

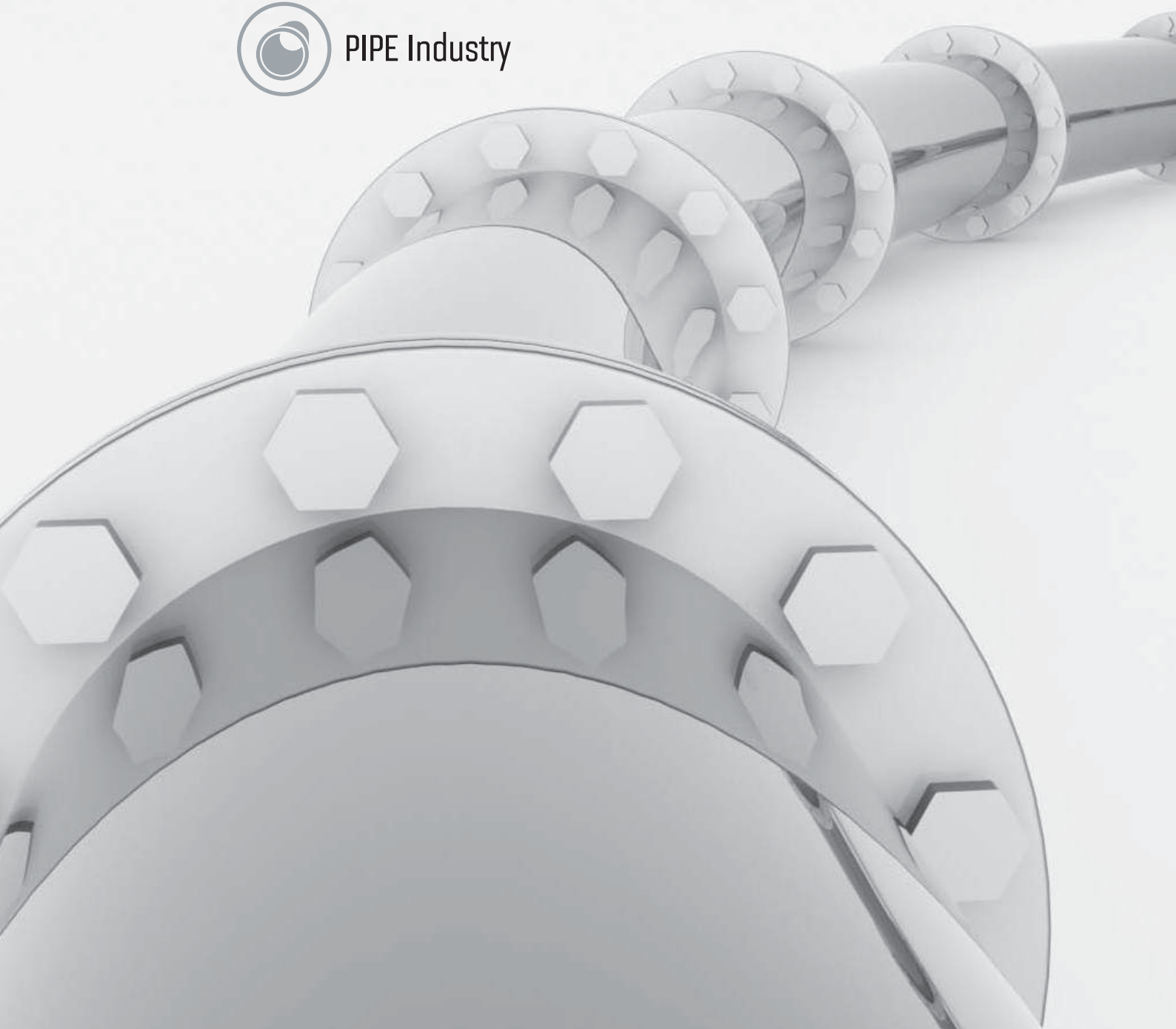
Technical Information **KORLOY**

PIPE Industry

Tools for Pipe Processing / Application Example / Product Details



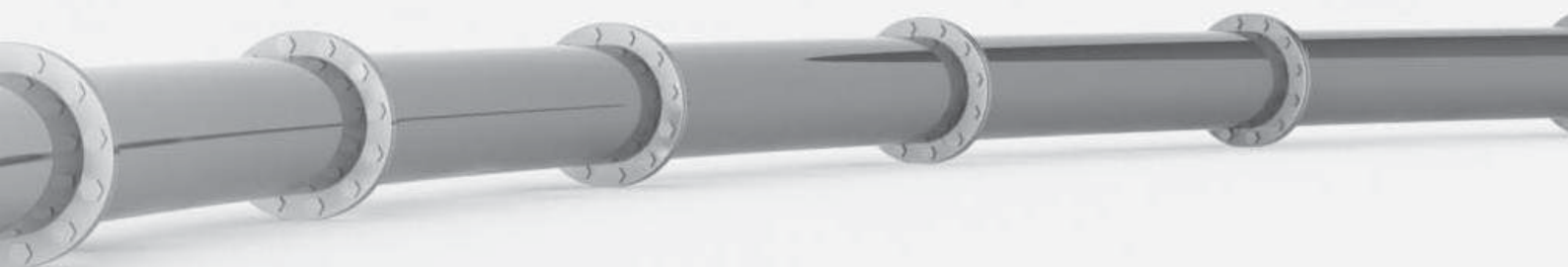
PIPE Industry



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PIPE Industry

Part 1

