

Milling Insert

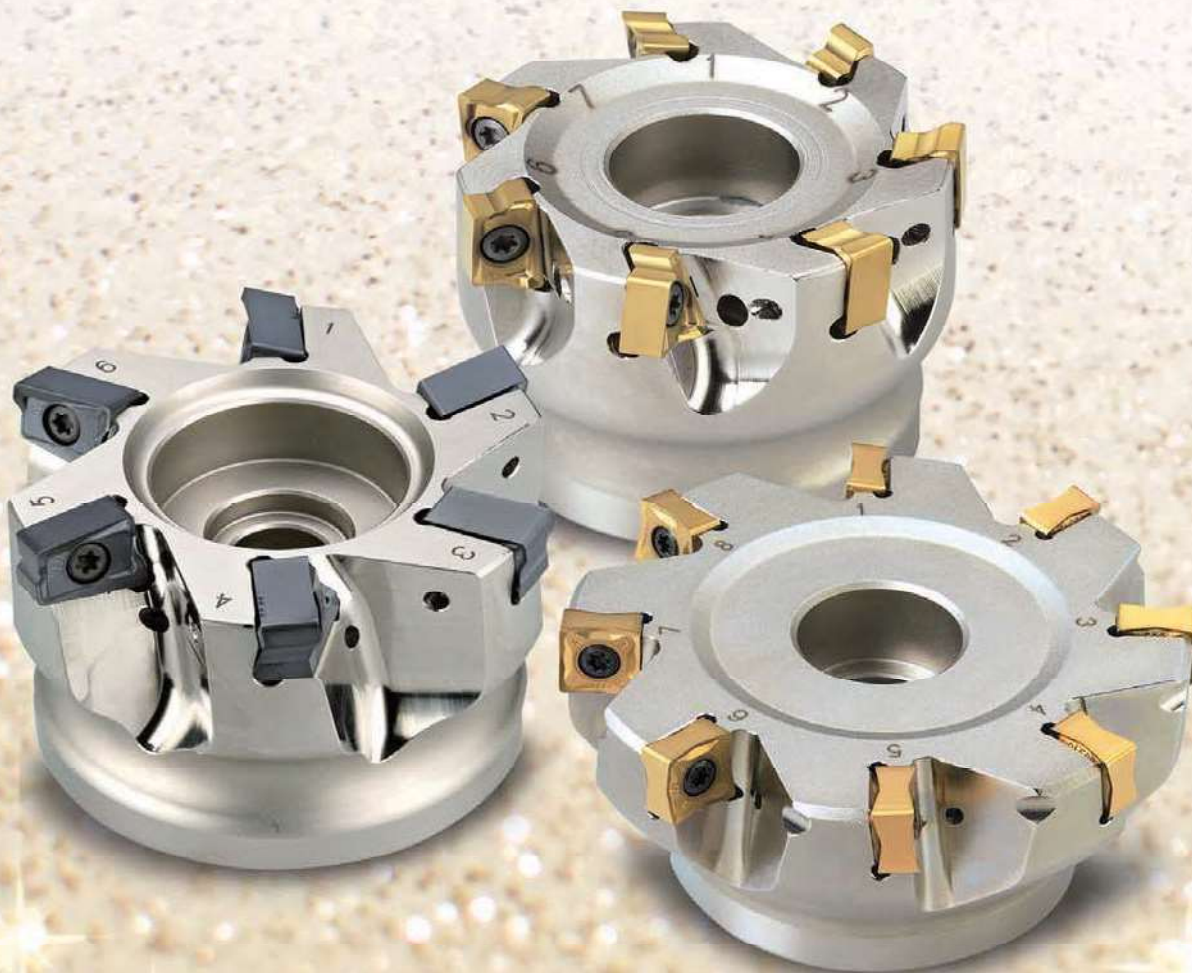
- E02** Milling Insert Code System (ISO)
- E04** Milling Inserts
- E32** KORLOY Cutters
- E38** KORLOY Shanks
- E42** KORLOY Modular Adaptors

Face Milling Cutters

- E44** Mill-max/Mill-max Plus (E45, E51)
- E54** Technical Information for Mill-max Heavy
- E55** Mill-max Heavy
- E56** Turbo Mill
- E59** Double Mill
- E61** Technical Information for Power Buster
- E65** Power Buster
- E68** Technical Information for Rich Mill
- E89** Rich Mill
- E132** Technical Information for Aero Mill/
Aero Mill-Plus/Aero Mill-Mini
- E136** Aero Mill
- E137** Aero Mill-Plus
- E139** Aero Mill-Mini
- E141** PCD Face Cutter

Cutters for Molds

- E142** Technical Information for Alpha Mill-X
- E145** Alpha Mill-X
- E147** Technical Information for Alpha Mill/Alpha Mill Nick
- E154** Alpha Mill
- E183** Technical Information for BT/HSK Tooling System
- E184** BT Tooling System (Single-edge)
- E189** HSK Tooling System (Single-edge)
- E194** BT Tooling System (Multi-edge)
- E200** HSK Tooling System (Multi-edge)
- E205** BT Tooling System (Modular)
- E206** HSK Tooling System (Modular)
- E207** Technical Information for Future Mill/FMR P-Positive
- E222** Future Mill
- E248** FMR P-Positive
- E260** Technical Information for HFMD
- E264** HFMD
- E268** Technical Information for HFM
- E273** HFM
- E276** Technical Information for HRMDouble
- E281** HRMDouble
- E292** HRM
- E299** Tank Mill
- E300** Technical Information for TP2P
- E303** TP2P



Cutters for Molds

- E309** Technical Information for Laser Mill/GBE/BRE
- E318** Laser Mill
- E323** BFE
- E324** GBE
- E327** BRE
- E329** Technical Information for HAVE
- E331** HAVE (Single-edge/Multi-edge)
- E333** O-ring Cutter
- E335** Chamfer Tool (Multi-functional, Solid)
- E343** T-Cutter (TFE)

Milling Cutters for Aluminum

- E344** Technical Information for Pro-A Mill/Pro-X Mill/Pro-L Mill/Pro-XL Mill/Pro-V Mill
- E354** Pro-A Mill
- E357** Pro-X Mill
- E363** Pro-L Mill
- E367** Pro-XL Mill
- E368** Pro-V Mill
- E371** Modular Adaptor (MAT)

Side Milling Cutters

- E373** Technical Information for Side Milling Cutters
- E375** Side Milling Cutter
- E379** Side Cutter
- E382** Wind Mill

Milling Cutter for Cast iron at high feed

- E386** Technical Information for High feed Cutter
- E388** Technical Information for Cube Mill
- E389** Technical Information for Couple Mill
- E391** Technical Information for Storm Mill
- E392** Technical Information for Shave Mill
- E394** Technical Information for Shave Mill-Ultra
- E395** High feed Cutter
- E397** Shave Mill
- E398** Shave Mill-Ultra

Detail Information of Milling Cutter and Arbor

- E400** Actual Designations of Milling Cutter and Arbor

Gear Tools

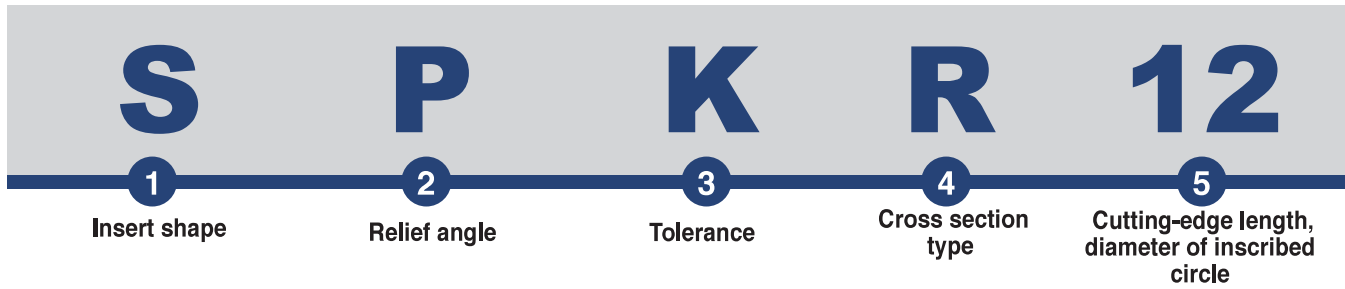
- E403** Technical Information for Gear Cutter Tools
- E404** Gear Cutter Table
- E405** Gear Cutter
- E413** Gear Cutter Order Form
- E414** Indexable HOB
- E415** Indexable HOB Order Form
- E416** Special Boring Tool Order Form

MILLING

Milling tools that provide the best quality and improve productivity for every customer needs.



E Milling Insert Code System (ISO)



1 Insert shape

S P K R 12 03 ^{ED}08 S R - MX

2 Relief angle

S P K R 12 03 ^{ED}08 S R - MX

3 Tolerance

S P K R 12 03 ^{ED}08 S R - MX

d: Inscribed circle
t: Thickness
m: Refer to figure

■ Tolerance on C, E, H, M, O, P, R, S, T, W Insert Shape (exceptional case)

Class	d	m	t	Tolerance on d		Tolerance on m	
				J, K, L, M, N	U	M, N	U
A	±0.025	±0.005	±0.025	6.35	±0.05 ±0.08	±0.08	±0.13
C	±0.025	±0.013	±0.025	9.525	±0.05 ±0.08	±0.08	±0.13
H	±0.013	±0.013	±0.025	12.7	±0.08 ±0.13	±0.13	±0.20
E	±0.025	±0.025	±0.025	15.875	±0.10 ±0.18	±0.15	±0.27
G	±0.025	±0.025	±0.13	19.05	±0.10 ±0.18	±0.15	±0.27
J	±0.05~±0.15	±0.005	±0.025	25.4	±0.13 ±0.25	±0.18	±0.38
K	±0.05~±0.15	±0.013	±0.025	Tolerance on D Insert Shape (exceptional case)			
L	±0.05~±0.15	±0.025	±0.025	d	Tolerance on d	Tolerance on m	
M	±0.05~±0.15	±0.08~±0.20	±0.13	6.35	±0.05	±0.11	
U	±0.08~±0.25	±0.13~±0.38	±0.13	9.525	±0.05	±0.11	
				12.7	±0.08	±0.15	
				15.875	±0.10	±0.18	
				19.05	±0.10	±0.18	

4 Cross section type

S P K R 12 03 ^{ED}08 S R - MX

Special type

5 Cutting-edge length, diameter of inscribed circle

S P K R 12 03 ^{ED}08 S R - MX

■ Metric system * Decimal integer constant

■ Inch system

· Use 1/32" unit for a insert having smaller I.C under 1/4"
· Use 1/8" unit for a insert having larger I.C over 1/4"

* In case of rectangular and rhombic insert indicate cutting-edge length instead of inscribed circle.

■ Cross over chart for "Metric" and "Inch" system

	06	09	11	16	22	27	33	44
	03	05	06	09	12	15	19	25
	04	06	07	11	15	19	23	31
	03	05	06	09	12	16	19	25
Inscribed circle	5/32"	7/32"	1/4"	3/8"	1/2"	5/8"	3/4"	1"
Inch system	5	7	2 (8)	3	4	5	6	8



03

**ED
08**

S

R - MX

6

Height of cutting-edge

7

Nose radius (Nose R)

8

Edge preparation

9

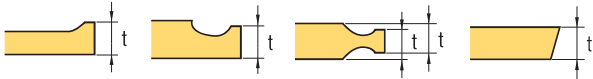
Hand

10

Chip breaker for milling

6 Height of cutting-edge

S P K R 12 03 **ED 08** S R - MX

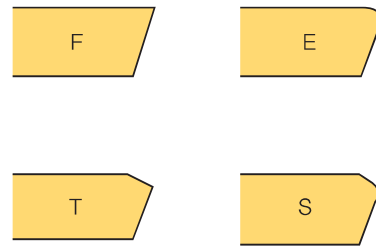


Symbol		Height of cutting-edge (t)	
Metric	Inch	mm	Inch
01	1 (2)	1.59	1/16
T0	1.125	1.79	9/128
T1	1.2	1.98	5/64
02	1.5 (3)	2.38	3/32
T2	1.75	2.78	7/64
03	2	3.18	1/8
T3	2.5	3.97	5/32
04	3	4.76	3/16
05	3.5	5.56	7/32
06	4	6.35	1/4
07	5	7.94	5/16
09	6	9.52	3/8
11	7	11.11	7/16
12	8 (16)	12.70	1/2

() Symbol for small size insert

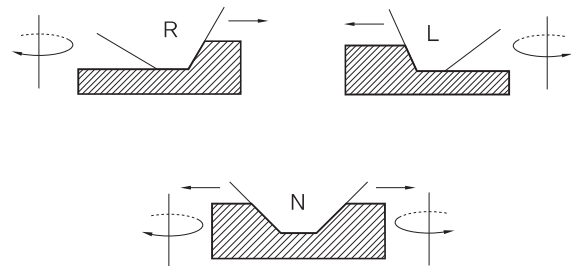
8 Edge preparation

S P K R 12 03 **ED 08** S R - MX



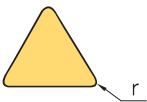
9 Hand

S P K R 12 03 **ED 08** S R - MX

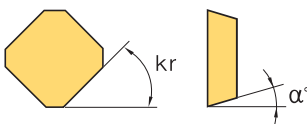


7 Nose radius (Nose R)

S P K R 12 03 **ED 08** S R - MX



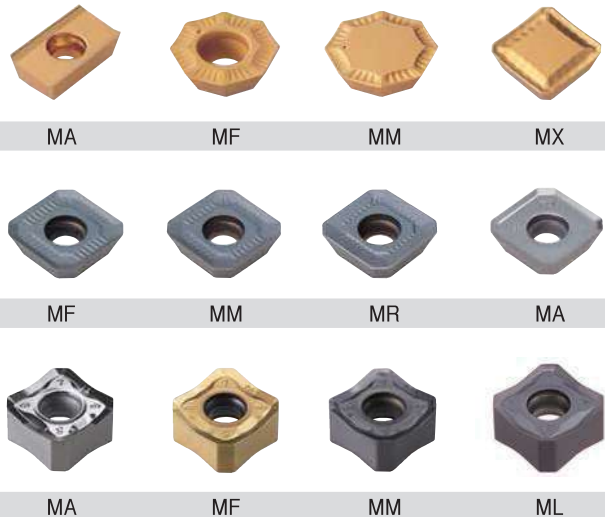
r		Symbol		r		Symbol	
mm	Inch	mm	Inch	mm	Inch	mm	Inch
00	0	0.0		12	3	1.2	3/64
02		0.2		15		1.5	
04	1	0.4	1/64	16	4	1.6	4/64
05		0.5		24	6	2.4	6/64
08	2	0.8	2/64	32	8	3.2	8/64
10		1.0		40		4.0	



Parallel land	Relief angle
kr	α°
A - 45°	A - 3° F - 25°
D - 60°	B - 5° G - 30°
E - 75°	C - 7° N - 0°
F - 85°	D - 15° P - 11°
P - 90°	E - 20°
Z - Special	

10 Chip breaker for milling

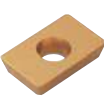
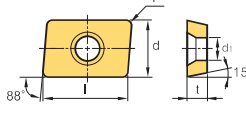

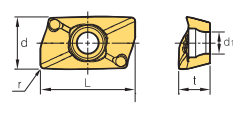

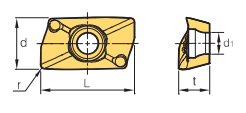

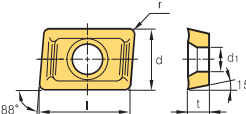

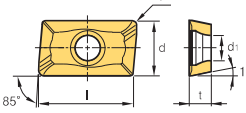

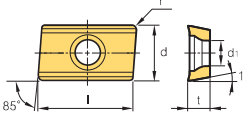

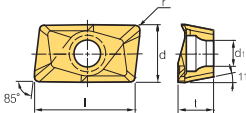

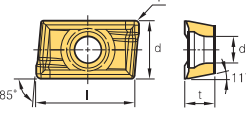

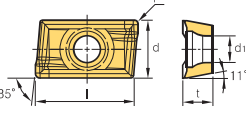

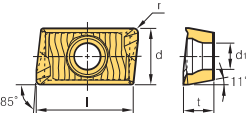
S P K R 12 03 **ED 08** S R - MX



E Milling Inserts

Workpiece	Steel	P											Machining types				
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Non-ferrous metal	N															
	Heat resistant alloy, Titanium alloy	S															
Hardened steel	H																

● Continuous cutting
 ● General cutting
 * Interrupted cutting


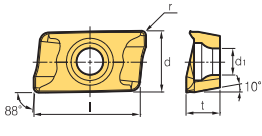
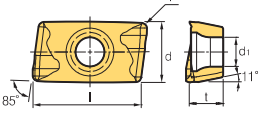
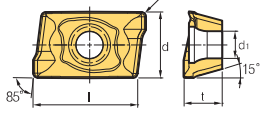

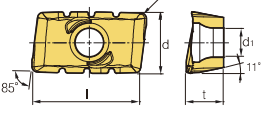

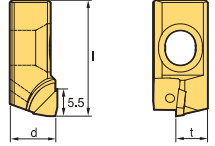

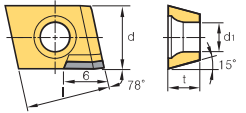
Inserts	Designation	Cermet		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools		
		CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	H01	H05	l	d			t	r
	150308R																	15.0	9.525	3.18	0.8	4.5		-
	150308SR																	15.0	9.525	3.18	0.8	4.5		
	150308TR	●																15.0	9.525	3.18	0.8	4.5		
	170608PESR-ML					●					●	●	●	●				19.650	10.843	6.529	0.8	4.5		E145~ E146
	170604PESR-MM																	19.650	10.843	6.529	0.4	4.5		E145~ E146
	170608PESR-MM					●				●	●	●	●					19.650	10.843	6.529	0.8	4.5		
	170616PESR-MM																	19.650	10.843	6.529	1.6	4.5		
	170620PESR-MM																	19.650	10.843	6.529	2.0	4.5		
	150308R			●												●		15.0	9.525	3.18	0.8	4.5		E299
	150308SR															●		15.0	9.525	3.18	0.8	4.5		
	150308TR																	15.0	9.525	3.18	0.8	4.5		
	1604PDSR			●							●	●						16.4	9.525	4.76	0.8	4.4		E158 E170
	1604PDFR-MA															●	●	16.4	9.525	4.76	0.2	4.4		E158 E170
	160416FR-MA															●		16.4	9.525	4.76	1.6	4.4		
	1604PDFR-MA2															●		16.5	9.56	5.76	0.8	4.5		E158 E170
	160416FR-MA2																	16.5	9.56	5.76	1.6	4.5		
	160432FR-MA2																	16.5	9.56	5.76	3.2	4.5		
	1604PDFR-MA3															●	●	16.4	9.525	5.0	0.8	4.4		E158 E170
	160420FR-MA3																	16.0	9.525	5.0	2.0	4.4		
	1604PDSR-MF			●													●	16.4	9.525	5.0	0.8	4.4		E158 E170 E179
	1604PDSR-MM			●	●						●	●	●	●				16.4	9.525	5.2	0.8	4.4		E158 E170 E179

● : Stock item



E Milling Inserts

Workpiece	Steel	P											Machining types				
	Stainless steel	M		●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	K		●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Non-ferrous metal	N																
Heat resistant alloy, Titanium alloy	S																
Hardened steel	H																


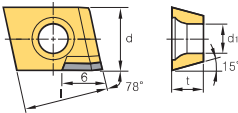

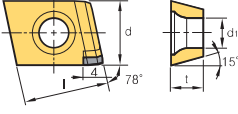

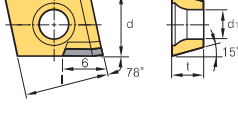

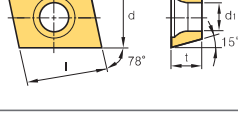

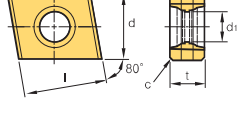

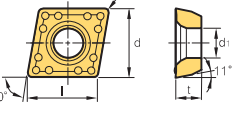

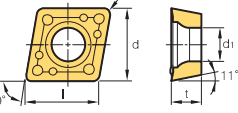

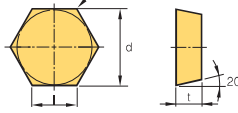

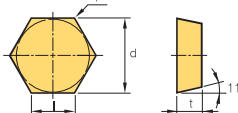

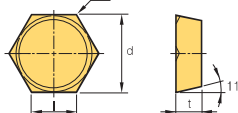
Inserts	Designation	Cermet		Coated										PCD		Dimensions (mm)					Geometries	Available tools				
		CN2000	CN30	NCM325	NC5330	NCM535	PC2505	PC2510	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	DP150	DP200	l	d			t	r	d ₁	
APMT-MM 	11T3PDSR-MM			●	●	●	●	●	●	●	●	●	●	●	●	●			11.2	6.467	3.6	0.5	2.85		E154~ E182 E184~ E204	
	11T308PDSR-MM			●					●	●	●	●	●	●	●	●			11.2	6.467	3.6	0.8	2.85			
	11T312PDSR-MM			●					●	●	●	●	●	●	●	●			11.2	6.467	3.6	1.2	2.85			
	11T316R-MM			●					●	●	●	●	●	●	●	●			11.0	6.467	3.6	1.6	2.85			
	11T318R-MM			●					●	●	●	●	●	●	●	●			11.0	6.467	3.6	1.8	2.85			
	11T324R-MM			●					●	●	●	●	●	●	●	●			11.0	6.467	3.6	2.4	2.85			
	1604PDSR-MM			●	●	●	●	●	●	●	●	●	●	●	●	●	●			16.4	9.41	5.76	0.8	4.5		
	160410PDSR-MM			●					●	●	●	●	●	●	●	●			16.4	9.41	5.76	1.0	4.5			
	160416PDSR-MM			●					●	●	●	●	●	●	●	●			16.4	9.41	5.76	1.6	4.5			
	160424R-MM			●					●	●	●	●	●	●	●	●			16	9.41	5.76	2.4	4.5			
	160430R-MM			●					●	●	●	●	●	●	●	●			16	9.41	5.76	3.0	4.5			
	160432R-MM			●					●	●	●	●	●	●	●	●			16	9.41	5.76	3.2	4.5			
	160450R-MM *			●					●	●	●	●	●	●	●	●			16	9.41	5.76	5.0	4.5			
	160464R-MM *			●					●	●	●	●	●	●	●	●			16	9.41	5.76	6.4	4.5			
	1806PDSR-MM			●	●	●	●	●	●	●	●	●	●	●	●	●	●			17.4	10.98	6.35	0.8	4.5		
	180612PDSR-MM			●					●	●	●	●	●	●	●	●			17.4	10.98	6.35	1.2	4.5			
	180616PDSR-MM			●					●	●	●	●	●	●	●	●			17.4	10.98	6.35	1.6	4.5			
	180620PDSR-MM			●					●	●	●	●	●	●	●	●			17.4	10.98	6.35	2.0	4.5			
180624PDSR-MM			●					●	●	●	●	●	●	●	●			17.4	10.98	6.35	2.4	4.5				
180630R-MM			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	3.0	4.5				
180632R-MM			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	3.2	4.5				
180640R-MM *			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	4.0	4.5				
180648R-MM *			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	4.8	4.5				
180650R-MM *			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	5.0	4.5				
180660R-MM *			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	6.0	4.5				
180664R-MM *			●					●	●	●	●	●	●	●	●			16.7	10.98	6.35	6.4	4.5				
APMT-MN 	11T3PDSR-MN2			●												●		11.2	6.467	3.6	0.5	2.85		E156~ E182 E186~ E204		
	11T3PDSR-MN3			●												●		11.2	6.467	3.6	0.5	2.85				
	1604PDSR-MN3			●												●		16.4	9.41	5.76	0.8	4.5				
	1604PDSR-MN4			●												●		16.4	9.41	5.76	0.8	4.5				
	1806PDSR-MN3			●												●		17.4	10.98	6.35	0.8	4.5				
	1806PDSR-MN4			●												●		17.4	10.98	6.35	0.8	4.5				
BAMPR-XAF 	BAMPR-XAF															●		25.5	10.5	7	-	-		E137~ E138		
	BAMPR-XAW															●		25.5	10	7	-	-				
	BAMPR-XAWR																●		25.5	10	7	-			-	
CDEW-NAF 	1204R-NAF															●		12.7	9.525	4.76	-	4.4		E136		
	1204L-NAF															●		12.7	9.525	4.76	-	4.4				

Inserts marked with an asterisk (*) require a custom-made order for special holders.

