

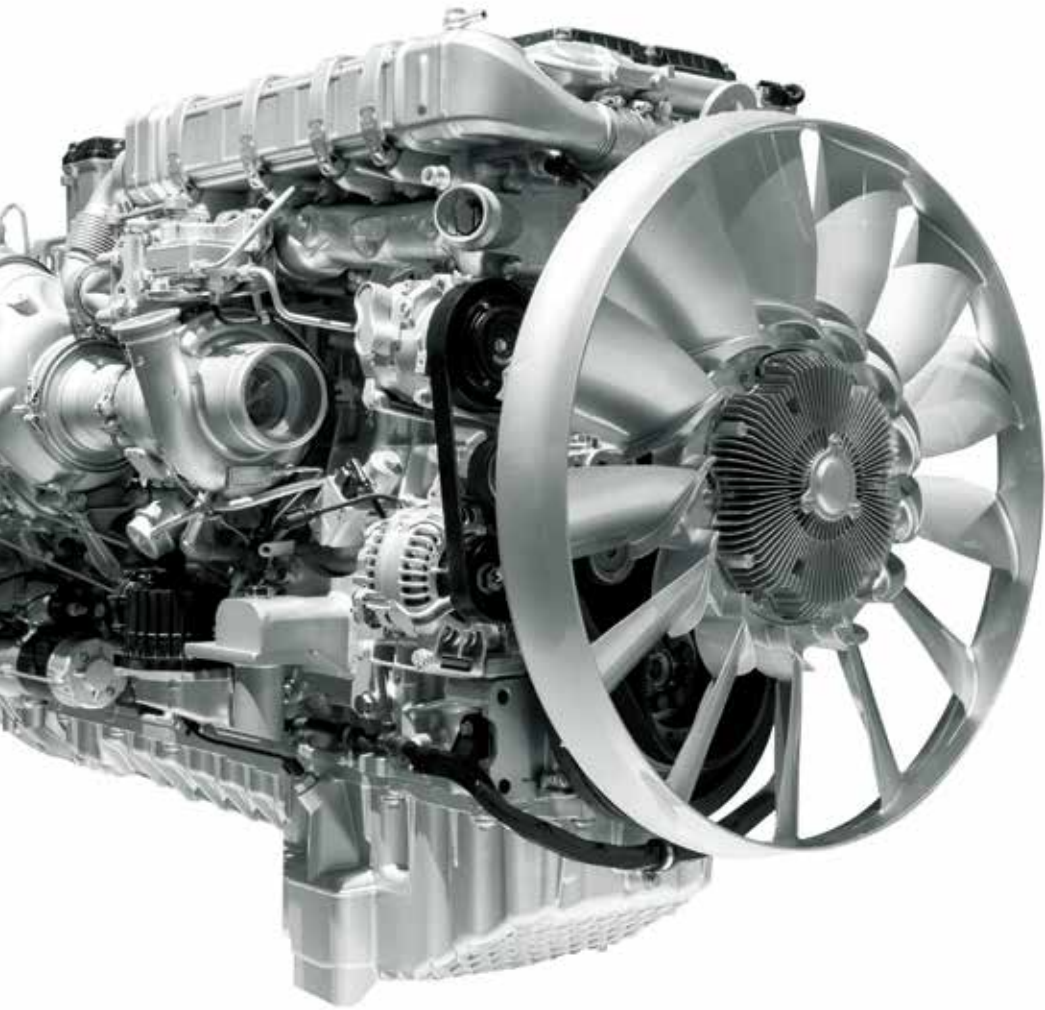
# KORLOY

*Exploring Limitless Machining*

## CUTTING TOOLS







A variety of high performance tools  
**KORLOY CUTTING TOOLS**







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# Grades / Chip Breakers

Korloys new grades are designed with optimal substrates for each application and are PVD coated for high temperature, high hardness and oxidation resistance, or CVD coated for high temperature and wear resistance. Additionally, the improved post-coating treatment provides superior surface finishes to ensure the highest levels of quality and productivity.

Selection of KORLOY Grades

CVD Coated Grades

PVD Coated Grades

Cermet Grades

Uncoated Carbide Grades

cBN Grades

PCD Grades

Chip Breakers



# Selection of KORLOY Grades

## ▶ Turning

Workpiece	Steel					Stainless steel				Cast iron				Nonferrous				HRSA			H			Hardened		
	P01	P10	P20	P30	P40	P50	M10	M20	M30	M40	K01	K10	K20	K30	N01	N10	N20	N30	S01	S10	S20	S30	H01	H10	H20	H30
Coated carbide	NC3010					PC8105				NC6205				ND1000				PC8105			PC8105					
	NC3215					PC8110				NC6210				PD1000				PC8110			PC8110					
	NC3225					PC8115				NC6215								PC8115			PC8115					
	NC3120					NC9115				NC5330								PC8115			PC8115					
	NC3030					NC9125				PC5300								NC5330			PC8115					
	NC5330					NC9135				PC9030								PC5300			PC5300					
	PC5300					PC5300				PC5400								PC5300			PC5300					
	PC5400					PC5400				PC5400								PC5400			PC5400					
	PC5400					PC5400				PC5400								PC5400			PC5400					
	PC5400					PC5400				PC5400								PC5400			PC5400					
Cermets	CN1500									CN1500																
	CN2000									CN2500																
	CN2500																									
cBN/PCD										KB370				DP90				KB370			DNC100					
										KB800				DP150				KB370			DNC250					
										KB350				DP200							DNC400					
																					DNC350					
Uncoated carbide	ST10					U20				H01				H01				H01			H01					
	ST20									H05				H05				H05								
	ST30A									G10																

## ▶ Milling

Workpiece	Steel					Stainless steel				Cast iron				Nonferrous				HRSA			H			Hardened		
	P01	P10	P20	P30	P40	P50	M10	M20	M30	M40	K01	K10	K20	K30	K40	N01	N10	N20	N30	S10	S20	S30	H01	H10	H20	H30
Coated carbide	NC5330					NC5330				PC8110				ND2000				PC5300								
	PC3500					PC5300				PC6510				PD2000				PC5300			PC5400					
	PC3600					PC9530				NC5330								PC5400			PC2005					
	NC5340					NC5340				PC5300								PC5400			PC2505					
	NCM325					NCM325				NC5340								PC5400			PC2010					
	PC5300					NCM335				PC5400								PC5400			PC2510					
	NC5350					NCM335												PC5400			PC2015					
	NCM335					PC5400												PC5400			PC210F					
	PC5400					PC5400												PC5400			PC210F					
	PC5400					PC5400												PC5400			PC210F					
Cermets	CN2000																									
	CN30																									
cBN/PCD														DP150							KB350					
Uncoated carbide	ST20					U20				H01				H01				H01								
	ST30A									H05				H05				H05								
										G10																



# Selection of KORLOY Grades

## ► Endmilling

Workpiece	grade	ISO	Application range
P Steel	PC303S <i>New</i>	P01	
	PC310U <i>New</i>	P10	PC303S <i>New</i> → PC203F <i>New</i>
	PC315F <i>New</i>	P20	PC310U <i>New</i>
	PC320 <i>New</i>	P30	PC315E <i>New</i> → PC320 <i>New</i> → PC215F
M Stainless steel	PC303S <i>New</i>	M01	
	PC310U <i>New</i>	M10	PC303S <i>New</i> → PC203F <i>New</i> → PC310U <i>New</i>
	PC320S <i>New</i>	M20	PC320S <i>New</i>
	PC315E <i>New</i>	M30	PC315F <i>New</i> → PC320 <i>New</i> → PC215F
K Cast iron	PC303S <i>New</i>	K01	
	PC310U <i>New</i>	K10	
	PC315F <i>New</i>	K20	PC303S <i>New</i> → PC203F <i>New</i> → PC310U <i>New</i>
	PC320 <i>New</i>	K30	PC315E <i>New</i> → PC320 <i>New</i> → PC215F → PC220 → FA2
N Non ferrous	ND3000	N01	
	PD3000	N05	
	H01	N10	ND3000 → PD3000 → H01 → H05S
	H05S	N20	
	PC210C	N30	PC210C
S HRSA	PC210	S10	
	PC320S <i>New</i>	S20	PC210 → PC320S <i>New</i>
	PC315E <i>New</i>	S30	PC315E <i>New</i> → PC320 → PC215F → PC220 → FA2
H High hardness steel	PC303S <i>New</i>	H01	
	PC203F	H10	PC303S <i>New</i> → PC203F → PC310U <i>New</i>
	PC310U <i>New</i>	H20	

## ► Drilling

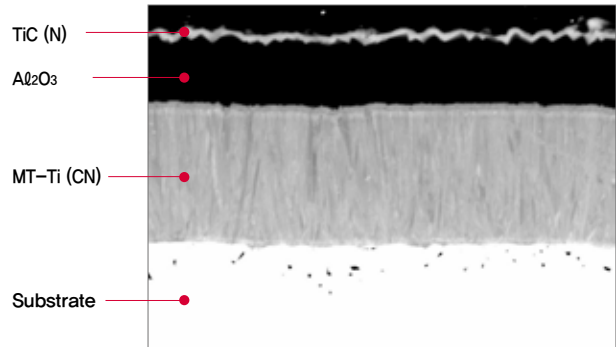
Workpiece	ISO	Application range
P Steel	P01	
	P10	
	P20	PC215G <i>New</i> → PC315G <i>New</i>
	P30	PC325U <i>New</i> → PC230F
M Stainless steel	M01	
	M10	
	M20	PC215G <i>New</i> → PC315G <i>New</i> → PC205F → PC325U <i>New</i>
K Cast iron	K01	
	K10	
	K20	PC215G <i>New</i> → PC315G <i>New</i> → PC205F → PC325U <i>New</i>
	K30	
N Non ferrous	N01	
	N10	FG2
	N20	
	N30	



# CVD Coated Grades

## Features

- The special crystalline structure of the new coating technology achieves superior toughness
- A multi-layer coating with strong bonding strength provides superior wear resistance



Cross-sectional view of CVD coating

## Grade Selection Guide

### ▶ Turning

Workpiece		Machining types	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range
P	Steel	Continuous cutting	NC3010	295 (170 ~ 420)	P05	NC3010
			NC3215 <i>New</i>	295 (170 ~ 420)	P10	NC3215 <i>New</i>
		Interrupted cutting	NC3225 <i>New</i>	260 (150 ~ 370)	P15	NC3225 <i>New</i>
			NC3120	260 (120 ~ 370)	P20	NC3120
			NC3030	205 (120 ~ 290)	P25	NC3030
			NC5330	205 (120 ~ 290)	P30	NC5330
			NC500H	205 (120 ~ 290)	P35	NC500H
M	Stainless steel	Continuous cutting	NC9115 <i>New</i>	240 (220 ~ 260)	M10	NC9115 <i>New</i>
			NC9125 <i>New</i>	210 (190 ~ 230)	M20	NC9125 <i>New</i>
		Interrupted cutting	NC9135 <i>New</i>	180 (160 ~ 200)	M30	NC9135 <i>New</i>
			NC5330	180 (160 ~ 200)	M40	NC5330
K	Cast iron	Continuous cutting	NC6205	315 (180 ~ 450)	K01	NC6205
			NC6210	250 (130 ~ 370)	K10	NC6210
		Interrupted cutting	NC6215 <i>New</i>	220 (130 ~ 310)	K20	NC6215 <i>New</i>
			NC5330	190 (110 ~ 270)	K30	NC5330
S	HRSA	Continuous cutting	NC5330	40 (20 ~ 60)	S10	NC5330
		Interrupted cutting		S20		

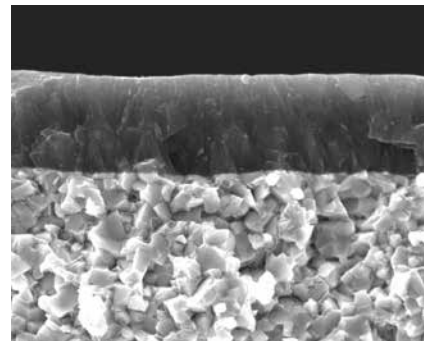
### ▶ Milling

Workpiece		Machining types	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range		
P	Steel	Continuous cutting	NC5330	205 (120 ~ 290)	P20	NC5330		
			NC5340 <i>New</i>	230 (130 ~ 330)	P25			
		Interrupted cutting	NC5350 <i>New</i>	205 (120 ~ 290)	P30	NC5340 <i>New</i>	NCM325	
			NCM335	205 (120 ~ 290)	P35	NC5350 <i>New</i>	NCM335	
M	Stainless steel	Continuous cutting	NC5330	140 (80 ~ 200)	P40	NC5330		
			NC5340 <i>New</i>	155 (90 ~ 220)	P45		NC5340 <i>New</i>	NCM325
		Interrupted cutting	NC5350 <i>New</i>	140 (80 ~ 200)	M10	NC5350 <i>New</i>	NCM335	
			NCM335	140 (80 ~ 200)	M20	NC5330	NC5340 <i>New</i>	NCM325
			NC5330	150 (80 ~ 250)	M25	NC5330	NC5340 <i>New</i>	NCM325
			NC5340 <i>New</i>	150 (80 ~ 250)	M30	NC5340 <i>New</i>	NCM325	NC5350 <i>New</i>
K	Cast iron	Continuous cutting	NC5330	190 (110 ~ 270)	M35	NC5330		
			NC5340 <i>New</i>	150 (80 ~ 250)	M40	NC5340 <i>New</i>		
		NC5330	150 (80 ~ 250)	M40	NC5330	NC5340 <i>New</i>		

# PVD Coated Grades

## Features

- PVD coating technology has inherent advantages such as a superior chipping resistance of the coated film while maintaining the toughness of the substrate. Thus it is possible to increase the tool life significantly
- PVD coatings ensure sharp cutting edges without blunting the substrate
- Ti-based coating films can provide excellent surface finish and high accuracy machining due to the low affinity of Ti-film with the workpiece



Cross-sectional view of PVD coating

## Advantages of PVD Coatings

- TiAlN coating optimal for high speed machining
- Toughness of TiAlN has been enhanced to reduce brittleness of conventional TiAlN
- The outer TiN layer reduces friction and improves surface smoothness
- Easy to recognize the amount of wear on the cutting edge

## Grade Selection Guide

### ▶ Turning

Workpiece	Machining types	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range
P	Steel	PC5300	175 (100 ~ 250)	P30	PC5300
			145 (80 ~ 120)	P40	
	Interrupted cutting	PC5400 <i>New</i>	125 (80 ~ 160)	P50	PC5400 <i>New</i>
			PC8105 <i>New</i>	175 (120 ~ 230)	M01
Continuous cutting	PC8110	160 (110 ~ 210)		M10	PC8110 <i>New</i>
		Interrupted cutting	PC8115 <i>New</i>	150 (100 ~ 200)	M20
PC5300	135 (80 ~ 190)			M30	PC5300
	PC9030	130 (80 ~ 180)	M40	PC9030	
PC5400		110 (80 ~ 140)	M50	PC5400 <i>New</i>	
	S	HRSA	PC8105 <i>New</i>	55 (40 ~ 70)	S01
PC8110				50 (35 ~ 65)	S10
	PC8115 <i>New</i>	45 (30 ~ 60)	S20	PC8115 <i>New</i>	
PC5300		40 (20 ~ 60)	S30	PC5300	
	PC5400 <i>New</i>	35 (20 ~ 50)	S40	PC5400 <i>New</i>	
H		High hardness steel	PC8110	100 (70 ~ 130)	H01
	PC8115 <i>New</i>			90 (65 ~ 115)	H10

### ▶ Milling

Workpiece	Machining types	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range	
P	Steel	PC3600	235 (180 ~ 290)	P20	PC3600	
			235 (180 ~ 290)	P30	PC3500	
	Interrupted cutting	PC5300	195 (150 ~ 240)	P40	PC5300	
			PC5400 <i>New</i>	145 (80 ~ 210)		PC5400 <i>New</i>
M	Stainless steel	PC5300	130 (100 ~ 160)	M20	PC5300	
			PC9530	125 (80 ~ 150)	M30	PC9530
	Interrupted cutting	PC5400 <i>New</i>	110 (80 ~ 140)	M40	PC5400 <i>New</i>	
			K	Cast iron	PC8110	180 (140 ~ 230)
PC6510	180 (140 ~ 230)	K10				PC6510
S	HRSA	PC5300	145 (110 ~ 180)	K20	PC5300	
			PC5400 <i>New</i>	125 (85 ~ 160)	K30	PC5400 <i>New</i>
H	High hardness steel	PC5300	55 (40 ~ 70)	S10	PC5300	
			PC5400 <i>New</i>	40 (30 ~ 50)	S30	PC5400 <i>New</i>
	Continuous cutting	PC2005 <i>New</i>	60 (40 ~ 80)	H01	PC2005 <i>New</i>	
			PC2010 <i>New</i>	55 (40 ~ 70)	H10	PC2010 <i>New</i>
			PC2015 <i>New</i>	50 (35 ~ 65)	H20	PC2015 <i>New</i>
			PC210F	50 (35 ~ 65)	H30	PC210F



# Cermet Grades

## Features

- KORLOY cermet is a carbonitride type cermet which has an ultra fine microstructure accomplished by adding TiN, TiCN powders as additives. It also has superior toughness, thermal shock and wear resistance.

## Advantages

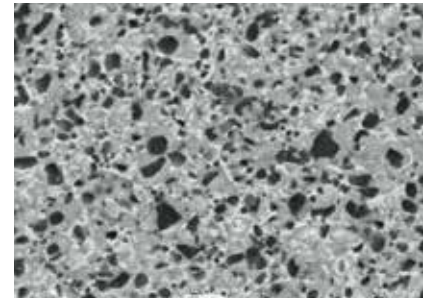
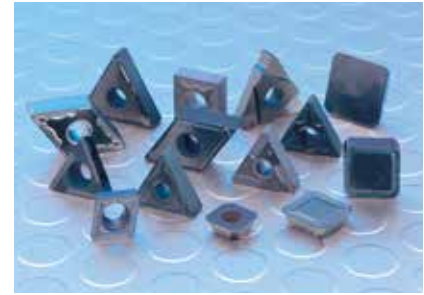
- Cermet, using TiCN as the main component, is harder than cemented carbide and has a lower affinity with ferrous workpieces at high temperatures, thus cermets have special advantages as listed below:

### Compared to Uncoated Carbide

- Since cermet has superior wear and crater wear resistance, higher cutting speeds can be applied
- The low affinity with ferrous workpieces enables cutting operations from low to high speed and provides an excellent surface finish
- Exceptional tool life and cutting performances in high speed finishing applications

### Compared to Coated Carbide

- Suitable for light cutting and finishing
- Better wear resistance and surface finish can be acquired while using the same cutting conditions



Microstructure of Cermet

## Grade Selection Guide

### ► Turning

Workpiece	Machining types	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range
P Steel	Continuous cutting	CN1500 <i>New</i>	250 (150 ~ 350)	P10	
	Interrupted cutting	CN2500 <i>New</i>	220 (130 ~ 300)	P20 P30	

### ► Turning (Coated Cermet Grades)

Workpiece	Machining types	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range
P Steel	Continuous cutting	CC1500 <i>New</i>	325 (200 ~ 450)	P10	
	Interrupted cutting	CC2500 <i>New</i>	265 (180 ~ 350)	P20 P30	

### ► Milling

Workpiece	Machining types	Grade	Recommended cutting speed(m/min)	ISO	Application range
P Steel	Continuous cutting	CN2000	250 (200 ~ 300)	P20	
	Interrupted cutting	CN30	150 (100 ~ 200)	P30	

# Uncoated Carbide Grades

## Features

- Due to its the advanced sintering technology, KORLOY's uncoated carbide grades have a fine alloy structure which is necessary to get superior quality cutting tools

## Advantages

- P, M, K carbide grades can be used for the machining of all kinds of workpieces
- Excellent quality in wet machining due to the carbide's superior thermal crack resistance
- Due to the special design of the carbide, it has a fine microstructure and low affinity with the workpiece
- It has excellent toughness and provides low cutting loads



## ► Main Applications

Workpiece	Composition	Features	Workpiece
<b>P</b>	WC-TiC-TaC-Co	Heat resistance, excellent plastic deformation resistance	Carbon steel, Alloy steel, Stainless steel
<b>M</b>	WC-TiC-TaC-Co	General tools stable heat resistance with strength	Carbon steel, Alloy steel, Stainless steel, Cast steel
<b>K</b>	WC-Co	High strength and superior wear resistance	Cast iron, Non-ferrous metal, Plastic, etc
<b>S</b>	WC-Co	Excellent wear resistance and chipping resistance	Titanium alloy

## ► The Physical Properties of Grades

Workpiece	Grade	Hardness (HRA)	TRS (kgf/mm <sup>2</sup> )	Young's modulus (10 <sup>3</sup> kgf/mm <sup>2</sup> )	Thermal expansion coefficient(10 <sup>-6</sup> /°C)	Thermal conductivity (cal/cm · sec·°C)
<b>P</b>	ST10	92.1	175	48	6.2	25
	ST20	91.9	200	56	5.2	45
	ST30A	91.3	230	53	5.2	-
<b>M</b>	U20	91.1	210	-	-	88
	ST30A	91.3	230	53	5.2	-
<b>K</b>	H01	92.9	210	66	4.7	109
	G10	90.9	250	63	-	105
<b>S</b>	H01	92.9	210	66	4.7	109
	H05	91.8	250	-	-	-

1KPa = 102kgf/m<sup>2</sup>, 1w/mk = 2.39x10<sup>-3</sup>cal/cm·sec·°C

# Uncoated Carbide Grades

## Grade Selection Guide

### ▶ Turning

Workpiece	Recommended grade	Recommended cutting speed(m/min)	ISO	Application range
P Steel	ST10	110 (70 ~ 140)	P10	ST10
	ST20	80 (50 ~ 110)	P20	ST20
	ST30A	70 (40 ~ 90)	P30	ST30A
M Stainless steel	U20	70 (40 ~ 90)	M25	U20
K Cast iron	H01	105 (60 ~ 140)	K01	H01
	H05	105 (60 ~ 140)	K10	H05
	G10	90 (50 ~ 120)	K20	G10
N Aluminum alloy Copper alloys	H01	600 (450 ~ 750)	N10	H01
	H05	425 (320 ~ 530)	N20	H05
S Titanium alloy	H01	55 (40 ~ 70)	S01	H01
	H05	50 (35 ~ 65)	S10	H05
H High hardness steel	H01	80 (55 ~ 105)	H10	H01

### ▶ Milling

Workpiece	Grade	Recommended cutting speed(m/min)	ISO	Application range
P Steel	ST30A	80 (60 ~ 100)	P30	ST30A
M Stainless steel	U20	90 (70 ~ 110)	M20	U20
			M30	
K Cast iron	H01, H05	150 (110 ~ 190)	K10	H01, H05
	G10	120 (90 ~ 150)	K20	G10
N Aluminum alloy Copper alloys	H01	600 (450 ~ 750)	N10	H01
	H05	425 (320 ~ 530)	N20	H05








# cBN Grades

## Features

- cBN is a cutting tool material made under ultra high pressure and temperature sintering of a mixture of cubic boron nitride and a special ceramic binder material.
- cBN tools are suitable for high speed precise machining in hardened steels and cast irons. Machining with cBN can effectively replace the conventional grinding process.



### ▶ Cutting Conditions of cBN Grades

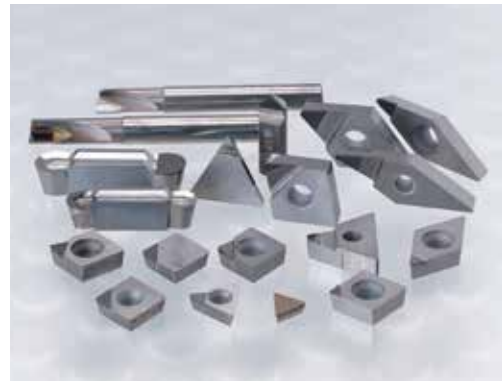
ISO	Grades	Insert color	Application	Cutting Speed, vc (m/min)						feed, fn	Depth of cut, ap	
				50	100	150	200	250	300			
H Heat-treated steel	Coated	 DNC100 <sup>New</sup>	Continuous cutting at high speed	180 ————— 300						0.03~0.3	0.03~0.3	
		 DNC250	Continuous and low interrupted cutting at high speed	120 ————— 220						0.05~0.3	0.05~0.3	
		 DNC350	Medium and high interrupted cutting	90 ————— 150						0.05~0.3	0.05~0.3	
		 DNC400 <sup>New</sup>	Continuous and medium interrupted cutting	90 ————— 220						0.05~0.3	0.05~0.5	
	Non-coated		KB410	Continuous cutting at high speed	150 ————— 200						0.03~0.13	0.03~0.2
			KB1000	Continuous cutting at high speed	130 ————— 250						0.03~0.15	0.03~0.2
			KB420	Highly efficient cutting	120 ————— 150						0.03~0.3	0.03~0.5
			KB425	Interrupted cutting at high speed	150 ————— 200						0.03~0.3	0.03~0.5
			KB320	Medium and low interrupted cutting	80 ————— 120						0.03~0.2	0.03~0.3
			KB2000	Medium and low interrupted cutting	80 ————— 200						0.03~0.2	0.03~0.3
			KB335	High interrupted cutting	80 ————— 110						0.03~0.2	0.03~0.3
			KB400	High speed and high depth of cut	120 ————— 220						0.10~0.3	0.5

# PCD Grades

## Features

• KORLOY PCD products are manufactured by using high quality PCD tips under ultra high temperatures and pressure. The PCD tip is welded on the qualified KORLOY carbide insert. KORLOY high quality PCD products meet a wide range of application needs in turning, milling, and endmills.

