145	180	200	220
		620	770	870	940	590	740	820	890	475	590	660	720
	P11	195	245	270	300	185	230	260	285	150	185	210	230
		640	800	890	980	610	750	850	940	490	610	690	750
	P12	120	150	170	185	115	145	160	175	95	115	130	145
		395	490	560	610	375	475	520	570	310	375	425	475
Non ferrous	M1	—	—	—	—	200	245	275	305	160	195	220	240
		—	—	—	—	660	800	900	1000	520	640	720	790
	M2	—	—	—	—	165	200	225	250	130	160	180	200
		—	—	—	—	540	660	740	820	425	520	590	660
	M3	—	—	—	—	130	160	175	195	105	130	145	155
		—	—	—	—	425	520	570	640	345	425	475	510
	M4	—	—	—	—	100	120	135	150	80	100	110	120
		—	—	—	—	330	395	445	490	260	330	360	395
	M5	—	—	—	—	80	100	115	125	65	85	90	100
		—	—	—	—	260	330	375	410	215	280	295	330
Hard	K1	205	255	285	310	195	240	270	300	155	195	215	235
		670	840	940	1025	640	790	890	980	510	640	710	770
	K2	180	225	250	275	170	210	235	260	135	170	190	210
		590	740	820	900	560	690	770	850	445	560	620	690
	K3	155	190	210	235	145	180	200	220	115	145	160	180
		510	620	690	770	475	590	660	720	375	475	520	590
	K4	145	180	200	225	140	170	190	210	110	140	155	170
		475	590	660	740	460	560	620	690	360	460	510	560
	K5	90	110	120	135	85	105	115	125	65	85	95	100
		295	360	395	445	280	345	375	410	215	280	310	330
	K6	130	160	180	195	120	150	170	185	95	120	135	150
		425	520	590	640	395	490	560	610	310	395	445	490
	K7	115	140	155	170	110	135	150	165	85	105	120	130
		375	460	510	560	360	445	490	540	280	345	395	425
	N1	1550	1950	2150	2350	1475	1850	2025	2250	1175	1475	1625	1800
		5075	6400	7050	7700	4850	6075	6650	7375	3850	4850	5325	5900
Graphite	N2	630	780	870	950	600	750	820	910	475	590	660	720
		2075	2550	2850	3125	1975	2450	2700	2975	1550	1925	2175	2350
	N3	420	520	580	630	400	495	550	610	315	395	440	485
		1375	1700	1900	2075	1300	1625	1800	2000	1025	1300	1450	1600
	N11	480	600	660	720	455	570	630	690	360	455	500	550
		1575	1975	2175	2350	1500	1875	2075	2275	1175	1500	1650	1800
	S1	48	60	65	75	46	55	65	70	37	46	50	55
		155	195	215	245	150	180	215	230	120	150	165	180
	S2	39	48	55	60	37	46	50	55	30	37	41	45
		130	155	180	195	120	150	165	180	100	120	135	150
	S3	34	42	47	50	32	40	45	49	26	32	36	39
		110	140	155	165	105	130	150	160	85	105	120	130
	S11	—	—	—	—	65	80	90	100	50	65	75	80
		—	—	—	—	215	260	295	330	165	215	245	260
	S12	—	—	—	—	45	55	60	70	36	45	50	55
		—	—	—	—	150	180	195	230	120	150	165	180
	S13	—	—	—	—	26	32	36	39	21	26	29	31
		—	—	—	—	85	105	120	130	70	85	95	100
Minimaster	H5	41	50	55	60	39	48	55	60	31	39	43	47
		135	165	180	195	130	155	180	195	100	130	140	155
	H8	42	50	60	65	40	50	55	60	33	40	45	49
		140	165	195	215	130	165	180	195	110	130	150	160
	H11	50	65	70	80	49	60	70	75	39	49	55	60
		165	215	230	260	160	195	230	245	130	160	180	195
	H12	75	95	105	115	70	90	100	110	60	70	80	90
		245	310	345	375	230	295	330	360	195	230	260	295
	H21	42	50	60	65	40	50	55	60	33	40	45	49
		140	165	195	215	130	165	180	195	110	130	150	160

MM08 Z3 – Copy milling – Insert selection – Roughing – mm/Inch

SMG		a_p		f_z			
			100%	40%	20%	10%	
P1	MM08-08009-B90A30-M03 F40M	1,8	0,055	0,050	0,055	0,070	
		0.070	0.0022	0.0020	0.0022	0.0028	
P2	MM08-08009-B90A30-M03 F40M	1,8	0,055	0,050	0,055	0,070	
		0.070	0.0022	0.0020	0.0022	0.0028	
P3	MM08-08009-B90A30-M03 F40M	1,8	0,050	0,050	0,050	0,070	
		0.070	0.0020	0.0020	0.0020	0.0028	
P4	MM08-08009-B90A30-M03 F40M	1,8	0,050	0,048	0,050	0,065	
		0.070	0.0020	0.0019	0.0020	0.0026	
P5	MM08-08009-B90A30-M03 F40M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
P6	MM08-08009-B90A30-M03 F40M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
P7	MM08-08009-B90A30-M03 F40M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
P8	MM08-08009-B90A30-M03 F40M	1,8	0,050	0,050	0,050	0,070	
		0.070	0.0020	0.0020	0.0020	0.0028	
P11	MM08-08009-B90A30-M03 F40M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
P12	MM08-08009-B90A30-M03 F40M	1,4	0,034	0,034	0,034	0,044	
		0.055	0.0013	0.0013	0.0013	0.0017	
M1	MM08-08009-B90A30-M03 F40M	1,8	0,055	0,050	0,055	0,070	
		0.070	0.0022	0.0020	0.0022	0.0028	
M2	MM08-08009-B90A30-M03 F40M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
M3	MM08-08009-B90A30-M03 F40M	1,4	0,040	0,040	0,040	0,055	
		0.055	0.0016	0.0016	0.0016	0.0022	
M4	MM08-08009-B90A30-M03 F40M	1,0	0,038	0,036	0,036	0,046	
		0.040	0.0015	0.0014	0.0014	0.0019	
M5	MM08-08009-B90A30-M03 F40M	1,0	0,038	0,036	0,036	0,046	
		0.040	0.0015	0.0014	0.0014	0.0019	
K1	MM08-08009-B90A30-E03 F30M	1,8	0,055	0,050	0,055	0,070	
		0.070	0.0022	0.0020	0.0022	0.0028	
K2	MM08-08009-B90A30-E03 F30M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
K3	MM08-08009-B90A30-E03 F30M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
K4	MM08-08009-B90A30-E03 F30M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
K5	MM08-08009-B90A30-M03 F40M	1,8	0,044	0,042	0,046	0,060	
		0.070	0.0017	0.0017	0.0018	0.0024	
K6	MM08-08009-B90A30-M03 F40M	1,8	0,048	0,048	0,050	0,065	
		0.070	0.0019	0.0019	0.0020	0.0026	
K7	MM08-08009-B90A30-M03 F40M	1,8	0,044	0,042	0,046	0,060	
		0.070	0.0017	0.0017	0.0018	0.0024	
N1	MM08-08009-B90A30-E03 F30M	1,8	0,070	0,065	0,070	0,090	
		0.070	0.0028	0.0026	0.0028	0.0036	
N2	MM08-08009-B90A30-E03 F30M	1,8	0,070	0,065	0,070	0,090	
		0.070	0.0028	0.0026	0.0028	0.0036	
N3	MM08-08009-B90A30-E03 F30M	1,8	0,070	0,065	0,070	0,090	
		0.070	0.0028	0.0026	0.0028	0.0036	
N11	MM08-08009-B90A30-E03 F30M	1,8	0,070	0,065	0,070	0,090	
		0.070	0.0028	0.0026	0.0028	0.0036	
S1	MM08-08009-B90A30-M03 F40M	1,0	0,038	0,036	0,036	0,046	
		0.040	0.0015	0.0014	0.0014	0.0019	
S2	MM08-08009-B90A30-M03 F40M	1,0	0,038	0,036	0,036	0,046	
		0.040	0.0015	0.0014	0.0014	0.0019	
S3	MM08-08009-B90A30-M03 F40M	1,0	0,036	0,034	0,034	0,042	
		0.040	0.0014	0.0013	0.0013	0.0017	
S11	MM08-08009-B90A30-M03 F40M	1,2	0,042	0,040	0,042	0,055	
		0.048	0.0017	0.0016	0.0017	0.0022	
S12	MM08-08009-B90A30-M03 F40M	1,2	0,042	0,040	0,042	0,055	
		0.048	0.0017	0.0016	0.0017	0.0022	
S13	MM08-08009-B90A30-M03 F40M	1,0	0,038	0,036	0,036	0,046	
		0.040	0.0015	0.0014	0.0014	0.0019	
H5	MM08-08009-B90A30-E03 F30M	1,4	0,034	0,034	0,034	0,044	
		0.055	0.0013	0.0013	0.0013	0.0017	
H8	MM08-08009-B90A30-E03 F30M	1,2	0,028	0,026	0,026	0,034	
		0.048	0.0011	0.0010	0.0010	0.0013	
H11	MM08-08009-B90A30-E03 F30M	1,4	0,034	0,034	0,034	0,044	
		0.055	0.0013	0.0013	0.0013	0.0017	
H12	MM08-08009-B90A30-E03 F30M	1,2	0,028	0,026	0,026	0,034	
		0.048	0.0011	0.0010	0.0010	0.0013	
H21	MM08-08009-B90A30-E03 F30M	1,2	0,028	0,026	0,026	0,034	
		0.048	0.0011	0.0010	0.0010	0.0013	

SMG = Seco material group

f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

All cutting data are start values

MM08 Z3 – Copy milling – Insert selection – Finishing – mm/Inch

	SMG		a_p	f_z			
				15%	10%	5%	2%
Universal	P1	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,060 0.0024	0,070 0.0028	0,10 0.0040	0,16 0.0065
	P2	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,060 0.0024	0,070 0.0028	0,10 0.0040	0,17 0.0065
Steel and cast iron	P3	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,16 0.0065
	P4	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,095 0.0038	0,15 0.0060
	P5	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	P6	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	P7	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	P8	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,060 0.0024	0,070 0.0028	0,095 0.0038	0,16 0.0065
Stainless steel and S-materials	P11	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	P12	MM08-08009-B90A30-E03 F30M	1,4 0,055	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
	M1	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,060 0.0024	0,070 0.0028	0,10 0.0040	0,17 0.0065
	M2	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
Non ferrous	M3	MM08-08009-B90A30-E03 F30M	1,4 0,055	0,046 0.0018	0,055 0.0022	0,075 0.0030	0,12 0.0048
	M4	MM08-08009-B90A30-E03 F30M	1,0 0,040	0,040 0.0016	0,046 0.0019	0,065 0.0026	0,10 0.0040
	M5	MM08-08009-B90A30-E03 F30M	1,0 0,040	0,040 0.0016	0,046 0.0019	0,065 0.0026	0,10 0.0040
	K1	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,060 0.0024	0,070 0.0028	0,10 0.0040	0,17 0.0065
	K2	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
Hard	K3	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	K4	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	K5	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,13 0.0050
	K6	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,055 0.0022	0,065 0.0026	0,090 0.0036	0,15 0.0060
	K7	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,050 0.0020	0,060 0.0024	0,080 0.0032	0,13 0.0050
Plastic and cfrp	N1	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,080 0.0032	0,090 0.0036	0,13 0.0050	0,22 0.0085
	N2	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,080 0.0032	0,090 0.0036	0,13 0.0050	0,22 0.0085
	N3	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,080 0.0032	0,090 0.0036	0,13 0.0050	0,22 0.0085
	N11	MM08-08009-B90A30-E03 F30M	1,8 0,070	0,080 0.0032	0,090 0.0036	0,13 0.0050	0,22 0.0085
Graphite	S1	MM08-08009-B90A30-E03 F30M	1,0 0,040	0,040 0.0016	0,046 0.0019	0,065 0.0026	0,10 0.0040
	S2	MM08-08009-B90A30-E03 F30M	1,0 0,040	0,040 0.0016	0,046 0.0019	0,065 0.0026	0,10 0.0040
	S3	MM08-08009-B90A30-E03 F30M	1,0 0,040	0,038 0.0015	0,042 0.0017	0,060 0.0024	0,095 0.0038
	S11	MM08-08009-B90A30-E03 F30M	1,2 0,048	0,046 0.0018	0,055 0.0022	0,075 0.0030	0,12 0.0048
X-Heads	S12	MM08-08009-B90A30-E03 F30M	1,2 0,048	0,046 0.0018	0,055 0.0022	0,075 0.0030	0,12 0.0048
	S13	MM08-08009-B90A30-E03 F30M	1,0 0,040	0,040 0.0016	0,046 0.0019	0,065 0.0026	0,10 0.0040
	H5	MM08-08009-B90A30-E03 F30M	1,4 0,055	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
	H8	MM08-08009-B90A30-E03 F30M	1,2 0,048	0,030 0.0012	0,034 0.0013	0,048 0.0019	0,075 0.0030
Minimaster	H11	MM08-08009-B90A30-E03 F30M	1,4 0,055	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
	H12	MM08-08009-B90A30-E03 F30M	1,2 0,048	0,030 0.0012	0,034 0.0013	0,048 0.0019	0,075 0.0030
	H21	MM08-08009-B90A30-E03 F30M	1,2 0,048	0,030 0.0012	0,034 0.0013	0,048 0.0019	0,075 0.0030

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM08 Z3 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F30M					F40M				
	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%
P1	280	330	355	380	380	265	315	335	360	360
	920	1075	1175	1250	1250	870	1025	1100	1175	1175
P2	270	325	345	370	365	260	310	325	350	350
	890	1075	1125	1225	1200	850	1025	1075	1150	1150
P3	235	280	295	320	320	225	270	280	305	300
	770	920	970	1050	1050	740	890	920	1000	980
P4	210	250	265	280	280	200	235	250	270	270
	690	820	870	920	920	660	770	820	890	890
P5	200	235	250	270	270	190	225	240	260	255
	660	770	820	890	890	620	740	790	850	840
P6	225	265	280	305	305	215	255	270	290	290
	740	870	920	1000	1000	710	840	890	950	950
P7	210	250	265	290	285	200	240	255	275	270
	690	820	870	950	940	660	790	840	900	890
P8	200	235	250	270	265	190	225	235	255	255
	660	770	820	890	870	620	740	770	840	840
P11	205	245	260	280	275	195	230	245	265	265
	670	800	850	920	900	640	750	800	870	870
P12	130	155	160	175	175	125	150	155	165	165
	425	510	520	570	570	410	490	510	540	540
M1	220	260	275	300	295	210	250	265	285	280
	720	850	900	980	970	690	820	870	940	920
M2	180	215	225	245	245	170	205	215	235	230
	590	710	740	800	800	560	670	710	770	750
M3	145	170	175	190	190	135	165	170	180	180
	475	560	570	620	620	445	540	560	590	590
M4	100	135	135	145	145	95	130	130	140	140
	330	445	475	475	475	310	425	445	460	460
M5	80	115	115	120	120	80	110	105	115	115
	260	375	395	395	395	260	360	375	375	375
K1	215	255	270	295	290	205	245	260	280	275
	710	840	890	970	950	670	800	850	920	900
K2	190	225	240	260	255	180	215	225	245	245
	620	740	790	850	840	590	710	740	800	800
K3	160	190	200	220	215	155	180	190	210	205
	520	620	660	720	710	510	590	620	690	670
K4	155	180	190	210	205	145	175	185	200	195
	510	590	620	690	670	475	570	610	660	640
K5	90	110	115	125	125	90	105	110	120	120
	295	360	375	410	410	295	345	360	395	395
K6	135	160	170	185	180	130	150	160	175	175
	445	520	560	610	590	425	490	520	570	570
K7	120	140	150	160	160	110	135	140	155	155
	395	460	490	520	520	360	445	460	510	510
N1	1625	1950	2075	2225	2200	1550	1850	1975	2125	2100
	5325	6400	6800	7300	7225	5075	6075	6475	6975	6900
N2	660	790	830	900	890	630	750	790	850	840
	2175	2600	2725	2950	2925	2075	2450	2600	2800	2750
N3	440	520	560	600	590	420	500	530	570	560
	1450	1700	1825	1975	1925	1375	1650	1750	1875	1825
N11	500	600	640	680	670	480	570	610	650	640
	1650	1975	2100	2225	2200	1575	1875	2000	2125	2100
S1	46	65	65	70	70	44	60	60	65	65
	150	215	215	230	230	145	195	215	215	215
S2	37	50	50	55	55	35	49	48	50	50
	120	165	180	180	180	115	160	165	165	165
S3	32	45	44	48	48	31	43	42	45	45
	105	150	155	155	155	100	140	150	150	150
S11	70	90	90	95	95	65	85	85	90	90
	230	295	295	310	310	215	280	280	295	295
S12	49	60	60	65	65	47	60	60	65	65
	160	195	215	215	215	155	195	195	215	215
S13	26	36	35	38	38	25	34	34	36	37
	85	120	125	125	125	80	110	120	120	120
H5	43	50	55	60	55	41	49	50	55	55
	140	165	180	195	180	135	160	165	180	180
H8	43	55	55	60	60	41	50	50	55	55
	140	180	180	195	195	135	165	180	180	180
H11	55	65	70	75	75	50	60	65	70	70
	180	215	230	245	245	165	195	215	230	230
H12	75	95	100	105	105	75	95	95	100	100
	245	310	330	345	345	245	310	310	330	330
H21	43	55	55	60	60	41	50	50	55	55
	140	180	180	195	195	135	165	180	180	180

Universal
iron

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster

MM08 Z2 – Copy milling – Insert selection – Roughing – mm/Inch

	SMG		a_p	f_z			
				100%	40%	20%	10%
Universal	P1	MM08-08008-B90S-E03 F30M	3,0 0,12	0,048 0,0019	0,046 0,0018	0,055 0,0022	0,070 0,0028
	P2	MM08-08008-B90S-E03 F30M	3,0 0,12	0,048 0,0019	0,048 0,0019	0,055 0,0022	0,075 0,0030
Steel and cast iron	P3	MM08-08008-B90S-E03 F30M	3,0 0,12	0,046 0,0018	0,044 0,0017	0,050 0,0020	0,070 0,0028
	P4	MM08-08008-B90-MD03 F30M	3,0 0,12	0,044 0,0017	0,044 0,0017	0,050 0,0020	0,070 0,0028
	P5	MM08-08008-B90-MD03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	P6	MM08-08008-B90-MD03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	P7	MM08-08008-B90-MD03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	P8	MM08-08008-B90-MD03 F30M	3,0 0,12	0,046 0,0018	0,044 0,0017	0,050 0,0020	0,070 0,0028
Stainless steel and S-materials	P11	MM08-08008-B90-MD03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	P12	MM08-08008-B90-MD03 F30M	2,5 0,10	0,030 0,0012	0,030 0,0012	0,034 0,0013	0,044 0,0018
	M1	MM08-08008-B90S-E03 F30M	3,0 0,12	0,048 0,0019	0,048 0,0019	0,055 0,0022	0,075 0,0030
	M2	MM08-08008-B90S-E03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
Non ferrous	M3	MM08-08008-B90S-E03 F30M	2,5 0,10	0,036 0,0014	0,036 0,0014	0,040 0,0016	0,055 0,0022
	M4	MM08-08008-B90-MD03 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0019
	M5	MM08-08008-B90-MD03 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0019
	K1	MM08-08008-B90S-E03 F30M	3,0 0,12	0,048 0,0019	0,048 0,0019	0,055 0,0022	0,075 0,0030
	K2	MM08-08008-B90S-E03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
Hard	K3	MM08-08008-B90S-E03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	K4	MM08-08008-B90S-E03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	K5	MM08-08008-B90-MD03 F30M	3,0 0,12	0,040 0,0016	0,038 0,0015	0,046 0,0018	0,060 0,0024
	K6	MM08-08008-B90-MD03 F30M	3,0 0,12	0,044 0,0017	0,042 0,0017	0,050 0,0020	0,065 0,0026
	K7	MM08-08008-B90-MD03 F30M	3,0 0,12	0,040 0,0016	0,038 0,0015	0,046 0,0018	0,060 0,0024
Plastic and cfrp	N1	MM08-08008-B90S-E03 F30M	3,0 0,12	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
	N2	MM08-08008-B90S-E03 F30M	3,0 0,12	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
	N3	MM08-08008-B90S-E03 F30M	3,0 0,12	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
	N11	MM08-08008-B90S-E03 F30M	3,0 0,12	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
	S1	MM08-08008-B90-MD03 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0019
Graphite	S2	MM08-08008-B90-MD03 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0019
	S3	MM08-08008-B90-MD03 F30M	1,9 0,075	0,032 0,0013	0,030 0,0012	0,034 0,0013	0,042 0,0017
	S11	MM08-08008-B90-MD03 F30M	2,5 0,10	0,036 0,0014	0,036 0,0014	0,042 0,0017	0,055 0,0022
	S12	MM08-08008-B90-MD03 F30M	2,5 0,10	0,036 0,0014	0,036 0,0014	0,042 0,0017	0,055 0,0022
	S13	MM08-08008-B90-MD03 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0019
X-Heads	H5	MM08-08008-B90-MD03 F30M	2,5 0,10	0,030 0,0012	0,030 0,0012	0,034 0,0013	0,044 0,0018
	H8	MM08-08008-B90-MD03 F30M	2,5 0,10	0,024 0,00095	0,024 0,00095	0,026 0,0010	0,034 0,0013
	H11	MM08-08008-B90-MD03 F30M	2,5 0,10	0,030 0,0012	0,030 0,0012	0,034 0,0013	0,044 0,0018
	H12	MM08-08008-B90-MD03 F30M	2,5 0,10	0,024 0,00095	0,024 0,00095	0,026 0,0010	0,034 0,0013
	H21	MM08-08008-B90-MD03 F30M	2,5 0,10	0,024 0,00095	0,024 0,00095	0,026 0,0010	0,034 0,0013

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM08 Z2 – Copy milling – Insert selection – Finishing – mm/Inch

SMG		a_p	f_z				
			15%	10%	5%	2%	
P1	MM08-08008-B90PF-M01 F15M	3,0	0,020	0,024	0,032	0,050	Universal
		0.12	0.00080	0.00095	0.0013	0.0020	
P2	MM08-08008-B90PF-M01 F15M	3,0	0,020	0,024	0,034	0,055	Steel and cast iron
		0.12	0.00080	0.00095	0.0013	0.0022	
P3	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,032	0,050	Steel and cast iron
		0.12	0.00075	0.00085	0.0013	0.0020	
P4	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Steel and cast iron
		0.12	0.00075	0.00085	0.0012	0.0019	
P5	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Steel and cast iron
		0.12	0.00075	0.00085	0.0012	0.0019	
P6	MM08-08008-B90PF-M01 F15M	3,0	0,018	0,022	0,030	0,048	Steel and cast iron
		0.12	0.00070	0.00085	0.0012	0.0019	
P7	MM08-08008-B90PF-M01 F15M	3,0	0,018	0,022	0,030	0,048	Steel and cast iron
		0.12	0.00070	0.00085	0.0012	0.0019	
P8	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,032	0,050	Stainless steel and S-materials
		0.12	0.00075	0.00085	0.0013	0.0020	
P11	MM08-08008-B90PF-M01 F15M	3,0	0,018	0,022	0,030	0,048	Stainless steel and S-materials
		0.12	0.00070	0.00085	0.0012	0.0019	
P12	MM08-08008-B90PF-M01 F15M	2,0	0,013	0,015	0,020	0,032	Stainless steel and S-materials
		0.080	0.00050	0.00060	0.00080	0.0013	
M1	MM08-08008-B90PF-M01 F15M	3,0	0,020	0,024	0,034	0,055	Stainless steel and S-materials
		0.12	0.00080	0.00095	0.0013	0.0022	
M2	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Stainless steel and S-materials
		0.12	0.00075	0.00085	0.0012	0.0019	
M3	MM08-08008-B90PF-M01 F15M	2,0	0,015	0,018	0,024	0,038	Stainless steel and S-materials
		0.080	0.00060	0.00070	0.00095	0.0015	
M4	MM08-08008-B90PF-M01 F15M	1,7	0,014	0,015	0,022	0,034	Stainless steel and S-materials
		0.065	0.00055	0.00065	0.00085	0.0013	
M5	MM08-08008-B90PF-M01 F15M	1,7	0,014	0,015	0,022	0,034	Stainless steel and S-materials
		0.065	0.00055	0.00065	0.00085	0.0013	
K1	MM08-08008-B90PF-M01 F15M	3,0	0,020	0,024	0,034	0,055	Non ferrous
		0.12	0.00080	0.00095	0.0013	0.0022	
K2	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Non ferrous
		0.12	0.00075	0.00085	0.0012	0.0019	
K3	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Non ferrous
		0.12	0.00075	0.00085	0.0012	0.0019	
K4	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Non ferrous
		0.12	0.00075	0.00085	0.0012	0.0019	
K5	MM08-08008-B90PF-M01 F15M	3,0	0,017	0,020	0,028	0,044	Non ferrous
		0.12	0.00065	0.00080	0.0011	0.0017	
K6	MM08-08008-B90PF-M01 F15M	3,0	0,019	0,022	0,030	0,048	Non ferrous
		0.12	0.00075	0.00085	0.0012	0.0019	
K7	MM08-08008-B90PF-M01 F15M	3,0	0,017	0,020	0,028	0,044	Non ferrous
		0.12	0.00065	0.00080	0.0011	0.0017	
N1	MM08-08008-B90PF-M01 F15M	3,0	0,026	0,030	0,042	0,070	Hard
		0.12	0.0010	0.0012	0.0017	0.0028	
N2	MM08-08008-B90PF-M01 F15M	3,0	0,026	0,030	0,042	0,070	Hard
		0.12	0.0010	0.0012	0.0017	0.0028	
N3	MM08-08008-B90PF-M01 F15M	3,0	0,026	0,030	0,042	0,070	Hard
		0.12	0.0010	0.0012	0.0017	0.0028	
N11	MM08-08008-B90PF-M01 F15M	3,0	0,026	0,030	0,042	0,070	Hard
		0.12	0.0010	0.0012	0.0017	0.0028	
S1	MM08-08008-B90PF-M01 F15M	1,7	0,014	0,015	0,022	0,034	Graphite
		0.065	0.00055	0.00065	0.00085	0.0013	
S2	MM08-08008-B90PF-M01 F15M	1,7	0,014	0,015	0,022	0,034	Graphite
		0.065	0.00055	0.00065	0.00085	0.0013	
S3	MM08-08008-B90PF-M01 F15M	1,7	0,013	0,014	0,020	0,030	Graphite
		0.065	0.00050	0.00060	0.00080	0.0012	
S11	MM08-08008-B90PF-M01 F15M	1,9	0,015	0,018	0,024	0,038	Graphite
		0.075	0.00060	0.00070	0.00095	0.0015	
S12	MM08-08008-B90PF-M01 F15M	1,9	0,015	0,018	0,024	0,038	Graphite
		0.075	0.00060	0.00070	0.00095	0.0015	
S13	MM08-08008-B90PF-M01 F15M	1,7	0,014	0,015	0,022	0,034	Graphite
		0.065	0.00055	0.00065	0.00085	0.0013	
H5	MM08-08008-B90PF-M01 F15M	2,0	0,013	0,015	0,020	0,032	X-Heads
		0.080	0.00050	0.00060	0.00080	0.0013	
H8	MM08-08008-B90PF-M01 F15M	1,9	0,010	0,011	0,016	0,025	X-Heads
		0.075	0.00040	0.00048	0.00065	0.0010	
H11	MM08-08008-B90PF-M01 F15M	2,0	0,013	0,015	0,020	0,032	X-Heads
		0.080	0.00050	0.00060	0.00080	0.0013	
H12	MM08-08008-B90PF-M01 F15M	1,9	0,010	0,011	0,016	0,025	X-Heads
		0.075	0.00040	0.00048	0.00065	0.0010	
H21	MM08-08008-B90PF-M01 F15M	1,9	0,010	0,011	0,016	0,025	X-Heads
		0.075	0.00040	0.00048	0.00065	0.0010	

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM08 Z2 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F15M					F30M					T60M				
		100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%
Universal	P1	320	405	430	465	465	265	330	360	385	385	215	265	290	315	310
		1050	1325	1400	1525	1525	870	1075	1175	1275	1275	710	870	950	1025	1025
Steel and cast iron	P2	315	395	420	450	450	260	320	345	375	370	210	260	280	305	300
		1025	1300	1375	1475	1475	850	1050	1125	1225	1225	690	850	920	1000	980
	P3	270	340	360	390	390	225	280	300	325	325	180	225	245	265	260
		890	1125	1175	1275	1275	740	920	980	1075	1075	590	740	800	870	850
	P4	240	300	320	345	345	200	245	265	285	285	160	200	215	230	230
		790	980	1050	1125	1125	660	800	870	940	940	520	660	710	750	750
	P5	225	285	305	330	330	190	235	255	275	275	155	190	205	220	220
		740	940	1000	1075	1075	620	770	840	900	900	510	620	670	720	720
	P6	255	320	340	370	370	210	265	285	310	305	170	215	230	250	250
		840	1050	1125	1225	1225	690	870	940	1025	1000	560	710	750	820	820
Stainless steel and S-materials	P7	240	300	320	350	350	200	250	270	295	290	160	200	220	235	235
		790	980	1050	1150	1150	660	820	890	970	950	520	660	720	770	770
	P8	225	285	305	330	330	190	235	250	275	270	150	190	205	220	220
		740	940	1000	1075	1075	620	770	820	900	890	490	620	670	720	720
	P11	235	295	315	340	340	195	240	260	285	280	160	195	210	230	230
		770	970	1025	1125	1125	640	790	850	940	920	520	640	690	750	750
	P12	145	185	185	200	200	125	155	165	175	175	100	125	130	145	140
		475	610	620	660	660	410	510	540	570	570	330	410	445	475	460
Non ferrous	M1	250	315	335	365	365	210	260	280	305	300	170	210	225	245	240
		820	1025	1100	1200	1200	690	850	920	1000	980	560	690	740	800	790
	M2	205	255	275	295	295	170	210	230	245	245	140	170	185	200	200
		670	840	900	970	970	560	690	750	800	800	460	560	610	660	660
	M3	165	205	210	225	225	135	175	180	195	195	110	140	145	155	155
		540	670	710	740	740	445	570	590	640	640	360	460	475	510	510
	M4	125	160	160	170	170	110	140	135	150	150	85	110	110	120	120
		410	520	560	560	560	360	460	475	490	490	280	360	375	395	395
	M5	105	135	130	140	140	90	115	115	125	125	75	95	90	100	100
		345	445	460	460	460	295	375	395	410	410	245	310	330	330	330
Hard	K1	250	310	330	360	355	205	255	275	300	295	165	205	220	240	240
		820	1025	1075	1175	1175	670	840	900	980	970	540	670	720	790	790
	K2	215	270	290	310	310	180	225	240	260	260	145	180	195	210	210
		710	890	950	1025	1025	590	740	790	850	850	475	590	640	690	690
	K3	180	230	245	265	265	150	190	205	220	220	125	155	165	180	180
		590	750	800	870	870	490	620	670	720	720	410	510	540	590	590
Plastic and cfrp	K4	175	220	235	250	250	145	180	195	210	210	115	145	160	170	170
		570	720	770	820	820	475	590	640	690	690	375	475	520	560	560
	K5	105	130	140	150	150	90	110	120	125	125	70	90	95	105	105
		345	425	460	490	490	295	360	395	410	410	230	295	310	345	345
	K6	155	190	205	220	220	130	160	170	185	185	105	130	140	150	150
		510	620	670	720	720	425	520	560	610	610	345	425	460	490	490
	K7	135	165	180	195	195	110	140	150	165	165	90	110	120	130	130
		445	540	590	640	640	360	460	490	540	540	295	360	395	425	425
Graphite	N1	1925	2425	2575	2800	2775	1550	1925	2075	2250	2225	1250	1550	1675	1825	1800
		6325	7950	8450	9175	9100	5075	6325	6800	7375	7300	4100	5075	5500	6000	5900
	N2	780	980	1050	1125	1125	630	780	840	910	900	510	630	680	740	730
		2550	3225	3450	3700	3700	2075	2550	2750	2975	2950	1675	2075	2225	2425	2400
	N3	520	650	700	750	750	420	520	560	610	600	340	420	455	490	485
		1700	2125	2300	2450	2450	1375	1700	1825	2000	1975	1125	1375	1500	1600	1600
	N11	590	740	800	860	860	480	590	640	700	690	390	480	520	560	560
		1925	2425	2625	2825	2825	1575	1925	2100	2300	2275	1275	1575	1700	1825	1825
X-Heads	S1	60	75	75	80	80	50	65	65	70	70	41	50	50	55	55
		195	245	260	260	260	165	215	230	230	230	135	165	180	180	180
	S2	47	60	60	65	65	40	50	50	55	55	33	42	42	45	45
		155	195	215	215	215	130	165	180	180	180	110	140	145	150	150
	S3	40	50	50	55	55	35	45	45	48	48	28	36	36	39	39
		130	165	180	180	180	115	150	155	155	155	90	120	125	130	130
	S11	85	105	105	115	115	70	90	90	100	100	55	75	75	80	80
		280	345	360	375	375	230	295	310	330	330	180	245	245	260	260
	S12	60	75	75	80	80	48	60	65	70	70	39	50	50	55	55
		195	245	245	260	260	155	195	215	230	230	130	165	180	180	180
Minimaster	S13	33	42	42	45	45	28	36	36	39	39	23	29	29	31	32
		110	140	150	150	150	90	120	125	130	130	75	95	100	100	105
	H5	48	60	60	65	65	41	50	55	60	60	33	42	44	47	47
		155	195	215	215	215	135	165	180	195	195	110	140	145	155	155
	H8	49	60	60	65	65	42	55	55	60	60	34	44	45	48	48
		160	195	215	215	215	140	180	180	195	195	110	145	150	155	155
	H11	60	80	80	85	85	55	65	70	75	75	43	55	55	60	60
		195	260	260	280	280	180	215	230	245	245	140	180	180	195	195
	H12	85	110	110	120	120	75	100	100	105	105	60	80	80	85	85
		280	360	375	395	395	245	330	345	345	345	195	260	280	280	280
	H21	49	60	60	65	65	42	55	55	60	60	34	44	45	48	48
		160	195	215	215	215	140	180	180	195	195	110	145	150	155	155