● : Stock item



Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types				
	Stainless steel	M																						● Continuous cutting	● General cutting	✳ Interrupted cutting	
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
Non-ferrous metal	N																										
Heat resistant alloy, Titanium alloy	S																										
Hardened steel	H																										

Inserts	Designation	Cermets		Coated								Uncoated	PCD		Dimensions (mm)					Geometries	Available tools			
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	H01	DP150	DP200	l			d	t	r
CDEW-NAW  Strengthened Edge Wiper Insert	1204R-NAW																●	12.7	9.525	4.76	-	4.4		E136
	1204L-NAW																	12.7	9.525	4.76	-	4.4		
CDEW-XAW  Sharp Edge Wiper Insert	1204R-XAW																●	12.7	9.525	4.76	-	4.4		E136
	1204L-XAW																	12.7	9.525	4.76	-	4.4		
CDEW-XAF  Sharp Edge	1204R-XAF																●	12.7	9.525	4.76	-	4.4		E136
	1204L-XAF																	12.7	9.525	4.76	-	4.4		
CDEW-XCF  Sharp Edge	1204R-XCF																●	12.7	9.525	4.76	-	4.4		E136
	1204L-XCF																	12.7	9.525	4.76	-	4.4		
CNHQ 	1005-C0.5																	10	10	5.4	-	4.7		E375
	1305-C0.5																	12.7	10	5.4	-	4.7		E376
	1606-C0.5																		16	12	6.4	-		5.9
CPMH 	120408-MM									●								12.9	12.7	4.76	0.8	5.5		E343
CPMT 	060204-MM									●								6.4	6.35	2.38	0.4	2.75		E343
	080308-MM									●								8.1	7.938	3.40	0.8	3.18		
	09T308-MM										●								9.7	9.525	3.97	0.8		
HECN 	090408FN																	9.0	15.875	4.76	0.8	-		E387
	090408SN																	9.0	15.875	4.76	0.8	-		
	090408TN																	9.0	15.875	4.76	0.8	-		
	110412FN																	11.0	19.05	4.76	1.2	-		
	110412TN																	11.0	19.05	4.76	1.2	-		
HPEN 	090408FN																	9.0	15.875	4.76	0.8	-		E387
	090408SN																	9.0	15.875	4.76	0.8	-		
	090408EN																	9.0	15.875	4.76	0.8	-		
	110412FN																	11.0	19.05	4.76	1.2	-		
HPEN-WC 	090408-WC																	9.0	15.875	4.76	0.8	-		E387
	110412-WC																	11.0	19.05	4.76	1.2	-		


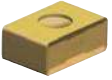
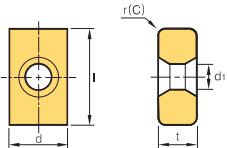


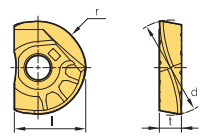

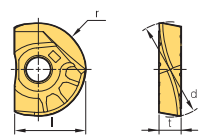

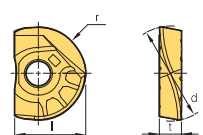
● : Stock item

E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Stainless steel	M																				
Cast iron	K		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	N																					
Heat resistant alloy, Titanium alloy	S																					
Hardened steel	H																					

Machining types


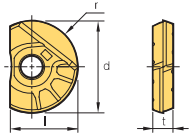

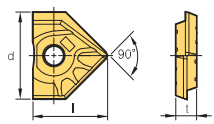

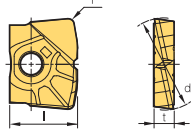

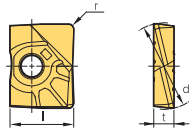
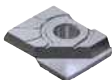
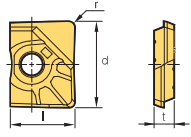
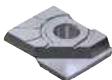
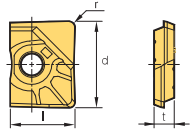
- Continuous cutting
- General cutting
- Interrupted cutting

Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools		
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2010	PC2015	PC210F	PC3700	PC6510	PC9530	PC9540	PC5400	ST30A	H01	l	d	t			r	d ₁
KEL-MF 	150608-MF																	15.88	15.23	6.35	0.8	-		E408
	150608-ML																	15.88	15.23	6.35	0.8	-		
KEL-QNN 	1506QNN-MF																	15.88	15.23	6.35	0.8	-		E391
	1506QNN-ML																	15.88	15.23	6.35	0.8	-		
KEL-ANN 	1506ANN-MF																	15.88	15.23	6.35	0.8	-		E391
	1506ANN-ML																	15.88	15.23	6.35	0.8	-		
LBH 	080																	7.0	8	2.4	4.0	-		E319~ E322
	100																	8.5	10	2.6	5.0	-		
	120																	10.0	12	3.0	6.0	-		
	160																	12.0	16	4.0	8.0	-		
	200																	15.0	20	5.0	10.0	-		
	250																	18.5	25	6.0	12.5	-		
	300																	22.5	30	7.0	15.0	-		
	320																	23.5	32	7.0	16.0	-		
330																	24.0	33	7.0	16.5	-			
LBH-KF 	080-KF																	7.0	8	2.4	4.0	-		E318 E319
	100-KF																	8.5	10	2.6	5.0	-		
	120-KF																	10.0	12	3.0	6.0	-		
	130-KF																	20.5	13	3.0	6.5	-		
	160-KF																	12.0	16	4.0	8.0	-		
	170-KF																	12.5	17	4.0	8.5	-		
	200-KF																	15.0	20	5.0	10.0	-		
	210-KF																	15.5	21	5.0	10.5	-		
	250-KF																	18.5	25	6.0	12.5	-		
	300-KF																	22.5	30	7.0	15.0	-		
	320-KF																	23.5	32	7.0	16.0	-		
	330-KF																	24.0	33	7.0	16.5	-		
LBH-KH 	080-KH																	7.0	8	2.4	4.0	-		E318 E319
	100-KH																	8.5	10	2.6	5.0	-		
	120-KH																	10.0	12	3.0	6.0	-		
	130-KH																	20.5	13	3.0	6.5	-		
	160-KH																	12.0	16	4.0	8.0	-		
	170-KH																	12.5	17	4.0	8.5	-		
	200-KH																	15.0	20	5.0	10.0	-		
	210-KH																	15.5	21	5.0	10.5	-		
	250-KH																	18.5	25	6.0	12.5	-		
	260-KH																	19.0	26	6.0	13.0	-		
	300-KH																	22.5	30	7.0	15.0	-		
	320-KH																	23.5	32	7.0	16.0	-		
330-KH																	24.0	33	7.0	16.5	-			

● : Stock item



Workpiece	Steel	P											Machining types	
	Stainless steel	M											● Continuous cutting	⊕ General cutting
Cast iron	K											⊕ General cutting	⊕ Interrupted cutting	
Non-ferrous metal	N											● Continuous cutting	⊕ General cutting	
Heat resistant alloy, Titanium alloy	S											● Continuous cutting	⊕ General cutting	
Hardened steel	H											● Continuous cutting	⊕ General cutting	

Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools					
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2010	PC210F	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r	d _t		
LBS 	080																	18.5	25	6.0	12.5	-		E319~ E322			
	090																	19.0	26	6.0	13.0	-					
	100																	22.5	30	7.0	15.0	-					
	110																	23.0	31	7.0	15.5	-					
	120																	23.5	32	7.0	16.0	-					
	130																	7.0	8	2.4	4.0	-					
	160																	7.5	9	2.4	4.5	-					
	170																	8.5	10	2.6	5.0	-					
	200																	9.0	11	2.6	5.5	-					
	210																	10.0	12	3.0	6.0	-					
	250																	10.5	13	3.0	6.5	-					
	260																	12.0	16	4.0	8.0	-					
	300																	12.5	17	4.0	8.5	-					
	310																	15.0	20	5.0	10.0	-					
320																	15.5	21	5.0	10.5	-						
LCF 	160-D90																	13.7	16	4.0	-	-		E319~ E322			
	200-D90																	17.0	20	5.0	-	-					
	250-D90																	21.5	25	6.0	-	-					
LFH 	100																	8.5	10	2.6	1.0	-		E319~ E322			
	120																	10.0	12	3.0	1.0	-					
	160																	12.0	16	4.0	1.5	-					
	200																	15.0	20	5.0	1.5	-					
	250																	18.5	25	6.0	2.0	-					
	300																	22.5	30	7.0	2.0	-					
	320																	23.5	32	7.0	2.0	-					
LRH 	100-R05																	8.5	10	2.6	0.5	-		E319~ E322			
	100-R10																	8.5	10	2.6	1.0	-					
	100-R20																	8.5	10	2.6	2.0	-					
	110-R05																	9.0	11	2.6	0.5	-					
	120-R05																	10.0	12	3.0	0.5	-					
	120-R10																	10.0	12	3.0	1.0	-					
	120-R20																	10.0	12	3.0	2.0	-					
	130-R05																	10.5	13	3.0	0.5	-					
	130-R10																	10.5	13	3.0	1.0	-					
	160-R05																	12.0	16	4.0	0.5	-					
	160-R10																	12.0	16	4.0	1.0	-					
	160-R20																	12.0	16	4.0	2.0	-					
	160-R30																	12.0	16	4.0	3.0	-					
	170-R05																	12.5	17	4.0	0.5	-					
	170-R10																	12.5	17	4.0	1.0	-					
	200-R05																	15.0	20	5.0	0.5	-					
	200-R10																	15.0	20	5.0	1.0	-					
	200-R20																	15.0	20	5.0	2.0	-					
	200-R30																	15.0	20	5.0	3.0	-					
	LR  (Special type)	210-R05																	15.5	21	5.0	0.5			-		LR type
		210-R10																	15.5	21	5.0	1.0			-		
250-R05																		18.5	25	6.0	0.5	-					
250-R10																		18.5	25	6.0	1.0	-					
250-R20																		18.5	25	6.0	2.0	-					
250-R30																		18.5	25	6.0	3.0	-					
260-R05																		19.0	26	6.0	0.5	-					
260-R10																		19.0	26	6.0	1.0	-					
300-R10																		22.5	30	7.0	1.0	-					
300-R20																		22.5	30	7.0	2.0	-					
LR  (Special type)	300-R30																	22.5	30	7.0	3.0	-		LR type			
	310-R05																	23.0	31	7.0	0.5	-					
	320-R10																	23.5	32	7.0	1.0	-					
	320-R20																	23.5	32	7.0	2.0	-					

● : Stock item



E Milling Inserts

Workpiece	Machining types										
	●	●	●	●	●	●	●	●	●	●	●
Steel	P	●	●	●	●	●	●	●	●	●	●
Stainless steel	M					●	●		●	●	●
Cast iron	K		●	●	●	●	●			●	●
Non-ferrous metal	N							●			●
Heat resistant alloy, Titanium alloy	S					●				●	●
Hardened steel	H				●	●	●			●	●


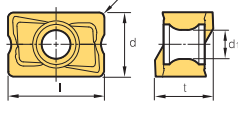

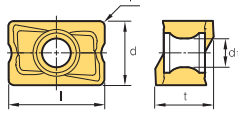

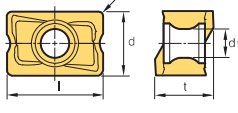

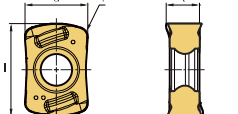

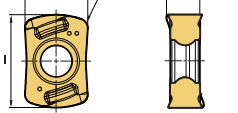

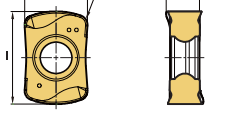

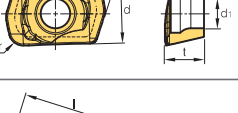
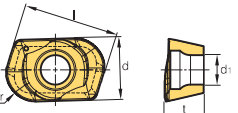
Inserts	Designation	Coated											Uncoated	Dimensions (mm)					Geometries	Available tools					
		Cermet												ST30A	H01	l	d	t			r	d ₁			
LRH 	320-R30												●					23.5	32	7.0	3.0	-	<p>LRH type</p>		
	330-R05																	24.0	33	7.0	0.5	-			
	330-R10																	24.0	33	7.0	1.0	-			
	330-R20																	24.0	33	7.0	2.0	-			
	330-R30																	24.0	33	7.0	3.0	-			
LR (Special type)																									
LDET <small>new</small> 	650540PPFR-MA																	65	15	5.625	4.0	5.56	<p>E367</p>		
	650550PPFR-MA																	65	15	5.625	5.0	5.56			
LNCS 	1907-C1.5-WC																	19.05	14.3	7	-	5.8	<p>E398 E399</p>		
LNCS 	1907-R3.0-WC																	19.05	14.3	7	-	5.8	<p>E398 E399</p>		
LNE 	324-R0.8																	15.9	9.525	6.35	0.8	4.4	<p>E405~ E409</p>		
	324-C1.0																	15.9	9.525	6.35	1.0	4.4			
LNKT-MA <small>new</small> 	080404PNR-MA																	8.0	4.2	6.6	0.4	2.8	<p>E303~ E308</p>		
	080408PNR-MA																	8.0	4.2	6.6	0.8	2.8			
	140608PNR-MA																	12.7	6.65	10.0	0.8	4.0			
	170704PNR-MA																	16.5	7.0	11.0	0.4	4.5			
	170708PNR-MA																	16.5	7.0	11.0	0.8	4.5			
	170712PNR-MA																	16.5	7.0	11.0	1.2	4.5			
	170716PNR-MA																	16.5	7.0	11.0	1.6	4.5			
	170720PNR-MA																	16.5	7.0	11.0	2.0	4.5			
LNKT-ML <small>new</small> 	080404PNR-ML																	8.0	4.2	6.6	0.4	2.8	<p>E303~ E308</p>		
	080408PNR-ML																	8.0	4.2	6.6	0.8	2.8			
	140608PNR-ML																	12.7	6.65	10.0	0.8	4.0			
	170704PNR-ML																	16.5	7.0	11.0	0.4	4.5			
	170708PNR-ML													●	●	●		16.5	7.0	11.0	0.8	4.5			
	170712PNR-ML																	16.5	7.0	11.0	1.2	4.5			
	170716PNR-ML																	16.5	7.0	11.0	1.6	4.5			
	170720PNR-ML																	16.5	7.0	11.0	2.0	4.5			
LNKT-MM <small>new</small> 	080404PNR-MM																	8.0	4.2	6.6	0.4	2.8	<p>E303~ E308</p>		
	080408PNR-MM																	8.0	4.2	6.6	0.8	2.8			
	140608PNR-MM																	12.7	6.65	10.0	0.8	4.0			
	170704PNR-MM																	16.5	7.0	11.0	0.4	4.5			
	170708PNR-MM																●	●	16.5	7.0	11.0	0.8			4.5
	170712PNR-MM																	16.5	7.0	11.0	1.2	4.5			
	170716PNR-MM																	16.5	7.0	11.0	1.6	4.5			
170720PNR-MM																	16.5	7.0	11.0	2.0	4.5				

● : Stock item



Workpiece	Steel	P												
	Stainless steel	M												
Cast iron	K													
Non-ferrous metal	N													
Heat resistant alloy, Titanium alloy	S													
Hardened steel	H													

Machining types	
●	Continuous cutting
●	General cutting
✱	Interrupted cutting

Inserts	Designation	Cermet		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools			
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2510	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r	d ₁
	100605PNR-MA																●	10.0	6.5	6.5	0.5	3.5		E95~96	
	151004PNR-MA																●	15.0	10.0	10.0	0.4	4.5		E99~100	
	151008PNR-MA																●	15.0	10.0	10.0	0.8	4.5		E103~ E107	
	LNMX 100605PNR-MF																	10.0	6.5	6.5	0.5	3.5		E95	
	100608PNR-MF																	10.0	6.5	6.5	0.8	3.5		E96	
	151004PNR-MF																	15.0	10.0	10.0	0.4	4.5		E99	
	151008PNR-MF			●														15.0	10.0	10.0	0.8	4.5		E100	
	151016PNR-MF																	15.0	10.0	10.0	1.6	4.5		E103~ E107	
	LNEX 100605PNR-MF																		10.0	6.5	6.5	0.5		3.5	E95
100608PNR-MF																		10.0	6.5	6.5	0.8	3.5	E96		
151004PNR-MF																		15.0	10.0	10.0	0.4	4.5	E99		
151008PNR-MF																		15.0	10.0	10.0	0.8	4.5	E100		
151016PNR-MF																		15.0	10.0	10.0	1.6	4.5	E103~ E107		
	LNMX 100605PNR-MM																	10.0	6.5	6.5	0.5	3.5		E95~	
	100608PNR-MM																	10.0	6.5	6.5	0.8	3.5		E109	
	100605PNL-MM																	10.0	6.5	6.5	0.5	3.5			
	151004PNR-MM																	15.0	10.0	10.0	0.4	4.5			
	151008PNR-MM			●														15.0	10.0	10.0	0.8	4.5			
	151016PNR-MM																	15.0	10.0	10.0	1.6	4.5			
	151008PNL-MM																	15.0	10.0	10.0	0.8	4.5			
	LNEX 100605PNR-MM																		10.0	6.5	6.5	0.5		3.5	E95~
	100608PNR-MM																		10.0	6.5	6.5	0.8		3.5	E109
	100605PNL-MM																		10.0	6.5	6.5	0.5		3.5	
151004PNR-MM																		15.0	10.0	10.0	0.4	4.5			
151008PNR-MM																		15.0	10.0	10.0	0.8	4.5			
151016PNR-MM																		15.0	10.0	10.0	1.6	4.5			
151008PNL-MM																		15.0	10.0	10.0	0.8	4.5			
	060310R-MF																	10.0	6.8	3.6	1	-		E264~ E267	
	060310R-ML																	10.0	6.8	3.6	1	-		E264~ E267	
	060310R-MM																	10.0	6.8	3.6	1	-		E264~ E267	
	040210R																	6.4	4.2	2.6	1.0	2.0		E273~ E275	
	040220R																		6.4	4.2	2.6	2.0	2.0		E273~ E275


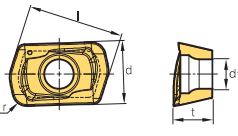

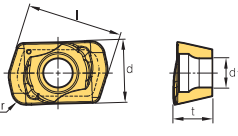

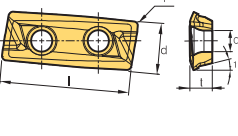

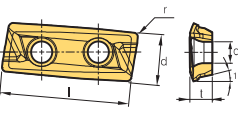
● : Stock item

E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Stainless steel	M										●	●	●	●	●	●	●	●
	Cast iron	K			●	●	●	●	●	●								●	●
	Non-ferrous metal	N																	●
	Heat resistant alloy, Titanium alloy	S																●	●
Hardened steel	H						●	●	●									●	