- Excellent tool life for aluminum alloy and copper alloy
- Excellent tool life for Ceramic, high-silicon aluminum and rocks or stones
- Excellent tool life for rubber, carbon, graphite and wood



### ► PCD grades























Grade	Features	Application	Grain size(μm)	Hardness(Hv)	TRS(kg/mm <sup>2</sup> )
DP90	Coarse diamond grain has been used to get excellent wear resistance enough to machine cemented-carbide, high Si aluminum alloys	Cemented carbide Ceramic roughing High Si aluminum alloy rocks, stones	50	10,000 ~ 12,000	110
DP150	By using fine diamond grains having good bonding properties, this grade is suitable for machining of non-ferrous metals, graphite, etc	High Si aluminum alloy Copper, Bronze alloy Rubber, Wood, Carbon	5	10,000 ~ 12,000	200
DP200	By using ultra fine diamond grains, it is possible to make a sharp cutting edge. Thus this grade is appropriate for machining non-ferrous materials	Plastic Wood Precise finishing of aluminum	0.5	8,000 ~ 10,000	220

### ► Recommended Cutting Conditions

Workpiece	Cutting speed (m/min)	Feed (mm/rev)	Depth of cut (mm)	Recommended grade	
				1 <sup>st</sup>	2 <sup>nd</sup>
Aluminum alloy (4%~8%Si)	1000 ~ 3000	0.1 ~ 0.6	~ 3	DP150	DP200
Aluminum alloy (9%~14%Si)	600 ~ 2500	0.1 ~ 0.5	~ 3	DP150	DP200
Aluminum alloy (15%~18%Si)	300 ~ 700	0.1 ~ 0.4	~ 3	DP150	DP200
Copper, Bronze alloy	~ 1000	0.05 ~ 0.2	~ 3	DP150	DP200
Reinforced plastic	~ 1000	0.1 ~ 0.3	~ 2	DP150	DP200
Wood	~ 4000	0.1 ~ 0.4	-	DP150	DP200
Cemented carbide	10 ~ 30	~ 0.2	~ 0.5	DP90	DP150

# Chip Breakers

## Chip Breakers for Turning


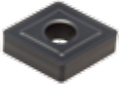









Geometry	Cutting edge	Application range											Features					
		feed rate, $f_n$ (mm/rev)																
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0		6.3				
depth of cut, $a_p$ (mm)																		
0.1	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0		11.6	13					
<b>VQ</b> 						0.10~0.40												<b>For Medium cutting to finishing</b> <ul style="list-style-type: none"><li>Strong cutting edge makes excellent cutting performance at interrupted cutting</li></ul>
<b>VL</b> 						0.10~0.35												<b>For Finishing</b> <ul style="list-style-type: none"><li>Stable chip control in high toughness material; low carbon steel, pipe steel &amp; steel plates</li><li>Improved chip control for facing, copying machining and better surface finish</li></ul>
<b>VF</b> 						0.05~0.35												<b>For Finishing</b> <ul style="list-style-type: none"><li>Good chip control quality on varied depths of cut</li><li>Excellent cutting edge strength has been acquired due to the special chip-breaker</li></ul>
<b>VB</b> 						0.15~0.45												<b>For Finishing</b> <ul style="list-style-type: none"><li>Improved chip control for smaller depths of cut</li><li>Excellent chip control in copying, corner R machining</li></ul>
<b>VC</b> 						0.12~0.45												<b>For Medium to finish cutting</b> <ul style="list-style-type: none"><li>Stable chip control in copying and internal machining with various depths of cut</li></ul>
<b>VM</b> 						0.10~0.50												<b>For Medium cutting</b> <ul style="list-style-type: none"><li>Wide available chip control range from medium-finishing to medium-roughing</li><li>Suitable chip breaker for CNC machining</li></ul>
<b>VH</b> 																		<b>For Heavy duty cutting</b> <ul style="list-style-type: none"><li>Designed specifically for heavy machining</li><li>Specialized chip breaker for the heavy industries like Ship building, Power plant industry</li></ul>
<b>VT</b> 																		<b>For Heavy duty cutting</b> <ul style="list-style-type: none"><li>Designed specifically for heavy machining</li><li>Specialized chip breaker for the heavy industries like Ship building, Power plant industry</li></ul>
<b>VP1</b> 						0.05~0.20												<b>For Finishing</b> <ul style="list-style-type: none"><li>High positive cutting edge</li><li>Reduced contract chip minimizes temperature to improve tool life</li></ul>
<b>VP2</b> 						0.05~0.40												<b>For Medium to finish cutting</b> <ul style="list-style-type: none"><li>Stable chip control and high machinability in copying with various depths of cut</li></ul>
<b>VP3</b> 						0.05~0.45												<b>For Medium cutting</b> <ul style="list-style-type: none"><li>High positive cutting edge with wide land</li><li>Stable cutting performance in interrupted machining with high toughness</li><li>Stable machinability and chip control in machining with high depth of cut</li></ul>

Notice : Application ranges are based on main cutting material



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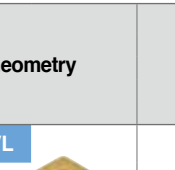
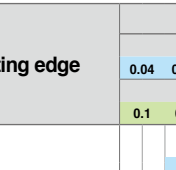
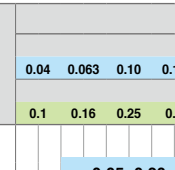
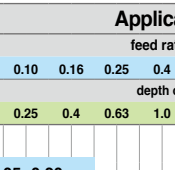
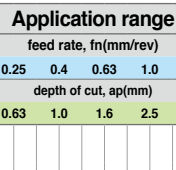
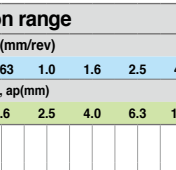
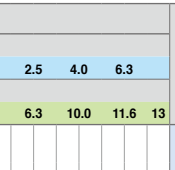
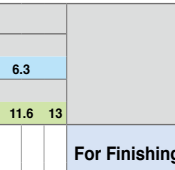

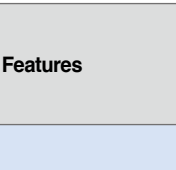
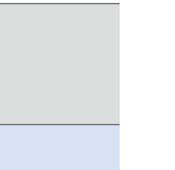
## Chip Breakers for Turning

Geometry	Cutting edge	Application range												Features		
		feed rate, $f_n$ (mm/rev)														
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3			
depth of cut, $a_p$ (mm)																
		0.1	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0	11.6	13		
V Series	VP4						0.15~0.45			1.0~4.5						<b>For Medium cutting of Inconel and medium to roughing of stainless steel</b> <ul style="list-style-type: none"> <li>The 1st recommended chip breaker for Inconel machining</li> <li>A high rake angle resistant to high hardness cutting was applied to enable stronger cutting edges and prevent notch wear in machining rough surfaces</li> </ul>
	VR						0.25~0.55			1.2~7.0						<b>For Medium cutting of cast iron and medium to roughing of steel</b> <ul style="list-style-type: none"> <li>High feed machining with the combination of wide land and pockets</li> <li>Shallow chip breaker design prevents chip blocking at high feed</li> <li>Decreased wear on major cutting edge due to special treatment on blade</li> </ul>
-P Series	LP					0.10~0.40				0.5~2.5						<b>For Medium to finish cutting of steel</b> <ul style="list-style-type: none"> <li>Angle land decreases cutting resistance for better surface roughness</li> <li>Special dot design prevents chip blocking by clear chip breaking</li> </ul>
	MP					0.15~0.45				0.5~4.5						<b>For Medium cutting</b> <ul style="list-style-type: none"> <li>Increased productivity due to excellent chip control in various conditions</li> <li>Stable tool life by reducing cutting load at high speed and high feed</li> </ul>
-M Series	MM					0.12~0.45				0.5~5.5						<b>For Medium cutting</b> <ul style="list-style-type: none"> <li>The 1st recommended chip breaker for stainless steel machining</li> <li>Dual land enables balanced cutting performance and toughness to improve tool life and machining quality</li> <li>Wide chip pockets for stable chip evacuation at high depth of cuts and high feeds</li> </ul>
	RM					0.15~0.55				2.0~6.0						<b>For Roughing</b> <ul style="list-style-type: none"> <li>The 1st recommended chip breaker for interrupted or rough machining of stainless steel</li> <li>Prevents notch wear and burr creation even at high depth of cuts and high feeds</li> <li>Longer tool life due to reduced cutting loads at high feeds</li> </ul>
H Series	HA		0.03~0.30				0.5~2.5									<b>For Light-alloy, stainless-steel machining</b> <ul style="list-style-type: none"> <li>Sharp cutting edge generates low cutting force</li> <li>Specially designed tough main cutting edge</li> <li>Suitable for cutting of low carbon steel, stainless steel, aluminum</li> </ul>
G Series	GR						0.30~0.80			3.0~8.0						<b>For Medium to roughing</b> <ul style="list-style-type: none"> <li>Suitable for deep depth of cut and high feed cutting of steel and cast iron</li> <li>Suitable for intermittent cutting</li> </ul>
	GH						0.30~1.30			3.0~11.0						<b>For Heavy duty cutting</b> <ul style="list-style-type: none"> <li>Suitable for heavy duty cutting due to strong cutting edge</li> <li>Wide chip control range with low cutting force</li> </ul>
B Series	B25						0.50~1.00			4.0~10.0						<b>For General cutting</b> <ul style="list-style-type: none"> <li>Suitable for general cutting condition</li> </ul>
V-Posi Series	VF		0.05~0.25			0.1~1.5										<b>For Finishing</b> <ul style="list-style-type: none"> <li>Improved surface finish and size accuracy due to stable inner boring</li> </ul>

Notice : Application ranges are based on main cutting material

# Chip Breakers

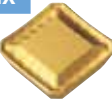























## Chip Breakers for Turning

Geometry	Cutting edge	Application range											Features			
		feed rate, $f_n$ (mm/rev)														
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0		6.3		
		depth of cut, $a_p$ (mm)														
		0.1	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0	11.6	13		
V-Posi Series	VL															<b>For Finishing</b> <ul style="list-style-type: none"> <li>Superior chip control in low carbon steel, pipes, and steel plates</li> </ul>
	VP1															<b>For Finishing</b> <ul style="list-style-type: none"> <li>Excellent chip control in application with micro depth of cut and low feed</li> <li>Low cutting load and superb surface finish</li> <li>Optimal for both internal and external machining</li> </ul>
H-Posi Series	HMP															<b>For Medium cutting</b> <ul style="list-style-type: none"> <li>Excellent chip control at wide range of cutting conditions</li> <li>Suitable for stainless steel cutting</li> </ul>
C Series	C25															<b>For Medium cutting</b> <ul style="list-style-type: none"> <li>Suitable for interrupted cutting and cast iron machining</li> <li>Good surface finish due to low cutting force</li> <li>Suitable for both boring and outer diameter turning</li> </ul>
P-Posi Series	MP															<b>For Medium cutting</b> <ul style="list-style-type: none"> <li>Sharp cutting edge and wide chip pocket for low cutting load</li> <li>Stable chip control at varying depth of cuts</li> <li>Excellent cutting performance when machining automobile components</li> </ul>
AL Series	AK															<b>For Aluminum cutting</b> <ul style="list-style-type: none"> <li>High rake angle and low resistance cutting edge secures long tool life in continuous cutting of aluminum turning</li> <li>High speed of finishing operation</li> </ul>
	AR															<b>For Aluminum cutting</b> <ul style="list-style-type: none"> <li>High stability of cutting edge secures great performance in high speed and interrupted machining</li> <li>High speed of medium and interrupted operation</li> </ul>
Auto tool Series	KF															<b>For Finishing</b> <ul style="list-style-type: none"> <li>Shallow depth of cut with sharp edge.</li> <li>Longer tool life at high speed cutting due to low cutting force</li> <li>Good surface finish</li> </ul>
	KM															<b>For Medium to finish cutting</b> <ul style="list-style-type: none"> <li>Improved chip control makes tool life long and better machining</li> </ul>
Wiper tool Series	LW															<b>For Medium cutting(Wiper)</b> <ul style="list-style-type: none"> <li>Guarantees excellent surface roughness and good chip evacuation at high feed machining</li> </ul>
	VW															<b>For Finishing(Wiper)</b> <ul style="list-style-type: none"> <li>Improved surface roughness at shallow depth of cut and high feed due to strong cutting edge</li> </ul>

Notice : Application ranges are based on main cutting material

# Chip Breakers

## Chip Breakers for Milling

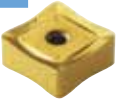












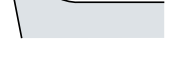

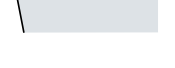



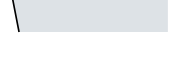



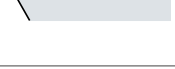
Geometry	Cutting edge	Application range											Features			
		feed rate, $f_n$ (mm/rev)														
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0		6.3		
		depth of cut, $a_p$ (mm)														
		0.1	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0	11.6	13		
MX Series	MX 					0.10~0.30			1.0~5.0							<b>For General milling</b> <ul style="list-style-type: none"> <li>Possible to increase productivity through increase feed and depth</li> <li>Excellent heat resistance due to the special chip breaker design of top face of insert</li> </ul>
RichMill Series-RM3	MA 					0.05~0.40			1.0~8.0							<b>For Aluminum milling</b> <ul style="list-style-type: none"> <li>Sharp cutting edge for low cutting load, which is ideal for machining steel, hard-to-cut materials and aluminum</li> </ul>
	ML 					0.05~0.30			1.0~8.0							<b>For Machining hard-to-cut materials</b> <ul style="list-style-type: none"> <li>Low cutting resistance for light cutting and machining hard-to-cut materials with excellent tool life and surface roughness</li> </ul>
	MM 					0.05~0.35			1.0~8.0							<b>For Medium to roughing</b> <ul style="list-style-type: none"> <li>Available for most of applications with universal design for general milling</li> </ul>
RichMill Series-RM4	MA 					0.05~0.25			0.3~14.0							<b>For Aluminum milling</b> <ul style="list-style-type: none"> <li>Sharp cutting edge design ensures low cutting resistance and excellent machining in difficult-to-cut materials, aluminum and light machining</li> </ul>
	MF 					0.05~0.30			0.5~14.0							<b>For Finishing in milling</b> <ul style="list-style-type: none"> <li>Low cutting force chip breaker design ensures longer tool life and excellent machining in difficult-to-cut material and light machining</li> </ul>
	MM 					0.05~0.30			1.0~14.0							<b>For Medium to roughing in milling</b> <ul style="list-style-type: none"> <li>Suitable geometry design for general milling has wider ranges of machining</li> </ul>
RichMill Series-RM8	MA 					0.05~0.35			0.3~6.0							<b>For Aluminum</b> <ul style="list-style-type: none"> <li>Sharp cutting edge and lubricated top face show excellent chip flow and welding resistance in aluminum machining</li> </ul>
	MF 					0.05~0.35			0.3~6.0							<b>For Finishing in milling</b> <ul style="list-style-type: none"> <li>Low cutting force chip breaker design ensures longer tool life and excellent machining in difficult-to-cut material and light machining</li> </ul>
	ML 					0.05~0.30			0.3~6.0							<b>For Machining hard-to-cut materials</b> <ul style="list-style-type: none"> <li>Low cutting resistance for excellent tool life and surface roughness in machining hard-to-cut materials</li> </ul>
	MM 					0.10~0.40			0.5~6.0							<b>For Medium to roughing in milling</b> <ul style="list-style-type: none"> <li>Suitable geometry design for general milling has wider ranges of machining</li> </ul>
RichMill Series-RMT	MF 					0.05~0.20			0.5~5.0							<b>For Finishing in milling</b> <ul style="list-style-type: none"> <li>Low cutting force chip breaker design ensures longer tool life and excellent machining in difficult-to-cut material and light machining</li> </ul>

Notice : Application ranges are based on main cutting material



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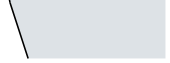
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Geometry	Cutting edge	Application range											Features	
		feed rate, $f_n$ (mm/rev)												
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0		6.3
depth of cut, $a_p$ (mm)														
0.1	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0	11.6	13		
RichMill Series-RMT	MM			0.05~0.30		0.5~8.0								<p><b>For Medium to roughing in milling</b></p> <ul style="list-style-type: none"> <li>Suitable geometry design for general milling has wider ranges of machining</li> </ul>
RichMill Series-RM16	MA			0.05~0.30		0.3~5.5								<p><b>For Aluminum</b></p> <ul style="list-style-type: none"> <li>Sharp cutting edge design ensures low cutting resistance and excellent machining in difficult-to-cut materials, aluminum and light machining</li> </ul>
	MF			0.05~0.40		0.3~5.5								<p><b>For Finishing in milling</b></p> <ul style="list-style-type: none"> <li>Low cutting force chip breaker design ensures longer tool life and excellent machining in difficult-to-cut material and light machining</li> </ul>
	ML			0.05~0.35		0.3~5.5								<p><b>For Machining hard-to-cut materials</b></p> <ul style="list-style-type: none"> <li>Low cutting resistance for excellent tool life and surface roughness in machining hard-to-cut materials</li> </ul>
	MM			0.10~0.45		0.5~5.5								<p><b>For Medium to roughing in milling</b></p> <ul style="list-style-type: none"> <li>Suitable geometry design for general milling has wider ranges of machining</li> </ul>
	W			0.05~0.30		0.3~2.0								<p><b>For Finishing in milling (Wiper)</b></p> <ul style="list-style-type: none"> <li>Wiper insert provides improved surface roughness due to special cutting edge</li> </ul>
	Alpha Mill Series	MA			0.10~0.40		0.5~16							
MF				0.05~0.15		0.5~16								<p><b>For Finishing in milling</b></p> <ul style="list-style-type: none"> <li>Low cutting force chip breaker design ensures longer tool life and excellent machining in difficult-to-cut material and light machining</li> </ul>
MM				0.10~0.25		0.5~16								<p><b>For Medium to roughing in milling</b></p> <ul style="list-style-type: none"> <li>Suitable geometry design for general milling has wider ranges of machining</li> </ul>
ML				0.05~0.15		0.5~16								<p><b>For Hard-to-cut material machining</b></p> <ul style="list-style-type: none"> <li>The chip breaker with low cutting resistance ensures superior machinability in hard-to-cut materials</li> </ul>
Futur Mill Series		MF			0.05~0.20		0.5~5.0							
	MM			0.05~0.30		1.0~5.0								<p><b>For Medium cutting in milling</b></p> <ul style="list-style-type: none"> <li>Chip breaker design to cover general cutting condition provides wide available application range</li> <li>Ground type and as sintered type is available</li> </ul>

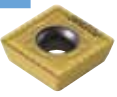



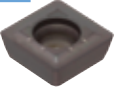

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Geometry	Cutting edge	Application range											Features									
		feed rate, $f_n$ (mm/rev)																				
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0		6.3								
depth of cut, $a_p$ (mm)																						
0.1											0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0	11.6	13
Futur Mill Series	MR			0.05~0.35				1.5~5.0				<b>For Roughing in milling</b> <ul style="list-style-type: none"> <li>• Strongest cutting edge strength provide stable tool life even in case of severe cutting with heavy intermittent and heavy roughing</li> </ul>										
	MA			0.10~0.35				0.5~5.0				<b>For Aluminum</b> <ul style="list-style-type: none"> <li>• Sharp cutting edge and lubricated top face show excellent chip flow and welding resistance in aluminum machining</li> </ul>										
Futur Mill Series P-Posi	MA			0.30~0.60				0.3~6.0				<b>For Aluminum milling</b> <ul style="list-style-type: none"> <li>• Excellent surface roughness due to buffed surface in machining aluminum</li> </ul>										
	ML			0.30~0.50				0.3~3.0				<b>For Machining titanium and inconel</b> <ul style="list-style-type: none"> <li>• Low cutting resistance and high hardness cutting edges for excellent surface roughness in machining titanium and Inconel</li> </ul>										
	MF			0.12~0.50				0.3~6.0				<b>For Medium cutting</b> <ul style="list-style-type: none"> <li>• Low cutting resistance for light cutting</li> </ul>										
	MM			0.20~0.70				0.3~6.0				<b>For Medium to rough milling</b> <ul style="list-style-type: none"> <li>• Universal purpose for most of milling applications</li> </ul>										
	None CB			0.3~0.5				0.30~0.50				<b>For Machining high hardness steel</b> <ul style="list-style-type: none"> <li>• Ideal for machining high hardness mold steel and heat resistant alloy</li> </ul>										

## Chip Breakers for Drilling

Geometry	Cutting edge	Application range											Features									
		feed rate, $f_n$ (mm/rev)																				
		0.04	0.063	0.10	0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0		6.3								
depth of cut, $a_p$ (mm)																						
0.1											0.16	0.25	0.4	0.63	1.0	1.6	2.5	4.0	6.3	10.0	11.6	13
KING DRILL Series	PD			0.04~0.20				60~300				<b>For General steel machining</b> <ul style="list-style-type: none"> <li>• Chip breaker with strong cutting edge for universal applications with steel, stainless steel, and cast iron</li> </ul>										
	ND			0.04~0.10				100~400				<b>Non-ferrous metals</b> <ul style="list-style-type: none"> <li>• Chip breaker with sharp and polished cutting edge for aluminum and non-ferrous metals. Machining with King Drill ensures good chip flow and resistance to chip welding.</li> </ul>										
	LD			0.04~0.15				40~250				<b>For General steel (Mild steel and forged steel)</b> <ul style="list-style-type: none"> <li>• Superior chip control in machining of mild steel, forged steel and stainless steel</li> </ul>										

Notice : Application ranges are based on main cutting material

# Inserts

KORLOY constantly tries to expand the range of chip breakers and corner geometries to facilitate customized production that covers many different workpiece materials(P, M, K, S, N) and machining methods(turning, milling and drilling).

We always ensure to enhance customer satisfaction to provide prompt troubleshooting, or higher productivity and machining quality.

Turning Inserts

Milling Inserts

Drilling Inserts

Inserts for Aluminium Machining

Multi Functional Tools (Inserts)

Bearing Inserts

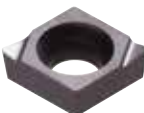
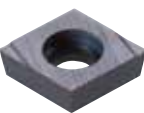
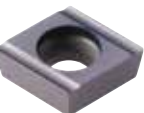

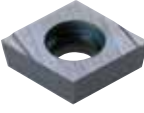




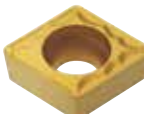

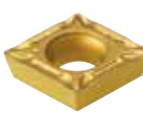
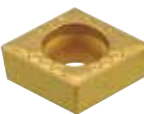
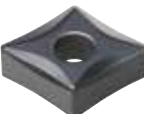





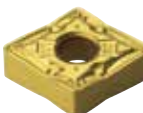




cBN Inserts

PCD Inserts



# Turning Inserts

## ► For Turning

<p><b>CCET</b></p>  <p>0301005R/L 030101R/L 030102R/L 030104R/L 0401005R/L 040101R/L 040102R/L 040104R/L</p>	<p><b>CCET-KF</b></p>  <p>0602005MFR/L 060201MFR/L 060202MFR/L 09T3005MFR/L 09T301MFR/L 09T302MFR/L</p>	<p><b>CCET-KM</b></p>  <p>0602005MFR/L 060201MFR/L 060202MFR/L 09T3005MFR/L 09T301MFR/L 09T302MFR/L</p>	<p><b>CCGT-AK / AR</b></p>  <p><b>AK</b> 060202 09T308 060204 120402 060208 120404 09T302 120408 09T304</p> <p><b>AR</b> 060202 09T308 060204 120402 060208 120404 09T302 120408 09T304 120412</p>
<p><b>CCGT-KF</b></p>  <p>0602003R/L 060201R/L 060202R/L 09T3003R/L 09T301R/L 09T302R/L</p>	<p><b>CCGT-KM</b></p>  <p>0602003R/L 060201R/L 060202R/L 09T3003R/L 09T301R/L 09T302R/L</p>	<p><b>CCGT-VP1</b></p>  <p>060201 060202 060204 09T301 09T302 09T304</p>	<p><b>CCGT-VP1</b> (Precision class)</p>  <p>060201MFN 060202MFN 060204MFN 09T301MFN 09T302MFN 09T304MFN</p>
<p><b>CCMT-C25</b></p>  <p>060202 060204 060208 080308 09T304 09T308 120404 120408 120412</p>	<p><b>CCMT-HMP</b></p>  <p>060202 060204 060208 09T302 09T304 09T308 120404 120408 120412</p>	<p><b>CCMT-MP</b></p>  <p>060202 060204 060208 09T302 09T304 09T308 120404 120408</p>	<p><b>CCMT-VF</b></p>  <p>060202 060204 09T302 09T304 09T308 120404</p>
<p><b>CCMT-VL</b></p>  <p>060204 060208 09T304 09T308</p>	<p><b>CNGG-VP1</b></p>  <p>120402 120404 120408</p>	<p><b>CNMA</b></p>  <p>090308 160612 120404 160616 120408 190608 120412 190612 120416 190616 160608</p>	<p><b>CNMG-B25</b></p>  <p>120404 120408 120412 160608 160612 160616 190604 190608 190612 190616</p>
<p><b>CNMG-GR</b></p>  <p>120408 190612 120412 190616 120416 190624 160608 250724 160612 250924 160616 190608</p>	<p><b>CNMG-HA</b></p>  <p>120404 120408 120412</p>	<p><b>CNMG-LP</b></p>  <p>120404 120408 120412</p>	<p><b>CNMG-LW</b></p>  <p>120408 120412</p>
<p><b>CNMG-MM</b></p>  <p>090404 160608 090408 160612 090412 160616 120404 190608 120408 190612 120412 190616 120416</p>	<p><b>CNMG-MP</b></p>  <p>090304 120412 090308 120416 090404 160608 090408 160612 090412 190612 120404 190616 120408</p>	<p><b>CNMG-RM</b></p>  <p>120404 160612 120408 160616 120412 190608 120416 190612 160608 190616</p>	<p><b>CNMG-VB</b></p>  <p>120404 120408 120412</p>

# Turning Inserts

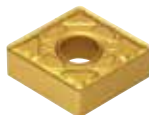
## ► For Turning

### CNMG-VC



120404  
120408  
120412

### CNMG-VF



090304  
090308  
120404  
120408  
120412

### CNMG-VL



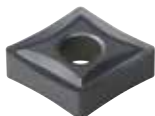
120404  
120408  
120412

### CNMG-VM



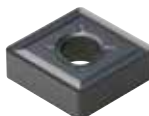
090304  
090308  
120404  
120408  
120412  
120416  
160608  
160612  
190608  
190612

### CNMG-VP2



120404  
120408

### CNMG-VP3



120404  
120408  
120412

### CNMG-VP4



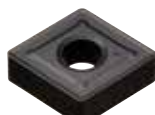
120408  
120412  
190608  
190612

### CNMG-VQ



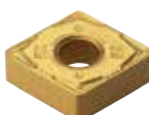
090304  
090308  
120404  
120408  
120412

### CNMG-VR



120408  
120412  
120416  
160612  
160616  
190612  
190616

### CNMG-VW



120404  
120408

### CNMM-GH



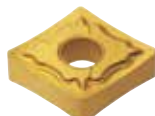
120408 190612  
120412 190616  
160412 190624  
160424 250716  
160612 250724  
160616 250924  
160624 250950  
190608

### CNMM-GR



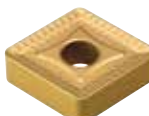
120408  
120412  
190612  
190616

### CNMM-HA



120408

### CNMM-VH



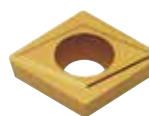
190612  
190616  
190624  
250724  
250924

### CNMM-VT



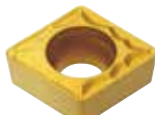
190612  
190616  
190624  
250724  
250924

### CPGT



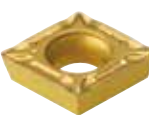
080202  
080204  
080208  
090302  
090304  
090308

### CPGT-HMP



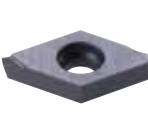
090308

### CPMT-VF



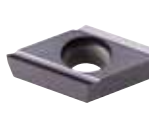
080204  
080208  
090304  
090308

### DCET-KF



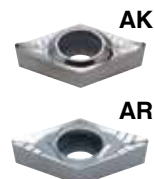
0702005MFR/L  
070201MFR/L  
070202MFR/L  
11T3005MFR/L  
11T301MFR/L  
11T302MFR/L

### DCET-KM



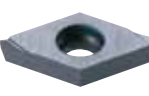
0702005MFR/L  
070201MFR/L  
070202MFR/L  
11T3005MFR/L  
11T301MFR/L  
11T302MFR/L

### DCGT-AK / AR



**AK** 070202  
070204  
070208  
**AR** 11T302  
11T304  
11T308  
11T312

### DCGT-KF



0702003R/L  
070201R/L  
070202R/L  
11T3003R/L  
11T301R/L  
11T302R/L

### DCGT-KM



0702003R/L  
070201R/L  
070202R/L  
11T3003R/L  
11T301R/L  
11T302R/L

### DCGT-VP1



070201  
070202  
070204  
11T301  
11T302  
11T304

# Turning Inserts

## ► For Turning

### DCGT-VP1 (Precision class)



070201MFN  
070202MFN  
070204MFN  
11T301MFN  
11T302MFN  
11T304MFN

### DCMT-C25



070202  
070204  
070208  
11T302  
11T304  
11T308

### DCMT-HMP



070202  
070204  
070208  
11T302  
11T304  
11T308

### DCMT-MP



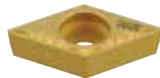
070202  
070204  
070208  
11T302  
11T304  
11T308

### DCMT-VF



070202  
070204  
11T302  
11T304  
11T308

### DCMT-VL



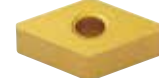
070204  
070208  
11T304  
11T308

### DNGG-VP1



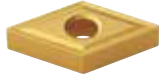
150404  
150408  
150604  
150608

### DNMA



110408  
150404  
150408  
150412  
150604  
150608  
150612  
190608

### DNMG-B25



150402  
150404  
150408  
150412  
150425  
150602  
150604  
150608  
150612  
150625

### DNMG-GR



150408  
150412  
150416  
150608  
150612  
150616

### DNMG-HA



150404  
150408  
150604  
150608

### DNMG-LP



150404  
150408  
150412  
150604  
150608  
150612

### DNMG-LW



150408  
150412  
150608  
150612

### DNMG-MM



110504  
110508  
110512  
150404  
150408  
150412  
150604  
150608  
150612

### DNMG-MP



110404 150404  
110408 150408  
110412 150412  
110504 150604  
110508 150608  
110512 150612

### DNMG-RM



150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VB



150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VC



150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VF



110402  
110404  
110408  
150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VL



110408  
150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VM



110404  
110408  
110412  
150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VP2



150404  
150408  
150604  
150608

### DNMG-VP3



150404  
150408  
150412  
150604  
150608  
150612

### DNMG-VP4



150408  
150412  
150608  
150612

# Turning Inserts

## ► For Turning

### DNMG-VQ



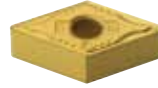
110404  
110408  
150404  
150408  
150604  
150608

### DNMG-VR



150408  
150412  
150608  
150612

### DNMG-VW



150404  
150408  
150604  
150608

### DNMX-SH



150404R/L  
150408R/L  
150604R/L  
150608R/L

### KNUX-11



160405R  
160410R  
160405L  
160410L

### KNUX-12



160405R  
160410R  
160405L  
160410L

### RCGT-AK / AR



**AK** 0602M0  
0803M0  
1003M0  
10T3M0  
1204M0

**AR**

### RCMX



1003M0  
1204M0  
1606M0  
2006M0  
2507M0  
3209M0

### RNMG-B25



090300  
120400  
150600  
190600  
250600  
250900  
310900

### SCGT-AK / AR



**AK** 09T302  
09T304  
09T308  
120404  
120408  
120416

**AR**

### SCMT-C25



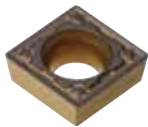
060204  
09T304  
09T308  
120404  
120408

### SCMT-HMP



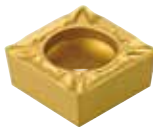
09T304  
09T308  
120404  
120408

### SCMT-MP



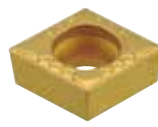
09T304  
09T308  
120408

### SCMT-VF



09T304

### SCMT-VL



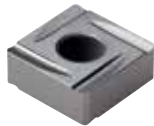
09T304  
09T308

### SNGA



090304  
090308  
120404  
120408  
120412  
150608  
150616  
190608  
190612

### SNGG



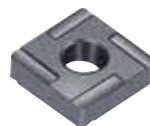
090304R/L  
090308R/L  
120404R/L  
120408R/L  
120412R/L

### SNGN



090302 120424  
090304 150402  
090308 150408  
120304 150412  
120308 150416  
120312 190402  
120402 190412  
120404 190416  
120408 250604  
120412 250616

### SNGX



120408R

### SNMA



090304 150616  
090308 190608  
090312 190612  
120402 190616  
120404 190624  
120408 250724  
120412 250924  
120416  
120430  
150612

### SNMG-B25



090308 150616  
120404 190608  
120408 190612  
120412 190616  
120416 250716  
120420 250724  
150608 250924  
150612

### SNMG-GR



120404  
120408  
120412  
150608  
150612  
190608  
190612  
190616  
250724  
250924

### SNMG-HA



120404  
120408  
120412

### SNMG-LP



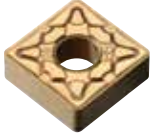
120404  
120408  
120412



# Turning Inserts

## ► For Turning

### SNMG-MM



090404 150608  
090408 150612  
090412 150616  
120404 190608  
120408 190612  
120412 190616  
120416