MM08 High-Feed – Insert selection – mm/Inch

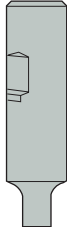
SMG		a_p	f_z				
			100%	70%	30%	20%	
P1	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,32 0,013	0,32 0,013	0,42 0,017	0,50 0,020	Universal
P2	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,32 0,013	0,32 0,013	0,42 0,017	0,50 0,020	
P3	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,30 0,012	0,30 0,012	0,40 0,016	0,48 0,019	Steel and cast iron
P4	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,30 0,012	0,30 0,012	0,38 0,015	0,48 0,019	
P5	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,30 0,012	0,38 0,015	0,46 0,018	Steel and cast iron
P6	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,28 0,011	0,38 0,015	0,46 0,018	
P7	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,28 0,011	0,38 0,015	0,46 0,018	Stainless steel and S-materials
P8	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,30 0,012	0,30 0,012	0,40 0,016	0,48 0,019	
P11	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,28 0,011	0,38 0,015	0,46 0,018	Stainless steel and S-materials
P12	MM08-08.40-HF-MD06 F30M	0,20 0,0080	0,20 0,0080	0,20 0,0080	0,25 0,010	0,30 0,012	
M1	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,32 0,013	0,32 0,013	0,42 0,017	0,50 0,020	Stainless steel and S-materials
M2	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,30 0,012	0,38 0,015	0,46 0,018	
M3	MM08-08.40-HF-MD06 F30M	0,20 0,0080	0,24 0,0095	0,24 0,0095	0,30 0,012	0,36 0,014	Stainless steel and S-materials
M4	MM08-08.40-HF-MD06 F30M	0,16 0,0065	0,20 0,0080	0,20 0,0080	0,26 0,010	0,32 0,013	
M5	MM08-08.40-HF-MD06 F30M	0,16 0,0065	0,20 0,0080	0,20 0,0080	0,26 0,010	0,32 0,013	Non ferrous
K1	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,32 0,013	0,32 0,013	0,42 0,017	0,50 0,020	
K2	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,30 0,012	0,38 0,015	0,46 0,018	Non ferrous
K3	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,30 0,012	0,38 0,015	0,46 0,018	
K4	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,28 0,011	0,30 0,012	0,38 0,015	0,46 0,018	Hard
K5	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,26 0,010	0,26 0,010	0,34 0,013	0,42 0,017	
K6	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,26 0,011	0,26 0,012	0,34 0,015	0,42 0,018	Hard
K7	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,26 0,010	0,26 0,010	0,34 0,013	0,42 0,017	
N1	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,40 0,016	0,40 0,016	0,55 0,022	0,70 0,028	Hard
N2	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,40 0,016	0,40 0,016	0,55 0,022	0,70 0,028	
N3	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,40 0,016	0,40 0,016	0,55 0,022	0,70 0,028	Graphite
N11	MM08-08.40-HF-MD06 F30M	0,26 0,010	0,40 0,016	0,40 0,016	0,55 0,022	0,70 0,028	
S1	MM08-08.40-HF-MD06 F30M	0,16 0,0065	0,20 0,0080	0,20 0,0080	0,26 0,010	0,32 0,013	Graphite
S2	MM08-08.40-HF-MD06 F30M	0,16 0,0065	0,20 0,0080	0,20 0,0080	0,26 0,010	0,32 0,013	
S3	MM08-08.40-HF-MD06 F30M	0,16 0,0065	0,19 0,0075	0,19 0,0075	0,24 0,0095	0,30 0,012	X-Heads
S11	MM08-08.40-HF-MD06 F30M	0,18 0,0070	0,24 0,0095	0,24 0,0095	0,30 0,012	0,36 0,014	
S12	MM08-08.40-HF-MD06 F30M	0,18 0,0070	0,24 0,0095	0,24 0,0095	0,30 0,012	0,36 0,014	X-Heads
S13	MM08-08.40-HF-MD06 F30M	0,16 0,0065	0,20 0,0080	0,20 0,0080	0,26 0,010	0,32 0,013	
H5	MM08-08.40-HF-MD06 F30M	0,20 0,0080	0,20 0,0080	0,20 0,0080	0,25 0,010	0,30 0,012	X-Heads
H8	MM08-08.40-HF-MD06 F30M	0,18 0,0070	0,16 0,0065	0,15 0,0060	0,19 0,0075	0,24 0,0095	
H11	MM08-08.40-HF-MD06 F30M	0,20 0,0080	0,20 0,0080	0,20 0,0080	0,25 0,010	0,30 0,012	Minimaster
H12	MM08-08.40-HF-MD06 F30M	0,18 0,0070	0,16 0,0065	0,15 0,0060	0,19 0,0075	0,24 0,0095	
H21	MM08-08.40-HF-MD06 F30M	0,18 0,0070	0,16 0,0065	0,15 0,0060	0,19 0,0075	0,24 0,0095	Minimaster

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %
 All cutting data are start values

MM08 High-Feed – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F30M			
		100%	70%	30%	20%
Universal	P1	250 820	305 1000	350 1150	375 1225
	P2	245 800	300 980	345 1125	365 1200
Steel and cast iron	P3	215 710	260 850	300 980	315 1025
	P4	190 620	230 750	265 870	275 900
	P5	180 590	220 720	255 840	265 870
	P6	205 670	250 820	285 940	300 980
Stainless steel and S-materials	P7	190 620	235 770	270 890	285 940
	P8	180 590	220 720	250 820	265 870
	P11	185 610	230 750	260 850	275 900
	P12	120 395	145 475	165 540	175 570
Non ferrous	M1	195 640	240 790	275 900	295 970
	M2	165 540	195 640	230 750	240 790
	M3	130 425	155 510	180 590	190 620
	M4	100 330	120 395	140 460	145 475
Hard	M5	85 280	100 330	115 375	120 395
	K1	195 640	235 770	270 890	290 950
	K2	170 560	210 690	240 790	255 840
	K3	145 475	175 570	205 670	215 710
Plastic and cfrp	K4	140 460	170 560	195 640	205 670
	K5	85 280	105 345	120 395	125 410
	K6	125 410	150 490	170 560	180 590
	K7	110 360	130 425	150 490	160 520
Graphite	N1	1475 4850	1800 5900	2050 6725	2125 6975
	N2	590 1925	720 2350	820 2700	860 2825
	N3	395 1300	480 1575	550 1800	570 1875
	N11	450 1475	550 1800	630 2075	650 2125
X-Heads	S1	48 155	55 180	65 215	70 230
	S2	39 130	46 150	50 165	55 180
	S3	33 110	40 130	46 150	48 155
	S11	65 215	80 260	90 295	95 310
Minimaster	S12	46 150	55 180	65 215	65 215
	S13	27 90	32 105	36 120	38 125
	H5	40 130	47 155	55 180	60 195
	H8	41 135	50 165	55 180	60 195
	H11	50 165	60 195	70 230	75 245
	H12	75 245	90 295	100 330	105 345
	H21	41 135	50 165	55 180	60 195

Shank design

Design 1, Keyway shank	Design 2, Cylindrical/Weldon back end and 90° front
	
Design 3, Cylindrical/Weldon back end tapered front 87°/89°	Design 4, Cylindrical/Weldon back end tapered front 80°/85°/87°
	
Design 5, Cylindrical back end double tapered front end 89°/85°	
	

Universal

 Steel and cast
iron

 Stainless steel
and S-materials

 Stainless steel
and S-materials

Non ferrous

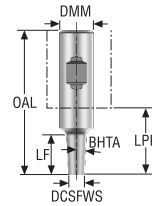
Hard

Graphite

X-Heads

Minimaster

MM10 Shank – Metric



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		mm	mm	mm	mm	mm					kg	
MM10-10045.0-0007	00083979	9,6	10,0	7,0	7,0	45,0	0,0	2	■	80000	0,1	2
MM10-12060.0-0007DS	02580667	9,6	12,0	7,0	15,0	60,0	0,0	2	■	76300	0,1	3
MM10-12085.0-3024DS	02580704	9,5	12,0	23,8	40,0	85,0	3,0	4	■	76300	0,2	3
MM10-12100.0-1035DS	02580733	9,5	12,0	35,0	55,0	100,0	1,0	3	■	76300	0,2	3
MM10-14120.0-1050DS	02580736	9,5	14,0	50,0	75,0	120,0	1,0	3	■	76300	0,3	3
MM10-16065.0-0000	75004925	9,5	16,0	0,0	17,0	65,0	60,0	1	■	80000	0,1	1
MM10-16160.0-1035M	00094757	9,5	16,0	35,0	112,0	160,0	1,0	3	■	80000	0,2	6
MM10-16160.0-1055M	00094758	9,5	16,0	55,0	112,0	160,0	1,0	3	■	80000	0,2	7
MM10-16160.0-1075M	00094760	9,5	16,0	75,0	112,0	160,0	1,0	3	■	80000	0,2	7
MM10-16085.0-0020DS	02580688	9,5	16,0	20,0	37,0	85,0	0,0	2	■	76300	0,3	3
MM10-16105.0-0040DS	02580689	9,5	16,0	40,0	57,0	105,0	0,0	2	■	76300	0,3	3
MM10-16160.0-1055DS	02580748	9,5	16,0	55,0	112,0	160,0	1,0	3	■	76300	0,4	3
MM10-16160.0-1075DS	02580749	9,5	16,0	75,0	112,0	160,0	1,0	3	■	76300	0,4	3
MM10-20075.3-0010	75012787	9,5	20,0	10,0	25,0	75,0	0,0	2	■	80000	0,2	4
MM10-20085.3-3023	75012788	9,5	20,0	23,0	35,0	85,0	3,0	3	■	80000	0,2	4
MM10-20140.3-5060	75012789	9,5	20,0	60,0	90,0	140,0	5,0	4	■	80000	0,3	5
MM10-20250.0-1055DS	02580750	9,5	20,0	55,0	200,0	250,0	1,0	5	■	76300	1,0	3
MM10-32250.0-10063	75069366	9,5	32,0	63,8	190,0	250,0	10,0	4	■	80000	1,3	5

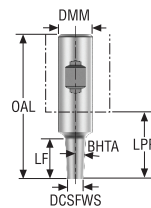
Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-06032	MM10-0627	H06-4
2	MM-06020	MM10-0627	H05-4
3	–	MM10-061027	–
4	MM-06048	MM10-0627	H06-4
5	MM-06116	MM10-0627	H06-4
6	MM-06048	MM10-0651	H06-4
7	MM-06032	MM10-0688	H06-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

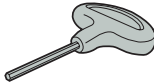
MM10 Shank – Inch



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		inch	inch	inch	inch	inch					lbs	
MM10-0.38-1.8-0-0002	00096126	0.360	0.375	0.276	0.276	1.772	0,0	2	■	80000	0.220	2
MM10-0.62-2.6-0-0000	75005069	0.374	0.625	0	0.669	2.559	60,0	1	■	80000	0.220	1
MM10-0.62-6.3-0-1021	75054608	0.360	0.625	2.165	4.409	6.299	1,0	3	■	80000	0.440	7
MM10-0.75-3.0-3-0004	75015052	0.360	0.750	0.394	0.984	2.953	0,0	2	■	80000	0.440	3
MM10-0.75-3.3-3-3009	75015053	0.374	0.750	0.906	1.378	3.346	3,0	3	■	80000	0.440	3
MM10-0.75-5.5-3-5021	75015054	0.374	0.750	2.150	3.543	5.512	5,0	4	■	80000	0.660	5
MM10-0.75-10.0-0-1021DS	02593420	0.360	0.750	2.165	7.874	9.843	1,0	5	■	76300	1.980	4
MM10-0.75-4.1-0-0015DS	02593422	0.360	0.750	1.575	2.165	4.134	0,0	2	■	76300	0.660	4
MM10-1.25-10.0-0-10024	00096132	0.374	1.250	2.484	7.480	9.843	10,0	4	■	80000	2.870	5

Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-06032	MM10-0627	H06-4
2	MM-06020	MM10-0627	H05-4
3	MM-06048	MM10-0627	H06-4
4	–	MM10-061027	–
5	MM-06116	MM10-0627	H06-4
7	MM-06032	MM10-0688	H06-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

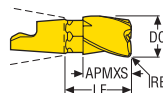
Hard

Graphite

X-Heads

Minimaster

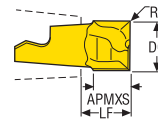
Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench		Grades			
												Coated			
												T60M	F15M	F30M	F40M
	mm Inch	mm Inch	mm Inch	mm Inch											
MM10-09512-A30-E03	9,525 0.375	11,8 0.465	–	15,72 0.619	15,0	11,6	18,8	30	3	MM0416	✓			■	
MM10-09512-R03A30-M03	9,525 0.375	11,8 0.465	0,3 0.012	15,72 0.619	15,0	11,6	18,2	30	3	MM0416	✓				■
MM10-09512-R04A30-M03	9,525 0.375	11,8 0.465	0,4 0.016	15,72 0.619	15,0	11,6	18,0	30	3	MM0416	✓				■
MM10-09512-R08A30-M03	9,525 0.375	11,8 0.465	0,8 0.031	15,72 0.619	15,0	11,6	17,2	30	3	MM0416	✓				■
MM10-09512-R16A30-M03	9,525 0.375	11,8 0.465	1,6 0.063	15,72 0.619	15,0	11,6	15,6	30	3	MM0416	✓				■
MM10-10012-A30-E03	10,0 0.394	11,8 0.465	–	15,72 0.619	15,0	12,2	19,8	30	3	MM0416	✓			■	
MM10-10012-R05A30-M03	10,0 0.394	11,8 0.465	0,5 0.020	15,72 0.619	15,0	12,2	18,8	30	3	MM0416	✓				■
MM10-10012-R10A30-D03	10,0 0.394	11,8 0.465	1,0 0.039	15,72 0.619	15,0	12,2	17,8	30	3	MM0416	✓			■	
MM10-10012-R10A30-E03	10,0 0.394	11,8 0.465	1,0 0.039	15,72 0.619	15,0	12,2	17,8	30	3	MM0416	✓			■	
MM10-10012-R10A30-M03	10,0 0.394	11,8 0.465	1,0 0.039	15,72 0.619	15,0	12,2	17,8	30	3	MM0416	✓				■
MM10-10012-R20A30-M03	10,0 0.394	11,8 0.465	2,0 0.079	15,72 0.619	15,0	12,2	15,8	30	3	MM0416	✓				■
MM10-10012-R30A30-M03	10,0 0.394	11,8 0.465	3,0 0.118	15,72 0.619	15,0	12,2	13,8	30	3	MM0416	✓				■

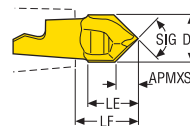
Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench	Grades			
											Coated			
											T60M	F15M	F30M	F40M
MM10-09510-M03	9,525 0.375	6,8 0.268	—	8,5 0.335	15,0	11,6	18,8	0	2	MM0612	■			
MM10-09510-R04-MD04	9,525 0.375	6,8 0.268	0,4 0.016	8,49 0.334	15,0	11,6	18,0	0	2	MM0612	■			
MM10-09510-R08A8-E03	9,525 0.375	6,6 0.260	0,8 0.031	8,37 0.330	15,0	11,6	17,2	8	2	MM0612			■	
MM10-09807T-R03-D04	9,8 0.386	6,8 0.268	0,3 0.012	8,49 0.334	15,0	11,9	18,8	0	2	MM0612	■			
MM10-10007-M03	10,0 0.394	6,9 0.272	—	8,5 0.335	15,0	12,2	19,8	0	2	MM0612	■			
MM10-10007-R04A8-E03	10,0 0.394	6,6 0.260	0,4 0.016	8,44 0.332	15,0	12,2	19,0	8	2	MM0612	■		■	
MM10-10007-R04-MD04	10,0 0.394	6,8 0.268	0,4 0.016	8,49 0.334	15,0	12,2	19,0	0	2	MM0612	■		■	
MM10-10007-R04P-M03	10,0 0.394	6,7 0.264	0,4 0.016	8,38 0.330	15,0	12,2	19,0	0	2	MM0612			■	
MM10-10007-R10-MD04	10,0 0.394	6,8 0.268	1,0 0.039	8,48 0.334	15,0	12,2	17,8	0	2	MM0612	■		■	
MM10-10007-R20-MD04	10,0 0.394	6,8 0.268	2,0 0.079	8,46 0.333	15,0	12,2	15,8	0	2	MM0612			■	
MM10-10007-R30-MD04	10,0 0.394	6,8 0.268	3,0 0.118	8,44 0.332	15,0	12,2	13,8	0	2	MM0612			■	

Centre drilling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	SIG°	ZEFP	Wrench	Grades			
								Coated			
								T60M	F15M	F30M	F40M
MM10-10005-C90-M03	10,0 0.394	4,69 0.185	—	11,8 0.465	90,0	2	MM0612	■			
MM10-10007-C120-M03	10,0 0.394	2,7 0.106	—	11,8 0.465	120,0	2	MM0612	■			

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

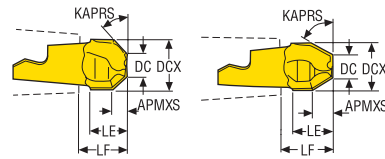
Hard

Graphite

X-Heads

Minimaster

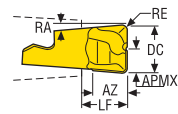
Chamfering



—For Torque keys and torque values, see page 787

Designation	DCX	DC	APMXS	RE	LE	LF	KAPRS°	ZEFP	Wrench	Grades			
										Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM10-10007-4525-E03	10,0 0.394	4,82 0.190	2,6 0.102	0,3 0.012	6,94 0.273	8,48 0.334	45,0	2	MM0612	■			
MM10-10008-6040-E03	10,0 0.394	5,24 0.206	4,0 0.157	0,3 0.012	8,05 0.317	9,6 0.378	60,0	2	MM0612	■			

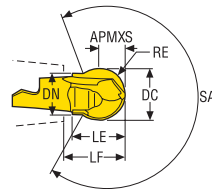
Plunge milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXE	RE	AZ	LF	RA°	ZEFP	Wrench	Grades			
									Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM10-10007-R10-PL-MD04	10,0 0.394	5,0 0.197	1,0 0.039	7,1 0.280	8,48 0.334	5,0	2	MM0612			■	

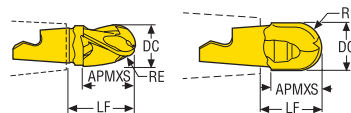
Precision inserts for semi-finishing in all materials



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LE	DN	LF	SA°	ZEFP	Wrench	Grades			
										Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM10-12012-B120P-M05	12,0 0.472	6,0 0.236	6,0 0.236	12,0 0.472	10,0 0.394	13,2 0.520	247,0	2	MM0612			■	
MM10-12712-B120PF-M03	12,7 0.500	6,35 0.250	6,35 0.250	12,4 0.488	10,0 0.394	13,56 0.534	256,0	2	MM0612		■		
MM10-12712-B120P-M05	12,7 0.500	6,35 0.250	6,35 0.250	12,4 0.488	10,0 0.394	13,56 0.534	256,0	2	MM0612			■	

Copy milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	FHA°	ZEFP	Wrench		Grades			
									Coated			
	mm Inch	mm Inch	mm Inch	mm Inch					T60M	F15M	F30M	F40M
MM10-09510-B90P-M04	9,525 0.375	8,7 0.343	4,763 0.188	11,74 0.462		2	MM0612		■		■	
MM10-10010-B90-MD04	10,0 0.394	10,2 0.402	5,0 0.197	11,77 0.463		2	MM0612		■		■	
MM10-10010-B90PF-M02	10,0 0.394	8,73 0.344	5,0 0.197	11,74 0.462		2	MM0612			■		
MM10-10010-B90P-M04	10,0 0.394	8,73 0.344	5,0 0.197	11,74 0.462		2	MM0612				■	
MM10-10010-B90S-E04	10,0 0.394	10,2 0.402	5,0 0.197	11,77 0.463		2	MM0612				■	
MM10-10012-B90A30-D03	10,0 0.394	11,8 0.465	5,0 0.197	15,72 0.619	30,0	3	MM0416	✓			■	
MM10-10012-B90A30-E03	10,0 0.394	11,8 0.465	5,0 0.197	15,72 0.619	30,0	3	MM0416	✓			■	
MM10-10012-B90A30-M03	10,0 0.394	11,8 0.465	5,0 0.197	15,72 0.619	30,0	3	MM0416	✓				■

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

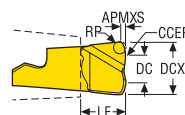
Hard

Graphite

X-Heads

Minimaster

High feed



—For Torque keys and torque values, see page 787

Designation												Grades			
	DCX	DC	APMXS	RP	CCER	LF	RMPX°	C min	C max	ZEFP	Wrench	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch						T60M	F15M	F30M	F40M
MM10-10.50-HF-MD08	10,0 0.394	5,0 0.197	0,44 0.017	1,13 0.044	5,0 0.197	8,5 0.335	5,0	12,2	18,2	2	MM0612		■	■	

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster

MM10 – Slot and Side milling – Insert selection – mm/Inch

SMG		a_p	f_z			
			100%	40%	20%	10%
P1	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,044 0.0017	0,044 0.0017	0,055 0.0022	0,070 0.0028
P2	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,044 0.0017	0,044 0.0017	0,055 0.0022	0,070 0.0028
P3	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,042 0.0017	0,042 0.0017	0,050 0.0020	0,070 0.0028
P4	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,042 0.0017	0,042 0.0017	0,050 0.0020	0,065 0.0026
P5	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,040 0.0016	0,040 0.0016	0,050 0.0020	0,065 0.0026
P6	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,040 0.0016	0,040 0.0016	0,048 0.0019	0,065 0.0026
P7	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,040 0.0016	0,040 0.0016	0,048 0.0019	0,065 0.0026
P8	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,042 0.0017	0,042 0.0017	0,050 0.0020	0,070 0.0028
P11	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,040 0.0016	0,040 0.0016	0,048 0.0019	0,065 0.0026
P12	MM10-10012-R05A30-M03 F40M	1,7 0.065	0,028 0.0011	0,028 0.0011	0,034 0.0013	0,044 0.0017
M1	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,044 0.0017	0,044 0.0017	0,055 0.0022	0,070 0.0028
M2	MM10-10012-R05A30-M03 F40M	2,0 0.080	0,040 0.0016	0,040 0.0016	0,050 0.0020	0,065 0.0026
M3	MM10-10012-R05A30-M03 F40M	1,7 0.065	0,032 0.0013	0,032 0.0013	0,040 0.0016	0,050 0.0020
M4	MM10-10012-R05A30-M03 F40M	1,2 0.048	0,030 0.0012	0,030 0.0012	0,034 0.0013	0,046 0.0018
M5	MM10-10012-R05A30-M03 F40M	1,2 0.048	0,030 0.0012	0,030 0.0012	0,034 0.0013	0,046 0.0018
K1	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,048 0.0019	0,048 0.0019	0,055 0.0022	0,075 0.0030
K2	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,044 0.0017	0,042 0.0017	0,050 0.0020	0,065 0.0026
K3	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,044 0.0017	0,042 0.0017	0,050 0.0020	0,065 0.0026
K4	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,044 0.0017	0,042 0.0017	0,050 0.0020	0,065 0.0026
K5	MM10-10012-R10A30-D03 F30M	2,0 0.080	0,040 0.0016	0,038 0.0015	0,044 0.0017	0,060 0.0024
K6	MM10-10012-R10A30-D03 F30M	2,0 0.080	0,044 0.0017	0,042 0.0017	0,050 0.0020	0,065 0.0026
K7	MM10-10012-R10A30-D03 F30M	2,0 0.080	0,040 0.0016	0,038 0.0015	0,044 0.0017	0,060 0.0024
N1	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
N2	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
N3	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
N11	MM10-10012-R10A30-E03 F30M	2,0 0.080	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
S1	MM10-10012-R10A30-D03 F30M	1,2 0.048	0,036 0.0014	0,034 0.0013	0,036 0.0014	0,046 0.0018
S2	MM10-10012-R10A30-D03 F30M	1,2 0.048	0,036 0.0014	0,034 0.0013	0,036 0.0014	0,046 0.0018
S3	MM10-10012-R10A30-D03 F30M	1,2 0.048	0,032 0.0013	0,032 0.0013	0,034 0.0013	0,042 0.0017
S11	MM10-10012-R05A30-M03 F40M	1,4 0.055	0,034 0.0013	0,034 0.0013	0,040 0.0016	0,050 0.0020
S12	MM10-10012-R05A30-M03 F40M	1,4 0.055	0,034 0.0013	0,034 0.0013	0,040 0.0016	0,050 0.0020
S13	MM10-10012-R05A30-M03 F40M	1,2 0.048	0,030 0.0012	0,030 0.0012	0,034 0.0013	0,046 0.0018
H5	MM10-10012-R10A30-D03 F30M	1,7 0.065	0,030 0.0012	0,030 0.0012	0,034 0.0013	0,044 0.0017
H8	MM10-10012-R10A30-D03 F30M	1,4 0.055	0,025 0.0010	0,024 0.00095	0,026 0.0010	0,034 0.0013
H11	MM10-10012-R10A30-D03 F30M	1,7 0.065	0,030 0.0012	0,030 0.0012	0,034 0.0013	0,044 0.0017
H12	MM10-10012-R10A30-D03 F30M	1,4 0.055	0,025 0.0010	0,024 0.00095	0,026 0.0010	0,034 0.0013
H21	MM10-10012-R10A30-D03 F30M	1,4 0.055	0,025 0.0010	0,024 0.00095	0,026 0.0010	0,034 0.0013

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

All cutting data are start values

 Universal

Steel and cast iron

Stainless steel and S-materials

Stainless steel and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster

MM10 – Slot and Side milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F30M				F40M				T60M			
		100%	40%	20%	10%	100%	40%	20%	10%	100%	40%	20%	10%
Universal	P1	265	330	365	405	250	315	345	385	190	240	270	295
		870	1075	1200	1325	820	1025	1125	1275	620	790	890	970
Steel and cast iron	P2	260	320	360	390	245	305	340	375	185	235	260	290
		850	1050	1175	1275	800	1000	1125	1225	610	770	850	950
	P3	225	280	315	340	215	265	295	325	165	205	230	250
		740	920	1025	1125	710	870	970	1075	540	670	750	820
	P4	200	245	275	305	190	235	260	290	145	180	200	225
		660	800	900	1000	620	770	850	950	475	590	660	740
	P5	190	235	265	290	180	225	250	275	140	175	195	215
		620	770	870	950	590	740	820	900	460	570	640	710
	P6	215	265	295	325	205	250	280	310	155	195	220	240
		710	870	970	1075	670	820	920	1025	510	640	720	790
Stainless steel and S-materials	P7	200	250	280	310	190	240	265	290	145	185	205	225
		660	820	920	1025	620	790	870	950	475	610	670	740
	P8	190	235	265	285	180	225	250	270	140	175	190	210
		620	770	870	940	590	740	820	890	460	570	620	690
	P11	195	245	270	300	185	230	260	285	140	180	200	220
		640	800	890	980	610	750	850	940	460	590	660	720
	P12	125	150	170	185	115	145	160	175	90	115	125	140
		410	490	560	610	375	475	520	570	295	375	410	460
Non ferrous	M1	—	—	—	—	200	245	275	305	150	190	210	235
		—	—	—	—	660	800	900	1000	490	620	690	770
	M2	—	—	—	—	165	200	225	250	125	155	175	190
		—	—	—	—	540	660	740	820	410	510	570	620
	M3	—	—	—	—	130	160	175	195	100	125	140	155
		—	—	—	—	425	520	570	640	330	410	460	510
	M4	—	—	—	—	100	120	135	150	75	95	105	115
		—	—	—	—	330	395	445	490	245	310	345	375
	M5	—	—	—	—	80	100	115	125	65	80	90	95
		—	—	—	—	260	330	375	410	215	260	295	310
Hard	K1	205	255	285	310	195	240	270	300	150	185	205	230
		670	840	940	1025	640	790	890	980	490	610	670	750
	K2	180	225	250	275	170	215	235	260	130	165	185	200
		590	740	820	900	560	710	770	850	425	540	610	660
	K3	150	190	210	235	145	180	200	220	110	140	155	170
		490	620	690	770	475	590	660	720	360	460	510	560
	K4	145	180	200	225	140	170	190	210	105	130	150	165
		475	590	660	740	460	560	620	690	345	425	490	540
	K5	90	110	125	135	85	105	115	125	65	80	90	100
		295	360	410	445	280	345	375	410	215	260	295	330
	K6	130	160	180	195	120	150	170	185	95	115	130	145
		425	520	590	640	395	490	560	610	310	375	425	475
	K7	110	140	155	170	105	135	150	165	85	105	115	125
		360	460	510	560	345	445	490	540	280	345	375	410
	N1	1550	1925	2150	2350	1475	1825	2025	2250	1125	1400	1550	1725
		5075	6325	7050	7700	4850	6000	6650	7375	3700	4600	5075	5650
Graphite	N2	630	780	870	950	600	740	820	910	450	570	630	690
		2075	2550	2850	3125	1975	2425	2700	2975	1475	1875	2075	2275
	N3	415	520	580	630	395	495	550	610	300	380	420	460
		1350	1700	1900	2075	1300	1625	1800	2000	980	1250	1375	1500
	N11	475	590	660	720	455	570	620	690	345	430	480	530
		1550	1925	2175	2350	1500	1875	2025	2275	1125	1400	1575	1750
	S1	48	60	65	75	46	55	65	70	36	45	50	55
		155	195	215	245	150	180	215	230	120	150	165	180
X-Heads	S2	38	48	55	60	37	46	50	55	29	36	40	44
		125	155	180	195	120	150	165	180	95	120	130	145
	S3	34	42	47	50	32	40	45	49	25	32	35	38
		110	140	155	165	105	130	150	160	80	105	115	125
	S11	—	—	—	—	65	80	90	100	50	65	70	75
		—	—	—	—	215	260	295	330	165	215	230	245
	S12	—	—	—	—	45	55	60	70	35	43	49	55
		—	—	—	—	150	180	195	230	115	140	160	180
Minimaster	S13	—	—	—	—	26	32	36	39	20	25	28	30
		—	—	—	—	85	105	120	130	65	80	90	100
	H5	41	50	55	60	39	48	55	60	30	38	42	46
		135	165	180	195	130	155	180	195	100	125	140	150
	H8	42	50	60	65	40	50	55	60	31	39	44	48
		140	165	195	215	130	165	180	195	100	130	145	155
	H11	50	65	70	80	49	60	70	75	38	48	55	60
		165	215	230	260	160	195	230	245	125	155	180	195
	H12	75	95	105	115	70	90	100	110	55	70	80	85
		245	310	345	375	230	295	330	360	180	230	260	280
	H21	42	50	60	65	40	50	55	60	31	39	44	48
		140	165	195	215	130	165	180	195	100	130	145	155

MM10 Z3 – Copy milling – Insert selection – Roughing – mm/Inch

SMG		a_p	f_z			
			100%	40%	20%	10%
P1	MM10-10012-B90A30-M03 F40M	2,0	0,055	0,050	0,055	0,070
		0,080	0,0022	0,0020	0,0022	0,0028
P2	MM10-10012-B90A30-M03 F40M	2,0	0,055	0,050	0,055	0,075
		0,080	0,0022	0,0020	0,0022	0,0030
P3	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,050	0,050	0,070
		0,080	0,0020	0,0020	0,0020	0,0028
P4	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
P5	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
P6	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
P7	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
P8	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,050	0,050	0,070
		0,080	0,0020	0,0020	0,0020	0,0028
P11	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
P12	MM10-10012-B90A30-M03 F40M	1,7	0,034	0,034	0,034	0,044
		0,065	0,0013	0,0013	0,0013	0,0018
M1	MM10-10012-B90A30-M03 F40M	2,0	0,055	0,050	0,055	0,075
		0,080	0,0022	0,0020	0,0022	0,0030
M2	MM10-10012-B90A30-M03 F40M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
M3	MM10-10012-B90A30-M03 F40M	1,7	0,042	0,040	0,042	0,055
		0,065	0,0017	0,0016	0,0017	0,0022
M4	MM10-10012-B90A30-M03 F40M	1,2	0,038	0,036	0,036	0,046
		0,048	0,0015	0,0014	0,0014	0,0019
M5	MM10-10012-B90A30-M03 F40M	1,2	0,038	0,036	0,036	0,046
		0,048	0,0015	0,0014	0,0014	0,0019
K1	MM10-10012-B90A30-E03 F30M	2,0	0,055	0,050	0,055	0,075
		0,080	0,0022	0,0020	0,0022	0,0030
K2	MM10-10012-B90A30-E03 F30M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
K3	MM10-10012-B90A30-E03 F30M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
K4	MM10-10012-B90A30-E03 F30M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
K5	MM10-10012-B90A30-D03 F30M	2,0	0,044	0,042	0,046	0,060
		0,080	0,0017	0,0017	0,0018	0,0024
K6	MM10-10012-B90A30-D03 F30M	2,0	0,050	0,048	0,050	0,065
		0,080	0,0020	0,0019	0,0020	0,0026
K7	MM10-10012-B90A30-D03 F30M	2,0	0,044	0,042	0,046	0,060
		0,080	0,0017	0,0017	0,0018	0,0024
N1	MM10-10012-B90A30-E03 F30M	2,0	0,070	0,065	0,070	0,095
		0,080	0,0028	0,0026	0,0028	0,0038
N2	MM10-10012-B90A30-E03 F30M	2,0	0,070	0,065	0,070	0,095
		0,080	0,0028	0,0026	0,0028	0,0038
N3	MM10-10012-B90A30-E03 F30M	2,0	0,070	0,065	0,070	0,095
		0,080	0,0028	0,0026	0,0028	0,0038
N11	MM10-10012-B90A30-E03 F30M	2,0	0,070	0,065	0,070	0,095
		0,080	0,0028	0,0026	0,0028	0,0038
S1	MM10-10012-B90A30-D03 F30M	1,2	0,038	0,036	0,036	0,046
		0,048	0,0015	0,0014	0,0014	0,0019
S2	MM10-10012-B90A30-D03 F30M	1,2	0,038	0,036	0,036	0,046
		0,048	0,0015	0,0014	0,0014	0,0019
S3	MM10-10012-B90A30-D03 F30M	1,2	0,036	0,034	0,034	0,042
		0,048	0,0014	0,0013	0,0013	0,0017
S11	MM10-10012-B90A30-M03 F40M	1,4	0,042	0,042	0,042	0,055
		0,055	0,0017	0,0017	0,0017	0,0022
S12	MM10-10012-B90A30-M03 F40M	1,4	0,042	0,042	0,042	0,055
		0,055	0,0017	0,0017	0,0017	0,0022
S13	MM10-10012-B90A30-M03 F40M	1,2	0,038	0,036	0,036	0,046
		0,048	0,0015	0,0014	0,0014	0,0019
H5	MM10-10012-B90A30-D03 F30M	1,7	0,034	0,034	0,034	0,044
		0,065	0,0013	0,0013	0,0013	0,0018
H8	MM10-10012-B90A30-D03 F30M	1,4	0,028	0,026	0,026	0,034
		0,055	0,0011	0,0010	0,0010	0,0013
H11	MM10-10012-B90A30-D03 F30M	1,7	0,034	0,034	0,034	0,044
		0,065	0,0013	0,0013	0,0013	0,0018
H12	MM10-10012-B90A30-D03 F30M	1,4	0,028	0,026	0,026	0,034
		0,055	0,0011	0,0010	0,0010	0,0013
H21	MM10-10012-B90A30-D03 F30M	1,4	0,028	0,026	0,026	0,034
		0,055	0,0011	0,0010	0,0010	0,0013

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %

All cutting data are start values

 Universal
 Steel and cast iron
 Stainless steel and S-materials
 Stainless steel and S-materials
 Non ferrous
 Hard
 Graphite
 X-Heads
 Minimaster