Machining types

- Continuous cutting
- General cutting
- Interrupted cutting


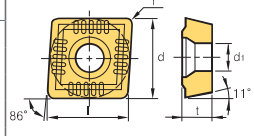

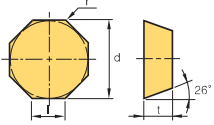

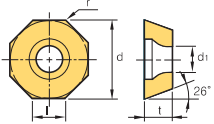

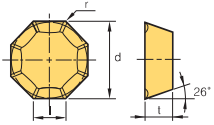

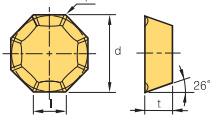

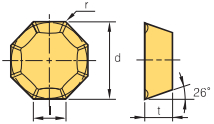

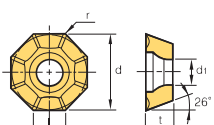

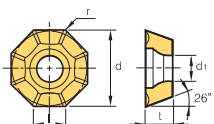
Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools		
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2510	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r
LPMT-MF 	LPMT_040210R-MF								●		●				●	●		6.4	4.2	2.6	1.0	2.0		E273~E275
	LPMT_040220R-MF								●		●				●	●		6.4	4.2	2.6	2.0	2.0		
LPMW 	LPMW_040210R								●	●					●			6.4	4.2	2.6	1.0	2.0		E273~E275
	LPMW_040220R								●	●					●			6.4	4.2	2.6	2.0	2.0		
LXET-MA 	250404PEFR-32-MA																	25	10.775	4.76	0.4	4.5		E363~E366
	2504PEFR-32-MA																●	25	10.775	4.76	0.8	4.5		
	250412PEFR-32-MA																	25	10.775	4.76	1.2	4.5		
	250416PEFR-32-MA																	25	10.775	4.76	1.6	4.5		
	250404PEFR-40-MA																	25	10.618	4.76	0.4	4.5		
	2504PEFR-40-MA																	25	10.618	4.76	0.8	4.5		
	250412PEFR-40-MA																	25	10.618	4.76	1.2	4.5		
	250416PEFR-40-MA																	25	10.618	4.76	1.6	4.5		
	340504PEFR-50-MA																●	34	13.765	5.56	0.4	5.56		
	3405PEFR-50-MA																●	34	13.765	5.56	0.8	5.56		
	340512PEFR-50-MA																	34	13.765	5.56	1.2	5.56		
	340516PEFR-50-MA																	34	13.765	5.56	1.6	5.56		
	340504PEFR-63-MA																	34	13.803	5.56	0.4	5.56		
	3405PEFR-63-MA															●	34	13.803	5.56	0.8	5.56			
	340512PEFR-63-MA																	34	13.803	5.56	1.2	5.56		
340516PEFR-63-MA																	34	13.803	5.56	1.6	5.56			
LXET-ML 	250404PEER-32-ML																	25	10.775	4.76	0.4	4.5		E363~E366
	2504PEER-32-ML																	25	10.775	4.76	0.8	4.5		
	250412PEER-32-ML																	25	10.775	4.76	1.2	4.5		
	250416PEER-32-ML																	25	10.775	4.76	1.6	4.5		
	250404PEER-40-ML																	25	10.618	4.76	0.4	4.5		
	2504PEER-40-ML																	25	10.618	4.76	0.8	4.5		
	250412PEER-40-ML																	25	10.618	4.76	1.2	4.5		
	250416PEER-40-ML																	25	10.618	4.76	1.6	4.5		
	340504PEER-50-ML																	34	13.765	5.56	0.4	5.56		
	3405PEER-50-ML															●	34	13.765	5.56	0.8	5.56			
	340512PEER-50-ML																	34	13.765	5.56	1.2	5.56		
	340516PEER-50-ML																	34	13.765	5.56	1.6	5.56		
	340504PEER-63-ML																	34	13.803	5.56	0.4	5.56		
	3405PEER-63-ML																	34	13.803	5.56	0.8	5.56		
	340512PEER-63-ML																	34	13.803	5.56	1.2	5.56		
340516PEER-63-ML																	34	13.803	5.56	1.6	5.56			

● : Stock item



Workpiece	Steel	P											Machining types				
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	K		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	N		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	S																
Hardened steel	H																


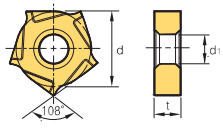
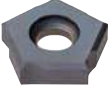
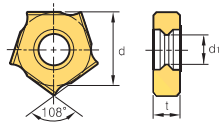

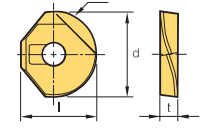

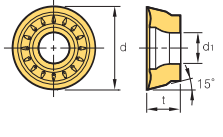

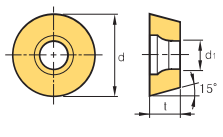

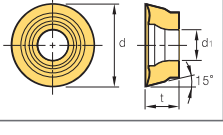
● Continuous cutting
 ● General cutting
 ● Interrupted cutting

Inserts	Designation	Cermet		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools		
		CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC2505	PC2010	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r
MPMT 	090308																	9.5	9.525	3.18	0.8	4.5		
	120408									●								12.7	12.7	4.76	0.8	5.5		
OFCN 	0704SN																	7.4	18	4.86	0.5	-		E60
	0704FN																	7.4	18	4.86	0.5	-		
	070408SN																	7.4	18	4.86	0.8	-		
	070408FN																	7.4	18	4.86	0.8	-		
	070408TN																	7.4	18	4.86	0.8	-		
OFCW 	05T3SN																	5.2	12.7	3.85	0.5	4.4		E59
	05T3FN																	5.2	12.7	3.85	0.5	4.4		
	05T308FN																	5.2	12.7	3.85	0.8	4.4		
OFKR-MA 	0704FN-MA															●		7.4	18	4.76	0.5	-		E60
	0704EN-MA																	7.4	18	4.76	0.5	-		
OFKR-MF 	0704SN-MF			●	●													7.4	18	4.76	0.5	-		E60
	070408SN-MF																	7.4	18	4.76	0.8	-		
OFKR-MM 	0704SN-MM			●	●						●	●	●		●			7.4	18	4.76	0.5	-		E60
	070408SN-MM			●														7.4	18	4.76	0.8	-		
OFKT-MA 	05T3FN-MA															●		5.2	12.7	3.97	0.5	4.4		E59 E60
	05T3EN-MA																	5.2	12.7	3.97	0.5	4.4		
	0704FN-MA															●		7.4	18	4.76	0.5	5.8		
	0704EN-MA																	7.4	18	4.76	0.5	5.8		
OFKT-MF 	05T3SN-MF															●		5.2	12.7	3.97	0.5	4.4		E59
	05T308SN-MF																	5.2	12.7	3.97	0.8	5.8		

● : Stock item

Workpiece	Steel	P												Machining types			
	Stainless steel	M															
Cast iron	K																
Non-ferrous metal	N																
Heat resistant alloy, Titanium alloy	S																
Hardened steel	H																


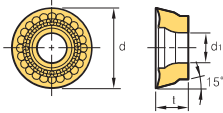

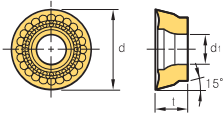

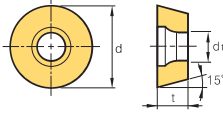

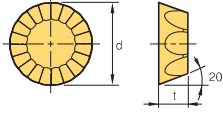

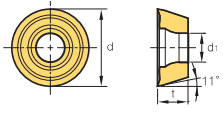

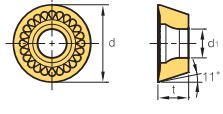

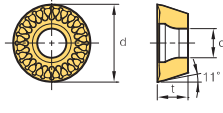

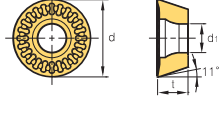

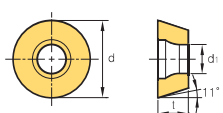
● Continuous cutting
 ● General cutting
 ✦ Interrupted cutting

Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)						Geometries	Available tools			
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2010	PC210F	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d	t			r	d ₁	Cutter width
PNEJ 	1223N										●							-	12.7	2.3	-	5.0	4.0		E379 E380	
	1225N										●							-	12.7	2.5	-	5.0	4.5			
	1230N																	-	12.7	3.0	-	5.0	5.0			
	1235N																	-	12.7	3.5	-	5.0	6.0			
	1240N																	-	12.7	4.0	-	5.0	7.0			
	1245N																	-	12.7	4.5	-	5.0	8.0			
	1250N																	-	12.7	5.0	-	5.0	9.0			
	1255N																	-	12.7	5.5	-	5.0	10.0			
	1260N																	-	12.7	6.0	-	5.0	11.0			
	1265N																	-	12.7	6.5	-	5.0	12.0			
	1270N																	-	12.7	7.0	-	5.0	13.0			
	1275N																	-	12.7	7.5	-	5.0	14.0			
	1285N																	-	12.7	8.5	-	5.0	16.0			
PNEJ-C 	1223N-C03																-	12.7	2.3	-	5.0	4.0		E379 E380		
	1230N-C03																-	12.7	3.0	-	5.0	5.0				
	1235N-C03																-	12.7	3.5	-	5.0	6.0				
	1240N-C05																-	12.7	4.0	-	5.0	7.0				
	1245N-C05																-	12.7	4.5	-	5.0	8.0				
	1250N-C05																-	12.7	5.0	-	5.0	9.0				
	1255N-C05																-	12.7	5.5	-	5.0	10.0				
	1260N-C05																-	12.7	6.0	-	5.0	11.0				
	1265N-C05																-	12.7	6.5	-	5.0	12.0				
1270N-C05																-	12.7	7.0	-	5.0	13.0					
1275N-C05																-	12.7	7.5	-	5.0	14.0					
RC 	16										●						15.8	16	3.5	8	-	-		E323		
	20										●						17.8	20	4	10	-	-				
	25										●						22.0	25	5	12.5	-	-				
	30										●						26.8	30	6	15	-	-				
	32										●						27.8	32	6	16	-	-				
RDCT-MA 	10T3M0-MA															●	-	10	3.97	-	3.85	-		E234 E235 E240 E241 E246		
	1204M0-MA															●	-	12	4.76	-	4.5	-				
RDHW 	0501M0F																-	5	1.59	-	2.3	-		E238 E239 E244 E245		
	0501M0E																●	-	5	1.59	-	2.3			-	
	0501M0S																	-	5	1.59	-	2.3			-	
	06T1M0F																	-	6	1.98	-	2.5			-	
	06T1M0E																	●	-	6	1.98	-			2.5	-
	06T1M0S																	-	6	1.98	-	2.5			-	
	0702M0F																	-	7	2.38	-	2.8			-	
	0702M0E																	●	-	7	2.38	-			2.8	-
	0702M0S																		-	7	2.38	-			2.8	-
	0803M0F																	-	8	3.18	-	3.4			-	
	0803M0E																	●	-	8	3.18	-			3.4	-
	0803M0S																		-	8	3.18	-			3.4	-
	1605M0F																	-	16	5.56	-	5.5			-	
	1605M0E																	●	-	16	5.56	-			5.5	-
	1605M0S																		-	16	5.56	-			5.5	-
2006M0F																	-	20	6.35	-	5.5	-				
2006M0E																	●	-	20	6.35	-	5.5	-			
2006M0S																		-	20	6.35	-	5.5	-			
RDKT-MF 	10T3M0-MF																●	-	10	3.97	-	3.85	-		E234 E235 E240 E241 E246	
	1204M0-MF																●	-	12	4.76	-	4.5	-			
	1605M0-MF																●	-	16	5.56	-	5.5	-			

● : Stock item

E Milling Inserts

Workpiece	Material	Machining types											
		●	●	●	●	●	●	●	●	●	●	●	●
Steel	P	●	●	●	●	●	●	●	●	●	●	●	●
Stainless steel	M		●									●	●
Cast iron	K		●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	N												●
Heat resistant alloy, Titanium alloy	S											●	●
Hardened steel	H					●	●					●	●


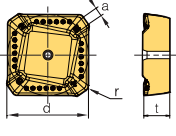

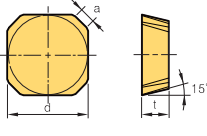

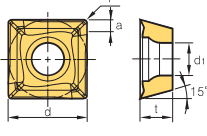

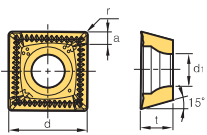

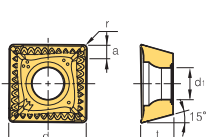

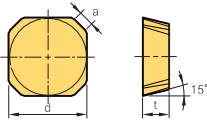
Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools		
		CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r
	1605M0-ML																	-	16	5.56	-	5.5		E236 E242 E246
	10T3M0-MM			●						●	●	●			●			-	10	3.97	-	3.85		E234~
	1204M0-MM			●						●	●	●			●			-	12	4.76	-	4.5		E237
	1605M0-MM									●	●	●			●			-	16	5.56	-	5.5		E239~
	2006M0-MM									●	●	●			●			-	20	6.35	-	5.5		E246
	0501M0E									●								-	5	1.59	-	2.3		E238
	06T1M0E									●								-	6	1.98	-	2.5		E239
	0702M0E									●								-	7	2.38	-	2.8		E244
	0803M0E									●								-	8	3.18	-	3.4		E245
	170400-MM																	-	17.8	4.76	-	-		E60
	10T3M0-MA															●		-	10	3.97	-	4.0		E248~
	1204M0-MA															●		-	12	4.76	-	4.5		E259
	1606M0-MA															●		-	16	6.35	-	5.5		
	2007M0-MA															●		-	20	7.00	-	7.0		
	0803M0E-MF									●					●	●		-	8	3.18	-	3.4		E248~
	10T3M0E-MF									●					●	●		-	10	3.97	-	4.0		E259
	1204M0E-MF									●					●	●		-	12	4.76	-	4.5		
	1606M0E-MF									●					●	●		-	16	6.35	-	5.5		
	2007M0E-MF									●					●	●		-	20	7.00	-	7.0		
	0803M0E-ML														●	●		-	8	3.18	-	3.4		E248~
	10T3M0E-ML														●	●		-	10	3.97	-	4.0		E259
	1204M0E-ML														●	●		-	12	4.76	-	4.5		
	1606M0E-ML														●	●		-	16	6.35	-	5.5		
	2007M0E-ML														●	●		-	20	7.00	-	7.0		
	0803M0S-MM									●	●	●			●	●		-	8	3.18	-	3.4		E248~
	10T3M0S-MM									●	●	●			●	●		-	10	3.97	-	4.0		E259
	1204M0S-MM									●	●	●			●	●		-	12	4.76	-	4.5		
	1606M0S-MM									●	●	●			●	●		-	16	6.35	-	5.5		
	2007M0S-MM									●	●	●			●	●		-	20	7.00	-	7.0		
	0803M0E1									●	●	●			●	●		-	8	3.18	-	3.4		E248~
	10T3M0E1									●	●	●			●	●		-	10	3.97	-	4.0		E259
	1204M0S1									●	●	●			●	●		-	12	4.76	-	4.5		
	1204M0S2									●	●	●			●	●		-	12	4.76	-	4.5		
	1606M0S1									●	●	●			●	●		-	16	6.35	-	5.5		
	2007M0S1									●	●	●			●	●		-	20	7.00	-	7.0		

● : Stock item



Workpiece	Steel	P											Machining types		
	Stainless steel	M													
Cast iron	K														
Non-ferrous metal	N														
Heat resistant alloy, Titanium alloy	S														
Hardened steel	H														

● Continuous cutting
 ● General cutting
 ✦ Interrupted cutting

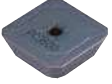
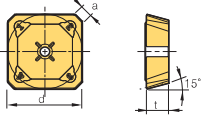
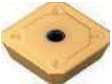
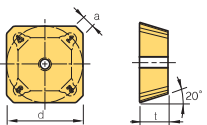
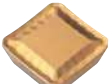
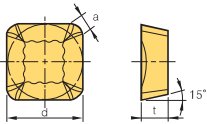
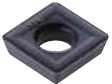
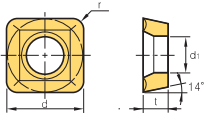

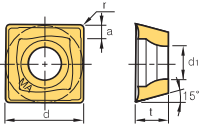

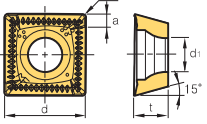

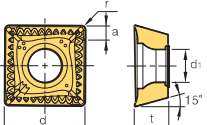

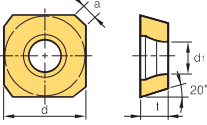
Inserts	Designation	Cermets		Coated							Uncoated				Dimensions (mm)						Geometries	Available tools			
		CN2000	CN30	NCM325	NCM335	NCM535	NCM545	PC3700	PC6510	PC9530	PC9540	PC5300	PD2000	PD1010	ST30A	G10	H01	H05	l	d			t	r	d ₁
SCKN 	220715DDSR-MM			●				●										-	22.0	7.0	1.5	-	2.5		E55
	280920DDSR-MM																	-	28.0	9.0	2.0	-	3.0		
SDCN 	42M													●				-	12.7	3.18	-	-	1.5	 <ul style="list-style-type: none"> ● Cutting-edge geometry <ul style="list-style-type: none"> - G: Light Side, Sharpe Edge - S20: STS - RH: Strengthened edge ● Sub-cutting-edge geometry <ul style="list-style-type: none"> - M: AEFN - MT: AETN 	E44
	42M-G													●				-	12.7	3.18	-	-	1.5		E45
	42MT	●	●											●				-	12.7	3.18	-	-	1.5		E56
	42MT-RH																	-	12.7	3.18	-	-	1.5		E57
	42MT-S20																	-	12.7	3.18	-	-	1.5		
	53M														●			-	15.875	4.76	-	-	1.5		
	53M-G														●			-	15.875	4.76	-	-	1.5		
	53MT	●	●											●				-	15.875	4.76	-	-	1.5		
	53MT-RH																	-	15.875	4.76	-	-	1.5		
	53MT-S20																	-	15.875	4.76	-	-	1.5		
	1203AEEN																	-	12.7	3.18	-	-	1.5		
	1203AEEN-RH																	-	12.7	3.18	-	-	1.43		
	1203AESN																	-	12.7	3.18	-	-	1.5		
	1203AESN-RH																	-	12.7	3.18	-	-	1.43		
1504AEEN																	-	15.875	4.76	-	-	1.5			
1504AEEN-RH																	-	15.875	4.76	-	-	1.43			
1504AESN																	-	15.875	4.76	-	-	1.5			
1504AESN-RH																	-	15.875	4.76	-	-	1.43			
SDET-MA 	09M402R-MA													●			-	9.525	3.923	0.2	4.0	1.2		E228~	
	09M404R-MA																-	9.525	3.923	0.4	4.0	1.2		E233	
	09M405R-MA																-	9.525	3.923	0.5	4.0	1.2			
	130504R-MA														●			-	13.5	5.56	0.4	5.56		2.2	
SDET-MF 	09M405R-MF																-	9.525	4	0.5	4	1.2		E228~	
	130508R-MF																-	13.5	5.56	0.8	5.56	2.2		E233	
SDET-MM 	09M405R-MM																-	9.525	4	0.5	4	1.2		E228~	
	130508R-MM																-	13.5	5.56	0.8	5.56	2.2		E233	
SDKN-CM 	42MT-CM	●															-	12.7	3.18	-	-	1.5		-	

● : Stock item



E Milling Inserts


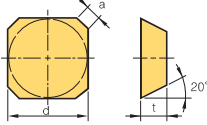

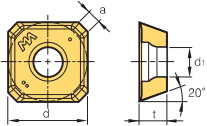

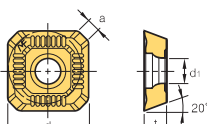

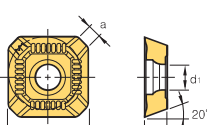

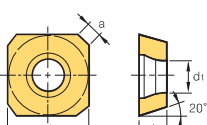
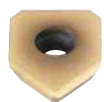
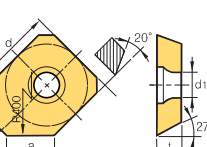
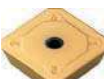
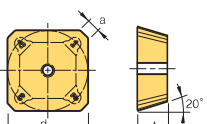
Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	● Continuous cutting ● General cutting ● Interrupted cutting
Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●		

Inserts	Designation	Cermets		Coated										Uncoated			Dimensions (mm)						Geometries	Available tools	
		CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	H05	l	d	t	r			d ₁
SDKN-MU 	1203AESN-MU	●							●									-	12.7	3.18	-	-	2.08		E44 E45 E50 E51
	1504AESN-MU	●							●									-	15.875	4.76	-	-	2.10		
SDKN-SU 	1203AESN-SU	●							●	●								-	12.7	3.18	-	-	2.08		E44 E45 E50 E51
	1504AESN-SU	●							●	●								-	15.875	4.76	-	-	2.10		
SDKR-MX 	1203AESN-MX	●																-	12.7	3.18	-	-	1.46		E44 E45 E50 E51
	1203AETN-MX	●																-	12.7	3.18	-	-	1.46		
	1203AEN-MX	●		●														-	12.7	3.18	-	-	1.46		
	1504AESN-MX	●			●													-	15.875	4.76	-	-	1.45		
	1504AETN-MX	●																-	15.875	4.76	-	-	1.45		
	1504AEN-MX	●																-	15.875	4.76	-	-	1.45		
SDMT-MM 	090308-MM	●								●								-	9.525	3.18	0.8	4.4	-		E299 E327
SDXT-MA 	09M405R-MA	●															●	-	9.525	4.0	0.5	4.0	1.2		E228~ E233
	130508R-MA	●															●	-	13.5	5.56	0.8	5.56	2.2		
SDXT-MF 	09M403R-MF	●																-	9.525	4.0	0.3	4.0	1.2		E228~ E233
	09M403L-MF	●																-	9.525	4.0	0.3	4.0	1.2		
	09M404R-MF	●																-	9.525	4.0	0.4	4.0	1.2		
	09M404L-MF	●																-	9.525	4.0	0.4	4.0	1.2		
	09M405R-MF	●		●					●	●	●	●	●	●	●			-	9.525	4.0	0.5	4.0	1.2		
	09M405L-MF	●																-	9.525	4.0	0.5	4.0	1.2		
	130508R-MF	●																-	13.5	5.56	0.8	5.56	2.2		
SDXT-MM 	09M405R-MM	●		●				●	●	●	●	●	●	●			●	-	9.525	4.0	0.5	4.0	1.2		E228~ E233
	09M405L-MM	●															●	-	9.525	4.0	0.5	4.0	1.2		
	130508R-MM	●		●					●	●	●	●	●	●			●	-	13.5	5.56	0.8	5.56	2.2		
	130508L-MM	●															●	-	13.5	5.56	0.8	5.56	2.2		
	130538-MM	●															●	-	13.5	5.56	3.8	5.56	2.2		
SECA 	1204AFSN	●		●														-	12.7	4.76	-	5.56	2.66		-
	1204AFTN	●															●	-	12.7	4.76	-	5.56	2.66		
	1204AFFN	●															●	-	12.7	4.76	-	5.56	2.66		
	1204AFEN	●															●	-	12.7	4.76	-	5.56	2.66		
	1504AFSN	●															●	-	15.875	4.76	-	5.5	2.8		
	1504AFTN	●															●	-	15.875	4.76	-	5.5	2.8		
1504AFFN	●															●	-	15.875	4.76	-	5.5	2.8			