### SNMG-MP



090304  
090308  
090404  
090408  
120404  
120408  
120412  
120416

### SNMG-RM



120404  
120408  
120412  
120416  
150612  
150616  
190608  
190612  
190616

### SNMG-VB



120404  
120408

### SNMG-VC



120408

### SNMG-VF



090304  
090308  
120404  
120408  
120412

### SNMG-VK



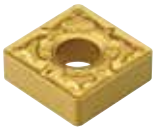
120404  
120408  
120412

### SNMG-VL



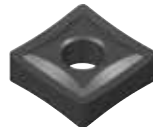
120408

### SNMG-VM



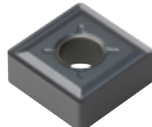
090304  
090308  
120404  
120408  
120412  
190612

### SNMG-VP2



120404  
120408  
120412

### SNMG-VP3



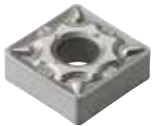
120404  
120408  
120412

### SNMG-VP4



120408  
120412  
150612  
190608  
190612  
190616

### SNMG-VQ



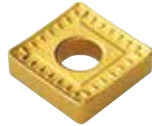
090304  
090308  
120404  
120408

### SNMG-VR



120408  
120412  
190612  
190616

### SNMM-GH



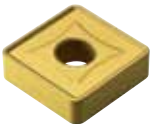
120408  
120412  
150612  
190612  
190616  
190624  
250724  
250924  
250932

### SNMM-GR



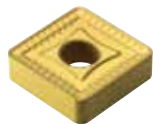
120408  
120412  
190612  
190616

### SNMM-VH



190612  
190616  
190624  
250724  
250920  
250924  
250716

### SNMM-VT



190612  
190616  
190624  
250724  
250920  
250924  
250716

### SNMN



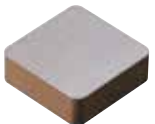
120304  
120308  
120312  
120404  
120408  
120412  
150404  
150408  
150412  
190416

### SNMX



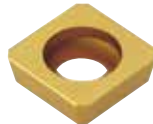
120408R

### SNUN



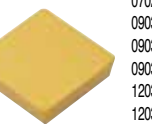
120408  
120412  
190412  
120412TN  
250724TN

### SPGA



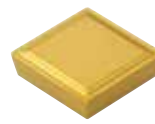
060204  
090308T  
090308T-Z

### SPGN



070202 120402 150416  
070208 120404 150420  
090302 120408 190404  
090304 120412 190408  
090308 120416 190412  
120302 120430 190416  
120304 120440 190424  
120308 150404  
120312 150408  
120316 150412

### SPGR-F

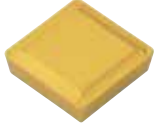


090304  
120304

# Turning Inserts

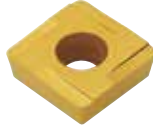
## ► For Turning

### SPGR-M



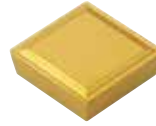
090308  
120308

### SPGT



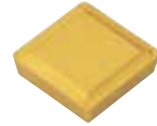
090304R/L  
090308R/L

### SPMR-F



090304  
120304

### SPMR-M



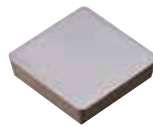
090308  
120308  
120312

### SPMT-VF



090304  
090308

### SPUN



120304  
120308  
150412  
190412  
190416  
250620  
120308SN

### TBGT



060102L  
060104L

### TCGT-AK / AR



AK

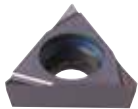
090202 16T304  
090204 16T308



AR

110202 16T312  
110204 16T316  
110208 16T325  
16T302

### TCGT-KF



0802003R-KF  
080201R-KF  
080202R-KF  
0802003L-KF  
080201L-KF  
080202L-KF

### TCMT-C25



090204  
090208  
110202  
110204  
110208  
16T304  
16T308

### TCMT-HMP



090204  
090208  
110202  
110204  
110208  
16T304  
16T308

### TCMT-MP



090204  
090208  
110202  
110204  
110208  
16T304  
16T308  
16T312

### TCMT-VF



110202  
110204  
110208  
16T302  
16T304

### TCMT-VL



090208  
110204  
110208  
16T304  
16T308

### TNGA



110302 220402  
110304 220404  
160304 220408  
160402 220412  
160404 270612  
160408 270624  
220304

### TNGG



110304R/L  
160402R/L  
160404R/L  
160408R/L  
220404R/L  
220408R/L  
220412R/L

### TNGG-SC



160402R/L  
160404R/L

### TNGN



110302 160412  
110304 220404  
110308 220408  
160302 220412  
160304 220416  
160308 220424  
160404 270630  
160408

### TNMA



110308 220416  
160404 220420  
160408 220432  
160412 270608  
160416 270612  
220404 270616  
220408 330924  
220412

### TNMG-B25



110308 220424  
160404 220432  
160408 270608  
160412 270612  
160416 270616  
220404 330716  
220408 330924  
220412  
220416

### TNMG-GR



160408  
160412  
220408  
220412  
220416  
270608  
270612  
270616  
330924

### TNMG-HA



160404  
160408  
160412  
220408

### TNMG-LP



160404  
160408  
160412




















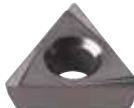




### TNMG-LW



160408  
160412

# Turning Inserts

## ► For Turning

<b>TNMG-MM</b>  160404 160408 160412 220404 220408 220412	<b>TNMG-MP</b>  160404 160408 160412 220404 220408 220412 220416	<b>TNMG-RM</b>  160404 160408 160412 220408 220412	<b>TNMG-VB</b>  160404 160408 220408 220412
<b>TNMG-VC</b>  160404 160408 160412 220408 220412	<b>TNMG-VF</b>  110304 160404 160408 160412 220404 220408	<b>TNMG-VL</b>  160404 160408 160412 220408 220412	<b>TNMG-VM</b>  110308 160404 160408 160412 220404 220408 220412
<b>TNMG-VP2</b>  160404 160408 160412 220404 220408	<b>TNMG-VP3</b>  160404 160408	<b>TNMG-VP4</b>  160408 160412	<b>TNMG-VR</b>  160408 160412 160416 220408 220412 220416
<b>TNMG-VW</b>  160404 160408	<b>TNMM-GH</b>  160408 220408 220412 220416 270616 270624 330924	<b>TNMM-GR</b>  220408 220412 220416	<b>TNMM</b>  160408 220408 220412
<b>TNMX</b>  160402R 160404R/L 160408R/L 220404R 220408R	<b>TNMX-SH</b>  160404R/L 160408R/L	<b>TOEH</b>  060102L 090204L 140304L	<b>TPGH</b>  080202L 080204L 110202L 110204L
<b>TPGN</b>  090204 160316 110302 160404 110304 220404 110308 220408 160302 220412 160304 220430 160308 220440 160310 270408 160312 270608	<b>TPGR-F</b>  110302 110304 160304	<b>TPGR-M</b>  110308 160308	<b>TPGT</b>  080202R/L 110302R/L 110304R/L 110308R/L 160404R/L 160408R/L

# Turning Inserts

## ► For Turning

### TPGX



090202L  
090204L  
090208L  
110304L

### TPMR-F



090202  
090204  
110302  
110304  
110308  
160304  
160308

### TPMR-M



110304  
110308  
160304  
160308  
160312  
220408

### TPMT-MP



110304  
110308  
160404  
160408

### TPMT-VF



110304  
110308  
160404  
160408

### TPMT-VL



090204  
110304  
110308  
160404  
160408

### TPUN



090308 220404  
110208 220408  
110304 220412  
110308 330620  
160304 160308TN  
160308 160312TN  
160312 220412TN

### VBGT



160404  
160408

### VBGT-AK / AR



**AK**  
110302  
110304  
110308  
160402  
160404  
160408  
**AR**  
160412

### VBGT-KF



1103003R/L  
110301R/L  
110302R/L

### VBGT-KM



1103003R/L  
110301R/L  
110302R/L

### VBMT



160404  
160408

### VBMT-HMP



110204  
110208  
110304  
110308  
160404  
160408  
160412

### VBMT-MP



110304  
110308  
160404  
160408  
160412

### VBMT-VB



160404  
160408

### VBMT-VF



160404  
160408

### VBMT-VL



160404  
160408  
160412

### VCET-KF



1103005MFR/L  
110301MFR/L  
110302MFR/L

### VCET-KM



1103005MFR/L  
110301MFR/L  
110302MFR/L

### VCGT-AK / AR



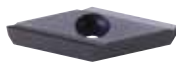
**AK** 110301 160402  
110302 160404  
110304 160408  
110308 160412  
**AR** 130302 220516  
130304 220525  
130308 220530

### VCGT-KF



1103003R/L  
110301R/L  
110302R/L

### VCGT-KM



1103003R/L  
110301R/L  
110302R/L

### VCGT-VP1



110301  
110302  
110304

### VCGT-VP1 (Precision class)























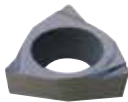



110301MFN  
110302MFN  
110304MFN



# Turning Inserts

## ► For Turning

<b>VCGX-VP1</b> (Precision class)  120300MFR 120301MFR 120302MFR	<b>VCMT-HMP</b>  160404 160408	<b>VCMT-MP</b>  080202 080204 160404 160408 160412	<b>VCMT-VF</b>  080202 080204 110304 160404
<b>VCMT-VL</b>  080202 080204 160404 160408 160412	<b>VNGG-HA</b>  160408	<b>VNMG-MM</b>  160404 160408 160412	<b>VNMG-HA</b>  160404 160408
<b>VNMG-LP</b>  160404 160408 160412	<b>VNMG-MP</b>  160404 160408 160412	<b>VNMG-RM</b>  160404 160408 160412	<b>VNMG-VB</b>  160404 160408
<b>VNMG-VC</b>  160404 160408	<b>VNMG-VF</b>  160402 160404 160408 160412	<b>VNMG-VL</b>  160404 160408	<b>VNMG-VM</b>  160404 160408 160412 220404 220408
<b>VNMG-VP3</b>  160404 160408	<b>VNMG-VQ</b>  160404 160408	<b>VPET-KF</b>  0802005MFR/L 080201MFR/L 080202MFR/L	<b>VPET-KM</b>  0802005MFR/L 080201MFR/L 080202MFR/L
<b>VPGT-VP1</b>  110301 110302 110304	<b>VPGT-VP1</b> (Precision class)  110301MFN 110302MFN 110304MFN	<b>WBG</b>  020102R/L S30202L S30204R/L	<b>WNMA</b>  060404 060408 060412 080404 080408 080412 080416

# Turning Inserts

## ► For Turning

### WNMG-B25



080404  
080408  
080412

### WNMG-GR



080404  
080408  
080412  
080416

### WNMG-HA



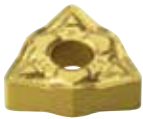
060404  
060408  
080404  
080408  
080412

### WNMG-LP



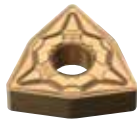
080404  
080408  
080412

### WNMG-LW



060408  
060412  
080408  
080412

### WNMG-MM



060404  
060408  
060412  
080404  
080408  
080412

### WNMG-MP



060404  
060408  
060412  
080404  
080408  
080412  
080416

### WNMG-RM



060408  
060412  
080404  
080408  
080412

### WNMG-VB



080404  
080408

### WNMG-VC



080404  
080408  
080412

### WNMG-VF



060404  
060408  
080404  
080408  
080412

### WNMG-VL



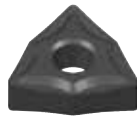
060404  
080404  
080408

### WNMG-VM



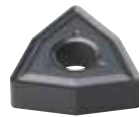
060402  
060404  
060408  
060412  
080404  
080408  
080412

### WNMG-VP2



080404  
080408  
080412

### WNMG-VP3



080404  
080408  
080412

### WNMG-VP4



080408  
080412

### WNMG-VQ



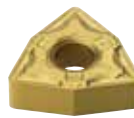
060404  
060408  
080404  
080408  
080412

### WNMG-VR



080408  
080412

### WNMG-VW



080404  
080408

### WNMM-B25



100608  
130612



### WNMX-SH



080404R/L  
080408R/L

# Milling Inserts

## ► For Milling

<b>ADKA</b>  150308R 150308SR 150308TR	<b>ADLT</b>  150308R 150308SR 150308TR	<b>APKT</b>  1604PDSR	<b>APKT-MA</b>  1604PDFR
<b>APKT-MA2</b>  1604PDFR 160416FR 160432FR	<b>APKT-MA3</b>  1604PDFR 160420FR	<b>APKT-MF</b>  1604PDSR	<b>APKT-MM</b>  1604PDSR
<b>APKT-MM1</b>  160432R	<b>APKT-X22</b>  1604PDSR 1604PDTR	<b>APLT</b>  070304R	
<b>APMT-MA</b>  0602PDFR 060208PDFR 0903PDFR 090308PDFR 11T3PDFR 11T308PDFR 160404PDFR 1604PDFR 180604PDFR 1806PDFR 180612PDFR 180616PDFR 180620PDFR 180624PDFR 180630R	<b>APMT-MF</b>  11T3PDSR 1604PDSR 1806PDSR 180612PDSR		
<b>APMT-ML</b>  0903PDER 090308PDER 11T3PDER 11T308PDER 160404PDER 1604PDER 180604PDER 1806PDER 180612PDER 180616PDER 180620PDER 180624PDER 180630R	<b>APMT-MM</b>  060202PDSR 0602PDSR 060208PDSR 060212R 060216R 0903PDSR 090306PDSR 090308PDSR 090312R 090316R 090320R 090331R 090332R 11T3PDSR 11T308PDSR 11T312PDSR 11T316R 11T318R 11T324R 1604PDSR 160410PDSR 160416PDSR 160424R 160430R 160432R 160450R 160464R 1806PDSR 180612PDSR 180616PDSR 180620PDSR 180624PDSR 180630R 180632R 180640R 180648R 180650R 180660R 180664R		
<b>CNHQ</b>  1005-C0.5 1305-C0.5 1606-C0.5	<b>CPMH-MM</b>  120408	<b>CPMT-MM</b>  060204 080308 09T308	<b>HECN</b>  090408FN 090408SN 090408TN 110412FN 110412TN

# Milling Inserts

## ► For Milling

### HPEN



090408FN  
090408SN  
090408EN  
110412FN

### HPEN-WC



090408  
110412

### LBH



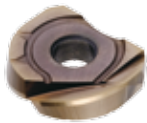
080  
100  
120  
160  
200  
250  
300  
320

### LBH-KF



080 200  
100 210  
120 250  
130 300  
160 320  
170

### LBH-KH



080 210  
100 250  
120 260  
130 300  
160 320  
170  
200

### LBS



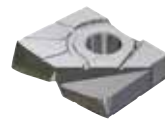
080 200  
090 210  
100 250  
110 260  
120 300  
130 310  
160 320  
170

### LCF



160-D90  
200-D90  
250-D90

### LFH



100  
120  
160  
200  
250  
300  
320

### LPEW



040210R  
040220R

### LPMT-MF



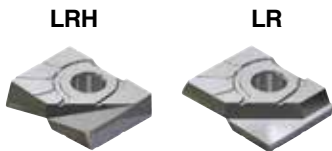
040210R  
040220R

### LPMW



040210R  
040220R

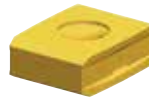
### LRH / LR



(Special type)

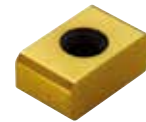
100-R05	160-R20	250-R20
100-R10	160-R30	250-R30
100-R20	170-R05	260-R05
110-R05	200-R05	300-R10
120-R05	200-R10	300-R20
120-R10	200-R20	300-R30
120-R20	200-R30	310-R05
130-R05	210-R05	320-R10
160-R05	250-R05	320-R20
160-R10	250-R10	320-R30

### LNCS



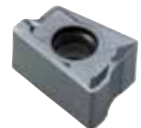
1907-C1.5-WC  
1907-R3.0-WC

### LNE



324-R0.8  
324-C1.0

### LN(E)X-MF



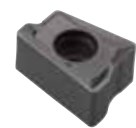
100605PNR  
100608PNR

### LN(E)X-MF



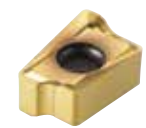
151004PNR  
151008PNR  
151016PNR

### LN(E)X-MM



100605PNR  
100608PNR  
100605PNL

### LN(E)X-MM



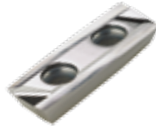
151004PNR  
151008PNR  
151016PNR  
151008PNL

### LNEX-MA



100605PNR  
151004PNR  
151008PNR

### LXET-MA



250404PEFR-32	250412PEFR-40	340504PEFR-63
2504PEFR-32	250416PEFR-40	3405PEFR-63
250412PEFR-32	340504PEFR-50	340512PEFR-63
250416PEFR-32	3405PEFR-50	340516PEFR-63
250404PEFR-40	340512PEFR-50	
2504PEFR-40	340516PEFR-50	

# Milling Inserts

## ► For Milling

### LXET-ML



250404PEER-32 340504PEER-50  
 2504PEER-32 3405PEER-50  
 250412PEER-32 340512PEER-50  
 250416PEER-32 340516PEER-50  
 250404PEER-40 340504PEER-63  
 2504PEER-40 340508PEER-63  
 250412PEER-40 340512PEER-63  
 250416PEER-40 340516PEER-63

### MPMT



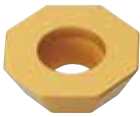
090308  
 120408

### OFCN



0704SN  
 0704FN  
 070408SN  
 070408FN  
 070408TN

### OFCW



05T3SN  
 05T3FN  
 05T308FN

### OFKR-MA



0704FN  
 0704EN

### OFKR-MF



0704SN  
 070408SN

### OFKR-MM



0704SN  
 070408SN

### OFKT-MA



05T3FN  
 05T3EN  
 0704FN  
 0704EN

### OFKT-MF



05T3SN  
 05T308SN

### OFKT-MM



05T3SN  
 05T308SN  
 0704SN

### ONHX-MF



060608  
 080608  
 0606ANN  
 0806ANN

### ONHX-ML



060608  
 080608

### ONHX-MM



060608  
 080608  
 0606ANN  
 0806ANN

### ONHX-MA



060608  
 080608

### ONHX-W



060608  
 080608

### ONMX-MF



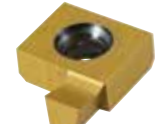
060608  
 080608  
 0606ANN  
 0806ANN

### ONMX-MM



060608  
 080608  
 0606ANN  
 0806ANN

### ORG



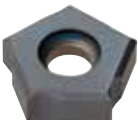
265  
 325  
 405  
 470

### PNEJ



1223N 1260N  
 1225N 1265N  
 1230N 1270N  
 1235N 1275N  
 1240N 1285N  
 1245N  
 1250N  
 1255N

### PNEJ-C



1223N-C03 1255N-C05  
 1230N-C03 1260N-C05  
 1235N-C03 1265N-C05  
 1240N-C05 1270N-C05  
 1245N-C05 1275N-C05  
 1250N-C05

### RC



16  
 20  
 25  
 30  
 32

### RDCT-MA



10T3M0  
 1204M0

### RDHW



0501M0F 0702M0F  
 0501M0E 0702M0E  
 0501M0S 0702M0S  
 06T1M0F 0803M0F  
 06T1M0E 0803M0E  
 06T1M0S 0803M0S



# Milling Inserts

## ► For Milling

### RDHW



1605M0F  
1605M0E  
1605M0S  
2006M0F  
2006M0E  
2006M0S

### RDKT-MF



10T3M0  
1204M0  
1605M0

### RDKT-ML



1605M0

### RDKT-MM



10T3M0  
1204M0  
1605M0  
2006M0

### RDKW



0501M0E  
06T1M0E  
0702M0E  
0803M0E

### REKR-MM



170400

### RPCT-MA



10T3M0  
1204M0  
1606M0  
2007M0

### RPET-ML



0803M0E  
103TM0E  
1204M0E  
1606M0E  
2007M0E

### RPMT-MF



0803M0E  
10T3M0E  
1204M0E  
1606M0E  
2007M0E

### RPMT-MM



0803M0S  
10T3M0S  
1204M0S  
1606M0S  
2007M0S

### RPMW



0803M0E1  
10T3M0E1  
1204M0S1  
1204M0S2  
1606M0S1  
2007M0S1

### SDCN



42R  
42L  
53R  
53L  
42M  
42M-G  
42MT  
42MT-RH

42MT-S20  
53M  
53M-G  
53MT  
53MT-RH  
53MT-S20  
1203AEEN  
1203AEEN-RH  
1203AESN  
1203AESN-RH  
1504AEEN  
1504AEEN-RH  
1504AESN  
1504AESN-RH

### SDET-MA



09M402R  
09M404R  
09M405R  
130504R

### SDET-MF



09M405R  
130508R

### SDET-MM



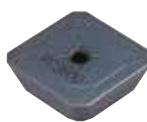
09M405R  
130508R

### SDKN-CM



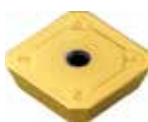
42MT

### SDKN-MU



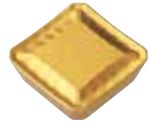
1203AESN  
1504AESN

### SDKN-SU



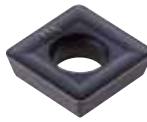
1203AESN  
1504AESN

### SDKR-MX



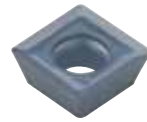
1203AESN  
1203AETN  
1203AEN  
1504AESN  
1504AETN  
1504AEN

### SDMT-MM



090308

### SDXT-MA



09M405R  
130508R

### SDXT-MF



09M403R  
09M403L  
09M404R  
09M404L  
09M405R  
09M405L  
130508R

# Milling Inserts

## ► For Milling

### SDXT-MM



09M405R  
09M405L  
130508R  
130508L  
130538

### SECA



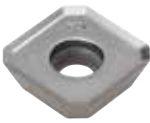
1204AFSN  
1204AFTN  
1204AFFN  
1204AFEN  
1504AFSN  
1504AFTN  
1504AFFN

### SECN



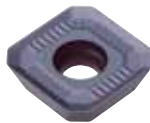
1203AFFN 1504AFFN  
1203AFTN 1504AFTN  
1203AFEN 1504AFEN  
1203AFSN 1504AFSN  
1203AFEN-RH 1504AFEN-RH  
1203AFSN-RH 1504AFSN-RH  
1203AFTN-S20 1504AFTN-S20

### SEET-MA



0903AGFN  
14M4AGFN

### SEET-MF



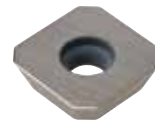
0903AGSN  
14M4AGSN

### SEET-MM



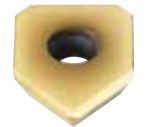
0903AGSN  
14M4AGSN

### SEEW



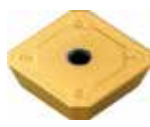
0903AGTN  
14M4AGTN

### SEEW-W



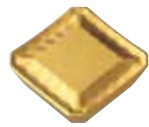
14M4AGFN  
14M4AGSN  
14M4AGTN

### SEKN-SU



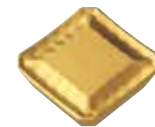
1203AFSN  
1504AFSN

### SEKR-MF1



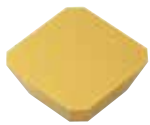
1203AFSN

### SEKR-MX



1203AFSN  
1204AFSN  
1504AFSN

### SEMN



1204AZ

### SEXT-MF



0903AGSN  
14M4AGSN

### SEXT-MM



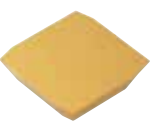
0903AGSN  
14M4AGSN

### SEXT-MR



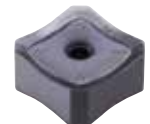
0903AGSN  
14M4AGSN

### SFCN



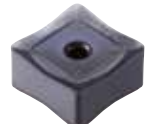
1203EFR

### SNCF-MF



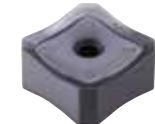
1206ANN  
1206ENN  
1206QNN  
1507ANN  
1507ENN

### SNMF-MF



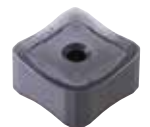
1206ANN  
1206ENN  
1206QNN  
1507ANN  
1507ENN

### SNCF-MM



1206ANN  
1206ENN  
1206QNN  
1507ANN  
1507ENN

### SNMF-MM



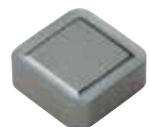
1206ANN  
1206ENN  
1206QNN  
1507ANN  
1507ENN

### SNCN



1204ENN  
1504ENN

### SNEF



435  
535




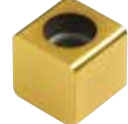


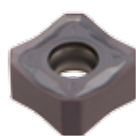
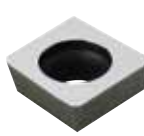
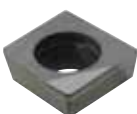
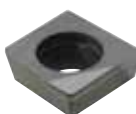



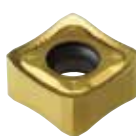
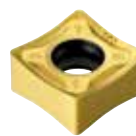

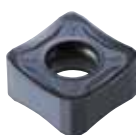
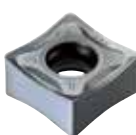


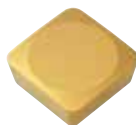
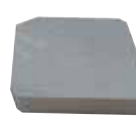
### SNEU-MF



120420





# Milling Inserts

## ► For Milling

<p><b>SNEU-MF</b></p> <p>1204ANN</p> 	<p><b>SNEU-TBW</b></p> <p>1204</p> 	<p><b>SNEU-WMF</b></p> <p>1204R</p> 	<p><b>SNEX</b></p> <p>101010 1010ZNN</p> 	
<p><b>SNEX-CU1</b></p> <p>101010 1010ZNN 121212 1212ZNN</p> 	<p><b>SNEX-MA</b></p> <p>1206ANN 1206ENN 1206QNN 120612</p> 	<p><b>SNEX-ML</b></p> <p>1206ANN 1206ENN 1206QNN 120612 1507ANN 1507ENN</p> 	<p><b>SNEW</b></p> <p>09T3ADFR</p> 	
<p><b>SNEW-NAF</b></p> <p>09T3ADTR-NAF 09T3ADTR-NAW</p> 	<p><b>SNEW-XAF</b></p> <p>09T3ADTR-XAF 09T3ADTR-XAW</p> 	<p><b>SNHT-WX</b></p> <p>1102308R/L 120508R/L 110308R/L 1205408R/L 120308R/L 120608R/L 1203508R/L 1206508R/L 120408R/L 120708R/L 1204508R/L 1207508R/L</p> 		
<p><b>SNKN</b></p> <p>1204ENN 1504ENN</p> 	<p><b>SNM(E)X-MF</b></p> <p>1206ANN 1507ANN</p> 	<p><b>SNM(E)X-MF</b></p> <p>1206ENN 1507ENN</p> 	<p><b>SNM(E)X-MF</b></p> <p>1206QNN 120612</p> 	
<p><b>SNM(E)X-MM</b></p> <p>1206ANN 1507ANN</p> 	<p><b>SNM(E)X-MM</b></p> <p>11206ENN 1507ENN</p> 	<p><b>SNM(E)X-MM</b></p> <p>11206QNN 120612</p> 	<p><b>SNEX-W</b></p> <p>1206ANN</p> 	
<p><b>SPCN</b></p> <p>1203EDR 1204EDR 1504EDSR-RH 1203EDR-RH 150412T 1504EDTR-RH 1203EDL 1504EDR 1504EDR-S20 1203EDR-G 1504EDR-RH 1203EDR-RN 1504EDSR 1203EDER-RH 1504EDL 1203EDSR-RH 1504EDR-G 1203EDTR-RH 1504EDR-RN 1203EDR-S20 1504EDER-RH</p> 			<p><b>SPEN-WC</b></p> <p>120416 150412 150416 150420 190424</p> 	<p><b>SPEX</b></p> <p>1203EDR-1 1203EDL-1 1504EDR-1 1504EDL-1</p> 

# Milling Inserts

## ► For Milling

<p><b>SPFN</b></p>  <p>200-N 300-N 400-N</p>	<p><b>SPKN-MU</b></p>  <p>1203EDSR 1504EDSR</p>	<p><b>SPKN-SU</b></p>  <p>1203EDSR 1203EDSL 1504EDSR 1504EDSL</p>	<p><b>SPKR-MX</b></p>  <p>1203EDSR 1203EDSL 1504EDR 1504EDSR</p>
<p><b>SPMN</b></p>  <p>120308</p>	<p><b>SPMT</b></p>  <p>060304</p>	<p><b>SPMT-KC</b></p>  <p>110408</p>	<p><b>SPMT-MM</b></p>  <p>120408-MM 120508-MMN</p>
<p><b>TEC(E)N</b></p>  <p><b>TECN</b> 22R 22TR 32R 32R-G 32TR 32TR-S20 43R-G 43TR-Z 43TR</p> <p><b>TEEN</b> 32TR</p>	<p><b>TEEN</b></p>  <p>43R-Z 43TR-Z 43TR-ZH 43R 43R-G 43TR 43TR-S20</p>	<p><b>TFCN</b></p>  <p>2203PFR 2203PFL</p>	<p><b>TNMX-NM</b></p>  <p>2710AZNR 2710AZNL</p>
<p><b>TPCN</b></p>  <p>1103PPN 1103PPTN 1603PDR 1603PPN 1603PPR 1603PPR-RH 1603PPR-G 1603PPSR 1603PPTN 1603PPTR</p> <p>1603PPR-RH 1603PDER-RH 1603PDSR-RH 1603PDR-S20 1603PDR-RN 2204PDR 2204PDR-RH 2204PDR-RN 2204PDR-G 2204PDL</p> <p>2204PDSR 2204PDTR 2204PPN 2204PPTN 2204PDR-RH 2204PDER-RH 2204PDSR-RH 2204PDR-S20</p>	<p><b>TPKN-MU</b></p>  <p>2204PDSR</p>	<p><b>TPKN-SU</b></p>  <p>1603PDSL 1603PDSR 2204PDSL 2204PDSR</p>	<p><b>TPKR-MX</b></p>  <p>1603PDSN 1603PDSR 1603PPR 1603PPSN 1603PPSR 2204PDR 2204PDSR 2204PPR</p>
<p><b>TPKR-MX</b></p>  <p>1603PDSN 1603PDSR 1603PPR 1603PPSN 1603PPSR 2204PDR 2204PDSR 2204PPR</p>	<p><b>TWX-KC</b></p>  <p>16R 22R</p>	<p><b>VCKT-MA</b></p>  <p>220530N</p>	<p><b>VDKT-MA</b></p>  <p>11T210N 11T220N</p>
<p><b>WDKT-MH</b></p>  <p>080316ZDSR 10T320ZDSR 130520ZDSR 150625ZDSR</p>	<p><b>WNMX-MM</b></p>  <p>060312ZNN 09T316ZNN 130520ZNN 160720ZNN</p>	<p><b>WNMX-MF</b></p>  <p>060312ZNN 09T316ZNN 130520ZNN 160720ZNN</p>	<p><b>XCET-KC</b></p>  <p>310404ER</p>