MM10 Z3 – Copy milling – Insert selection – Finishing – mm/Inch

	SMG		a_p	f_z			
				15%	10%	5%	2%
Universal	P1	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,060 0,0024	0,070 0,0028	0,10 0,0040	0,16 0,0065
	P2	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,060 0,0024	0,075 0,0030	0,10 0,0040	0,16 0,0065
Steel and cast iron	P3	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,15 0,0060
	P4	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,095 0,0038	0,15 0,0060
	P5	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
	P6	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
	P7	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
	P8	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,15 0,0060
Stainless steel and S-materials	P11	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
	P12	MM10-10012-B90A30-E03 F30M	1,7 0,065	0,038 0,0015	0,044 0,0018	0,060 0,0024	0,10 0,0040
	M1	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,060 0,0024	0,075 0,0030	0,10 0,0040	0,16 0,0065
	M2	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
Non ferrous	M3	MM10-10012-B90A30-E03 F30M	1,7 0,065	0,046 0,0018	0,055 0,0022	0,075 0,0030	0,12 0,0048
	M4	MM10-10012-B90A30-E03 F30M	1,2 0,048	0,040 0,0016	0,046 0,0019	0,065 0,0026	0,10 0,0040
	M5	MM10-10012-B90A30-E03 F30M	1,2 0,048	0,040 0,0016	0,046 0,0019	0,065 0,0026	0,10 0,0040
	K1	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,060 0,0024	0,075 0,0030	0,10 0,0040	0,16 0,0065
	K2	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
Hard	K3	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
	K4	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
	K5	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,050 0,0020	0,060 0,0024	0,080 0,0032	0,13 0,0050
	K6	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,055 0,0022	0,065 0,0026	0,090 0,0036	0,15 0,0060
Plastic and cfrp	K7	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,050 0,0020	0,060 0,0024	0,080 0,0032	0,13 0,0050
	N1	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,22 0,0085
	N2	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,22 0,0085
	N3	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,22 0,0085
Graphite	N11	MM10-10012-B90A30-E03 F30M	2,0 0,080	0,080 0,0032	0,095 0,0038	0,13 0,0050	0,22 0,0085
	S1	MM10-10012-B90A30-E03 F30M	1,2 0,048	0,040 0,0016	0,046 0,0019	0,065 0,0026	0,10 0,0040
	S2	MM10-10012-B90A30-E03 F30M	1,2 0,048	0,040 0,0016	0,046 0,0019	0,065 0,0026	0,10 0,0040
	S3	MM10-10012-B90A30-E03 F30M	1,2 0,048	0,038 0,0015	0,042 0,0017	0,060 0,0024	0,095 0,0038
X-Heads	S11	MM10-10012-B90A30-E03 F30M	1,4 0,055	0,046 0,0018	0,055 0,0022	0,075 0,0030	0,12 0,0048
	S12	MM10-10012-B90A30-E03 F30M	1,4 0,055	0,046 0,0018	0,055 0,0022	0,075 0,0030	0,12 0,0048
	S13	MM10-10012-B90A30-E03 F30M	1,2 0,048	0,040 0,0016	0,046 0,0019	0,065 0,0026	0,10 0,0040
	H5	MM10-10012-B90A30-E03 F30M	1,7 0,065	0,038 0,0015	0,044 0,0018	0,060 0,0024	0,10 0,0040
	H8	MM10-10012-B90A30-E03 F30M	1,4 0,055	0,030 0,0012	0,034 0,0013	0,048 0,0019	0,075 0,0030
Minimaster	H11	MM10-10012-B90A30-E03 F30M	1,7 0,065	0,038 0,0015	0,044 0,0018	0,060 0,0024	0,10 0,0040
	H12	MM10-10012-B90A30-E03 F30M	1,4 0,055	0,030 0,0012	0,034 0,0013	0,048 0,0019	0,075 0,0030
	H21	MM10-10012-B90A30-E03 F30M	1,4 0,055	0,030 0,0012	0,034 0,0013	0,048 0,0019	0,075 0,0030

SMG = Seco material group

f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %

All cutting data are start values

MM10 Z3 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F30M					F40M					
	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	
P1	280	330	355	380	380	270	310	335	365	360	Universal
	920	1075	1175	1250	1250	890	1025	1100	1200	1175	
P2	275	320	340	370	370	260	305	325	355	355	Steel and cast iron
	900	1050	1125	1225	1225	850	1000	1075	1175	1175	
P3	240	280	295	320	320	230	265	280	305	305	Steel and cast iron
	790	920	970	1050	1050	750	870	920	1000	1000	
P4	210	245	265	285	285	200	235	250	270	270	Steel and cast iron
	690	800	870	940	940	660	770	820	890	890	
P5	200	235	250	275	270	190	225	240	260	260	Steel and cast iron
	660	770	820	900	890	620	740	790	850	850	
P6	225	265	285	305	305	215	250	270	290	290	Stainless steel and S-materials
	740	870	940	1000	1000	710	820	890	950	950	
P7	215	250	265	290	285	205	235	255	275	275	Stainless steel and S-materials
	710	820	870	950	940	670	770	840	900	900	
P8	200	235	250	270	270	190	225	235	260	260	Stainless steel and S-materials
	660	770	820	890	890	620	740	770	850	850	
P11	205	240	260	280	280	195	230	245	265	265	Stainless steel and S-materials
	670	790	850	920	920	640	750	800	870	870	
P12	130	160	160	175	175	125	150	155	165	165	Stainless steel and S-materials
	425	520	520	570	570	410	490	510	540	540	
M1	220	255	275	300	300	210	245	260	285	285	Stainless steel and S-materials
	720	840	900	980	980	690	800	850	940	940	
M2	180	210	225	245	245	175	200	215	235	230	Stainless steel and S-materials
	590	690	740	800	800	570	660	710	770	750	
M3	145	175	175	190	190	135	165	170	185	180	Stainless steel and S-materials
	475	570	590	620	620	445	540	560	610	590	
M4	95	140	135	145	145	95	130	130	140	140	Stainless steel and S-materials
	310	460	475	475	475	310	425	445	460	460	
M5	80	115	115	120	120	75	110	105	115	115	Stainless steel and S-materials
	260	375	395	395	395	245	360	375	375	375	
K1	220	255	270	295	295	205	240	255	280	280	Non ferrous
	720	840	890	970	970	670	790	840	920	920	
K2	190	220	240	260	255	180	210	230	245	245	Non ferrous
	620	720	790	850	840	590	690	750	800	800	
K3	160	190	200	220	215	155	180	195	210	205	Non ferrous
	520	620	660	720	710	510	590	640	690	670	
K4	155	180	195	210	205	145	170	185	200	195	Non ferrous
	510	590	640	690	670	475	560	610	660	640	
K5	95	110	115	125	125	90	105	110	120	120	Hard
	310	360	375	410	410	295	345	360	395	395	
K6	135	160	170	185	185	130	150	160	175	175	Hard
	445	520	560	610	610	425	490	520	570	570	
K7	120	140	150	160	160	115	130	140	155	155	Hard
	395	460	490	520	520	375	425	460	510	510	
N1	1650	1925	2050	2225	2200	1575	1825	1950	2125	2100	Graphite
	5425	6325	6725	7300	7225	5175	6000	6400	6975	6900	
N2	670	780	830	900	890	640	740	790	860	850	Graphite
	2200	2550	2725	2950	2925	2100	2425	2600	2825	2800	
N3	445	520	550	600	590	425	495	530	570	560	Graphite
	1450	1700	1800	1975	1925	1400	1625	1750	1875	1825	
N11	510	590	630	690	680	485	560	600	650	650	Graphite
	1675	1925	2075	2275	2225	1600	1825	1975	2125	2125	
S1	45	65	65	70	70	43	60	60	65	65	X-Heads
	150	215	215	230	230	140	195	215	215	215	
S2	37	50	50	55	55	35	49	48	50	50	X-Heads
	120	165	180	180	180	115	160	165	165	165	
S3	32	45	44	48	48	30	43	42	46	45	X-Heads
	105	150	155	155	155	100	140	150	150	150	
S11	70	90	90	95	95	65	85	85	90	90	X-Heads
	230	295	295	310	310	215	280	280	295	295	
S12	48	60	60	65	65	45	60	60	65	65	X-Heads
	155	195	215	215	215	150	195	195	215	215	
S13	26	36	36	38	38	24	34	34	37	37	X-Heads
	85	120	125	125	125	80	110	120	120	120	
H5	43	55	55	60	55	41	50	50	55	55	Minimaster
	140	180	180	195	180	135	165	165	180	180	
H8	41	55	55	60	60	39	50	50	55	55	Minimaster
	135	180	180	195	195	130	165	180	180	180	
H11	55	65	70	75	75	50	65	65	70	70	Minimaster
	180	215	230	245	245	165	215	215	230	230	
H12	75	100	100	105	105	70	95	95	100	100	Minimaster
	245	330	330	345	345	230	310	310	330	330	
H21	41	55	55	60	60	39	50	50	55	55	Minimaster
	135	180	180	195	195	130	165	180	180	180	

MM10 Z2 – Copy milling – Insert selection – Roughing – mm/Inch

	SMG		a_p	f_z			
				100%	40%	20%	10%
Universal	P1	MM10-10010-B90S-E04 F30M	4,0 0,16	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
	P2	MM10-10010-B90S-E04 F30M	4,0 0,16	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,095 0.0038
Steel and cast iron	P3	MM10-10010-B90S-E04 F30M	4,0 0,16	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,090 0.0036
	P4	MM10-10010-B90-MD04 F30M	4,0 0,16	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,090 0.0036
	P5	MM10-10010-B90-MD04 F30M	4,0 0,16	0,060 0.0024	0,055 0.0022	0,065 0.0026	0,090 0.0036
	P6	MM10-10010-B90-MD04 F30M	4,0 0,16	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,085 0.0034
	P7	MM10-10010-B90-MD04 F30M	4,0 0,16	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,085 0.0034
	P8	MM10-10010-B90-MD04 F30M	4,0 0,16	0,055 0.0024	0,055 0.0024	0,065 0.0028	0,085 0.0036
Stainless steel and S-materials	P11	MM10-10010-B90-MD04 F30M	4,0 0,16	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,085 0.0034
	P12	MM10-10010-B90-MD04 F30M	3,5 0,14	0,040 0.0016	0,040 0.0016	0,046 0.0018	0,060 0.0024
	M1	MM10-10010-B90S-E04 F30M	4,0 0,16	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,095 0.0038
	M2	MM10-10010-B90S-E04 F30M	4,0 0,16	0,060 0.0024	0,055 0.0022	0,065 0.0026	0,090 0.0036
Non ferrous	M3	MM10-10010-B90S-E04 F30M	3,5 0,14	0,048 0.0019	0,048 0.0019	0,055 0.0022	0,070 0.0028
	M4	MM10-10010-B90-MD04 F30M	2,5 0,10	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,060 0.0026
	M5	MM10-10010-B90-MD04 F30M	2,5 0,10	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,060 0.0026
	K1	MM10-10010-B90S-E04 F30M	4,0 0,16	0,065 0.0026	0,065 0.0026	0,075 0.0030	0,095 0.0038
	K2	MM10-10010-B90S-E04 F30M	4,0 0,16	0,060 0.0024	0,055 0.0022	0,065 0.0026	0,090 0.0036
Hard	K3	MM10-10010-B90S-E04 F30M	4,0 0,16	0,060 0.0024	0,055 0.0022	0,065 0.0026	0,090 0.0036
	K4	MM10-10010-B90S-E04 F30M	4,0 0,16	0,060 0.0024	0,055 0.0022	0,065 0.0026	0,090 0.0036
	K5	MM10-10010-B90-MD04 F30M	4,0 0,16	0,050 0.0020	0,050 0.0020	0,060 0.0024	0,080 0.0032
	K6	MM10-10010-B90-MD04 F30M	4,0 0,16	0,060 0.0024	0,055 0.0022	0,065 0.0026	0,090 0.0036
	K7	MM10-10010-B90-MD04 F30M	4,0 0,16	0,050 0.0020	0,050 0.0020	0,060 0.0024	0,080 0.0032
Plastic and cfrp	N1	MM10-10010-B90S-E04 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,12 0.0048
	N2	MM10-10010-B90S-E04 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,12 0.0048
	N3	MM10-10010-B90S-E04 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,12 0.0048
	N11	MM10-10010-B90S-E04 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,12 0.0048
Graphite	S1	MM10-10010-B90S-E04 F30M	2,5 0,10	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,060 0.0026
	S2	MM10-10010-B90S-E04 F30M	2,5 0,10	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,060 0.0026
	S3	MM10-10010-B90S-E04 F30M	2,5 0,10	0,042 0.0017	0,042 0.0017	0,044 0.0017	0,055 0.0024
	S11	MM10-10010-B90S-E04 F30M	3,0 0,12	0,048 0.0019	0,048 0.0019	0,055 0.0022	0,070 0.0028
X-Heads	S12	MM10-10010-B90S-E04 F30M	3,0 0,12	0,048 0.0019	0,048 0.0019	0,055 0.0022	0,070 0.0028
	S13	MM10-10010-B90S-E04 F30M	2,5 0,10	0,044 0.0017	0,044 0.0017	0,048 0.0019	0,060 0.0026
	H5	MM10-10010-B90-MD04 F30M	3,5 0,14	0,040 0.0016	0,040 0.0016	0,046 0.0018	0,060 0.0024
	H8	MM10-10010-B90-MD04 F30M	3,0 0,12	0,032 0.0013	0,032 0.0013	0,036 0.0014	0,046 0.0018
Minimaster	H11	MM10-10010-B90-MD04 F30M	3,5 0,14	0,040 0.0016	0,040 0.0016	0,046 0.0018	0,060 0.0024
	H12	MM10-10010-B90-MD04 F30M	3,0 0,12	0,032 0.0013	0,032 0.0013	0,036 0.0014	0,046 0.0018
	H21	MM10-10010-B90-MD04 F30M	3,0 0,12	0,032 0.0013	0,032 0.0013	0,036 0.0014	0,046 0.0018

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM10 Z2 – Copy milling – Insert selection – Finishing – mm/Inch

SMG		a_p	f_z			
			15%	10%	5%	2%
P1	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,11 0.0044
P2	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,042 0.0017	0,048 0.0019	0,070 0.0028	0,11 0.0044
P3	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,046 0.0018	0,065 0.0026	0,10 0.0040
P4	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,046 0.0018	0,065 0.0026	0,10 0.0040
P5	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
P6	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
P7	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
P8	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,046 0.0018	0,065 0.0026	0,10 0.0040
P11	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
P12	MM10-10010-B90PF-M02 F15M	3,0 0.12	0,026 0.0010	0,030 0.0012	0,042 0.0017	0,065 0.0026
M1	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,042 0.0017	0,048 0.0019	0,070 0.0028	0,11 0.0044
M2	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
M3	MM10-10010-B90PF-M02 F15M	3,0 0.12	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,075 0.0030
M4	MM10-10010-B90PF-M02 F15M	2,0 0.080	0,028 0.0011	0,030 0.0013	0,042 0.0017	0,070 0.0028
M5	MM10-10010-B90PF-M02 F15M	2,0 0.080	0,028 0.0011	0,030 0.0013	0,042 0.0017	0,070 0.0028
K1	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,042 0.0017	0,048 0.0019	0,070 0.0028	0,11 0.0044
K2	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
K3	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
K4	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
K5	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,034 0.0013	0,040 0.0016	0,055 0.0022	0,085 0.0034
K6	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,10 0.0040
K7	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,034 0.0013	0,040 0.0016	0,055 0.0022	0,085 0.0034
N1	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,050 0.0020	0,060 0.0024	0,085 0.0034	0,14 0.0055
N2	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,050 0.0020	0,060 0.0024	0,085 0.0034	0,14 0.0055
N3	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,050 0.0020	0,060 0.0024	0,085 0.0034	0,14 0.0055
N11	MM10-10010-B90PF-M02 F15M	3,5 0.14	0,050 0.0020	0,060 0.0024	0,085 0.0034	0,14 0.0055
S1	MM10-10010-B90PF-M02 F15M	2,0 0.080	0,028 0.0011	0,030 0.0013	0,042 0.0017	0,070 0.0028
S2	MM10-10010-B90PF-M02 F15M	2,0 0.080	0,028 0.0011	0,030 0.0013	0,042 0.0017	0,070 0.0028
S3	MM10-10010-B90PF-M02 F15M	2,0 0.080	0,025 0.0010	0,028 0.0012	0,040 0.0016	0,065 0.0026
S11	MM10-10010-B90PF-M02 F15M	2,5 0.10	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,075 0.0030
S12	MM10-10010-B90PF-M02 F15M	2,5 0.10	0,030 0.0012	0,036 0.0014	0,048 0.0019	0,075 0.0030
S13	MM10-10010-B90PF-M02 F15M	2,0 0.080	0,028 0.0011	0,030 0.0013	0,042 0.0017	0,070 0.0028
H5	MM10-10010-B90PF-M02 F15M	3,0 0.12	0,026 0.0010	0,030 0.0012	0,042 0.0017	0,065 0.0026
H8	MM10-10010-B90PF-M02 F15M	2,5 0.10	0,020 0.00080	0,022 0.00095	0,032 0.0013	0,050 0.0020
H11	MM10-10010-B90PF-M02 F15M	3,0 0.12	0,026 0.0010	0,030 0.0012	0,042 0.0017	0,065 0.0026
H12	MM10-10010-B90PF-M02 F15M	2,5 0.10	0,020 0.00080	0,022 0.00095	0,032 0.0013	0,050 0.0020
H21	MM10-10010-B90PF-M02 F15M	2,5 0.10	0,020 0.00080	0,022 0.00095	0,032 0.0013	0,050 0.0020

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

All cutting data are start values

Universal

 Steel and cast
iron

 Stainless steel
and S-materials

 Stainless steel
and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster

MM10 Z2 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F15M					F30M					T60M				
		100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%
Universal	P1	305	390	405	440	440	250	320	340	370	365	205	260	275	300	295
		1000	1275	1325	1450	1450	820	1050	1125	1225	1200	670	850	900	980	970
Steel and cast iron	P2	295	380	395	425	425	240	305	330	355	355	195	250	270	285	285
		970	1250	1300	1400	1400	790	1000	1075	1175	1175	640	820	890	940	940
	P3	260	330	340	370	370	210	265	285	310	310	170	215	235	250	250
		850	1075	1125	1225	1225	690	870	940	1025	1025	560	710	770	820	820
	P4	225	290	300	325	325	185	235	255	270	275	150	190	205	220	220
		740	950	980	1075	1075	610	770	840	890	900	490	620	670	720	720
	P5	215	275	290	315	310	175	225	240	265	260	145	185	195	215	210
		710	900	950	1025	1025	570	740	790	870	850	475	610	640	710	690
	P6	245	310	325	350	350	200	255	275	295	295	165	205	220	240	235
		800	1025	1075	1150	1150	660	840	900	970	970	540	670	720	790	770
Stainless steel and S-materials	P7	230	295	305	330	330	190	240	260	280	275	155	195	210	225	225
		750	970	1000	1075	1075	620	790	850	920	900	510	640	690	740	740
	P8	215	275	290	310	310	175	225	240	260	260	145	180	195	210	210
		710	900	950	1025	1025	570	740	790	850	850	475	590	640	690	690
	P11	225	285	295	325	320	185	235	250	270	270	150	190	205	220	215
		740	940	970	1075	1050	610	770	820	890	890	490	620	670	720	710
	P12	140	175	180	195	195	120	150	155	170	170	95	120	125	135	135
		460	570	610	640	640	395	490	510	560	560	310	395	410	445	445
Non ferrous	M1	240	305	320	345	345	195	245	265	285	285	160	200	215	230	230
		790	1000	1050	1125	1125	640	800	870	940	940	520	660	710	750	750
	M2	195	250	260	280	280	160	205	215	235	235	130	165	175	190	190
		640	820	850	920	920	520	670	710	770	770	425	540	570	620	620
	M3	155	200	200	220	220	130	165	175	185	185	105	135	140	150	150
		510	660	670	720	720	425	540	570	610	610	345	445	460	490	490
	M4	120	155	155	165	165	105	135	130	145	140	85	105	105	115	115
		395	510	560	540	540	345	445	460	475	460	280	345	375	375	375
	M5	100	130	130	140	140	85	110	110	120	120	70	90	90	95	95
		330	425	460	460	460	280	360	375	395	395	230	295	310	310	310
Hard	K1	235	300	315	335	335	190	245	260	280	280	155	195	210	225	225
		770	980	1025	1100	1100	620	800	850	920	920	510	640	690	740	740
	K2	205	265	275	295	295	170	215	230	250	250	135	175	185	200	200
		670	870	900	970	970	560	710	750	820	820	445	570	610	660	660
	K3	175	225	230	250	250	140	180	195	210	210	115	150	155	170	170
		570	740	750	820	820	460	590	640	690	690	375	490	510	560	560
Plastic and cfrp	K4	165	215	220	240	240	135	175	185	200	200	110	140	150	165	160
		540	710	720	790	790	445	570	610	660	660	360	460	490	540	520
	K5	100	130	135	145	145	85	105	110	120	120	70	85	90	100	100
		330	425	445	475	475	280	345	360	395	395	230	280	295	330	330
	K6	145	185	195	210	210	120	155	165	180	175	95	125	130	145	145
		475	610	640	690	690	395	510	540	590	570	310	410	425	475	475
	K7	130	165	170	185	185	105	135	145	155	155	85	110	115	125	125
		425	540	560	610	610	345	445	475	510	510	280	360	375	410	410
Graphite	N1	1800	2300	2425	2600	2600	1450	1825	1975	2150	2100	1175	1475	1600	1725	1700
		5900	7550	7950	8525	8525	4750	6000	6475	7050	6900	3850	4850	5250	5650	5575
	N2	730	930	970	1050	1050	590	740	800	870	850	475	600	650	700	680
		2400	3050	3175	3450	3450	1925	2425	2625	2850	2800	1550	1975	2125	2300	2225
	N3	485	620	650	700	700	390	495	530	580	560	315	400	435	465	455
		1600	2025	2125	2300	2300	1275	1625	1750	1900	1825	1025	1300	1425	1525	1500
	N11	550	710	740	800	800	450	570	610	660	640	360	460	495	530	520
		1800	2325	2425	2625	2625	1475	1875	2000	2175	2100	1175	1500	1625	1750	1700
X-Heads	S1	55	70	70	80	75	48	60	60	65	65	39	50	50	55	55
		180	230	260	260	245	155	195	215	215	215	130	165	180	180	180
	S2	46	60	60	65	60	39	50	50	55	55	32	40	40	43	43
		150	195	215	215	195	130	165	180	180	180	105	130	140	140	140
	S3	40	50	50	55	55	34	43	43	47	46	27	35	35	38	38
		130	165	180	180	180	110	140	150	155	150	90	115	120	125	125
	S11	80	100	100	110	110	65	85	85	95	95	55	70	70	75	75
		260	330	360	360	360	215	280	295	310	310	180	230	245	245	245
	S12	55	70	70	75	75	47	60	60	65	65	38	48	49	55	55
		180	230	245	245	245	155	195	195	215	215	125	155	165	180	180
Minimaster	S13	32	41	40	44	43	27	35	35	37	37	22	28	28	30	30
		105	135	145	145	140	90	115	120	120	120	70	90	100	100	100
	H5	46	60	60	65	65	39	50	50	55	55	32	41	42	45	45
		150	195	195	215	215	130	165	165	180	180	105	135	140	150	150
	H8	48	60	60	65	65	41	55	55	60	60	33	43	43	47	47
		155	195	215	215	215	135	180	180	195	195	110	140	150	155	155
	H11	60	75	75	85	85	50	65	65	70	70	40	50	55	60	60
		195	245	260	280	280	165	215	215	230	230	130	165	180	195	195
	H12	85	110	110	120	120	75	95	95	105	105	60	75	80	85	85
		280	360	375	395	395	245	310	330	345	345	195	245	260	280	280
	H21	48	60	60	65	65	41	55	55	60	60	33	43	43	47	47
		155	195	215	215	215	135	180	180	195	195	110	140	150	155	155

MM10 High-Feed – Insert selection – mm/Inch

SMG		a_p	f_z			
			100%	70%	30%	20%
P1	MM10-10.50-HF-MD08 F30M	0,30	0,48	0,48	0,65	0,80
		0.012	0.019	0.019	0.026	0.032
P2	MM10-10.50-HF-MD08 F30M	0,30	0,50	0,50	0,65	0,80
		0.012	0.020	0.020	0.026	0.032
P3	MM10-10.50-HF-MD08 F30M	0,30	0,46	0,46	0,60	0,75
		0.012	0.018	0.018	0.024	0.030
P4	MM10-10.50-HF-MD08 F30M	0,30	0,46	0,46	0,60	0,75
		0.012	0.018	0.018	0.024	0.030
P5	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,46	0,60	0,75
		0.012	0.017	0.018	0.024	0.030
P6	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,44	0,60	0,75
		0.012	0.017	0.017	0.024	0.030
P7	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,44	0,60	0,75
		0.012	0.017	0.017	0.024	0.030
P8	MM10-10.50-HF-MD08 F30M	0,30	0,46	0,46	0,60	0,75
		0.012	0.018	0.018	0.024	0.030
P11	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,44	0,60	0,75
		0.012	0.017	0.017	0.024	0.030
P12	MM10-10.50-HF-MD08 F30M	0,25	0,30	0,30	0,40	0,48
		0.010	0.012	0.012	0.016	0.019
M1	MM10-10.50-HF-MD08 F30M	0,30	0,50	0,50	0,65	0,80
		0.012	0.020	0.020	0.026	0.032
M2	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,46	0,60	0,75
		0.012	0.017	0.018	0.024	0.030
M3	MM10-10.50-HF-MD08 F30M	0,25	0,36	0,36	0,46	0,55
		0.010	0.014	0.014	0.018	0.022
M4	MM10-10.50-HF-MD08 F30M	0,18	0,32	0,32	0,40	0,50
		0.0070	0.013	0.013	0.016	0.020
M5	MM10-10.50-HF-MD08 F30M	0,18	0,32	0,32	0,40	0,50
		0.0070	0.013	0.013	0.016	0.020
K1	MM10-10.50-HF-MD08 F30M	0,30	0,50	0,50	0,65	0,80
		0.012	0.020	0.020	0.026	0.032
K2	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,46	0,60	0,75
		0.012	0.017	0.018	0.024	0.030
K3	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,46	0,60	0,75
		0.012	0.017	0.018	0.024	0.030
K4	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,46	0,60	0,75
		0.012	0.017	0.018	0.024	0.030
K5	MM10-10.50-HF-MD08 F30M	0,30	0,40	0,40	0,55	0,65
		0.012	0.016	0.016	0.022	0.026
K6	MM10-10.50-HF-MD08 F30M	0,30	0,44	0,46	0,60	0,75
		0.012	0.017	0.018	0.024	0.030
K7	MM10-10.50-HF-MD08 F30M	0,30	0,40	0,40	0,55	0,65
		0.012	0.016	0.016	0.022	0.026
N1	MM10-10.50-HF-MD08 F30M	0,30	0,65	0,65	0,85	1,1
		0.012	0.026	0.026	0.034	0.044
N2	MM10-10.50-HF-MD08 F30M	0,30	0,65	0,65	0,85	1,1
		0.012	0.026	0.026	0.034	0.044
N3	MM10-10.50-HF-MD08 F30M	0,30	0,65	0,65	0,85	1,1
		0.012	0.026	0.026	0.034	0.044
N11	MM10-10.50-HF-MD08 F30M	0,30	0,65	0,65	0,85	1,1
		0.012	0.026	0.026	0.034	0.044
S1	MM10-10.50-HF-MD08 F30M	0,18	0,32	0,32	0,40	0,50
		0.0070	0.013	0.013	0.016	0.020
S2	MM10-10.50-HF-MD08 F30M	0,18	0,32	0,32	0,40	0,50
		0.0070	0.013	0.013	0.016	0.020
S3	MM10-10.50-HF-MD08 F30M	0,18	0,30	0,30	0,38	0,46
		0.0070	0.012	0.012	0.015	0.018
S11	MM10-10.50-HF-MD08 F30M	0,22	0,36	0,36	0,46	0,55
		0.0085	0.014	0.014	0.018	0.022
S12	MM10-10.50-HF-MD08 F30M	0,22	0,36	0,36	0,46	0,55
		0.0085	0.014	0.014	0.018	0.022
S13	MM10-10.50-HF-MD08 F30M	0,18	0,32	0,32	0,40	0,50
		0.0070	0.013	0.013	0.016	0.020
H5	MM10-10.50-HF-MD08 F15M	0,25	0,30	0,30	0,40	0,48
		0.010	0.012	0.012	0.016	0.019
H8	MM10-10.50-HF-MD08 F15M	0,22	0,24	0,24	0,30	0,36
		0.0085	0.0095	0.0095	0.012	0.014
H11	MM10-10.50-HF-MD08 F15M	0,25	0,30	0,30	0,40	0,48
		0.010	0.012	0.012	0.016	0.019
H12	MM10-10.50-HF-MD08 F15M	0,22	0,24	0,24	0,30	0,36
		0.0085	0.0095	0.0095	0.012	0.014
H21	MM10-10.50-HF-MD08 F15M	0,22	0,24	0,24	0,30	0,36
		0.0085	0.0095	0.0095	0.012	0.014

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

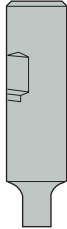
All cutting data are start values

 Universal
 Steel and cast iron
 Stainless steel and S-materials
 Stainless steel and S-materials
 Non ferrous
 Hard
 Graphite
 X-Heads
 Minimaster

MM10 High-Feed – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F15M				F30M			
		100%	70%	30%	20%	100%	70%	30%	20%
Universal	P1	—	—	—	—	230	280	325	340
		—	—	—	—	750	920	1075	1125
Steel and cast iron	P2	—	—	—	—	225	270	315	330
		—	—	—	—	740	890	1025	1075
	P3	—	—	—	—	195	240	275	290
		—	—	—	—	640	790	900	950
	P4	—	—	—	—	170	210	240	255
		—	—	—	—	560	690	790	840
	P5	—	—	—	—	165	200	230	240
		—	—	—	—	540	660	750	790
	P6	—	—	—	—	185	225	260	270
		—	—	—	—	610	740	850	890
Stainless steel and S-materials	P7	—	—	—	—	175	215	245	255
		—	—	—	—	570	710	800	840
	P8	—	—	—	—	165	200	230	240
		—	—	—	—	540	660	750	790
	P11	—	—	—	—	170	210	240	250
		—	—	—	—	560	690	790	820
	P12	—	—	—	—	110	135	150	160
		—	—	—	—	360	445	490	520
Non ferrous	M1	—	—	—	—	180	220	255	265
		—	—	—	—	590	720	840	870
	M2	—	—	—	—	150	180	210	220
		—	—	—	—	490	590	690	720
	M3	—	—	—	—	120	145	165	175
		—	—	—	—	395	475	540	570
	M4	—	—	—	—	95	110	130	135
		—	—	—	—	310	360	425	445
	M5	—	—	—	—	80	95	110	115
		—	—	—	—	260	310	360	375
Hard	K1	190	230	270	280	175	215	250	260
		620	750	890	920	570	710	820	850
	K2	170	205	235	245	160	190	220	230
		560	670	770	800	520	620	720	750
	K3	145	175	200	210	135	160	185	195
		475	570	660	690	445	520	610	640
Plastic and cfrp	K4	135	165	190	200	125	155	175	185
		445	540	620	660	410	510	570	610
	K5	85	100	115	125	75	95	105	115
		280	330	375	410	245	310	345	375
	K6	120	145	170	175	110	135	155	165
		395	475	560	570	360	445	510	540
	K7	105	130	150	155	100	120	140	145
		345	425	490	510	330	395	460	475
Graphite	N1	—	—	—	—	1325	1600	1850	1925
		—	—	—	—	4350	5250	6075	6325
	N2	—	—	—	—	530	650	750	780
		—	—	—	—	1750	2125	2450	2550
	N3	—	—	—	—	355	430	500	520
		—	—	—	—	1175	1400	1650	1700
	N11	—	—	—	—	405	495	570	590
		—	—	—	—	1325	1625	1875	1925
X-Heads	S1	—	—	—	—	45	50	60	65
		—	—	—	—	150	165	195	215
	S2	—	—	—	—	36	42	49	50
		—	—	—	—	120	140	160	165
	S3	—	—	—	—	31	37	42	45
		—	—	—	—	100	120	140	150
	S11	—	—	—	—	60	75	85	90
		—	—	—	—	195	245	280	295
	S12	—	—	—	—	43	50	60	60
		—	—	—	—	140	165	195	195
Minimaster	S13	—	—	—	—	25	29	34	36
		—	—	—	—	80	95	110	120
	H5	40	48	55	60	37	44	50	55
		130	155	180	195	120	145	165	180
	H8	42	50	55	60	39	46	55	55
		140	165	180	195	130	150	180	180
	H11	50	60	70	75	47	55	65	70
		165	195	230	245	155	180	215	230
	H12	75	90	105	110	70	85	95	100
		245	295	345	360	230	280	310	330
	H21	42	50	55	60	39	46	55	55
		140	165	180	195	130	150	180	180

Shank design

Design 1, Keyway shank	Design 2, Cylindrical/Weldon back end and 90° front
	
Design 3, Cylindrical/Weldon back end tapered front 87°/89°	Design 4, Cylindrical/Weldon back end tapered front 80°/85°/87°
	
Design 5, Cylindrical back end double tapered front end 89°/85°	
	

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

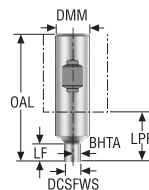
Hard

Graphite

X-Heads

Minimaster

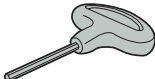
MM12 Shank – Metric



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		mm	mm	mm	mm	mm					kg	
MM12-12055.0-0008	00083978	11,5	12,0	8,5	10,0	55,0	0,0	2	■	80000	0,1	2
MM12-12070.0-0008DS	02580668	11,5	12,0	8,5	25,0	70,0	0,0	2	■	63600	0,1	3
MM12-16065.0-0000	75004926	11,4	16,0	0,0	17,0	65,0	60,0	1	■	80000	0,1	1
MM12-16170.0-1040	75034505	11,4	16,0	40,0	122,0	170,0	1,0	3	■	80000	0,3	5
MM12-16170.0-1060	75034506	11,4	16,0	60,0	122,0	170,0	1,0	3	■	80000	0,2	5
MM12-16170.0-1080	75034507	11,4	16,0	80,0	122,0	170,0	1,0	3	■	80000	0,2	5
MM12-16095.0-0024DS	02580690	11,4	16,0	24,0	47,0	95,0	0,0	2	■	63600	0,3	3
MM12-16090.0-3044DS	02580705	11,4	16,0	43,9	42,0	90,0	3,0	4	■	63600	0,3	3
MM12-16120.0-1045DS	02580752	11,4	16,0	45,0	72,0	120,0	1,0	3	■	63600	0,3	3
MM12-16115.0-0048DS	02580691	11,4	16,0	48,0	67,0	115,0	0,0	2	■	63600	0,3	3
MM12-16170.0-1060DS	02580753	11,4	16,0	60,0	122,0	170,0	1,0	3	■	63600	0,5	3
MM12-16170.0-1080DS	02580755	11,4	16,0	80,0	122,0	170,0	1,0	3	■	63600	0,5	3
MM12-20080.3-0012	75012864	11,4	20,0	12,0	30,0	80,0	0,0	2	■	80000	0,2	4
MM12-20095.3-3027	75012865	11,4	20,0	27,0	45,0	95,0	3,0	3	■	80000	0,2	4
MM12-20150.3-5049	75012866	11,4	20,0	49,1	100,0	150,0	5,0	4	■	80000	0,3	5
MM12-20250.0-1060DS	02580756	11,4	20,0	60,0	200,0	250,0	1,0	5	■	63600	1,0	3

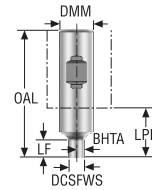
Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-06032	MM12-0637	H06-4
2	MM-06020	MM12-0637	H05-4
3	–	MM12-061037	–
4	MM-06048	MM12-0637	H06-4
5	MM-06116	MM12-0637	H06-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