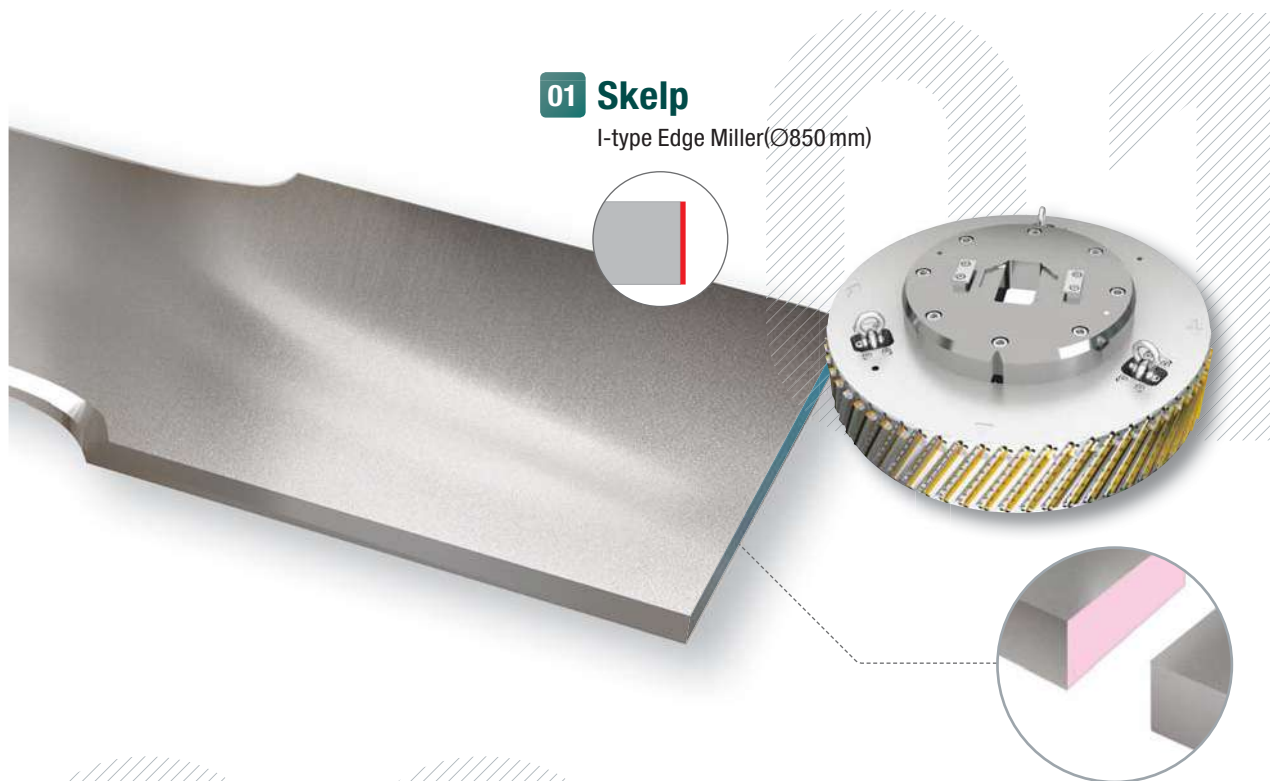
Tools for Pipe Processing

- 
- 01 _ Edge Milling
 - 02 _ Long Seam Milling
 - 03 _ Bead Removal
 - 04 _ End Face, Chamfer
 - 05 _ Cutting-off

Edge Milling

01 Skelp

I-type Edge Miller(Ø850 mm)



02 Skelp

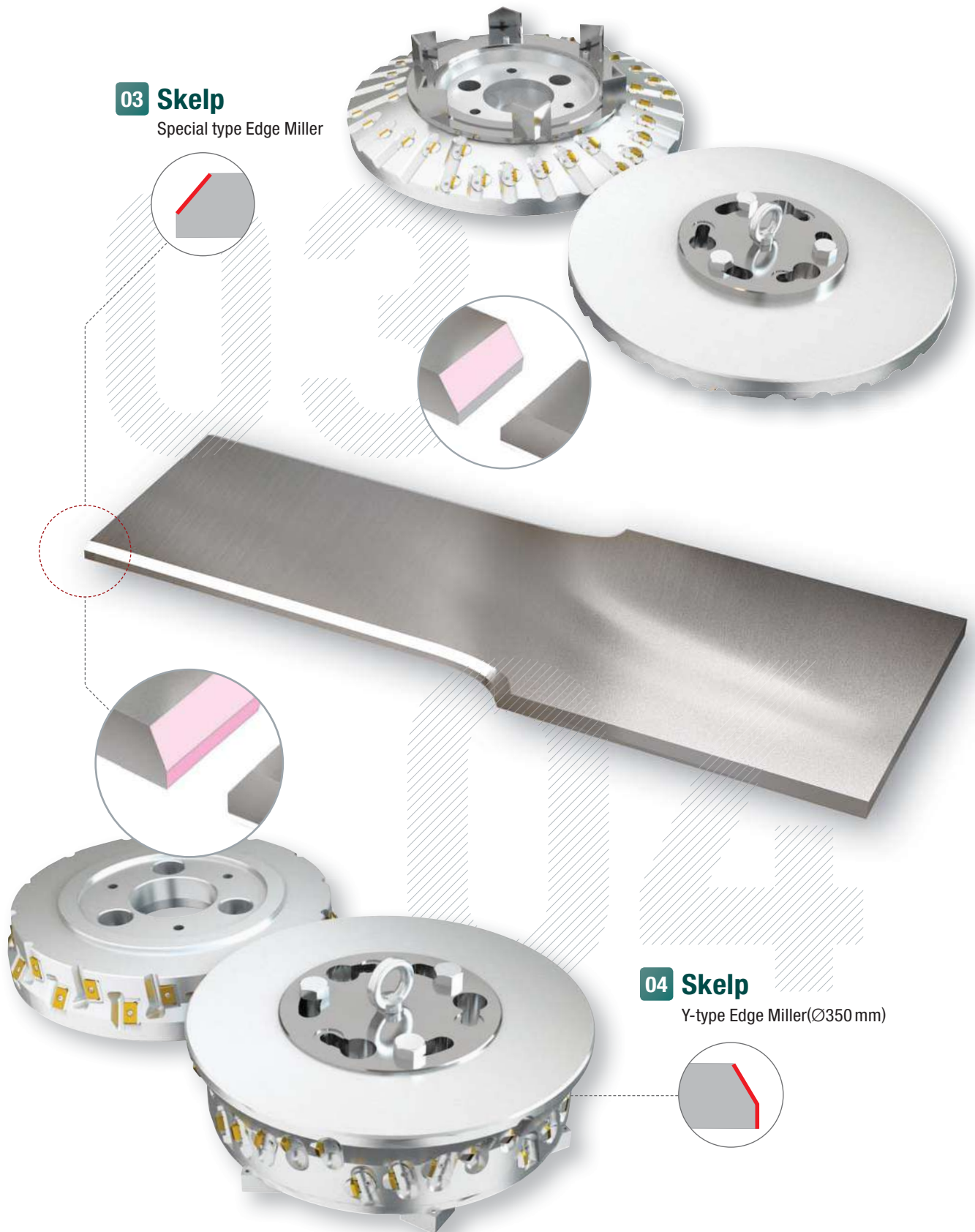
X-type Edge Miller(Ø500 mm)