# Milling Inserts / Drilling Inserts

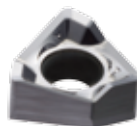
## ► For Milling

### XEKT-MA



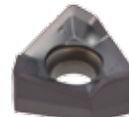
19M504FR 19M532FR 250620FR  
 19M508FR 19M540FR 250630FR  
 19M512FR 19M550FR 250632FR  
 19M516FR 250604FR 250640FR  
 19M518FR 250608FR 250650FR  
 19M520FR 250612FR  
 19M530FR 250616FR

### XNCT-MA



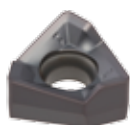
080504PNFR  
 080508PNFR  
 080512PNFR  
 080520PNFR  
 120608PNFR

### XNKT-ML



060405PNER  
 080504PNER  
 080508PNER  
 080512PNER  
 080516PNER  
 080520PNER  
 120608PNER  
 120612PNER  
 120616PNER  
 120620PNER

### XNKT-MM



060405PNSR  
 080504PNSR  
 080508PNSR  
 080512PNSR  
 080516PNSR  
 080520PNSR  
 120608PNSR  
 120612PNSR  
 120616PNSR  
 120620PNSR

### XPMT-MM



0802ER  
 1003ER  
 13T3ER  
 1604ER  
 1805ER  
 2006ER  
 2507ER

### ZDMT-R-MM



080310R  
 110312.5R  
 130416R

### ZPET-MM



(Internal)

080M 140M  
 090M 150M  
 100M 160M  
 110M 200M  
 125M 250M  
 130M

### ZPET-MM



(External)

080S 140S  
 090S 150S  
 100S 160S  
 110S 200S  
 125S 250S  
 130S

### ZPMT-MM



1504PPSR-MM  
 1505PPSR-MMN

### ZPMT-R-MM



160520R  
 160525R  
 160531.5R

### ZPMT-R-MR



160525R

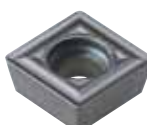
## ► For Drilling

### SPET-ND



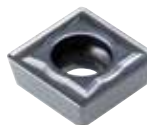
040204  
 050204  
 060205  
 07T208  
 090308  
 11T308  
 130410  
 15M510  
 180510

### SPMT-DF



050203  
 060204  
 070204

### SPMT-DM



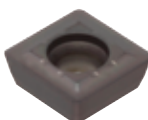
050203  
 060204  
 070204

### SPMT-DS



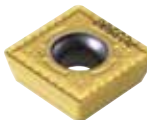
050203  
 060204  
 070204

### SPMT-LD



060205  
 07T208  
 090308  
 11T308  
 130410  
 15M510  
 180510

### SPMT-PD



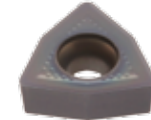
040204  
 050204  
 060205  
 07T208  
 090308  
 11T308  
 130410  
 15M510  
 180510

### WCKT-C21



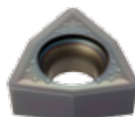
030204  
 040204  
 050308  
 06T308  
 080408

### WCMT-C20N



030208  
 040208  
 050308  
 06T308  
 080408  
 080412

### WCMT-C21N



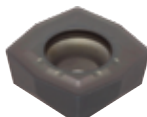
030204  
 040204  
 040208  
 050308  
 06T308  
 080408

### XOET-ND



040204  
 050204  
 060204  
 07T205  
 090305  
 11T306  
 130406  
 15M508  
 180508

### XOMT-LD



060204  
 07T205  
 090305  
 11T306  
 130406  
 15M508  
 180508

### XOMT-PD



040204  
 050204  
 060204  
 07T205  
 090305  
 11T306  
 130406  
 15M508  
 180508

### XOMT-RD



07T207  
 090308  
 11T309  
 130410  
 15M511  
 180512



# Inserts for Aluminium Machining

## ► For Turning

### CCGT-AK / AR



AK  
060202  
060204  
060208  
09T302  
09T304  
09T308  
120402  
120404  
120408

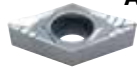


AR  
060202  
060204  
060208  
09T302  
09T304  
09T308  
120402  
120404  
120408  
120412

### DCGT-AK / AR



AK  
070202  
070204  
070208  
11T302  
11T304  
11T308  
11T312



### RCGT-AK / AR



AK  
0602M0  
0803M0  
1003M0  
10T3M  
1204M0



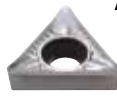
### SCGT-AK / AR



AK  
09T302  
09T304  
09T308  
120404  
120408  
120416



### TCGT-AK / AR



AK  
090202  
090204  
110202  
110204  
110208  
16T302  
16T304  
16T308  
16T312  
16T316  
16T325



### VBGT-AK / AR



AK  
110302  
110304  
110308  
160402  
160404  
160408  
160412



### VCGT-AK / AR



AK  
110301  
110302  
110304  
110308  
130302  
130304  
160402  
160404  
160408  
160412  
220516  
220525  
220530



## ► For Grooving

### KGGN-A



200-02  
300-02  
400-04  
500-04  
600-04

### KRGN-A



300  
400  
500  
600  
800

### MGGN-A



300-02  
300-04  
300-08  
400-02  
400-04  
400-08

### MRGN-A



400  
500  
600  
800

### MRGN-A



6N  
8N

### MRGN-A5



6N  
8N

### MRGN-AM



6N  
8N

### MRGN-AP



6N  
8N

### MVGN



8N-A-R1.2  
8N-A-R1.6

## ► For Drilling

### SPET-ND



040204  
050204  
060205  
07T208  
090308  
11T308  
130410  
15M510  
180510

### XOET-ND



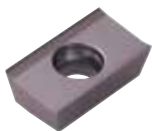
040204  
050204  
060204  
07T205  
090305  
11T306  
130406  
15M508  
180508

# Inserts for Aluminium Machining

## ► For Milling

### APKT-MA

1604PDRF



### APKT-MA2

1604PDRF  
160416FR  
160432FR



### APKT-MA3

1604PDRF  
160420FR



### APMT-MA

0602PDRF  
060208PDRF  
0903PDRF  
090308PDRF  
11T3PDRF  
11T308PDRF



160404PDRF  
1604PDRF  
180604PDRF  
1806PDRF  
180612PDRF  
180616PDRF

180620PDRF  
180624PDRF  
180630R

### CDEW-XCF

1204R/L



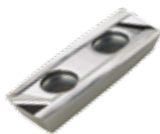
### LNEX-MA

100605PNR  
151004PNR  
151008PNR



### LXET-MA

250404PEFR-32  
2504PEFR-32  
250412PEFR-32  
250416PEFR-32  
250404PEFR-40  
2504PEFR-40



250412PEFR-40  
250416PEFR-40  
340504PEFR-50  
3405PEFR-50  
340512PEFR-50  
340516PEFR-50

340504PEFR-63  
3405PEFR-63  
340512PEFR-63  
340516PEFR-63

### OFKR-MA

0704FN  
0704EN



### OFKT-MA

05T3FN  
05T3EN  
0704FN  
0704EN



### ONHX-MA

060608  
080608



### RDCT-MA

10T3M0



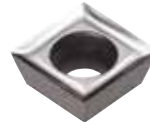
### RPCT-MA

1204M0  
10T3M0  
1204M0  
1606M0  
2007M0



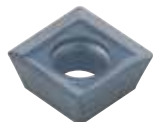
### SDET-MA

09M402R  
09M404R  
09M405R  
130504R



### SDXT-MA

09M405R  
130508R



### SEET-MA

0903AGFN  
14M4AGFN



### SNEX-MA

1206ANN  
1206ENN  
1206QNN  
120612



### VCKT-MA

220530N



### VDKT-MA

11T210N  
11T220N



### XEKT-MA

19M504FR  
19M508FR  
19M512FR  
19M516FR  
19M518FR  
19M520FR  
19M530FR

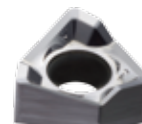


19M532FR  
19M540FR  
19M550FR  
250604FR  
250608FR  
250612FR  
250616FR

250620FR  
250630FR  
250632FR  
250640FR  
250650FR















### XNCT-MA

080504PNFR  
080508PNFR  
080512PNFR  
080520PNFR  
120608PNFR



# Multi Functional Tools (Inserts)

## ► KGT

<p><b>KGML-L</b></p>  <p>· Width : 2.0~6.0mm</p>	<p><b>KGMR-R</b></p>  <p>· Width : 1.5~8.0mm</p>	<p><b>KGMR-T</b></p>  <p>· Width : 1.5~8.0mm</p>	<p><b>KRMN-C</b></p>  <p>· Width : 2.0~8.0mm</p>
<p><b>KGMI-T</b></p>  <p>· Width : 2.0~4.0mm</p>	<p><b>KGMR-LP</b></p>  <p>· Width : 2.0~5.0mm</p>	<p><b>KGMR-RP</b></p>  <p>· Width : 2.0~5.0mm</p>	<p><b>KGML-LP</b></p>  <p>· Width : 2.0~4.0mm</p>
<p><b>KGML-RP</b></p>  <p>· Width : 2.0~4.0mm</p>	<p><b>KGGN-B</b></p>  <p>· Width : 2.65~8.0mm</p>	<p><b>KGGN-R</b></p>  <p>· Width : 2.0~8.0mm</p>	<p><b>KGGN-R (Type sigular)</b></p>  <p>· Width : 2.0~8.0mm</p>
<p><b>KGGN-A</b></p>  <p>· Width : 2.0~6.0mm</p>	<p><b>KRGN-A</b></p>  <p>· Width : 3.0~8.0mm</p>		

## ► For Micro Boring Tools

**NFTF, NFTG, NFTT**



Holder : NFTIH  
 ※ for Internal Grooving, Threading and Copy machining

# Multi Functional Tools (Inserts)

## ► MGT

### MFMN



Holder  
MGFHR/L  
MGFVR/L

· Width : 3.0mm

### MGGN-M



Holder  
MGEHR/L  
MGEVR/L  
MGIVR/L

· Width : 3.0~6.0mm

### MGMN-G



Holder  
MGEHR/L  
MGEVR/L  
MGIVR/L  
MGFHR/L  
MGFVR/L

· Width : 1.5~6.0mm

### MGMN-M



Holder  
MGEHR/L  
MGEVR/L  
MGIVR/L  
MGFHR/L  
MGFVR/L

· Width : 2.0~8.0mm

### MGMN-L,R,T



Holder  
MGEHR/L  
MGEVR/L  
MGIVR/L  
MGFHR/L  
MGFVR/L

· Width : 2.0~5.0mm

### MGGN-A



Holder  
MGEHR/L  
MGEVR/L  
MGIVR/L

· Width : 3.0~5.0mm

### MGMR/L-PS



Holder  
MGEHR/L

· Width : 3.0~5.0mm

### MGMR/L-PT



Holder  
MGEHR/L

· Width : 2.0~5.0mm

### MRGN-A



Holder  
MGEHR/L  
MGEUR/L  
MGEVR/L  
MGIUR/L  
MGIVR/L

· Width : 4.0~5.0mm

### MRMN-M



Holder  
MGEHR/L  
MGEUR/L  
MGEVR/L  
MGIUR/L  
MGIVR/L

· Width : 2.0~8.0mm

### MVGN



Holder  
MGEXR/L  
MGIUR/  
L-MV

## ► For Parting

### SP



160	400L
180	500
200	500R
200R	500L
200L	600
300	600R
300R	600L
300L	
400	
400R	

· Holder : SPB/SPB-S,  
SPH/SPH-S

### POB



Holder  
PH

· Width : 3.0~5.0mm

## ► for Forming

### BF













Holder  
GFT, GFIP

· Width : 3.1~8.1mm

# Multi Functional Tools (Inserts)

## ► For Grooving

<p><b>DB</b></p> <p>Holder DBH</p>  <p>· Width : 3.0~8.0mm</p>	<p><b>DC</b></p> <p>Holder DBH</p>  <p>· Width : 3.0~5.0mm</p>	<p><b>FGD / FGM / FMM</b></p> <p>Holder FGHH FGVH</p>  <p>· Width : 3.0~5.0mm</p>	<p><b>GO</b></p> <p>Holder GH</p>  <p>· Width : 2.5~4.1mm</p>
<p><b>GS</b></p> <p>Holder GH</p>  <p>· Width : 1.23~4.28mm</p>	<p><b>GW</b></p> <p>Holder GFT GFIP</p>  <p>· Width : 1.1~8.0mm</p>	<p><b>IG</b></p> <p>Holder IGH</p>  <p>· Width : 1.25~2.8mm</p>	<p><b>GR</b></p> <p>Holder GFT GFIK</p>  <p>· Width : 2.0~8.0mm</p>
<p><b>TB</b></p> <p>Holder TBH</p>  <p>· Width : 3000type 1.25~4.3mm 4000type 1.25~4.5mm</p>	<p><b>TB-M</b></p> <p>Holder TBH</p>  <p>· Width : 4000type 1.5~4.5mm</p>		

## ► For Threading

### <Standard>

- Partial profile 60°
- Partial Profile 55°
- ISO Metric (Full Profile)
- American UN (Full Profile)  
UN, UNC, UNF, UNEF
- Whitworth (Full Profile)  
BSW, BSF, BSP
- British Standard Pipe thread  
(Full Profile) BSPT
- National Pipe Thread  
(Full Profile) NPT
- National Pipe Threads-Dryseal  
(Full Profile) NPTF
- Round DIN 405
- Trapez DIN 103
- American ACME
- Stub ACME
- UNJ
- American Buttress
- British Buttress
- Metric Buttress-Sagengewinde
- API
- API Buttress Casing
- API Round Casing & Tubing
- EL-Extreme Line

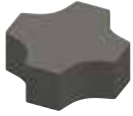
<p><b>ER</b></p>  <p>· Holder : ER(L)H / ER(L)H-C</p>	<p><b>ERM</b></p>  <p>· Holder : ER(L)H / ER(L)H-C</p>	<p><b>ERM-U</b></p>  <p>· Holder : ER(L)H / ER(L)H-C</p>
<p><b>IR</b></p>  <p>· Holder : IR(L)H / IR(L)H-C</p>	<p><b>IRM</b></p>  <p>· Holder : IR(L)H / IR(L)H-C</p>	<p><b>IRM-U</b></p>  <p>· Holder : IR(L)H / IR(L)H-C</p>



# Bearing Inserts

## ► For R-Chamfering

### MC



0906  
0910  
1206  
1210  
1212  
1215  
1220  
1225  
1525  
1530  
1540

• Holder : CMSN...F  
CMSN...B

### MC-BR



1206  
1210  
1212  
1215  
1220  
1230  
1235

• Holder : CMSN...F  
CMSN...B

## ► Internal Turning

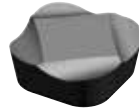
### RPGT



0802M0  
1203M0  
1604M0  
2004M0

• Holder : SRGP...E  
SRGP...F  
SRGP...B

### SPGR



120440L

• Holder : CSKP...B

### SPGH

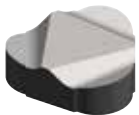


090330L

• Holder : SSKP...B

## ► Machining for Race-way

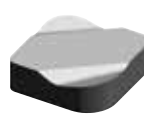
### KORIC



2204R/L  
2704R/L  
3306R/L  
3806R/L  
4408R/L

• Holder : CKFN...RW  
CKGN...RW

### SNGN-W

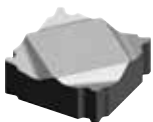


0903WR/L  
1504WR/L  
1905WR/L

• Holder : CSGN...RW

## ► Machining for Bearing Shield

### SNGN-S



0903SR/L  
1204SR/L  
1504SR/L

• Holder : CSBN...BS  
CSKN...BS

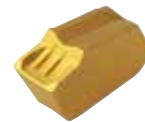
### TNGN



2204SR/L

• Holder : STGN...BS

### SP

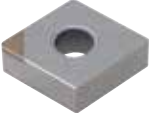
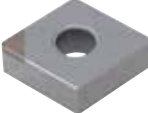

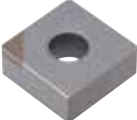
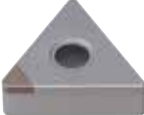


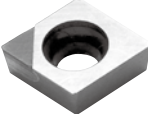
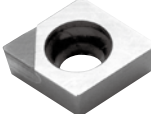
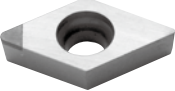
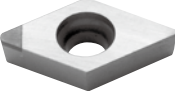




• Holder : SPB-S

160 400R  
180 400L  
200 500  
200R 500R  
200L 500L  
300 600  
300R 600R  
300L 600L  
400

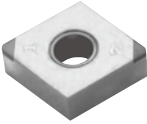
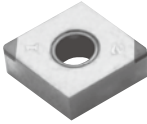
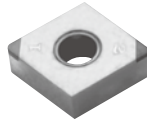
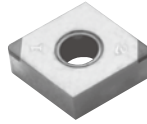
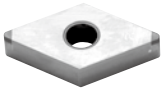
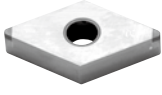
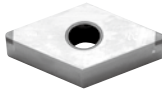
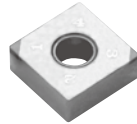
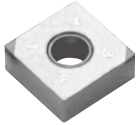
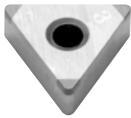

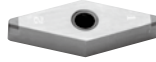
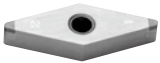
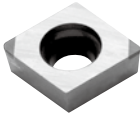
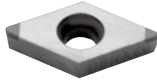
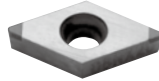



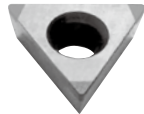
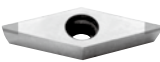

# cBN Inserts

## ► Regrinding Type (Negative / Positive)

<p><b>CNMA</b></p> <p>120404 120408</p> 	<p><b>T-CNMA</b></p> <p>120408</p> 	<p><b>DNMA</b></p> <p>150404 150408</p> 
<p><b>SNMA</b></p> <p>120404 120408</p> 	<p><b>TNMA</b></p> <p>160404 160408</p> 	<p><b>VNMA</b></p> <p>160404 160408</p> 
<p><b>T-VNMA</b></p> <p>160404</p> 	<p><b>CCMW</b></p> <p>09T304</p> 	<p><b>CPMW</b></p> <p>09T304</p> 
<p><b>DCGW</b></p> <p>11T308</p> 	<p><b>T-DCGW</b></p> <p>11T308</p> 	<p><b>TPGB</b></p> <p>110304 110308</p> 
<p><b>VBMW</b></p> <p>160404 160408</p> 		

# cBN Inserts

## Multi-Corner Type (Negative / Positive)

<b>2NU-CNGA</b>  120404 120408WF 120404F 120408WT 120404T 120412 120404W 120412F 120404WF 120412T 120408 120412W 120408F 120412WF 120408T 120412WT 120408W	<b>T-2NU-CNGA</b>  120408	<b>2NU-CNMA</b>  120404 120408	<b>2NS-CNGA</b>  120408
<b>2NU-DNGA</b>  150404 150404F 150404T 150408 150408F 150408T 150412 150412F 150412T 150608	<b>T-2NU-DNGA</b>  150412	<b>2NS-DNGA</b>  150408	<b>4NU-SNGA</b>  120404 120404F 120404T 120408 120408F 120408T 120412
<b>2NS-SNGA</b>  120408	<b>3NU-TNGA</b>  160404 160404F 160404T 160408 160408F 160408T 160412	<b>2NS-TNGA</b>  160408	<b>2NU-VNGA</b>  160404 160404F 160404T 160408 160408F 160408T
<b>2NS-VNGA</b>  160408	<b>2NU-CCGW</b>  060202 09T304 060202F 09T304F 060202T 09T304T 060204 09T308 060204F 09T308F 060204T 09T308T 060208 09T308W 060208F 09T308WF 060208T	<b>2NU-DCGW</b>  070204 11T304 070204F 11T304F 070204T 11T304T 070208 11T308 070208F 11T308F 070208T 11T308T	<b>T-2NU-DCGW</b>  11T304
<b>3NU-TCGW</b>  090204 090204F 090204T	<b>3NU-TPGB</b>  110304 110304F 110304T 110308 110308F 110308T	<b>3NU-TPGN</b>  110304 110304F 110304T 110308 110308F 110308T 160304 160308	<b>3NU-TPGW</b>  110304 110304F 110304T 110308 110308F 110308T
<b>2NU-VBGW</b>  160404 160404F 160404T 160408 160408F 160408T	<b>2NU-VCGW</b>  160404 160404F 160404T 160408 160408F 160408T		

# PCD Inserts

## ► PCD Inserts (Negative / Positive)

<p><b>BAMPR-XAF</b></p> <p>BAMPR</p> 	<p><b>BAMPR-XAW</b></p> <p>BAMPR</p> 	<p><b>BAMPR-XAWR</b></p> <p>BAMPR</p> 	<p><b>CDEW-NAF</b></p> <p>1204R/L</p>  <p>(strengthened Edge)</p>																																																																											
<p><b>CDEW-NAW</b></p> <p>1204R/L</p>  <p>(Strengthened Edge Wiper Insert)</p>	<p><b>CDEW-XAW</b></p> <p>1204R/L</p>  <p>(Sharp Edge Wiper Insert)</p>	<p><b>CDEW-XAF</b></p> <p>1204R/L</p>  <p>(Sharp Edge)</p>	<p><b>CDEW-XCF</b></p> <p>1204R/L</p>  <p>(Sharp Edge)</p>																																																																											
<p><b>CNMM / CNMX</b></p> <p>120404 120408 120412</p> 	<p><b>DNMM / DNMX</b></p> <p>150404 150408 150412</p> 	<p><b>TNMX</b></p> <p>160404 160408 160412</p> 	<p><b>VNMX</b></p> <p>160404 160408 160412</p> 																																																																											
<p><b>CCMT / CPMT</b></p> <table border="0"> <tr> <td>CCMT</td> <td>CPMT</td> </tr> <tr> <td>060202</td> <td>080204</td> </tr> <tr> <td>060204</td> <td>080208</td> </tr> <tr> <td>060208</td> <td>080212</td> </tr> <tr> <td>09T304</td> <td>090304</td> </tr> <tr> <td>09T308</td> <td>090308</td> </tr> <tr> <td>09T312</td> <td>090312</td> </tr> </table> 	CCMT	CPMT	060202	080204	060204	080208	060208	080212	09T304	090304	09T308	090308	09T312	090312	<p><b>DCMT</b></p> <p>070202 070204 070208 11T302 11T304 11T308</p> 	<p><b>SCMT / SPGW</b></p> <table border="0"> <tr> <td>SCMT</td> <td>SPGW</td> </tr> <tr> <td>09T304</td> <td>090302</td> </tr> <tr> <td>09T308</td> <td>090304</td> </tr> <tr> <td>09T312</td> <td>090308</td> </tr> </table> 		SCMT	SPGW	09T304	090302	09T308	090304	09T312	090308																																																					
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# Turning Tools

KORLOY holders contribute to improving machining quality and tool life by employing excellent durability and strong clamping. KORLOY responds to customer demands for a variety of holder shapes that are proper for each machining route.

Tool Holders (ISO Type)

Boring Bars (ISO Type)

Save Turn

Auto Tools

Multi Functional Tools (Holders)



# Tool Holders (ISO Type)

## ► Double Clamp System

### DCBNR/L



2020-K12  
2525-M12  
3225-P12  
2525-M16  
3232-P16  
3232-P19  
4040-S19

### DCKNR/L



2020-K12  
2525-M12  
3225-P12  
3232-P16  
4040-S16

### DCLNR/L



2020-K09 3225-P16  
2525-M09 3232-P16  
2020-K12 2525-M19  
2525-M12 3225-P19  
3225-P12 3232-P19  
3232-P12 4040-S19  
2525-M16

### DDJNR/L



2020-K11  
2525-M11  
3225-P11  
3232-P11  
2020-K15  
2525-M15  
3225-P15  
3232-P15  
2020-K15-3  
2525-M15-3  
3232-P15-3

### DSBNR/L



2020-K09  
2525-M09  
2020-K12  
2525-M12  
3225-P12  
3232-P12  
2525-M15  
3225-P15  
3232-P15  
3232-P19  
4040-S19

### DSDNN



2020-K09  
2020-K12  
2525-M12  
3225-P12  
3232-P12  
2525-M15  
3232-P15  
3232-P19  
4040-S19

### DSKNR/L



2020-K09  
2020-K12  
2525-M12  
3232-P12  
3232-P15  
3232-P19  
4040-S19

### DSSNR/L



2020-K09  
2020-K12  
2525-M12  
3225-P12  
3232-P12  
2525-M15  
3232-P15  
3232-P19  
4040-S19

### DTFNR/L



2020-K16  
2525-M16  
3232-P16  
2525-M22  
3225-P22  
3232-P22

### DTGNR/L



2020-K16  
2525-M16  
3232-P16  
2525-M22  
3225-P22  
3232-P22

### DVJNR/L



2020-K16  
2525-M16  
3232-P16

### DVVNN



2020-K16  
2525-M16  
3232-P16

### DWLNRL



2020-K06  
2525-M06  
2020-K08  
2525-M08

# Tool Holders (ISO Type)

## ▶ Lever Lock System

### PCBNR/L



New Type		
2020-K12N	3225-P12N	3232-P16N
2525-M12N	2525-M16N	
2020-K12	3232-P16	4040-S25-5
2525-M12	3232-P19	5050-T25
3225-P12	4040-S19	
2525-M16	4040-S25	

### PCKNR/L



New Type		
2020-K12N	3225-P12N	4040-S16N
2525-M12N	3232-P16N	
2020-K12	3225-P12	4040-S16
2525-M12	3232-P16	

### PCLNR/L



New Type		
1616-H09N	2020-K12N	2525-M16N
2020-K09N	2525-M12N	3232-P16N
2525-M09N	3225-P12N	
1616-H12N	3232-P12N	
1616-H09	3232-P12	4040-S19
2020-K09	2525-M16	4040-S25
2525-M09	3232-P16	5050-T25
1616-H12	2525-M19	4040-S25-5
2020-K12	3225-P19	5050-S25-5
2525-M12	3232-P19	
3225-P12	4040-P19	

### PDJNR/L



New Type		
1616-H11N	2525-M15N	2525-M15-3N
2020-K11N	3225-P15N	3232-P15-3N
2525-M11N	3232-P15N	
2020-K15N	2020-K15-3N	
1616-H11	2525-M15	2525-M15-3
2020-K11	3225-P15	3232-P15-3
2525-M11	3232-P15	
2020-K15	2020-K15-3	

### PDNNR/L



New Type		
2020-K15N	3232-P15N	2525-M15-3N
2525-M15N	4025-M15	3232-P15-3N
2020-K15	3232-P15	4025-M15-3
2525-M15	2525-M15-3	

### PRDCN



2020-M10	3225-Q12	3232-Q20
2525-M10	2525-Q16	4040-S25
2525-M12	3225-Q16	4040-T25
2020-K12	3232-Q16	5050-U32

### PRGCR/L



2020-K10	2525-M12	3225-P16
2525-M10	3225-P12	3232-P20
2020-K12	2525-M16	4040-S25

### PSBNR/L



New Type		
1616-H09N	2525-M12N	2525-M15N
2020-K09N	3225-P12N	3232-P15N
2020-K12N	3232-P12N	
1616-H09	3232-P12	4040-S25
2020-K09	2525-M15	4040-S25-6
2020-K12	3232-P15	5050-T25
2525-M12	3232-P19	
3225-P12	4040-S19	

### PSDNN



New Type		
1616-H09N	3225-P12N	3232-P15N
2020-K12N	3232-P12N	
2525-M12N	2525-M15N	
1616-H09	2525-M15	4040-S25
2020-K12	3232-P15	5050-T25
2525-M12	3225-P19	4040-S25-6
3225-P12	3232-P19	5050-T25-6
3232-P12	4040-S19	

### PSKNR/L

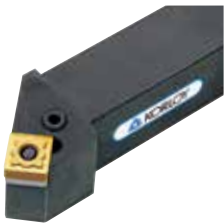


New Type		
1616-H09N	2525-M12N	3232-P15N
2020-K09N	3232-P12N	
2020-K12N	2525-M15N	
1616-H09	3232-P12	4040-S19
2020-K09	2525-M15	4040-S25
2020-K12	3232-P15	4040-S25-6
2525-M12	3232-P19	5050-T25-6