MM12 Shank – Inch



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		inch	inch	inch	inch	inch					lbs	
MM12-0.50-2.2-0-0003	00096133	0.453	0.500	0.335	0.394	2.165	0,0	2	■	80000	0.220	2
MM12-0.62-2.6-0-0000	75005070	0.449	0.625	0	0.669	2.559	60,0	1	■	80000	0.220	1
MM12-0.62-6.7-0-1015	75054728	0.449	0.625	1.575	4.803	6.693	1,0	3	■	80000	0.440	5
MM12-0.62-6.7-0-1023	75054729	0.449	0.625	2.362	4.803	6.693	1,0	3	■	80000	0.440	5
MM12-0.62-6.7-0-1023DS	02593423	0.449	0.625	2.362	4.803	6.693	1,0	3	■	63600	1.100	4
MM12-0.62-6.7-0-1031DS	02593426	0.449	0.625	3.150	4.803	6.693	1,0	3	■	63600	1.100	4
MM12-0.75-3.1-3-0004	75015055	0.449	0.750	0.472	1.181	3.150	0,0	2	■	80000	0.440	3
MM12-0.75-3.7-3-3010	75015056	0.449	0.750	1.063	1.772	3.740	3,0	3	■	80000	0.440	3
MM12-0.75-5.9-3-5017	75015057	0.449	0.750	1.720	3.937	5.906	5,0	4	■	80000	0.660	5
MM12-0.75-10.0-0-1023DS	02593427	0.449	0.750	2.362	7.874	9.843	1,0	5	■	63600	1.980	4
MM12-0.75-3.8-0-0009DS	02593428	0.449	0.750	0.945	1.772	3.740	0,0	2	■	63600	0.880	4
MM12-0.75-4.5-0-0018DS	02593430	0.449	0.750	1.890	2.559	4.528	0,0	2	■	63600	0.880	4

Spare Parts, included in delivery

Accessories

For cutter	Sleeve	Tension screw	Sleeve key
			
1	MM-06032	MM12-0637	H06-4
2	MM-06020	MM12-0637	H05-4
3	MM-06048	MM12-0637	H06-4
4	-	MM12-061037	-
5	MM-06116	MM12-0637	H06-4

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

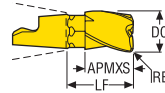
Hard

Graphite

X-Heads

Minimaster

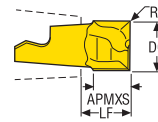
Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

												Grades			
Designation	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench		Coated			
	mm Inch	mm Inch	mm Inch	mm Inch								T60M	F15M	F30M	F40M
MM12-11715-R03A30-M04	11,7 0.461	15,35 0.604	0,3 0.012	19,9 0.783	15,0	14,2	22,6	30	3	MM0416	✓				■
MM12-12015-A30-E04	12,0 0.472	15,35 0.604	—	19,9 0.783	15,0	14,6	23,8	30	3	MM0416	✓			■	
MM12-12015-R05A30-M04	12,0 0.472	15,35 0.604	0,5 0.020	19,9 0.783	15,0	14,6	22,8	30	3	MM0416	✓				■
MM12-12015-R10A30-E04	12,0 0.472	15,35 0.604	1,0 0.039	19,9 0.783	15,0	14,6	21,8	30	3	MM0416	✓			■	
MM12-12015-R10A30-M04	12,0 0.472	15,35 0.604	1,0 0.039	19,9 0.783	15,0	14,6	21,8	30	3	MM0416	✓				■
MM12-12015-R15A30-D04	12,0 0.472	15,35 0.604	1,5 0.059	19,9 0.783	15,0	14,6	20,8	30	3	MM0416	✓			■	
MM12-12015-R20A30-M04	12,0 0.472	15,35 0.604	2,0 0.079	19,9 0.783	15,0	14,6	19,8	30	3	MM0416	✓				■
MM12-12015-R30A30-E04	12,0 0.472	15,3 0.602	3,0 0.118	19,9 0.783	15,0	14,6	17,8	30	3	MM0416	✓			■	
MM12-12015-R30A30-M04	12,0 0.472	15,35 0.604	3,0 0.118	19,9 0.783	15,0	14,6	17,8	30	3	MM0416	✓				■
MM12-12015-R40A30-M04	12,0 0.472	15,35 0.604	4,0 0.157	19,9 0.783	15,0	14,6	15,8	30	3	MM0416	✓				■
MM12-12715-A30-E04	12,7 0.500	15,35 0.604	—	19,9 0.783	15,0	15,4	25,2	30	3	MM0416	✓			■	
MM12-12715-R08A30-M04	12,7 0.500	15,35 0.604	0,8 0.031	19,9 0.783	15,0	15,4	23,6	30	3	MM0416	✓				■
MM12-12715-R16A30-M04	12,7 0.500	15,35 0.604	1,6 0.063	19,9 0.783	15,0	15,4	22,0	30	3	MM0416	✓				■

Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

Designation											Grades			
	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch							T60M	F15M	F30M	F40M
MM12-11708T-R03-D05	11,7 0.461	8,2 0.323	0,3 0.012	10,18 0.401	15,0	14,2	22,6	0	2	MM0612	■			
MM12-12008-M04	12,0 0.472	8,2 0.323	—	10,2 0.402	15,0	14,6	23,8	0	2	MM0612	■			
MM12-12008-R08A8-E04	12,0 0.472	8,1 0.319	0,8 0.031	10,15 0.400	15,0	14,6	22,2	8	2	MM0612	■			
MM12-12008-R08-MD05	12,0 0.472	8,2 0.323	0,8 0.031	10,18 0.401	15,0	14,6	22,2	0	2	MM0612	■		■	
MM12-12008-R08P-M04	12,0 0.472	8,1 0.319	0,8 0.031	10,05 0.396	15,0	14,6	22,2	0	2	MM0612			■	
MM12-12008-R20-MD05	12,0 0.472	8,2 0.323	2,0 0.079	10,16 0.400	15,0	14,6	19,8	0	2	MM0612			■	
MM12-12008-R30-MD05	12,0 0.472	8,2 0.323	3,0 0.118	10,14 0.399	15,0	14,6	17,8	0	2	MM0612			■	
MM12-12708-M04	12,7 0.500	9,3 0.366	—	11,25 0.443	15,0	15,4	25,2	0	2	MM1420	■			
MM12-12708-R08-MD05	12,7 0.500	9,3 0.366	0,8 0.031	11,23 0.442	15,0	15,4	23,6	0	2	MM1420	■			
MM12-12708-R08P-M04	12,7 0.500	9,3 0.366	0,8 0.031	11,23 0.442	15,0	15,4	23,6	0	2	MM1420			■	
MM12-13709T-R03-D05	13,7 0.539	9,3 0.366	0,3 0.012	11,25 0.443	15,0	16,6	26,6	0	2	MM1420	■			
MM12-14009-M04	14,0 0.551	9,3 0.366	—	11,26 0.443	15,0	17,0	27,8	0	2	MM1420	■			
MM12-14009-R08A8-E04	14,0 0.551	9,2 0.362	0,8 0.031	11,06 0.435	15,0	17,0	26,2	8	2	MM1420	■		■	
MM12-14009-R08-MD05	14,0 0.551	9,3 0.366	0,8 0.031	11,26 0.443	15,0	17,0	26,2	0	2	MM1420	■		■	

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

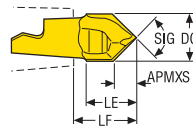
Hard

Graphite

X-Heads

Minimaster

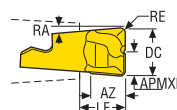
Centre drilling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	SIG°	ZEFP	Wrench	Grades			
								Coated			
	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM12-12006-C90-M04	12,0 0.472	5,65 0.222	— —	14,64 0.576	90,0	2	MM0612	■			

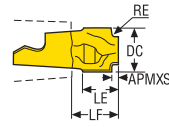
Plunge milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXE	RE	AZ	LF	RA°	ZEFP	Wrench	Grades			
									Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM12-12008-R10-PL-MD05	12,0 0.472	6,0 0.236	1,0 0.039	8,5 0.335	10,2 0.402	5,0	2	MM0612			■	

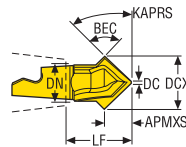
Concave radius



—For Torque keys and torque values, see page 787

Designation							Grades		Coated			
	DC	APMXS	RE	LE	LF	ZEFP	Wrench					
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM12-12010-CR10-MD05	12,0 0.472	2,2 0.087	1,0 0.039	10,6 0.417	12,14 0.478	2	MM0612		■			
MM12-12010-CR20-MD05	12,0 0.472	2,4 0.094	2,0 0.079	10,7 0.421	12,25 0.482	2	MM0612		■			
MM12-12010-CR30-MD05	12,0 0.472	3,3 0.130	3,0 0.118	10,6 0.417	12,2 0.480	2	MM0612		■			

Double chamfering



—For Torque keys and torque values, see page 787

Designation									Grades		Coated			
	DCX	DC	APMXS	DN	LF	KAPRS°	BEC°	ZEFP	Wrench					
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch						T60M	F15M	F30M	F40M
MM12-16016-D3020P-M02	16,0 0.630	1,0 0.039	4,3 0.169	11,5 0.453	15,2 0.598	30,0	60,0	2	MM1420			■		
MM12-16016-D4520P-M02	16,0 0.630	1,0 0.039	7,5 0.295	11,5 0.453	17,2 0.677	45,0	90,0	2	MM1420			■		

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

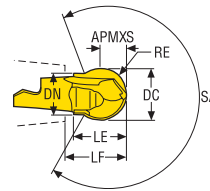
Hard

Graphite

X-Heads

Minimaster

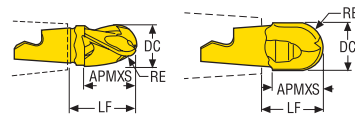
Precision inserts for semi-finishing in all materials



—For Torque keys and torque values, see page 787

Designation											Grades			
	DC	APMXS	RE	LE	DN	LF	SA°	ZEFP	Wrench		Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch					T60M	F15M	F30M	F40M
MM12-14014-B120P-M05	14,0 0.551	7,0 0.276	7,0 0.276	14,0 0.551	12,0 0.472	15,45 0.608	242,0	2	MM1420				■	
MM12-16016-B120PF-M03	16,0 0.630	8,0 0.315	8,0 0.315	16,0 0.630	12,0 0.472	17,46 0.687	263,0	2	MM1420			■		
MM12-16016-B120P-M07	16,0 0.630	8,0 0.315	8,0 0.315	16,0 0.630	12,0 0.472	17,46 0.687	263,0	2	MM1420				■	

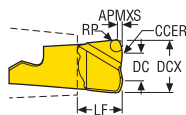
Copy milling



—For Torque keys and torque values, see page 787

Designation											Grades			
	DC	APMXS	RE	LF	FHA°	ZEFP	Wrench				Coated			
	mm Inch	mm Inch	mm Inch	mm Inch							T60M	F15M	F30M	F40M
MM12-12012-B90-MD05	12,0 0.472	12,2 0.480	6,0 0.236	14,12 0.556		2	MM0612				■		■	
MM12-12012-B90PF-M02	12,0 0.472	10,4 0.409	6,0 0.236	14,09 0.555		2	MM0612					■		
MM12-12012-B90P-M05	12,0 0.472	10,4 0.409	6,0 0.236	14,09 0.555		2	MM0612						■	
MM12-12012-B90S-E05	12,0 0.472	12,3 0.484	6,0 0.236	14,12 0.556		2	MM0612						■	
MM12-12015-B90A30-E04	12,0 0.472	15,3 0.602	6,0 0.236	19,9 0.783	30,0	3	MM0416	✓					■	
MM12-12015-B90A30-M04	12,0 0.472	15,3 0.602	6,0 0.236	19,9 0.783	30,0	3	MM0416	✓						■
MM12-12713-B90P-M05	12,7 0.500	12,2 0.480	6,35 0.250	15,92 0.627		2	MM1420				■		■	
MM12-12715-B90A30-M04	12,7 0.500	15,3 0.602	6,35 0.250	19,75 0.778	30,0	3	MM0416	✓						■
MM12-14014-B90S-E05	14,0 0.551	14,1 0.555	7,0 0.276	15,92 0.627		2	MM1420						■	

High feed



—For Torque keys and torque values, see page 787

Designation	DCX	DC	APMXS	RP	CCER	LF	RMPX°	C min	C max	ZEFP	Wrench	Grades			
												Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch						T60M	F15M	F30M	F40M
MM12-12.60-HF-MD10	12,0 0.472	6,0 0.236	0,51 0.020	1,21 0.048	6,5 0.256	10,25 0.404	5,0	14,6	22,2	2	MM0612		■	■	

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster

MM12 – Slot and Side milling – Insert selection – mm/Inch

	SMG		a_p	f_z			
				100%	40%	20%	10%
Universal	P1	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,055 0,0022	0,060 0,0024	0,070 0,0028	0,095 0,0038
	P2	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
Steel and cast iron	P3	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,070 0,0028	0,090 0,0036
	P4	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,065 0,0026	0,090 0,0036
	P5	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,065 0,0026	0,085 0,0034
	P6	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,050 0,0020	0,055 0,0022	0,065 0,0026	0,085 0,0034
	P7	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,050 0,0020	0,055 0,0022	0,065 0,0026	0,085 0,0034
	P8	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,070 0,0028	0,090 0,0036
Stainless steel and S-materials	P11	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,050 0,0020	0,055 0,0022	0,065 0,0026	0,085 0,0034
	P12	MM12-12015-R05A30-M04 F40M	2,0 0,080	0,036 0,0014	0,036 0,0014	0,044 0,0017	0,060 0,0024
	M1	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
	M2	MM12-12015-R05A30-M04 F40M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,065 0,0026	0,085 0,0034
Non ferrous	M3	MM12-12015-R05A30-M04 F40M	2,0 0,080	0,042 0,0017	0,044 0,0017	0,050 0,0020	0,070 0,0028
	M4	MM12-12015-R05A30-M04 F40M	1,6 0,065	0,038 0,0015	0,038 0,0015	0,046 0,0018	0,060 0,0024
	M5	MM12-12015-R05A30-M04 F40M	1,6 0,065	0,038 0,0015	0,038 0,0015	0,046 0,0018	0,060 0,0024
	K1	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,060 0,0024	0,060 0,0024	0,070 0,0028	0,095 0,0038
	K2	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,065 0,0026	0,090 0,0036
Hard	K3	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,065 0,0026	0,090 0,0036
	K4	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,065 0,0026	0,090 0,0036
	K5	MM12-12015-R15A30-D04 F30M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,060 0,0024	0,080 0,0032
	K6	MM12-12015-R15A30-D04 F30M	2,5 0,10	0,060 0,0024	0,060 0,0024	0,065 0,0026	0,090 0,0036
	K7	MM12-12015-R15A30-D04 F30M	2,5 0,10	0,055 0,0022	0,055 0,0022	0,060 0,0024	0,080 0,0032
Plastic and cfrp	N1	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,080 0,0032	0,080 0,0032	0,090 0,0036	0,12 0,0048
	N2	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,080 0,0032	0,080 0,0032	0,090 0,0036	0,12 0,0048
	N3	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,080 0,0032	0,080 0,0032	0,090 0,0036	0,12 0,0048
	N11	MM12-12015-R10A30-E04 F30M	2,5 0,10	0,080 0,0032	0,080 0,0032	0,090 0,0036	0,12 0,0048
Graphite	S1	MM12-12015-R15A30-D04 F30M	1,6 0,065	0,050 0,0020	0,048 0,0019	0,048 0,0019	0,060 0,0026
	S2	MM12-12015-R15A30-D04 F30M	1,6 0,065	0,050 0,0020	0,048 0,0019	0,048 0,0019	0,060 0,0026
	S3	MM12-12015-R15A30-D04 F30M	1,6 0,065	0,046 0,0018	0,044 0,0017	0,044 0,0017	0,055 0,0024
	S11	MM12-12015-R05A30-M04 F40M	1,9 0,075	0,044 0,0017	0,044 0,0017	0,050 0,0020	0,070 0,0028
X-Heads	S12	MM12-12015-R05A30-M04 F40M	1,9 0,075	0,044 0,0017	0,044 0,0017	0,050 0,0020	0,070 0,0028
	S13	MM12-12015-R05A30-M04 F40M	1,6 0,065	0,038 0,0015	0,038 0,0015	0,046 0,0018	0,060 0,0024
	H5	MM12-12015-R15A30-D04 F30M	2,0 0,080	0,044 0,0017	0,042 0,0017	0,046 0,0018	0,060 0,0024
	H8	MM12-12015-R15A30-D04 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0018
Minimaster	H11	MM12-12015-R15A30-D04 F30M	2,0 0,080	0,044 0,0017	0,042 0,0017	0,046 0,0018	0,060 0,0024
	H12	MM12-12015-R15A30-D04 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0018
	H21	MM12-12015-R15A30-D04 F30M	1,9 0,075	0,034 0,0013	0,034 0,0013	0,036 0,0014	0,046 0,0018

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM12 – Slot and Side milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F30M				F40M				T60M				Universal
	100%	40%	20%	10%	100%	40%	20%	10%	100%	40%	20%	10%	
P1	250	315	350	385	240	300	335	365	185	225	255	280	Steel and cast iron
	820	1025	1150	1275	790	980	1100	1200	610	740	840	920	
P2	245	305	340	375	235	290	325	355	175	220	250	275	Steel and cast iron
	800	1000	1125	1225	770	950	1075	1175	570	720	820	900	
P3	210	265	295	325	200	250	280	310	155	195	215	235	Steel and cast iron
	690	870	970	1075	660	820	920	1025	510	640	710	770	
P4	190	235	260	285	180	225	250	270	135	170	190	210	Steel and cast iron
	620	770	850	940	590	740	820	890	445	560	620	690	
P5	180	225	250	275	170	215	240	260	130	160	180	200	Steel and cast iron
	590	740	820	900	560	710	790	850	425	520	590	660	
P6	205	250	280	310	195	240	270	295	150	185	205	225	Stainless steel and S-materials
	670	820	920	1025	640	790	890	970	490	610	670	740	
P7	190	240	265	295	180	225	255	280	140	175	195	215	Stainless steel and S-materials
	620	790	870	970	590	740	840	920	460	570	640	710	
P8	175	220	245	275	170	210	235	260	130	160	180	200	Stainless steel and S-materials
	570	720	800	900	560	690	770	850	425	520	590	660	
P11	185	230	260	285	175	220	245	270	135	170	190	210	Stainless steel and S-materials
	610	750	850	940	570	720	800	890	445	560	620	690	
P12	115	145	165	180	110	140	155	170	85	110	120	130	Stainless steel and S-materials
	375	475	540	590	360	460	510	560	280	360	395	425	
M1	200	245	275	300	190	235	260	285	140	180	200	220	Stainless steel and S-materials
	660	800	900	980	620	770	850	940	460	590	660	720	
M2	160	200	225	245	155	195	215	235	120	145	165	180	Stainless steel and S-materials
	520	660	740	800	510	640	710	770	395	475	540	590	
M3	130	160	175	195	125	150	170	185	95	120	135	145	Stainless steel and S-materials
	425	520	570	640	410	490	560	610	310	395	445	475	
M4	100	125	140	150	95	115	130	145	75	90	100	110	Stainless steel and S-materials
	330	410	460	490	310	375	425	475	245	295	330	360	
M5	80	100	115	125	80	95	110	120	60	75	85	95	Non ferrous
	260	330	375	410	260	310	360	395	195	245	280	310	
K1	195	240	270	295	185	230	255	280	140	175	195	220	Non ferrous
	640	790	890	970	610	750	840	920	460	570	640	720	
K2	170	215	240	260	165	205	225	245	125	155	175	190	Non ferrous
	560	710	790	850	540	670	740	800	410	510	570	620	
K3	145	180	200	220	140	170	190	210	105	130	145	160	Non ferrous
	475	590	660	720	460	560	620	690	345	425	475	520	
K4	140	170	190	210	130	165	185	200	100	125	140	155	Hard
	460	560	620	690	425	540	610	660	330	410	460	510	
K5	85	105	115	125	80	100	110	120	60	75	85	95	Hard
	280	345	375	410	260	330	360	395	195	245	280	310	
K6	120	150	170	185	115	145	160	175	90	110	125	135	Hard
	395	490	560	610	375	475	520	570	295	360	410	445	
K7	105	135	150	165	100	125	140	155	80	100	110	120	Hard
	345	445	490	540	330	410	460	510	260	330	360	395	
N1	1450	1800	2025	2225	1375	1725	1925	2125	1050	1300	1450	1600	Graphite
	4750	5900	6650	7300	4500	5650	6325	6975	3450	4275	4750	5250	
N2	580	730	820	900	560	690	780	860	420	530	590	650	Graphite
	1900	2400	2700	2950	1825	2275	2550	2825	1375	1750	1925	2125	
N3	390	485	550	600	370	460	520	570	280	350	395	435	Graphite
	1275	1600	1800	1975	1225	1500	1700	1875	920	1150	1300	1425	
N11	445	550	620	690	425	530	590	650	320	405	450	495	Graphite
	1450	1800	2025	2275	1400	1750	1925	2125	1050	1325	1475	1625	
S1	46	55	65	70	44	55	60	65	34	43	47	50	X-Heads
	150	180	215	230	145	180	195	215	110	140	155	165	
S2	37	46	50	55	35	44	49	55	28	34	38	42	X-Heads
	120	150	165	180	115	145	160	180	90	110	125	140	
S3	32	40	45	50	31	38	43	47	24	30	33	37	X-Heads
	105	130	150	165	100	125	140	155	80	100	110	120	
S11	65	80	90	100	60	75	85	95	48	60	65	75	X-Heads
	215	260	295	330	195	245	280	310	155	195	215	245	
S12	45	55	60	70	43	55	60	65	33	41	47	50	Minimaster
	150	180	195	230	140	180	195	215	110	135	155	165	
S13	26	32	36	40	25	31	34	38	19	24	27	29	Minimaster
	85	105	120	130	80	100	110	125	60	80	90	95	
H5	39	49	55	60	37	46	50	55	29	36	40	44	Minimaster
	130	160	180	195	120	150	165	180	95	120	130	145	
H8	41	50	55	60	39	48	55	60	30	37	42	46	Minimaster
	135	165	180	195	130	155	180	195	100	120	140	150	
H11	49	60	70	75	47	60	65	70	37	46	50	55	Minimaster
	160	195	230	245	155	195	215	230	120	150	165	180	
H12	75	90	100	110	70	85	95	105	55	65	75	85	Minimaster
	245	295	330	360	230	280	310	345	180	215	245	280	
H21	41	50	55	60	39	48	55	60	30	37	42	46	Minimaster
	135	165	180	195	130	155	180	195	100	120	140	150	

MM12 Z3 – Copy milling – Insert selection – Roughing – mm/Inch

	SMG		a _p	f _z			
				100%	40%	20%	10%
Universal	P1	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,095 0.0038
	P2	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,095 0.0038
Steel and cast iron	P3	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,070 0.0028	0,065 0.0026	0,070 0.0028	0,090 0.0036
	P4	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,070 0.0028	0,090 0.0036
	P5	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,090 0.0036
	P6	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,085 0.0034
	P7	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,085 0.0034
	P8	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,070 0.0028	0,065 0.0026	0,070 0.0028	0,090 0.0036
Stainless steel and S-materials	P11	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,085 0.0034
	P12	MM12-12015-B90A30-M04 F40M	2,0 0,080	0,046 0.0018	0,044 0.0017	0,046 0.0018	0,060 0.0024
	M1	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,095 0.0038
	M2	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,090 0.0036
Non ferrous	M3	MM12-12015-B90A30-M04 F40M	2,0 0,080	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,070 0.0028
	M4	MM12-12015-B90A30-M04 F40M	1,6 0,065	0,050 0.0020	0,048 0.0019	0,048 0.0019	0,060 0.0026
	M5	MM12-12015-B90A30-M04 F40M	1,6 0,065	0,050 0.0020	0,048 0.0019	0,048 0.0019	0,060 0.0026
	K1	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,070 0.0028	0,070 0.0028	0,075 0.0030	0,095 0.0038
	K2	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,090 0.0036
Hard	K3	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,090 0.0036
	K4	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,090 0.0036
	K5	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,060 0.0024	0,055 0.0022	0,060 0.0024	0,080 0.0032
	K6	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,065 0.0026	0,065 0.0026	0,065 0.0026	0,090 0.0036
Plastic and cfrp	K7	MM12-12015-B90A30-M04 F40M	2,5 0,10	0,060 0.0024	0,055 0.0022	0,060 0.0024	0,080 0.0032
	N1	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,090 0.0036	0,090 0.0036	0,095 0.0038	0,12 0.0048
	N2	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,090 0.0036	0,090 0.0036	0,095 0.0038	0,12 0.0048
	N3	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,090 0.0036	0,090 0.0036	0,095 0.0038	0,12 0.0048
Graphite	N11	MM12-12015-B90A30-E04 F30M	2,5 0,10	0,090 0.0036	0,090 0.0036	0,095 0.0038	0,12 0.0048
	S1	MM12-12015-B90A30-M04 F40M	1,6 0,065	0,050 0.0020	0,048 0.0019	0,048 0.0019	0,060 0.0026
	S2	MM12-12015-B90A30-M04 F40M	1,6 0,065	0,050 0.0020	0,048 0.0019	0,048 0.0019	0,060 0.0026
	S3	MM12-12015-B90A30-M04 F40M	1,6 0,065	0,046 0.0018	0,046 0.0018	0,046 0.0018	0,055 0.0024
X-Heads	S11	MM12-12015-B90A30-M04 F40M	1,9 0,075	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,070 0.0028
	S12	MM12-12015-B90A30-M04 F40M	1,9 0,075	0,055 0.0022	0,055 0.0022	0,055 0.0022	0,070 0.0028
	S13	MM12-12015-B90A30-M04 F40M	1,6 0,065	0,050 0.0020	0,048 0.0019	0,048 0.0019	0,060 0.0026
	H5	MM12-12015-B90A30-E04 F30M	2,0 0,080	0,046 0.0018	0,044 0.0017	0,046 0.0018	0,060 0.0024
	H8	MM12-12015-B90A30-E04 F30M	1,9 0,075	0,036 0.0014	0,036 0.0014	0,036 0.0014	0,046 0.0018
	H11	MM12-12015-B90A30-E04 F30M	2,0 0,080	0,046 0.0018	0,044 0.0017	0,046 0.0018	0,060 0.0024
Minimaster	H12	MM12-12015-B90A30-E04 F30M	1,9 0,075	0,036 0.0014	0,036 0.0014	0,036 0.0014	0,046 0.0018
	H21	MM12-12015-B90A30-E04 F30M	1,9 0,075	0,036 0.0014	0,036 0.0014	0,036 0.0014	0,046 0.0018

SMG = Seco material group

f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

All cutting data are start values

MM12 Z3 – Copy milling – Insert selection – Finishing – mm/Inch

SMG		a_p	f_z				
			15%	10%	5%	2%	
P1	MM12-12015-B90A30-E04 F30M	2,5	0,080	0,095	0,13	0,22	Universal
		0.10	0.0032	0.0038	0.0050	0.0085	
P2	MM12-12015-B90A30-E04 F30M	2,5	0,080	0,095	0,13	0,22	Steel and cast iron
		0.10	0.0032	0.0038	0.0050	0.0085	
P3	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,13	0,20	Steel and cast iron
		0.10	0.0030	0.0036	0.0050	0.0080	
P4	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Steel and cast iron
		0.10	0.0030	0.0036	0.0048	0.0080	
P5	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Steel and cast iron
		0.10	0.0030	0.0036	0.0048	0.0080	
P6	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,085	0,12	0,19	Steel and cast iron
		0.10	0.0030	0.0034	0.0048	0.0075	
P7	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,085	0,12	0,19	Steel and cast iron
		0.10	0.0030	0.0034	0.0048	0.0075	
P8	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,13	0,20	Stainless steel and S-materials
		0.10	0.0030	0.0036	0.0050	0.0080	
P11	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,085	0,12	0,19	Stainless steel and S-materials
		0.10	0.0030	0.0034	0.0048	0.0075	
P12	MM12-12015-B90A30-E04 F30M	2,0	0,050	0,060	0,080	0,13	Stainless steel and S-materials
		0.080	0.0020	0.0024	0.0032	0.0050	
M1	MM12-12015-B90A30-E04 F30M	2,5	0,080	0,095	0,13	0,22	Stainless steel and S-materials
		0.10	0.0032	0.0038	0.0050	0.0085	
M2	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Stainless steel and S-materials
		0.10	0.0030	0.0036	0.0048	0.0080	
M3	MM12-12015-B90A30-E04 F30M	2,0	0,060	0,070	0,095	0,16	Stainless steel and S-materials
		0.080	0.0024	0.0028	0.0038	0.0065	
M4	MM12-12015-B90A30-E04 F30M	1,6	0,055	0,060	0,085	0,14	Stainless steel and S-materials
		0.065	0.0022	0.0026	0.0034	0.0055	
M5	MM12-12015-B90A30-E04 F30M	1,6	0,055	0,060	0,085	0,14	Stainless steel and S-materials
		0.065	0.0022	0.0026	0.0034	0.0055	
K1	MM12-12015-B90A30-E04 F30M	2,5	0,080	0,095	0,13	0,22	Non ferrous
		0.10	0.0032	0.0038	0.0050	0.0085	
K2	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Non ferrous
		0.10	0.0030	0.0036	0.0048	0.0080	
K3	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Non ferrous
		0.10	0.0030	0.0036	0.0048	0.0080	
K4	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Non ferrous
		0.10	0.0030	0.0036	0.0048	0.0080	
K5	MM12-12015-B90A30-E04 F30M	2,5	0,065	0,080	0,11	0,18	Non ferrous
		0.10	0.0026	0.0032	0.0044	0.0070	
K6	MM12-12015-B90A30-E04 F30M	2,5	0,075	0,090	0,12	0,20	Non ferrous
		0.10	0.0030	0.0036	0.0048	0.0080	
K7	MM12-12015-B90A30-E04 F30M	2,5	0,065	0,080	0,11	0,18	Non ferrous
		0.10	0.0026	0.0032	0.0044	0.0070	
N1	MM12-12015-B90A30-E04 F30M	2,5	0,10	0,12	0,17	0,28	Hard
		0.10	0.0040	0.0048	0.0065	0.011	
N2	MM12-12015-B90A30-E04 F30M	2,5	0,10	0,12	0,17	0,28	Hard
		0.10	0.0040	0.0048	0.0065	0.011	
N3	MM12-12015-B90A30-E04 F30M	2,5	0,10	0,12	0,17	0,28	Hard
		0.10	0.0040	0.0048	0.0065	0.011	
N11	MM12-12015-B90A30-E04 F30M	2,5	0,10	0,12	0,17	0,28	Hard
		0.10	0.0040	0.0048	0.0065	0.011	
S1	MM12-12015-B90A30-E04 F30M	1,6	0,055	0,060	0,085	0,14	Graphite
		0.065	0.0022	0.0026	0.0034	0.0055	
S2	MM12-12015-B90A30-E04 F30M	1,6	0,055	0,060	0,085	0,14	Graphite
		0.065	0.0022	0.0026	0.0034	0.0055	
S3	MM12-12015-B90A30-E04 F30M	1,6	0,050	0,055	0,080	0,13	Graphite
		0.065	0.0020	0.0024	0.0032	0.0050	
S11	MM12-12015-B90A30-E04 F30M	1,9	0,060	0,070	0,095	0,16	Graphite
		0.075	0.0024	0.0028	0.0038	0.0065	
S12	MM12-12015-B90A30-E04 F30M	1,9	0,060	0,070	0,095	0,16	Graphite
		0.075	0.0024	0.0028	0.0038	0.0065	
S13	MM12-12015-B90A30-E04 F30M	1,6	0,055	0,060	0,085	0,14	Graphite
		0.065	0.0022	0.0026	0.0034	0.0055	
H5	MM12-12015-B90A30-E04 F30M	2,0	0,050	0,060	0,080	0,13	X-Heads
		0.080	0.0020	0.0024	0.0032	0.0050	
H8	MM12-12015-B90A30-E04 F30M	1,9	0,040	0,046	0,065	0,10	X-Heads
		0.075	0.0016	0.0018	0.0026	0.0040	
H11	MM12-12015-B90A30-E04 F30M	2,0	0,050	0,060	0,080	0,13	X-Heads
		0.080	0.0020	0.0024	0.0032	0.0050	
H12	MM12-12015-B90A30-E04 F30M	1,9	0,040	0,046	0,065	0,10	X-Heads
		0.075	0.0016	0.0018	0.0026	0.0040	
H21	MM12-12015-B90A30-E04 F30M	1,9	0,040	0,046	0,065	0,10	Minimaster
		0.075	0.0016	0.0018	0.0026	0.0040	

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %

All cutting data are start values

MM12 Z3 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F30M					F40M				
		100%	20%	10%	5%	2%	100%	20%	10%	5%	2%
Universal	P1	270	315	335	365	360	255	300	320	345	340
		890	1025	1100	1200	1175	840	980	1050	1125	1125
Steel and cast iron	P2	265	305	325	355	350	250	290	310	335	330
		870	1000	1075	1175	1150	820	950	1025	1100	1075
	P3	225	265	285	305	305	215	255	270	290	290
		740	870	940	1000	1000	710	840	890	950	950
	P4	200	235	250	270	270	190	225	235	260	255
		660	770	820	890	890	620	740	770	850	840
	P5	195	225	240	260	255	185	215	225	245	245
		640	740	790	850	840	610	710	740	800	800
	P6	215	255	270	290	290	205	240	255	275	275
		710	840	890	950	950	670	790	840	900	900
Stainless steel and S-materials	P7	205	240	255	275	275	195	230	240	260	260
		670	790	840	900	900	640	750	790	850	850
	P8	190	225	240	255	255	180	215	225	245	245
		620	740	790	840	840	590	710	740	800	800
	P11	200	235	245	265	265	190	220	235	255	255
		660	770	800	870	870	620	720	770	840	840
	P12	125	150	155	170	165	120	140	145	160	160
		410	490	510	560	540	395	460	490	520	520
Non ferrous	M1	210	245	265	285	280	200	235	250	270	270
		690	800	870	940	920	660	770	820	890	890
	M2	175	205	215	235	230	165	195	205	220	220
		570	670	710	770	750	540	640	670	720	720
	M3	140	165	170	185	185	130	155	160	175	175
		460	540	560	610	610	425	510	540	570	570
	M4	100	130	130	140	140	95	125	125	135	135
		330	425	460	460	460	310	410	425	445	445
	M5	80	110	110	115	115	80	105	105	110	110
		260	360	375	375	375	260	345	360	360	360
Hard	K1	210	240	260	280	275	200	230	245	265	265
		690	790	850	920	900	660	750	800	870	870
	K2	185	215	225	245	245	175	205	215	235	230
		610	710	740	800	800	570	670	710	770	750
	K3	155	180	190	210	205	145	175	180	200	195
		510	590	620	690	670	475	570	590	660	640
Plastic and cfrp	K4	150	175	180	200	195	140	165	175	190	185
		490	570	590	660	640	460	540	570	620	610
	K5	90	105	110	120	120	85	100	105	115	115
		295	345	360	395	395	280	330	345	375	375
	K6	130	155	160	175	175	125	145	155	165	165
		425	510	520	570	570	410	475	510	540	540
	K7	115	135	140	155	155	110	125	135	145	145
		375	445	460	510	510	360	410	445	475	475
Graphite	N1	1575	1825	1950	2100	2100	1500	1750	1850	2000	2000
		5175	6000	6400	6900	6900	4925	5750	6075	6550	6550
	N2	640	740	790	850	840	610	700	750	810	800
		2100	2425	2600	2800	2750	2000	2300	2450	2650	2625
	N3	425	495	530	570	560	405	470	500	540	540
		1400	1625	1750	1875	1825	1325	1550	1650	1775	1775
	N11	485	560	600	650	640	460	540	570	620	610
		1600	1825	1975	2125	2100	1500	1775	1875	2025	2000
X-Heads	S1	46	60	60	65	65	44	60	60	65	60
		150	195	215	215	215	145	195	195	215	195
	S2	37	50	49	55	55	35	47	47	50	50
		120	165	165	180	180	115	155	165	165	165
	S3	32	43	43	46	46	31	41	41	44	44
		105	140	150	150	150	100	135	140	145	145
	S11	70	85	85	95	90	65	80	80	90	90
		230	280	295	310	295	215	260	280	295	295
Minimaster	S12	48	60	60	65	65	46	55	55	60	60
		155	195	195	215	215	150	180	195	195	195
	S13	26	35	34	37	37	25	33	33	35	35
		85	115	120	120	120	80	110	115	115	115
	H5	42	50	50	55	55	40	47	49	55	55
		140	165	165	180	180	130	155	160	180	180
	H8	42	55	55	55	55	40	50	50	55	55
		140	180	180	180	180	130	165	165	180	180
	H11	55	65	65	70	70	50	60	60	65	65
		180	215	215	230	230	165	195	195	215	215
	H12	75	95	95	105	105	75	90	90	100	100
		245	310	330	345	345	245	295	310	330	330
	H21	42	55	55	55	55	40	50	50	55	55
		140	180	180	180	180	130	165	165	180	180