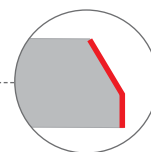


Edge Milling

03 Skelp Special type Edge Miller



04 Skelp Y-type Edge Miller(Ø350 mm)

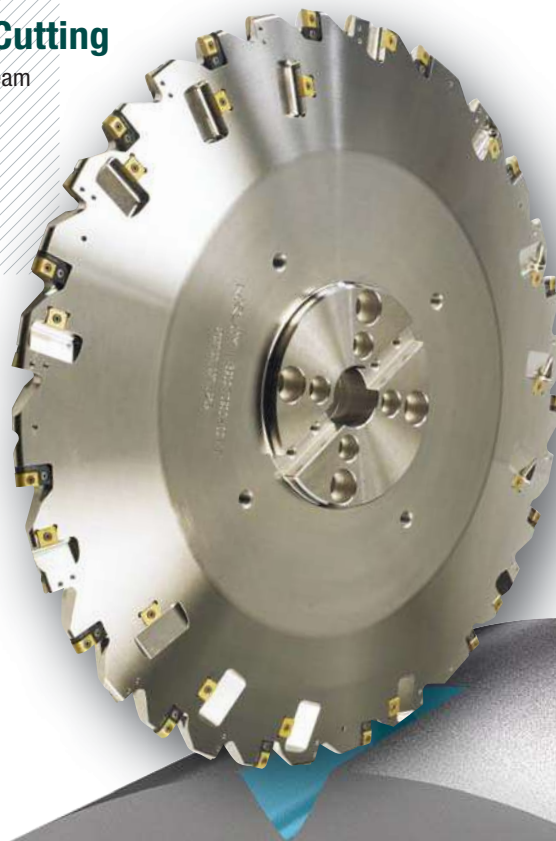




Long Seam Milling

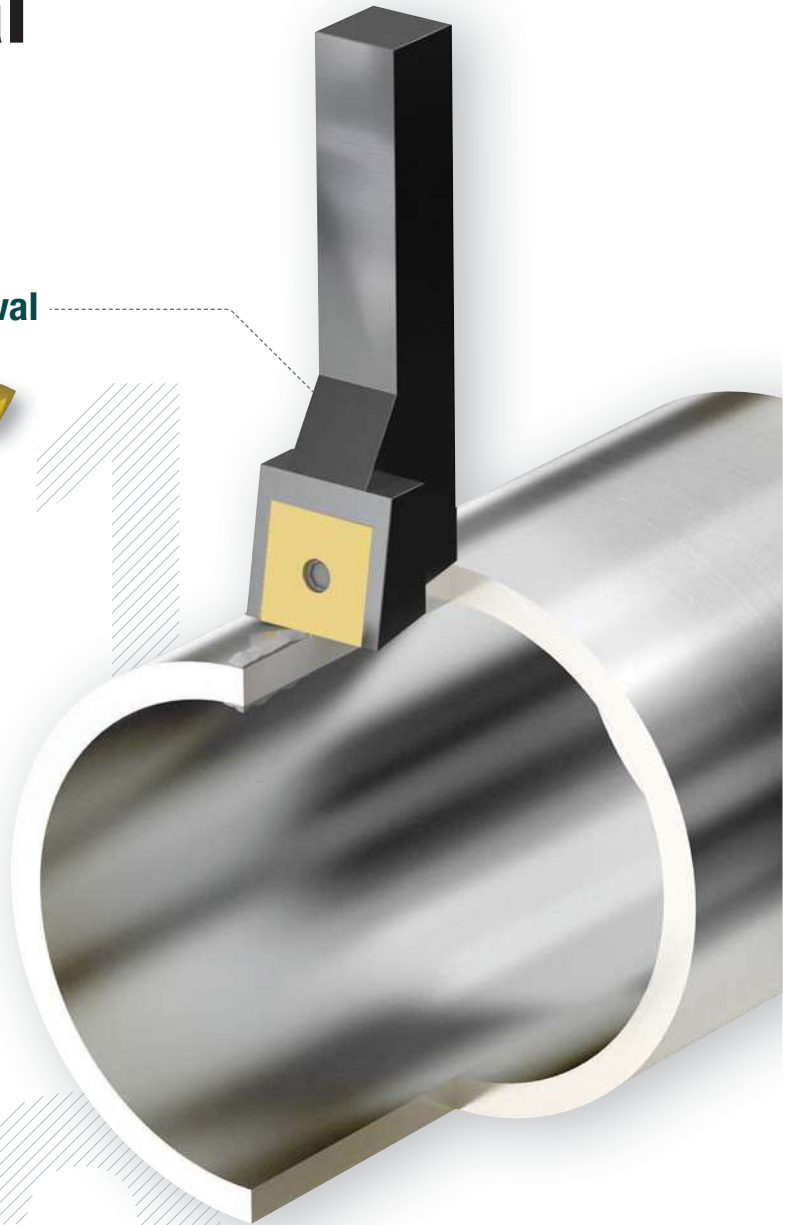
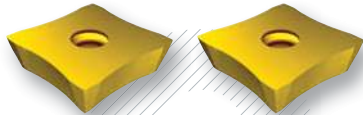
01 Weld Removal and Cutting

Milling cutter with special long Seam

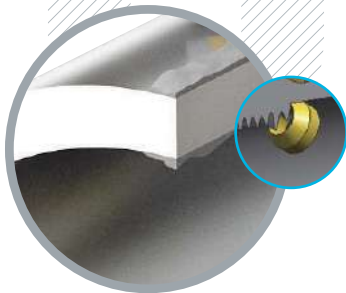


Bead Removal

01 Outer Bead Removal



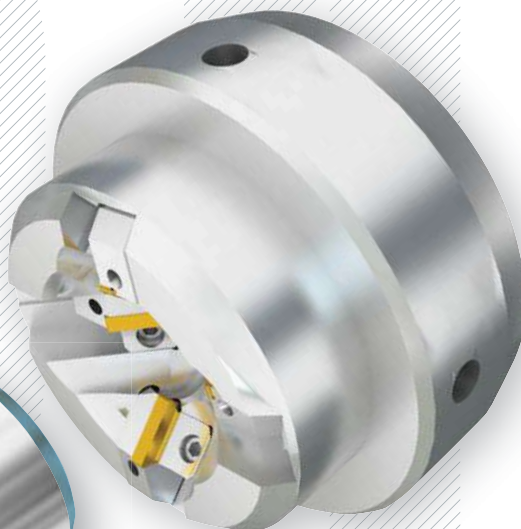
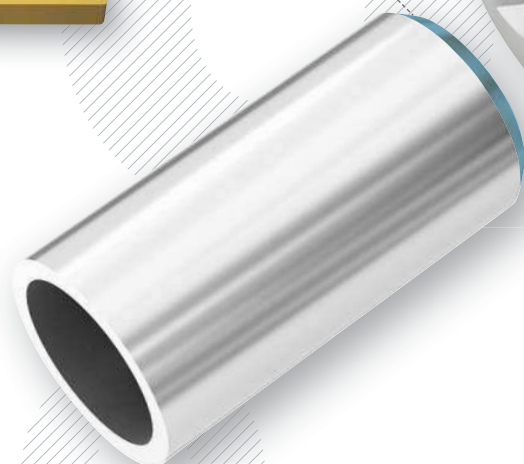
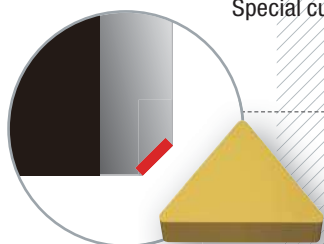
02 Inner Bead Removal