# Tool Holders (ISO Type)

## ▶ Lever Lock System

### PSSNR/L



#### New Type

1616-H09N	3225-P12N	3232-P15N
2020-K12N	3232-P12N	
2525-M12N	2525-M15N	
1616-H09	2525-M15	4040-S19
2020-K12	3232-P15	4040-S25
2525-M12	3232-P19	4040-S25-6
3232-P12	4040-R19	

### PTFNR/L



#### New Type

1616-H16N	2525-M22N	4040-S27N
2020-K16N	3232-P22N	
2525-M16N	3232-P27N	
1616-H16	2525-M22	4040-S27
2020-K16	3232-P22	
2525-M16	3232-P27	

### PTGNR/L



#### New Type

1616-H16N	3232-P16N	3232-P27N
2020-K16N	2525-M22N	4040-S27N
2525-M16N	3232-P22N	
1212-F11	2020-K16	3232-P27
1616-H11	2525-M16	4040-S27
2020-K11	3232-P16	
2525-M11	2525-M22	
1616-H16	3232-P22	

### PTTNR/L



#### New Type

1616-H16N	2525-M16N
2020-K16N	2525-M22N
1616-H16	2525-M16
2020-K16	2525-M22

### PWLNRL



#### New Type

1616-H06N	2525-M06N	2525-M08N
2020-K06N	2020-K08N	
1616-H06	2525-M06	2525-M08
2020-K06	2020-K08	

## ▶ Wedge Clamp System

### WTENN



2020-K16  
2525-M16  
2525-M22  
3232-P22

### WTJNR/L



2020-K16  
2525-M16  
3232-P16  
2525-M22  
3232-P22

### WTXNR/L



2020-K16  
2525-M16  
3232-P16

### WWLNR/L



2020-K08  
2525-M08  
3232-P08

# Tool Holders (ISO Type)

## ▶ Clamp on System

### CKJNR



2020-K16  
2525-M16  
3225-M16  
3232-P16  
4040-R16

### CKJNL



2020-K16  
2525-M16  
3232-P16  
4040-R16

### CKNNR/L



2525-M16  
3232-P16

### CSDPN



1616-H09  
2525-M12

### CSKPR/L



2525-M12

### CTFPR/L



2020-K16  
2525-M16

### CTGPR/L



1212-F11  
1616-H11  
2020-K11  
2020-K16  
2525-M16  
2525-M22  
3232-P22

## ▶ Multi Lock System

### MCKNR/L



2020-K12  
2525-M12  
3232-P12

### MCLNR/L



1616-H09 2525-M16  
2020-K09 3232-P16  
2525-M09 4040-S16  
2020-K12 2525-M19  
2525-M12 3232-P19  
3225-P12 4040-S19  
3232-P12 4040-S25

### MCMNN



2020-K12  
2525-M12  
3232-P12  
2525-M16  
3232-P16  
3232-P19  
4040-S19

### MCRNR/L



2020-K12  
2525-M12  
2525-M16  
3232-P16  
3232-P19  
4040-S19

### MDJNR/L



2020-K11  
2525-M11  
2020-K15-3  
2525-M15-3  
3232-P15-3  
2020-K15  
2525-M15  
3232-P15

### MDNNN



2525-M15-3  
2525-M15

# Tool Holders (ISO Type)

## ► Multi Lock System

### MDQNR/L



2525-M15-3  
3232-P15-3  
2525-M15  
3232-M15

### MSBNR/L



2020-K12  
2525-M12  
2525-M15  
3232-P15  
3232-P19  
4040-S19

### MSDNN



1616-H09  
2020-K09  
2020-K12  
2525-M12  
3225-P12  
2525-M15  
3225-P15  
3232-P15  
4040-S15  
3232-P19  
4040-S19

### MSKNR/L



1616-H09  
2020-K09  
2020-K12  
2525-M12  
3225-P12  
2525-M15  
3232-P15  
3232-P19  
4040-S19  
4040-S25

### MSRNR/L



1616-H09  
2020-K09  
2020-K12  
2525-M12  
2525-M15  
3232-P15  
3225-P19  
3232-P19  
4040-S19  
4040-S25

### MSSNR/L



1616-H09  
2020-K09  
2020-K12  
2525-M12  
2525-M15  
3232-P15  
3232-P19  
4040-S19

### MTENN



2020-K16  
2525-M16  
2525-M22  
3225-P27  
4040-S33

### MTFNR/L



1616-H16  
2020-K16  
2525-M16  
2525-M22  
3232-P22  
4040-S22  
3232-P27  
4040-S27  
4040-S33

### MTGNR/L



1616-H16  
2020-K16  
2525-M16  
2525-M22  
3232-P22  
3232-P27  
4040-S27  
4040-S33

### MTJNR/L



2020-K16  
2525-M16  
2525-M22  
3232-P22  
3232-P27  
4040-S27  
4040-S33

### MVJNR/L



2020-K16  
2525-M16  
3232-P16  
2525-M22  
3232-P22  
4040-S22

### MVQNR/L



2020-K16  
2525-M16  
3232-P16

### MVVNN



2020-K16  
2525-M16

### MWLNR



2020-K06  
2525-M06  
3232-P06  
2020-K08  
2525-M08  
3232-P08



# Tool Holders (ISO Type)

## ► Screw on System

### SCACR/L



1010-E06  
1212-F09

### SCLCR/L



0808-D06  
1010-E06  
1212-F09  
1616-H09  
2020-K09  
2020-K12  
2525-M12

### SDACR/L



1010-E07  
1212-F11  
1616-H11

### SDJCR/L



1010-E07 1212-F11  
1212-F07 1616-H11  
1616-H07 2020-K11  
2020-K07 2525-M11

### SDNCN



1010-E07  
1212-F07  
1212-H11  
1616-H11  
2020-K11

### SRDCN



1010-E06 2525-M08  
1212-F06 1616-H10  
1616-H06 2020-K10  
2525-M06 2525-M10  
1616-H08 2020-K12  
2020-K08 2525-M12

### SRGCR/L



1010-E06 1616-H10  
1212-F06 2020-K10  
1616-H06 2525-M10  
1616-H08 2020-K12  
2020-K08 2525-M12  
2525-M08

### SSBCR/L



1212-F09  
1616-H09  
2020-K12

### SSDCN



1212-F09  
1616-H09

### SSKCR/L



1616-H09

### SSSCR/L



1616-H09  
2020-K12  
2525-M12

### STACR/L



1010-E09  
1212-F11

### STFCR/L



1010-E09  
1212-F11  
1616-H11  
1616-H16  
2020-K16  
2525-M16

### STGCR/L



0808-D09  
1010-E09  
1212-F11  
1616-H11  
1616-H16  
2020-K16  
2525-M16

### STTCR/L



1616-H11  
1616-H16  
2020-K16

# Tool Holders (ISO Type)

## ► Screw on System

### SVABR/L



1616-H16  
2020-K16

### SVHBR/L



2525-M16  
3225-P16

### SVJVR/L



1212-F11	2020-K16
1616-H11	2525-M16
2020-K11	3225-P16
1616-H16	3232-P16

### SVJCR/L



1212-F11	2020-K13
1616-H11	1616-H16
2020-K11	2020-K16
1212-F13	2525-M16
1616-H13	

### SVVBN



1212-F11	2020-K16
1616-H11	2525-M16
2020-K11	3225-P16
1616-H16	

### SVVCN



1212-F11	2020-K13
1616-H11	1616-H16
2020-K11	2020-K16
1212-F13	2525-M16
1616-H13	

### SWACR/L



1010-E04  
1212-F04  
1616-H06  
2020-K08

# Boring Bars (ISO Type)

## ▶ Double Clamp System

### DCLNR/L



A25R-DCLNR/L-09  
A25R-DCLNR/L-12  
A32S-DCLNR/L-12  
A40T-DCLNR/L-12  
A50U-DCLNR/L-16

### DDUNR/L



A40T-DDUNR/L-15  
A50U-DDUNR/L-15  
A40T-DDUNR/L-15-3  
A50U-DDUNR/L-15-3

### DSKNR/L



A25R-DSKNR/L-09  
A25R-DSKNR/L-12  
A32S-DSKNR/L-12  
A40T-DSKNR/L-12

### DTFNR/L



A25R-DTFNR/L-16  
A32S-DTFNR/L-16  
A40T-DTFNR/L-22  
A50U-DTFNR/L-22

### DWLNRL



A25R-DWLNRL/L-06  
A32S-DWLNRL/L-06  
A40T-DWLNRL/L-06  
A25R-DWLNRL/L-08  
A32S-DWLNRL/L-08  
A40T-DWLNRL/L-08  
A50U-DWLNRL/L-08

## ▶ Lever Lock System

### PCLNR/L



#### New Type

S16R-PCLNR/L-09N	S32U-PCLNR/L-12N	A25R-PCLNR/L-09N
S20S-PCLNR/L-09N	S40T-PCLNR/L-12N	A25R-PCLNR/L-12N
S25R-PCLNR/L-09N	S50U-PCLNR/L-12N	A32S-PCLNR/L-12N
S25R-PCLNR/L-12N	S50U-PCLNR/L-19N	A40T-PCLNR/L-12N
S25T-PCLNR/L-12N	A16R-PCLNR/L-09N	A50U-PCLNR/L-12N
S32S-PCLNR/L-12N	A20S-PCLNR/L-09N	A50U-PCLNR/L-19N

S16R-PCLNR/L-09	S32S-PCLNR/L-12	A25R-PCLNR/L-12
S20S-PCLNR/L-09	S40T-PCLNR/L-12	A32S-PCLNR/L-12
S25R-PCLNR/L-09	S50U-PCLNR/L-12	A40T-PCLNR/L-12
S25R-PCLNR/L-12	S50U-PCLNR/L-19	

### PDSNR/L



#### New Type

S32S-PDSNR/L-15N	A32S-PDSNR/L-15N
S40T-PDSNR/L-15N	A40T-PDSNR/L-15N
S32S-PDSNR/L-15-3N	A32S-PDSNR/L-15-3N
S40T-PDSNR/L-15-3N	A40T-PDSNR/L-15-3N

S32S-PDSNR/L-15	S40T-PDSNR/L-15-3
S40T-PDSNR/L-15	A32S-PDSNR/L-15
S32S-PDSNR/L-15-3	A32S-PDSNR/L-15-3

### PDUNR/L



#### New Type

S20S-PDUNR/L-11N	S50U-PDUNR/L-15N	A32S-PDUNR/L-15N
S25R-PDUNR/L-11N	S32S-PDUNR/L-15-3N	A40T-PDUNR/L-15N
S32S-PDUNR/L-11N	S40T-PDUNR/L-15-3N	A50U-PDUNR/L-15N
S32S-PDUNR/L-15N	A20S-PDUNR/L-11N	A32S-PDUNR/L-15-3N
S32U-PDUNR/L-15N	A25R-PDUNR/L-11N	A40T-PDUNR/L-15-3N
S40T-PDUNR/L-15N	A32S-PDUNR/L-11N	

S20S-PDUNR/L-11	S40T-PDUNR/L-15	A32S-PDUNR/L-15
S25R-PDUNR/L-11	S50U-PDUNR/L-15	A32S-PDUNR/L-15-3
S32S-PDUNR/L-11	S32S-PDUNR/L-15-3	
S32S-PDUNR/L-15	S40T-PDUNR/L-15-3	

### PSKNR/L



#### New Type

S25R-PSKNR/L-12N	A25R-PSKNR/L-12N
S32S-PSKNR/L-12N	A32S-PSKNR/L-12N
S40T-PSKNR/L-12N	A40T-PSKNR/L-12N

S25R-PSKNR/L-12	A25R-PSKNR/L-12
S32S-PSKNR/L-12	A32S-PSKNR/L-12
S40T-PSKNR/L-12	

### PTFNR/L



#### New Type

S25R-PTFNR/L-16N	A25R-PTFNR/L-16N
S25T-PTFNR/L-16N	A32S-PTFNR/L-16N
S32S-PTFNR/L-16N	A40T-PTFNR/L-16N
S40T-PTFNR/L-16N	

S16R-PTFNR/L-11	S32S-PTFNR/L-16
S20S-PTFNR/L-11	S40T-PTFNR/L-16
S25R-PTFNR/L-11	A25R-PTFNR/L-16
S25R-PTFNR/L-16	A32S-PTFNR/L-16

### PWLNRL



#### New Type

S20S-PWLNRL/L-06N	S25R-PWLNRL/L-08N
S25R-PWLNRL/L-06N	S32S-PWLNRL/L-08N
S32S-PWLNRL/L-06N	

S20S-PWLNRL/L-06	S25R-PWLNRL/L-08
S25R-PWLNRL/L-06	S32S-PWLNRL/L-08
S32S-PWLNRL/L-06	

# Boring Bars (ISO Type)

## ▶ Clamp on System

### CKUNR/L



S32S-CKUNR/L-16  
S40T-CKUNR/L-16  
S50U-CKUNR/L-16

### CSKPR/L



S16R-CSKPR/L-09  
S20S-CSKPR/L-09  
S20S-CSKPR/L-12  
S25R-CSKPR/L-12

### CTFPR/L



S12M-CTFPR/L-11  
S16R-CTFPR/L-11  
S20S-CTFPR/L-11  
S16R-CTFPR/L-16  
S20S-CTFPR/L-16  
S25R-CTFPR/L-16  
S32S-CTFPR/L-16  
S40T-CTFPR/L-16  
S40T-CTFPR/L-22

## ▶ Multi Lock System

### MCLNR/L



S20S-MCLNR/L-09  
S25R-MCLNR/L-09  
S25R-MCLNR/L-12  
S32S-MCLNR/L-12  
S40T-MCLNR/L-12  
A25R-MCLNR/L-12  
A32S-MCLNR/L-12

### MDUNR/L



S32S-MDUNR/L-15-3  
S40T-MDUNR/L-15-3  
A32S-MDUNR/L-15-3

### MSKNR/L



S25R-MSKNR/L-12  
S32S-MSKNR/L-12  
S40T-MSKNR/L-12  
A25R-MSKNR/L-12  
A32S-MSKNR/L-12  
A40T-MSKNR/L-12

### MTFNR/L



S25R-MTFNR/L-16  
S32S-MTFNR/L-16  
S40T-MTFNR/L-16  
A25R-MTFNR/L-16  
A32S-MTFNR/L-16

### MVUNR/L



S32S-MVUNR/L-16  
S40T-MVUNR/L-16  
A32S-MVUNR/L-16  
A40T-MVUNR/L-16

### MWLNRL



S25R-MWLNRL-06  
S32S-MWLNRL-06  
S40T-MWLNRL-06  
S25R-MWLNRL-08  
S32S-MWLNRL-08  
S40T-MWLNRL-08  
A25R-MWLNRL-06  
A32S-MWLNRL-06  
A25R-MWLNRL-08  
A32S-MWLNRL-08

## ▶ Screw on System

### SCLCR/L



S08K-SCLCR/L-06	S20S-SCLCR/L-09	A12K-SCLCR/L-06
S10K-SCLCR/L-06	S25R-SCLCR/L-09	A12K-SCLCR/L-09
S10M-SCLCR/L-06	S25R-SCLCR/L-12	A16M-SCLCR/L-09
S12M-SCLCR/L-06	S32S-SCLCR/L-12	A20Q-SCLCR/L-09
S16R-SCLCR/L-06	S40T-SCLCR/L-12	A25R-SCLCR/L-09
S12M-SCLCR/L-09	A08F-SCLCR/L-06	A25R-SCLCR/L-12
S16R-SCLCR/L-09	A10H-SCLCR/L-06	A32S-SCLCR/L-12

### SCLPR/L



S10M-SCLPR/L-08	S20S-SCLPR/L-09
S12M-SCLPR/L-08	A10H-SCLPR/L-08
S16N-SCLPR/L-09	A12K-SCLPR/L-08
S16R-SCLPR/L-09	A16M-SCLPR/L-09
S20N-SCLPR/L-09	A20Q-SCLPR/L-09

### SDQCR/L



S10M-SDQCR/L-07	A10H-SDQCR/L-07
S12M-SDQCR/L-07	A12K-SDQCR/L-07
S16R-SDQCR/L-07	A16M-SDQCR/L-11
S16R-SDQCR/L-11	A20Q-SDQCR/L-11
S20S-SDQCR/L-11	A25R-SDQCR/L-11
S25R-SDQCR/L-11	

### SDUCR/L



S10M-SDUCR/L-07	S32S-SDUCR/L-11
S12M-SDUCR/L-07	A10H-SDUCR/L-07
S16R-SDUCR/L-07	A12K-SDUCR/L-07
S16R-SDUCR/L-11	A16M-SDUCR/L-07
S20S-SDUCR/L-11	A20Q-SDUCR/L-11
S25R-SDUCR/L-11	A25R-SDUCR/L-11

# Boring Bars (ISO Type)

## ► Screw on System

### SDZCR/L



S16R-SDZCR/L-07  
S20S-SDZCR/L-07  
S25R-SDZCR/L-11  
S32S-SDZCR/L-11  
S40T-SDZCR/L-11  
A25R-SDZCR/L-11  
A32S-SDZCR/L-11

### SSKCR/L



S12M-SSKCR/L-09  
S16R-SSKCR/L-09  
S20S-SSKCR/L-09  
S25R-SSKCR/L-12  
S32S-SSKCR/L-12  
A12K-SSKCR/L-09  
A16M-SSKCR/L-09  
A20Q-SSKCR/L-09  
A25R-SSKCR/L-12  
A32S-SSKCR/L-12

### SSKPR/L



S12M-SSKPR/L-09  
S16N-SSKPR/L-09  
S16R-SSKPR/L-09  
S20N-SSKPR/L-09  
S20S-SSKPR/L-09  
A12K-SSKPR/L-09  
A16M-SSKPR/L-09  
A20Q-SSKPR/L-09

### STFCR/L



S10M-STFCR/L-09  
S12M-STFCR/L-09  
S12M-STFCR/L-11  
S16R-STFCR/L-11  
S20S-STFCR/L-11  
S20S-STFCR/L-16  
S25R-STFCR/L-16  
S32S-STFCR/L-16  
S40T-STFCR/L-16  
A10H-STFCR/L-09  
A12K-STFCR/L-09  
A12K-STFCR/L-11  
A16M-STFCR/L-11  
A20Q-STFCR/L-11  
A25R-STFCR/L-16  
A32S-STFCR/L-16

### STFPR/L



S10M-STFPR/L-11  
S12M-STFPR/L-11  
S16N-STFPR/L-11  
S16R-STFPR/L-11  
S20N-STFPR/L-16  
S20S-STFPR/L-16  
A10H-STFPR/L-11  
A12H-STFPR/L-11  
A16M-STFPR/L-11  
A20Q-STFPR/L-16

### STWPR/L



S10M-STWPR/L-11  
S12M-STWPR/L-11  
S16R-STWPR/L-11  
S20R-STWPR/L-11

### SVJCR/L



S12M-SVJCR/L-08  
S16Q-SVJCR/L-08

### SVQBR/L



S32S-SVQBR/L-16  
S40T-SVQBR/L-16  
A32S-SVQBR/L-16

### SVQCR/L



S16R-SVQCR/L-11  
S20S-SVQCR/L-11  
S25R-SVQCR/L-11  
S20S-SVQCR/L-13  
S25R-SVQCR/L-13  
S25R-SVQCR/L-16  
S32S-SVQCR/L-16  
S40T-SVQCR/L-16

### SVUBR/L



S32S-SVUBR/L-16  
S40T-SVUBR/L-16  
A32S-SVUBR/L-16

### SVUCR/L



S16R-SVUCR/L-11  
S20S-SVUCR/L-11  
S25T-SVUCR/L-11  
S20S-SVUCR/L-13  
S25R-SVUCR/L-13  
S25R-SVUCR/L-16  
S32S-SVUCR/L-16  
S40T-SVUCR/L-16

### SWLCR/L



S25R-SWLCR/L-08  
S32S-SWLCR/L-08  
A25R-SWLCR/L-08  
A32S-SWLCR/L-08

## ► Sleeve

### SL



SL1603  
SL1604  
SL1605  
SL1606  
SL1607  
SL2008  
SL2010



# Boring Bars (ISO Type)

## ► Carbide Shank Boring Bar

### SCLCR/L



C04G-SCLCR/L-03	C12Q-SCLCR/L-09	E10M-SCLCR/L-06
C05H-SCLCR/L-03	C16R-SCLCR/L-09	E12M-SCLCR/L-06
C06H-SCLCR/L-04	C16S-SCLCR/L-09	E12Q-SCLCR/L-06
C07K-SCLCR/L-04	C20R-SCLCR/L-09	E12M-SCLCR/L-09
C08K-SCLCR/L-06	C20S-SCLCR/L-09	E12Q-SCLCR/L-09
C10K-SCLCR/L-06	C25T-SCLCR/L-12	E16R-SCLCR/L-09
C10M-SCLCR/L-06	E06H-SCLCR/L-04	E16S-SCLCR/L-09
C12M-SCLCR/L-06	E07K-SCLCR/L-04	E20R-SCLCR/L-09
C12Q-SCLCR/L-06	E08K-SCLCR/L-06	E20S-SCLCR/L-09
C12M-SCLCR/L-09	E10K-SCLCR/L-06	E25T-SCLCR/L-12

### SCLPR/L



C10K-SCLPR/L-08	E10K-SCLPR/L-08
C10M-SCLPR/L-08	E10M-SCLPR/L-08
C12M-SCLPR/L-08	E12M-SCLPR/L-08
C12Q-SCLPR/L-08	E12Q-SCLPR/L-08
C12M-SCLPR/L-09	E12M-SCLPR/L-09
C12Q-SCLPR/L-09	E12Q-SCLPR/L-09
C16R-SCLPR/L-09	E16R-SCLPR/L-09
C16S-SCLPR/L-09	E16S-SCLPR/L-09
C20R-SCLPR/L-09	E20R-SCLPR/L-09
C20S-SCLPR/L-09	E20S-SCLPR/L-09

### SDQCR/L



C08K-SDQCR/L-07	E08K-SDQCR/L-07
C10K-SDQCR/L-07	E10K-SDQCR/L-07
C12M-SDQCR/L-07	E12M-SDQCR/L-07
C16R-SDQCR/L-07	E16R-SDQCR/L-07
C16R-SDQCR/L-11	E16R-SDQCR/L-11
C20R-SDQCR/L-11	E20R-SDQCR/L-11
C20S-SDQCR/L-11	E20S-SDQCR/L-11

### SDUCR/L



C10K-SDUCR/L-07	E10K-SDUCR/L-07
C10M-SDUCR/L-07	E10M-SDUCR/L-07
C12M-SDUCR/L-07	E12M-SDUCR/L-07
C12Q-SDUCR/L-07	E12Q-SDUCR/L-07
C16R-SDUCR/L-07	E16R-SDUCR/L-07
C16S-SDUCR/L-07	E16S-SDUCR/L-07
C16R-SDUCR/L-11	E16R-SDUCR/L-11
C16S-SDUCR/L-11	E16S-SDUCR/L-11
C20R-SDUCR/L-11	E20R-SDUCR/L-11
C20S-SDUCR/L-11	E20S-SDUCR/L-11
C25T-SDUCR/L-11	E25T-SDUCR/L-11

### STFCR/L



C08K-STFCR/L-09	E08K-STFCR/L-09
C10K-STFCR/L-09	E10K-STFCR/L-09
C10K-STFCR/L-11	E10K-STFCR/L-11
C12M-STFCR/L-11	E12M-STFCR/L-11
C16R-STFCR/L-11	E16R-STFCR/L-11
C20R-STFCR/L-11	E20R-STFCR/L-11
C20S-STFCR/L-11	E20S-STFCR/L-11
C20R-STFCR/L-16	E20R-STFCR/L-16
C20S-STFCR/L-16	E20S-STFCR/L-16

### STFPR/L



C08K-STFPR/L-08	E08K-STFPR/L-08
C10K-STFPR/L-11	E10K-STFPR/L-11
C10M-STFPR/L-11	E10M-STFPR/L-11
C12M-STFPR/L-11	E12M-STFPR/L-11
C12Q-STFPR/L-11	E12Q-STFPR/L-11
C16R-STFPR/L-11	E16R-STFPR/L-11
C16S-STFPR/L-11	E16S-STFPR/L-11
C20R-STFPR/L-11	E20R-STFPR/L-11
C20S-STFPR/L-11	E20S-STFPR/L-11
C20R-STFPR/L-16	E20R-STFPR/L-16
C20S-STFPR/L-16	E20S-STFPR/L-16
C25T-STFPR/L-16	E25T-STFPR/L-16

### STUBR/L



C08K-STUBR/L-06	E08K-STUBR/L-06
C10K-STUBR/L-06	E10K-STUBR/L-06

### STUPR/L



C08K-STUPR/L-08	E08K-STUPR/L-08
C10K-STUPR/L-11	E10K-STUPR/L-11
C10M-STUPR/L-11	E10M-STUPR/L-11
C12M-STUPR/L-11	E12M-STUPR/L-11
C12Q-STUPR/L-11	E12Q-STUPR/L-11
C16R-STUPR/L-11	E16R-STUPR/L-11
C16S-STUPR/L-11	E16S-STUPR/L-11
C20R-STUPR/L-11	E20R-STUPR/L-11
C20S-STUPR/L-11	E20S-STUPR/L-11
C20R-STUPR/L-16	E20R-STUPR/L-16
C20S-STUPR/L-16	E20S-STUPR/L-16
C25T-STUPR/L-16	E25T-STUPR/L-16

### SWUBR/L



C05H-SWUBR/L-02	E06H-SWUBR/L-02
C06H-SWUBR/L-02	E08K-SWUBR/L-02
C08K-SWUBR/L-02	E08K-SWUBR/L-S3
C08K-SWUBR/L-S3	

# Save Turn

## External Turning

**PCLNR/L**



1616-H09-4N  
2020-K09-4N  
2525-M09-4N

**PCBNR/L**



2020-K09-4N  
2525-M09-4N

**PDJNR/L**



2020-K11-5N  
2525-M11-5N

**PDNNR/L**



2020-K11-5N  
2525-M11-5N

**PDQNR/L**



2020-K11-5N  
2525-M11-5N

**PSBNR/L**



2020-K09-4N  
2525-M09-4N

**PSDNN**



2020-K09-4N  
2525-M09-4N

**PSKNR/L**



2020-K09-4N  
2525-M09-4N

**PSSNR/L**



2020-K09-4N  
2525-M09-4N

**PWLNRL/L**



1616-H06  
2020-K06  
2525-M06

## Internal Turning

**PCLNR/L**



S20Q-PCLNR/L-09-4N  
S25R-PCLNR/L-09-4N  
S32S-PCLNR/L-09-4N

**PDUNR/L**



S32S-PDUNR/L-11-5N  
S40T-PDUNR/L-11-5N

**PDZNR/L**



S32S-PDZNR/L-11-5N  
S40T-PDZNR/L-11-5N

**PSKNR/L**



S25R-PSKNR/L-09-4N  
S32S-PSKNR/L-09-4N

**PWLNRL/L**



S20S-PWLNRL/L-06  
S25S-PWLNRL/L-06  
S32S-PWLNRL/L-06

# Auto Tools

## ▶ Parting and Grooving

### SXGNR/L



- Insert : SG, SC
- 1010-X06A
- 1212-X06A
- 1616-X06A
- 2020-X06A
- 1212-X08A
- 1616-X08A
- 2020-X08A

### KGEHR/L-D00A



- Insert : KGMMN
- 1010-2-D20A
- 1212-2-D25A
- 1414-2-D25A
- 1616-2-D32A
- 1212-3-D25A
- 1616-3-D32A

### SBHR/L



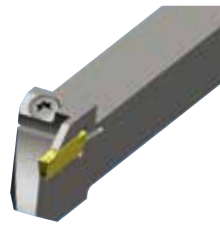
- Insert : SBG, SBC
- 1010-K25
- 1212-K25
- 1616-K25

### SBHR/L-X



- Insert : SBG, SBC
- 1010-K25-X
- 1212-K25-X

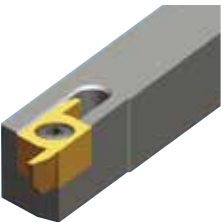
### MGEHR/L-X00A



- Insert : MGMMN
- 1010-X15A
- 1212-X15A
- 1010-X20A
- 1212-X20A
- 1616-X20A
- 1010-X25A
- 1212-X25A
- 1616-X25A

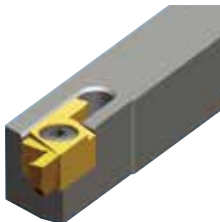
## ▶ Back Turning

### SXGNR/L



- Insert : SB
- 1010-X06A
- 1212-X06A
- 1616-X06A
- 2020-X06A
- 1212-X08A
- 1616-X08A
- 2020-X08A

### SXGNR/L



- Insert : SGB
- 1010-X06A
- 1212-X06A
- 1616-X06A
- 2020-X06A
- 1212-X08A
- 1616-X08A
- 2020-X08A

### SBHR/L



- Insert : SBB
- 1010-K25
- 1212-K25
- 1616-K25

## ▶ Threading

### SXGNR/L



- Insert : ST
- 1010-X06A
- 1212-X06A
- 1616-X06A
- 2020-X06A
- 1212-X08A
- 1616-X08A
- 2020-X08A