● : Stock item



Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	
Cast iron	K															● Continuous cutting ● General cutting ● Interrupted cutting
Non-ferrous metal	N															
Heat resistant alloy, Titanium alloy	S															
Hardened steel	H															

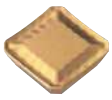
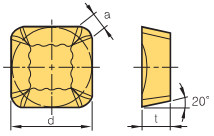
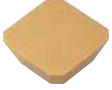
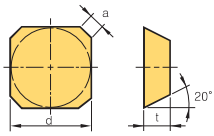

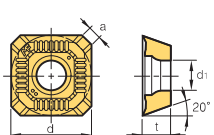

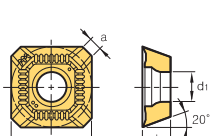

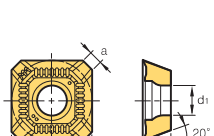

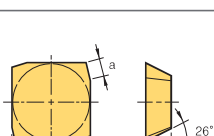
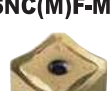
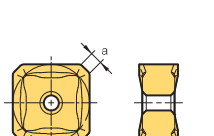

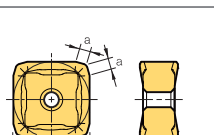
Inserts	Designation	Cermets		Coated								Uncoated			Dimensions (mm)						Geometries	Available tools				
		CN2000	CN30	NCM325	NCM335	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	PD2000	PD1010	ST30A	G10	H01	H05	l	d			t	r	d ₁	a
SECN 	1203AFFN														●	●		-	12.7	3.18	-	-	2.36	 <ul style="list-style-type: none"> ● Shape of Edge - S20: STS - RH: Strengthened edge, STS 	E46	
	1203AFTN	●	●												●			-	12.7	3.18	-	-	2.36		E47	
	1203AFEN																	-	12.7	3.18	-	-	2.36			
	1203AFSN			●	●														-	12.7	3.18	-	-		2.36	
	1203AFEN-RH							●			●								-	12.7	3.18	-	-		2.36	
	1203AFSN-RH																		-	12.7	3.18	-	-		2.36	
	1203AFTN-S20										●								-	12.7	3.18	-	-		2.36	
	1504AFFN															●			-	15.875	4.76	-	-		2.4	
	1504AFTN		●																-	15.875	4.76	-	-		2.4	
	1504AFEN																		-	15.875	4.76	-	-		2.4	
	1504AFSN																		-	15.875	4.76	-	-		2.4	
	1504AFEN-RH																		-	15.875	4.76	-	-		2.4	
	1504AFSN-RH								●										-	15.875	4.76	-	-		2.4	
	1504AFTN-S20																		-	15.875	4.76	-	-		2.4	
SEET-MA 	0903AGFN-MA														●	●		-	9.525	3.18	-	3.4	2.11		E222~	
	14M4AGFN-MA														●	●		-	14.0	4.0	-	4.4	2.64		E227	
SEET-MF 	0903AGSN-MF								●	●	●	●						-	9.525	3.18	-	3.4	2.11		E222~	
	14M4AGSN-MF								●	●	●	●						-	14.0	4.0	-	4.4	2.64		E227	
SEET-MM 	0903AGSN-MM			●				●		●	●							-	9.525	3.18	-	3.4	2.11		E222~	
	14M4AGSN-MM			●		●	●	●	●	●	●							-	14.0	4.0	-	4.4	2.64		E227	
SEEW 	0903AGTN																	-	9.525	3.18	-	3.4	2.11		E222~	
	14M4AGTN																	-	14.0	4.0	-	4.4	2.64		E227	
SEEW-W 	14M4AGFN-W																	-	14.0	4.0	-	4.4	8.5		E223	
	14M4AGSN-W									●								-	14.0	4.0	-	4.4	8.5		E225	
	14M4AGTN-W						●	●										-	14.0	4.0	-	4.4	8.5		E227	
SEKN-SU 	1203AFSN-SU					●	●											-	12.7	3.18	-	1.98	-		E46	
	1504AFSN-SU					●	●			●								-	15.875	4.76	-	2.04	-		E47	

● : Stock item



E Milling Inserts

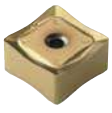
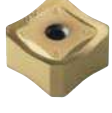





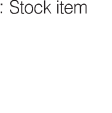
Workpiece	Machining types										
	●	●	●	●	●	●	●	●	●	●	●
Steel	P	●	●	●	●	●	●	●	●	●	●
Stainless steel	M	●	●	●	●	●	●	●	●	●	●
Cast iron	K	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●
Hardened steel	H	●	●	●	●	●	●	●	●	●	●

Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)					Geometries	Available tools		
		CN2000	CN30	NCM325	NCM335	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	d ₁
SEKR-MX 	1203AFSN-MX	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	3.18	-	2.3		E46 E47
	1504AFSN-MX	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	15.875	4.76	-	2.4		
SEMN 	1204AZ	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	4.76	-	2.0		-
SEXT-MF 	0903AGSN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	9.525	3.18	3.4	2.11		E222~ E227
	14M4AGSN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	14.0	4.0	4.4	2.64		
SEXT-MM 	0903AGSN-MM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	9.525	3.18	3.4	2.11		E222~ E227
	14M4AGSN-MM	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	14.0	4.0	4.4	2.64		
SEXT-MR 	0903AGSN-MR	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	9.525	3.18	3.4	2.11		E222~ E227
	14M4AGSN-MR	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	14.0	4.0	4.4	2.64		
SFCN 	1203EFR	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	3.18	-	2.5		E48
SNC(M)F-MF 	SNCF 1206ANN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	6.6	-	2		E125 E126
	1507ANN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	15.875	7.35	-	2.1		
	SNMF 1206ANN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	6.6	-	2		
	1507ANN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	15.875	7.35	-	2.1		
SNC(M)F-MM 	SNCF 1206ENN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	6.6	-	1.8		E127 E128
	1507ENN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	15.875	7.35	-	1.8		
	SNMF 1206ENN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	12.7	6.6	-	1.8		
	1507ENN-MF	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	-	15.875	7.35	-	1.8		

● : Stock item



Workpiece	Machining types												
	P	M	K	N	S	H	●	⊙	⊛	⊞	⊠	⊡	⊣
Steel	●	●	●	●	●	●	●	●	●	●	●	●	●
Stainless steel	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	●	●	●	●	●	●	●	●	●	●	●	●	●
Hardened steel	●	●	●	●	●	●	●	●	●	●	●	●	●

Inserts	Designation	Cermets		Coated										Uncoated		Dimensions (mm)							Geometries	Available tools						
		CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d	t	r			d ₁	a	b			
SNC(M)F-MF 	SNCF 1206QNN-MF											●						-	12.7	6.6	0.8	-	1	-					E127	
	SNMF 1206QNN-MF											●						-	12.7	6.6	0.8	-	1	-						
SNC(M)F-MM 	SNCF 1206ANN-MM																	-	12.7	6.6	-	-	2	-					E125	
	1507ANN-MM																	-	15.875	7.35	-	-	2.1	-					E126	
	SNMF 1206ANN-MM																	-	12.7	6.6	-	-	2	-						
	1507ANN-MM																	-	15.875	7.35	-	-	2.1	-						
SNC(M)F-MM 	SNCF 1206ENN-MM																	-	12.7	6.6	-	-	1.8	-					E127	
	1507ENN-MM																	-	15.875	7.35	-	-	1.8	-					E128	
	SNMF 1206ENN-MM											●						-	12.7	6.6	-	-	1.8	-						
	1507ENN-MM											●						-	15.875	7.35	-	-	1.8	-						
SNC(M)F-MM 	SNCF 1206QNN-MM											●						-	12.7	6.6	0.8	-	1	-					E129	
	SNMF 1206QNN-MM											●						-	12.7	6.6	0.8	-	1	-						
SNCN 	1204ENN			●													●	-	12.7	4.76	-	-	1.4	1.0					E49	
	1504ENN																	●	-	15.875	4.76	-	-	1.4	1.0					
SNEF 	435											●						-	12.7	4.76	2.0	-	-	-					E395	
	535											●						-	15.875	4.76	2.0	-	-	-						
SNEU-MF 	120420-MF											●						-	12.7	4.76	2.0	5.7	(2.3)	-					E397	
												●																		
SNEU-MF 	1204ANN-MF																	-	12.7	4.76	-	5.7	(2.0)	-					E397	

● : Stock item

E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	Machining types			
	Stainless steel	M					●								●	●	●	●
	Cast iron	K			●	●	●								●	●	●	●
	Non-ferrous metal	N																●
	Heat resistant alloy, Titanium alloy	S																●
	Hardened steel	H						●	●									●

● Continuous cutting
 ● General cutting
 ● Interrupted cutting


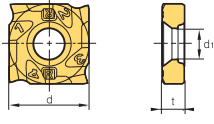

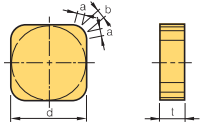

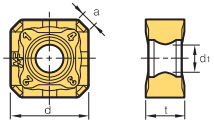

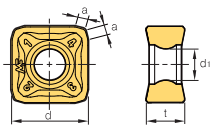

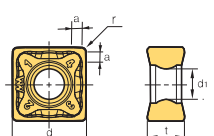

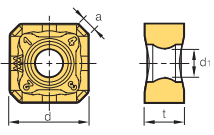
Inserts	Designation	Cermets		Coated										PCD		Dimensions (mm)						Geometries	Available tools			
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	HO1	DP150	DP200	l	d	t			r	d _i	a
SNEU-TBW	1204-TBW																	-	12,7	4,76	-	5,7	(2,1)		E397	
SNEU-WMF	1204R-WMF																	-	12,7	4,76	-	5,7	-		E397	
SNEX	101010																	-	10	10	1,0	4,6	-		-	
																		-	10	10	(1,0)	4,6	-			
SNEX-CU1	101010-CU1																	-	10	10	1,0	4,6	-		-	
																		-	10	10	(1,0)	4,6	-			
	121212-CU1																	-	12,7	12,7	1,2	5,6	-			
	1212ZNN-CU1																	-	12,7	12,7	(1,2)	5,6	-			
SNEX-MA	1206ANN-MA																	-	12,7	6,35	-	4,5	2,36		E115~ E124	
																		-	12,7	6,35	-	5,2	1,82			
	1206QNN-MA																	-	12,7	6,35	-	5,2	1,39			
	120612-MA																	-	12,7	6,35	1,2	5,2	-			
SNEX-ML	1206ANN-ML																	-	12,7	6,35	-	4,5	2,36		E115~ E124	
																		-	12,7	6,35	-	4,5	1,82			
	1206QNN-ML																	-	12,7	6,35	-	4,5	1,39			
	120612-ML																	-	12,7	6,35	1,2	4,5	-			
	1507ANN-ML																	-	15,875	7,94	-	5,6	3,16			
	1507ENN-ML																	-	15,875	7,94	-	5,6	2,66			
SNEW	09T3ADFR																	9,525	9,525	3,97	-	4,4	-		E139 E140	
SNEW-NAF	09T3ADTR-NAF																	●	9,525	9,525	3,97	-	4,4	-		E139 E140
																		●	9,525	9,525	3,97	-	4,4	-		
SNEW-XAF	09T3ADTR-XAF																	●	9,525	9,525	3,97	-	4,4	-		E139 E140
																		●	9,525	9,525	3,97	-	4,4	-		

● : Stock item



Workpiece	Steel	P												Machining types											
	Stainless steel	M																							
Cast iron	K																								
Non-ferrous metal	N																								
Heat resistant alloy, Titanium alloy	S																								
Hardened steel	H																								

● Continuous cutting
 ● General cutting
 ✳ Interrupted cutting

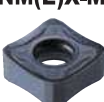
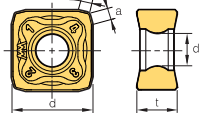
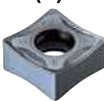
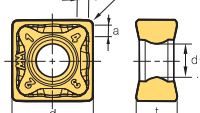

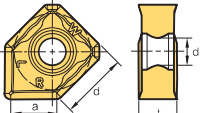

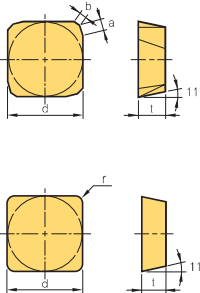

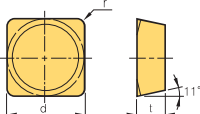

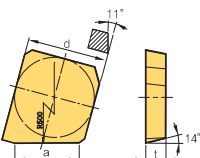
Inserts	Designation	Cermets		Coated										PCD		Dimensions (mm)								Geometries	Available tools		
		CN2000	CN30	NC5330	NCM535	NCM545	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	DP150	DP200	l	d	t	r	d _i	a	b				
SNHT-WX 	1102308R-WX														●		-	11	2.30	-	4	-	-				E384
	110308R-WX														●		-	11	3.00	-	4	-	-				E385
	120308R-WX																-	12.7	3.25	-	5	-	-				
	1203508R-WX														●		-	12.7	3.50	-	5	-	-				
	120408R-WX																-	12.7	4.00	-	5	-	-				
	1204508R-WX														●		-	12.7	4.54	-	5	-	-				
	120508R-WX														●		-	12.7	5.00	-	5	-	-				
	1205408R-WX														●		-	12.7	5.47	-	5	-	-				
	120608R-WX																-	12.7	6.00	-	5	-	-				
	1206508R-WX																-	12.7	6.50	-	5	-	-				
	120708R-WX																-	12.7	7.00	-	5	-	-				
	1207508R-WX																-	12.7	7.5	-	5	-	-				
		1102308L-WX													●		-	11	2.30	-	4	-	-				
		110308L-WX													●		-	11	3.00	-	4	-	-				
		120308L-WX															-	12.7	3.25	-	5	-	-				
		1203508L-WX													●		-	12.7	3.50	-	5	-	-				
		120408L-WX															-	12.7	4.00	-	5	-	-				
		1204508L-WX													●		-	12.7	4.54	-	5	-	-				
		120508L-WX													●		-	12.7	5.00	-	5	-	-				
		1205408L-WX													●		-	12.7	5.47	-	5	-	-				
		120608L-WX															-	12.7	6.00	-	5	-	-				
	1206508L-WX															-	12.7	6.50	-	5	-	-					
	120708L-WX															-	12.7	7.00	-	5	-	-					
	1207508L-WX															-	12.7	7.5	-	5	-	-					
SNKN 	1204ENN													●		-	12.7	4.76	-	-	1.4	1.0				E49	
	1504ENN															-	15.875	4.76	-	-	1.4	1.0					
SNM(E)X-MF 	SNMX 1206ANN-MF				●			●	●	●	●	●	●			-	12.7	6.35	-	4.5	2.36	-				E117	
	1507ANN-MF				●			●	●	●	●	●	●			-	15.875	7.94	-	5.6	3.15	-				E118	
	SNEX 1206ANN-MF							●	●	●	●	●	●			-	12.7	6.35	-	4.5	2.36	-				E125	
	1507ANN-MF								●	●	●	●	●			-	15.875	7.94	-	5.6	3.15	-					
SNM(E)X-MF 	SNMX 1206ENN-MF				●			●	●	●	●	●	●			-	12.7	6.35	-	4.5	1.82	-				E115~	
	1507ENN-MF				●			●	●	●	●	●	●			-	15.875	7.94	-	5.6	2.66	-				E118	
	SNEX 1206ENN-MF							●	●	●	●	●	●			-	12.7	6.35	-	4.5	1.82	-					
	1507ENN-MF								●	●	●	●	●			-	15.875	7.94	-	5.6	2.66	-					
SNM(E)X-MF 	SNMX 1206QNN-MF				●			●	●	●	●	●	●			-	12.7	6.35	-	5.2	2.36	-				E123	
	120612-MF							●	●	●	●	●	●			-	12.7	6.35	1.2	5.2	-	-				E124	
	SNEX 1206QNN-MF								●	●	●	●	●			-	12.7	6.35	-	5.2	2.36	-					
	120612-MF									●	●	●	●			-	12.7	6.35	1.2	5.2	-	-					
SNM(E)X-MM 	SNMX 1206ANN-MM				●	●		●	●	●	●	●	●			-	12.7	6.35	-	4.5	2.36	-				E115~	
	1507ANN-MM				●			●	●	●	●	●	●			-	15.875	7.94	-	5.6	3.15	-				E118	
	SNEX 1206ANN-MM							●	●	●	●	●	●			-	12.7	6.35	-	4.5	2.36	-					
	1507ANN-MM								●	●	●	●	●			-	15.875	7.94	-	5.6	3.15	-					

● : Stock item

E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types			
	Stainless steel	M			●	●											●	●	●	
	Cast iron	K			●	●											●	●	●	
	Non-ferrous metal	N															●	●	●	
	Heat resistant alloy, Titanium alloy	S															●	●	●	
Hardened steel	H															●	●	●		

● Continuous cutting
 ● General cutting
 ● Interrupted cutting


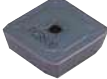


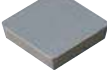



Inserts	Designation	Cermets		Coated								Uncoated			Dimensions (mm)							Geometries	Available tools			
		CN2000	CN30	NCM325	NCM335	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	G10	H01	l	d	t	r			d ₁	a	b
SNM(E)X-MM 	SNMX 1206ENN-MM					●	●	●	●	●	●	●	●				-	12.7	6.35	-	5.2	1.82	-		E119~ E122	
	1507ENN-MM					●	●	●	●	●	●	●	●				-	15.875	7.94	-	5.6	2.66	-			
	SNEX 1206ENN-MM																-	12.7	6.35	-	5.2	1.82	-			
	1507ENN-MM																-	15.875	7.94	-	5.6	2.66	-			
SNM(E)X-MM 	SNMX 1206QNN-MM					●	●	●	●	●	●	●	●				-	12.7	6.35	-	4.5	2.36	-		E123 E124	
	120612-MM																-	12.7	6.35	1.2	4.5	-	-			
	SNEX 1206QNN-MM																-	12.7	6.35	-	4.5	2.36	-			
	120612-MM																-	12.7	6.35	1.2	4.5	-	-			
SNEX-W 	1206ANN-W																-	12.7	6.35	-	4.5	7.6	-		E115 E116	
SPCN 	1203EDR		●	●	●									●	●	●	-	12.7	3.18	-	-	1.4	1.0		E50 E51	
	1203EDR-RH																	-	12.7	3.18	-	-	1.4			1.0
	1203EDL														●			-	12.7	3.18	-	-	1.4			1.0
	1203EDR-G															●		-	12.7	3.18	-	-	1.4			1.0
	1203EDR-RN																	-	12.7	3.18	-	-	1.4			1.0
	1203EDER-RH																	-	12.7	3.18	-	-	1.63			0.8
	1203EDSR-RH																	-	12.7	3.18	-	-	1.63			0.8
	1203EDTR-RH																	-	12.7	3.18	-	-	1.63			0.8
	1203EDR-S20																	-	12.7	3.18	-	-	1.4			1.0
	150412T																	-	15.875	4.76	1.2	-	-			-
	1504EDR		●	●														-	15.875	4.76	-	-	1.4			1.0
	1504EDR-RH																	-	15.875	4.76	-	-	1.4			1.0
	1504EDSR																	-	15.875	4.76	-	-	1.4			1.0
	1504EDL																	-	15.875	4.76	-	-	1.4			1.0
	1504EDR-G															●		-	15.875	4.76	-	-	1.4			1.0
	1504EDR-RN		●															-	15.875	4.76	-	-	1.4			1.0
1504EDER-RH																	-	15.875	4.76	-	-	1.64	0.8			
1504EDSR-RH																	-	15.875	4.76	-	-	1.64	0.8			
1504EDTR-RH																	-	15.875	4.76	-	-	1.64	0.8			
1504EDR-S20																	-	15.875	4.76	-	-	1.4	1.0			
SPEN-WC 	120416-WC																-	12.7	4.76	1.6	-	-	-		E396	
	150412-WC																-	15.875	4.76	1.2	-	-	-			
	150416-WC																-	15.875	4.76	1.6	-	-	-			
	150420-WC																-	15.875	4.76	2.0	-	-	-			
	190424-WC																-	19.05	4.76	2.4	-	-	-			
SPEX 	1203EDR-1																-	12.7	3.18	-	-	10.2	-		E50 E51	
	1203EDL-1																-	12.7	3.18	-	-	10.2	-			
	1504EDR-1																-	15.875	4.76	-	-	10.2	-			
	1504EDL-1																-	15.875	4.76	-	-	10.2	-			

● : Stock item



Workpiece	Steel	P	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	●●●	Machining types	
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Continuous cutting
 ● General cutting
 ● Interrupted cutting