End Face, Chamfer

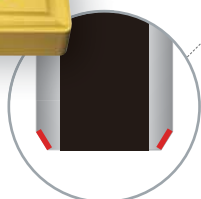
01 Chamfer

Special cutters for chamfering



02 Chamfer

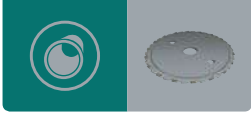
Special cutters for chamfering



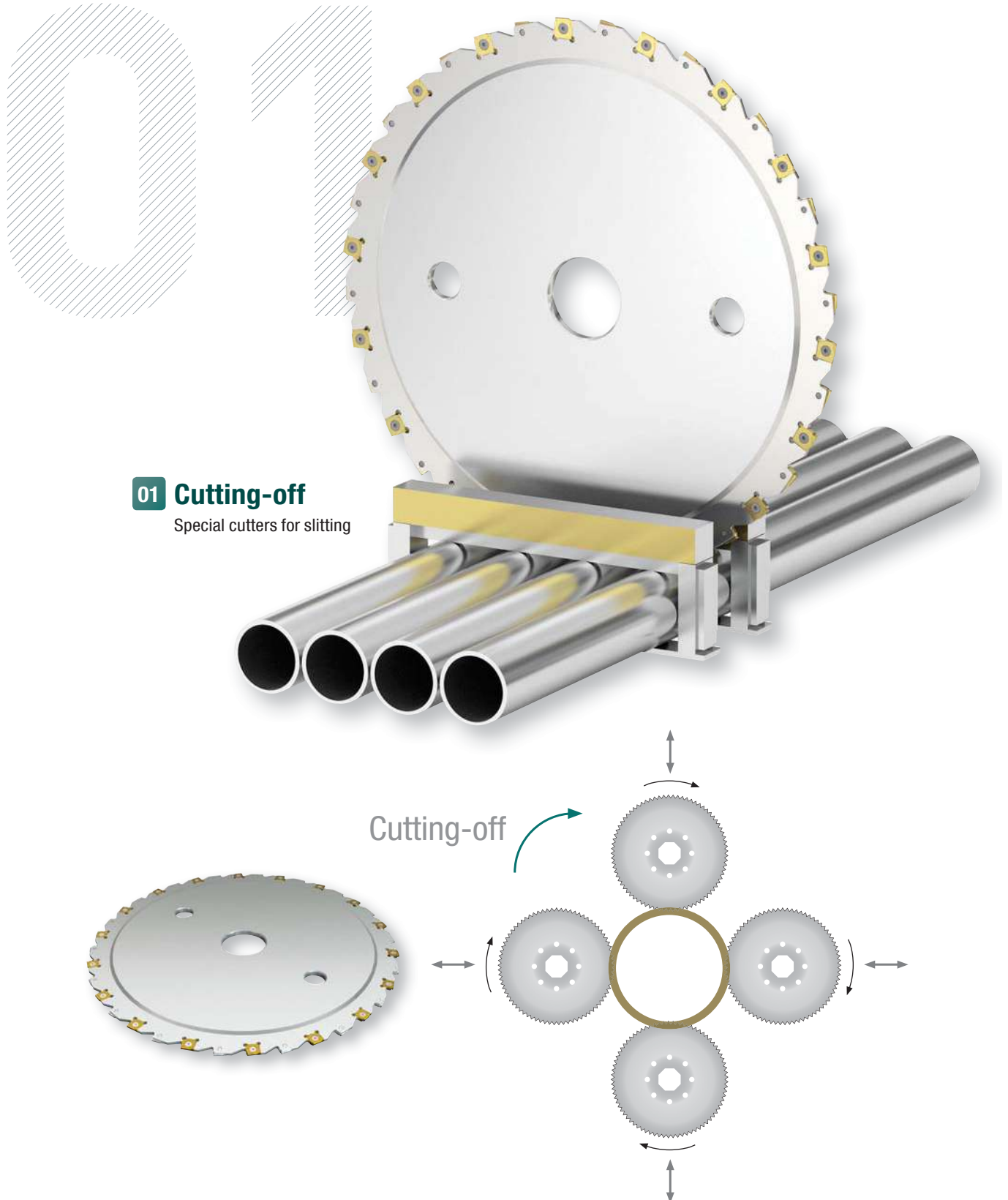


End Face, Chamfer





Cutting-off



PIPE Industry

Part 2

Application Example



01 _ Edge Milling

02 _ End Face, Chamfer

Edge Milling

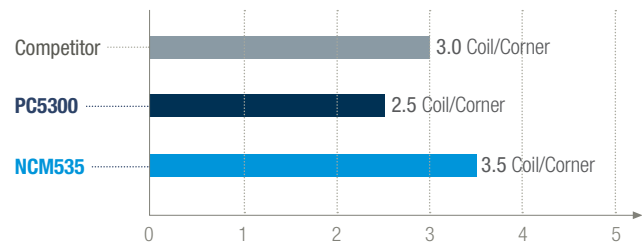
Application Example 1

Cutting conditions

Insert	TPEW3106ZS-IN	
Grade	NCM535, PC5300	
Workpiece	API X83 (Ø850, 65t)	
Application	Steel Pipe t : 12.5 mm	
Cutting Condition	Cutting speed	vc = 152 (m/min)
	Feed	fz = 0.4 (mm/t)
	Depth of cut	ap = 6 ~ 12 (mm)
Tool failure	Wear	



[Tool life]



Edge Milling

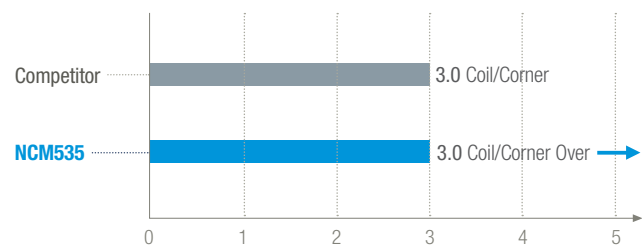
Application Example 2

Cutting conditions

Insert	TPEW3106ZS-IN	
Grade	NCM535	
Workpiece	API X52 (Ø650, 68t)	
Application	Steel Pipe t : 12.5 mm	
Cutting Condition	Cutting speed	vc = 165 (m/min)
	Feed	fz = 0.4 (mm/t)
	Depth of cut	ap = 6 ~ 12 (mm)
Tool failure	Wear	



[Tool life]





Edge Milling

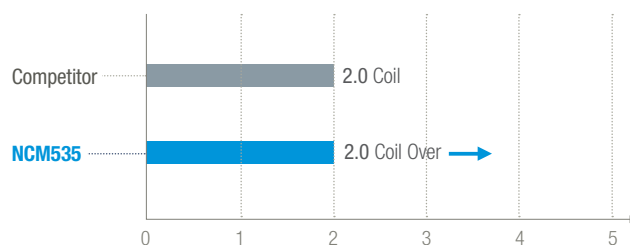
Application Example 3

Cutting conditions

Insert		LNMN500604
Grade		NCM535
Workpiece		PL-52-LHRE 145660
Application		Oil Pipeline, Pipe t : 9.15 mm
Cutting Condition	Cutting speed	vc = 140 (m/min)
	Feed	fz = 0.35 (mm/t)
	Depth of cut	ap = 3.2 ~ 5.9 (mm)
Tool failure		Wear



[Tool life]