### SBHR/L



- Insert : SBT
- 1010-K25
- 1212-K25
- 1616-K25

# Auto Tools

## External Turning

### SDJCR/L



0808-X07A  
1010-X07A  
1010-X11A  
1212-X11A  
1616-X11A

### SDNCN



0808-X07A  
1010-X07A  
1010-X11A  
1212-X11A  
1616-X11A

### SVJBR/L



1010-X11A  
1212-X11A  
1616-X11A

### SVJCR/L



1010-X11A  
1212-X11A  
1616-X11A

### SCACR/L



0808-X06A  
1010-X06A  
1010-X09A  
1212-X09A  
1616-X09A

### SCLCR/L



0808-X06A  
1010-X06A  
1010-X09A  
1212-X09A  
1616-X09A

### STACR/L



0808-X08A  
1010-X08A

## Internal Turning (Boring)

### SCLCR/L



S10H-SCLCR/L-0305  
S10H-SCLCR/L-0306  
S10J-SCLCR/L-0407  
S10J-SCLCR/L-0408

### STUBR/L



S08K-STUBR/L-06  
A08F-STUBR/L-06

### STUPR/L



S08K-STUPR/L-08  
A08F-STUPR/L-08

### SWUBR/L



S05H-SWUBR/L-02  
S08K-SWUBR/L-02  
S08K-SWUBR/L-S3  
A08F-SWUBR/L-02  
A08F-SWUBR/L-S3

# Multi Functional Tools (Holders)

## ▶ KGT

### KGEHR/L



1616-□-T□□  
2020-□-T□□  
2525-□-T□□  
3232-□-T□□

• Insert  
KGGN KRMN  
KGMN KRGN  
KGMR/L

### KGEHR/L-D00A



1010-□-□□□A  
1212-□-□□□A  
1414-□-□□□A  
1616-□-□□□A

• Insert  
KGGN KRMN  
KGMN KRGN  
KGMR/L

### KGEHR/L-T00



1616-□-00  
2020-□-00  
2525-□-00

• Insert  
KGMN KGGN  
KRMN KRGN

### KGEVR/L-T00



2020-□-T00  
2525-□-T00  
3232-□-T00

• Insert  
KGMN KGGN  
KRMN KRGN

### KGEUR/L



1616-□  
2020-□  
2525-□  
3232-□

• Insert  
KRMN KRGN

### KGFVR/L



425-□/□-T□□

• Insert  
KGMN KGGN  
KRMN KRGN

### KGFHR/L



325-□/□-T□□  
425-□/□-T□□  
525-□/□-T□□  
625-□/□-T□□

• Insert  
KGMN KGGN  
KRMN KRGN

### KGIUR/L



3520-□  
4025-□  
5032-□

• Insert  
KRMN KRGN

### KGIVR/L



2016-□ 3225-□  
2516-□ 4032-□  
2520-□ 4540-□

• Insert  
KGMN KGGN

### KGTB (Blades)



1532 5032  
2032 6032  
3032 8032S  
4032

• Insert  
KG□□

## ▶ MGT

### MGEHR/L



1212-□ 2525-□  
1616-□ 2525-□-T□  
2020-□ 3232-□  
2020-□-T□ 3232-□-T□

• Insert  
MGMN MRMN  
MGMR MRGN  
MGGN

### MGEUR/L



2020-□  
2525-□  
3232-□

• Insert  
MRMN MRGN

### MGEVR/L



2020-□  
2525-□  
3232-□

• Insert  
MGMN MRMN  
MGGN MRGN

### MGIUR/L



3520-□  
4025-□  
5032-□

• Insert  
MRMN MRGN

### MGIVR/L



2016-□ 3125-□  
2520-□ 3732-□  
2925-□ 4540-□

• Insert  
MGMN MGGN  
MRMN MRGN



# Multi Functional Tools (Holders)

## ► MGT Cartridge

### MCER/L (Cartridge)



3-T16  
4-T16  
5-T20  
6-T20

• Insert  
MGMN MGGN  
MGMR MRMN

### MCFR/L (Cartridge)



3-24/35-T16  
3-29/40-T16  
3-34/50-T16  
3-44/70-T16  
3-64/99-T16  
4-44/60-T16  
4-60/120-T16  
4-112/200-T16

• Insert  
MFNM MGMN

### MCHR/L (Holder)



2020  
2525  
3232

### MCVR/L (Holder)



2020  
2525  
3232

## ► Saw-Man

### SMBB (Block)



1626 2032 2532  
2026 2526 3232

• Insert : SP

### SPB (Blades)



226 232  
326 332  
426 432  
526 532  
626 632

• Insert : SP

### SPB-S (Blades)



226-S 232-S  
326-S 332-S  
426-S 432-S  
526-S 532-S  
626-S 632-S

• Insert : SP

### SPH (Holder)



316R/L 325R/L  
320R/L 425R/L  
420R/L 525R/L  
520R/L

• Insert : SP

### SPH-S (Holder)



316R/L-S 325R/L-S  
320R/L-S 425R/L-S  
420R/L-S 525R/L-S  
520R/L-S

• Insert : SP

## ► Internal Cutting

### GFIK



316R/L 525R/L  
325R/L 540R/L  
340R/L 840R/L

• Insert : GR

### GFIP



316R/L 525R/L  
320R/L 540R/L  
325R/L 840R/L  
340R/L

• Insert : BF, GW

### IGH



214R/L 220R/L  
216R/L

• Insert : IG

### NFTIH



08206C 08512C 11412C 14116C 16312C 16416C  
08212C 11208C 11512C 14212C 16312S 16516C  
08312C 11212C 14012C 14216C 16412C  
08312S 11312C 14016C 14312C 16512C  
08412C 11312S 14112C 14316C 16316C

• Insert : NFTF, NFFT, NFTG

# Multi Functional Tools (Holders)

## External Cutting

**DBH**



320R/L 525R/L  
325R/L 720R/L  
520R/L 725R/L

• Insert : DB, DC


**EH**



620R  
625R

• Insert : ESB

**GFT**



320R/L 525R/L  
325R/L 825R/L

• Insert : GW, BF


**GH**



2020R/L-3  
2025R/L-3  
2020R/L-4  
2525R/L-4

• Insert : GO, GS


**TBH**



320-23R/L 420-23R/L 510R/L  
320-33R/L 420-33R/L 512R/L  
320-43R/L 420-45R/L 516R/L  
325-23R/L 425-23R/L 520R/L  
325-33R/L 425-33R/L 525R/L  
325-43R/L 425-45R/L

• Insert : TB

**PH**



320R/L 425R/L  
325R/L 520R/L  
420R/L 525R/L

• Insert : POB

## Face Grooving Tools


**FGHH (FGVH)**



320R 425R  
325R 520R  
420R 525R

• Insert : FGD, FGM, FMM


**MGFHR/L**



325-24/35-T10 325-64/99-T10  
325-29/40-T10 425-62/120-T15  
325-34/50-T10 425-112/200-T15  
325-44/70-T10

• Insert : MFMN, MGMM

**MGFVR/L**



325-24/35-T10 325-64/99-T10  
325-29/40-T10 425-44/60-T10  
325-34/50-T10 425-60/120-T10  
325-44/70-T10 425-112/200-T10

• Insert : MFMN, MGMM

## Threading


**ER(L)H**



• Screw on system  
ER(L)H□□-□□

• Insert : ER, ERM


**ER(L)H-C**



• Clamp on system  
ER(L)H□□-□□C

• Insert : ER, ERM, ERM-U


**IR(L)H**



• Clamp on system  
IR(L)H□□-□□

• Insert : IR, IRM, IRM-U

**IR(L)H-C**



• Clamp on system  
IR(L)H□□-□□C

• Insert : IR, IRM, IRM-U

**VTH**



2020R  
2525R  
3225R

• Insert : VETR

# Milling Tools

KORLOY provides high quality milling cutters thanks to its advanced technology and accumulated know-how of tooling systems, carrying out values for higher productivity and quality results.

Face Milling Cutters

Multi Functional Cutters

For Aluminum Milling

High Feed Milling Cutters

Side Cutters

# Face Milling Cutters

## Rich Mill Series

### RM3PC(M) 3000 / 4000 / 5000



#### 3000 Type

: Ø40 - Ø80mm

#### • Insert

XNKT060405PNER-ML  
XNKT060405PNSR-MM

#### 4000 Type

: Ø40 - Ø125mm

#### • Insert

XNCT080504PNFR-MA XNKT080512PNER-ML  
XNCT080508PNFR-MA XNKT080512PNSR-MM  
XNCT080512PNER-MA XNKT080516PNER-ML  
XNCT080520PNFR-MA XNKT080516PNSR-MM  
XNKT080508PNER-ML XNKT080520PNER-ML  
XNKT080508PNSR-MM XNKT080520PNSR-MM

#### 5000 Type

: Ø80 - Ø125mm

#### • Insert

XNCT120608PNFR-MA XNKT120616PNSR-MM  
XNKT120608PNSR-MM XNKT120616PNER-ML  
XNKT120608PNER-ML XNKT120620PNSR-MM  
XNKT120612PNSR-MM XNKT120620PNER-ML  
XNKT120612PNER-ML

### RM3PS 3000 / 4000



#### 3000 Type

: Ø20 - Ø40mm

#### • Insert

XNKT060405PNER-ML  
XNKT060405PNSR-MM

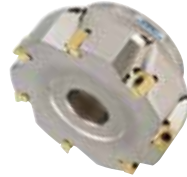
#### 4000 Type

: Ø32 - Ø63mm

#### • Insert

XNCT080504PNFR-MA  
XNCT080508PNFR-MA  
XNCT080512PNER-MA  
XNCT080520PNFR-MA  
XNKT080508PNER-ML  
XNKT080508PNSR-MM  
XNKT080512PNER-ML  
XNKT080512PNSR-MM  
XNKT080516PNER-ML  
XNKT080516PNSR-MM  
XNKT080520PNER-ML  
XNKT080520PNSR-MM

### RM4PC(M) 3000 / 4000



#### 3000 Type

: Ø40 - Ø100mm

#### • Insert

LNEX100605PNR-MF/MM  
LNMX100605PNR-MF/MM  
LNEX100608PNR-MF/MM  
LNMX100608PNR-MF/MM  
LNEX100605PNR-MA  
LNEX100605PNL-MM  
LNMX100605PNL-MM

#### 4000 Type

: Ø50 - Ø160mm

#### • Insert

LNEX151004PNR-MF/MM  
LNMX151004PNR-MF/MM  
LNEX151008PNR-MF/MM  
LNMX151008PNR-MF/MM  
LNEX151016PNR-MF/MM  
LNMX151016PNR-MF/MM  
LNEX151004PNR-MA  
LNEX151008PNR-MA  
LNEX151008PNL-MM  
LNMX151008PNL-MM

### RM4PS 3000 / 4000



#### 3000 Type

: Ø14 - Ø50mm

#### • Insert

LNEX100605PNR-MF/MM  
LNMX100605PNR-MF/MM  
LNEX100608PNR-MF/MM  
LNMX100608PNR-MF/MM  
LNEX100605PNR-MA  
LNEX100605PNL-MM  
LNMX100605PNL-MM

#### 4000 Type

: Ø32 - Ø63mm

#### • Insert

LNEX151004PNR-MF/MM  
LNMX151004PNR-MF/MM  
LNEX151008PNR-MF/MM  
LNMX151008PNR-MF/MM  
LNEX151016PNR-MF/MM  
LNMX151016PNR-MF/MM  
LNEX151004PNR-MA  
LNEX151008PNR-MA

### RM4PM 3000



#### 3000 Type

: Ø14 - Ø50mm

#### • Insert

LNEX100605PNR-MF/MM  
LNMX100605PNR-MF/MM  
LNEX100608PNR-MF/MM  
LNMX100608PNR-MF/MM  
LNEX100605PNR-MA  
LNEX100605PNL-MM  
LNMX100605PNL-MM

• Please refer to page 88 for available adaptors

### RM4ZC(M) 3000 / 4000



#### 3000 Type

: Ø40 - Ø63mm

#### • Insert

LNEX100605PNL-MM  
LNMX100605PNL-MM

#### 4000 Type

: Ø66 - Ø100mm

#### • Insert

LNEX151008PNL-MM  
LNMX151008PNL-MM

### RM4ZS 3000



#### 3000 Type

: Ø25 - Ø40mm

#### • Insert

LNEX100605PNL-MM  
LNMX100605PNL-MM

### RM4ZM 3000



#### 3000 / 4000 Type

: Ø25 - Ø40mm

#### • Insert

LNEX100605PNL-MM  
LNMX100605PNL-MM

• Please refer to page 88 for available adaptors

### RM8AC(M) 4000 / 5000



#### 4000 Type

: Ø50 - Ø400mm

#### • Insert

SNEX1206ANN-MF/MM  
SNMX1206ANN-MF/MM  
SNEX1206ANN-MA  
SNEX1206ANN-ML  
SNEX1206ANN-W

#### 5000 Type

: Ø80 - Ø400mm

#### • Insert

SNEX1507ANN-MF/MM  
SNMX1507ANN-MF/MM  
SNEX1507ANN-ML

# Face Milling Cutters

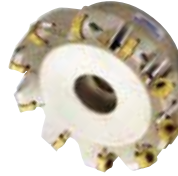
## Rich Mill Series

### RMH8AC(M) 4000 / 5000



- **4000 Type**  
: Ø80 - Ø400mm
- **Insert**  
SNEX1206ANN-MF/MM  
SNMX1206ANN-MF/MM  
SNEX1206ANN-MA  
SNEX1206ANN-ML  
SNEX1206ANN-W
- **5000 Type**  
: Ø80 - Ø400mm
- **Insert**  
SNEX1507ANN-MF/MM  
SNMX1507ANN-MF/MM  
SNEX1507ANN-ML

### RM8EC(M) 4000 / 5000



- **4000 Type**  
: Ø50 - Ø400mm
- **Insert**  
SNEX1206ENN-MF/MM  
SNMX1206ENN-MF/MM  
SNEX1206ENN-MA  
SNEX1206ENN-ML
- **5000 Type**  
: Ø80 - Ø400mm
- **Insert**  
SNEX1507ENN-MF/MM  
SNMX1507ENN-MF/MM  
SNEX1507ENN-ML

### RMH8EC(M) 4000 / 5000



- **4000 Type**  
: Ø80 - Ø400mm
- **Insert**  
SNEX1206ENN-MF/MM  
SNMX1206ENN-MF/MM  
SNEX1206ENN-MA  
SNEX1206ENN-ML
- **5000 Type**  
: Ø80 - Ø400mm
- **Insert**  
SNEX1507ENN-MF/MM  
SNMX1507ENN-MF/MM  
SNMX1507ENN-ML

### RM8QC(M) 4000



- **4000 Type**  
: Ø63 - Ø200mm
- **Insert**  
SNEX1206QNN-MF/MM  
SNMX1206QNN-MF/MM  
SNEX1206QNN-MA  
SNEX1206QNN-ML  
SNEX120612-MF/MM  
SNMX120612-MF/MM  
SNEX120612-MA  
SNEX120612-ML

### RMH8QC(M) 4000



- **4000 Type**  
: Ø80 - Ø200mm
- **Insert**  
SNEX1206QNN-MF/MM  
SNMX1206QNN-MF/MM  
SNEX1206QNN-MA  
SNEX1206QNN-ML  
SNEX120612-MF/MM  
SNMX120612-MF/MM  
SNEX120612-MA  
SNEX120612-ML

### RMT8A(M) 4000 / 5000



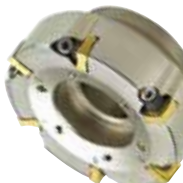
- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNCF1206ANN-MF/MM  
SNMF1206ANN-MF/MM
- **5000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNCF1507ANN-MF/MM  
SNMF1507ANN-MF/MM

### RMT8E(M) 4000 / 5000



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNCF1206ENN-MF/MM  
SNMF1206ENN-MF/MM
- **5000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNCF1507ENN-MF/MM  
SNMF1507ENN-MF/MM

### RMT8Q(M) 4000



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNMF1206QNN-MF/MM

### RM16AC(M) 6000 / 8000



- **6000 Type**  
: Ø63 - Ø400mm
- **Insert**  
ONMX060608-MM/MF  
ONHX060608-MM/MF/ML  
ONHX060608-W  
ONMX0606ANN-MF/MM  
ONHX0606ANN-MF/MM  
ONHX060608-MA
- **8000 Type**  
: Ø63 - Ø400mm
- **Insert**  
ONMX080608-MF/MM  
ONHX080608-MF/MM/ML  
ONHX080608-W  
ONMX0806ANN-MF/MM  
ONHX0806ANN-MF/MM  
ONHX080608-MA



# Face Milling Cutters

## ► Rich Mill Series (Side Milling Cutter)

### RM4PFCB 3000 / 4000



- **3000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX100605PNR-MM  
LNMX100605PNR-MM  
LNEX100605PNL-MM  
LNMX100605PNL-MM
- **4000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX151008PNR-MM  
LNMX151008PNR-MM  
LNEX151008PNL-MM  
LNMX151008PNL-MM

### RM4PHCB 3000 / 4000



- **3000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX100605PNR-MF/MM  
LNMX100605PNR-MF/MM  
LNEX100608PNR-MF/MM  
LNMX100608PNR-MF/MM  
LNEX100605PNR-MA
- **4000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX151004PNR-MF/MM  
LNMX151004PNR-MF/MM  
LNEX151008PNR-MF/MM  
LNMX151008PNR-MF/MM  
LNEX151016PNR-MF/MM  
LNMX151016PNR-MF/MM  
LNEX151004PNR-MA  
LNEX151008PNR-MA

### RM4PFCP 3000 / 4000



- **3000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX100605PNR-MM  
LNMX100605PNR-MM  
LNEX100605PNL-MM  
LNMX100605PNL-MM
- **4000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX151008PNR-MM  
LNMX151008PNR-MM  
LNEX151008PNL-MM  
LNMX151008PNL-MM

### RM4PHCP 3000 / 4000



- **3000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX100605PNR-MF/MM  
LNMX100605PNR-MF/MM  
LNEX100608PNR-MF/MM  
LNMX100608PNR-MF/MM  
LNEX100605PNR-MA
- **4000 Type**  
: Ø80 - Ø160mm
- **Insert**  
LNEX151004PNR-MF/MM  
LNMX151004PNR-MF/MM  
LNEX151008PNR-MF/MM  
LNMX151008PNR-MF/MM  
LNEX151016PNR-MF/MM  
LNMX151016PNR-MF/MM  
LNEX151004PNR-MA  
LNEX151008PNR-MA

## ► Future Mill Series

### FMAC(M) 3000 / 4000



- **3000 Type**  
: Ø50 - Ø125mm
- **Insert**  
SEET0903AGFN-MA  
SEET0903AGSN-MF/MM  
SEXT0903AGSN-MF/MM/MR  
SEEW0903AGTN
- **4000 Type**  
: Ø50 - Ø200mm
- **Insert**  
SEET14M4AGFN-MA  
SEET14M4AGSN-MF/MM  
SEXT14M4AGSN-MF/MM/MR  
SEEW14M4AGTN  
SEEW14M4AGFN-W  
SEEW14M4AGSN-W  
SEEW14M4AGTN-W

### FMAS 3000 / 4000



- **3000 Type**  
: Ø25 - Ø63mm
- **Insert**  
SEET0903AGFN-MA  
SEET0903AGSN-MF/MM  
SEXT0903AGSN-MF/MM/MR  
SEEW0903AGTN
- **4000 Type**  
: Ø50 - Ø63mm
- **Insert**  
SEET14M4AGFN-MA  
SEET14M4AGSN-MF/MM  
SEXT14M4AGSN-MF/MM/MR  
SEEW14M4AGTN  
SEEW14M4AGFN-W  
SEEW14M4AGSN-W  
SEEW14M4AGTN-W

### FMPC(M) 3000 / 4000



- **3000 Type**  
: Ø50 - Ø100mm
- **Insert**  
SDET09M402R-MA  
SDET09M405R-MF/MM  
SDXT09M405R/L-MF  
SDXT09M405R/L-MM  
SDXT09M405R-MA
- **4000 Type**  
: Ø63 - Ø125mm
- **Insert**  
SDET130504R-MA  
SDET130508R-MF/MM  
SDXT130508R-MF/MM  
SDXT130538-MM  
SDXT130508R-MA

### FMPS 3000 / 4000



- **3000 Type**  
: Ø25 - Ø63mm
- **Insert**  
SDET09M402R-MA  
SDET09M405R-MF/MM  
SDXT09M405R/L-MF  
SDXT09M405R/L-MM  
SDXT09M405R-MA
- **4000 Type**  
: Ø40 - Ø63mm
- **Insert**  
SDET130504R-MA  
SDET130508R-MF/MM  
SDXT130508R-MF/MM  
SDXT130538-MM  
SDXT130508R-MA

### FMRC(M) 3000 / 4000



- **3000 Type**  
: Ø40 - Ø100mm
- **Insert**  
RDCT10T3M0-MA  
RDKT10T3M0-MF/MM
- **4000 Type**  
: Ø50 - Ø125mm
- **Insert**  
RDCT1204M0-MA  
RDKT1204M0-MF/MM

### FMRC(M) 5000 / 6000



- **5000 Type**  
: Ø50 - Ø125mm
- **Insert**  
RDHW1605M0E, F, S  
RDKT1605M0-MM/ML/MF
- **6000 Type**  
: Ø63 - Ø160mm
- **Insert**  
RDHW2006M0E, F, S  
RDKT2006M0-MM

# Face Milling Cutters

## ► Future Mill Series

### FMRS 1000 / 1500



- **1000 Type**  
: Ø8 - Ø15mm
- **Insert**  
RDHW0501M0E, F, S  
RDKW0501M0E
- **1500 Type**  
: Ø10 - Ø20mm
- **Insert**  
RDHW06T1M0E, F, S  
RDKW06T1M0E

### FMRS 2000 / 2500



- **2000 Type**  
: Ø15 - Ø20mm
- **Insert**  
RDHW0702M0E, F, S  
RDKW0702M0E
- **2500 Type**  
: Ø16 - Ø25mm
- **Insert**  
RDHW0803M0E, F, S  
RDKW0803M0E

### FMRS 3000 / 4000



- **3000 Type**  
: Ø21 - Ø40mm
- **Insert**  
RDCT10T3M0-MA  
RDKT10T3M0-MF/MM
- **4000 Type**  
: Ø32 - Ø50mm
- **Insert**  
RDCT1204M0-MA  
RDKT1204M0-MF/MM

### FMRS 5000 / 6000



- **5000 Type**  
: Ø40 - Ø63mm
- **Insert**  
RDHW1605M0E, F, S  
RDKT1605M0-MM/ML/MF
- **6000 Type**  
: Ø50 - Ø63mm
- **Insert**  
RDHW2006M0E, F, S  
RDKT2006M0-MM

### FMRM 1000 / 1500 / 2000 / 2500



- **1000 / 1500 / 2000 / 2500 Type**  
: Ø8 - Ø25mm
- **Insert**  
RDHW0501M0E, F, S  
RDKW0501M0E  
RDHW06T1M0E, F, S  
RDKW06T1M0E
- RDHW0702M0E, F, S  
RDKW0702M0E  
RDHW0803M0E, F, S  
RDKW0803M0E
- Please refer to page 88 for available adaptors

### FMRM 3000 / 4000 / 5000



- **3000 / 4000 / 5000 Type**  
: Ø21 - Ø40mm
- **Insert**  
RDCT10T3M0-MA  
RDKT10T3M0-MF / MM  
RDCT1204M0-MA  
RDKT1204M0-MF / MM  
RDHW1605M0E, F, S  
RDKT1605M0-MF/MM/ML
- Please refer to page 88 for available adaptors

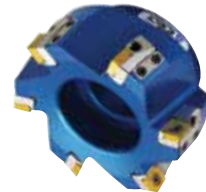
### FMAC(M) 3000-A / 4000-A



Aluminum Body

- **3000 Type**  
: Ø63 - Ø125mm
- **Insert**  
SEET0903AGFN-MA  
SEET0903AGSN-MF/MM  
SEXT0903AGSN-MF/MM/MR  
SEEW0903AGTN
- **4000 Type**  
: Ø63 - Ø315mm
- **Insert**  
SEET14M4AGFN-MA  
SEET14M4AGSN-MF/MM  
SEXT14M4AGSN-MF/MM/MR  
SEEW14M4AGTN  
SEEW14M4AGFN-W  
SEEW14M4AGSN-W  
SEEW14M4AGTN-W

### FMPC(M) 3000-A / 4000-A



Aluminum Body

- **3000 Type**  
: Ø63 - Ø100mm
- **Insert**  
SDET09M402R-MA  
SDET09M405R-MF/MM  
SDXT09M405R/L-MF  
SDXT09M405R/L-MM  
SDXT09M405R-MA
- **4000 Type**  
: Ø63 - Ø315mm
- **Insert**  
SDET130504R-MA  
SDET130508R-MF/MM  
SDXT130508R-MF/MM  
SDXT130538-MM  
SDXT130508R-MA

## ► FMR P-positive

### FMRC(M) 3000 / 4000



- **3000 Type**  
: Ø40 - Ø66mm
- **Insert**  
RPCT10T3M0-MA  
RPET10T3M0E-ML  
RPMT10T3M0E-MF  
RPMT10T3M0S-MM  
RPMW10T3M0E1
- **4000 Type**  
: Ø50 - Ø100mm
- **Insert**  
RPCT1204M0-MA  
RPET1204M0E-ML  
RPMT1204M0E-MF  
RPMT1204M0S-MM  
RPMW1204M0S1  
RPMW1204M0S2

### FMRC(M) 5000 / 6000



- **5000 Type**  
: Ø63 - Ø160mm
- **Insert**  
RPCT1606M0-MA  
RPET1606M0E-ML  
RPMT1606M0E-MF  
RPMT1606M0S-MM  
RPMW1606M0S1
- **6000 Type**  
: Ø63 - Ø250mm
- **Insert**  
RPCT2007M0-MA  
RPET2007M0E-ML  
RPMT2007M0E-MF  
RPMT2007M0S-MM  
RPMW2007M0S1

# Face Milling Cutters

## ► FMR P-positive

### FMRS 2500



- **2500 Type**  
: Ø17 - Ø26mm
- **Insert**  
RPET0803M0E-ML  
RPMT0803M0E-MF  
RPMT0803M0S-MM  
RPMW0803M0E1

### FMRS 3000 / 4000



- **3000 Type**  
: Ø25 - Ø33mm
- **Insert**  
RPET10T3M0-MA  
RPET10T3M0E-ML  
RPMT10T3M0E-MF  
RPMT10T3M0S-MM  
RPMW10T3M0E1
- **4000 Type**  
: Ø25 - Ø50mm
- **Insert**  
RPCT1204M0-MA  
RPET1204M0E-ML  
RPMT1204M0E-MF  
RPMT1204M0S-MM  
RPMW1204M0S1  
RPMW1204M0S2

### FMRS 5000 / 6000



- **5000 Type**  
: Ø40 - Ø50mm
- **Insert**  
RPCT1606M0-MA  
RPET1606M0E-ML  
RPMT1606M0E-MF  
RPMT1606M0S-MM  
RPMW1606M0S1
- **6000 Type**  
: Ø50mm
- **Insert**  
RPCT2007M0-MA  
RPCT2007M0E-ML  
RPMT2007M0E-MF  
RPMT2007M0S-MM  
RPMW2007M0S1

### FMRM 2500 / 3000 / 4000 / 5000



- **2500 / 3000 / 4000 / 5000 Type**  
: Ø17-42mm
- **Insert**  
RPET0803M0E-ML  
RPMT0803M0E-MF  
RPMT0803M0S-MM  
RPMW0803M0E1  
RPCT10T3M0-MA  
RPET10T3M0E-ML  
RPMT10T3M0E-MF  
RPMT10T3M0S-MM  
RPMW10T3M0E1  
RPCT1204M0-MA
- **Insert**  
RPET1204M0E-ML  
RPMT1204M0E-MF  
RPMT1204M0S-MM  
RPMW1204M0S1  
RPMW1204M0S2  
RPCT1606M0-MA  
RPET1606M0E-ML  
RPMT1606M0E-MF  
RPMT1606M0S-MM  
RPMW1606M0S1

• Please refer to page 88 for available adaptors

## ► Double-Mill Series

### AFO(M) 4000



- **4000 Type**  
: Ø80 - Ø125mm
- **Insert**  
OFCW05T3SN  
OFCW05T3FN  
OFCW05T308FN  
OFKT05T3SN-MF/MM  
OFKT05T308SN-MF/MM  
OFKT05T3FN-MA  
OFKT05T3EN-MA

### AFO(M) 5000



- **5000 Type**  
: Ø80 - Ø315mm
- **Insert**  
OFCN0704SN  
OFCN0704FN  
OFCN070408SN  
OFCN070408FN  
OFKR0704SN-MF/MM  
OFKR070408SN-MF/MM  
OFKR0704E(F)N-MA  
OFKT0704SN-MM  
OFKT0704E(F)N-MA  
REKR170400-MM

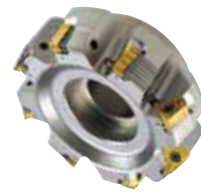
## ► Power Buster Series

### PBAC(M) 5000



- **5000 Type**  
: Ø80 - Ø315mm
- **Insert**  
TNMX2710AZNR-NM  
TNMX2710AZNL-NM

### PBZC(M) 5000



- **5000 Type**  
: Ø80 - Ø315mm
- **Insert**  
TNMX2710AZNR-NM  
TNMX2710AZNL-NM

# Face Milling Cutters

## ► Mill-Max Series

### ADN(M) 4000 / 5000+



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SDCN42  
SDCN1203  
SDKN1203  
SDKR1203
- **5000+ Type**  
: Ø80 - Ø315mm
- **Insert**  
SDCN53  
SDCN1504  
SDKN1504  
SDKR1504