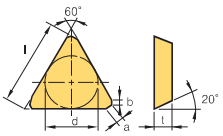

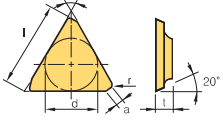

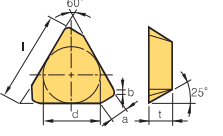

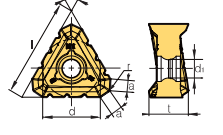

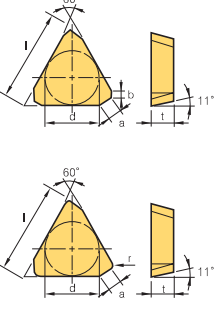
Inserts	Designation	Cermet		Coated								Uncoated		Dimensions (mm)							Geometries	Available tools			
		CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	G10	l	d	t			r	d ₁	a
SPFN 	200-N																8,8	2,2	-	0,2	-	-	-		E381
	300-N																9,8	3,0	-	0,2	-	-	-		
	400-N																9,8	4,0	-	0,25	-	-	-		
SPKN-MU 	1203EDSR-MU										●						-	12,7	3,18	-	-	0,86	1,87		E50
	1504EDSR-MU										●						-	15,875	4,76	-	-	0,84	1,92		E51
SPKN-SU 	1203EDSR-SU										●	●					-	12,7	3,18	-	-	1,66	0,92		E50
	1203EDSL-SU										●						-	12,7	3,18	-	-	1,66	0,92		E51
	1504EDSR-SU										●	●					-	15,875	4,76	-	-	1,62	0,93		
	1504EDSL-SU										●						-	15,875	4,76	-	-	1,62	0,93		
SPKR-MX 	1203EDSR-MX			●	●												-	12,7	3,18	-	-	1,4	-		E50
	1203EDSL-MX																-	12,7	3,18	-	-	1,4	-		E51
	1504EDSR-MX			●													-	15,875	4,76	-	-	1,45	-		
	1504EDSL-MX																-	15,875	4,76	-	-	1,45	-		
SPMN 	120308															●	-	12,7	3,18	0,8	-	-	-		E338
SPMT 	060304			●													-	6,35	3,18	0,4	2,8	-	-		E299 E326 E327
SPMT-KC 	110408-KC									●						●	-	11,5	4,8	0,8	4,5	-	-		E338
SPMT-MM 	120408-MM										●						-	12,7	4,76	0,8	5,6	-	-		E199
	120508-MMN																-	12,7	5,56	0,8	5,6	-	-		E299 E326 E328

● : Stock item

E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	Machining types			
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Continuous cutting
 ● General cutting
 ● Interrupted cutting

Inserts	Designation	Cermet		Coated								Uncoated		Dimensions (mm)							Geometries	Available tools			
		CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	G10	H01	l	d	t			r	d _r	a
TEC(E)N 	TECN 22R																11.0	6.35	3.18	-	-	1.0	0.5		E58
	22TR	●															11.0	6.35	3.18	0.8	-	0.5	-		
	32R																16.5	9.525	3.18	-	-	1.0	0.5		
	32R-G																16.5	9.525	3.18	-	-	1.0	0.5		
	32TR	●		●													16.5	9.525	3.18	0.8	-	0.5	-		
	32TR-S20										●						16.5	9.525	3.18	0.8	-	0.5	-		
	43R-G																22.0	12.7	4.76	-	-	2.0	0.5		
	43TR-Z																22.0	12.7	4.76	0.8	-	1.5	-		
	43TR																22.0	12.7	4.76	0.8	-	1.5	-		
TEEN 	TEEN 32TR																16.5	9.525	3.18	0.8	-	0.5	-		E58
	43R-Z																22.0	12.7	4.76	-	-	2.0	0.5		
	43TR-Z																22.0	12.7	4.76	0.8	-	1.5	-		
	43TR-ZH																22.0	12.7	4.76	0.8	-	1.5	-		
	43R																22.0	12.7	4.76	-	-	2.0	0.5		
	43R-G																22.0	12.7	4.76	-	-	2.0	0.5		
TFCN 	2203PFR																22.0	12.7	3.18	-	-	2.42	0.71		E52
	2203PFL																22.0	12.7	3.18	-	-	2.42	0.71		
TNMX 	2710AZNR-NM				●	●		●	●	●	●						27	15.875	10	0.8	5.6	2.63	-		E65~ E67
	2710AZNL-NM																27	15.875	10	0.8	5.6	2.63	-		
	3012PNR-NM																30	17.462	11.970	0.8	5.6	3.5	-		
TPCN 	1103PPN		●														11.0	6.35	3.18	-	-	0.7	0.7		E53
	1103PPTN																11.0	6.35	3.18	-	-	0.7	0.7		
	1603PDR				●												16.5	9.525	3.18	-	-	1.2	0.7		
	1603PPN		●								●						16.5	9.525	3.18	-	-	1.2	1.2		
	1603PPR		●	●													16.5	9.525	3.18	-	-	1.2	1.0		
	1603PPR-RH																16.5	9.525	3.18	-	-	1.2	1.0		
	1603PPR-G																16.5	9.525	3.18	-	-	1.2	1.0		
	1603PPSR																16.5	9.525	3.18	-	-	1.2	1.0		
	1603PPTN																16.5	9.525	3.18	-	-	1.2	1.2		
	1603PPTR																16.5	9.525	3.18	-	-	1.2	1.0		
	1603PPTR-RH																16.5	9.525	3.18	-	-	1.2	1.0		
	1603PDER-RH																16.5	9.525	3.18	0.8	-	1.5	-		
	1603PDSR-RH																16.5	9.525	3.18	0.8	-	1.5	-		
	1603PDR-S20																16.5	9.525	3.18	-	-	1.2	0.7		
	1603PDR-RN																16.5	9.525	3.18	-	-	1.5	1.1		
	2204PDR		●	●													22.0	12.7	4.76	-	-	1.4	0.7		
	2204PDR-RH																22.0	12.7	4.76	-	-	1.4	0.7		
	2204PDR-RN																22.0	12.7	4.76	-	-	1.42	0.52		
	2204PDR-G																22.0	12.7	4.76	-	-	1.4	0.7		
	2204PDL																22.0	12.7	4.76	-	-	1.4	0.7		
	2204PDSR					●											22.0	12.7	4.76	-	-	1.4	0.7		
	2204PDTR																22.0	12.7	4.76	-	-	1.4	0.7		
	2204PPN																22.0	12.7	4.76	-	-	1.2	1.2		
	2204PPTN																22.0	12.7	4.76	-	-	1.2	1.2		
	2204PDR-RH																22.0	12.7	4.76	0.8	-	1.8	-		
	2204PDER-RH																22.0	12.7	4.76	0.8	-	1.8	-		
2204PDSR-RH																22.0	12.7	4.76	0.8	-	1.8	-			
2204PDR-S20																22.0	12.7	4.76	-	-	1.4	0.7			

※ In this page, TPC(K)N □□□□P-N is for FC·HC and □□□□P-R is for Cutter (face).

● : Stock item



Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	Machining types			
	Stainless steel	M	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Non-ferrous metal	N	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Heat resistant alloy, Titanium alloy	S	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Hardened steel	H	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● Continuous cutting
 ● General cutting
 ● Interrupted cutting


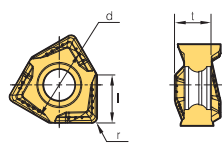

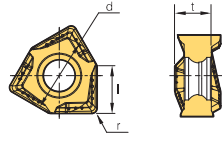

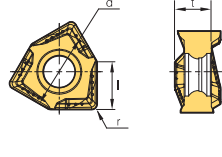

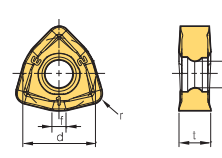

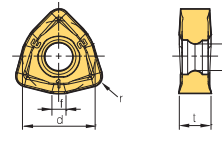
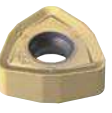
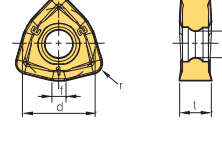
Inserts	Designation	Cermet		Coated										Uncoated	Dimensions (mm)								Geometries	Available tools		
		CN2000	CN30	NCM325	NCM335	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530		PC9540	PC5300	PC5400	HO1	l	d	t	r			d ₁	a
TPKN-MU	2204PDSR-MU	●								●							22.0	12.7	4.76	0.8	-	1.96	-		E53	
TPKN-SU	1603PDSL-SU																16.5	9.525	3.18	1.0	-	1.70	-		E53	
	1603PDSR-SU																16.5	9.525	3.18	1.0	-	1.70	-		E53	
	2204PDSL-SU																22.0	12.7	4.76	1.0	-	1.91	-		E53	
	2204PDSR-SU																22.0	12.7	4.76	1.0	-	1.91	-		E53	
TPKR-MX	1603PDSN-MX																16.5	9.525	3.18	-	-	1.2	1.2		E53	
	1603PDSR-MX																16.5	9.525	3.18	-	-	1.2	0.7		E53	
	1603PPR-MX					●											16.5	9.525	3.18	-	-	1.2	1.0		E53	
	1603PPSN-MX																16.5	9.525	3.18	-	-	1.2	1.2		E53	
	1603PPSR-MX					●											16.5	9.525	3.18	-	-	1.2	1.0		E53	
	2204PDR-MX																22.0	12.7	4.76	1.0	-	1.4	-		E53	
	2204PDSR-MX																22.0	12.7	4.76	1.0	-	1.4	-		E53	
	2204PPR-MX					●	●										22.0	12.7	4.76	1.0	-	1.4	-		E53	
TWX-KC	16R-KC																16.5	9.52	3.97	0.8	4.45	-	-		E340	
	22R-KC																22.0	12.7	4.76	0.8	4.45	-	-		E340	
VCKT-MA	220530N-MA														●	15.6	12.7	5.56	3.0	5.6	-	-	-		E354 E355	
VDKT-MA	11T210N-MA														●	8.8	6.35	2.87	1.0	2.8	-	-	-		E356	
	11T220N-MA																6.7	6.35	2.87	2.0	2.8	-	-		E356	
WDKT-MH	080316ZDSR-MH																-	8.0	3.18	1.6	3.3	-	-	1.8		E292~ E298
	10T320ZDSR-MH																-	10.0	3.97	2.0	4.3	-	-	2.3		E292~ E298
	130520ZDSR-MH																-	13.5	5.56	2.0	5.56	-	-	3.1		E292~ E298
	150625ZDSR-MH																-	15.0	6.35	2.5	5.56	-	-	3.4		E292~ E298

● : Stock item



E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types
	Stainless steel	M															
Cast iron	K	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	● Continuous cutting ● General cutting ✱ Interrupted cutting
Non-ferrous metal	N																
Heat resistant alloy, Titanium alloy	S																
Hardened steel	H																

Inserts	Designation	Cermets		Coated								Uncoated		Dimensions (mm)						Geometries	Available tools		
		CN2000	CN30	NCM535	NCM545	PC2505	PC2510	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r
WNGX-MA 	040304PNFR-MA														●	4.3	7.0	3.46	0.4	-	-		E110~ E114
	040308PNFR-MA														●	4.3	7.0	3.46	0.8	-	-		
	040312PNFR-MA														●	4.3	7.0	3.46	1.2	-	-		
	040316PNFR-MA														●	4.3	7.0	3.46	1.6	-	-		
	080604PNFR-MA														●	8.2	13.0	6.4	0.4	-	-		
	080608PNFR-MA														●	8.2	13.0	6.4	0.8	-	-		
	080612PNFR-MA														●	8.2	13.0	6.4	1.2	-	-		
	080616PNFR-MA														●	8.2	13.0	6.4	1.6	-	-		
	080620PNFR-MA														●	8.2	13.0	6.4	2.0	-	-		
WNGX-ML 	040304PNER-ML														●	4.3	7.0	3.46	0.4	-	-		E110~ E114
	040308PNER-ML														●	4.3	7.0	3.46	0.8	-	-		
	040312PNER-ML														●	4.3	7.0	3.46	1.2	-	-		
	040316PNER-ML														●	4.3	7.0	3.46	1.6	-	-		
	080604PNER-ML														●	8.2	13.0	6.4	0.4	-	-		
	080608PNER-ML			●											●	8.2	13.0	6.4	0.8	-	-		
	080612PNER-ML														●	8.2	13.0	6.4	1.2	-	-		
	080616PNER-ML														●	8.2	13.0	6.4	1.6	-	-		
	080620PNER-ML														●	8.2	13.0	6.4	2.0	-	-		
WNGX-MM 	040304PNSR-MM														●	4.3	7.0	3.46	0.4	-	-		E110~ E114
	040308PNSR-MM														●	4.3	7.0	3.46	0.8	-	-		
	040312PNSR-MM														●	4.3	7.0	3.46	1.2	-	-		
	040316PNSR-MM														●	4.3	7.0	3.46	1.6	-	-		
	080604PNSR-MM														●	8.2	13.0	6.4	0.4	-	-		
	080608PNSR-MM			●											●	8.2	13.0	6.4	0.8	-	-		
	080612PNSR-MM														●	8.2	13.0	6.4	1.2	-	-		
	080616PNSR-MM														●	8.2	13.0	6.4	1.6	-	-		
	080620PNSR-MM														●	8.2	13.0	6.4	2.0	-	-		
WNMX-MF 	060312ZNN-MF														●	-	6.35	3.18	1.2	2.86	1.2		E281~ E291
	09T316ZNN-MF														●	-	9.525	3.97	1.6	3.6	1.7		
	130520ZNN-MF														●	-	12.7	5.56	2.0	4.7	2.5		
	160720ZNN-MF														●	-	16.0	7.0	2.0	5.8	3.0		
WNMX-ML 	060312ZNN-ML														●	-	6.35	3.18	1.2	2.86	1.2		E281~ E291
	09T316ZNN-ML														●	-	9.525	3.97	1.6	3.6	1.7		
	130520ZNN-ML														●	-	12.7	5.56	2.0	4.7	2.5		
	160720ZNN-ML														●	-	16.0	7.0	2.0	5.8	3.0		
WNMX-MM 	060312ZNN-MM														●	-	6.35	3.18	1.2	2.86	1.2		E281~ E291
	09T316ZNN-MM														●	-	9.525	3.97	1.6	3.6	1.7		
	130520ZNN-MM														●	-	12.7	5.56	2.0	4.7	2.5		
	160720ZNN-MM														●	-	16.0	7.0	2.0	5.8	3.0		


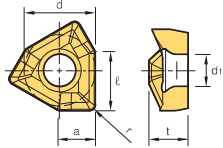

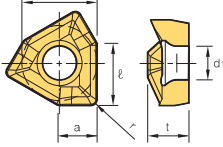

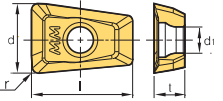

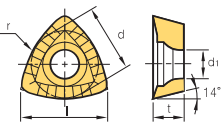
● : Stock item



E Milling Inserts

Workpiece	Steel	P	●	●	●	●	●	●	●	●	●	●	●	●	●	●	Machining types	
	Stainless steel	M															●	●
	Cast iron	K															●	●
	Non-ferrous metal	N															●	●
	Heat resistant alloy, Titanium alloy	S															●	●
Hardened steel	H															●	●	

● Continuous cutting
 ● General cutting
 ● Interrupted cutting

Inserts	Designation	Cermets		Coated								Uncoated		Dimensions (mm)						Geometries	Available tools			
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	l	d			t	r	d ₁
XNKT-ML 	060405PNER-ML							●	●	●	●	●	●	●			5,7	6,5	4,0	0,5	3,4	1,8		E89~ E94
	060408PNER-ML							●	●	●	●	●	●	●			5,7	6,5	4,0	0,8	3,4	1,8		
	080504PNER-ML								●	●	●	●	●	●			8,2	10,0	5,5	0,4	4,5	2,9		
	080508PNER-ML				●			●	●	●	●	●	●	●			8,2	10,0	5,5	0,8	4,5	2,9		
	080512PNER-ML							●	●	●	●	●	●	●			8,2	10,0	5,5	1,2	4,5	2,9		
	080516PNER-ML												●	●			8,2	10,0	5,5	1,6	4,5	2,9		
	080520PNER-ML												●	●			8,2	10,0	5,5	2,0	4,5	2,9		
	120608PNER-ML								●	●	●	●	●	●			12,0	13,0	6,5	0,8	5,5	3,5		
	120612PNER-ML												●	●			12,0	13,0	6,5	1,2	5,5	3,5		
	120616PNER-ML												●	●			12,0	13,0	6,5	1,6	5,5	3,5		
120620PNER-ML												●	●			12,0	13,0	6,5	2,0	5,5	3,5			
XNKT-MM 	060405PNSR-MM						●	●	●	●	●	●	●	●			5,7	6,5	4,0	0,5	3,4	1,8		E89~ E94
	060408PNSR-MM						●	●	●	●	●	●	●	●			5,7	6,5	4,0	0,8	3,4	1,8		
	080504PNSR-MM							●	●	●	●	●	●	●			8,2	10,0	5,5	0,4	4,5	2,9		
	080508PNSR-MM				●			●	●	●	●	●	●	●			8,2	10,0	5,5	0,8	4,5	2,9		
	080512PNSR-MM							●	●	●	●	●	●	●			8,2	10,0	5,5	1,2	4,5	2,9		
	080516PNSR-MM							●	●	●	●	●	●	●			8,2	10,0	5,5	1,6	4,5	2,9		
	080520PNSR-MM							●	●	●	●	●	●	●			8,2	10,0	5,5	2,0	4,5	2,9		
	120604PNSR-MM												●	●			12,0	13,0	6,5	0,4	5,5	3,5		
	120608PNSR-MM							●	●	●	●	●	●	●			12,0	13,0	6,5	0,8	5,5	3,5		
	120612PNSR-MM							●	●	●	●	●	●	●			12,0	13,0	6,5	1,2	5,5	3,5		
120616PNSR-MM							●	●	●	●	●	●	●			12,0	13,0	6,5	1,6	5,5	3,5			
120620PNSR-MM							●	●	●	●	●	●	●			12,0	13,0	6,5	2,0	5,5	3,5			
XPMT-MM 	0802ER-MM												●			8,5	5,9	2,38	0,8	-	-		E331 E332	
	1003ER-MM												●			10,5	7,25	3,18	0,8	-	-			
	13T3ER-MM												●			13,1	9	3,97	0,8	-	-			
	1604ER-MM												●			16,5	11,5	4,76	0,8	-	-			
	1805ER-MM												●			18	12,4	5,56	0,8	-	-			
	2006ER-MM												●			20,5	14,1	6,35	0,8	-	-			
	2507ER-MM												●			25,5	17,6	7,94	0,8	-	-			
ZDMT-R-MM 	080310R-MM												●	●		8,4	6,73	3,2	10	2,8	-		E327	
	110312.5R-MM												●	●		10,6	8,5	3,65	12,5	2,8	-			
	130416R-MM												●	●		13,2	10,5	4,76	16	4,4	-			


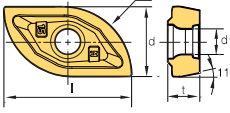

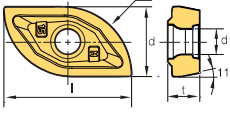

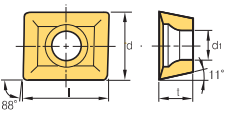

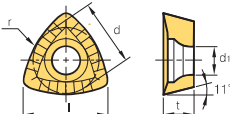

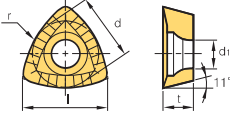
● : Stock item



Workpiece	Steel	P																									
	Stainless steel	M																									
	Cast iron	K																									
	Non-ferrous metal	N																									
Heat resistant alloy, Titanium alloy	S																										
Hardened steel	H																										















Machining types

- Continuous cutting
- ◐ General cutting
- ✱ Interrupted cutting

Inserts	Designation	Cermets		Coated								Uncoated	Dimensions (mm)					Geometries	Available tools				
		CN2000	CN30	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01			l	d	t	r
 Internal	080M-MM																16	8.0	3.5	8	2.9		E326
	090M-MM																17.7	7.2	4.3	9	3.4		
	100M-MM																19	10.4	4.5	10	3.4		
	110M-MM																22.2	11.4	4.8	11	4.5		
	125M-MM																24	12.9	5.3	12.5	4.5		
	130M-MM																25.7	13.4	5.3	13	4.5		
	140M-MM																27.2	14.3	6.3	14	5.6		
	150M-MM																28	15.4	7	15	5.6		
	160M-MM																28.5	16.4	7	16	5.6		
	200M-MM																38	20.7	8	20	6.6		
250M-MM																48	25.9	9.5	25	8.6			
 External	080S-MM																15	6.6	3.1	8	2.9		E326
	090S-MM																15.5	7.4	3.7	9	3.4		
	100S-MM																15.5	8.4	3.8	10	3.4		
	110S-MM																18.1	9	4.4	11	4.5		
	125S-MM																20.5	10.7	4.5	12.5	4.5		
	130S-MM																22.2	11	4.4	13	4.5		
	140S-MM																24.1	11.2	5.7	14	5.6		
	150S-MM																25	12.4	6.5	15	5.6		
	160S-MM																26	13.4	6.5	16	5.6		
	200S-MM																32	16.7	7	20	6.6		
250S-MM																40	20.7	8.5	25	8.6			
 ZPMT-MM	1504PPSR-MM																15.9	12.7	4.76	-	5.6		E199 E299
	1505PPSR-MMN																15.9	12.7	5.76	-	5.6		
 ZPMT-R-MM	160520R-MM																16.1	12.7	5.56	20	5.6		E328
	160525R-MM																16.9	12.7	5.56	25	5.6		
	160531.5R-MM																17.6	12.7	5.56	31.5	5.6		
 ZPMT-R-MR	160525R-MR																17.6	12.7	5.56	25	5.6		E327


