Edge Milling

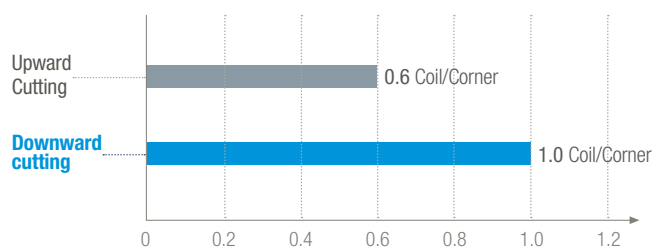
Application Example 4

Cutting conditions

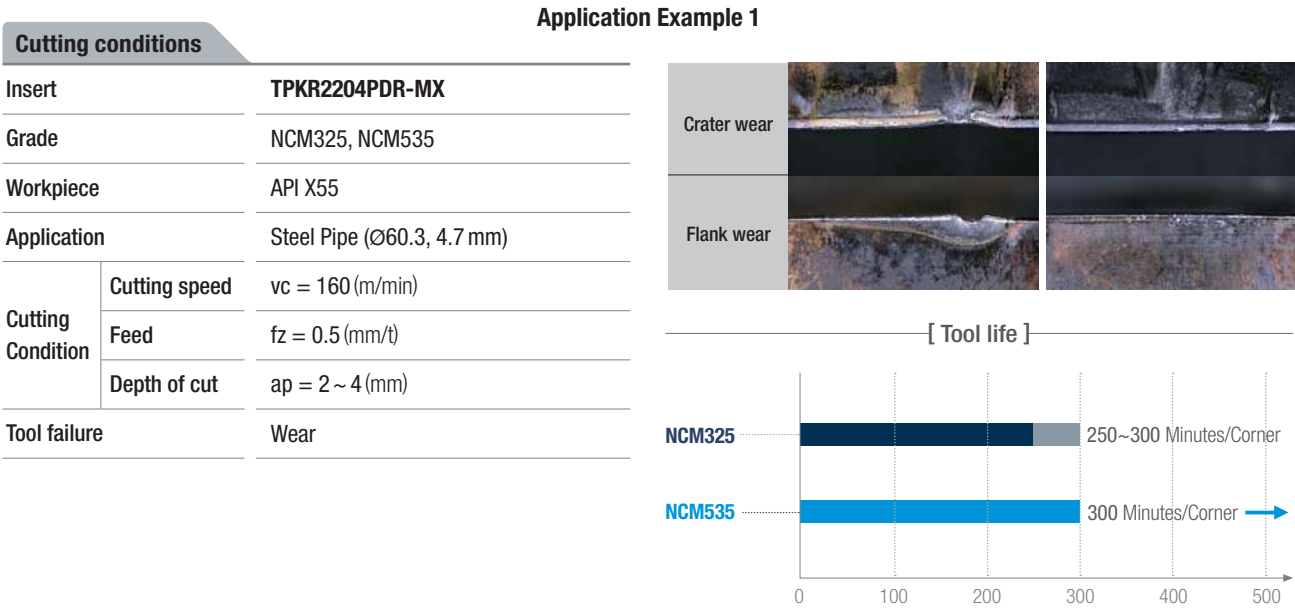
Cutter		ECX500R-400502(BD)-1411
Insert		SEEW220603-LS
Grade		PC5300
Workpiece		STS304
Application		Spiral pipe t : 12.5 mm
Cutting Condition	Cutting speed	vc = 120 (m/min)
	Feed	vf = 68 (mm/min)
	Depth of cut	ap = 12.5 (mm), ae = 6 (mm)
Tool failure		chipping



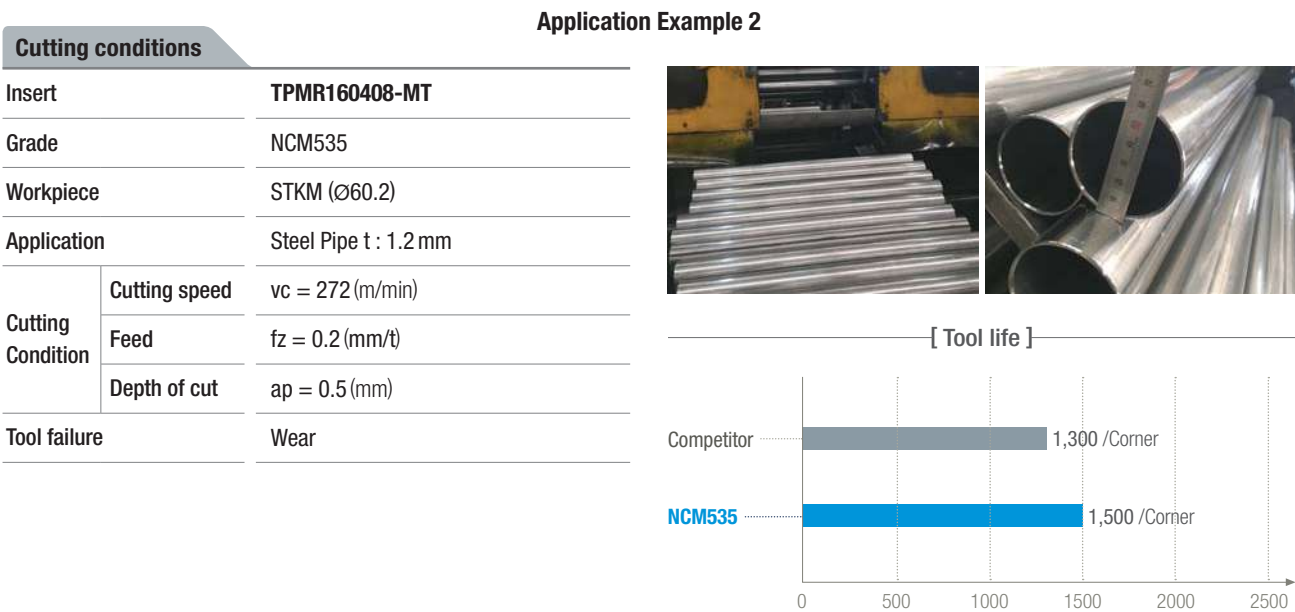
[Tool life]



End Facing



End Facing





PIPE Industry

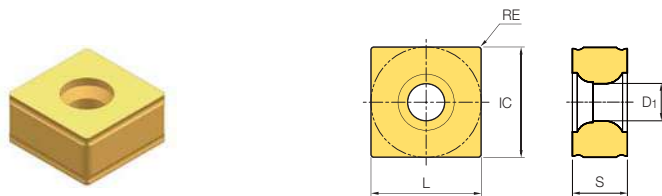
Part 3

Product Details

- 01 _ Edge Milling Inserts
- 02 _ Long Seam Milling Inserts
- 03 _ Bead Removal Inserts
- 04 _ End Face, Chamfer Inserts

Edge Milling Inserts

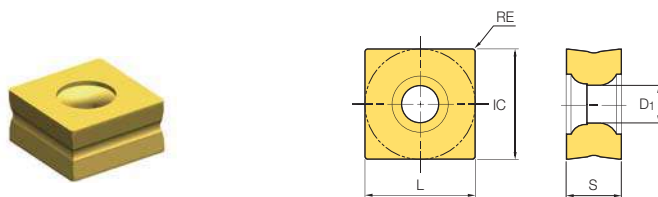
SNHQ -SCB



(mm)

Designation	IC	S	L	D1	RE
SNHQ150708E-SCB	15.875	7.94	15.875	5.8	0.8

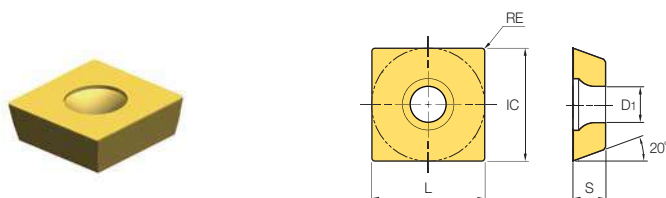
KES



(mm)

Designation	IC	S	L	D1	RE
KES1507-MXR	15.875	7.94	15.875	5.8	0.6

SEEW



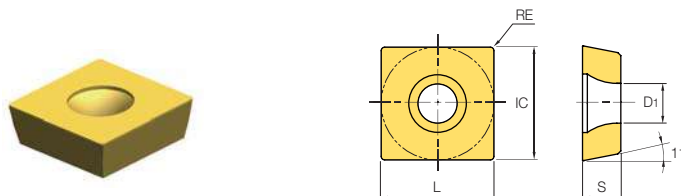
(mm)

Designation	IC	S	L	D1	RE
SEEW220603-LS	22	6.35	22	5.8	0.3



Edge Milling Inserts

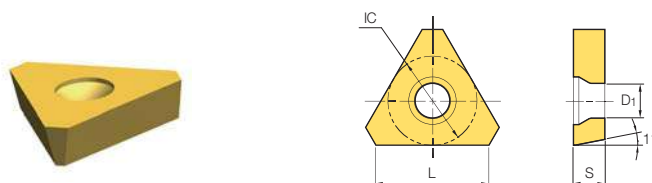
SPEW



(mm)