### AE(M) 4000 / 5000



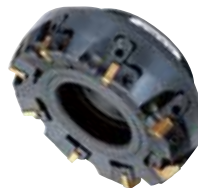
- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SECN1203  
SEKN1203  
SEKR1203
- **5000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SECN1504  
SEKN1504

### EF(M) 4000



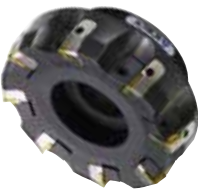
- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SFCN1203EFR

### EN(M) 4000



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNKN1204ENN  
SNKN1204ENN

### EPN(M) 4000 / 5000+



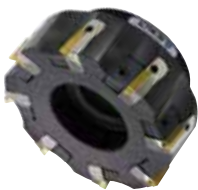
- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SPCN1203  
SPKN1203  
SPKR1203  
SPEX1203
- **5000+ Type**  
: Ø80 - Ø315mm
- **Insert**  
SPCN1504  
SPKN1504  
SPKR1504  
SPEX1504

### PF(M) 4000



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
TFCN2203PFR  
TFCN2203PFL

### PPN(M) 4000



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
TPCN2204  
TPKN2204  
TPKR2204

## ► Shave Mill

### SVM(M) 4000



- **4000 Type**  
: Ø80 - Ø315mm
- **Insert**  
SNEU120420-MF  
SNEU1204ANN-MF  
SNEU1204R-WMF  
SNEU1204-TBW

## ► Shave Mill Ultra

### SVUM 6000



- **6000 Type**  
: Ø80 - Ø315mm
- **Insert**  
LNCS1907-R3.0-WC  
LNCS1907-C1.5-WC

### SVUM 6000-B



- **6000 Type**  
: Ø80 - Ø315mm
- **Insert**  
LNCS1907-R3.0-WC  
LNCS1907-C1.5-WC

# Face Milling Cutters

## ► High Feed Cutter

### ANH 4000 / 5000



- **4000 Type**  
: Ø100 - Ø450mm
- **5000 Type**  
: Ø100 - Ø450mm
- **Insert**  
SNCN1204ENN  
SNKN1204ENN
- **Insert**  
SNCN 1504ENN  
SNKN 1504ENN

### CDH 4000 / 5000



- **4000 Type**  
: Ø100 - Ø450mm
- **5000 Type**  
: Ø100 - Ø450mm
- **Insert**  
SDCN42R  
SDCN42L
- **Insert**  
SDCN53R  
SDCN53L

### DEH 5000



- Ø100 - Ø450mm
- **Insert**  
HECN090408FN  
HECN090408SN  
HECN090408TN

### DPH 5000



- Ø100 - Ø450mm
- **Insert**  
HPEN090408FN  
HPEN090408SN  
HPEN090408EN  
HPEN090408-WC

### PNH 4000 / 5000

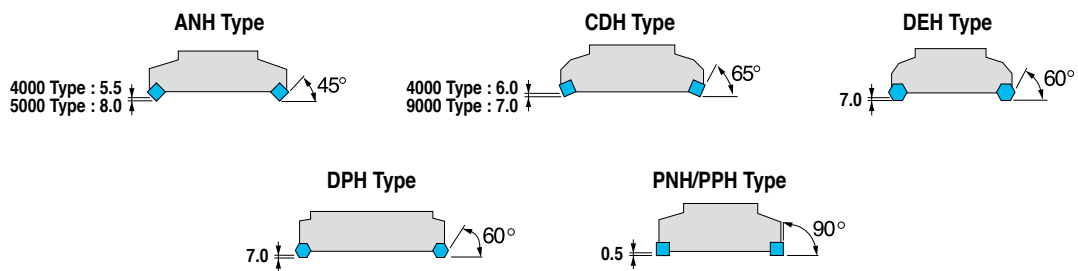


- Ø125 - Ø450mm
- **Insert**  
SNEF435

### PPH 4000



- Ø125 - Ø450mm
- **Insert**  
SPEN120416-WC





# Multi Functional Cutters

## ▶ Alpha Mill Series

### AMC(M)-S

1000S, 1500S, 2000S, 3000S(-K), 4000S



- **1000 Type**  
: Ø32 - Ø63mm
- **1500 Type**  
: Ø40 - Ø100mm
- **2000 Type**  
: Ø40 - Ø100mm
- **3000 Type**  
: Ø40 - Ø100mm
- **4000 Type**  
: Ø50 - Ø200mm

### AMC(M)-SE

1000SE, 2000SE, 3000SE



- **1000 Type**  
: Ø40 - Ø50mm
- **2000 Type**  
: Ø80 - Ø100mm
- **3000 Type**  
: Ø80 - Ø100mm

### AMC(M)-M

2000M, 3000M, 4000M



- **2000 Type**  
: Ø50 - Ø100mm
- **3000 Type**  
: Ø63 - Ø100mm
- **4000 Type**  
: Ø63 - Ø125mm

### AMS-S

1000S, 1500S, 2000S, 3000S, 3000S(-K), 4000S



- **1000 Type**  
: Ø10 - Ø33mm
- **1500 Type**  
: Ø10 - Ø40mm
- **2000 Type**  
: Ø10 - Ø63mm
- **3000 Type**  
: Ø25 - Ø63mm
- **4000 Type**  
: Ø20 - Ø63mm

### AMS-SE

1000SE, 2000SE, 3000SE



- **1000 Type**  
: Ø25mm
- **2000 Type**  
: Ø25 - Ø63mm
- **3000 Type**  
: Ø50 - Ø63mm

### AMS-M

1000M, 1500M, 2000M, 4000M



- **1000 Type**  
: Ø16 - Ø25mm
- **1500 Type**  
: Ø20 - Ø32mm
- **2000 Type**  
: Ø20 - Ø40mm
- **4000 Type**  
: Ø32 - Ø50mm

### AMS-MH

1000MH, 1500MH, 2000MH, 3000MH-K



- **1000 Type**  
: Ø14 - Ø18mm
- **1500 Type**  
: Ø20mm
- **2000 Type**  
: Ø25 - Ø32mm
- **3000 Type**  
: Ø40mm

### AMM

1000M, 1500M, 2000M



- **1000 Type**  
: Ø12 - Ø32mm
- **1500 Type**  
: Ø10 - Ø32mm
- **2000 Type**  
: Ø16 - Ø40mm

• Please refer to page 88 for available adaptors

### BT Tooling system (Single)

AM1000HS, AM1500HS, AM2000HS, AM3000HS, AM4000HS



- **1000 Type**  
: Ø10 - Ø20mm
- **1500 Type**  
: Ø16 - Ø40mm
- **2000 Type**  
: Ø16 - Ø50mm
- **3000 Type**  
: Ø25 - Ø50mm
- **4000 Type**  
: Ø20 - Ø50mm

### BT Tooling system (Multi)

AM1000, AM1500, AM2000, AM3000, AM4000



- **1000 Type**  
: Ø16 - Ø25mm
- **1500 Type**  
: Ø20 - Ø32mm
- **2000 Type**  
: Ø20 - Ø100mm
- **3000 Type**  
: Ø50 - Ø100mm
- **4000 Type**  
: Ø40 - Ø100mm

### HSK Tooling system (Single)

AM1000HS, AM1500HS, AM2000HS, AM3000HS, AM4000HS



- **1000 Type**  
: Ø10 - Ø20mm
- **1500 Type**  
: Ø16 - Ø40mm
- **2000 Type**  
: Ø16 - Ø50mm
- **3000 Type**  
: Ø25 - Ø50mm
- **4000 Type**  
: Ø20 - Ø50mm

### HSK Tooling system (Multi)

AM1000, AM1500, AM2000, AM3000, AM4000



- **1000 Type**  
: Ø16 - Ø25mm
- **1500 Type**  
: Ø20 - Ø32mm
- **2000 Type**  
: Ø20 - Ø100mm
- **3000 Type**  
: Ø50 - Ø100mm
- **4000 Type**  
: Ø40 - Ø100mm

# Multi Functional Cutters

## ▶ Have Mill Series

### HAVE (Multi Edge)



Ø16 - Ø50mm

- **Insert**  
XPMT0802ER-MM  
XPMT1003ER-MM  
XPMT13T3ER-MM  
XPMT1604ER-MM  
XPMT1805ER-MM  
XPMT2006ER-MM  
XPMT2507ER-MM

### HAVE (Single Edge)



Ø16 - Ø50mm

- **Insert**  
XPMT0802ER-MM  
XPMT1003ER-MM  
XPMT13T3ER-MM  
XPMT1604ER-MM  
XPMT1805ER-MM  
XPMT2006ER-MM  
XPMT2507ER-MM

## ▶ Tank Mill Series

### THE



Ø25 - Ø50mm

- **Insert**  
SPMT060304  
SDMT090308-MM  
SPMT120408-MM  
APLT070304R  
ADLT150308R  
ZPMT1504PPSR-MM

## ▶ Turbo Mill Series

### ADS 4000 / 5000



■ **4000 Type**  
: Ø50 - Ø63mm

- **Insert**  
SDCN42  
SDCN1203  
SDKN1203  
SDKR1203

■ **5000 Type**  
: Ø50 - Ø63mm

- **Insert**  
SDCN53  
SDCN1504  
SDKN1504  
SDKR1504

### PES 2000 / 3000 / 4000



2000 / 3000 Type



4000 Type

■ **2000 / 3000 / 4000 Type**  
: Ø20 - Ø63mm

- **Insert**  
TECN22R/TR  
TECN32R/TR  
TECN32TR-S20  
TEEN43R/TR  
TEEN43R-G  
TEEN43TR-S20  
TEEN43TR-Z  
TEEN43TR-ZH

## ▶ T-Cutter Series

### TFE



Ø21 - Ø50mm

- **Insert**  
CPMT060204-MM  
CPMT080308-MM  
CPMT09T308-MM  
CPMH120408-MM

## ▶ Chamfer Tool Series

### CE (Back & Front)



• **Chamfer angles**  
15°, 30°, 45°, 60°

- **Insert**  
SPMT110408-KC  
SPMN120308  
  
15-1125R-S20  
30-1125R-S20  
45-1107R-S20  
45-1119R-S20  
45-1125R-S20  
60-1125R-S32  
45-1207R-S32  
45-1220R-S32  
45-1225R-S32  
45-1235R-S32

### CE (Long Chamfer)



• **Chamfer angles**  
30°, 45°, 60°

- **Insert**  
XCET310404ER-KC  
  
30-3105R-S32  
45-3105R-S32  
60-3105R-S32

### CE (Multi-functional)



• **Chamfer angles**  
45°

- **Insert**  
TWX16R-KC  
TWX22R-KC  
  
45-1600R-S12  
45-1600R-S20  
45-1600R-L20  
45-2200R-S12  
45-2200R-S25  
45-2200R-L25

### CET



- |            |            |
|------------|------------|
| CET060-030 | CET090-120 |
| CET060-040 | CET090-160 |
| CET060-060 | CET120-030 |
| CET060-080 | CET120-040 |
| CET060-100 | CET120-060 |
| CET060-120 | CET120-080 |
| CET060-160 | CET120-100 |
| CET090-030 | CET120-120 |
| CET090-040 | CET120-160 |
| CET090-060 |            |
| CET090-080 |            |
| CET090-100 |            |

### CCT



- |             |              |              |              |              |
|-------------|--------------|--------------|--------------|--------------|
| CCT060-030  | CCT060T-012  | CCT090-010   | CCT090T-060L | CCT120T-040  |
| CCT060-040  | CCT060T-016  | CCT090-012   | CCT090T-080L | CCT120T-060  |
| CCT060-060  | CCT060T-030L | CCT090-016   | CCT090T-010L | CCT120T-080  |
| CCT060-080  | CCT060T-040L | CCT090T-030  | CCT090T-012L | CCT120T-010  |
| CCT060-010  | CCT060T-060L | CCT090T-040  | CCT120-030   | CCT120T-012  |
| CCT060-012  | CCT060T-080L | CCT090T-060  | CCT120-040   | CCT120T-016  |
| CCT060-016  | CCT060T-010L | CCT090T-080  | CCT120-060   | CCT120T-030L |
| CCT060T-030 | CCT060T-012L | CCT090T-010  | CCT120-080   | CCT120T-040L |
| CCT060T-040 | CCT090-030   | CCT090T-012  | CCT120-010   | CCT120T-060L |
| CCT060T-060 | CCT090-040   | CCT090T-016  | CCT120-012   | CCT120T-080L |
| CCT060T-080 | CCT090-060   | CCT090T-030L | CCT120-016   | CCT120T-010L |
| CCT060T-010 | CCT090-080   | CCT090T-040L | CCT120T-030  | CCT120T-012L |

# For Aluminum Milling

## ► Pro-A Mill

### PAC(M) 2000 / 4000



- 2000 / 4000 Type  
: Ø40 - Ø100mm
- Insert  
VCKT220530N-MA

### PAS 2000 / 4000



- 2000 / 4000 Type  
: Ø12 - Ø40mm
- Insert  
VDKT11T210N-MA  
VDKT11T220N-MA  
VCKT220530N-MA

### PAM 2000



- 2000 Type  
: Ø12 - Ø42mm
- Insert  
VDKT11T210N-MA

• Please refer to page 88 for available adaptors

## ► Pro-X Mill

### PAXC(M) 5000 / 6000



- 5000 Type  
: Ø40 - Ø125mm
- Insert  
XEKT19M5□□FR-MA
- 6000 Type  
: Ø50 - Ø125mm
- Insert  
XEKT2506□□FR-MA

### PAXS 5000 / 6000



- 5000 Type  
: Ø20 - Ø40mm
- Insert  
XEKT19M5□□FR-MA
- 6000 Type  
: Ø25 - Ø40mm
- Insert  
XEKT2506□□FR-MA

### PAXM 5000



- 5000 Type  
: Ø25 - Ø40mm
- Insert  
XEKT19M5□□FR-MA

• Please refer to page 88 for available adaptors

## ► Pro-L Mill

### PALCM



- Ø63mm
- Insert  
340504PEFR-63-MA  
3405PEFR-63-MA  
340512PEFR-63-MA  
340516PEFR-63-MA  
340504PEER-63-ML  
3405PEER-63-ML  
340512PEER-63-ML  
340516PEER-63-ML

### PALS (Single Edge)



- Ø32mm - Ø63mm
- Insert  
LXET-MA  
LXET-ML

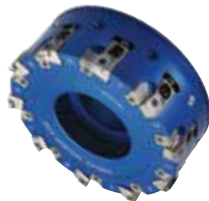
### PALS (Multi Edge)



- Ø63mm
- Insert  
LXET-MA  
LXET-ML

## ► Aero Mill

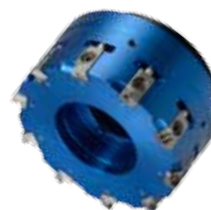
### APD(M)-A



- Ø80 - Ø315mm
- Insert  
CDEW1204R/L-XCF  
CDEW1204R/L-XAF  
CDEW1204R-NAF  
CDEW1204R/L-XAW  
CDEW1204R-NAW

## ► Aero Mill-Plus

### APD(M)-PB



- Ø80 - Ø315mm
- Insert  
BAMPR-XAF  
BAMPR-XAW  
BAMPR-XAWR

## ► Aero Mill-Mini

### MAPD000HR/L-Z0



- Ø40 - Ø63mm
- Insert  
SNEW09T3ADFR  
SNEW09T3ADTR-XAF  
SNEW09T3ADTR-XAW  
SNEW09T3ADTR-NAF  
SNEW09T3ADTR-NAW

### MAPDS000HR/L-Z0



- Ø32 - Ø40mm
- Insert  
SNEW09T3ADFR  
SNEW09T3ADTR-XAF  
SNEW09T3ADTR-XAW  
SNEW09T3ADTR-NAF  
SNEW09T3ADTR-NAW

# High Feed Milling Cutters

## ► HRM / HRMDouble Tools

### HRMDC(M) 09 / 13



- **09 Type**  
: Ø40 - Ø100mm
- **Insert**  
WNMX09T316ZNN-MF/MM
- **13 Type**  
: Ø50 - Ø125mm
- **Insert**  
WNMX130520ZNN-MF/MM

### HRMDC(M) 16



- **16 Type**  
: Ø80 - Ø315mm
- **Insert**  
WNMX160720ZNN-MF/MM

### HRMDS 06



- **06 Type**  
: Ø16 - Ø33mm
- **Insert**  
WNMX060312ZNN-MF/MM

### HRMDS 09 / 13



- **09 Type**  
: Ø25 - Ø50mm
- **Insert**  
WNMX09T316ZNN-MF/MM
- **13 Type**  
: Ø32 - Ø63mm
- **Insert**  
WNMX130520ZNN-MF/MM

### HRMDM 06



- **06 Type**  
: Ø16 - Ø33mm
- **Insert**  
WNMX060312ZNN-MF/MM

• Please refer to page 88 for available adaptors

### HRMDM 09 / 13



- **09 Type**  
: Ø25 - Ø40mm
- **Insert**  
WNMX09T316ZNN-MF/MM

- **13 Type**  
: Ø32 - Ø40mm
- **Insert**  
WNMX130520ZNN-MF/MM

• Please refer to page 88 for available adaptors

### HRMC(M) 13 / 15



- **13 Type**  
: Ø50 - Ø160mm
- **Insert**  
WDKT130520ZDSR-MH
- **15 Type**  
: Ø80 - Ø160mm
- **Insert**  
WDKT150625ZDSR-MH

### HRMS 08 / 10



- **08 Type**  
: Ø20 - Ø30mm
- **Insert**  
WDKT080316ZDSR-MH

- **10 Type**  
: Ø25 - Ø30mm
- **Insert**  
WDKT10T320ZDSR-MH

### HRMS 13 / 15



- **13 Type**  
: Ø32 - Ø40mm
- **Insert**  
WDKT130520ZDSR-MH

- **15 Type**  
: Ø50 - Ø63mm
- **Insert**  
WDKT150625ZDSR-MH

### HRMM 08 / 10 / 13



- **08 / 10 / 13 Type**  
: Ø20 - Ø40mm
- **Insert**  
WDKT080316ZDSR-MH  
WDKT10T320ZDSR-MH  
WDKT130520ZDSR-MH

• Please refer to page 88 for available adaptors

## ► HFM (High Feed Mill)

### HFMS 1000



- **1000 Type**  
: Ø8 - Ø21mm
- **Insert**  
LPMT040210R-MF  
LPMT040220R-MF  
LPMW040210R  
LPMW040220R  
LPEW040210R  
LPEW040220R

### HFMM 1000



- **1000 Type**  
: Ø8 - Ø33mm
- **Insert**  
LPMT040210R-MF  
LPMT040220R-MF  
LPMW040210R  
LPMW040220R  
LPEW040210R  
LPEW040220R

• Please refer to page 88 for available adaptors

# Side Cutters

## ► Tangential Type (Full Side Cutter)

### TAFCP(M)



Ø100 - Ø315mm

- **Insert**  
CNHQ1005-□□□  
CNHQ1305-□□□  
CNHQ1606-□□□

### TAFCB(M)



Ø100 - Ø315mm

- **Insert**  
CNHQ1005-□□□  
CNHQ1305-□□□  
CNHQ1606-□□□

## ► Tangential Type (Half Side Cutter)

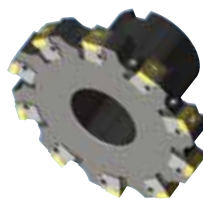
### TAHCP(M)



Ø100 - Ø315mm

- **Insert**  
CNHQ1005-□□□  
CNHQ1305-□□□  
CNHQ1606-□□□

### TAHCB(M)



Ø100 - Ø315mm

- **Insert**  
CNHQ1005-□□□  
CNHQ1305-□□□  
CNHQ1606-□□□

## ► Radial Type (Full Side Cutter)

### RAFCP(M)



Ø100 - Ø315mm

- **Insert**  
SDXT09M40□R/L  
SDXT13050□R/L

### RAFCB(M)



Ø100 - Ø315mm

- **Insert**  
SDXT09M40□R/L  
SDXT13050□R/L

## ► Radial Rype (Half Side Cutter)

### RAHCP(M)



Ø100 - Ø315mm

- **Insert**  
SDXT09M40□R/L  
SDXT13050□R/L

### RAHCB(M)



Ø100 - Ø315mm

- **Insert**  
SDXT09M40□R/L  
SDXT13050□R/L



# Side Cutters

## ► Side Cutters

### FC(M) (Full Side Cutter)



Ø80 - Ø315mm  
 • **Insert**  
 TPCN1103PPN  
 TPCN1603PPN

### HC(M) (Half Side Cutter)



Ø100 - Ø315mm  
 • **Insert**  
 TPCN1603PPN

### SPP(M)



Ø80 - Ø200mm  
 • **Insert**  
 PNEJ12□□N

### SPB(M)



Ø80 - Ø200mm  
 • **Insert**  
 PNEJ12□□N

### SPS



Ø50 - Ø200mm  
 • **Insert**  
 SPFN200  
 SPFN300  
 SPFN400

## ► Wind Mill

### RAHCP(M) (Boss Type)



Ø80 - Ø250mm  
 • **Insert**  
 SNHT11023□□R/L-WX SNHT1205□R/L-WX  
 SNHT1103 □□R/L-WX SNHT12054□R/L-WX  
 SNHT1203□□R/L-WX SNHT1206□□R/L-WX  
 SNHT12035□□R/L-WX SNHT12065□□R/L-WX  
 SNHT1204□□R/L-WX SNHT1207□□R/L-WX  
 SNHT12045□□R/L-WX SNHT12075□□R/L-WX

### RAHCB(M) (Plane Type)



Ø80 - Ø250mm  
 • **Insert**  
 SNHT11023□□R/L-WX SNHT1205□R/L-WX  
 SNHT1103□□R/L-WX SNHT12054□R/L-WX  
 SNHT1203□□R/L-WX SNHT1206□□R/L-WX  
 SNHT12035□□R/L-WX SNHT12065□□R/L-WX  
 SNHT1204□□R/L-WX SNHT1207□□R/L-WX  
 SNHT12045□□R/L-WX SNHT12075□□R/L-WX

# Endmills / Drills

KORLOY provides high quality endmills and drills thanks to its advanced technology and accumulated know-how of tooling systems, carrying out values for higher productivity and quality results.

Solid Endmills

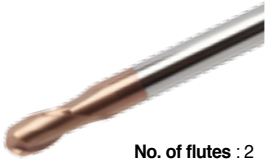
Solid Drills

Indexable Drills / Indexable Endmills

# Solid Endmills

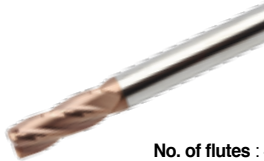
## ▶ H Endmill

**PBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.5 \sim \varnothing 12$

**PRE4000 (Radius)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 3 \sim \varnothing 16$

## ▶ V Endmill

**VFE4000 (Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 2.5 \sim \varnothing 16$

## ▶ Z Endmill

**ZFE2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 16$

**ZFE4000 (Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 1 \sim \varnothing 16$

**ZSFE2000 (Short Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**ZSFE4000 (Short Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 1 \sim \varnothing 14$

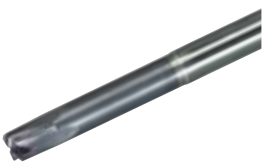
**ZBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

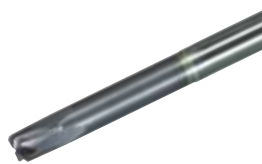
## ▶ F Endmill

**FME4000 (Standard)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 12$

**FMLE4000 (Long)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 12$

## ▶ S+ Endmill

**SPFE4000 (Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**SPLFE4000 (Long Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

# Solid Endmills

## ► R+ Endmill

### EM09CA (Roughing)

Roughing Endmill with Finishing Capability



No. of flutes : 4  
Cutting diameter :  $\varnothing 6.0 \sim \varnothing 20.0$

### EM11CA (Roughing)

Roughing Endmill for Wave Form of Al



No. of flutes : 3  
Cutting diameter :  $\varnothing 6.0 \sim \varnothing 25.0$

### EM36CA (Roughing)

Long Type Roughing Endmill for Fine Pitches

- High helix angle, irregular flute spacing and lead



No. of flutes : 4  
Cutting diameter :  $\varnothing 5 \sim \varnothing 20$

### EM37CA (Roughing)

Roughing Endmill for Fine Pitches



No. of flutes : 4  
Cutting diameter :  $\varnothing 5 \sim \varnothing 20$

### EM38CA (Roughing)

Standard Roughing Endmill



No. of flutes : 4  
Cutting diameter :  $\varnothing 5 \sim \varnothing 20$

### EM43CA (Roughing)

Standard Roughing Endmill for Fine Pitches

- High helix angle, irregular flute spacing and lead



No. of flutes : 4  
Cutting diameter :  $\varnothing 5 \sim \varnothing 20$

### EM11PM (Roughing)

4F Roughing Endmill



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 20$

### EM16PM (Roughing)

Roughing Endmill for Fine Pitches

- Irregular flute spacing



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 20$

### EM17PM (Roughing)

Roughing Endmill for Fine Pitches

- Irregular flute spacing



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 20$

### EM06H9 (Roughing)

Roughing Endmill



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 50$

# Solid Endmills

## ► I+ Endmill

**IPFE2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 20$

**IPFE4000 (Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 1 \sim \varnothing 20$

**IPLFE2000 (Long Flat)**



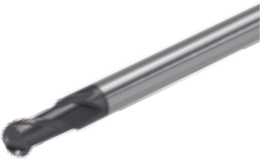
No. of flutes : 2  
Cutting diameter :  $\varnothing 6 \sim \varnothing 12$

**IPLFE4000 (Long Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 6 \sim \varnothing 12$

**IPBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.5 \sim \varnothing 10$

**IPBE4000 (Ball)**



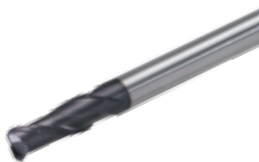
No. of flutes : 4  
Cutting diameter :  $\varnothing 0.5 \sim \varnothing 10$

**IPLBE2000 (Long Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.5 \sim \varnothing 8$

**IPRE2000 (Radius)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**IPRE4000 (Radius)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 2 \sim \varnothing 12$

**IPLRE2000 (Long Radius)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 3 \sim \varnothing 12$

**IPLRE4000 (Long Radius)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 3 \sim \varnothing 12$



# Solid Endmills

## ► Endmills for Specific Aluminum

**SSEA2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 20$

**SSEA3000 (Flat)**



No. of flutes : 3  
Cutting diameter :  $\varnothing 2 \sim \varnothing 16$

**SSBEA2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 20$

## ► A+ Endmill

**APFE2000 (Flat)**



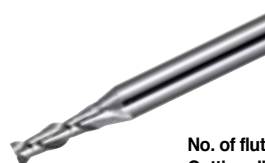
No. of flutes : 2  
Cutting diameter :  $\varnothing 2.5 \sim \varnothing 20$

**APFE3000 (Flat)**



No. of flutes : 3  
Cutting diameter :  $\varnothing 2 \sim \varnothing 16$

**APLFE2000 (Long Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 3 \sim \varnothing 20$

**APLFE3000 (Long Flat)**



No. of flutes : 3  
Cutting diameter :  $\varnothing 2 \sim \varnothing 16$

**APBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**APBE3000 (Ball)**



No. of flutes : 3  
Cutting diameter :  $\varnothing 4 \sim \varnothing 25$

## ► C-Max Endmills

**CFE2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**CFNE2000 (Long Neck Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.5 \sim \varnothing 4$

**CBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**CBNE2000 (Long Neck Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.5 \sim \varnothing 4$

**CRE2000 (Radius)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 2 \sim \varnothing 12$

**CRNE2000 (Long Neck Radius)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 4$

# Solid Endmills

## ► D Endmill

**DFE2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 1 \sim \varnothing 12$

**DFE4000 (Flat)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 2 \sim \varnothing 12$

**DBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.6 \sim \varnothing 12$

**DBE4000 (Ball)**



No. of flutes : 4  
Cutting diameter :  $\varnothing 2 \sim \varnothing 12$

## ► PCD Endmills

**PDE1000 (Flat)**



No. of flutes : 1  
Cutting diameter :  $\varnothing 4.6 \sim \varnothing 6$

**PDE2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 6.0 \sim \varnothing 12$

## ► Micro Endmills

**MSE2000 (Flat)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.2 \sim \varnothing 1$

**MSBE2000 (Ball)**



No. of flutes : 2  
Cutting diameter :  $\varnothing 0.2 \sim \varnothing 1$

# Solid Endmills / Solid Drills

## ► Brazed Endmills

ZSE200 (Flat)



No. of flutes : 2  
Cutting diameter :  $\varnothing 14 \sim \varnothing 50$

ZSE300 (Flat)



No. of flutes : 3  
Cutting diameter :  $\varnothing 14 \sim \varnothing 50$

ZSE400 (Flat)



No. of flutes : 4  
Cutting diameter :  $\varnothing 14 \sim \varnothing 50$

ZSE600 (Flat)



No. of flutes : 6  
Cutting diameter :  $\varnothing 34 \sim \varnothing 50$

ZSEA200 (Flat)



No. of flutes : 2  
Cutting diameter :  $\varnothing 15 \sim \varnothing 50$

ZSEL200 (Long Flat)



No. of flutes : 2  
Cutting diameter :  $\varnothing 14 \sim \varnothing 50$

ZSEL400 (Long Flat)



No. of flutes : 4  
Cutting diameter :  $\varnothing 16 \sim \varnothing 40$

ZSEXL200 (Long Flat)



No. of flutes : 2  
Cutting diameter :  $\varnothing 20 \sim \varnothing 25$

ZSBE200 (Ball)



No. of flutes : 2  
Cutting diameter :  $\varnothing 13 \sim \varnothing 50$

## ► Mach Drills

MSD

MSD□□□□-□P/M/K/N



Aspect Ratio(L/D) : 3, 5, 7  
Cutting diameter :  $\varnothing 2.5 \sim \varnothing 20$

MSDH

MSDH□□□□-□P/M/K/N  
Oil hole type



Aspect Ratio(L/D) : 3, 5, 7  
Cutting diameter :  $\varnothing 2.5 \sim \varnothing 20$

# Solid Drills

## ► Mach Drills Plus

### MSDP

MSDP□□□-□P/M/K/N



Aspect Ratio(L/D) : 3, 5, 7  
Cutting diameter : Ø1.0 ~ Ø2.4

### MSDP(H)

MSDPH□□□-□P/M/K/N

Oil hole type



Aspect Ratio(L/D) : 3, 5, 7  
Cutting diameter : Ø2.5 ~ Ø20

## ► MSFD

### MSFD

MSFD□□□-□P



Aspect Ratio(L/D) : 2, 3  
Cutting diameter : Ø2.5 ~ Ø12.0

### MSFDH

MSFDH□□□-□P

Oil hole type

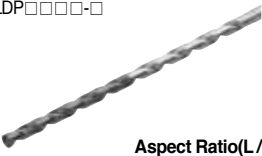


Aspect Ratio(L/D) : 2, 3  
Cutting diameter : Ø2.5 ~ Ø12.0

## ► Mach Long Drills

### MLDP

MLDP□□□□-□



Aspect Ratio(L/D) : 5, 7  
Cutting diameter : Ø3 ~ Ø10

### MLD

MLD□□□□-□

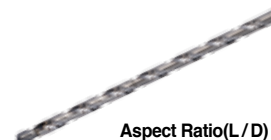


Aspect Ratio(L/D) : 20, 25  
Cutting diameter : Ø3 ~ Ø10

## ► Mach Long Drills Plus

### MLDP

MLD□□□□N-□P/K/N



Aspect Ratio(L/D) : 10, 15, 20, 25  
Cutting diameter : Ø3 ~ Ø10

## ► Vulcan Drills

### VZD (MA, MBA)

Brazed type  
Cutting diameter :  
Ø12.6 ~ Ø40.5



Special size items can be ordered.