● : Stock item



Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page
							Facing	Shouldering	Slotting	Copying	Ramping, Helical	
Cutters for face milling	Mill-max	ADN(M) 4000/5000+		45°	Ø80~Ø315	Excellent cutting-edge strength and chip flow	●					E44 E45
		AE(M) 4000/5000		45°	Ø80~Ø315	Low cutting load and good machinability	●					E46 E47
		EF(M) 4000	AI 	75°	Ø80~Ø315	High rake angle to prevents welding	●					E48
		EN(M) 4000		75°	Ø80~Ø315	Economical because double sided inserts applied	●					E49
		EPN(M) 4000/5000+		75°	Ø80~Ø315	Double posi rake angle and low cutting force	●					E50 E51
		PF(M) 4000	AI 	90°	Ø80~Ø315	High rake angle and good machinability	●	●	●			E52
		PPN(M) 4000		90°	Ø80~Ø315	Double posi rake angle and low cutting force	●	●	●			E53
	Mill-max Heavy	HDDCM 7000/9000 <small>new</small>		55°	Ø125~Ø315	Deep roughing availability thanks to highly rigid inserts	●					E55
	Turbo Mill	ADS 4000/5000		45°	Ø50~Ø63	Anti-vibration	●					E56 E57
		PES 2000/3000/4000		90°	Ø20~Ø63	High rake angle, Cutting efficiency	●	●	●			E58
	Double Mill	AFO(M)4000		45°	Ø80~Ø125	High rake angle low cutting force Economical (8 corners available)	●					E59
		AFO(M)5000			Ø80~Ø315							E60
	Power Buster	PBAC(M)5000		45°	Ø80~Ø315	Double-sided Insert High depth High feed roughing	●					E65
		PBZC(M)5000		90°	Ø80~Ø315		●					E66
		PBPCM6000 <small>new</small>			Ø80~Ø315		●	●				E67













AI Cutter for aluminum














Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page
							Facing	Shouldering	Slotting	Copying	Ramping, Helical	
Cutters for face milling	Aero Mill	APD(M) A type	 	90°	Ø80~Ø315	Aluminum cutter body suitable for high speed machining, Both cemented carbides and PCD inserts are available, G2.5 balance possible	●					E136
	Aero Mill - Plus	APD(M)-PB	 	90°	Ø80~Ø315	Prevent overload to the spindle bearings through weight reduction of the AI alloy body and enable high-speed processing	●					E137 E138
	Aero Mill-Mini	MAPDS	 	90°	Ø40~Ø63	Available with small Machining center-Carbide, PCD insert	●					E139
		MAPD	 	90°	Ø32~Ø40	Application-Balancing class G2.5	●					E140
	Rich Mill	RM8AC(M)4000 RMH8AC(M)4000		45°	Ø50~Ø400	8 corners available Double-sided insert for steel, cast iron, stainless steel, aluminum	●					E115 E116
							●					E117 E118
		RM8EC(M)4000 RMH8EC(M)4000		75°	Ø50~Ø400	8 corners available Double-sided insert for steel, cast iron	●					E119 E120
							●					E121 E122
		RM8QC(M)4000 RMH8QC(M)4000		88°	Ø63~Ø200	8 corners available Reduced cutting interruption at cast iron	●					E123 E124
							●					E125 E126
		RMT8A(M) 4000/5000		45°	Ø80~Ø315		●					E127 E128
		RMT8E(M) 4000/5000		75°	Ø80~Ø315	Easy insert change and good machinability due to latch clamping system 8 corners available Excellent surface finish	●					E129
		RMT8Q(M) 4000		88°	Ø80~Ø315		●					E130 E131
	RM16AC(M) 6000/8000		45°	Ø63~Ø400	16 corners available Wiper inserts can be applied for good surface finish Strong insert and powerful clamping	●					E89	
	Cutters for molds	Rich Mill	RM3PC(M)3000 		90°	Ø40~Ø80	Perfect perpendicularity Strong clamping	●	●	●	●	
Ø40~Ø125			E91									
Ø80~Ø125			E91									


















 Cutter for aluminum



Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page
							Facing	Shouldering	Slotting	Copying	Ramping, Helical	
Cutters for molds	Rich Mill	RM4PC(M)3000		90°	Ø40~Ø100	4 corners available High rake angle insert reduces cutting force. Excellent insert rigidity	●	●	●	●	●	E95 E96
		RM4PC(M)4000			Ø50~Ø160							
		RM4ZCM3000		90°	Ø40~Ø52	4 corners available In vertical machining, the maximum cutting depth for RM4Z3000: 9.00 mm, RM4Z4000: 14.0 mm	●	●	●	●	●	E108
		RM4ZC(M)4000			Ø63~Ø100							
		RM6PC(M)-WN04 ^{new}		90°	Ø40~Ø63	Improved productivity and high-quality shouldering through high speed and high feed machining	●	●	●	●	●	E110
		RM6PC(M)-WN08 ^{new}			Ø50~Ø125							E111
	Alpha Mill-X	AMXCM ^{new}		90°	Ø40~Ø80	High rake angle cutting edge and chip breaker reduce cutting load and improve chip evacuation. High rigidity due to special design	●	●	●	●	●	E145
	Alpha Mill	AMC(M) 1000S/1500S/2000S		90°	Ø32~Ø100	3-dimensional shape and high rake angle lowers cutting load and ensures better chip evacuation Inner coolant system for better chip control increases tool life Wide size range of inserts enlarges application range. Various types of Alpha Mills available for high depth of cut and high feed machining	●	●	●	●	●	E154 ~E156
		AMC(M) 3000S/3000S-K/4000S		90°	Ø40~Ø200		E157 ~E159					
		AMC(M) 1000SE 2000SE 3000SE		75°	Ø40~Ø100		E160 E161					
		AMC(M) 2000M 3000M 4000M		90°	Ø50~Ø125		E162 E163 E164					
	Future Mill	FMAC(M)3000		45°	Ø50~Ø125	Accurate inserts and cutter, Excellent chip flow	●					E222
		FMAC(M)4000			Ø50~Ø200							E223
		FMAC(M)3000A		45°	Ø63~Ø125	Excellent in high speed cutting and tapping center, low power machine due to light aluminum body	●					E224
		FMAC(M)4000A			Ø63~Ø315							E225
		FMPC(M)3000		90°	Ø50~Ø100	4 corners available various inserts can be applied to machine for different types of workpiece	●	●	●			E228
		FMPC(M)4000			Ø63~Ø125							E229
		FMPC(M)3000A		90°	Ø63~Ø100	Excellent in high speed cutting and tapping center, low power machine due to light aluminum body	●	●	●			E230
FMPC(M)4000A		Ø63~Ø315			E231							



























Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page
							Facing	Shouldering	Slotting	Copying	Ramping, Helical	
Cutters for molds	Future Mill	FMRC(M)3000		-	Ø40~Ø100	4~8 corners available Double contact faces between insert & seat part of cutter for stable clamping Excellent rotating-free machining	●	●	●	●	●	E234
		FMRC(M)4000			Ø50~Ø125		E235					
		FMRC(M)5000		-	Ø50~Ø125		E236					
		FMRC(M)6000			Ø63~Ø160		E237					
	Future Mill P-positive	FMRC(M) ^{new} 3000 4000 5000 6000		-	Ø40~Ø250	Stable clamping system enables stable machining and productivity Varied product line-up ensures wide application range Optimal shape and grade with high hardness for hard-to-cut material machining.	●	●	●	●	●	E248 ~E251
	HFMD	HFMDCM-LN06 ^{new}		-	Ø32~Ø66	Double sided with 4 corners insert for small diameter machining For high feed and multi-functional machining Strong clamping realizes stable machining.	●	●	●		●	E266
	HRM	HRMC(M)13		15°	Ø50~Ø80	Powerful clamping by double clamping system 3 corners available high feed cutting with low cutting load	●	●	●		●	E292
		HRMC(M)15			Ø63~Ø160		E293					
	HRMD	HRMDC(M)09		14°	Ø40~Ø100	Double side insert with 6 corner High feed cutting with strong simple screw-on clamp	●	●	●		●	E281
		HRMDC(M)13			Ø50~Ø125		E282					
		HRMDC(M)16 ^{new}			Ø80~Ø315		E283					
	Tangen-Pro	TP2PC(M)-LN08 ^{new}		90°	Ø40~Ø63	High-quality results available even under harsh cutting conditions, thanks to the stable clamping force	●	●	●			E303
		TP2PC(M)-LN14 ^{new}			Ø40~Ø125		E304					
		TP2PC(M)-LN17 ^{new}			Ø40~Ø125		E305					
	BT/HSK Tooling System	BT30/40/50		90°	Ø10~Ø50	BT/HSK one solid type has been accepted to increase the precision Inner coolant system can also make it possible to evacuate the chip effectively High feed and high depth	●	●	●		●	E184 ~E188
		HSK63					E189 ~E193					
BT30/40/50			90°	Ø16~Ø100	BT/HSK one solid type has been accepted to increase the precision Inner coolant system can also make it possible to evacuate the chip effectively High feed and high depth	●	●	●		●	E194 ~E199	
HSK63/100						E200 ~E204						
BT30/40/50-MAT			90°	Ø12~Ø40	Alpha Mill, Rich Mill, FMR, Laser Mill, HRM(D), Pro-A, Pro-X Modular head M06~M16 applicable	●	●	●	●	●	E205	
HSK63/100-MAT						E206						
	BT50 HAT4000		90°	Ø50~Ø80	Head only replacement possible and higher efficiency by self assembly head	●	●	●			E199	

Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page	
							Facing	Shouldering	Slotting	Copying	Ramping, Helical		
Cutters for aluminum	Pro-A Mill	PAC(M) 2000/4000	 	90°	Ø40~Ø100	Buffered insert controls chip flow without built-up edge	●	●	●	●	●	E354	
	Pro-X Mill	PAXC(M)5000	 	90°	Ø40~Ø125	Powerful clamping Excellent body rigidity for rectangular and curve machining	●	●	●	●	●	E357	
		Ø50~Ø125			E358								
	Pro-L Mill	PALC(M)	 	90°	Ø63	High helix and high depth of cut High perpendicularity Low cutting load	●	●	●	●	●	E363	
Pro-V Mill	PAVCM-XD19 		90°	Ø40~Ø125	Exclusive milling tool for high speed aluminum machining with key to key way structure ensures stable clamping.	●	●	●	●	●	E368		
High feed cutter for cast iron	High feed cutter	PNH 4000/5000		90°	Ø125~Ø450	Wiper insert available Double negative rake angle Excellent surface finish	●					E395	
		PPH 4000		90°	Ø125~Ø450	Square insert and wiper insert available Excellent surface finish	●					E396	
	Shave Mill	SVM(M)4000		90°	Ø80~Ø315	Exclusive adjusting device of cutting-edge adjusts run-out easily.	●					E397	
	Shave Mill-Ultra	SVUM6000		90°	Ø80~Ø315	Good rigidity and economical due to screw on simple type	●					E398	
		SVUM6000-B		90°	Ø80~Ø315	Easy to handle the run-out due to Korloy exclusive high toughness cutting-edge special parts	●					E399	
Indexable side cutter	Tangential type	Full-side cutter	TAFCP		-	Ø100~Ø315	Various cutting depth can be possible because of adjustable length control. Medium to Roughing based on strengthened edge		●	●			E375
			TAFCB		-	Ø100~Ø315		●	●	●		E375	
	Half-side cutter	TAHCP		-	Ø100~Ø315	●			●	●		E376	
		TAHCB		-	Ø100~Ø315	●		●	●		E376		

 Cutter for aluminum















Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page	
							Facing	Shouldering	Slotting	Copying	Ramping, Helical		
Indexable side cutter	Radial type	Full-side cutter	RAFCP		-	Ø100~Ø315	Wide range of machining width with only one side cutter due to adjustable cutting-edge height Suitable for medium and finishing in narrow width side cutting due to good chip evacuation by 3-dimensional chip breaker		●	●			E377
		RAFCB		-	Ø100~Ø315	●		●	●		E377		
	Half-side cutter	RAHCP		-	Ø100~Ø315			●	●		E378		
	RAHCB		-	Ø100~Ø315	●	●		●		E378			
Side cutterz	-	SPP(M)		-	Ø80~Ø200	Economical by using pentagonal insert Suitable for narrow & deep grooving			●			E379	
		SPB(M)		-	Ø80~Ø200	Economical by using pentagonal insert Suitable for narrow & deep grooving			●		E380		
		SPS		-	Ø50~Ø200	For narrow and deep width grooving			●		E381		
	Full-side cutter	RM4PFCB		-	Ø80~Ø160	4 corner usage with double-sided insert can be economical			●		E97 E98		
		RM4PFCP		-	Ø80~Ø160				●		E101 E102		
	Half-side cutter	RM4PHCB		-	Ø80~Ø160	4 corner usage with double-sided insert can be economical			●		E99 E100		
		RM4PHCP		-	Ø80~Ø160				●		E103 E104		
	Wind Mill	WFSB(M)		-	Ø100~Ø250	The nose R shape of insert ensures long tool life. Wide applications with various widths and corner R sizes.	●	●	●		E384		
		WFSP(M)		-	Ø100~Ø250				●	●	E385		









Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page
							Facing	Shouldering	Slotting	Copying	Ramping, Helical	
Cutters for face milling	Turbo Mill	ADS 4000/5000		45°	Ø50~Ø63	Uneven insert spacing prevents chattering	●					E56 E57
		PES 2000/3000/4000		90°	Ø20~Ø63	Good machinability due to the high rake angle	●	●	●			E58
Cutters for molds	Rich Mill	RM3PS3000 <small>new</small>		90°	Ø20~Ø40	Perfect perpendicularity Strong clamping	●	●	●			E92
		Ø32~Ø63							E93			
		RM4PS3000		90°	Ø14~Ø50	4 corners available High rake angle insert reduces cutting force Excellent insert rigidity	●	●	●		●	E105
		Ø32~Ø63			●		●	●	●	E106		
		RM4ZS3000		90°	Ø25~Ø40	In vertical machining, the maximum cutting width: 9.0 mm	●	●	●		●	E109
		RM6PS-WN04 <small>new</small>		90°	Ø20~Ø32	Improved productivity and high-quality shouldering through high speed and high feed machining	●	●	●		●	E112
	RM6PS-WN08 <small>new</small>	Ø32~Ø50							E113			
	Alpha Mill-X		90°	Ø32~Ø40	High rake angle cutting edge and chip breaker reduce cutting resistance and improve chip evacuation. High rigidity due to special design	●	●	●	●	●	E146	
	Alpha Mill	AMS 1000S/1500S 2000S/3000S 3000S-K/4000S		90°	Ø10~Ø63		●	●	●	●	●	E165 ~E172
		AMS 1000SE/2000SE 3000SE		75°	Ø25~Ø63	The combination of a 3-dimensional curve design & high rake angle helps chip-evacuation effectively with a low cutting force Inner coolant system	●					E173 E174
		AMS 1000M/1500M 2000M/4000M		90°	Ø16~Ø50	The various range of inserts can provide the widened choice High depth and high feed can be available during operation	●	●	●	●	●	E175 ~E177
		AMS 1000MH/1500MH 2000MH/3000MH(-K)		90°	Ø14~Ø40		●	●	●	●	●	E178 E179



Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page	
							Facing	Shouldering	Slotting	Copying	Ramping, Helical		
Cutters for molds	Future Mill	FMAS3000		45°	Ø25~Ø63	For precision machining	●					E226	
		FMAS4000			Ø50~Ø63	Excellent chip evacuation						E227	
		FMPS3000		90°	Ø25~Ø63	4 corners available	●						E232
		FMPS4000			Ø40~Ø63	Strong cutting-edge with low cutting load							E233
		FMRS 1000/1500/2000 2500/3000/4000 5000/6000		-	Ø8~Ø63	2 touch clamping system, convenient insert change	●	●	●	●	●		E238 ~243
	Future Mill P-positive	FMRS ^{new} 2500/3000 4000/5000 6000		-	Ø17~Ø50	P-positive relief angle ensures high rigidity and high machinability in die steel and high-resistant alloy machining Flat clearance face of insert prevents interference and revolution while machining	●	●	●	●	●		E252 ~E255
	HFMD	HFMS-LN06 ^{new}		-	Ø16~Ø40	Double sided insert with 4 corners for small diameter machining For high feed and multi-functional machining Strong clamping system for stable machining	●	●	●	●	●		E264 E265
	HFM	HFMS ^{new} 1000		-	Ø8~Ø21	Apply helix cutting-edge on insert, low cutting load and reinforce toughness on corner Increased rigidity with double relief angle (11, 13), prevent interference with high feed To apply the negative axial rake angle when set up the holder, increased chipping resistance	●	●	●	●	●		E273 E274
	HRM	HRMS 08/10/13/15		15°	Ø20~Ø63	Powerful clamping by double clamping system 3 corners available High feed cutting with low cutting load	●	●	●	●	●		E294 ~E296
	HRMD	HRMS ^{new} 06 09/13		14°	Ø16~Ø63	6 corners available, High feed, multi-function, only one screw application	●	●	●	●	●		E284 ~E287
	Tangen-Pro	TP2PS-LN08 ^{new} TP2PS-LN14 ^{new} TP2PS-LN17 ^{new}		90°	Ø16~Ø25	High-quality results available even under harsh cutting conditions, thanks to the stable clamping force	●	●	●	●	●		E306
		Ø25~Ø50			E307								
		Ø32~Ø50			E308								
	Tank Mill	THE		90°	Ø25~Ø50	Right-hand helix angle employed for good chip evacuation. Special surface treatment prevents body breaking and improves rigidity. Strong cutting-edge	●	●					E299
	Laser Mill	LBE□□ LRE□□		-	Ø8~Ø32	Indexable ball endmill for precise mold. Rigid holder with simple design finishing MQL is available	●	●	●	●			E318 ~E322
LBE□□-C LRE□□-C			-	Ø8~Ø32	Indexable ball endmill for precise mold. Rigid holder with simple design finishing MQL is available Carbide shank	●	●	●				E318 ~E322	

Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page	
							Facing	Shouldering	Slotting	Copying	Ramping, Helical		
Cutters for molds	Mach Mill	BFE		-	Ø16~Ø32	Upgraded cutting performance with S type curve design V clamping application	●	●	●	●		E323	
		GBE		-	Ø16~Ø50	Helical design of edge can reduce the force during operation. Safe application to prevent rotation guarantee the increased tool life	●	●	●	●		E324	
		BRE		-	Ø20~Ø63	Flute type chip-pocket can make chip-evacuation Customized edge design can prevent the breakage of holder's body	●	●	●	●		E327	
	HAVE	Multi-edge		90°	Ø16~Ø50	Tools for Z-axis feed plunge machining to cut faster and more effectively in vertical machining Machining with whole diameter	●	●	●	●		E331	
		Single-edge										E332	
	O-ring Cutter	ORC		90°	Ø11~Ø46	For grooving the seat of an O-Ring in a plastic mold Superior surface roughness and cutting performance compared to HSS and brazed tool	-	-	-	-	-	E334	
	Chamfer Tool	CE		75°	Ø25~Ø30	For Back & Front high quality chamfering and various Chamfering angle machining	●						E338
				60°	Ø25~Ø35								
				45°	Ø7~Ø39								
				30°	Ø25~Ø42								
		CE		30°	Ø5~Ø35	Various chamfer degrees available Effective long chamfer cutting available	●	●	●				E339
				45°	Ø5~Ø48								
				60°	Ø5~Ø57								
	CCT		45°	~Ø28	Centering, Grooving, Chamfering	●	●	●		●	E340		
	CCT		30°	Ø3~Ø16	Centering, Countersinking, Chamfering							E342	
45°													
60°													
CET		30°	Ø4~Ø16	Countersinking, Chamfering, Shouldering	●	●	●		●		E341		
		45°											
		60°											
T-Cutter	TFE		90°	Ø21~Ø50	For slotting	●	●	●	●	●	E343		




Type	Cutter	Designation	Shape	A.A	Diameter range	Features	Application					Page
							Facing	Shouldering	Slotting	Copying	Ramping, Helical	
Cutters for aluminum	Pro-A Mill	PAS 2000/4000		90°	Ø12~Ø42 Ø32~Ø40	Polished face increases chip flow and reduces built-up edge	●	●	●	●	●	E355
	Pro-X Mill	PAXS 5000/6000		90°	Ø20~Ø40 Ø25~Ø40	Square shoulder and corner machining	●	●	●	●	●	E359 E360
	Pro-L Mill	PALS-HR (Single-edge)		90°	Ø32~Ø63	High helix and high depth of cut High perpendicularity Low cutting load	●	●	●	●	●	E364 E365
		PALS-HM (Multi-edge)			Ø63		●	●	●	●	●	E366
	Pro-XL Mill	PXLS ^{new}		90°	Ø40~Ø80	Improved surface finish and perpendicularity achieved by a single pass with the deep cutting-edges	●	●				E367
	Pro-V Mill	PAVS-XD19 ^{new}		90°	Ø25~Ø40	Exclusive milling tool for high speed aluminum machining with key to key way structure ensures stable machining.	●	●	●	●	●	E369
		HSK-XD19 ^{new}			Ø32~Ø50		●	●	●	●	●	E370
Thread milling	-	TM		-	Ø32~Ø50	For internal and external threading	●				D49	

E KORLOY Modular Adaptors


FMRM type
 → E244~247
 E256~259




LBE-MHD type
 → E322




PAM type
 → E356



PAXM type
 → E361



AMM type
 → E180~182



RM3PM type
 → E94



RM4PM type
 → E107




Steel Shank type
 → E371



Carbide Shank type
 → E372



BT Arbors type
 → E205

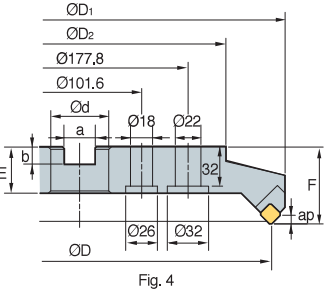
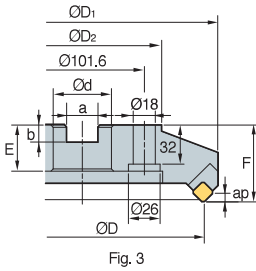
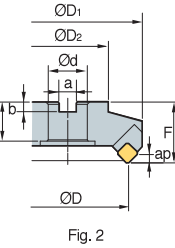
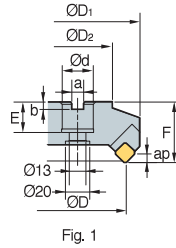


HSK Arbors type
 → E206



<p>RM4ZM type  E109</p>			<p>Steel Shank type  E371</p>
<p>RM6PM type  E114</p>	 new		<p>Carbide Shank type  E372</p>
<p>HFMDM type  E267</p>	 new		<p>BT Arbors type  E205</p>
<p>HFMM type  E275</p>			<p>HSK Arbors type  E206</p>
<p>HRMM type  E297, 298</p>			
<p>HRMDM type  E289~291</p>	 new		
<p>GBEM type  E326</p>			