Designation	IC	S	L	D1	RE
SPEW190606-BY	19	6.35	19	6.6	0.6

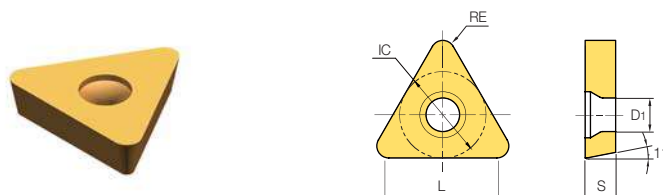
TP□W



(mm)

Designation	IC	S	L	D1	RE
TPEW3106ZS	18	6.35	22.5	7	-
TPEW33ZZSN-VA	19.05	7	24	6.7	-
TPGW3306Z-CX	19.05	7	24	6.7	-

TP□W

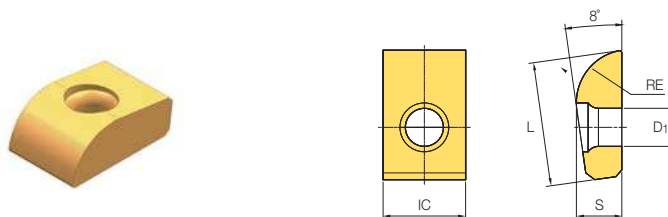


(mm)

Designation	IC	S	L	D1	RE
TPEW33M715S	18.953	7	27.6	6.7	1.5
TPEW33M726S	19.05	7	24	6.7	2.6

Long Seam Milling Inserts

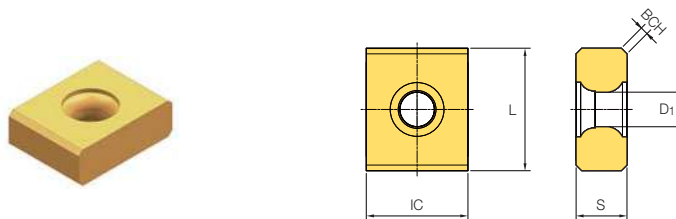
LNEX



(mm)

Designation	IC	S	L	D1	RE
LNEX190880ULP	12.7	7.55	19.05	5.8	8

LNE



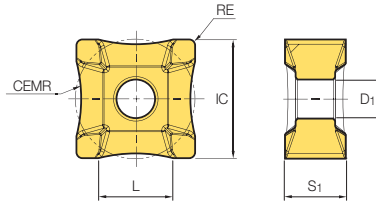
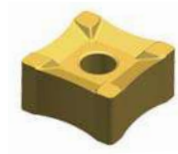
(mm)

Designation	IC	S	L	D1	BCH
LNE64-C08	14.29	6.35	19.05	5.8	1.131



Bead Removal Inserts

SNMG (For External)

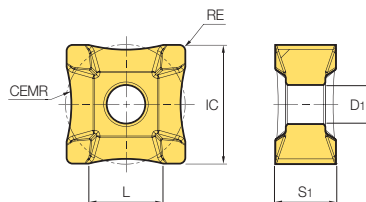
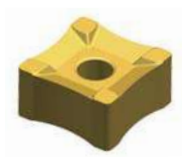


(mm)

	Designation	IC	S1	L	CEMR	D1	RE
SNMG	150708-R07	15.875	8.15	10	7	5.16	0.8
	150708-R09	15.875	8.15	10	9	5.16	0.8
	150708-R10	15.875	8.15	10	10	5.16	0.8
	150708-R11	15.875	8.15	10	11	5.16	0.8
	150708-R12	15.875	8.15	10	12	5.16	0.8
	150708-R13	15.875	8.15	10	13	5.16	0.8
	150708-R15	15.875	8.15	10	15	5.16	0.8
	150708-R18	15.875	8.15	10	18	5.16	0.8
	150708-R20	15.875	8.15	10	20	5.16	0.8
	150708-R22	15.875	8.15	10	22	5.16	0.8
	150708-R25	15.875	8.15	10	25	5.16	0.8
	150708-R27	15.875	8.15	10	27	5.16	0.8
	150708-R30	15.875	8.15	10	30	5.16	0.8
	150708-R35	15.875	8.15	10	35	5.16	0.8
	150708-R40	15.875	8.15	10	40	5.16	0.8
	150708-R45	15.875	8.15	10	45	5.16	0.8
	150708-R50	15.875	8.15	10	50	5.16	0.8
	150708-R55	15.875	8.15	10	55	5.16	0.8
	150708-R60	15.875	8.15	10	60	5.16	0.8
	150708-R65	15.875	8.15	10	65	5.16	0.8
	150708-R70	15.875	8.15	10	70	5.16	0.8
	150708-R75	15.875	8.15	10	75	5.16	0.8
	150708-R80	15.875	8.15	10	80	5.16	0.8
	150708-R90	15.875	8.15	10	90	5.16	0.8
	150708-R100	15.875	8.15	10	100	5.16	0.8
	190708-R09	19.05	8.35	12	9	8	0.8
	190708-R10	19.05	8.35	12	10	8	0.8
	190708-R11	19.05	8.35	12	11	8	0.8
	190708-R12	19.05	8.35	12	12	8	0.8
	190708-R13	19.05	8.35	12	13	8	0.8
	190708-R15	19.05	8.35	12	15	8	0.8
	190708-R17	19.05	8.35	12	17	8	0.8
	190708-R18	19.05	8.35	12	18	8	0.8
	190708-R20	19.05	8.35	12	20	8	0.8
	190708-R22	19.05	8.35	12	22	8	0.8
	190708-R25	19.05	8.35	12	25	8	0.8

Bead Removal Inserts

SNMG (For External)



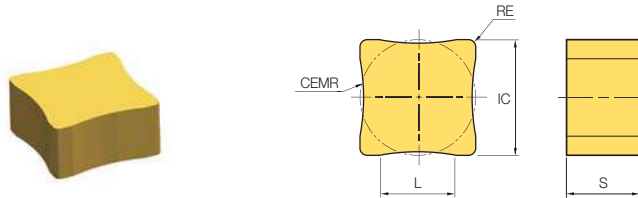
(mm)

	Designation	IC	S1	L	CEMR	D1	RE
SNMG	190708-R27	19.05	8.35	12	27	8	0.8
	190708-R30	19.05	8.35	12	30	8	0.8
	190708-R35	19.05	8.35	12	35	8	0.8
	190708-R40	19.05	8.35	12	40	8	0.8
	190708-R45	19.05	8.35	12	45	8	0.8
	190708-R50	19.05	8.35	12	50	8	0.8
	190708-R55	19.05	8.35	12	55	8	0.8
	190708-R60	19.05	8.35	12	60	8	0.8
	190708-R70	19.05	8.35	12	70	8	0.8
	190708-R75	19.05	8.35	12	75	8	0.8
	190708-R80	19.05	8.35	12	80	8	0.8
	190708-R85	19.05	8.35	12	85	8	0.8
	190708-R90	19.05	8.35	12	90	8	0.8



Bead Removal Inserts

SNU (For External)

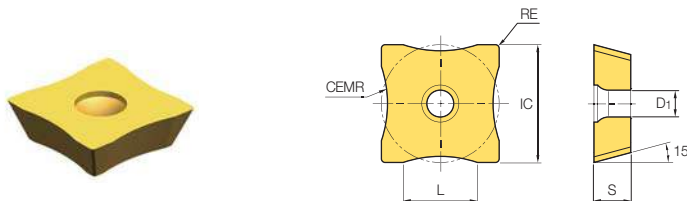


(mm)