MM12 Z2 – Copy milling – Insert selection – Roughing – mm/Inch

SMG		a_p	f_z			
			100%	40%	20%	10%
P1	MM12-12012-B90S-E05 F30M	5,0	0,075	0,080	0,090	0,12
		0.20	0.0030	0.0032	0.0036	0.0048
P2	MM12-12012-B90S-E05 F30M	5,0	0,080	0,080	0,090	0,12
		0.20	0.0032	0.0032	0.0036	0.0048
P3	MM12-12012-B90S-E05 F30M	5,0	0,075	0,075	0,085	0,11
		0.20	0.0030	0.0030	0.0034	0.0044
P4	MM12-12012-B90-MD05 F30M	5,0	0,075	0,075	0,085	0,11
		0.20	0.0030	0.0030	0.0034	0.0044
P5	MM12-12012-B90-MD05 F30M	5,0	0,070	0,070	0,085	0,11
		0.20	0.0028	0.0028	0.0034	0.0044
P6	MM12-12012-B90-MD05 F30M	5,0	0,070	0,070	0,080	0,11
		0.20	0.0028	0.0028	0.0032	0.0044
P7	MM12-12012-B90-MD05 F30M	5,0	0,070	0,070	0,080	0,11
		0.20	0.0028	0.0028	0.0032	0.0044
P8	MM12-12012-B90-MD05 F30M	5,0	0,075	0,075	0,085	0,11
		0.20	0.0030	0.0030	0.0034	0.0044
P11	MM12-12012-B90-MD05 F30M	5,0	0,070	0,070	0,080	0,11
		0.20	0.0028	0.0028	0.0032	0.0044
P12	MM12-12012-B90-MD05 F30M	4,0	0,050	0,050	0,060	0,075
		0.16	0.0020	0.0020	0.0024	0.0030
M1	MM12-12012-B90S-E05 F30M	5,0	0,080	0,080	0,090	0,12
		0.20	0.0032	0.0032	0.0036	0.0048
M2	MM12-12012-B90S-E05 F30M	5,0	0,070	0,070	0,085	0,11
		0.20	0.0028	0.0028	0.0034	0.0044
M3	MM12-12012-B90S-E05 F30M	4,0	0,060	0,060	0,070	0,090
		0.16	0.0024	0.0024	0.0028	0.0036
M4	MM12-12012-B90-MD05 F30M	3,0	0,055	0,055	0,060	0,075
		0.12	0.0022	0.0022	0.0024	0.0032
M5	MM12-12012-B90-MD05 F30M	3,0	0,055	0,055	0,060	0,075
		0.12	0.0022	0.0022	0.0024	0.0032
K1	MM12-12012-B90S-E05 F30M	5,0	0,080	0,080	0,090	0,12
		0.20	0.0032	0.0032	0.0036	0.0048
K2	MM12-12012-B90S-E05 F30M	5,0	0,070	0,070	0,085	0,11
		0.20	0.0028	0.0028	0.0034	0.0044
K3	MM12-12012-B90S-E05 F30M	5,0	0,070	0,070	0,085	0,11
		0.20	0.0028	0.0028	0.0034	0.0044
K4	MM12-12012-B90S-E05 F30M	5,0	0,070	0,070	0,085	0,11
		0.20	0.0028	0.0028	0.0034	0.0044
K5	MM12-12012-B90-MD05 F30M	5,0	0,065	0,065	0,075	0,10
		0.20	0.0026	0.0026	0.0030	0.0040
K6	MM12-12012-B90-MD05 F30M	5,0	0,070	0,070	0,085	0,11
		0.20	0.0028	0.0028	0.0034	0.0044
K7	MM12-12012-B90-MD05 F30M	5,0	0,065	0,065	0,075	0,10
		0.20	0.0026	0.0026	0.0030	0.0040
N1	MM12-12012-B90S-E05 F30M	5,0	0,10	0,10	0,12	0,15
		0.20	0.0040	0.0040	0.0048	0.0060
N2	MM12-12012-B90S-E05 F30M	5,0	0,10	0,10	0,12	0,15
		0.20	0.0040	0.0040	0.0048	0.0060
N3	MM12-12012-B90S-E05 F30M	5,0	0,10	0,10	0,12	0,15
		0.20	0.0040	0.0040	0.0048	0.0060
N11	MM12-12012-B90S-E05 F30M	5,0	0,10	0,10	0,12	0,15
		0.20	0.0040	0.0040	0.0048	0.0060
S1	MM12-12012-B90-MD05 F30M	3,0	0,055	0,055	0,060	0,075
		0.12	0.0022	0.0022	0.0024	0.0032
S2	MM12-12012-B90-MD05 F30M	3,0	0,055	0,055	0,060	0,075
		0.12	0.0022	0.0022	0.0024	0.0032
S3	MM12-12012-B90-MD05 F30M	3,0	0,050	0,050	0,055	0,070
		0.12	0.0020	0.0020	0.0022	0.0030
S11	MM12-12012-B90-MD05 F30M	3,5	0,060	0,060	0,070	0,090
		0.14	0.0024	0.0024	0.0028	0.0036
S12	MM12-12012-B90-MD05 F30M	3,5	0,060	0,060	0,070	0,090
		0.14	0.0024	0.0024	0.0028	0.0036
S13	MM12-12012-B90-MD05 F30M	3,0	0,055	0,055	0,060	0,075
		0.12	0.0022	0.0022	0.0024	0.0032
H5	MM12-12012-B90-MD05 F30M	4,0	0,050	0,050	0,060	0,075
		0.16	0.0020	0.0020	0.0024	0.0030
H8	MM12-12012-B90-MD05 F30M	3,5	0,040	0,040	0,044	0,055
		0.14	0.0016	0.0016	0.0017	0.0024
H11	MM12-12012-B90-MD05 F30M	4,0	0,050	0,050	0,060	0,075
		0.16	0.0020	0.0020	0.0024	0.0030
H12	MM12-12012-B90-MD05 F30M	3,5	0,040	0,040	0,044	0,055
		0.14	0.0016	0.0016	0.0017	0.0024
H21	MM12-12012-B90-MD05 F30M	3,5	0,040	0,040	0,044	0,055
		0.14	0.0016	0.0016	0.0017	0.0024

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

All cutting data are start values

 Universal
 Steel and cast iron
 Stainless steel and S-materials
 Stainless steel and S-materials
 Non ferrous
 Hard
 Graphite
 X-Heads
 Minimaster

MM12 Z2 – Copy milling – Insert selection – Finishing – mm/Inch

	SMG		a_p	f_z			
				15%	10%	5%	2%
Universal	P1	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,040 0.0016	0,048 0.0019	0,065 0.0026	0,11 0.0044
	P2	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,042 0.0017	0,048 0.0019	0,070 0.0028	0,11 0.0044
Steel and cast iron	P3	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,040 0.0016	0,046 0.0018	0,065 0.0026	0,10 0.0040
	P4	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,046 0.0018	0,065 0.0026	0,10 0.0040
	P5	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	P6	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	P7	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	P8	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0016	0,044 0.0018	0,060 0.0026	0,095 0.0040
Stainless steel and S-materials	P11	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	P12	MM12-12012-B90PF-M02 F15M	3,5 0,14	0,026 0.0010	0,030 0.0012	0,042 0.0017	0,065 0.0026
	M1	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,042 0.0017	0,048 0.0019	0,070 0.0028	0,11 0.0044
	M2	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
Non ferrous	M3	MM12-12012-B90PF-M02 F15M	3,5 0,14	0,030 0.0012	0,036 0.0014	0,050 0.0020	0,075 0.0030
	M4	MM12-12012-B90PF-M02 F15M	2,5 0,10	0,028 0.0011	0,032 0.0013	0,042 0.0017	0,065 0.0026
	M5	MM12-12012-B90PF-M02 F15M	2,5 0,10	0,028 0.0011	0,032 0.0013	0,042 0.0017	0,065 0.0026
	K1	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,042 0.0017	0,048 0.0019	0,070 0.0028	0,11 0.0044
	K2	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
Hard	K3	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	K4	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	K5	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,034 0.0013	0,040 0.0016	0,055 0.0022	0,085 0.0034
	K6	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,038 0.0015	0,044 0.0017	0,060 0.0024	0,095 0.0038
	K7	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,034 0.0013	0,040 0.0016	0,055 0.0022	0,085 0.0034
Plastic and cfrp	N1	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,055 0.0022	0,060 0.0024	0,085 0.0034	0,14 0.0055
	N2	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,055 0.0022	0,060 0.0024	0,085 0.0034	0,14 0.0055
	N3	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,055 0.0022	0,060 0.0024	0,085 0.0034	0,14 0.0055
	N11	MM12-12012-B90PF-M02 F15M	4,0 0,16	0,055 0.0022	0,060 0.0024	0,085 0.0034	0,14 0.0055
Graphite	S1	MM12-12012-B90PF-M02 F15M	2,5 0,10	0,028 0.0011	0,032 0.0013	0,042 0.0017	0,065 0.0026
	S2	MM12-12012-B90PF-M02 F15M	2,5 0,10	0,028 0.0011	0,032 0.0013	0,042 0.0017	0,065 0.0026
	S3	MM12-12012-B90PF-M02 F15M	2,5 0,10	0,025 0.0010	0,028 0.0012	0,040 0.0016	0,065 0.0026
	S11	MM12-12012-B90PF-M02 F15M	3,0 0,12	0,030 0.0012	0,036 0.0014	0,050 0.0020	0,075 0.0030
X-Heads	S12	MM12-12012-B90PF-M02 F15M	3,0 0,12	0,030 0.0012	0,036 0.0014	0,050 0.0020	0,075 0.0030
	S13	MM12-12012-B90PF-M02 F15M	2,5 0,10	0,028 0.0011	0,032 0.0013	0,042 0.0017	0,065 0.0026
	H5	MM12-12012-B90PF-M02 F15M	3,5 0,14	0,026 0.0010	0,030 0.0012	0,042 0.0017	0,065 0.0026
	H8	MM12-12012-B90PF-M02 F15M	3,0 0,12	0,020 0.00080	0,024 0.00095	0,032 0.0013	0,050 0.0020
Minimaster	H11	MM12-12012-B90PF-M02 F15M	3,5 0,14	0,026 0.0010	0,030 0.0012	0,042 0.0017	0,065 0.0026
	H12	MM12-12012-B90PF-M02 F15M	3,0 0,12	0,020 0.00080	0,024 0.00095	0,032 0.0013	0,050 0.0020
	H21	MM12-12012-B90PF-M02 F15M	3,0 0,12	0,020 0.00080	0,024 0.00095	0,032 0.0013	0,050 0.0020

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM12 Z2 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F15M					F30M					T60M					Universal
	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	
P1	310	390	410	445	440	240	300	325	350	345	195	240	265	285	280	Steel and cast iron
	1025	1275	1350	1450	1450	790	980	1075	1150	1125	640	790	870	940	920	
P2	300	380	400	430	430	230	290	315	340	340	185	235	255	275	275	Steel and cast iron
	980	1250	1300	1400	1400	750	950	1025	1125	1125	610	770	840	900	900	
P3	260	330	345	370	370	200	255	275	295	295	160	205	225	240	240	Steel and cast iron
	850	1075	1125	1225	1225	660	840	900	970	970	520	670	740	790	790	
P4	230	290	305	325	330	175	225	245	260	260	145	180	195	210	210	Steel and cast iron
	750	950	1000	1075	1075	570	740	800	850	850	475	590	640	690	690	
P5	220	275	290	315	315	170	215	235	255	250	140	170	190	205	200	Steel and cast iron
	720	900	950	1025	1025	560	710	770	840	820	460	560	620	670	660	
P6	245	310	325	355	355	190	240	260	285	280	155	195	210	230	225	Steel and cast iron
	800	1025	1075	1175	1175	620	790	850	940	920	510	640	690	750	740	
P7	230	295	310	335	335	180	230	245	270	265	145	185	200	215	215	Stainless steel and S-materials
	750	970	1025	1100	1100	590	750	800	890	870	475	610	660	710	710	
P8	215	275	290	310	315	170	215	235	250	250	135	170	190	200	200	Stainless steel and S-materials
	710	900	950	1025	1025	560	710	770	820	820	445	560	620	660	660	
P11	225	285	300	325	325	175	220	240	260	255	140	180	195	210	210	Stainless steel and S-materials
	740	940	980	1075	1075	570	720	790	850	840	460	590	640	690	690	
P12	140	180	180	195	200	115	145	150	165	160	95	120	120	135	130	Stainless steel and S-materials
	460	590	610	640	660	375	475	510	540	520	310	395	410	445	425	
M1	240	305	320	345	345	185	235	255	275	270	150	190	205	225	220	Stainless steel and S-materials
	790	1000	1050	1125	1125	610	770	840	900	890	490	620	670	740	720	
M2	195	250	260	285	285	155	190	210	225	225	125	155	170	185	180	Stainless steel and S-materials
	640	820	850	940	940	510	620	690	740	740	410	510	560	610	590	
M3	155	200	205	220	220	125	160	165	180	180	100	130	135	145	145	Stainless steel and S-materials
	510	660	670	720	720	410	520	560	590	590	330	425	445	475	475	
M4	120	155	155	165	165	100	130	130	135	140	80	105	105	110	110	Stainless steel and S-materials
	395	510	540	540	540	330	425	445	445	460	260	345	360	360	360	
M5	100	130	130	140	140	85	110	105	115	115	70	85	85	95	95	Non ferrous
	330	425	460	460	460	280	360	375	375	375	230	280	295	310	310	
K1	235	300	315	340	340	180	230	250	270	270	145	185	205	220	215	Non ferrous
	770	980	1025	1125	1125	590	750	820	890	890	475	610	670	720	710	
K2	205	265	275	300	300	160	200	220	240	235	130	165	180	195	190	Non ferrous
	670	870	900	980	980	520	660	720	790	770	425	540	590	640	620	
K3	175	225	235	255	255	135	170	185	205	200	110	140	150	165	165	Non ferrous
	570	740	770	840	840	445	560	610	670	660	360	460	490	540	540	
K4	165	215	225	240	240	130	165	180	195	190	105	130	145	155	155	Non ferrous
	540	710	740	790	790	425	540	590	640	620	345	425	475	510	510	
K5	100	130	135	145	145	80	100	110	115	115	65	80	85	95	95	Hard
	330	425	445	475	475	260	330	360	375	375	215	260	280	310	310	
K6	145	185	195	215	215	115	145	155	170	170	95	115	125	140	135	Hard
	475	610	640	710	710	375	475	510	560	560	310	375	410	460	445	
K7	130	165	170	185	185	100	125	140	150	150	80	105	110	120	120	Hard
	425	540	560	610	610	330	410	460	490	490	260	345	360	395	395	
N1	1825	2300	2425	2625	2600	1375	1725	1900	2025	2000	1100	1400	1525	1650	1625	Graphite
	6000	7550	7950	8600	8525	4500	5650	6225	6650	6550	3600	4600	5000	5425	5325	
N2	730	930	980	1050	1050	550	690	760	820	810	450	560	620	660	660	Graphite
	2400	3050	3225	3450	3450	1800	2275	2500	2700	2650	1475	1825	2025	2175	2175	
N3	490	620	650	710	700	370	465	510	550	540	300	375	410	440	440	Graphite
	1600	2025	2125	2325	2300	1225	1525	1675	1800	1775	980	1225	1350	1450	1450	
N11	560	710	750	810	800	425	530	580	620	620	340	430	470	500	500	Graphite
	1825	2325	2450	2650	2625	1400	1750	1900	2025	2025	1125	1400	1550	1650	1650	
S1	55	70	70	80	80	47	60	60	65	65	38	49	48	50	50	X-Heads
	180	230	260	260	260	155	195	215	215	215	125	160	165	165	165	
S2	45	60	60	65	65	38	49	48	50	50	31	39	39	42	42	X-Heads
	150	195	215	215	215	125	160	165	165	165	100	130	135	140	140	
S3	39	50	50	55	55	33	43	42	45	45	27	34	34	37	36	X-Heads
	130	165	180	180	180	110	140	145	150	150	90	110	120	120	120	
S11	80	105	105	110	110	65	85	85	90	90	55	70	70	75	75	X-Heads
	260	345	360	360	360	215	280	280	295	295	180	230	230	245	245	
S12	55	70	70	75	75	45	60	60	65	60	37	47	47	50	50	Minimaster
	180	230	245	245	245	150	195	195	215	195	120	155	160	165	165	
S13	32	41	40	44	44	26	34	34	36	36	21	28	27	29	29	Minimaster
	105	135	145	145	145	85	110	120	120	120	70	90	95	95	95	
H5	46	60	60	65	65	38	48	50	55	55	31	39	41	44	44	Minimaster
	150	195	195	215	215	125	155	165	180	180	100	130	135	145	145	
H8	48	60	60	65	65	40	50	50	55	55	33	42	42	46	45	Minimaster
	155	195	215	215	215	130	165	180	180	180	110	140	140	150	150	
H11	60	75	75	85	85	49	60	65	70	70	39	50	50	55	55	Minimaster
	195	245	260	280	280	160	195	215	230	230	130	165	165	180	180	
H12	85	110	110	120	120	70	95	95	100	100	60	75	75	80	80	Minimaster
	280	360	375	395	395	230	310	310	330	330	195	245	260	260	260	
H21	48	60	60	65	65	40	50	50	55	55	33	42	42	46	45	Minimaster
	155	195	215	215	215	130	165	180	180	180	110	140	140	150	150	

MM12 High-Feed – Insert selection – mm/Inch

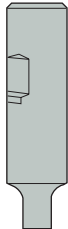
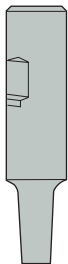
	SMG		a_p	f_z			
				100%	70%	30%	20%
Universal	P1	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,55 0.022	0,75 0.030	0,95 0.038
	P2	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,60 0.024	0,75 0.030	0,95 0.038
Steel and cast iron	P3	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,55 0.022	0,70 0.028	0,90 0.036
	P4	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,55 0.022	0,70 0.028	0,90 0.036
	P5	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,55 0.022	0,70 0.028	0,85 0.034
	P6	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,50 0.020	0,70 0.028	0,85 0.034
	P7	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,50 0.020	0,70 0.028	0,85 0.034
Stainless steel and S-materials	P8	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,55 0.022	0,70 0.028	0,90 0.036
	P11	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,50 0.020	0,70 0.028	0,85 0.034
	P12	MM12-12.60-HF-MD10 F30M	0,28 0.011	0,36 0.014	0,36 0.014	0,46 0.018	0,55 0.022
	M1	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,60 0.024	0,75 0.030	0,95 0.038
	M2	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,55 0.022	0,70 0.028	0,85 0.034
Non ferrous	M3	MM12-12.60-HF-MD10 F30M	0,28 0.011	0,42 0.017	0,42 0.017	0,55 0.022	0,65 0.026
	M4	MM12-12.60-HF-MD10 F30M	0,22 0.0085	0,36 0.014	0,36 0.014	0,48 0.019	0,60 0.024
	M5	MM12-12.60-HF-MD10 F30M	0,22 0.0085	0,36 0.014	0,36 0.014	0,48 0.019	0,60 0.024
	K1	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,55 0.022	0,60 0.024	0,75 0.030	0,95 0.038
	K2	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,55 0.022	0,70 0.028	0,85 0.034
Hard	K3	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,55 0.022	0,70 0.028	0,85 0.034
	K4	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,55 0.022	0,70 0.028	0,85 0.034
	K5	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,48 0.019	0,48 0.019	0,60 0.024	0,75 0.030
	K6	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,50 0.020	0,55 0.022	0,70 0.028	0,85 0.034
	K7	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,48 0.019	0,48 0.019	0,60 0.024	0,75 0.030
Plastic and cfrp	N1	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,75 0.030	0,75 0.030	1,0 0.040	1,3 0.050
	N2	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,75 0.030	0,75 0.030	1,0 0.040	1,3 0.050
	N3	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,75 0.030	0,75 0.030	1,0 0.040	1,3 0.050
	N11	MM12-12.60-HF-MD10 F30M	0,36 0.014	0,75 0.030	0,75 0.030	1,0 0.040	1,3 0.050
	S1	MM12-12.60-HF-MD10 F30M	0,22 0.0085	0,36 0.014	0,36 0.014	0,48 0.019	0,60 0.024
Graphite	S2	MM12-12.60-HF-MD10 F30M	0,22 0.0085	0,36 0.014	0,36 0.014	0,48 0.019	0,60 0.024
	S3	MM12-12.60-HF-MD10 F30M	0,22 0.0085	0,34 0.013	0,34 0.013	0,44 0.017	0,55 0.022
	S11	MM12-12.60-HF-MD10 F30M	0,25 0.010	0,42 0.017	0,42 0.017	0,55 0.022	0,65 0.026
	S12	MM12-12.60-HF-MD10 F30M	0,25 0.010	0,42 0.017	0,42 0.017	0,55 0.022	0,65 0.026
	S13	MM12-12.60-HF-MD10 F30M	0,22 0.0085	0,36 0.014	0,36 0.014	0,48 0.019	0,60 0.024
X-Heads	H5	MM12-12.60-HF-MD10 F15M	0,28 0.011	0,36 0.014	0,36 0.014	0,46 0.018	0,55 0.022
	H8	MM12-12.60-HF-MD10 F15M	0,25 0.010	0,28 0.011	0,28 0.011	0,36 0.014	0,42 0.017
	H11	MM12-12.60-HF-MD10 F15M	0,28 0.011	0,36 0.014	0,36 0.014	0,46 0.018	0,55 0.022
	H12	MM12-12.60-HF-MD10 F15M	0,25 0.010	0,28 0.011	0,28 0.011	0,36 0.014	0,42 0.017
	H21	MM12-12.60-HF-MD10 F15M	0,25 0.010	0,28 0.011	0,28 0.011	0,36 0.014	0,42 0.017
Minimaster							

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

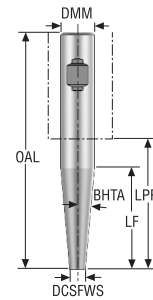
MM12 High-Feed – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F15M				F30M				
	100%	70%	30%	20%	100%	70%	30%	20%	
P1	—	—	—	—	225	275	315	330	Universal
	—	—	—	—	740	900	1025	1075	
P2	—	—	—	—	220	265	310	320	Steel and cast iron
	—	—	—	—	720	870	1025	1050	
P3	—	—	—	—	190	230	270	280	
	—	—	—	—	620	750	890	920	
P4	—	—	—	—	165	205	235	245	Stainless steel and S-materials
	—	—	—	—	540	670	770	800	
P5	—	—	—	—	165	195	225	240	
	—	—	—	—	540	640	740	790	
P6	—	—	—	—	185	225	255	270	Stainless steel and S-materials
	—	—	—	—	610	740	840	890	
P7	—	—	—	—	170	210	240	255	
	—	—	—	—	560	690	790	840	
P8	—	—	—	—	160	195	225	235	Stainless steel and S-materials
	—	—	—	—	520	640	740	770	
P11	—	—	—	—	165	205	235	245	
	—	—	—	—	540	670	770	800	
P12	—	—	—	—	110	130	150	160	Stainless steel and S-materials
	—	—	—	—	360	425	490	520	
M1	—	—	—	—	175	215	250	260	
	—	—	—	—	570	710	820	850	
M2	—	—	—	—	145	175	205	215	Stainless steel and S-materials
	—	—	—	—	475	570	670	710	
M3	—	—	—	—	120	140	165	175	
	—	—	—	—	395	460	540	570	
M4	—	—	—	—	95	110	125	130	Non ferrous
	—	—	—	—	310	360	410	425	
M5	—	—	—	—	80	90	105	110	
	—	—	—	—	260	295	345	360	
K1	185	225	260	275	175	210	245	255	Non ferrous
	610	740	850	900	570	690	800	840	
K2	165	200	230	245	155	185	215	225	
	540	660	750	800	510	610	710	740	
K3	140	170	195	205	130	155	180	190	Hard
	460	560	640	670	425	510	590	620	
K4	135	160	185	195	125	150	175	185	
	445	520	610	640	410	490	570	610	
K5	80	100	115	120	75	90	105	110	Hard
	260	330	375	395	245	295	345	360	
K6	120	140	165	175	110	130	155	160	
	395	460	540	570	360	425	510	520	
K7	105	125	145	155	95	115	135	145	Graphite
	345	410	475	510	310	375	445	475	
N1	—	—	—	—	1275	1575	1800	1875	
	—	—	—	—	4175	5175	5900	6150	
N2	—	—	—	—	520	630	730	750	Graphite
	—	—	—	—	1700	2075	2400	2450	
N3	—	—	—	—	345	420	485	500	
	—	—	—	—	1125	1375	1600	1650	
N11	—	—	—	—	395	480	550	570	X-Heads
	—	—	—	—	1300	1575	1800	1875	
S1	—	—	—	—	44	50	60	60	
	—	—	—	—	145	165	195	195	
S2	—	—	—	—	35	41	47	50	X-Heads
	—	—	—	—	115	135	155	165	
S3	—	—	—	—	31	36	42	44	
	—	—	—	—	100	120	140	145	
S11	—	—	—	—	60	70	85	90	Minimaster
	—	—	—	—	195	230	280	295	
S12	—	—	—	—	42	50	55	60	
	—	—	—	—	140	165	180	195	
S13	—	—	—	—	25	29	33	35	Minimaster
	—	—	—	—	80	95	110	115	
H5	39	46	55	55	36	43	50	55	
	130	150	180	180	120	140	165	180	
H8	41	49	55	60	38	45	50	55	Minimaster
	135	160	180	195	125	150	165	180	
H11	49	60	70	70	46	55	65	65	
	160	195	230	230	150	180	215	215	
H12	75	90	100	105	70	80	95	100	Minimaster
	245	295	330	345	230	260	310	330	
H21	41	49	55	60	38	45	50	55	
	135	160	180	195	125	150	165	180	

Shank design

Universal Steel and cast iron Stainless steel and S-materials Non ferrous Hard Plastic and cfrp Graphite X-Heads	Design 1, Keyway shank	Design 2, Cylindrical/Weldon back end and 90° front
		
	Design 3, Cylindrical/Weldon back end tapered front 87°/89°	Design 4, Cylindrical/Weldon back end tapered front 80°/85°/87°
		
	Design 5, Cylindrical back end double tapered front end 89°/85°	
		

MM16 Shank – Metric



Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		mm	mm	mm	mm	mm					kg	
MM16-16070.0-0011M	00023547	15,2	16,0	11,3	22,0	70,0	0,0	2	■	63600	0,1	1
MM16-16150.0-0080DS	02580692	15,2	16,0	80,0	102,0	150,0	0,0	2	■	47600	0,4	2
MM16-20115.3-3045	75014109	15,2	20,0	45,8	65,0	115,0	3,0	4	■	63600	0,2	3
MM16-20070.0-0000	00023548	15,2	20,0	0,0	20,0	70,0	60,0	1	■	63600	0,2	1
MM16-20190.0-1055M	00094766	15,2	20,0	55,0	140,0	190,0	1,0	3	■	63600	0,4	5
MM16-20190.0-1075M	00094768	15,2	20,0	75,0	140,0	190,0	1,0	3	■	63600	0,4	5
MM16-20190.0-1095M	00094770	15,2	20,0	95,0	140,0	190,0	1,0	3	■	63600	0,4	6
MM16-20080.0-0011DS	02580669	15,2	20,0	11,3	30,0	80,0	0,0	2	■	47600	0,3	2
MM16-20150.0-0038DS	02580695	15,2	20,0	38,0	100,0	150,0	0,0	2	■	47600	0,6	2
MM16-20160.0-0076DS	02580699	15,2	20,0	76,0	110,0	160,0	0,0	2	■	47600	0,6	2
MM16-20130.0-1045DS	02580757	15,2	20,0	45,0	80,0	130,0	1,0	3	■	47600	0,5	2
MM16-20190.0-1075DS	02580758	15,2	20,0	75,0	140,0	190,0	1,0	3	■	47600	0,8	2
MM16-20190.0-1095DS	02580760	15,2	20,0	95,0	140,0	190,0	1,0	3	■	47600	0,8	2
MM16-25100.3-0019	75012790	15,2	25,0	19,0	40,0	100,0	0,0	2	■	63600	0,3	3
MM16-25115.3-3035	75012791	15,2	25,0	35,0	59,0	115,0	3,0	3	■	63600	0,3	3
MM16-25170.3-5056	75012792	15,2	25,0	56,0	114,0	170,0	5,0	4	■	63600	0,6	4
MM16-25170.0-1060	00094767	19,0	25,0	60,0	114,0	170,0	1,0	3	■	63600	0,5	5
MM16-25250.0-1075DS	02580761	15,2	25,0	75,0	194,0	250,0	1,0	5	■	47600	1,5	2
MM16-32250.0-10047	75069368	15,2	32,0	47,6	190,0	250,0	10,0	4	■	63600	1,3	4

Spare Parts, included in delivery

For cutter	Sleeve	Tension screw
		
1	MM-10030	MM16-1045
2	–	MM16-1045
3	MM-10062	MM16-1045
4	MM-10132	MM16-1045
5	MM-10062	MM16-1093
6	MM-10062	MM16-10113

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

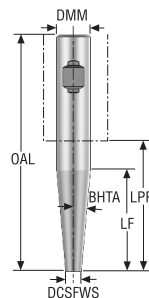
Hard

Graphite

X-Heads

Minimaster

MM16 Shank – Inch



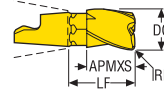
Designation	Item number	DCSFWS	DMM	LF	LPR	OAL	BHTA°	Design	CSP	RPMX	Weight	Spare part no.
		inch	inch	inch	inch	inch					lbs	
MM16-0.62-2.8-0M-0004	00037209	0.598	0.625	0.445	0.866	2.756	0,0	2	■	63600	0.220	1
MM16-0.75-4.5-3-3018	75054603	0.598	0.750	1.445	2.559	4.528	3,0	3	■	63600	0.440	4
MM16-0.75-2.8-0-0000	00037175	0.598	0.750	0	0.787	2.756	60,0	1	■	63600	0.440	1
MM16-0.75-7.5-0-1021	75054731	0.598	0.750	2.165	5.512	7.480	1,0	3	■	63600	0.660	6
MM16-0.75-7.5-0-1037	75054733	0.598	0.750	3.740	5.512	7.480	1,0	3	■	63600	0.880	7
MM16-0.75-7.5-0-1029DS	02567719	0.598	0.750	2.953	5.512	7.480	1,0	3	■	47600	1.760	3
MM16-0.75-7.5-0-1037DS	02593431	0.598	0.750	3.740	5.512	7.480	1,0	3	■	47600	1.540	3
MM16-1.00-3.9-3-0007	75015058	0.598	1.000	0.748	1.732	3.937	0,0	2	■	63600	0.660	4
MM16-1.00-4.5-3-3013	75015059	0.598	1.000	1.378	2.323	4.528	3,0	3	■	63600	0.660	4
MM16-1.00-6.7-3-5022	75015060	0.598	1.000	2.295	4.488	6.693	5,0	4	■	63600	1.320	5
MM16-1.00-5.9-0-0015DS	02593433	0.598	1.000	1.496	3.701	5.906	0,0	2	■	47600	2.200	3
MM16-1.00-6.3-0-0030DS	02593434	0.598	1.000	2.992	4.094	6.299	0,0	2	■	47600	1.980	3

Spare Parts, included in delivery

For cutter	Sleeve	Tension screw
		
1	MM-10030	MM16-1045
3	-	MM16-1045
4	MM-10062	MM16-1045
5	MM-10132	MM16-1045
6	MM-10062	MM16-1093
7	MM-10062	MM16-10113

Allen key H05-4 for sleeve to be ordered separately.
For wrench types, see insert pages

Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

												Grades			
Designation	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench		Coated			
												T60M	F15M	F30M	F40M
	mm Inch	mm Inch	mm Inch	mm Inch											
MM16-15719-R03A30-M06	15,7 0.618	19,05 0.750	0,3 0.012	24,5 0.965	15,0	19,0	30,6	30	3	MM0416	✓				■
MM16-15919-R08A30-M06	15,875 0.625	19,05 0.750	0,8 0.031	24,5 0.965	15,0	19,2	29,9	30	3	MM0416	✓				■
MM16-16019-A30-E06	16,0 0.630	19,05 0.750	–	24,5 0.965	15,0	19,4	31,8	30	3	MM0416	✓			■	
MM16-16019-R05A30-M06	16,0 0.630	19,05 0.750	0,5 0.020	24,5 0.965	15,0	19,4	30,8	30	3	MM0416	✓				■
MM16-16019-R10A30-E06	16,0 0.630	19,05 0.750	1,0 0.039	24,5 0.965	15,0	19,4	29,8	30	3	MM0416	✓			■	
MM16-16019-R10A30-M06	16,0 0.630	19,05 0.750	1,0 0.039	24,5 0.965	15,0	19,4	29,8	30	3	MM0416	✓				■
MM16-16019-R20A30-M06	16,0 0.630	19,05 0.750	2,0 0.079	24,5 0.965	15,0	19,4	27,8	30	3	MM0416	✓				■
MM16-16019-R30A30-E06	16,0 0.630	19,05 0.750	3,0 0.118	24,5 0.965	15,0	19,4	25,8	30	3	MM0416	✓			■	
MM16-16019-R30A30-M06	16,0 0.630	19,05 0.750	3,0 0.118	24,5 0.965	15,0	19,4	25,8	30	3	MM0416	✓				■
MM16-16019-R40A30-M06	16,0 0.630	19,05 0.750	4,0 0.157	24,5 0.965	15,0	19,4	23,8	30	3	MM0416	✓				■
MM16-16019-R50A30-M06	16,0 0.630	19,05 0.750	5,0 0.197	24,5 0.965	15,0	19,4	21,8	30	3	MM0416	✓				■
MM16-16019-R60A30-M06	16,0 0.630	19,05 0.750	6,0 0.236	24,5 0.965	15,0	19,4	19,8	30	3	MM0416	✓				■
MM16-20015-A30-E06	20,0 0.787	15,0 0.591	–	20,15 0.793	15,0	24,2	39,8	30	3	MM0416	✓			■	
MM16-20015-R05A30-M06	20,0 0.787	15,0 0.591	0,5 0.020	20,15 0.793	15,0	24,2	38,8	30	3	MM0416	✓				■
MM16-20015-R10A30-M06	20,0 0.787	15,0 0.591	1,0 0.039	20,15 0.793	15,0	24,2	37,8	30	3	MM0416	✓				■
MM16-20015-R20A30-D06	20,0 0.787	15,0 0.591	2,0 0.079	20,15 0.793	15,0	24,2	35,8	30	3	MM0416	✓			■	
MM16-20015-R30A30-M06	20,0 0.787	15,0 0.591	3,0 0.118	20,15 0.793	15,0	24,2	33,8	30	3	MM0416	✓				■
MM16-20015-R50A30-M06	20,0 0.787	15,0 0.591	5,0 0.197	20,15 0.793	15,0	24,2	29,8	30	3	MM0416	✓				■