ADN(M)4000



Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
ADN 4080R/L	80	57	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	6	1.9	1
(ADNM) 4100R/L	100	67	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	6	2.5	2
4125R/L	125	87	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	6	4.3	2
4160R/L	160	107	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	6	6.4	2
4200R/L	200	130	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	8.7	3
4250R/L	250	180	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	14.0	3
4315R/L	315	240	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	21.0	4

() Metric size

Available inserts

	SDCN	SDKN-MU	SDKN-SU	SDKR-MX		
Designation	Cermet	Coated			Uncoated	page
	CN2000 CN30	NCM6325 NCM635	NC5330 NCM635 NCM645	PC3600 PC3700 PC6510 PC9530 PC9540 PC5300 PC5400	ST30A G10 H01	
SDCN 42M					•	
42M-G						•
42MT	•	•				•
42MT-RH						
42MT-S20				•		E17
1203AEEN						
1203AEEN-RH						
1203AESN						
1203AESN-RH						
SDKN 1203AESN-MU			•			E18
1203AESN-SU			•	•	•	
SDKR 1203AESN-MX						E18
1203AETN-MX						
1203AEN-MX		•				

Available arbors

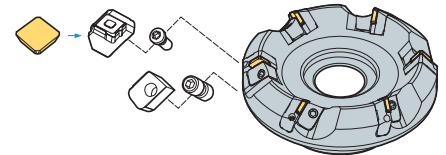
Designation	General arbor	NC arbors	
		ADN	ADNM
ADN 4080R/L	NT*□□(MU)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
(ADNM) 4100R/L	NT*□□(MU)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
4125R/L	NT*□□(MU)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
4160R/L	NT*□□(MU)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
4200R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4250R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



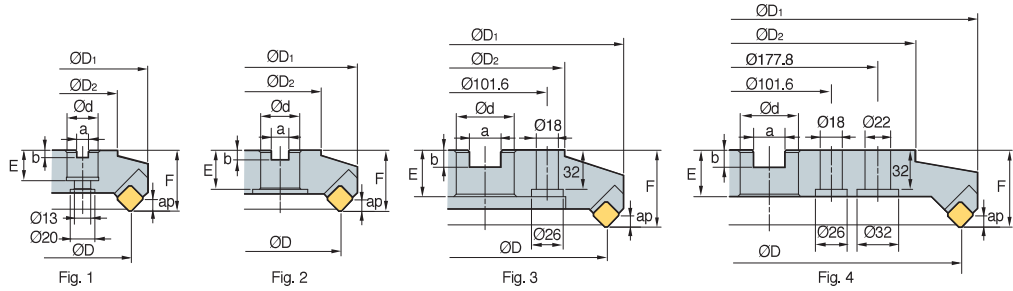
Parts

Specification					
Ø80~Ø315	LADN4R/L	WEPN4R/L	DHA0821F	LTX0514	HW40

Available inserts E17, E18 Available arbors and bolt E400~E402



ADN(M)5000+



Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.	
ADN 5080R/L ⁺	4	80	107	65	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	63	8	2.4	1
(ADNM) 5100R/L ⁺	5	100	126	75	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	63	8	3.0	2
5125R/L ⁺	6	125	150	100	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	8	4.7	2
5160R/L ⁺	8	160	185	120	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	8	6.5	2
5200R/L ⁺	10	200	225	140	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	8.7	3
5250R/L ⁺	12	250	275	220	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	15.5	3
5315R/L ⁺	14	315	340	280	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	23.7	4

() Metric size

Available inserts

	SDCN	SDKN-MU	SDKN-SU	SDKR-MX	
Designation	Cermet		Coated		page
	CN2000 CN30	NCM325 NCM385 NC5330 NCM535 NCM545	PC3600 PC6510 PC9530 PC9540 PC5300 PC5400	ST30A G10 H01	
SDCN 53M					E17
53M-G					
53MT	●	●			
53MT-RH					
53MT-S20			●		
1504AEEN					
1504AEEN-RH			●	●	
1504AESN					
1504AESN-RH			●		
SDKN 1504AESN-MU			●		E18
1504AESN-SU			● ●	● ●	
SDKR 1504AESN-MX		●			E18
1504AETN-MX					
1504AEN-MX		●			

Available arbors

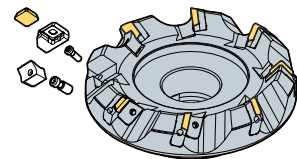
Designation	General arbor	NC arbors	
		ADN	ADNM
ADN 5080R/L ⁺	NT*□□ (MU)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC37
(ADNM) 5100R/L ⁺	NT*□□ (MU)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC22
5125R/L ⁺	NT*□□ (MU)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
5160R/L ⁺	NT*□□ (MU)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
5200R/L ⁺	NT*□□ (MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5250R/L ⁺	NT*□□ (MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5315R/L ⁺	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



Parts

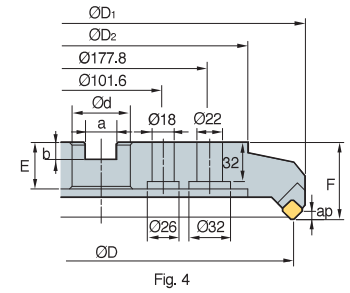
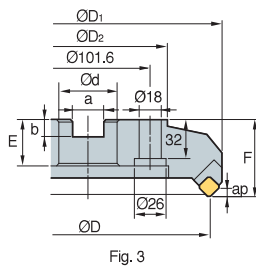
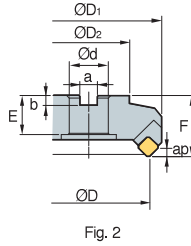
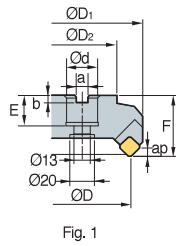
Specification					
Ø80~Ø315	LADN5R/L	WHPS5R/L	WHX0817 WHX0813*	LTX0514	HW40

Available inserts E17, E18

Available arbors and bolt E400~E402

*: Ø80

AE(M)4000

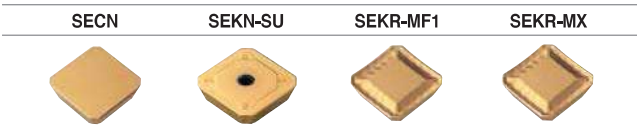


AA 45°
 • AR: 20°
 • RR: -3°

Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
AE (AEM) 4080R/L	80	103	60	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	5.5	1.7	1
4100R/L	100	122	80	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	5.5	2.9	2
4125R/L	125	146	100	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	5.5	4.4	2
4160R/L	160	181	120	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	5.5	6.1	2
4200R/L	200	220	130	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	5.5	8.9	3
4250R/L	250	270	180	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	5.5	15.7	3
4315R/L	315	335	240	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	5.5	25.1	4

() Metric size

Available inserts



Designation	Cermet		Coated							Uncoated			page		
	CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530	PC5400		ST30A	G10
SECN 1203AFFN															
1203AFTN	●	●											●		
1203AFEN															
1203AFSN			●	●											E19
1203AFEN-RH									●		●				
1203AFSN-RH															
1203AFTN-S20										●					
SEKN 1203AFSN-SU									●	●					E19
SEKR 1203AFSN-MX			●	●						●					E20

Available arbors

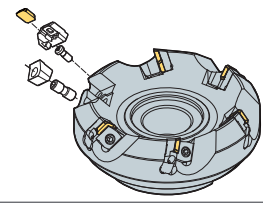
Designation	General arbor	NC arbors	
		ADN	ADNM
AE (AEM) 4080R/L	NT*□□(MU)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
4100R/L	NT*□□(MU)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
4125R/L	NT*□□(MU)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
4160R/L	NT*□□(MU)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
4200R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4250R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



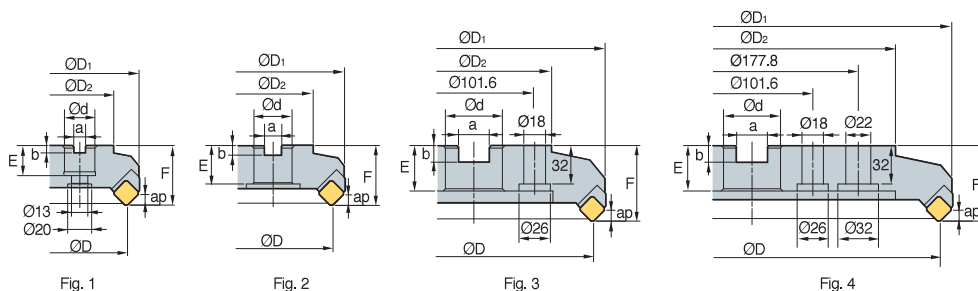
Parts

Specification	Locator	Wedge	Wedge screw	Locator screw	Wrench
Ø80~Ø315	LAE4R/L	WAE4R/L	DHA0821F	LTX0512	HW40

Available inserts E19, E20 Available arbors and bolt E400~E402



AE(M)5000



AA **45°** • AR: 20°
• RR: -3°

(mm)

Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
AE 5080R/L	80	103	60	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	7.5	1.7	1
(AEM) 5100R/L	100	122	80	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	7.5	2.9	2
5125R/L	125	146	100	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	7.5	4.4	2
5160R/L	160	181	120	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	7.5	6.1	2
5200R/L	200	220	130	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	7.5	8.9	3
5250R/L	250	270	180	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	7.5	15.7	3
5315R/L	315	335	240	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	7.5	25.1	4

() Metric size

Available inserts

	SECN	SEKR-MX	SEKN-SU	
Designation	Cement			page
	CN2000	CN30	Coated	
			NCM325	
			NCM335	
			NC5330	
			NCM535	
			NCM545	
			PC3700	
			PC3600	
			PC6510	
			PC9530	
			PC9540	
			PC5300	
			PC5400	
			Uncoated	
			ST30A	
			G10	
			H01	
SECN 1504AFFN				
1504AFTN	●			
1504AFEN				
1504AFSN				E19
1504AFEN-RH				
1504AFSN-RH			●	
1504AFTN-S20				
SEKN 1504AFSN-SU			●	
1504AFSN-MX	●		●	E19

Available arbors

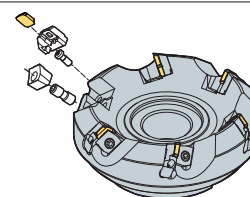
Designation	General arbor	NC arbors	
		AE	AEM
AE 5080R/L	NT*□□ (M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
(AEM) 5100R/L	NT*□□ (M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
5125R/L	NT*□□ (M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
5160R/L	NT*□□ (M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
5200R/L	NT*□□ (M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5250R/L	NT*□□ (M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling

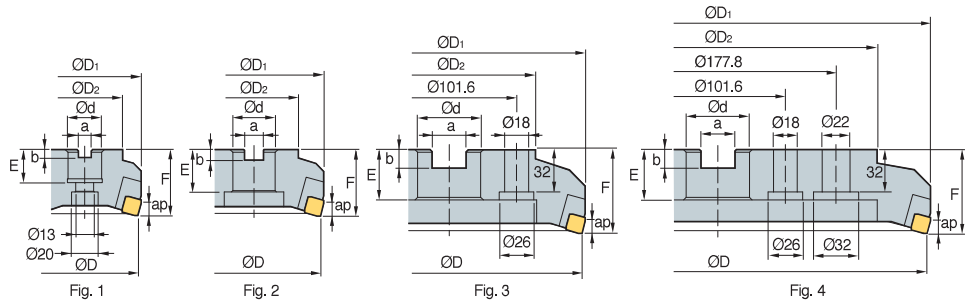


Parts

Specification					
Ø80-Ø315	LAE5R/L	WAE5R/L	DHA0821F	LTX0512	HW40

Available inserts **E19** Available arbors and bolt **E400~E402**

EF(M)4000

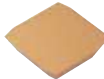


Designation	⊙	ØD	ØD ₁	ØD ₂	Ød	a	b	E	F	ap		Fig.
EF												
(EFM)												
4080R/L	4	80	89	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	8.0	1.5	1
4100R/L	5	100	108	70	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	8.0	2.1	2
4125R/L	6	125	133	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	8.0	3.8	2
4160R/L	8	160	168	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	8.0	5.5	2
4200R/L	10	200	208	130	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	8.0	8.2	3
4250R/L	12	250	257	180	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	8.0	13.4	3
4315R/L	16	315	322	240	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	8.0	21.2	4

() Metric size

Available inserts

SFCN



Designation	Cermet		Coated							Uncoated		page	
	CN2000	CN30	NCM325	NCM535	NCM545	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540		PC5300
SFCN 1203EFR													● E20

Available arbors

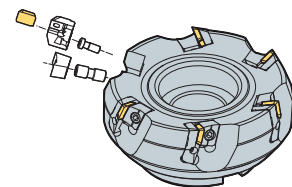
Designation	General arbor	NC arbors	
		EF	EFM
EF			
(EFM)			
4080R/L	NT*□□ (MU)-FMA25.4-25-□□	BT**□□ -FMA25.4-□□	FMC27
4100R/L	NT*□□ (MU)-FMA31.75-□□	BT**□□ -FMA31.75-□□	FMC32
4125R/L	NT*□□ (MU)-FMA38.1-□□	BT**□□ -FMA38.1-□□	FMB40
4160R/L	NT*□□ (MU)-FMA50.8-□□	BT**□□ -FMA50.8-□□	FMB40
4200R/L	NT*□□ (MU)-FMA47.625-25, KCP-8***	BT**□□ -FMA47.625-□□	FMB60
4250R/L	NT*□□ (MU)-FMA47.625-25, KCP-8***	BT**□□ -FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
K	75~125	0.05~0.30	H01

Assembling



Parts

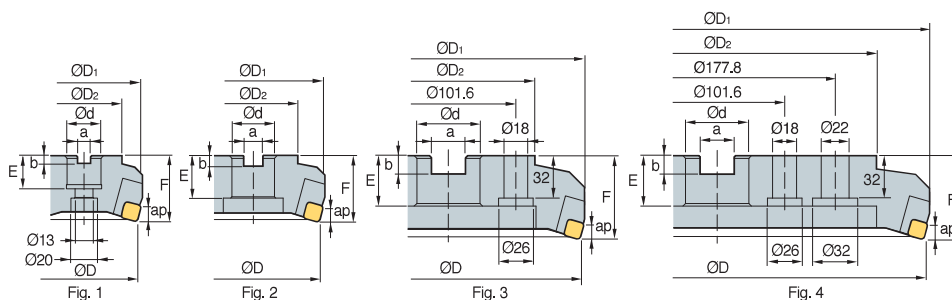
Specification					
Ø80~Ø315	LEF4R/L LEF4R1*/L1*	WEFR/L	DHA0821F	LTX0512	HW40

*: Ø80~Ø100

Available inserts **E20** Available arbors and bolt **E400~E402**



EN(M)4000



AA
75°
• AR: -6°
• RR: -5°

(mm)

Designation		ØD	ØD1	ØD2	Ød	a	b	E	F	ap		Fig.
EN												
(ENM)												
4080R/L	5	80	87	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	8.5	1.4	1
4100R/L	6	100	107	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	8.5	2.1	2
4125R/L	8	125	132	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	8.5	3.8	2
4160R/L	10	160	167	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	8.5	5.7	2
4200R/L	12	200	207	130	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	8.5	8.4	3
4250R/L	16	250	257	180	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	8.5	13.8	3
4315R/L	20	315	322	240	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	8.5	21.6	4

() Metric size

Available inserts

	SNCN	SNKN		
Designation	Cermet	Coated	Uncoated	page
	CN2000 CN30	NCM325 NCM535 NCM545 PC2010 PC3600 PC3700 PC6510 PC9530 PC9540 PC5300 PC5400	ST30A G10 H01	
SNCN 1204ENN		●	●	E21
SNKN 1204ENN			●	E23

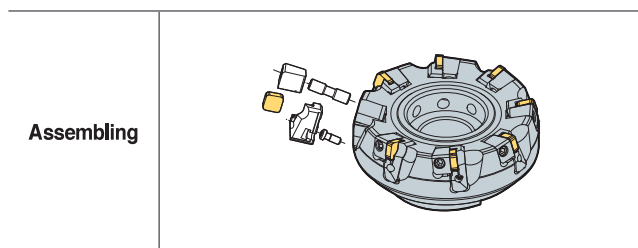
Available arbors

Designation	General arbor	NC arbors	
		EN	ENM
EF			
(EFM)			
4080R/L	NT*□□ (MU)-FMA25.4-25-□□	BT**□□-FMA25.4-□□	FMC27
4100R/L	NT*□□ (MU)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
4125R/L	NT*□□ (MU)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
4160R/L	NT*□□ (MU)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
4200R/L	NT*□□ (MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4250R/L	NT*□□ (MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	



Parts

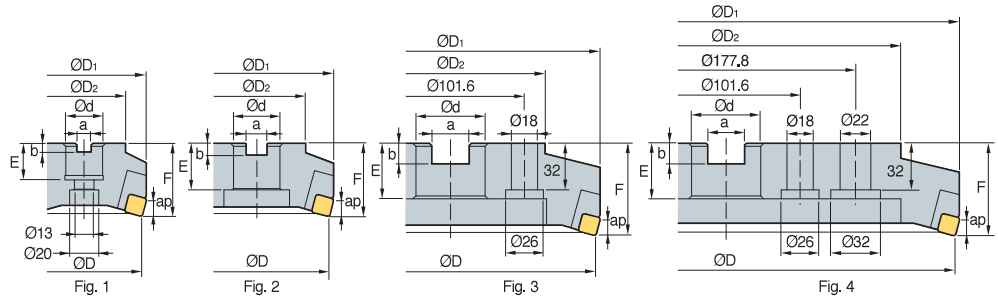
Specification					
Ø80~Ø315	LEN4R/L	WENR/L WENR1*/L1*	DHA0830 DHA0825*	LTX0512	HW40

Available inserts E21, E23

Available arbors and bolt E400~E402

*: Ø80~Ø100

EPN(M)4000



Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
EPN 4080R/L	80	86	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	9	1.4	1
(EPNM) 4100R/L	100	107	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	9	2.1	2
4125R/L	125	132	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	9	3.8	2
4160R/L	160	166	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	9	5.7	2
4200R/L	200	206	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	9	8.2	3
4250R/L	250	256	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	9	13.5	3
4315R/L	315	321	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	9	21.1	4

Available inserts



Designation	Cermet		Coated							Uncoated		page				
	CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530		PC5300	PC5400	ST30A	G10
SPCN 1203EDR	●	●	●	●										●	●	●
1203EDL														●		
1203EDR-G																●
1203EDER-RH										●						
1203EDSR-RH										●						
1203EDTR-RH																
1203EDR-S20											●					
SPKN 1203EDSR-MU										●						
1203EDSR-SU										●	●					
1203EDSL-SU										●						
SPKR 1203EDSR-MX			●	●												
1203EDSL-MX																
SPEX 1203EDR/L-1																

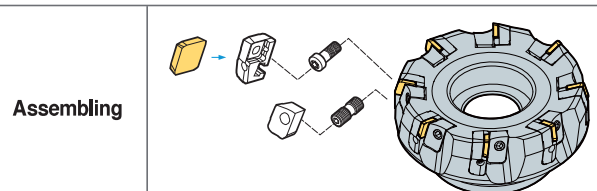
Available arbors

Designation	General arbor	NC arbors	
		EPN	EPNM
EPN 4080R/L	NT*□□(M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
(EPNM) 4100R/L	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
4125R/L	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
4160R/L	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
4200R/L	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4250R/L	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	



Parts

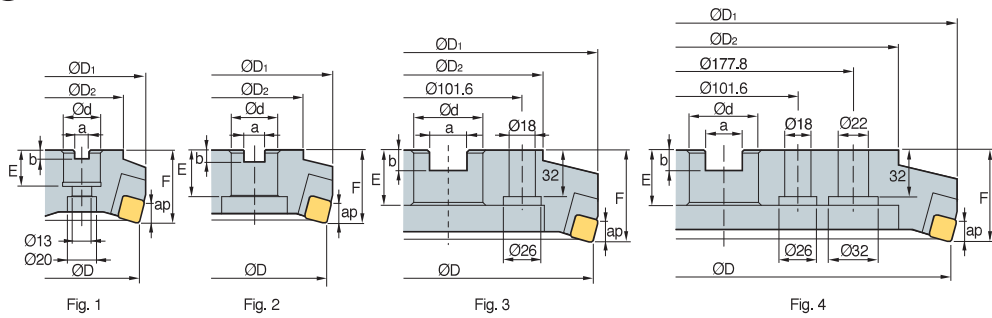
Specification	Locator	Wedge	Wedge screw	Locator screw	Wrench
Ø80~Ø315	LEPN4R/L LEPN4R1*/L1*	WEPN4R/L	DHA0821F DHA0817F*	LTX0514	HW40

*: Ø80~Ø100

Available inserts E24, E25 Available arbors and bolt E400~E402



EPN(M)5000+



Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
EPN 5080R/L ⁺	80	91	60	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	63	12	1.7	1
(EPNM) 5100R/L ⁺	100	110	70	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	63	12	2.5	1
5125R/L ⁺	125	134	90	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	12	3.8	2
5160R/L ⁺	160	169	110	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	12	5.5	2
5200R/L ⁺	200	209	150	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	12	8.0	3
5250R/L ⁺	250	259	230	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	12	14.8	3
5315R/L ⁺	315	324	270	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	12	22.4	4

(mm)

()Metric size

Available inserts



Designation	Cermet		Coated							Uncoated		page				
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2010	PC3600	PC3700	PC9530	PC9540		PC5400	ST30A	G10	H01
SPCN 150412T																
1504EDR	●	●											●	●		
1504EDSR																
1504EDL									●							
1504EDR-G															●	E24
1504EDER-RH									●	●						
1504EDSR-RH									●							
1504EDTR-RH																
1504EDR-S20										●						
SPKN 1504EDSR-MU									●							
1504EDSR-SU									●	●						E25
1504EDSL-SU									●							
SPKR 1504EDR-MX			●													E25
1504EDSR-MX																E25
SPEX 1504EDR/L-1																E24