Designation		IC	S	L	CEMR	RE
SNU	452-8R	12.7	7.94	8.5	8	0.8
	452-10R	12.7	7.94	8.5	10	0.8
	452-12R	12.7	7.94	8.5	12	0.8
	452-13R	12.7	7.94	8.5	13	0.8
	452-14R	12.7	7.94	8.5	14	0.8
	452-15R	12.7	7.94	8.5	15	0.8
	452-20R	12.7	7.94	8.5	20	0.8
	452-23R	12.7	7.94	8.5	23	0.8
	452-24R	12.7	7.94	8.5	24	0.8
	452-26R	12.7	7.94	8.5	26	0.8
	452-35R	12.7	7.94	8.5	35	0.8
	452-40R	12.7	7.94	8.5	40	0.8
	452-45R	12.7	7.94	8.5	45	0.8
	452-55R	12.7	7.94	8.5	55	0.8
	452-80R	12.7	7.94	8.5	80	0.8
	452-90R	12.7	7.94	8.5	90	0.8
	452-100R	12.7	7.94	8.5	100	0.8
	552-30R	15.875	7.94	10.875	30	0.8
	552-40R	15.875	7.94	10.875	40	0.8
	552-60R	15.875	7.94	10.875	60	0.8
	552-70R	15.875	7.94	10.875	70	0.8
	552-80R	15.875	7.94	10.875	80	0.8
	552-90R	15.875	7.94	10.875	90	0.8

Bead Removal Inserts

SDMX (For External)



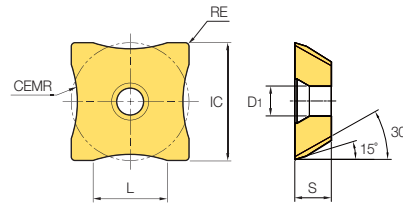
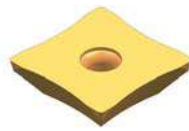
(mm)

Designation		IC	S	L	CEMR	D1	RE
SDMX	85-R16	25.4	7.94	16	16	5.8	0.8
	85-R17	25.4	7.94	16	17	5.8	0.8
	85-R18	25.4	7.94	16	18	5.8	0.8
	85-R20	25.4	7.94	16	20	5.8	0.8
	85-R25	25.4	7.94	16	25	5.8	0.8
	85-R30	25.4	7.94	16	30	5.8	0.8
	85-R40	25.4	7.94	17.4	40	5.8	0.8
	85-R50	25.4	7.94	17.4	50	5.8	0.8
	85-R60	25.4	7.94	17.4	60	5.8	0.8
	85-R70	25.4	7.94	17.4	70	5.8	0.8
	85-R80	25.4	7.94	17.4	80	5.8	0.8
	85-R90	25.4	7.94	17.4	90	5.8	0.8
	85-R100	25.4	7.94	17.4	100	5.8	0.8
	85-R170	25.4	7.94	17.4	170	5.8	0.8
	85-R200	25.4	7.94	17.4	200	5.8	0.8
	85-R300	25.4	7.94	17.4	300	5.8	0.8
	85-80R-0	25.4	7.94	23.8	80	5.8	0.8
	85-90R-0	25.4	7.94	23.8	90	5.8	0.8
	85-100R-0	25.4	7.94	23.8	100	5.8	0.8



Bead Removal Inserts

SDMX-DT (For External)

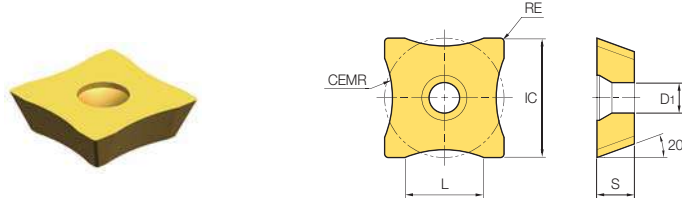


(mm)

	Designation	IC	S	L	CEMR	D1	RE
SDMX	85-R20-DT	25.4	7.94	17.4	20	5.8	0.8
	85-R25-DT	25.4	7.94	17.4	25	5.8	0.8
	85-R30-DT	25.4	7.94	17.4	30	5.8	0.8
	85-R40-DT	25.4	7.94	17.4	40	5.8	0.8
	85-R50-DT	25.4	7.94	17.4	50	5.8	0.8
	85-R80-DT	25.4	7.94	17.4	80	5.8	0.8

Bead Removal Inserts

SEGW (For External)



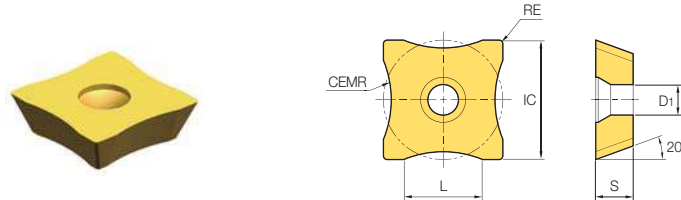
(mm)

Designation		IC	S	L	CEMR	D1	RE
SEGW	8R	25.4	7.94	10.5	8	6.5	0.8
	10R	25.4	7.94	11.7	10	6.5	0.8
	12R	25.4	7.94	11.7	12	6.5	0.8
	13R	25.4	7.94	14.8	13	6.5	0.8
	14R	25.4	7.94	14.8	14	6.5	0.8
	15R	25.4	7.94	14.8	15	6.5	0.8
	16R	25.4	7.94	14.8	16	6.5	0.8
	18R	25.4	7.94	16.4	18	6.5	0.8
	20R	25.4	7.94	16.4	20	6.5	0.8
	23R	25.4	7.94	16.8	23	6.5	0.8
	25R	25.4	7.94	16.8	25	6.5	0.8
	28R	25.4	7.94	16.8	28	6.5	0.8
	30R	25.4	7.94	16.8	30	6.5	0.8
	32R	25.4	7.94	16.8	32	6.5	0.8
	35R	25.4	7.94	16.8	35	6.5	0.8
	38R	25.4	7.94	16.8	38	6.5	0.8
	40R	25.4	7.94	17.4	40	6.5	0.8
	43R	25.4	7.94	17.4	43	6.5	0.8
	45R	25.4	7.94	17.4	45	6.5	0.8
	50R	25.4	7.94	17.4	50	6.5	0.8
	55R	25.4	7.94	17.4	55	6.5	0.8
	60R	25.4	7.94	17.4	60	6.5	0.8
	70R	25.4	7.94	17.4	70	6.5	0.8
	80R	25.4	7.94	17.4	80	6.5	0.8
	100R	25.4	7.94	17.4	100	6.5	0.8



Bead Removal Inserts

SEGW (For External)

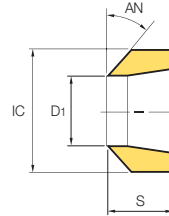


(mm)

	Designation	IC	S	L	CEMR	D1	RE
SEGW	54-R09-HS	15.875	6.35	10.875	9	5.6	0.8
	54-R10-HS	15.875	6.35	10.875	10	5.6	0.8
	54-R18-HS	15.875	6.35	10.875	18	5.6	0.8
	54-R20-HS	15.875	6.35	10.875	20	5.6	0.8
	54-R30-HS	15.875	6.35	10.875	30	5.6	0.8
	54-R35-HS	15.875	6.35	10.875	35	5.6	0.8
	54-R40-HS	15.875	6.35	10.875	40	5.6	0.8
	54-R43-HS	15.875	6.35	10.875	43	5.6	0.8
	54-R45-HS	15.875	6.35	10.875	45	5.6	0.8
	54-R50-HS	15.875	6.35	10.875	50	5.6	0.8
	54-R60-HS	15.875	6.35	10.875	60	5.6	0.8