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

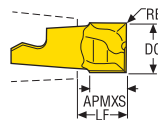
Hard

Graphite

X-Heads

Minimaster

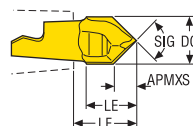
Slot milling/square shoulder milling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	RMPX°	C min	C max	FHA°	ZEFP	Wrench	Grades			
											Coated			
											T60M	F15M	F30M	F40M
	mm Inch	mm Inch	mm Inch	mm Inch										
MM16-15711T-R03-D07	15,7 0.618	11,0 0.433	0,3 0.012	13,6 0.535	15,0	19,0	30,6	0	2	MM1420	■			
MM16-16011-M06	16,0 0.630	11,0 0.433	—	13,6 0.535	15,0	19,4	31,8	0	2	MM1420	■			
MM16-16011-R08A8-E06	16,0 0.630	10,5 0.413	0,8 0.031	13,62 0.536	15,0	19,4	30,2	8	2	MM1420	■		■	
MM16-16011-R08-MD07	16,0 0.630	11,0 0.433	0,8 0.031	13,58 0.535	15,0	19,4	30,2	0	2	MM1420	■		■	
MM16-16011-R08P-M05	16,0 0.630	10,8 0.425	0,8 0.031	13,41 0.528	15,0	19,4	30,2	0	2	MM1420			■	
MM16-16011-R20-MD07	16,0 0.630	10,9 0.429	2,0 0.079	13,55 0.533	15,0	19,4	27,8	0	2	MM1420			■	
MM16-16011-R30-MD07	16,0 0.630	10,9 0.429	3,0 0.118	13,54 0.533	15,0	19,4	25,8	0	2	MM1420			■	
MM16-16011-R40-MD07	16,0 0.630	10,9 0.429	4,0 0.157	13,52 0.532	15,0	19,4	23,8	0	2	MM1420	■			
MM16-16011-R50-MD07	16,0 0.630	10,9 0.429	5,0 0.197	13,5 0.531	15,0	19,4	21,8	0	2	MM1420	■			
MM16-19013-R08A8-E06	19,05 0.750	12,7 0.500	0,8 0.031	15,39 0.606	15,0	23,1	36,3	8	2	MM1420			■	
MM16-20013-R08A8-E06	20,0 0.787	12,7 0.500	0,8 0.031	15,42 0.607	15,0	24,2	38,2	8	2	MM1420	■		■	

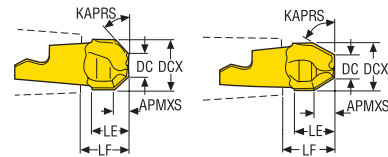
Centre drilling



—For Torque keys and torque values, see page 787

Designation	DC	APMXS	RE	LF	SIG°	ZEFP	Wrench	Grades			
								Coated			
	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM16-16008-C90-M06	16,0 0.630	7,53 0.296	—	19,2 0.756	90,0	2	MM1420	■			
MM16-16011-C120-M06	16,0 0.630	4,3 0.169	—	18,9 0.744	120,0	2	MM1420	■			
MM16-19019-C90	19,05 0.750	9,6 0.378	—	22,15 0.872	90,0	2	MM1420	■			

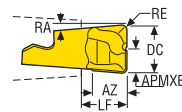
Chamfering



—For Torque keys and torque values, see page 787

Designation										Grades			
	DCX	DC	APMXS	RE	LE	LF	KAPRS°	ZEFP	Wrench	Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch				T60M	F15M	F30M	F40M
MM16-16011-4540-E06	16,0 0.630	7,69 0.303	3,9 0.154	0,4 0.016	10,9 0.429	13,25 0.522	45,0	2	MM1420	■			
MM16-16012-6060-E06	16,0 0.630	8,38 0.330	6,7 0.264	0,5 0.020	12,9 0.508	15,3 0.602	60,0	2	MM1420	■			

Plunge milling



—For Torque keys and torque values, see page 787

Designation										Grades			
	DC	APMXE	RE	AZ	LF	RA°	ZEFP	Wrench		Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch					T60M	F15M	F30M	F40M
MM16-16011-R10-PL-MD07	16,0 0.630	8,0 0.315	1,0 0.039	11,3 0.445	11,3 0.445	5,0	2	MM1420				■	
MM16-16011-R20-PL-MD07	16,0 0.630	8,0 0.315	2,0 0.079	11,3 0.445	11,3 0.445	5,0	2	MM1420				■	

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

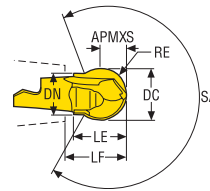
Hard

Graphite

X-Heads

Minimaster

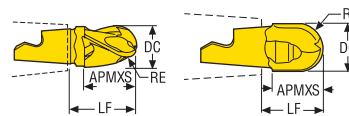
Precision inserts for semi-finishing in all materials



—For Torque keys and torque values, see page 787

Designation											Grades			
	DC	APMXS	RE	LE	DN	LF	SA°	ZEFP	Wrench		Coated			
	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch	mm Inch					T60M	F15M	F30M	F40M
MM16-20020-B120PF-M04	20,0 0.787	10,0 0.394	10,0 0.394	20,0 0.787	15,9 0.626	21,94 0.864	254,0	2	MM1420			■		
MM16-20020-B120P-M07	20,0 0.787	10,0 0.394	10,0 0.394	20,0 0.787	15,9 0.626	21,94 0.864	254,0	2	MM1420				■	

Copy milling



—For Torque keys and torque values, see page 787

Designation											Grades			
	DC	APMXS	RE	LF	FHA°	ZEFP	Wrench				Coated			
	mm Inch	mm Inch	mm Inch	mm Inch							T60M	F15M	F30M	F40M
MM16-15916-B90P-M07	15,875 0.625	13,8 0.543	7,938 0.313	18,4 0.724		2	MM1420						■	
MM16-16016-B90-MD07	16,0 0.630	16,2 0.638	8,0 0.315	18,4 0.724		2	MM1420				■		■	
MM16-16016-B90PF-M03	16,0 0.630	13,8 0.543	8,0 0.315	18,4 0.724		2	MM1420					■		
MM16-16016-B90P-M07	16,0 0.630	13,8 0.543	8,0 0.315	18,4 0.724		2	MM1420						■	
MM16-16019-B90A30-E06	16,0 0.630	19,0 0.748	8,0 0.315	24,5 0.965	30,0	3	MM0416	✓					■	
MM16-16019-B90A30-M06	16,0 0.630	19,0 0.748	8,0 0.315	24,5 0.965	30,0	3	MM0416	✓						■
MM16-19020-B90P-M07	19,05 0.750	17,4 0.685	9,525 0.375	22,12 0.871		2	MM1420				■			
MM16-20015-B90A30-E06	20,0 0.787	15,0 0.591	10,0 0.394	20,15 0.793	30,0	3	MM0416	✓					■	
MM16-20015-B90A30-M06	20,0 0.787	15,0 0.591	10,0 0.394	20,15 0.793	30,0	3	MM0416	✓						■
MM16-20020-B90-MD07	20,0 0.787	20,3 0.799	10,0 0.394	22,15 0.872		2	MM1420				■		■	
MM16-20020-B90P-M07	20,0 0.787	17,4 0.685	10,0 0.394	22,12 0.871		2	MM1420						■	

MM16 – Slot and Side milling – Insert selection – mm/Inch

SMG		a_p	f_z				
			100%	40%	20%	10%	
P1	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,085 0.0034	0,085 0.0034	0,11 0.0044	0,14 0.0055	Universal
P2	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,085 0.0034	0,090 0.0036	0,11 0.0044	0,14 0.0055	
P3	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,085 0.0034	0,10 0.0040	0,14 0.0055	Steel and cast iron
P4	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	
P5	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	Steel and cast iron
P6	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,13 0.0050	
P7	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,13 0.0050	Stainless steel and S-materials
P8	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,085 0.0034	0,10 0.0040	0,14 0.0055	
P11	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,095 0.0038	0,13 0.0050	Stainless steel and S-materials
P12	MM16-16019-R05A30-M06 F40M	2,5 0.10	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,090 0.0036	
M1	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,085 0.0034	0,090 0.0036	0,11 0.0044	0,14 0.0055	Stainless steel and S-materials
M2	MM16-16019-R05A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	
M3	MM16-16019-R05A30-M06 F40M	2,5 0.10	0,065 0.0026	0,065 0.0026	0,080 0.0032	0,10 0.0040	Stainless steel and S-materials
M4	MM16-16019-R05A30-M06 F40M	2,0 0.080	0,055 0.0022	0,055 0.0022	0,070 0.0028	0,090 0.0036	
M5	MM16-16019-R05A30-M06 F40M	2,0 0.080	0,055 0.0022	0,055 0.0022	0,070 0.0028	0,090 0.0036	Non ferrous
K1	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,14 0.0055	
K2	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	Non ferrous
K3	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	
K4	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	Hard
K5	MM16-16019-R10A30-M06 F40M	3,5 0.14	0,075 0.0030	0,075 0.0030	0,090 0.0036	0,12 0.0048	
K6	MM16-16019-R10A30-M06 F40M	3,5 0.14	0,080 0.0032	0,080 0.0032	0,10 0.0040	0,13 0.0050	Hard
K7	MM16-16019-R10A30-M06 F40M	3,5 0.14	0,075 0.0030	0,075 0.0030	0,090 0.0036	0,12 0.0048	
N1	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,11 0.0044	0,11 0.0044	0,14 0.0055	0,18 0.0070	Hard
N2	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,11 0.0044	0,11 0.0044	0,14 0.0055	0,18 0.0070	
N3	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,11 0.0044	0,11 0.0044	0,14 0.0055	0,18 0.0070	Graphite
N11	MM16-16019-R10A30-E06 F30M	3,5 0.14	0,11 0.0044	0,11 0.0044	0,14 0.0055	0,18 0.0070	
S1	MM16-16019-R05A30-M06 F40M	2,0 0.080	0,055 0.0022	0,055 0.0022	0,070 0.0028	0,090 0.0036	Graphite
S2	MM16-16019-R05A30-M06 F40M	2,0 0.080	0,055 0.0022	0,055 0.0022	0,070 0.0028	0,090 0.0036	
S3	MM16-16019-R05A30-M06 F40M	2,0 0.080	0,050 0.0020	0,055 0.0022	0,065 0.0026	0,085 0.0034	X-Heads
S11	MM16-16019-R05A30-M06 F40M	2,5 0.10	0,065 0.0026	0,065 0.0026	0,080 0.0032	0,10 0.0040	
S12	MM16-16019-R05A30-M06 F40M	2,5 0.10	0,065 0.0026	0,065 0.0026	0,080 0.0032	0,10 0.0040	X-Heads
S13	MM16-16019-R05A30-M06 F40M	2,0 0.080	0,055 0.0022	0,055 0.0022	0,070 0.0028	0,090 0.0036	
H5	MM16-16019-R10A30-E06 F30M	2,5 0.10	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,090 0.0036	X-Heads
H8	MM16-16019-R10A30-E06 F30M	2,5 0.10	0,044 0.0017	0,044 0.0017	0,050 0.0020	0,070 0.0028	
H11	MM16-16019-R10A30-E06 F30M	2,5 0.10	0,055 0.0022	0,055 0.0022	0,065 0.0026	0,090 0.0036	Minimaster
H12	MM16-16019-R10A30-E06 F30M	2,5 0.10	0,044 0.0017	0,044 0.0017	0,050 0.0020	0,070 0.0028	
H21	MM16-16019-R10A30-E06 F30M	2,5 0.10	0,044 0.0017	0,044 0.0017	0,050 0.0020	0,070 0.0028	Minimaster

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %

All cutting data are start values

MM16 – Slot and Side milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F30M				F40M				T60M			
		100%	40%	20%	10%	100%	40%	20%	10%	100%	40%	20%	10%
Universal	P1	230	285	315	350	215	270	300	335	200	250	275	310
		750	940	1025	1150	710	890	980	1100	660	820	900	1025
Steel and cast iron	P2	220	275	310	345	210	260	290	325	195	240	270	295
		720	900	1025	1125	690	850	950	1075	640	790	890	970
	P3	195	240	270	295	185	225	255	280	170	210	235	260
		640	790	890	970	610	740	840	920	560	690	770	850
	P4	170	215	240	265	160	205	225	250	150	185	205	225
		560	710	790	870	520	670	740	820	490	610	670	740
	P5	165	205	230	250	155	195	215	240	140	175	200	220
		540	670	750	820	510	640	710	790	460	570	660	720
	P6	185	230	260	285	175	215	245	270	160	200	220	245
		610	750	850	940	570	710	800	890	520	660	720	800
Stainless steel and S-materials	P7	175	220	245	265	165	205	230	255	150	190	210	235
		570	720	800	870	540	670	750	840	490	620	690	770
	P8	160	205	230	250	155	190	215	235	140	175	200	215
		520	670	750	820	510	620	710	770	460	570	660	710
	P11	170	210	235	260	160	200	225	245	145	185	205	225
		560	690	770	850	520	660	740	800	475	610	670	740
	P12	110	135	150	165	105	130	145	155	95	120	130	145
		360	445	490	540	345	425	475	510	310	395	425	475
Non ferrous	M1	180	225	250	275	170	210	235	260	155	190	215	240
		590	740	820	900	560	690	770	850	510	620	710	790
	M2	150	185	205	225	140	175	195	215	125	160	180	200
		490	610	670	740	460	570	640	710	410	520	590	660
	M3	120	150	165	180	110	140	155	175	105	130	145	155
		395	490	540	590	360	460	510	570	345	425	475	510
	M4	90	115	130	140	85	110	120	135	80	100	110	120
		295	375	425	460	280	360	395	445	260	330	360	395
	M5	75	95	105	115	75	90	100	110	65	85	95	100
		245	310	345	375	245	295	330	360	215	280	310	330
Hard	K1	175	220	245	270	165	205	230	260	150	190	210	235
		570	720	800	890	540	670	750	850	490	620	690	770
	K2	155	195	215	240	145	185	205	225	135	170	190	210
		510	640	710	790	475	610	670	740	445	560	620	690
	K3	130	165	185	205	125	155	175	190	115	145	160	175
		425	540	610	670	410	510	570	620	375	475	520	570
	K4	125	160	175	195	120	150	165	185	110	135	150	170
		410	520	570	640	395	490	540	610	360	445	490	560
	K5	75	95	105	115	75	90	100	110	65	80	95	100
		245	310	345	375	245	295	330	360	215	260	310	330
	K6	110	140	155	170	105	130	145	160	95	120	135	150
		360	460	510	560	345	425	475	520	310	395	445	490
	K7	100	120	135	150	95	115	130	140	85	105	120	130
		330	395	445	490	310	375	425	460	280	345	395	425
	N1	1325	1650	1825	2025	1225	1550	1725	1925	1125	1425	1575	1750
		4350	5425	6000	6650	4025	5075	5650	6325	3700	4675	5175	5750
Graphite	N2	530	670	730	820	500	630	690	770	455	570	640	700
		1750	2200	2400	2700	1650	2075	2275	2525	1500	1875	2100	2300
	N3	355	445	490	540	335	420	465	520	305	385	425	470
		1175	1450	1600	1775	1100	1375	1525	1700	1000	1275	1400	1550
	N11	405	510	560	620	380	475	530	590	345	435	485	540
		1325	1675	1825	2025	1250	1550	1750	1925	1125	1425	1600	1775
	S1	43	55	60	65	41	50	55	60	38	46	50	55
		140	180	195	215	135	165	180	195	125	150	165	180
X-Heads	S2	35	43	48	55	33	41	45	50	30	37	42	46
		115	140	155	180	110	135	150	165	100	120	140	150
	S3	30	38	42	46	29	35	40	44	27	33	37	40
		100	125	140	150	95	115	130	145	90	110	120	130
	S11	60	75	85	90	55	70	80	90	50	65	75	80
		195	245	280	295	180	230	260	295	165	215	245	260
	S12	42	50	60	65	39	49	55	60	36	45	50	55
		140	165	195	215	130	160	180	195	120	150	165	180
Minimaster	S13	24	30	34	37	23	29	32	35	21	26	29	32
		80	100	110	120	75	95	105	115	70	85	95	105
	H5	36	45	50	55	34	43	48	50	31	39	44	48
		120	150	165	180	110	140	155	165	100	130	145	155
	H8	38	47	55	60	36	45	50	55	33	41	46	50
		125	155	180	195	120	150	165	180	110	135	150	165
	H11	46	60	65	70	43	55	60	65	40	50	55	60
		150	195	215	230	140	180	195	215	130	165	180	195
	H12	70	85	95	105	65	80	90	100	60	75	85	90
		230	280	310	345	215	260	295	330	195	245	280	295
	H21	38	47	55	60	36	45	50	55	33	41	46	50
		125	155	180	195	120	150	165	180	110	135	150	165

MM16 Z3 – Copy milling – Insert selection – Roughing – mm/Inch

SMG		a_p	f_z				
			100%	40%	20%	10%	
P1	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,11 0.0044	0,10 0.0040	0,11 0.0044	0,14 0.0055	Universal
P2	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,11 0.0044	0,10 0.0040	0,11 0.0044	0,15 0.0060	
P3	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,14 0.0055	Steel and cast iron
P4	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	
P5	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	
P6	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,13 0.0050	
P7	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,13 0.0050	Stainless steel and S-materials
P8	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,10 0.0040	0,10 0.0040	0,10 0.0040	0,14 0.0055	
P11	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,095 0.0038	0,095 0.0038	0,10 0.0040	0,13 0.0050	Stainless steel and S-materials
P12	MM16-16019-B90A30-M06 F40M	2,5 0.10	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,090 0.0036	
M1	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,11 0.0044	0,10 0.0040	0,11 0.0044	0,15 0.0060	Stainless steel and S-materials
M2	MM16-16019-B90A30-M06 F40M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	
M3	MM16-16019-B90A30-M06 F40M	2,5 0.10	0,085 0.0034	0,080 0.0032	0,080 0.0032	0,11 0.0044	Stainless steel and S-materials
M4	MM16-16019-B90A30-M06 F40M	2,0 0.080	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,090 0.0038	
M5	MM16-16019-B90A30-M06 F40M	2,0 0.080	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,090 0.0038	Non ferrous
K1	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,11 0.0044	0,10 0.0040	0,11 0.0044	0,15 0.0060	
K2	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	Non ferrous
K3	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	
K4	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	
K5	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,090 0.0036	0,085 0.0034	0,090 0.0036	0,12 0.0048	
K6	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,10 0.0040	0,095 0.0038	0,10 0.0040	0,13 0.0050	Hard
K7	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,090 0.0036	0,085 0.0034	0,090 0.0036	0,12 0.0048	
N1	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,14 0.0055	0,13 0.0050	0,14 0.0055	0,19 0.0075	Hard
N2	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,14 0.0055	0,13 0.0050	0,14 0.0055	0,19 0.0075	
N3	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,14 0.0055	0,13 0.0050	0,14 0.0055	0,19 0.0075	Graphite
N11	MM16-16019-B90A30-E06 F30M	3,5 0.14	0,14 0.0055	0,13 0.0050	0,14 0.0055	0,19 0.0075	
S1	MM16-16019-B90A30-M06 F40M	2,0 0.080	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,090 0.0038	Graphite
S2	MM16-16019-B90A30-M06 F40M	2,0 0.080	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,090 0.0038	
S3	MM16-16019-B90A30-M06 F40M	2,0 0.080	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,085 0.0036	X-Heads
S11	MM16-16019-B90A30-M06 F40M	2,5 0.10	0,085 0.0034	0,080 0.0032	0,085 0.0034	0,11 0.0044	
S12	MM16-16019-B90A30-M06 F40M	2,5 0.10	0,085 0.0034	0,080 0.0032	0,085 0.0034	0,11 0.0044	Minimaster
S13	MM16-16019-B90A30-M06 F40M	2,0 0.080	0,075 0.0030	0,075 0.0030	0,075 0.0030	0,090 0.0038	
H5	MM16-16019-B90A30-E06 F30M	2,5 0.10	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,090 0.0036	Minimaster
H8	MM16-16019-B90A30-E06 F30M	2,5 0.10	0,055 0.0022	0,050 0.0020	0,055 0.0022	0,070 0.0028	
H11	MM16-16019-B90A30-E06 F30M	2,5 0.10	0,070 0.0028	0,070 0.0028	0,070 0.0028	0,090 0.0036	Minimaster
H12	MM16-16019-B90A30-E06 F30M	2,5 0.10	0,055 0.0022	0,050 0.0020	0,055 0.0022	0,070 0.0028	
H21	MM16-16019-B90A30-E06 F30M	2,5 0.10	0,055 0.0022	0,050 0.0020	0,055 0.0022	0,070 0.0028	Minimaster

SMG = Seco material group
 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %
 All cutting data are start values

MM16 Z3 – Copy milling – Insert selection – Finishing – mm/Inch

	SMG		a _p	f _z			
				15%	10%	5%	2%
Universal	P1	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,12 0,0048	0,14 0,0055	0,20 0,0080	0,32 0,013
	P2	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,12 0,0048	0,15 0,0060	0,20 0,0080	0,34 0,013
Steel and cast iron	P3	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,12 0,0048	0,14 0,0055	0,19 0,0075	0,32 0,013
	P4	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,19 0,0075	0,30 0,012
	P5	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	P6	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	P7	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	P8	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,12 0,0048	0,14 0,0055	0,19 0,0075	0,32 0,013
Stainless steel and S-materials	P11	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	P12	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,075 0,0030	0,090 0,0036	0,12 0,0048	0,20 0,0080
	M1	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,12 0,0048	0,15 0,0060	0,20 0,0080	0,34 0,013
	M2	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
Non ferrous	M3	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,090 0,0036	0,11 0,0044	0,15 0,0060	0,24 0,0095
	M4	MM16-16019-B90A30-E06 F30M	2,0 0,080	0,080 0,0032	0,090 0,0038	0,13 0,0050	0,20 0,0080
	M5	MM16-16019-B90A30-E06 F30M	2,0 0,080	0,080 0,0032	0,090 0,0038	0,13 0,0050	0,20 0,0080
	K1	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,12 0,0048	0,15 0,0060	0,20 0,0080	0,34 0,013
	K2	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
Hard	K3	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	K4	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	K5	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,10 0,0040	0,12 0,0048	0,17 0,0065	0,26 0,010
Plastic and cfrp	K6	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,11 0,0044	0,13 0,0050	0,18 0,0070	0,30 0,012
	K7	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,10 0,0040	0,12 0,0048	0,17 0,0065	0,26 0,010
	N1	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,16 0,0065	0,19 0,0075	0,26 0,010	0,44 0,017
	N2	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,16 0,0065	0,19 0,0075	0,26 0,010	0,44 0,017
Graphite	N3	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,16 0,0065	0,19 0,0075	0,26 0,010	0,44 0,017
	N11	MM16-16019-B90A30-E06 F30M	3,5 0,14	0,16 0,0065	0,19 0,0075	0,26 0,010	0,44 0,017
	S1	MM16-16019-B90A30-E06 F30M	2,0 0,080	0,080 0,0032	0,090 0,0038	0,13 0,0050	0,20 0,0080
X-Heads	S2	MM16-16019-B90A30-E06 F30M	2,0 0,080	0,080 0,0032	0,090 0,0038	0,13 0,0050	0,20 0,0080
	S3	MM16-16019-B90A30-E06 F30M	2,0 0,080	0,075 0,0030	0,085 0,0036	0,12 0,0048	0,19 0,0075
	S11	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,090 0,0036	0,11 0,0044	0,15 0,0060	0,24 0,0095
	S12	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,090 0,0036	0,11 0,0044	0,15 0,0060	0,24 0,0095
	S13	MM16-16019-B90A30-E06 F30M	2,0 0,080	0,080 0,0032	0,090 0,0038	0,13 0,0050	0,20 0,0080
	H5	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,075 0,0030	0,090 0,0036	0,12 0,0048	0,20 0,0080
	H8	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,15 0,0060
Minimaster	H11	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,075 0,0030	0,090 0,0036	0,12 0,0048	0,20 0,0080
	H12	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,15 0,0060
	H21	MM16-16019-B90A30-E06 F30M	2,5 0,10	0,060 0,0024	0,070 0,0028	0,095 0,0038	0,15 0,0060

SMG = Seco material group
f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %
All cutting data are start values

MM16 Z3 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

SMG	F30M					F40M					
	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	
P1	245	295	310	335	335	235	280	295	320	320	Universal
	800	970	1025	1100	1100	770	920	970	1050	1050	
P2	240	285	300	325	320	230	270	285	310	305	Steel and cast iron
	790	940	980	1075	1050	750	890	940	1025	1000	
P3	210	250	260	285	280	200	240	250	270	265	Steel and cast iron
	690	820	850	940	920	660	790	820	890	870	
P4	185	220	235	250	250	175	210	225	240	240	Steel and cast iron
	610	720	770	820	820	570	690	740	790	790	
P5	175	210	225	240	240	170	200	215	230	230	Steel and cast iron
	570	690	740	790	790	560	660	710	750	750	
P6	200	235	250	270	270	190	225	240	260	255	Stainless steel and S-materials
	660	770	820	890	890	620	740	790	850	840	
P7	190	225	235	255	255	180	210	225	245	240	Stainless steel and S-materials
	620	740	770	840	840	590	690	740	800	790	
P8	175	210	220	240	235	170	200	210	230	225	Stainless steel and S-materials
	570	690	720	790	770	560	660	690	750	740	
P11	185	215	230	250	245	175	205	220	235	235	Stainless steel and S-materials
	610	710	750	820	800	570	670	720	770	770	
P12	115	145	145	160	155	110	140	140	150	150	Stainless steel and S-materials
	375	475	475	520	510	360	460	460	490	490	
M1	195	230	240	265	260	185	220	230	250	245	Stainless steel and S-materials
	640	750	790	870	850	610	720	750	820	800	
M2	160	190	200	220	215	150	180	190	205	205	Stainless steel and S-materials
	520	620	660	720	710	490	590	620	670	670	
M3	130	160	160	170	170	120	150	150	165	165	Stainless steel and S-materials
	425	520	520	560	560	395	490	490	540	540	
M4	90	125	125	130	135	85	120	115	125	125	Non ferrous
	295	410	425	425	445	280	395	410	410	410	
M5	75	105	100	110	110	70	100	100	105	105	Non ferrous
	245	345	360	360	360	230	330	345	345	345	
K1	190	225	235	260	255	180	215	225	245	245	Non ferrous
	620	740	770	850	840	590	710	740	800	800	
K2	170	200	210	230	225	160	190	200	220	215	Non ferrous
	560	660	690	750	740	520	620	660	720	710	
K3	140	170	180	195	190	135	160	170	185	185	Hard
	460	560	590	640	620	445	520	560	610	610	
K4	135	160	170	185	185	130	155	165	175	175	Hard
	445	520	560	610	610	425	510	540	570	570	
K5	85	100	105	110	110	80	95	100	105	105	Hard
	280	330	345	360	360	260	310	330	345	345	
K6	120	140	150	165	160	115	135	145	155	155	Hard
	395	460	490	540	520	375	445	475	510	510	
K7	105	125	130	145	145	100	120	125	135	135	Hard
	345	410	425	475	475	330	395	410	445	445	
N1	1425	1700	1775	1925	1900	1350	1625	1700	1850	1800	Graphite
	4675	5575	5825	6325	6225	4425	5325	5575	6075	5900	
N2	580	690	720	780	770	550	650	680	740	730	Graphite
	1900	2275	2350	2550	2525	1800	2125	2225	2425	2400	
N3	385	455	480	520	510	365	435	455	495	485	Graphite
	1275	1500	1575	1700	1675	1200	1425	1500	1625	1600	
N11	440	520	550	600	580	420	495	520	570	560	Graphite
	1450	1700	1800	1975	1900	1375	1625	1700	1875	1825	
S1	42	60	55	60	60	40	55	55	60	60	X-Heads
	140	195	195	195	195	130	180	195	195	195	
S2	34	48	46	50	50	33	45	44	47	48	X-Heads
	110	155	160	165	165	110	150	155	155	155	
S3	30	41	40	43	43	28	39	38	41	41	X-Heads
	100	135	140	140	140	90	130	135	135	135	
S11	65	80	80	85	85	60	80	75	85	80	X-Heads
	215	260	280	280	280	195	260	260	280	260	
S12	45	55	55	60	60	43	55	55	55	55	Minimaster
	150	180	195	195	195	140	180	180	180	180	
S13	24	33	32	35	35	23	32	31	33	33	Minimaster
	80	110	110	115	115	75	105	110	110	110	
H5	39	48	48	55	50	37	46	46	50	50	Minimaster
	130	155	160	180	165	120	150	150	165	165	
H8	40	50	50	55	55	38	49	48	50	50	Minimaster
	130	165	165	180	180	125	160	165	165	165	
H11	50	60	60	65	65	47	60	60	65	65	Minimaster
	165	195	195	215	215	155	195	195	215	215	
H12	70	90	90	100	100	70	85	85	95	95	Minimaster
	230	295	310	330	330	230	280	295	310	310	
H21	40	50	50	55	55	38	49	48	50	50	Minimaster
	130	165	165	180	180	125	160	165	165	165	

MM16 Z2 – Copy milling – Insert selection – Roughing – mm/Inch

	SMG		a_p	f_z			
				100%	40%	20%	10%
Universal	P1	MM16-16016-B90-MD07 F30M	6,0 0,24	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,17 0.0065
	P2	MM16-16016-B90-MD07 F30M	6,0 0,24	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,17 0.0065
Steel and cast iron	P3	MM16-16016-B90-MD07 F30M	6,0 0,24	0,11 0.0044	0,10 0.0040	0,12 0.0048	0,16 0.0065
	P4	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,16 0.0065
	P5	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	P6	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	P7	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	P8	MM16-16016-B90-MD07 F30M	6,0 0,24	0,11 0.0044	0,10 0.0040	0,12 0.0048	0,16 0.0065
Stainless steel and S-materials	P11	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	P12	MM16-16016-B90-MD07 F30M	5,0 0,20	0,070 0.0028	0,070 0.0028	0,080 0.0032	0,10 0.0044
	M1	MM16-16016-B90-MD07 F30M	6,0 0,24	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,17 0.0065
	M2	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
Non ferrous	M3	MM16-16016-B90-MD07 F30M	5,0 0,20	0,085 0.0034	0,080 0.0032	0,095 0.0038	0,12 0.0050
	M4	MM16-16016-B90-MD07 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,085 0.0034	0,11 0.0044
	M5	MM16-16016-B90-MD07 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,085 0.0034	0,11 0.0044
	K1	MM16-16016-B90-MD07 F30M	6,0 0,24	0,11 0.0044	0,11 0.0044	0,13 0.0050	0,17 0.0065
	K2	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
Hard	K3	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	K4	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	K5	MM16-16016-B90-MD07 F30M	6,0 0,24	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,14 0.0055
	K6	MM16-16016-B90-MD07 F30M	6,0 0,24	0,10 0.0040	0,10 0.0040	0,12 0.0048	0,15 0.0060
	K7	MM16-16016-B90-MD07 F30M	6,0 0,24	0,090 0.0036	0,090 0.0036	0,11 0.0044	0,14 0.0055
Plastic and cfrp	N1	MM16-16016-B90PF-M03 F15M	6,0 0,24	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
	N2	MM16-16016-B90PF-M03 F15M	6,0 0,24	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
	N3	MM16-16016-B90PF-M03 F15M	6,0 0,24	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
	N11	MM16-16016-B90PF-M03 F15M	6,0 0,24	0,060 0.0024	0,060 0.0024	0,070 0.0028	0,095 0.0038
Graphite	S1	MM16-16016-B90-MD07 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,085 0.0034	0,11 0.0044
	S2	MM16-16016-B90-MD07 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,085 0.0034	0,11 0.0044
	S3	MM16-16016-B90-MD07 F30M	4,0 0,16	0,070 0.0028	0,070 0.0028	0,080 0.0032	0,10 0.0040
	S11	MM16-16016-B90-MD07 F30M	4,5 0,18	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,12 0.0050
X-Heads	S12	MM16-16016-B90-MD07 F30M	4,5 0,18	0,085 0.0034	0,085 0.0034	0,095 0.0038	0,12 0.0050
	S13	MM16-16016-B90-MD07 F30M	4,0 0,16	0,080 0.0032	0,080 0.0032	0,085 0.0034	0,11 0.0044
	H5	MM16-16016-B90-MD07 F30M	5,0 0,20	0,070 0.0028	0,070 0.0028	0,080 0.0032	0,10 0.0044
	H8	MM16-16016-B90-MD07 F30M	4,5 0,18	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,080 0.0032
Minimaster	H11	MM16-16016-B90-MD07 F30M	5,0 0,20	0,070 0.0028	0,070 0.0028	0,080 0.0032	0,10 0.0044
	H12	MM16-16016-B90-MD07 F30M	4,5 0,18	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,080 0.0032
	H21	MM16-16016-B90-MD07 F30M	4,5 0,18	0,055 0.0022	0,055 0.0022	0,060 0.0024	0,080 0.0032