### VZD (LA, LBA)

Brazed type  
Cutting diameter :  
Ø12.6 ~ Ø40.5



Special size items can be ordered.

## ► Carbide Drills

### SSDP

Solid carbide  
Cutting diameter :  
Ø1 ~ Ø15



For General purpose

# Indexable Drills

## ▶ Indexable Drill Series

### KING DRILL (2D/3D/4D/5D)

Ø12 - Ø60.5mm



Insert		Outer
Inner		
SP□T040204-□□		XO□T040204-□□
SP□T050204-□□		XO□T050204-□□
SP□T060205-□□		XO□T060204-□□
SP□T07T208-□□		XO□T07T205-□□
SP□T090308-□□		XO□T090305-□□
SP□T11T308-□□		XO□T11T306-□□
SP□T130410-□□		XO□T130406-□□
SP□T15M510-□□		XO□T15M508-□□
SP□T180510-□□		XO□T180508-□□

### KING DRILL-HP (2D/3D/4D)

Ø13 - Ø29mm



Insert		Outer
Inner		
SP□T040204-□□		XO□T040204-□□
SP□T050204-□□		XO□T050204-□□
SP□T060205-□□		XO□T060204-□□
SP□T07T208-□□		XO□T07T205-□□
SP□T090308-□□		XO□T090305-□□

### KING DRILL (K2D/K3D/K4D)

**KING DRILL- Cartridge Type**  
Ø61 - Ø100mm



Insert		Outer
Inner		
KDC6165C		KDC6165P
KDC6570C		KDC6570P
KDC7075C		KDC7075P
KDC7580C		KDC7580P
KDC8085C		KDC8085P
KDC8590C		KDC8590P
KDC9095C		KDC9095P
KDC95100C		KDC95100P

### KING DRILL Insert

	(General)	(Mild steel, STS)	(Aluminum)
Inner			
	<b>SPMT-PD</b>	<b>SPMT-LD</b>	<b>SPET-ND</b>
Outer			
	<b>XOMT-PD</b>	<b>XOMT-LD</b>	<b>XOET-ND</b>

### TPDC (3D/5D/8D)

Ø12 - Ø19.99mm



Insert		
TPDC1200CP	TPDC1500CP	TPDC1810CP
TPDC1220CP	TPDC1550CP	TPDC1850CP
TPDC1250CP	TPDC1600CP	TPDC1860CP
TPDC1260CP	TPDC1630CP	TPDC1870CP
TPDC1300CP	TPDC1650CP	TPDC1900CP
TPDC1350CP	TPDC1670CP	TPDC1920CP
TPDC1400CP	TPDC1700CP	TPDC1950CP
TPDC1420CP	TPDC1750CP	TPDC1970CP
TPDC1430CP	TPDC1770CP	
TPDC1450CP	TPDC1800CP	

### TPDB (3D/5D/8D)

Ø10 - Ø32.9mm



**Insert**  
TPD100B-TPD329B

### WPDC (5D/6.5D/8D)

**Standard type**  
Ø25 - Ø40mm



**Insert**  
WC□T030204-C21  
WC□T040204-C21  
WC□T050308-C21

### WPDC (5D/6.5D/8D)

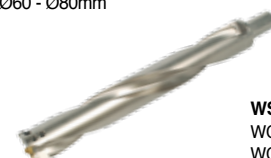
**Single insert cartridge type**  
Ø41 - Ø59mm



**Insert**  
WC□T06T308-C21  
WC□T080408-C21

### WPDC (5D/6.5D/8D)

**Dual insert cartridge type**  
Ø60 - Ø80mm



**WSP**  
WC□T050308-C21  
WC□T06T308-C21



# Indexable Endmills

## ► Indexable Endmills

### BFE

Ø16 - Ø32mm



#### Insert

RC16  
RC20  
RC25  
RC30  
RC321

### BRE

Ø20 - Ø50mm



#### Steel Shank

SDMT090308-MM  
SPMT060304  
SPMT120408-MM  
SPMT120508-MMN  
ZDMT080310R-MM  
ZDMT110312.5R-MM  
ZDMT130416R-MM  
ZPMT160520R-MM  
ZPMT160525R-MM  
ZPMT160531.5R-MM  
ZPMT160525R-MR

### GBE

Filo Single  
Ø16 - Ø50mm



#### Internal : M External : S

ZPET080M(S)-MM  
ZPET090M(S)-MM  
ZPET100M(S)-MM  
ZPET110M(S)-MM  
ZPET125M(S)-MM  
ZPET130M(S)-MM  
ZPET140M(S)-MM  
ZPET150M(S)-MM  
ZPET160M(S)-MM  
ZPET200M(S)-MM  
ZPET250M(S)-MM

### GBE-M

Multi Edge  
Ø20 - Ø50mm



#### Internal : M External : S

ZPET100M(S)-MM  
ZPET110M(S)-MM  
ZPET125M(S)-MM  
ZPET130M(S)-MM  
ZPET140M(S)-MM  
ZPET150M(S)-MM  
ZPET160M(S)-MM  
ZPET200M(S)-MM  
ZPET250M(S)-MM

#### Ext.Principal :

SPMT060304  
SDMT090308-MM  
SPMT120408-MM

### GBEM

Ø16 - Ø32mm



#### Internal : M External : S

ZPET080M(S)-MM  
ZPET090M(S)-MM  
ZPET100M(S)-MM  
ZPET110M(S)-MM  
ZPET125M(S)-MM  
ZPET130M(S)-MM  
ZPET140M(S)-MM  
ZPET150M(S)-MM  
ZPET160M(S)-MM  
ZPET200M(S)-MM  
ZPET250M(S)-MM

\* Please refer to page 88 for available adaptors

## ► Laser Mill Series

### LBE (08/10/12/16/20/25/30/32)

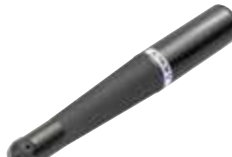
Carbide Shank-Ball,  
Corner R type(Straight type)



LBE080080S-S08C	LBE200120S-S20C
LBE080100S-S08C	LBE200170S-S20C
LBE080020S-S08C-130	LBE200035S-S20C-190
LBE080020S-S08C-150	LBE200035S-S20C-240
LBE100080S-S10C	LBE250140S-S25C
LBE100120S-S10C	LBE250170S-S25C
LBE100023S-S10C-130	LBE250040S-S25C-220
LBE100023S-S10C-170	LBE250040S-S25C-250
LBE120100S-S12C	LBE300140S-S32C
LBE120150S-S12C	LBE300170S-S32C
LBE120025S-S12C-150	LBE300050S-S32C-230
LBE120025S-S12C-200	LBE300050S-S32C-260
LBE160100S-S16C	LBE320140S-S32C
LBE160150S-S16C	LBE320170S-S32C
LBE160030S-S16C-160	LBE320050S-S32C-230
LBE160030S-S16C-210	LBE320050S-S32C-260

### LBE (08/10/12/16/20/25/30/32)

Steel Shank-Ball, Corner R type  
(Taper type)



LBE080035T-S12	LBE160100T-S20
LBE080055T-S12	LBE200075T-S20
LBE080075T-S12	LBE200115T-S25
LBE100035T-S12	LBE250090T-S25
LBE100055T-S12	LBE250135T-S32
LBE100075T-S12	LBE300105T-S32
LBE120055T-S12	LBE300160T-S32
LBE120085T-S16	LBE320105T-S32
LBE160065T-S16	LBE320160T-S32

### LBE (12/16/20/25/30/32)

Steel Shank-Ball,  
Corner R type(Straight type)



LBE120035S-S12
LBE160035S-S16
LBE200040S-S20
LBE250045S-S25
LBE300055S-S32
LBE320055S-S32

### LRE (10/12/16/20/25/30/32)

Carbide Shank-Corner R type  
(Straight type)



LRE100080S-S10C	LRE200035S-S20C-190
LRE100120S-S10C	LRE200035S-S20C-240
LRE100023S-S10C-130	LRE250140S-S25C
LRE100023S-S10C-170	LRE250170S-S25C
LRE120100S-S12C	LRE250040S-S25C-220
LRE120150S-S12C	LRE250040S-S25C-250
LRE120025S-S12C-150	LRE300140S-S32C
LRE120025S-S12C-200	LRE300170S-S32C
LRE160100S-S16C	LRE300050S-S32C-230
LRE160150S-S16C	LRE300050S-S32C-260
LRE160030S-S16C-160	LRE320140S-S32C
LRE160030S-S16C-210	LRE320170S-S32C
LRE200120S-S20C	LRE320050S-S32C-230
LRE200170S-S20C	LRE320050S-S32C-260

# Indexable Endmills

## ► Laser Mill Series

### LRE (10/12)

Steel Shank-Ball, Corner R type  
(Taper type)

LRE100025T-S12  
LRE100050T-S12  
LRE120060T-S16



### LRE (12/16/25/30/32)

Steel Shank-Corner R type  
(Straight type)

LRE120030S-S12  
LRE160050S-S16  
LRE160060S-S16  
LRE200060S-S20  
LRE200080S-S20  
LRE250070S-S25  
LRE250100S-S25  
LRE300070S-S32  
LRE300100S-S32  
LRE320080S-S32  
LRE320100S-S32



### LBE (MHD)



LBE100-MHD-M06  
LBE120-MHD-M06  
LBE160-MHD-M08  
LBE200-MHD-M10  
LBE250-MHD-M12  
LBE300-MHD-M16  
LBE320-MHD-M16

• Please refer to page 88 for available adaptors

## ► Shank Adaptor for Modular Head

### MAT (Steel Shank)

Available to use  
(HFMM, FMRM, LBE, PAM, PAXM, AMM, RM4PM, RM4ZM, HRMM, HRMDM, GBEM)



MAT-M06-020-S10S	MAT-M06-040-S12T
MAT-M6B-020-S12S	MAT-M06-065-S16T
MAT-M6B-040-S12S	MAT-M6B-065-S16T
MAT-M08-020-S16S	MAT-M6B-080-S16T
MAT-M10-030-S20S	MAT-M08-040-S16T
MAT-M12-030-S25S	MAT-M08-065-S16T
MAT-M16-035-S32S	MAT-M08-080-S20T
	MAT-M08-110-S25T
	MAT-M10-050-S20T
	MAT-M10-070-S20T
	MAT-M10-090-S25T
	MAT-M10-110-S25T
	MAT-M10-130-S32T
	MAT-M12-050-S25T
	MAT-M12-070-S25T
	MAT-M12-090-S25T
	MAT-M12-110-S32T
	MAT-M12-175-S40T
	MAT-M16-055-S32T
	MAT-M16-080-S32T
	MAT-M16-120-S32T
	MAT-M16-175-S40T

### MAT-C (Carbide Shank)

Available to use  
(HFMM, FMRM, LBE, PAM, PAXM, AMM, RM4PM, RM4ZM, HRMM, HRMDM, GBEM)



MAT-M06-030-S10S-C-80	MAT-M08-080-S16S-C
MAT-M06-050-S10S-C-100	MAT-M08-110-S16S-C
MAT-M06-080-S10S-C-130	MAT-M08-150-S16S-C
MAT-M6B-030-S10S-C-80	MAT-M10-090-S20S-C
MAT-M6B-050-S10S-C-100	MAT-M10-110-S20S-C
MAT-M6B-080-S10S-C-130	MAT-M10-175-S20S-C
MAT-M08-010-S16S-C-150	MAT-M12-090-S25S-C
MAT-M08-010-S16S-C-180	MAT-M12-110-S25S-C
MAT-M08-010-S16S-C-250	MAT-M12-175-S25S-C
MAT-M10-010-S20S-C-170	MAT-M16-090-S32S-C
MAT-M10-010-S20S-C-200	MAT-M16-120-S32S-C
MAT-M10-010-S20S-C-300	MAT-M16-175-S32S-C
MAT-M12-015-S25S-C-170	
MAT-M12-015-S25S-C-200	
MAT-M12-015-S25S-C-300	
MAT-M16-020-S32S-C-180	
MAT-M16-020-S32S-C-210	
MAT-M16-020-S32S-C-300	

# The Comparison of Chip Breakers

## ► Comparison of Chip Breakers

Application		KORLOY	KYOCERA	TAEGUTEC	SUMITOMO	SANDVIK	KENAMETAL	ISCAR	WLATER	mitsubishi	SECO	
Negative	Steel	Ultra-Finishing	-	DP (G)	-	-	-	FF(G)	-	-	PK(G)	-
			VL	GP, PP	FA	FA, FL	QF	UF	SF	NF3	FH,FS	FF1
		Finishing	VF	HQ	FG	LU, SU	PF	FN	NF	NF4	SH, C	FF2
			VB	-	SF	SE	61	-	F3M	PF5	LP	-
		Medium to finishing	VQ, VC	CQ	MC	SX	-	LF, CT	TF	NS6	SA, C()	MF2, MF3
			LP	PQ	FC	-	-	-	-	MP3	MV	MF5
	Medium machining	VM	HK, CS,GS,HS,PS	MP, MT	GU, UX	QM, SM	MP, MN	GN	NM4, NP5	MA,MH	M3, M5	
		MP	-	PC	GE	PM	-	M3M	NM5,NM6	MP	-	
	Roughing	B25	All round	All round	All round	-	-	-	-	All round	M5	
		GR	PT,GT, HT, PH	RT	MU,ME, MX	PR	RN	NR, R3M	NM9, PP5	GH, RP	MR5,MR6, MR7	
	Heavy duty machining	GH	PX	RH, RX	HG, MP	PR	RH	NM	NR4, NRF	HZ	R4,R5	
		VH	HX	HZ	HP	QR	RM	HR	NR8	HV, HX, HAX	R6, R7, R8	
Low carbon steel	Soft steel	VL	XF, XP, XP-T	SF	FL	LC	-	-	-	FY	-	
		-	XQ, XS	-	-	-	-	-	-	SY	-	
High feed	High feed cutting	VW	WP	WS	LUW,SEW	WF,WL	FW	WF	NF	SW	FF2, MF2	
		LW	WQ	WT	GUW	WM,WMX	MW	WG	NM	MW	MF5, M3	
-	-	-	-	-	WR	RW	-	-	-	R4,R7		
Application	Shaft (long bar)	SH	CJ, ST	FS, VF, FX	HM	K	-	-	-	ES	UX	
		KNUX-	KNMX-	KNUX-	-	KNUX-71	-	-	-	KNMX-19	-	
M	Stainless steel	VP2	MQ, GU	EA	SU	MF	FP	F3P	NF4	LM	MF1	
		MM	HU, TK, MU	MP, EM	EX, GU	MM	MP	M3M	NM4	MA, GM, MM	MF3	
		RM	MS	ET	MU, HM	MR	RP	R3M	NR4	RM	M5	
K	Cast iron	MP	C	MT	UZ	KF	FN	TF	NM, MK5	LK	M4	
		GR, VR	ZS	RT KT	UX, GZ	KM	RP	GN	NM5, RK5	MA, MK	M5	
		-MA	-MA, GC	-MA	-MA	KR	UN	-MA	-MA, MK5	GH, -MA, RK	MR7	
S	HRSA	VP1	MQ	EA	EF	-	FS, LF	PF	NF4	FJ(G), LS	M1	
		VP2	TK	ML	UP, EG	23.SR	MS	PP	-	MJ	MF1	
		VP3	MU	EM	EX	Xcel-SM	MP	VL	NM4	MS, MS	MF4	
		VP4	MS	ET	MU	-	RP	-	NR4	GJ, RS	MR4	
N	Aluminium	HA	AH	ML	UP (GX), AG	23	MS	PP	-	MJ	MF1	
Positive	Application	Finishing	VL	XP	FA	LU	PF	UF	-	PF	FV	FF1
			VF	GP	-	FP, FC, SI	UF	-	PF	PF, PF2	SV	F1
		Medium machining	HMP	XQ	FG	-	PM	LF	14	-	-	MF2
	MP		HQ,CK	PC	SU, SC	UM	-	SM	PF4,PF5	MV	F2	
	Roughing	C25		MT	MU	PR, UR	MF	-	PM5		M5	
	Stainless steel For HRSA	VP1	CF,GF,GQ	FG	FC	KF	LF	PF	PM	FJ, LM	F1	
		VL	MQ	SA	-	KM	MF	SM	PM5	AM, MM	MF2	
	Cast iron	MP	GK	PC	MU	UM	LF	17	-		M3	
		C25	HQ	MT	C/B	KR	MF,UF	19	C/B	C/B	M5	
	Aluminium	AK, AR	AH	FL	AW, AG	AL	HP	AS, AF	PM2	F	AL	
High precision bar turning (tolerance class G&E)	KF, KM	FSF,USF	GF, FF	FY, FX,FZ	UM	-GH	LF,RF,XL	-	F, SR, SS, SM	UX		

Grades / Chip Breakers

Inserts

Turning Tools

Milling Tools

Endmills / Drills

The Comparison of Chip Breakers, Grades

# Comparison of Turning Grades

## ➤ WC

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENNAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET
Turning	P	ST10	ST10 ST20		S1P			TX10S TX20	ST10T ST120T	SRN5 WS20B	S1F		P10 P20		
		ST20 MA2 ST30 ST30A	ST30A	PW30	IC50M IC54	SM30 S30T S6	TTX TTM TTR	K45 KM K420	TX30	UTi20T	EX35 EX40 EX45	VC6 VC5 VC56		P30 P40	
	M	U20	U10 U20 ST30A A40		H13A H10F	AT10 AT15 TTR	K2885 K2S	TU10 TU20 TU40	UTi20T	WAM10B EX35	VC27 VC28		M10 M20 M40		
K	H01 H05	H1		IC4	H1P	THM	K68	TH03 TH10 KS20	HTi10T HTi20T	WH05 W10 WH20	VC3 VC2 VC1		K10 K20 K20M K30		
	G10	G10	KW10H	IC20 IC28	H10F	THR	K8735								

## ➤ CVD Coated

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENNAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET	
Turning	P	NC3010	AC805P	CA5505 CA510		GC4305 GC4205	TP0500 TP0501 TP1500	KCP05 KCP05B	T9105	UE6105			TT8105			
		NC3215*	AC810P AC700G AC900G	CA515 VP5115 CA5515	IC8150	GC4315 GC4215	TP1501 TGP25	KCP10 KCP10B	T9115	UE6110 MY5015	HG8010	VP5515	WPP10S WKP13S	TT8110 LC215P TT8115		
		NC3225*	AC820P AC2000 AC8025P	CA525 VP5125 CA5525	IC8250	GC4325 GC4225	TP2500 TP2501 TGP35 TP3501	KCP25 KCP25B	T9125	MC6025 UE6020	HG8025	VP5525	WPP20S WKP23S	TT8120 LC225P TT8125	CP5	JC110V JC215V
		NC3030 NC5330	AC830P	CR9025 CA5535 CA530	IC8350	GC4335 GC4235	TP3500 TGP45	KCP30 KCP30B KCP40 KCP40B	T9135	MC6035 UE6035	GM8035	VP5535	WPP30S WKP33S	TT5100 TT8135		JC325V JC450
M	NC9115* NC9125* NC9025 NC9135*	AC610M	CA6515	IC6015 IC6025	S05F GC2015 GC2220 GC2025	TM2000	KCM15 KCM15M KCM25 KCM35 KCM35B	T6120	MC7015 MC7025 US7020	GM25	VP8515 VP8525	WAM10 WMP20S WAM20 WAM30	TT9215 TT9225			
	NC6205 NC6210 NC6215*	AC630M AC6030M	CA6525			TM4000		T6130	US735	GX30		TT9235				
K	NC6205	AC405K	CA4505	IC5005	GC3205 GC3210	TK1001	KCK05 KCK05B	T5105	MC5005 UC5105	HG3505	VP1505	WKK10S	TT7005 TT7505 TT7310	CP2	JC105V	
	NC6210 NC6215*	AC415K	CA4010 CA4515 CA4115	IC5015	GC3215 GC3225	TK2001 TgK1500	KCK15 KCK15B KCK20 KCK20B	T5115	MC5015 UC5115	HG3515	VP1510 VP1515	WKK20S	TT7015	CP5	JC110V JC215V	
		AC420K	CA4120					T5125				WAK30	TT6300			

## ➤ PVD Coated

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENNAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET	
Turning	P	PC8110 PC230		PR1005 PR915 PR1115	IC507 IC808		CP200	KU10T KU25T	AH710 GH730		VC907 VC927				JC5003	
		PC5300 PC8115* PC3545		PR930 PR1025 PR630 PR660	IC830 IC908 IC3028 IC330	GC1025	CP250		AH330 AH740 AH120 GH330	VP15TF VP20MF	IP2000 IP3000	VC905	WTA43 WTA41	TT5030	JC5015	
	PC8110 PC8115* PC5300* PC9030	AC510U EH510Z AC520U EH520Z AC530U	PR915 PR930	IC808 IC907 IC3028 IC830	GC1005 GC1105 GC1020 GC1025 GC4125	CP200 CP250	CP250	KC5010 KC5510	AH330 GH330 AH120 GH730 AH140 AH630	MP9005 VP10RT VP15TF VP20MF	IP50S IP100S	VC929 VC927 VC902 VC901 VC905	WSM10S WSM20S WSM30S WSM40S	TT5030	ZM3 QM3 VM1 TAS	JC5003 JC5015
	PC5400*	PR1125 PR630 PR660	IC330	GC2035		CP500	KC5025 KC5525	AH645	MP7035				TT8020			
K	PC5300	EH510Z EH520Z		IC5100 IC810 IC220 IC908 IC228		CP200 CP250 CP500		AH110 GH110 AH120		CY110H	VC929 VC903 VC927 VC902 VC901 VC907		TT5030			
	PC8105 PC8110 PC8115* PC5300 PC5400*	AC510U AC520U	PR915 PR660 PR1325	IC808 IC907 IC3028 IC328	GC1105 GC1025 GC2035	TS2000 CP500 TS2500	KC5010 KC5025	AH110 AH120	VP05RT VP10RT VP15TF MP7035			WSM10 WSM20 WSM30	TT5030			

## ➤ Cermet

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENNAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET	
Turning	P	CN1500* CN1500*	T110A T2000Z* T1500A	PV30* TN30	IC20N IC520N	CT5015	CM C15M	HT2 KT125 HT5 KT175 KT195M	NS520 GT530* NS530 NS9530 GT9530* NS540 NS730	NX2525 NX3035 UP35N* AP25N* NX335 MP3025*	CH350 CZ25* CH530 CH550 CH570	VC83	WTA43* WTA41*	PV3010* CT3000	T3N T15 N20	LN10 CX50 CX75
		CN2500* CN2500*	T3000Z*	PV7020* TN60 TN620 TN90 PV90*	IC30N IC530N	CT525 GC1525*	TP1020								C30 N40	CX90 CX99
	M	CN1500* CN2500*	T110A													
K	CN1500* CN2500*	T110A								NX2525			CT3000	T15	LN10 CX75	

\* : New grade \* : PVD coated cermet

# The Comparison of Milling Grades

## ► CVD Coated

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET
Milling	P	NC5330	ACP100		IC5100 IC5400	GC4210							TT8515		
		NC5340★				GC4220	MP1500 MS2500 MP2500 MS2500 T350M MM4500	KCPM20		FH7020 F7030		WKP25S	TT7800		
		NCM325				GC4230		KCMP30	T3130		SM245	WKP35S WKP35G			
Milling	M	NC5330													
		NC5340★					MP2500		T3130	F7030					
		NCM325	ACP400			GC2040	MM4500								
Milling	K	NC5330	ACK200		IC5100		MK1500	KC907M KCK15		T1115	MC5020		WAK15 WKK25 WKP25S	TT7515 TT6800	
		NC5340★				GC3330	MK2000 MS2500 T350M MK3000	KC914M KCPK30 KC917M KC924M	T1015			WKP35S WKP35G			
		NC5350★				GC3040									

## ► PVD Coated

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET		
Milling	P	PC2005★								ATH80D PCA08M ACS05E PCA12M PC20M							
		PC2010★				P20A											
		PC2015★															
		PC210F★															
		PC2505★					GC1010			AP20M GP20M			TT2510		DH102		
	Milling	M	PC3600	ACZ310	PR730	IC903 IC908 IC950	MP3000		GH330	MP6120	TB6045	VC935	WKP25			JC5003	
			PC3500	ACP200	PR830 PR630	IC903 IC950	F25M F30M	KC522M KUC20M		MP6120	TB6045			TT7070 TT7080 TT7030	QM3 ZM3	JC5015	
				ACZ330	PR630	IC1008	GC1025 GC1030		KC525M KUC30M	AH120	VP15TF UP20M	CY250 PTH30E					JC5030 JC5040
				PC5300	ACP300 ACZ350	PR660	IC928	GC1030	F40M T60M	KC935M KC7140 KC720	AH3135	VP30RT	JM4160 PTH40H		WKP45	TT8020	
				PC5400★		PR660	IC928	GC1030	F40M T60M	KC935M KC7140 KC720	AH3135	VP30RT	JM4160 PTH40H		WKP45	TT8020	
Milling	K			PR730	IC903		KC5510 KC7020	AH120		JX1020 CY9020 JX1015 TB6020 CY250					JC5003		
			PC5300	ACM100 ACP200	PR1025 PR630	IC900 IC250 IC928	GC1125 GC1025 GC2030 GC1030	F25M F30M	KC522M KC725M KC735M KC7030	MP7130	JX1045 TB6045	VC928 VC902 VC901		TT9030	QM3 ZM3	JC5015	
			PC9530	ACM300 ACP300 ACZ350	PR660 PR1535	IC928	GC1030	F30M	KC7030	AH140	JX1060 TB6060		WQM35 WSM35S WSP45 WSM45S	TT9080		JC5030 JC5040	
			PC5400★		PR660	IC328		F40M	KC722	AH3135	MP7140	JX1060 TB6060		TT8020			
			PC8110★		PR510 PR905	DT7150 IC900 IC910 IC950 IC350		MK2050	KC510M KC915M		VP10MF VP15TF	VC903 VC928		TT6290		JC5003	
Milling	S	PC6510		PR510 PR905	DT7150 IC900 IC910 IC950 IC350		MK2050	KC510M KC915M		VP10MF VP15TF	VC903 VC928		TT6290		JC5003		
		PC5300		PR510 PR905	DT7150 IC900 IC910 IC950 IC350		MK2050	KC510M KC915M	AH120	VP20RT	VC902 VC901		TT6030 TT6060		JC5015		
Milling	S	PC5300	AC520U	PR620 PR660 PR1535	IC328 IC408	GC1025 GC1040 S40T	F40M MS2050	KC510M KCU30M		VP15TF VP30RT MP9130	ACS05E	WSM35S WSM45S	TT9030 TT8020 TT8080				
		PC5400★		PR620 PR660 PR1535	IC328 IC408	GC1025 GC1040 S40T	F40M MS2050	KC510M KCU30M		VP15TF VP30RT MP9130	ACS05E	WSM35S WSM45S	TT9030 TT8020 TT8080				

## ► Cermet

ISO	KORLOY	SUMITOMO	KYOCERA	ISCAR	SANDVIK	SECO	KENAMETAL	TOSHIBA	mitsubishi	HITACHI	VALENITE	WALTER	TAEUCUTEC	NTK	DIJET
Milling	P	CN2000	T250A	TN100M					NX2525	CH550 CH570			CT3000	C50	
		CN30		TC60M	IC30N			KT195M	NS540 NS740	NX4545			CT7000		
							CT530								
Milling	M		T250A			CT530									
Milling	K								NX2525						

★ : New grade ★ : PVD coated cermet

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