Bead Removal Inserts

AR (For Internal)



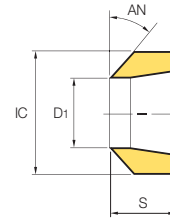
(mm)

Designation	IC	S	D1	AN
AR 4.5	8	4.5	5	42
5.5	10	4.5	5.5	42
5.7	10	4.5	5.7	42
6.5	10	4.5	6	48
7	13	6	6	42
7.5	13	6	6.5	42
8	13	6	7	42
8.5	13	6	7.5	42
9	13	6	8	42
9.5	13	6	8.5	42
10	19	10	9	42
10.5	19	10	9.5	42
11	19	10	10	42
11.5	19	10	10.5	42
12	19	10	11	42
13	19	10	11.5	42
15	22	12	13	36
15.5	22	12	13.5	36
16	22	12	14	36
17	22	12	15	36
18	28	12	14	36
19	35	12	17	36
20	35	12	17.5	36
21	35	12	18	36
22	35	12	19	36
23	35	12	20	36
24	35	12	21	36
25	35	12	22	36
26	35	12	23	36
27	35	12	24	36
28	35	12	25	36
30	45	15	27	36
31	45	15	28	36
32	45	15	28.5	36
33	45	15	29	36
34	45	15	30	36



Bead Removal Inserts

AR (For Internal)

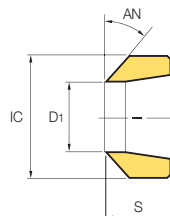


(mm)

	Designation	IC	S	D1	AN
AR	35	50	15	31	36
	36	50	15	32	36
	37	50	15	33	36
	38	50	15	34	36
	39	50	15	35	36
	40	50	15	36	36
	41	55	18	37	36
	42	55	18	38	36
	44	55	18	39	36
	46	55	18	40	36
	47	55	18	43	36
	52	65	20	46	36
	56	65	20	49	36

Bead Removal Inserts

AR (For Internal)



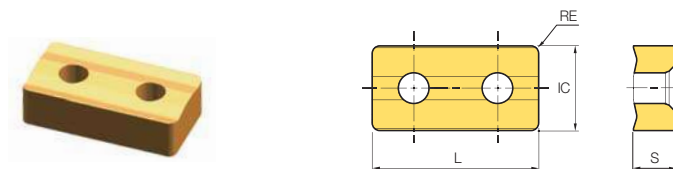
(mm)

Designation		IC	S	D1	AN
AR	4.5S	10	4.5	5	42
	6.5S	10	5	5.5	48
	9.5S	18.92	10	8.5	42
	13S	19	10	12	42
	16S	24	12	13.5	36
	19S	30	12	17	40
	25S	45	15	22	36
	26S	45	15	23	36
	27S	45	15	24	36
	30S	50	15	28	36
	34S	50	16.7	30	36
	40S	55	18	36	36
	50S	65	20	44	36



End Face, Chamfer Inserts

LNUX

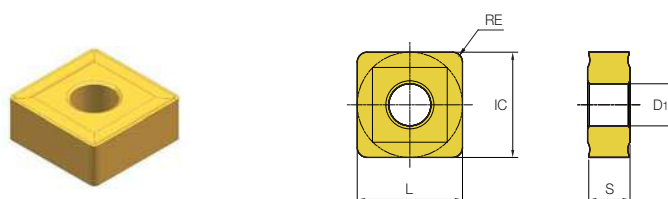


(mm)

	Designation	IC	S	L	D1	RE
LNUX	400624	25.4	6.35	40	9.2	2.4
	400924	25.4	9.52	40	9.2	2.4
	501224-BF	25.4	12.7	50	9.2	2.4
	601224-BF1	25.4	12.7	60	9.2	2.4
	701224EN	25.4	12.7	70	9.2	2.4

End Face, Chamfer Inserts

SNMG

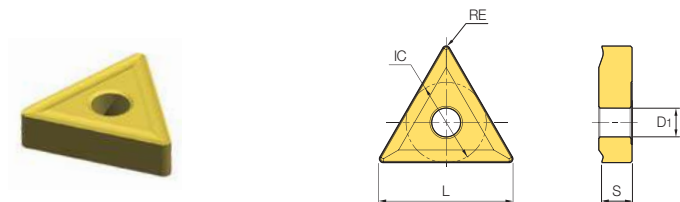


(mm)

	Designation	IC	S	L	D1	RE
SNMG	120408KP-B25	12.7	4.76	12.7	5.16	0.8
	150608KP-B25	15.875	6.35	15.875	6.35	0.8
	190608KP-B25	19.05	6.35	19.05	7.93	0.8
	190612KP-B25	19.05	6.35	19.05	7.93	1.2

End Face, Chamfer Inserts

TNMM

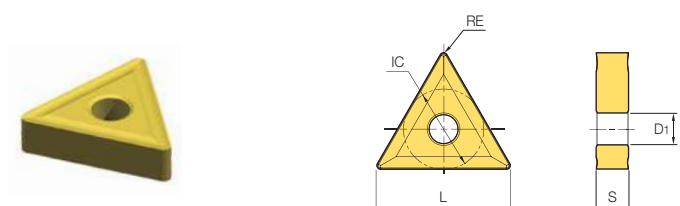


(mm)

	Designation	IC	S	L	D1	RE
TNMM	440912Z	25.4	9.52	40	9.12	1.2
	440912Z-B	25.4	9.52	40	9.12	1.2
	440912-SJ	25.4	9.52	40	9.12	1.2
	440912-X469	2.54	9.52	40	9.12	1.2

End Face, Chamfer Inserts

TNMG



(mm)

	Designation	IC	S	L	D1	RE
TNMG	160408KP-B25	9.525	4.76	13.7	3.8	0.8
	220408KP-B25	12.7	4.76	19.2	5.16	0.8
	270612KP-B25	15.875	6.35	23.3	6.35	1.2
	330716KP-B25	19.05	7.94	27.5	7.93	1.6
	330724KP-B25	19.05	7.94	24.7	7.93	2.4



PIPE Industry

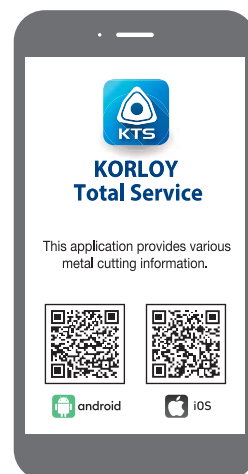
For the safe metalcutting

- Use safety supplies such as protective gloves to prevent possible injury while touching the edge of tools.
- Use safety glasses or safety cover to hedge possible dangers. Inappropriate usage or excessive cutting condition may lead tool's breakage or even the fragment's scattering.
- Clamp the workpiece tightly enough to prevent its movement while its machining.
- Properly manage the tool change phase because the inordinately used tool can be easily broken under the excessive cutting load or severe wear, and it may threat the operator's safety.
- Use safety cover because chips evacuated during cutting are hot and sharp and may cause burns and cuts. To remove chips safely, stop machining, put on protective gloves, and use a hook or other tools.
- Prepare for fire prevention measures as the use of the non-water soluble cutting oil may cause fire.
- Use safety cover and other safety supplies because the spare parts or the inserts can be pulled out due to centrifugal force while high speed machining.



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