SMG = Seco material group

f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e /DC = %

All cutting data are start values

MM16 Z2 – Copy milling – Insert selection – Finishing – mm/Inch

SMG		a_p	f_z				
			15%	10%	5%	2%	
P1	MM16-16016-B90PF-M03 F15M	6,0	0,060	0,070	0,10	0,16	Universal
		0.24	0.0024	0.0028	0.0040	0.0065	
P2	MM16-16016-B90PF-M03 F15M	6,0	0,060	0,075	0,10	0,16	Steel and cast iron
		0.24	0.0024	0.0030	0.0040	0.0065	
P3	MM16-16016-B90PF-M03 F15M	6,0	0,060	0,070	0,095	0,15	Steel and cast iron
		0.24	0.0024	0.0028	0.0038	0.0060	
P4	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,070	0,095	0,15	Steel and cast iron
		0.24	0.0022	0.0028	0.0038	0.0060	
P5	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,15	Steel and cast iron
		0.24	0.0022	0.0026	0.0036	0.0060	
P6	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,14	Steel and cast iron
		0.24	0.0022	0.0026	0.0036	0.0055	
P7	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,14	Steel and cast iron
		0.24	0.0022	0.0026	0.0036	0.0055	
P8	MM16-16016-B90PF-M03 F15M	6,0	0,060	0,070	0,095	0,15	Stainless steel and S-materials
		0.24	0.0024	0.0028	0.0038	0.0060	
P11	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,14	Stainless steel and S-materials
		0.24	0.0022	0.0026	0.0036	0.0055	
P12	MM16-16016-B90PF-M03 F15M	4,5	0,038	0,046	0,060	0,10	Stainless steel and S-materials
		0.18	0.0015	0.0018	0.0024	0.0040	
M1	MM16-16016-B90PF-M03 F15M	6,0	0,060	0,075	0,10	0,16	Stainless steel and S-materials
		0.24	0.0024	0.0030	0.0040	0.0065	
M2	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,15	Stainless steel and S-materials
		0.24	0.0022	0.0026	0.0036	0.0060	
M3	MM16-16016-B90PF-M03 F15M	4,5	0,046	0,055	0,075	0,12	Stainless steel and S-materials
		0.18	0.0018	0.0022	0.0030	0.0048	
M4	MM16-16016-B90PF-M03 F15M	3,5	0,040	0,046	0,065	0,10	Stainless steel and S-materials
		0.14	0.0016	0.0019	0.0026	0.0040	
M5	MM16-16016-B90PF-M03 F15M	3,5	0,040	0,046	0,065	0,10	Stainless steel and S-materials
		0.14	0.0016	0.0019	0.0026	0.0040	
K1	MM16-16016-B90PF-M03 F15M	6,0	0,060	0,075	0,10	0,16	Non ferrous
		0.24	0.0024	0.0030	0.0040	0.0065	
K2	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,15	Non ferrous
		0.24	0.0022	0.0026	0.0036	0.0060	
K3	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,15	Non ferrous
		0.24	0.0022	0.0026	0.0036	0.0060	
K4	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,15	Non ferrous
		0.24	0.0022	0.0026	0.0036	0.0060	
K5	MM16-16016-B90PF-M03 F15M	6,0	0,050	0,060	0,085	0,13	Non ferrous
		0.24	0.0020	0.0024	0.0034	0.0050	
K6	MM16-16016-B90PF-M03 F15M	6,0	0,055	0,065	0,090	0,15	Non ferrous
		0.24	0.0022	0.0026	0.0036	0.0060	
K7	MM16-16016-B90PF-M03 F15M	6,0	0,050	0,060	0,085	0,13	Non ferrous
		0.24	0.0020	0.0024	0.0034	0.0050	
N1	MM16-16016-B90PF-M03 F15M	6,0	0,080	0,095	0,13	0,20	Hard
		0.24	0.0032	0.0038	0.0050	0.0080	
N2	MM16-16016-B90PF-M03 F15M	6,0	0,080	0,095	0,13	0,20	Hard
		0.24	0.0032	0.0038	0.0050	0.0080	
N3	MM16-16016-B90PF-M03 F15M	6,0	0,080	0,095	0,13	0,20	Hard
		0.24	0.0032	0.0038	0.0050	0.0080	
N11	MM16-16016-B90PF-M03 F15M	6,0	0,080	0,095	0,13	0,20	Hard
		0.24	0.0032	0.0038	0.0050	0.0080	
S1	MM16-16016-B90PF-M03 F15M	3,5	0,040	0,046	0,065	0,10	Graphite
		0.14	0.0016	0.0019	0.0026	0.0040	
S2	MM16-16016-B90PF-M03 F15M	3,5	0,040	0,046	0,065	0,10	Graphite
		0.14	0.0016	0.0019	0.0026	0.0040	
S3	MM16-16016-B90PF-M03 F15M	3,5	0,038	0,044	0,060	0,095	Graphite
		0.14	0.0015	0.0017	0.0024	0.0038	
S11	MM16-16016-B90PF-M03 F15M	4,0	0,046	0,055	0,075	0,12	Graphite
		0.16	0.0018	0.0022	0.0030	0.0048	
S12	MM16-16016-B90PF-M03 F15M	4,0	0,046	0,055	0,075	0,12	Graphite
		0.16	0.0018	0.0022	0.0030	0.0048	
S13	MM16-16016-B90PF-M03 F15M	3,5	0,040	0,046	0,065	0,10	X-Heads
		0.14	0.0016	0.0019	0.0026	0.0040	
H5	MM16-16016-B90PF-M03 F15M	4,5	0,038	0,046	0,060	0,10	X-Heads
		0.18	0.0015	0.0018	0.0024	0.0040	
H8	MM16-16016-B90PF-M03 F15M	4,0	0,030	0,034	0,048	0,075	X-Heads
		0.16	0.0012	0.0014	0.0019	0.0030	
H11	MM16-16016-B90PF-M03 F15M	4,5	0,038	0,046	0,060	0,10	X-Heads
		0.18	0.0015	0.0018	0.0024	0.0040	
H12	MM16-16016-B90PF-M03 F15M	4,0	0,030	0,034	0,048	0,075	X-Heads
		0.16	0.0012	0.0014	0.0019	0.0030	
H21	MM16-16016-B90PF-M03 F15M	4,0	0,030	0,034	0,048	0,075	Minimaster
		0.16	0.0012	0.0014	0.0019	0.0030	

SMG = Seco material group

 f_z = mm/tooth (in/tooth), v_c = m/min (sf/min), a_e/DC = %

All cutting data are start values

MM16 Z2 – Copy milling – Cutting data $v_c = (m/min)/(sf/min)$

	SMG	F15M					F30M					T60M				
		100%	20%	10%	5%	2%	100%	20%	10%	5%	2%	100%	20%	10%	5%	2%
Universal	P1	285	360	390	420	415	225	280	300	325	325	185	225	245	265	265
		940	1175	1275	1375	1350	740	920	980	1075	1075	610	740	800	870	870
Steel and cast iron	P2	275	350	375	405	405	220	270	295	315	315	180	220	240	255	255
		900	1150	1225	1325	1325	720	890	970	1025	1025	590	720	790	840	840
	P3	240	305	325	355	355	190	240	255	280	275	155	195	210	225	225
		790	1000	1075	1175	1175	620	790	840	920	900	510	640	690	740	740
	P4	215	270	285	310	310	170	210	225	245	245	140	170	185	200	195
		710	890	940	1025	1025	560	690	740	800	800	460	560	610	660	640
	P5	205	255	275	300	295	165	200	220	235	230	130	160	175	190	190
		670	840	900	980	970	540	660	720	770	750	425	520	570	620	620
	P6	230	290	310	335	335	180	225	245	265	265	150	180	200	215	215
		750	950	1025	1100	1100	590	740	800	870	870	490	590	660	710	710
Stainless steel and S-materials	P7	215	275	290	315	315	170	210	230	250	250	140	170	190	200	200
		710	900	950	1025	1025	560	690	750	820	820	460	560	620	660	660
	P8	200	255	275	295	295	160	200	215	235	230	130	160	175	190	190
		660	840	900	970	970	520	660	710	770	750	425	520	570	620	620
	P11	210	265	285	310	310	165	205	225	240	240	135	165	180	195	195
		690	870	940	1025	1025	540	670	740	790	790	445	540	590	640	640
	P12	135	175	175	190	190	110	140	145	155	155	90	110	115	125	125
		445	570	590	620	620	360	460	475	510	510	295	360	375	410	410
Non ferrous	M1	225	285	300	330	325	175	220	235	255	250	145	180	190	205	205
		740	940	980	1075	1075	570	720	770	840	820	475	590	620	670	670
	M2	185	230	250	270	265	145	180	195	210	210	120	145	160	170	170
		610	750	820	890	870	475	590	640	690	690	395	475	520	560	560
	M3	150	190	195	210	210	120	150	155	170	170	95	125	125	135	135
		490	620	660	690	690	395	490	520	560	560	310	410	425	445	445
	M4	115	150	150	160	160	95	125	120	130	130	75	100	95	105	105
		375	490	520	520	520	310	410	425	425	425	245	330	345	345	345
	M5	95	125	125	135	135	80	100	100	110	110	65	85	80	90	85
		310	410	445	445	445	260	330	345	360	360	215	280	280	295	280
Hard	K1	220	280	295	320	320	175	215	235	250	250	140	175	190	205	200
		720	920	970	1050	1050	570	710	770	820	820	460	570	620	670	660
	K2	195	245	260	285	280	155	190	210	220	220	125	155	170	180	180
		640	800	850	940	920	510	620	690	720	720	410	510	560	590	590
	K3	165	205	220	240	240	130	160	175	190	185	105	130	140	150	150
		540	670	720	790	790	425	520	570	620	610	345	425	460	490	490
Plastic and cfrp	K4	155	195	210	230	225	125	155	170	180	180	100	125	135	145	145
		510	640	690	750	740	410	510	560	590	590	330	410	445	475	475
	K5	95	120	125	135	140	75	95	100	110	110	60	75	80	90	90
		310	395	410	445	460	245	310	330	360	360	195	245	260	295	295
	K6	135	175	185	200	200	110	135	150	160	155	90	110	120	130	125
		445	570	610	660	660	360	445	490	520	510	295	360	395	425	410
	K7	120	150	165	175	175	95	120	130	140	140	80	95	105	115	115
		395	490	540	570	570	310	395	425	460	460	260	310	345	375	375
Graphite	N1	1675	2125	2250	2450	2450	1300	1625	1725	1875	1850	1050	1325	1400	1525	1500
		5500	6975	7375	8050	8050	4275	5325	5650	6150	6075	3450	4350	4600	5000	4925
	N2	680	860	910	990	990	530	660	700	760	750	425	530	570	620	610
		2225	2825	2975	3250	3250	1750	2175	2300	2500	2450	1400	1750	1875	2025	2000
	N3	450	570	610	660	660	350	435	465	510	500	285	355	380	410	405
		1475	1875	2000	2175	2175	1150	1425	1525	1675	1650	940	1175	1250	1350	1325
	N11	520	650	690	750	760	400	500	530	580	570	325	405	430	470	465
		1700	2125	2275	2450	2500	1300	1650	1750	1900	1875	1075	1325	1400	1550	1525
X-Heads	S1	55	70	70	75	75	44	55	55	60	60	36	46	45	49	49
		180	230	245	245	245	145	180	195	195	195	120	150	160	160	160
	S2	44	55	55	60	60	35	46	45	49	49	29	37	36	40	39
		145	180	195	195	195	115	150	155	160	160	95	120	130	130	130
	S3	38	49	48	50	50	31	40	39	43	43	25	32	32	35	35
		125	160	165	165	165	100	130	140	140	140	80	105	110	115	115
	S11	75	100	100	105	105	60	80	80	85	85	50	65	65	70	70
		245	330	345	345	345	195	260	260	280	280	165	215	215	230	230
Minimaster	S12	55	70	70	75	75	43	55	55	60	60	35	44	44	48	48
		180	230	230	245	245	140	180	180	195	195	115	145	150	155	155
	S13	31	39	39	42	42	25	32	31	34	34	20	26	25	28	28
		100	130	140	140	140	80	105	110	110	110	65	85	90	90	90
	H5	45	55	60	65	65	36	46	48	50	50	30	37	39	41	41
		150	180	195	215	215	120	150	155	165	165	100	120	130	135	135
	H8	46	60	60	65	65	39	50	50	55	55	31	40	40	44	43
		150	195	215	215	215	130	165	165	180	180	100	130	140	145	140
	H11	55	75	75	80	80	46	60	60	65	65	38	47	49	55	50
		180	245	245	260	260	150	195	195	215	215	125	155	165	180	165
	H12	85	105	105	115	115	70	90	90	95	95	55	70	70	80	80
		280	345	375	375	375	230	295	310	310	310	180	230	245	260	260
	H21	46	60	60	65	65	39	50	50	55	55	31	40	40	44	43
		150	195	215	215	215	130	165	165	180	180	100	130	140	145	140

Torque wrench and Max RPM information

Torque wrench

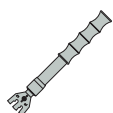
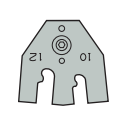
Recommended RPM for all Seco cutters are shown on each catalogue page.
Normally there is no need for balancing tools for RPM up to 10 000.
However in some cases balancing is necessary, for instance when using heavy tools and tool holders in small machines



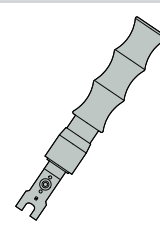
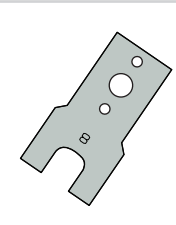
Torque wrench with fixed torque values to ensure the correct tightening force when mounting the Minimaster insert into its holder.
Dynamometric keys are calibrated according to ISO 6789.
Code key: MM02-4006
MM02 = 2-flute (MM03 = 3-flute)
40 = Torque value 4 Nm
06 = Insert size

Over 10 000 RPM:
We recommend balancing of tool and tool holders at least separately.
Over 20 000 RPM:
Both tool and tool holders must be balanced at least separately.
Over 30 000 RPM:
Tool and tool holders must be balanced as a unit.
The max RPM in the tables should never be exceeded.)

2 flute inserts

Insert size	Torque wrench (including key end)	Replaceable key end	Torque value
			
MM06	MM02-4006	MM02-06	4 Nm
MM08	MM02-8008	MM02-08	8 Nm
MM10	MM02-1201012	MM02-1012	12 Nm
MM12	MM02-1201012	MM02-1012	12 Nm
MM12 DC= Ø 14,0	MM02-16014	MM02-14	16 Nm
MM12 DCX= Ø 16,0	MM02-1601620	MM02-1620	16 Nm
MM16	MM02-1601620	MM02-1620	16 Nm

3 flute inserts

Insert size	Torque wrench (including key end)	Replaceable key end	Torque value
			
MM06	MM03-4006	MM03-06	4 Nm
MM08	MM03-8008	MM03-08	8 Nm
MM10	MM03-1201012	MM03-1012	12 Nm
MM12	MM03-1201012	MM03-1012	12 Nm
MM16	MM03-16016	MM03-16	16 Nm

Universal

Steel and cast iron

Stainless steel and S-materials

Stainless steel and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster

Universal

Steel and cast
iron

Stainless steel
and S-materials

Non ferrous

Hard

Plastic and cfrp

Graphite

X-Heads

Minimaster



SMG – Introduction



The foundation for SMG is a classification of workpiece materials based on their type rather than their relative machinability and consequently it contains workpiece materials like composites. It is comprehensive enough, but still easy to identify which SMG a particular material belongs.

Each SMG has a specific material standard in a specific condition assigned as reference to allow easy adjustment of cutting data for any actual material compared to any Seco reference material see page(s) 790-793.

As example the reference materials EN C45E for SMG P4 and EN 42 CrMo 4 for both SMG P5 and SMG H5 see further details in the following tables.

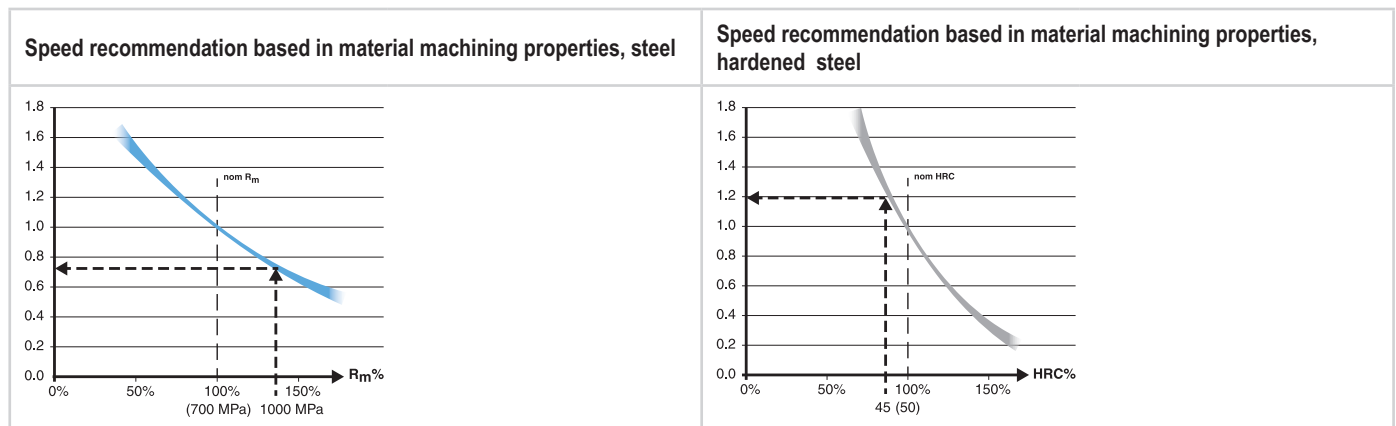
P4	Low-alloy general structural steels, 0.25% < C < 0.67%wt Low-alloy Quench & Temper steels	520 < R _m < 1200	C 45E R _m = 660 N/mm ²	H5	Quenched & Tempered steels	38 < HRC < 56	42 CrMo 4 50 HRC
P5	Structural steels, 0.25% < C < 0.67%wt Quench & Temper steels	550 < R _m < 1200	42 CrMo 4 R _m = 700 N/mm ²				

Focusing specifically on EN 42 CrMo 4 in annealed condition, the ultimate tensile strength R_m may typically vary between R_m = 630 N/mm² and R_m = 780 N/mm², which provide a reference level for SMG P5. In Quenched & Tempered condition, the ultimate tensile strength R_m may typically be between R_m = 900 N/mm² and R_m = 1100 N/mm² thus still belongs to SMG P5. However, if hardened above R_m = 1200 N/mm² it instead belongs to SMG H5.

P5	42 CrMo 4	1.1201	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	4142, 4140	38HM	Annealed	700	
	42 CrMo 4	1.1201	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	4142, 4140	38HM	Quenched & Tempered	1000	
H5	42 CrMo 4	1.1201	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	4142, 4140	38HM	Quenched & Tempered		45
	42 CrMo 4	1.1201	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	4142, 4140	38HM	Quenched & Tempered		50

The EN 42CrMo4 quench & tempered steel could be used to illustrate the machinability dependence of materials' condition.

The graphs below indicate how speed recommendations for a nominal material conditions may be adjusted for relative R_m (left diagram valid for ISO-P) and for relative HRC (valid for ISO-H).



To further illustrate how the SMG P5 nominal v_c can be adjusted to a more accurate recommended v_c we need ultimate tensile strength R_m data and in this case we use the EN 42 CrMo 4 quenched & tempered to R_m = 1000 N/mm² according to above table (bold blue arrows).

Assume that we find that the SMG P5 nominal v_c = 280 m/min / 918.64 sfm for a certain product and machining.

Then, actual recommended v_c = 280 m/min x 0.75 = 210 m/min / v_c = 918.64 sfm x 0.75 = 688.98 sfm.

Consequently in the SMG H5 the nominal v_c can be adjusted using the hardened EN 42 CrMo 4 at HRC 45 (smaller grey arrows).

Assume that the SMG H5 nominal v_c = 50 m/min / 164.04 sfm for a certain product and machining using a coated cemented carbide tools then, actual recommended v_c = 50 m/min x 1.2 = 60 m/min / v_c = 164.04 sfm x 1.2 = 196.85 sfm.

For further workpiece material details please see page(s) 794 - 801 and suggested cutting data at applicable pages.

For more convenient cutting data handling we recommend applicable tools in My Pages – on www.secotools.com

These cutting data compensations for steels are fully implemented at www.secotools.com in MyPages (see QR-code in the upper right corner).

Steels, ferritic and martensitic stainless steels

Universal	SMG	Description	Properties	Reference	$k_{c1.1}$	m_c
	P1	Free-cutting steels	$360 < R_m < 880$	11 SMn30 $R_m = 385 \text{ N/mm}^2$	1500	0,14
Steel and cast iron	P2	Low-alloy ferritic steels, $C < 0.25\% \text{wt}$ Low-alloy weldable general structural steels	$320 < R_m < 600$	S235JRG2 $R_m = 420 \text{ N/mm}^2$	1600	0,23
	P3	Ferritic & ferritic/pearlitic steels, $C < 0.25\% \text{wt}$ Weldable general structural steels Case-hardening steels	$430 < R_m < 610$	16 MnCr 5 $R_m = 550 \text{ N/mm}^2$	1800	0,14
	P4	Low-alloy general structural steels, $0.25\% < C < 0.67\% \text{wt}$ Low-alloy Quench & Temper steels	$520 < R_m < 1200$	C 45E $R_m = 660 \text{ N/mm}^2$	2000	0,15
Stainless steel and S-materials	P5	Structural steels, $0.25\% < C < 0.67\% \text{wt}$ Quench & Temper steels	$550 < R_m < 1200$	42 CrMo 4 $R_m = 700 \text{ N/mm}^2$	2020	0,18
	P6	Low-alloy through-hardening steels, $C > 0.67\% \text{wt}$ Low-alloy spring and bearing steels	$520 < R_m < 1200$	C 100S $R_m = 600 \text{ N/mm}^2$	2100	0,17
	P7	Through-hardening steels, $C > 0.67\% \text{wt}$ Spring and bearing steels	$600 < R_m < 1200$	100 Cr 6 $R_m = 650 \text{ N/mm}^2$	2160	0,17
Non ferrous	P8	Tool steels High Speed Steels (HSS)	$600 < R_m < 1200$	X 40 CrMoV 5 1 $R_m = 700 \text{ N/mm}^2$	2400	0,20
	P11	Ferritic & martensitic stainless steels	$415 < R_m < 1200$	X 20 Cr 13 $R_m = 675 \text{ N/mm}^2$	2000	0,15
Hard	P12	Maraging and precipitation-hardening stainless steels	$500 < R_m < 1200$	X 5 CrNiCuNb 16 4 $R_m = 1100 \text{ N/mm}^2$	2100	0,17

Free-cutting, austenitic and duplex stainless steels

Plastic and cfrp	SMG	Description	Properties	Reference	$k_{c1.1}$	m_c
	M1	Free-cutting austenitic stainless steels		X 10 CrNiS 18 9	1700	0,14
Graphite	M2	Low-alloy austenitic stainless steels		X 5 CrNi 18 10	1920	0,18
	M3	Medium-alloy austenitic stainless steels		X 2 CrNiMo 18 14 3	2070	0,17
	M4	High-alloy austenitic and duplex stainless steels		X 2 CrNiMoN 22 5 3	2230	0,16
X-Heads	M5	Difficult high-alloy austenitic and duplex stainless steels		X 2 CrNiMoN 25 7 4	2510	0,13

Cast irons

SMG	Description	Properties	Reference	$k_{c1.1}$	m_c	Universal
K1	Grey cast irons (GCI)		EN-GJL-250	930	0,32	
K2	Compacted graphite irons (CGI)		EN-GJV-400	1000	0,35	Steel and cast iron
K3	Malleable cast irons (MCI)		EN-GJMB-550-4	1050	0,37	
K4	Nodular cast irons (SGI)		EN-GJS-500-7	1160	0,37	Stainless steel and S-materials
K5	Austempered ductile irons (ADI)		EN-GJS-1000-5	0		
K6	Austenitic lamellar cast irons		EN-GJLA-XNiCuCr15-6-2	0		Stainless steel and S-materials
K7	Austenitic nodular cast irons		EN-GJSA-XNiMn23-4	0		

Non-ferrous metals

SMG	Description	Properties	Reference	$k_{c1.1}$	m_c	Non ferrous
N1	Aluminium alloys, Si < 9%		AW-7075	0		
N2	Aluminium alloys, 9% < Si < 16%		AC-44200 Si = 12%	0		Hard
N3	Aluminium alloys, Si > 16%		AlSi17Cu5	0		
N11	Copper alloys		CW614N	740	0,26	

Superalloys and titanium

SMG	Description	Properties	Reference	$k_{c1.1}$	m_c	Graphite
S1	Iron-based superalloys		Discalloy	0		
S2	Cobalt-based superalloys		Stellite 21	0		X-Heads
S3	Nickel-based superalloys		Inconel 718	2530	0,21	
S11	Titanium, low alloyed, (α)		Ti	0		Minimaster Plus
S12	Titanium, medium alloyed, ($\alpha+\beta$)		TiAl6V4	1500	0,24	
S13	Titanium, high alloyed, (near β and β)		Ti10V2Fe3Al	0		

Hard materials

Universal	SMG	Description	Properties	Reference	$k_{c1.1}$	m_c
	H3	Case-hardened steels	58 < HRC < 62	16 MnCr 5 60 HRC	2070	0,14
Steel and cast iron	H5	Quenched & Tempered steels	38 < HRC < 56	42 CrMo 4 50 HRC	2320	0,18
	H7	Quenched & Tempered steels Bearing steels	56 < HRC < 64	100 Cr 6 60 HRC	2480	0,17
Stainless steel and S-materials	H8	Tool steels High Speed Steels (HSS)	38 < HRC < 64	X 40 CrMoV 5 1 50 HRC	2750	0,20
	H11	Martensitic stainless steels	38 < HRC < 50	X 20 Cr 13 45 HRC	2300	0,15
	H12	Maraged and precipitation-hardened stainless steels	1200 < R_m < 1650	X 5 CrNiCuNb 16 4 $R_m = 1450 \text{ N/mm}^2$	2410	0,17
Non ferrous	H21	Manganese steels	23 < HRC < 64	X 120 Mn 12 50 HRC	0	
	H31	White cast irons	50 < HRC < 64	EN-GJN-HV600(XCr11) 55 HRC	0	

Other difficult materials

SMG	Description	Properties	Reference	$k_{c1.1}$	m_c
PM1	Low-alloy PM-materials		F-0008 Fe-0.7C	0	
PM2	Medium-alloy PM-materials		FLC-4608 Fe2Cu1.8Ni 0.5Mo0.2Mn0.8C	0	
PM3	High-alloy PM-materials Exhaust valve seat materials, etc.			0	
HF1	Hardfacing alloys Welded or plasma-deposited iron-based alloys			0	
HF2	Hardfacing alloys Welded or plasma-deposited cobalt- and nickel-based alloys			0	
CC1	Sintered tungsten carbide		G50	0	

Plastics and Composites

SMG	Description	Properties	Reference	$k_{c1.1}$	m_c	
TS1	Thermosetting polymers		Urea formaldehyde (UF)	0		Universal
TS2	Thermosetting carbon-fibre composites		T300 T700 T800 HTA-S IMA - Epoxy (M21)...	0		Steel and cast iron
TS3	Thermosetting glass-fibre composites		Epoxy - HX...(42...)/E glass (7781...)...	0		Steel and cast iron
TS4	Thermosetting aramide-fibre composites		Kevlar 49	0		Steel and cast iron
TP1	Thermoplastic polymers		Polycarbonate (PC)	0		Stainless steel and S-materials
TP2	Thermoplastic carbon-fibre composites		PPS/PEEK - T300..	0		Stainless steel and S-materials
TP3	Thermoplastic glass-fibre composites		PPS/PEEK - E-glass or A-glass...	0		Stainless steel and S-materials
TP4	Thermoplastic aramide-fibre composites			0		Stainless steel and S-materials

Graphite

SMG	Description	Properties	Reference	$k_{c1.1}$	m_c	
GR1	Graphite		R 8500	0		Non ferrous

Hard

Graphite

X-Heads

Minimaster Plus

	SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
Universal	P1	11 SMn 30	1.0715	1.0715	9 SMn 28	S 250	230 M 07	CF 9 SMn 28	SUM 22	1912	G12130
		11 SMnPb 30	1.0718	1.0718	9 SMnPb 28	S 250 Pb		CF 9 SMnPb 28	SUM 22 L	1914	G12134
		10 S 20	1.0721	1.0721	10 S 20	10 F 1	210 M 15	CF 10 S 20			
				1.0722	10 SPb 20	10 PbF 2		CF 10 SPb 20			
Steel and cast iron	P1	15 SMn 13	1.0725	1.0723	15 S 20		210 A 15		SUM 32	1922	
		35 S20	1.0726	1.0726	35 S 20	35 MF 4	212 M 36			1957	G11400
		46 S20	1.0727	1.0727	46 S 20	45 MF 4	212 M 44			1973	G11460
		11 SMn 37	1.0736	1.0736	9 SMn 36	S 300	240 M 07	CF 9 SMn 36			G12150
		11 SMn 37	1.0736	1.0736	9 SMn 36	S 300	240 M 07	CF 9 SMn 36			G12150
Stainless steel and S-materials	P2	S235JR	1.0037	1.0037	St 37-2	E 24-2		Fe 360 B	STKM 12 C	1311	
		S235JRG2	1.0038	1.0116	St 37-3	E 24-3, E 24-4	4360-40 C	Fe 360 D FF		1312, 1313	
		S275J2G3	1.0144	1.0144	St 44-3 N	E 28-3, E 28-4	4360-43 C	Fe 430 D FF	SM 41 C	1412, 1414	
		C 10	1.0301	1.0301	C 10	34 C 10, XC 10	045 M 10	C 10	S 10 C		G10100
				1.0401	C 15	37 C 12, XC 18	080 M 15	C 15, C 16		1350	G10170
		C22	1.0402	1.0402	C 22	C 20	050 A 20	C 20, C 21		1450	G10200
Non ferrous	P3	S355JR	1.0570	1.0570	St 52-3	E 36-3, E 36-4	4360-50 C	Fe 510 B	SM 50 YA	2172, 2132	
		C 15R	1.1141	1.1141	Ck 15	XC 15, XC 18	080 M 15	C 15, C 16	S 15 C, S 15 CK	1370	G10170
				1.1158	Ck 25	XC 25	060 A 25	C 25	S 25 C		G10250
									SCR 420 H		
		16 Mo 3	1.5415	1.5415	15 Mo 3	15 D 3	1501-240	16 Mo 3		2912	
				1.5423	16 Mo 5		1503-245-420	16 Mo 5	SB 450 M		G45200
Hard	P4	14 NiCr 14	1.5752	1.5752	14 NiCr 14	12 NC 15	655 M 13		SNC 815 (H)		G33106
				1.5919	15 CrNi 6	16 NC 6	S 107	16 CrNi 4			
		18 NiCrMo 7 6	1.6587	1.6587	18 CrNiMo 7 6	18 NCD 6	820 A 16	18 NiCrMo 7			
		16 MnCr 5	1.7131	1.7131	16 MnCr 5	16 MC 5	527 M 17	16 MnCr 5	SCR 415	2511	G51170
		16 MnCrS 5	1.7139	1.7139	16 MnCrS 5						
		20 MnCr 5	1.7147	1.7147	20 MnCr 5	20 MC 5		20 MnCr 5	SMnC 420 (H)		G51200
Plastic and cfrp	P5	20 MnCrS 5	1.7149	1.7149	20 MnCrS 5	20 MnCrS 5			SMnC 21 H		
		13 CrMo 4 5	1.7335	1.7335	13 CrMo 4 4	15 CD 3.5	1501-620 Gr. 27	14 CrMo 4 5		2216	
				1.7337	16 CrMo 4 4	15 CD 4.5	1501-620 Gr. 27	14 CrMo 4 5		2216	
		10 CrMo 9 10	1.7380	1.7380	10 CrMo 9 10	10 CD 9.10	1501-622 Gr. 31	12 CrMo 9 10		2218	J21890
Graphite	P6	C35		1.0501	C 35	55 C 35	060 A 35	C 35		1550	G10350
		E 335	1.0503	1.0503	C 45	65 C 45	80 M 46	C 45	S 45 C	1650	G10430
		C40		1.0511	C 40	60 C 40	080 M 40	C 40	S 40 C		
		E 360	1.0070	1.0535	St 70-2	A 70-2		Fe 690		1655	
		C60	1.0601	1.0601	C 60	CC 55	080 A 62	C 60			G10600
				1.1157	40 Mn 4	35 M 5	150 M 36				G10390
X-Heads	P6	G 28 Mn6	1.1165	1.1165	30 Mn 5		120 M 36		SMn 1 H, SCMn 2		G13300
		C 35E	1.1181	1.1181	Ck 35	XC 38 H1	080 M 36	C 35	S 35 C	1572	G10340
		C 45E	1.1191	1.1191	Ck 45	XC 42	080 M 46	C 45	S 45 C	1672	G10420
		C 60E	1.1221	1.1221	Ck 60	XC 60	080 A 62	C 60	S 58 C	1665, 1678	G10640
				1.1740	C 60 W	Y3 55			SK 7		
Minimaster Plus	P6	55 SiCr7	1.7100	1.0904	55 Si 7	55 S 7	250 A 53	55 Si 8		2085, 2090	
				1.2330	35 CrMo 4	34 CD 4	708 A 37	35 CrMo 4		2234	T51620
				1.2542	45 WCv 7		BS 1	45 WCv 8 KU		2710	T41901
			1.2714	1.2714	56 NiCrMoV 7		BH 224-5	56 NiCrMoV7-KU	SKT 4		T61206
				1.5121	46 MnSi 4						
				1.5710	36 NiCr 6	35 NC 6	640 A 35		SNC 236		
Minimaster Plus	P5			1.5736	36 NiCr 10	35 NC 11		35 NiCr 9	SNC 631 (H)		
		36 CrNiMo 4		1.6511	36 CrNiMo 4	40 NCD 3	816 M 40	38 NiCrMo 4 (KB)			G98400
		34 CrNiMo 6	1.6582	1.6582	34 CrNiMo 6	35 NCD 6	817 M 40	35 NiCrMo 6 (KW)	SNCM 447	2541	G43400
		34 Cr 4	1.7033	1.7033	34 Cr 4	32 C 4	530 A 32	34 Cr 4 (KB)	SCR 430 (H)		G51320
		41 Cr 4	1.7035	1.7035	41 Cr 4	42 C 4	530 M 40	41 Cr 4	SCR 440 (H)		G51400
		25 CrMo 4	1.7218	1.7218	25 CrMo 4	25 CD 4 S	708 M 25	25 CrMo 4 (KB)	SCM 425	2225	G41300
Minimaster Plus	P6	42 CrMo 4	1.7225	1.7225	42 CrMo 4	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	2244	G41400
		42 CrMo 4	1.7225	1.7225	42 CrMo 4	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	2244	G41400
				1.7361	32 CrMo 12	30 CD 12	722 M 24	32 CrMo 12		2240	
		50 CrV 4	1.8159	1.8159	50 CrV 4	50 CV 4	735 A 50	51 CrV 4	SUP 10	2230	H61500
		41 CrAlMo 7 10	1.8509	1.8509	41 CrAlMo 7	40 CAD 6.12	905 M 39	41 CrAlMo 7	SACM 645	2940	K24065
Minimaster Plus	P6	C 67S	1.1231	1.1231	Ck 67	XC 68	060 A 67	C 70		1770	G10700
		C 100S	1.1274	1.1274	Ck 101		060 A 96		SUP 4	1870	G10950
		C 105U	1.1545	1.1545	C 105 W1	Y1 105		C 100 KU		1880	
				1.1645	C 105 W2	Y1 105		C 100 KU	SK 3		
				1.1663	C 125 W	Y2 120		C 120 KU	SK 2		

U.N.E./ I.H.A.	AISI / ASTM	GOST	CSN	Misc. Brands	Condition	Structure	
	1213				Annealed		Universal
	12 L 13				Annealed		
	1108				Annealed		
	11 L 08				Annealed		
	1140	40			Annealed		Steel and cast iron
	1146				Annealed		
	1215				Annealed		
	12 L 14				Annealed		
	A573 Grade 58	16D			Annealed		Steel and cast iron
	A573 Grade 70	18kp	11 378		Annealed		
		St14kP	11 448		Annealed		
	1010	10			Annealed		
F.1110	1015	15			Annealed		Stainless steel and S-materials
	1020, 1023	20	12 024		Annealed		
		17G1S	11 523		Annealed		
F.1511	1015	15			Annealed		
F.1120	1025	25			Annealed		Stainless steel and S-materials
					Annealed		
	A204 Grade A		15 020		Annealed		
	4520				Annealed		
	3310, 9314	20X2H4A	16 420		Annealed		Stainless steel and S-materials
	4320		16 220		Annealed		
					Annealed		
					Annealed		
F.1516	5115	12KHN2	14 220		Annealed		Stainless steel and S-materials
		18HG			Annealed		
	5120	20KH	14 221		Annealed		
	5120 H	20KH			Annealed		
	A182-F11, A182-F12	12KHM	15 121		Annealed		Stainless steel and S-materials
	A387 Grade 12 Cl. 2				Annealed		
F.155	A182-F22	12KH8	15 313		Annealed		
					Annealed		
F.1130	1035	35	12 040		Annealed		Non ferrous
F.5110	1045	45	12 050		Annealed		
	1040	40	12 041		Annealed		
F.1150	1055	55			Annealed		
	1060	60	12 061		Annealed		Non ferrous
	1039	40G			Annealed		
	1330	30G2			Annealed		
F.1135	1035	35			Annealed		
F.1140	1045	45	12 050		Annealed		Non ferrous
F.1150	1064	60			Annealed		
	1060	60			Annealed		
					Annealed		
F.144	9255	55S2			Annealed		Hard
F.1250	4135	35KHM			Annealed		
F.5241	S1	5KHV2S			Annealed		
	L6	5KHNV			Annealed		
	5045				Annealed		Hard
	3135				Quenched & Tempered		
	3435				Annealed		
	9840				Quenched & Tempered		
F.1280	4340	38H2N2MA	16 343		Annealed		Graphite
	5132	35KH			Quenched & Tempered		
	5140	40H	14 140		Quenched & Tempered		
	4130	20KHM	15 130		Quenched & Tempered		
F.1251	4142, 4140	38HM	15 142		Annealed		Graphite
F.1252	4142, 4140	38HM	15 142		Annealed		
F.1252	4142, 4140	38HM	15 142		Quenched & Tempered		
					Quenched & Tempered		
F.143	6150	50KHFA	15 260		Quenched & Tempered		X-Heads
F.1740	A355 Cl. A				Quenched & Tempered		
					Annealed		
F.5103	1070	70			Annealed		
F.5117	1095				Annealed		X-Heads
F.5118	W1	U10A			Annealed		
		U10			Annealed		
	W1	U13			Annealed		
							Minimaster Plus

	SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
Universal	P7	107 CrV 3	1.2210	1.2210	115 CrV 3	100 C 3		107 CrV 3 KU			T61202
		90 MnCrV 8	1.2842	1.2842	100 MnCrW 4	90 MWCV 5	BO 1	95 MnVCr 5 KU	SKS 3	2140	T31501
		100 Cr 6	1.3505	1.3505	90 MnCrV 8	90 MV 8	BO 2	90 MnVCr 8 KU			T31502
Steel and cast iron	P8	X 210 Cr 12	1.2080	1.2080	100 Cr 6	100 C 6	534 A 99	100 Cr 6	SUJ 2	2258	G51986
				1.2343	X 210 Cr 12	Z 200 C 12	BD 3	X 210 Cr 13 KU	SKD 1		T30403
		X 40 CrMoV 5 1	1.2344	1.2344	X 38 CrMoV 5 1	Z 38 CDV 5	BH 11	X 37 CrMoV 5 1 KU	SKD 6		T20811
		X 100 CrMoV 5	1.2363	1.2363	X 40 CrMoV 5 1	Z 40 CDV 5	BH 13	X 40 CrMo 5 1 1 KU	SKD 61	2242	T20813
				1.2365	X 100 CrMoV 5 1	Z 100 CDV 5	BA 2	X 100 CrMoV 5 1 KU	SKD 12	2260	T30102
				1.2436	X 32 CrMoV 3 3	32 DCV 28	BH 10	30 CrMoV 12 27 KU	SKD 7		T20810
				1.2601	X 210 CrW 12			X 215 CrW 12 1 KU	SKD 2	2312	
				1.2713	X 165 CrMoV 12			X 165 CrMoV 12 KU		2310	
		HS 6-5-2-5	1.3243	1.3243	55 NiCrMoV 6	55 NCDV 7			SKT 4		T61206
		HS 2-10-1-8	1.3247	1.3247	S 6-5-2-5	Z 85 WDKCV 06-05-05-04-02		HS 6-5-2-5	SKH 55	2723	
		HS 18-1-2-5	1.3255	1.3255	S 2-10-1-8	Z 110 DKCVV 09-08-04	BM 42	HS 2-9-1-8	SKH 51		T11342
		HS 6-5-2	1.3343	1.3343	S 18-1-2-5	Z 80 WKCVC 18-05-04-01	BT 4	HS 18-1-1-5	SKH 3		T12004
Stainless steel and S-materials	P11	HS 2-9-2	1.3348	1.3348	S 6-5-2	Z 85 WDCV 06-05-04-02	BM 2	HS 6-5-2	SKH 9, SKH 51	2722	T11302
		HS 18-0-1	1.3355	1.3355	S 2-9-2	Z 100 DCVV 09-04-02-02		HS 2-9-2	SKH 58	2782	T11307
					S 18-0-1	Z 80 WCV 18-04-01	BT 1	HS 18-0-1	SKH 2		T12001
		X 6 Cr 13	1.4000	1.4000	X 6 Cr 13	Z 6 C 12	403 S 17	X 6 Cr 13	SUS 403	2301	S41008
		X 12 Cr 13	1.4006	1.4006	X 10 Cr 13	Z 10 C 13	410 S 21	X 12 Cr 13	SUS 410	2302	S41000
		X 6 Cr 17	1.4016	1.4016	X 6 Cr 17	Z 8 C 17	430 S 15	X 8 Cr 17	SUS 430	2320	S43000
		X 20 Cr 13	1.4021	1.4021	X 20 Cr 13	Z 20 C 13	420 S 37	X 20 Cr 13	SUS 420 J 1	2303	S42000
Non ferrous	P12	X 39 Cr 13	1.4031	1.4031	X 40 Cr 13	Z 40 C 14	420 S 45	X 40 Cr 14	SUS 420	2304	S40280
		X 70 CrMo 15	1.4109	1.4109	X 65 CrMo 14	Z 70 D 14			SUS 440 A		S44002
		X 90 CrMoV 18	1.4112	1.4112	X 90 CrMoV 18	Z 2 CND 18 05	409 S 19	X CrTi 12	SUS 440 B	2327	S44003
		X 105 CrMo 17	1.4125	1.4125	X 105 CrMo 17	Z 100 CD 17		X 105 CrMo 17	SUS 440 C		S44004
		X 3 CrNiMo 13 3	1.4313	1.4313	X 5 CrNi 13 4	Z 5 CN 13.4	425 C 11	X 6 CrNi 13 04	SCS 5	2385	S41500
		X 18 CrN 28	1.4749	1.4749	X 18 CrN 28	Z 18 C 25				2322	S44600
Hard	P12	X 6 NiCrTiMoV 25 15	1.4534	1.4534	X 3 CrNiMoAl 13 8 2						S13800
		X 4 CrNiCuNb 16 4	1.4540	1.4540	X 4 CrNiCuNb 16 4						S15500
			1.4540	1.4540	X 4 CrNiCuNb 16 4	Z 4 CNUNb 16.4 M					S15500
		X 4 CrNiCuNb 16 4	1.4540	1.4540	X 4 CrNiCuNb 16 4						S15500
		X 5 CrNiCuNb 16 4	1.4542	1.4542	X 5 CrNiCuNb 16 4				SUS 630		S17400
		X 5 CrNiCuNb 17 4	1.4548	1.4542	X 5 CrNiCuNb 17 4	Z 6 CNU 17.4			SCS 24, SUS 630		S17400
		X 7 CrNiAl 17 7	1.4564	1.4564	X 7 CrNiAl 17 7	Z 9 CAN 17.7	301 S 81	X 7 CrNiAl 17 7	SUS 631	2388	S17700
Plastic and cfrp	M1	X 2 NiCoMoTi 18 12 4	1.6356	1.6356	X 2 NiCoMoTi 18 12 4						K93160
		X 2 NiCoMoTi 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120
		X 2 NiCoMo 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120
		X 2 NiCoMo 18 8 5	1.6359	1.6359	X 2 NiCoMo 18 8 5		S 162				K92890
		X 2 NiCoMo 18 8 5	1.6359	1.6359	X 2 NiCoMo 18 8 5		S 162				K92890
		X 10 CrNiS 18 9	1.4305	1.4305	X 10 CrNiS 18 9	Z 10 CNF 18.09	303 S 31	X 10 CrNi 18 09	SUS 303	2346	S30300
Graphite	M2	X 2 CrNi 19 11	1.4306	1.4306	X 2 CrNi 19 11	Z 2 CN 18.10	304 S 12	X 3 Cr Ni 18 11	SUS 304 L	2352	S30403
		X 5 CrNi 18 10	1.4301	1.4301	X 5 CrNi 18 10	Z 6 CN 18.09	304 S 31	X 5 CrNi 18 11	SUS 304	2333	S30400
		X 5 CrNiMo 17 12 2	1.4401	1.4401	X 5 CrNiMo 17 12 2	Z 3 CND 17.11.1	316 S 31	X 5 CrNiMo 17 12	SUS 316	2347	S31600
		X 6 CrNiNb 18 10	1.4550	1.4550	X 6 CrNiNb 18 10	Z 6 CNNb 18.10	347 S 31	X 6 CrNiNb 18 11	SUS 347	2338	S34700
		X 9 CrNi 18 8	1.4310	1.4310	X 12 CrNi 17 7	Z 12 CN 17.07	301 S 21	X 12 CrNi 17 07	SUS 301	(2331)	S30100
		X 12 CrNi 18 8	1.4300	1.4300	X 12 CrNi 18 8	Z 12 CN 18	302 S 25		SUS 302	2331	S30200
X-Heads	M3	X 2 CrNiMo 18 14 3	1.4435	1.4435	X 2 CrNiMo 18 14 3	Z 2 CND 17.13	316 S 12	X 2 CrNiMo 17 13 2	SCS 16, SUS 316 L	2353	S31603
		X 2 CrNiMoN 17 13 3	1.4429	1.4429	X 2 CrNiMoN 17 13 3	Z 2 CND 17.13 Az	316 S 62	X 2 CrNiMoN 17 13 3	SUS 316 LN	2375	S31653
		X 2 CrNiN 18 10	1.4311	1.4311	X 2 CrNiN 19 11	Z 2 CN 18 .10 Az	304 S 62	X 2 CrNiN 18 11	SUS 304 LN	2371	S30453
		X 3 CrNiMo 18 12 3	1.4466	1.4466	X 5 CrNi 18 15		317 S 16	X 5 CrNi 18 15	SUS 317	2366	S31700
		X 9 CrNiSiNCE 21 11 2	1.4835	1.4893	X 9 CrNiSiNCE 21 11 2		310 S 31			2368	S30815
		X 12 CrNi 25 21	1.4335	1.4335	X 12 CrNi 25 21	Z 12 CN 25.20	310 S 24	X 6 CrNi 26 20	SUH 310, SUS 310 S	2361	S31008
Minimaster Plus	M4	X 2 CrNiMoN 22 5 3	1.4462	1.4462	X 2 CrNiMoN 22 5	Z 2 CND 22.05 Az	332 S 15	X 2 CrNiMoN 22 5		2377	S31803
		X 2 CrNiMoSi 19 5	1.4424	1.4417	X 2 CrNiMoSi 19 5	Z 2 CND 18.05.03				2376	S31500
		X 2 NiCrMoCu 25 20 5	1.4539	1.4539	X 2 NiCrMoCu 25 20 5	Z 2 NCDU 25 20	904 S 13			2562	N08904
		X 3 CrNiMo 27 5 2	1.4460	1.4460	X 4 CrNiMo 27 5 2	Z 3 CND 25.7 Az		X 3 CrNiMo 27 5 2	SUS 329 J 1	2374	S32900
		X 5 CrNiCuNb 16 4	1.4980	1.4943	X 4 NiCrTi 25 15	Z 6 NCTDV 25.15	HR 51		SUH 660	2570	S66286
	M5	X 1 CrNiMoN 20 18 7	1.4547	1.4529	X 1 CrNiMoN 20 18 7	Z 1 CNDU 20.18.05 Az		X 1 CrNiMoN 20 18 7		2778	S31254
		X 1 CrNiMoN 25 22 8	1.4652	1.4652	X 2 CrNiMoN 25 22 7						S32654
		X 10 NiCrAlTi 32 20	1.4876	1.4876	X 10 NiCrAlTi 32 20	Z 10 NC 32.21			NCF 800		N08800
		X 2 CrNiMoN 25 7 4	1.4410	1.4410	X 2 CrNiMoN 25 7 4	Z 3 CND 25.07 Az		X 2 CrNiMoN 25 7 4		2328	S32750

U.N.E./ I.H.A.	AISI / ASTM	GOST	CSN	Misc. Brands	Condition	Structure
F.520L	L2	11KHF			Annealed	
F.5220	O1	9KHVG			Annealed	
	O2	9G2F			Annealed	
F.5230	52100	SHKH15	14 109		Annealed	
F.5212	D3	KH12			Annealed	
	H11	4KH5MFS			Annealed	
F.5318	H13	4KH5MF1S			Annealed	
F.5227	A2	9KH5VF			Annealed	
	H10	3KH3M3F			Annealed	
F.5213		KH12			Annealed	
		KH12MF			Annealed	
F.520.S	L6	5KHNM			Annealed	
F.5613	M35	R6M5K5			Annealed	
	M42	R2AM9K5			Annealed	
	T4	R18K5F2			Annealed	
F.5603	M2	R6M5			Annealed	
	M7				Annealed	
	T1	R18			Annealed	
	403	08KH13			Annealed	Ferritic
F.3401	410, CA-15	12KH13, 08KH13			Annealed	Martensitic
F.3113	430	12KH17			Annealed	Ferritic
F.5261	420	20KH13	17 022		Annealed	Martensitic
F.3404	420	40KH13			Annealed	Martensitic
	440 A				Annealed	Martensitic
	440 B	95KH18			Annealed	Martensitic
	440 C	95KH18			Annealed	Martensitic
	A182 F6NM			F6NM	Annealed	Martensitic
	446	15KH28			Annealed	Ferritic
	XM-13			PH 13-8 Mo	Solution annealed	Austenitic
	XM-12			15-5 PH	H1150	Martensitic
	XM-12			15-5 PH	Solution annealed	Martensitic
	XM-12			15-5 PH	H1025	Martensitic
	SAE 630			17-4 PH	H1150	Martensitic
	630			17-4 PH	Solution annealed	Martensitic
	631	09KH17N7YU1		17-7 PH	Solution annealed	Austenitic/Ferritic
	AMS 6515			Marage 350	Solution annealed	Martensitic
	AMS 6521			Marage 300	Solution annealed	Martensitic
	AMS 6514			Marage 300, Vascomax C300	Solution annealed	Martensitic
	AMS 6512			Marage 250	Solution annealed	Martensitic
	AMS 6512			Marage 250, Vascomax C250	Solution annealed	Martensitic
F.3508	303	12KH19N9			Annealed	Austenitic
F.3504	304 L	03KH18N11			Annealed	Austenitic
F.3504	304	08KH18N10	17 240		Annealed	Austenitic
F.3534	316	08KH17H13M2T	17 346		Annealed	Austenitic
F.3524	347	08KH18N12B			Annealed	Austenitic
F.3517	301	07KH16N6			Annealed	Austenitic
	302	12KH18N9			Annealed	Austenitic
F.3533	(316 L)	03KH17N14M3	17 349		Annealed	Austenitic
	316 LN	03KH16N15M3			Annealed	Austenitic
F.3541	304 LN	03KH18N11			Annealed	Austenitic
	317	08KH17H15M3T			Annealed	Austenitic
				253 MA	Annealed	Austenitic
	310 S	12KH25N20			Annealed	Austenitic
	329 LN			SAF 2205	Annealed	Duplex
				3RE60	Annealed	Duplex
	904L				Annealed	Super austenitic
	329				Annealed	Duplex
	660			A286	Solution annealed	Austenitic
				254 SMO	Annealed	Super austenitic
				654 SMO	Annealed	Super austenitic
				Alloy 800	Annealed	Austenitic
	F 53			SAF 2507	Annealed	Super duplex

Universal

Steel and cast
iron

Stainless steel
and S-materials

Stainless steel
and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster Plus

Universal	SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS
	K1	EN-GJL-150	0.6150	0.6150	GG-15	Fl 15 D	Grade 150	G15	FC 150	01 15-00	F11601
		EN-GJL-200	0.6200	0.6200	GG-20	Fl 20 D	Grade 220	G20	FC 200	01 20-00	F12101
		EN-GJL-250	0.6250	0.6250	GG-25	Fl 25 D	Grade 260	G25	FC 250	01 25-00	F12401
		EN-GJL-350	0.6350	0.6350	GG-35	Fl 35 D	Grade 350	G35	FC 350	01 35-00	F13502
	EN-GJL-215			GG-220 HB					02 19		
Steel and cast iron	K2	EN-GJV-300			GJV-300						
		EN-GJV-350			GJV-350						
		EN-GJV-400			GJV-400						
EN-GJV-450				GJV-450							
	EN-GJV-500			GJV-500							
Stainless steel and S-materials	K3	EN-GJMB-550-4	0.8155		GTS-55-04	P 540/5	P 540/5	P 55-04	PCMP55-04	08 54-00	F24130
	K4	EN-GJS-350-22	0.7033	0.7033	GGG-35.3	FGS 370-17	Grade 350/22		FCD 350-22L	07 17-15	
		EN-GJS-400-15	0.7040	0.7040	GGG-40	FGS 400-12	Grade 420/12	GS 400-12	FCD 400-18L	07 17-02	F32800
		EN-GJS-400-18	0.7043	0.7043	GGG-40.3	FGS 370-17	Grade 370/17	GSO 42/17		07 17-12	F32800
		EN-GJS-500-7	0.7050	0.7050	GGG-50	FGS 500-7	Grade 500/7	GS 500-7	FCD 500-7	07 27-02	F33800
		EN-GJS-600-3	0.7060	0.7060	GGG-60	FGS 600-3	Grade 600/3	GS 600-3	FCD 600-3	07 32-03	F34100
		EN-GJS-700-2	0.7070	0.7070	GGG-70	FGS 700-2	Grade 700/2	GS 700-2	FCD 700-2	07 37-01	F34800
	K5	EN-GJS-1000-5			GJS-1000-5						ADI grade 5
		EN-GJS-1200-2			GJS-1200-2						ADI grade 2
		EN-GJS-1400-1			GJS-1400-1						ADI grade 3
		EN-GJS-800-8			GJS-800-8						ADI grade 4 ADI grade 1
Non ferrous	K6	EN-GJLA-XNiCr 20-2	0.6660	0.6660	GGL-NiCr 20 2	FGL Ni20 Cr2	Grade F2			05 23-00	F41002
		EN-GJLA-XNiCr 30-3	0.6676	0.6676	GGL-NiCr 30 3	FGL Ni30 Cr3	Grade F3				F41004
		EN-GJLA-XNiCuCr 15-6-2	0.6655	0.6655	GGL-NiCuCr 15 6 2	FGL Ni15 Cu6 Cr2	Grade F1				F41000
	K7	EN-GJSA-XNiMn 13-7	0.7652	0.7652	GGG-NiMn 13 7	FGS Ni13 Mn7	Grade S6			07 72-00	
		EN-GJSA-XNiCr 20-2	0.7660	0.7660	GGG-NiCr 20 2	FGS Ni20 Cr2	Grade S2				F43000
		EN-GJSA-XNiMn 23-4	0.7673	0.7673	GGG-NiMn 23 4	FGS Ni23 Mn4	Grade S2M				F43010
		EN-GJSA-XNiCr 30-3	0.7676	0.7676	GGG-NiCr 30 3	FGS Ni30 Cr3	Grade S3				F43003
	EN-GJSA-XNi 35	0.7683	0.7683	GGG-Ni 35	FGS Ni35					F43006	
Hard	N1	AW-1050A	AI99.5	3.0255	AI99.5	A-5/1050A	1B		(A1050)	4007	AA1050A
		AW-2011	AlCuBiPb	3.1655	AlCuBiPb	A-U5PbBi/2011	FC1		A2011	4355	AA2011
		AW-2014	AlCuSiMn	3.1255	AlCuSiMn	A-U4SG/2014	H15			4338	AA2014
		AW-5005	AlMg1	3.3315	AlMg1	A-G0.6	N41			4106	AA5005
		AW-6060	AlMgSi0.5	3.3206	AlMgSi0.5	A-GS/6060	(H9)			4103	AA6060
		AW-6063	AlMgSi0.7	3.3210	AlMgSi0.7	A-GSUC/6061	(H10)		(A6063)	4104, 4107	AA6005
		AW-3103	AlMn1	3.0515	AlMn1		N3			4054	AA3103
		AW-3003	AlMn1Cu	3.0517	AlMn1Cu	A-M1/3003			A3003		AA3003
		AW-7020	AlZn4.5Mg1	3.4335	AlZn4.5Mg1	A-Z5G/7020	H17			4425	AA7020
		AW-7075		3.4365	AlZnMgCu1.5	A-Z5GU/7075	2L95/2L96		A7075		AA7075
		AC-42000		3.2341	G-AlSi5Mg	A-S7G	LM25	3599	AC 4C	4244	
		AC-46200	AlSi8Cu3(Si)	3.2161	G-AlSi8Cu3		LM25			4251	A13800
		MG-P-63	MgAl6Zn	3.5612	G-MgAl6Zn	G-A6-Z1	MAG-E-121				M11600
		MG-P-61	MgAl8Zn	3.5812	G-MgAl8Zn	(G-A7-Z1)					
		MN65120	MgSe3Zn2Zr1	3.5103	G-MgSe3Zn2Zr1	ZRE1	MAG6-TE				M12330
		Plastic and cfrp	N2	AC-43400	AlSi10Mg(Fe)	3.2381	G-AlSi10Mg	A-S10G	LM9		
AC-44200	AlSi12			3.2382	GD-AlSi12						
AW-6082	AlMgSi1			3.2315	AlMgSi1	A-SGM0.7/6082	H30			4212	AA6082
Graphite	N3		AlSi17Cu5						ADC14		
	N11	CC331G		2.0940.01	CuAl10Fe	CuAl10Fe	AB1			5710	C95200
		CC333G		2.0975.01	CuAl10Ni	CuAl10Ni5Fe5	AB2			5716	C95500
			CuNi10Fe1Mn	2.0872	CuNi10Fe1Mn	CuNi10Fe1Mn	CN102			5667	C70600
					CuNi10Zn45						
			CW408J	2.0790	CuNi18Zn19Pb	CuNi18Zn19Pb1					C76300
		CW352H		2.1176	CuPb10Sn	CuSn10Pb10	LB2			5640	C93700
		CC480K		2.1050.01	CuSn10	CuSn10	CT1			5443	C90700
				2.1087	CuSn10Zn					5458	C90500
		CW452K	CuSn6	2.1020	CuSn6	CuSn6	PB103	C5191		5428	C51900
		CW502L	CuZn15	2.0240	CuZn15	CuZn15	CZ102	C2300		5112	C23000
CW706R	CuZn28Sn1	2.0470	CuZn28Sn1	CuZn29Sn1				5220	C44300		
X-Heads	CW508L	CuZn37	2.0321	CuZn37	CuZn37	CZ108			5150	C27200	
	CW717R	CuZn38Sn1	2.0530	CuZn38Sn1						C46400	
	CW614N	CuZn39Pb3	2.0401	CuZn39Pb3	CuZn39Pb3	CZ121			5170	C38500	
	CW612N	CuZn40Pb2	2.0402	CuZn40Pb2	CuZn39Pb2	CZ120			5168	C37800	
	CW622N	CuZn44Pb2	2.0410	CuZn44Pb2		CZ104			5272	C68700	
Minimaster Plus											

U.N.E./ I.H.A.	AISI / ASTM	GOST	CSN	Misc. Brands	Condition	Structure	
	A48 25 B	Sc 15	422 415			Grey cast iron (GCI)	Universal
	A48 30 B	Sc 20	422 420			Grey cast iron (GCI)	
	A48 35 B	Sc 25	422 425			Grey cast iron (GCI)	
	A48 50 B	Sc 35				Grey cast iron (GCI)	
	G 3500					Grey cast iron (GCI)	
	Grade 350					Compacted graphite iron (CGI)	Steel and cast iron
	Grade 400					Compacted graphite iron (CGI)	
	Grade 400-15					Compacted graphite iron (CGI)	
	Grade 450					Compacted graphite iron (CGI)	
	Grade 500					Compacted graphite iron (CGI)	
	A220 60004				Tempered	Malleable cast iron (MCI)	Steel and cast iron
						Nodular cast iron (SGI)	
FGE 38-17	60-40-18	Vc 42-12	422 304			Nodular cast iron (SGI)	
	60-40-18	Vc 42-12				Nodular cast iron (SGI)	
FGE 50-7	A536, 80-55-06	Vc 50-2	422 305			Nodular cast iron (SGI)	
FGE 60-2	A476, 80-60-03	Vc 60-2	422 306			Nodular cast iron (SGI)	Stainless steel and S-materials
FGE 70-2	A536, 100-70-03	Vc 70-2				Nodular cast iron (SGI)	
	1600/1300/-					Austempered ductile iron (ADI)	
	1050/700/7					Austempered ductile iron (ADI)	
	1200/850/4					Austempered ductile iron (ADI)	
	1400/1100/1					Austempered ductile iron (ADI)	Stainless steel and S-materials
	850/550/10					Austempered ductile iron (ADI)	
	A436 Type 2			Ni-Resist 2		Austenitic lamellar cast iron	
	A436 Type 3			Ni-Resist 3		Austenitic lamellar cast iron	
	A436 Type 1			Ni-Resist 1		Austenitic lamellar cast iron	
				Nodumag		Austenitic nodular cast iron	Stainless steel and S-materials
	A436 Type D-2			Ni-Resist D-2		Austenitic nodular cast iron	
	A439 Type D-2M			Ni-Resist D-2M		Austenitic nodular cast iron	
	A436 Type D-3			Ni-Resist D-3		Austenitic nodular cast iron	
	A439 Type D-5			Ni-Resist D-5		Austenitic nodular cast iron	
							Non ferrous
							Hard
	B26						
	A380						
	AZ61A						
	AZ80A						
	AMS 4442						Graphite
	B85						
	A413.2						
	B390.0						Graphite
	CA952	BrA9ZH3L					
	CA955	BrA10ZH4N4L					
	CA937						X-Heads
		BrOF6.5-0.15					
		L90					
		LOMsh70-1-0.05					Minimaster Plus
		LO60-1					
		LAMsh77-2-0.05					

Universal	SMG	EN	EN-Nr	W.-Nr	DIN	AFNOR	BS	UNI	JIS	SS	UNS	
	S1											
	S2											
Steel and cast iron	S3	NiMo30 NiMo16Cr15W		2.4810 2.4819							N10002 N10276	
		NiCr19Fe19Nb5Mo3 NiCr20TiAl		2.4668 2.4669 2.4631							N07718 N07750 N07080	
		NiCr19Co18Mo4Ti3Al3 NiCr20Co13Mo4Ti3Al			2.4654						N07500 N07001	
		S11			3.7024							R54620
		S12	TiAl6V4		3.7164							R56320 R56400
Stainless steel and S-materials	S13				TV10Fe2Al3							
	H3	16 MnCr 5	1.7131	1.7131	16 MnCr 5	16 MC 5	527 M 17	16 MnCr 5	SCR 415	2511	G51170	
	H5	C 67S	1.1231	1.1231	Ck 67	XC 68	060 A 67	C 70			1770	G10700
		C 75S	1.1248	1.1248	Ck 75	XC 75	060 A 78	C 75			1774, 1778	G10780
		C 100S	1.1274	1.1274	Ck 101		060 A 96		SUP 4		1870	G10950
		C 105U	1.1545	1.1545	C 105 W1	Y1 105		C 100 KU			1880	
	H7	55 Cr 3	1.7176	1.7176	55 Cr 3	55 C 3	527 A 60	55 Cr 3	SUP 9 (A)	2253	G51550	
		42 CrMo 4	1.7225	1.7225	42 CrMo 4	42 CD 4	708 M 40	42 CrMo 4	SCM 440 (H)	2244	G41400	
		107 CrV 3	1.2210	1.2210	115 CrV 3	100 C 3		107 CrV 3 KU				T61202
		90 MnCrV 8	1.2842	1.2842	100 MnCrW 4	90 MWCV 5	BO 1	95 MnWCr 5 KU	SKS 3	2140	T31501	
Hard	H8	100 Cr 6	1.3505	1.3505	100 Cr 6	100 C 6	BO 2	90 MnVCr 8 KU			T31502	
		X 40 CrMoV 5 1	1.2344	1.2344	X 40 CrMoV 5 1	Z 40 CDV 5	534 A 99	100 Cr 6	SUJ 2	2258	G51986	
		X 100 CrMoV 5	1.2363	1.2363	X 100 CrMoV 5 1	Z 100 CDV 5		X 40 CrMo 5 1 1 KU	SKD 61	2242	T20813	
		X 155 CrVMo 12 1		1.2379	X 155 CrVMo 12 1	Z 160 CDV 12	BD 2	X 100 CrMoV 5 1 KU	SKD 12	2260	T30102	
			1.2436	X 210 CrW 12			X 155 CrVMo 12 1 KU	SKD 11			T30402	
			1.2601	X 165 CrMoV 12			X 215 CrW 12 1 KU	SKD 2	2312			
			1.2713	55 NiCrMoV 6	55 NCDV 7		X 165 CrMoW 12 KU		2310			
	HS 6-5-2-5	1.3243	1.3243	S 6-5-2-5	Z 85 WDKCV 06-05-05-04-02		HS 6-5-2-5	SKT 4			T61206	
	HS 2-10-1-8	1.3247	1.3247	S 2-10-1-8	Z 110 DKCWW 09-08-		HS 2-9-1-8	SKH 55	2723			
	HS 18-0-1	1.3355	1.3355	S 18-0-1	Z 80 WCV 18-04-01	BM 42	HS 18-0-1	SKH 51			T11342	
Plastic and cfrp	H11	X 20 Cr 13	1.4021	1.4021	X 20 Cr 13	Z 20 C 13	BT 1	HS 18-0-1	SKH 2		T12001	
		X 70 CrMo 15	1.4109	1.4109	X 65 CrMo 14	Z 70 D 14						
		X 90 CrMoV 18	1.4112	1.4112	X 90 CrMoV 18	Z 2 CND 18 05	420 S 37	X 20 Cr 13	SUS 420 J 1	2303	S42000	
		X 105 CrMo 17	1.4125	1.4125	X 105 CrMo 17	Z 100 CD 17	409 S 19	X CrTi 12	SUS 440 A SUS 440 B SUS 440 C	2327	S44002 S44003 S44004	
Graphite	H12	X 4 CrNiCuNb 16 4	1.4540	1.4540	X 4 CrNiCuNb 16 4						S15500	
		X 5 CrNiCuNb 16 4	1.4542	1.4542	X 5 CrNiCuNb 16 4				SUS 630		S17400	
		X 5 CrNiCuNb 16 4	1.4542	1.4542	X 5 CrNiCuNb 16 4				SUS 630		S17400	
		X 7 CrNiAl 17 7	1.4568	1.4568	X 7 CrNiAl 17 7	Z 9 CAN 17.7	301 S 81	X 7 CrNiAl 17 7	SUS 631	2388	S17700	
		X 8 CrNiMoAl 15 7 5	1.4574	1.4574	X 8 CrNiMoAl 15 7 5						S15700	
		X 6 NiCrTiMoV 25 15	1.4980	1.4943	X 4 NiCrTi 25 15	Z 6 NCTDV 25.15	HR 51		SUH 660	2570	S66286	
		X 2 NiCoMo 18 8 5	1.6359	1.6359	X 2 NiCoMo 18 8 5		S 162				K92890	
		X 2 NiCoMoTi 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120	
		X 2 NiCoMoTi 18 9 5	1.6358	1.6358	X 2 NiCoMoTi 18 9 5	Z 2 NKD 19-09					K93120	
		X 2 NiCoMoTi 18 12 4	1.6356	1.6356	X 2 NiCoMoTi 18 12 4						K93160	
H21	X 120 Mn 12	1.3401	1.3401	X 120 Mn 12	Z 120 M 12	BW 10		SC MnH 1	2183			
	H31	EN-GJN-HV520	0.9620	0.9620	G-X330 NiCr 4 2	FB Ni4 Cr2 BC	Grade 2 A			05 12-00	F45001	
		EN-GJN-HV550	0.9625	0.9625	G-X260 NiCr 4 2	FB Ni4 Cr2 HC	Grade 2 B			05 13-00	F45000	
		EN-GJN-HV600(XCr11)	0.9630	0.9630	G-X300 CrNiSi 9 5 2	FB Cr9 Ni5	Grade 2 C, D, E		04 57-00	F45003		

U.N.E./ I.H.A.	AISI / ASTM	GOST	CSN	Misc. Brands	Condition	Structure
				Discalloy	Precipitation hardened	
				Haynes 25		
				Stellite 21		
		KHN65MV		Hastelloy C		
				Hastelloy C-276		
				IN 100		
				Inconel 718		
				Inconel X-750	Solution annealed	
				Nimonic 80A		
				René 41		
				Udimet 500		
				Waspalloy		
	AMS 4919			Ti	Commercially pure	Ti (α)
	AMS 4943			Ti 6-2-4-2	Annealed	Ti (α)
	AMS 4920, Grade 5	VT6		Ti 3Al-2.5V (grd 9)	Annealed	Ti (α + β)
	AMS 4986			Ti 6Al-4V	Annealed	Ti (α + β)
				Ti 10V-2Fe-3Al	Annealed	Ti (β)
F.1516	5115	12KHN2	14 220		Case hardened	
F.5103	1070	70			Quenched & Tempered	
F.5107	1078, 1080	75			Quenched & Tempered	
F.5117	1095				Quenched & Tempered	
F.5118	W1	U10A			Quenched & Tempered	
	S1	5KHV2SF			Quenched & Tempered	
	5155				Quenched & Tempered	
F.1252	4142, 4140	38HM	15 142		Quenched & Tempered	
F.520L	L2	11KHF			Quenched & Tempered	
F.5220	O1	9KHV/G			Quenched & Tempered	
	O2	9G2F			Quenched & Tempered	
F.5230	52100	SHKH15	14 109		Quenched & Tempered	
F.5318	H13	4KH5MF1S			Quenched & Tempered	
F.5227	A2	9KH5VF			Quenched & Tempered	
F.5211	D2	KH12MF			Quenched & Tempered	
F.5213		KH12			Quenched & Tempered	
		KH12MF			Quenched & Tempered	
F.520.S	L6	5KHNM			Quenched & Tempered	
F.5613	M35	R6M5K5			Quenched & Tempered	
	M42	R2AM9K5			Quenched & Tempered	
	T1	R18			Quenched & Tempered	
F.5261	420	20KH13	17 022		Quenched & Tempered	Martensitic
	440 A				Quenched & Tempered	Martensitic
	440 B	95KH18			Quenched & Tempered	Martensitic
	440 C	95KH18			Quenched & Tempered	Martensitic
	XM-12			15-5 PH	H900	Martensitic
	SAE 630			17-4 PH	H1025	Martensitic
	SAE 630			17-4 PH	H900	Martensitic
	AMS 5528	09KH17N7YU1		17-7 PH	TH1050	Martensitic
	632			PH 15-7 Mo	TH1050	Martensitic
	660			A286	Precipitation hardened	Austenitic
	AMS 6512			Marage 250	Precipitation hardened	Martensitic
	AMS 6521			Marage 300	Precipitation hardened	Martensitic
	AMS 6521			Marage 300	Precipitation hardened	Martensitic
	AMS 6515			Marage 350	Precipitation hardened	Martensitic
	A128 Grade A			Hadfield		
	A532 IB (NiCr-LC)			Ni-Hard 2		White cast iron
	A532 IA (NiCr-HC)			Ni-Hard 1		White cast iron
	A532 ID (Ni-HiCr)			Ni-Hard 4		White cast iron

Universal

Steel and cast
ironStainless steel
and S-materialsStainless steel
and S-materials

Non ferrous

Hard

Graphite

X-Heads

Minimaster Plus

This work is published with the understanding that Seco Tools and its editors are supplying information aimed to present a general orientation and direction of metal cutting and related sciences. If professional services are required for specific applications, the assistance of an appropriate professional should be acquired. The information is provided "as is"; Seco Tools and its editors disclaim all representations and warranties, express or implied, of any kind, including, without limitations, any warranties of merchantability, fitness for a particular purpose, title, or non-infringement. In no event will Seco Tools or its editors be liable to any party for any direct, indirect, special or other consequential damages for any use of the information, even if Seco Tools or its editors are advised of the possibility of such damage. The information provided herein is for reference purposes only. Actual prices, specifications, and product descriptions are finalized at the time of sale and may vary by location. The information provided herein is subject to change without prior notice.

secotools.com
ST20246803 GB
© Seco Tools AB, 2025.
All rights reserved.

Technical specifications are subject to
change without notice.