Available arbors

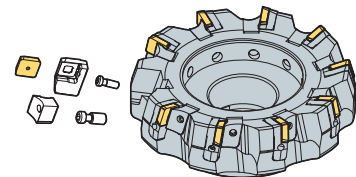
Designation	General arbor	NC arbors	
		EPN	EPNM
EPN 5080R/L ⁺	NT*□□(M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
(EPNM) 5100R/L ⁺	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
5125R/L ⁺	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
5160R/L ⁺	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
5200R/L ⁺	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5250R/L ⁺	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5315R/L ⁺	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



Parts

Specification	Locator	Wedge	Wedge screw	Locator screw	Wrench
Ø80~Ø315	LEPN5R/L LEPN5R1*/L1*	WHPS5R/L	WHX0817 WHX0813*	LTX0514	HW40

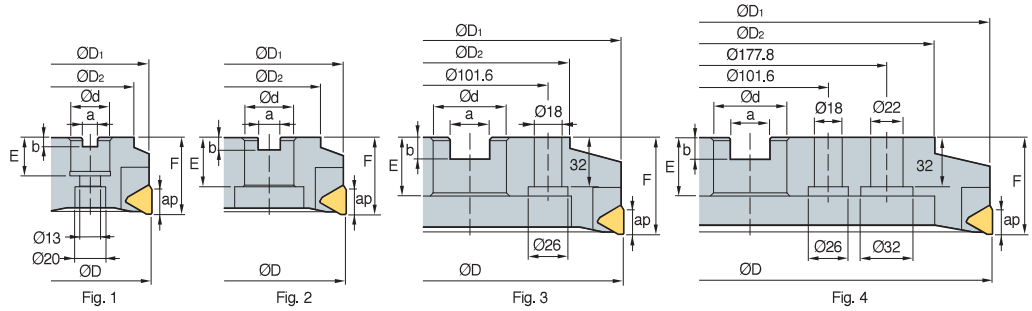
Available inserts E24, E25

Available arbors and bolt E400~E402

*: Ø80



PF(M)4000



Designation	ØD	ØD ₁	ØD ₂	Ød	a	b	E	F	ap	kg	Fig.
PF											
(PFM)											
4080R/L	80	79	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	16	1.2	1
4100R/L	100	97	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	16	1.8	2
4125R/L	125	122	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	16	3.1	2
4160R/L	160	158	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	16	5.6	2
4200R/L	200	197	130	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	16	8.8	3
4250R/L	250	247	180	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	16	16	3
4315R/L	315	311	240	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	16	22	4

() Metric size

Available inserts

TFCN

Designation	Coated										Uncoated			page			
	CN2000	CN30	NCM325	NCM330	NCM635	NCM645	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	ST30A	G10
TFCN 2203PFR																	
2203PFL																	E26

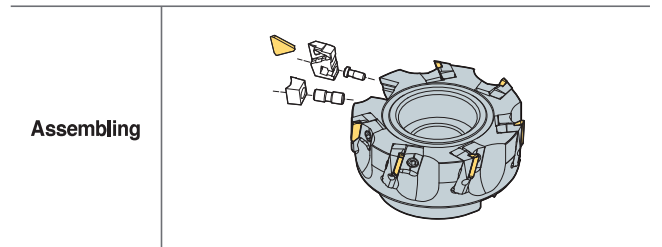
Available arbors

Designation	General arbor	NC arbors	
		PF	PFM
PF			
(PFM)			
4080R/L	NT*□□ (M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
4100R/L	NT*□□ (M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
4125R/L	NT*□□ (M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
4160R/L	NT*□□ (M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
4200R/L	NT*□□ (M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4250R/L	NT*□□ (M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530 PC6510 G10
K	140~230	0.05~0.30	
	50~90	0.05~0.30	



Parts

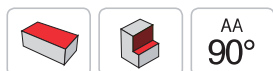
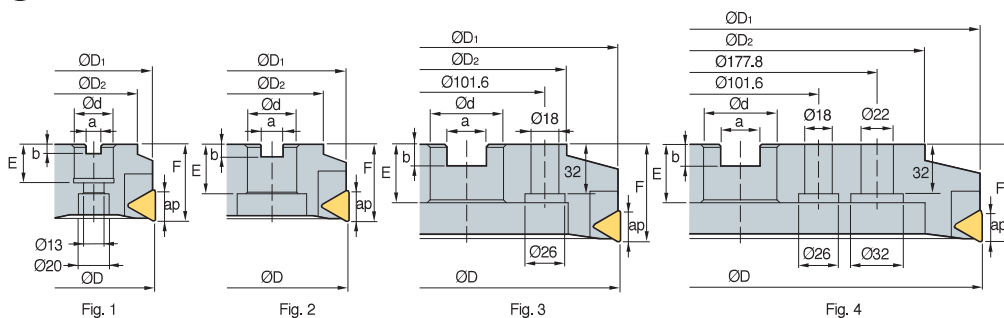
Specification	Locator	Wedge	Wedge screw	Locator screw	Wrench
Ø80~Ø315	LPF4R/L LPF4R1**/L1**	WPFR/L	DHA0821F DHA0817F*	LTX0512	HW40

*: Ø80~Ø100/ **: Ø80~Ø125

Available inserts **E26** Available arbors and bolt **E400~E402**



PPN(M)4000



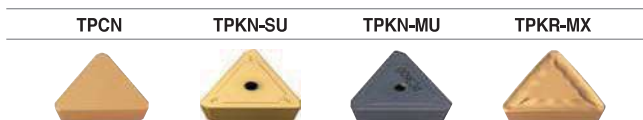
• AR: 7°
• RR: 0°

(mm)

Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
PPN											
(PPNM)											
4080R/L	80	79	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	18	1.3	1
4100R/L	100	99	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	18	1.9	2
4125R/L	125	124	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	18	3.5	2
4160R/L	160	158	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	18	5.6	2
4200R/L	200	198	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	18	8.1	3
4250R/L	250	248	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	18	13.3	3
4315R/L	315	313	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	18	21.4	4

() Metric size

Available inserts



Designation	Cermet		Coated							Uncoated		page					
	CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530		PC9540	PC5300	PC5400	ST30A	G10
TPCN																	
2204PDR	●	●													●	●	
2204PDR-G																	●
2204PDL																	●
2204PDSR			●														
2204PDTR																	E26
2204PDR-RH																	
2204PDER-RH										●		●					
2204PDSR-RH										●							
2204PDR-S20											●						
TPKN																	
2204PDSR-MU										●							
2204PDSR-SU										●	●			●	●		E27
2204PDSL-SU										●							
TPKR																	
2204PDR-MX			●														
2204PDSR-MX			●	●													E27
2204PPR-MX																	

Available arbors

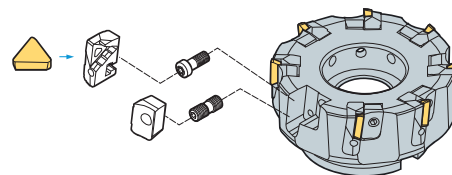
Designation	General arbor	NC arbors	
		PPN	PPNM
PPN			
(PPNM)			
4080R/L	NT*□□(MU)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
4100R/L	NT*□□(MU)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
4125R/L	NT*□□(MU)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
4160R/L	NT*□□(MU)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
4200R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4250R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
4315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



Parts

Specification	Locator	Wedge	Wedge screw	Locator screw	Wrench
Ø80~Ø315	LPPN4R/L LPPN4R1*/L1*	WPPN4R/L	DHA0821F DHA0817F*	LTX0514	HW40

Available inserts E26, E27

Available arbors and bolt E400~E402

*: Ø80~Ø100

Highly rigid inserts for roughing

Mill-max Heavy new

- Productivity - Cutting time is reduced by the cutting-edge design specialized for rough facing at high depth of cuts
- High rigidity - The highly rigid inserts and cutter seams prevent tool breakage in rough facing
- Clamping stability- The wedge-type clamping system, which is easy-to-use and strong, reduces time for replacing inserts, and improves clamping stability

Features of insert

- **Highly rigid inserts**
 - Ideally suited for roughing at high depth of cuts
- **Wide chip pocket area**
 - Improved chip evacuation
 - Reduced cutting loads
- **Minor cutting-edge**
 - Improved surface finish thanks to the wiper function

MAX. ap
 SCKN22: 10.5 mm
 SCKN28: 14.5 mm

- **Major cutting-edge**
 - High rake angle
- **2-level flank relief surface**
 - Relief angle availability even at high feed rates

Features of chip breakers

Insert	Cutting-edge	Uses	Features
MM		For roughing	Highly rigid chip breaker ideally suited for roughing at high depth of cuts

Features of cutter

- **Cutter seams**
 - Prevent cutter breakage even under harsh cutting conditions
- **Wide chip pockets**
 - Improve chip evacuation

- **Wedge-type clamping system**
 - Provides clamping stability
 - Reduces time for replacing inserts

Recommended cutting condition

Workpiece	Grades	Cutting conditions			
		vc (m/min)	fz (mm/t)	ap (mm)	
P Low carbon steel/Mild steel	PC5300, NC5340	140~270	0.2~0.4	2.0~10.0 [SCKN22], 3.0~14.0 [SCKN28]	
	High carbon steel	PC5300, NC5340	100~220	0.2~0.4	2.0~10.0 [SCKN22], 3.0~14.0 [SCKN28]
	Alloy steel	PC5300, NC5340	100~180	0.2~0.4	2.0~10.0 [SCKN22], 3.0~14.0 [SCKN28]
M Stainless steel	PC5300, NC5340	90~180	0.2~0.4	2.0~10.0 [SCKN22], 3.0~14.0 [SCKN28]	
K Cast iron	PC5300, NC5340	100~180	0.2~0.4	2.0~10.0 [SCKN22], 3.0~14.0 [SCKN28]	



HDDCM 7000/9000 new

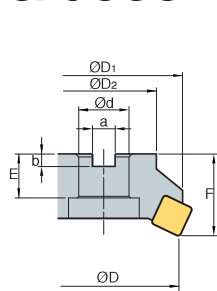
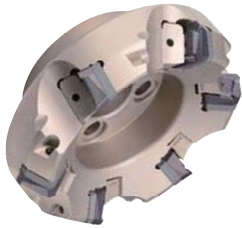


Fig. 1

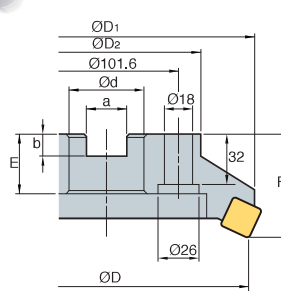


Fig. 2

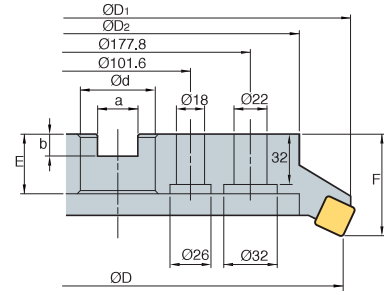


Fig. 3



AA
55°
• AR: 15°
• RR: 5°

(mm)

Designation		ØD	ØD1	ØD2	Ød	a	b	E	F	ap		Fig.	
HDDCM	7125R/L-5	5	125	135.6	90	40	16.4	9	32	63	10.5	3.43	1
	7160R/L-6	6	160	169.8	110	40	16.4	9	32	63	10.5	4.89	2
	7160R/L-8	8	160	169.8	110	40	16.4	9	32	63	10.5	4.62	2
	7200R/L-8	8	200	209.2	130	60	25.7	14	38	80	10.5	8.49	2
	7200R/L-10	10	200	209.2	130	60	25.7	14	38	80	10.5	8.74	2
	7250R/L-10	12	250	258.6	180	60	25.7	14	38	80	10.5	13.44	2
	7250R/L-12	10	250	258.6	180	60	25.7	14	38	80	10.5	13.41	2
	7315R/L-12	12	315	323.2	240	60	25.7	14	38	80	10.5	21.69	3
	7315R/L-14	14	315	323.2	240	60	25.7	14	38	80	10.5	21.41	3
HDDCM	9125R/L-5	5	125	140.4	90	40	16.4	9	32	63	14.5	3.4	1
	9160R/L-6	6	160	177.6	110	40	16.4	9	32	80	14.5	6.39	2
	9200R/L-8	8	200	213.6	130	60	25.7	14	38	80	14.5	8.76	2
	9250R/L-10	10	250	265	180	60	25.7	14	38	80	14.5	13.84	2
	9250R/L-12	12	250	265	180	60	25.7	14	38	80	14.5	13.41	2
	9315R/L-12	12	315	327.4	240	60	25.7	14	38	80	14.5	21.02	3

Available inserts

SCKN-MM



Type	Designation	Coated							Uncoated	page
		Cermet	Coated							
7000 type	SCKN 220715DDSR-MM	CN2000 CN30	NCM225 NC5330	NCM535 NCM645	PC2010 PC3600	PC3700 PC6510	PC9530 PC9540	PC5300 PC5400	ST30A G10 H01	E17
9000 type	SCKN 280920DDSR-MM									

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	140~270 100~220 100~180	0.2~0.4	PC5300 NC5340
M	90~180		
K	100~180		

Available arbors

Designation	General arbor	
HDDCM		
7125R-5	NT*□□(M/U)-FMC40	
7160R-6		
7160R-8		
7200R-8	NT*□□(M/U)-FMC60	
7200R-10		
7250R-10		
7250R-12		
7315R-12		
7315R-14	NT*□□(M/U)-FMC40	
9125R-5		
9160R-6		
9200R-8		
9250R-10		NT*□□(M/U)-FMC60
9250R-12		
9315R-12		

*□□-NT number **□□-BT number ***Over milling 5

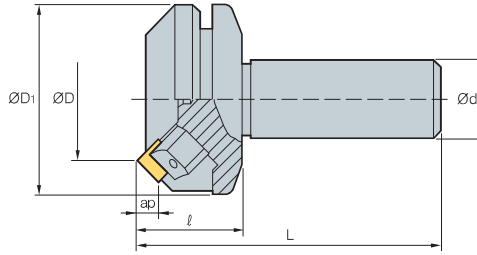
Parts

Specification					
Ø125~Ø315 (7000 type)	WHD7R/L	WHX0817	SS64DPR	FTGA0614	HW40
Ø125~Ø315 (9000 type)	WHD9R/L	WHX0817	SS84DPR	FTGA0818	HW40

Available inserts **E17** Available arbors and bolt **E400~E402**



ADS4000



(mm)

Designation		ØD	ØD ₁	Ød	ℓ	L	ap	
ADS	4050R/L	3	50	75	32	40	6.5	1.8
	4050R/L-S42	3	50	75	42	40	6.5	2.2
	4063R/L	4	63	87	32	40	6.5	2.3
	4063R/L-S42	4	63	87	42	40	6.5	2.7

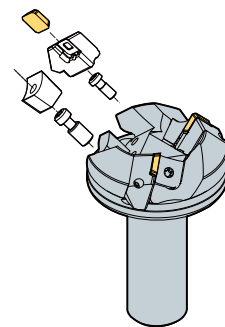
Available inserts

	SDCN	SDKN-MU	SDKN-SU	SDKR-MX		
Designation	Cermet	Coated			Uncoated	page
	CN2000 CN30	NCM325 NCM335	NC5330 NCM535 NCM545	PC3600 PC3700 PC6510 PC9530 PC9540 PC5300 PC5400	ST30A G10 H01	
SDCN 42M						●
42M-G						●
42MT	●●	●				●
42MT-RH						
42MT-S20				●		E17
1203AEEN						
1203AEEN-RH						
1203AESN						
1203AESN-RH						
SDKN 1203AESN-MU			●			●
1203AESN-SU			●●	●●		●●
SDKR 1203AESN-MX						
1203AETN-MX						●
1203AEN-MX		●				

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling

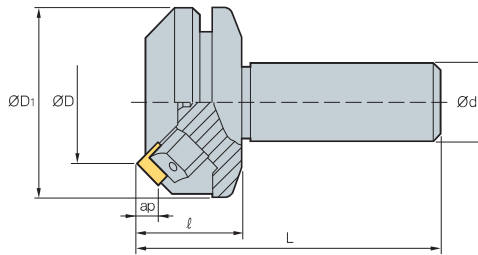


Parts

Specification					
Ø50-Ø63	LASS4R/L	WASR/L	WTX0817	LTX0512	TW25

Available inserts E17, E18

ADS5000



AA
45°
• AR: 15°
• RR: -3°

(mm)

Designation		ØD	ØD1	Ød	ℓ	L	ap		
ADS	5050R/L	3	50	75	32	40	120	8.5	1.9
	5050R/L-S42	3	50	75	42	40	120	8.5	2.3
	5063R/L	4	63	87	32	40	120	8.5	2.4
	5063R/L-S42	4	63	87	42	40	120	8.5	2.8

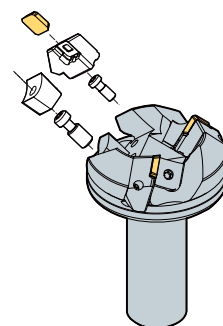
Available inserts

	SDCN	SDKN-MU	SDKN-SU	SDKR-MX			
Designation	Cermet	Coated				Uncoated	page
	CN2000 CN30	NCM325 NCM335 NC5330	NCM535 NCM545	PC3600 PC3700 PC6510 PC9530 PC9540 PC5300 PC5400	ST30A G10 H01		
SDCN 53M					●		
53M-G						●	
53MT	●	●					
53MT-RH							
53MT-S20				●		E17	
1504AEEN							
1504AEEN-RH				●	●		
1504AESN							
1504AESN-RH				●			
SDKN 1504AESN-MU			●			E18	
1504AESN-SU			●	●	●		
SDKR 1504AESN-MX		●					
1504AETN-MX						E18	
1504AEN-MX		●					

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3600 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



Parts

Specification					
Ø50~Ø63	LASS5R/L	WASR/L	WTX0817	LTX0512	TW25

Available inserts E17, E18

PES2000/3000/4000

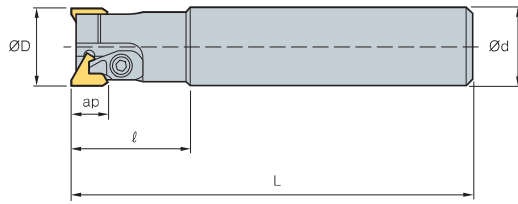


Fig. 1

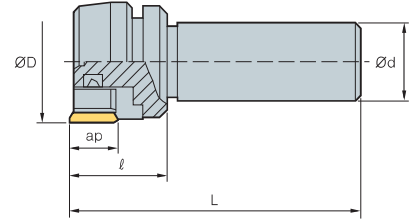


Fig. 2



(mm)

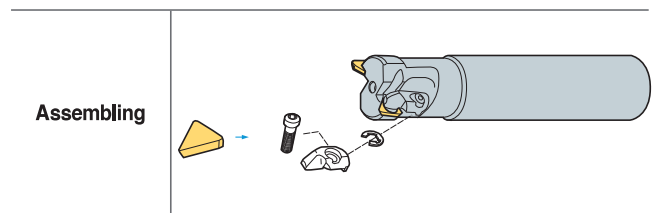
Designation		ØD	Ød	ℓ	L	ap		Fig.	
PES	2020R/L	2	20	20	30	110	0.3	1	
	2025R/L	2	25	25	35	120	0.5	1	
	3030R/L	2	30	32	45	160	0.9	1	
	3032R/L	2	32	32	45	160	1.0	1	
	3033R/L	2	33	32	45	160	1.1	1	
	3035R/L	2	35	32	45	160	1.2	1	
	3036R/L	2	36	32	45	160	1.3	1	
	3040R/L	2	40	32	45	160	1.4	1	
	4050R/L	3	50	32	40	120	16.5	1.2	2
	4050R/L-S42	3	50	42	40	120	16.5	1.5	2
	4063R/L	4	63	32	40	120	16.5	1.5	2
	4063R/L-S42	4	63	42	40	120	16.5	1.8	2

Available inserts

		TECN	TEEN																
Designation		Cermet		Coated								Uncoated		page					
		CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530	PC9540		PC5300	PC5400	ST30A	G10	H01
2000 type	TECN 22R																		
	22TR		●													●			E26
3000 type	TECN 32R																●		
	32TR		●		●											●			E26
	32TR-S20										●								
4000 type	TEEN 43R																●		
	43R-G																●		
	43TR		●	●	●					●						●			E26
	43TR-S20										●								
	43TR-Z															●			
	43TR-ZH										●								

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3500 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

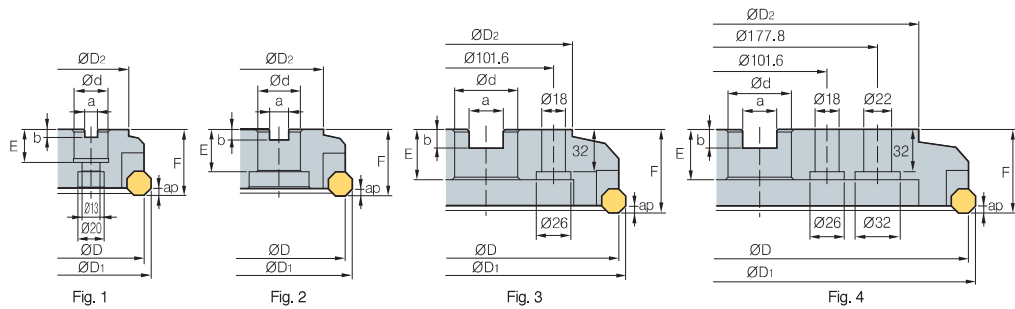


Parts

Specification								
Ø20~Ø25 (2000 type)	-	-	-	CHX0407	HW25L	-	CH4R1	ER03
Ø30~Ø40 (3000 type)	-	-	-	CHX0510	HW30L	-	CH5R1	ER04
Ø50~Ø63 (4000 type)	LPTS4R/L	WPTSR	DHA0815	LTX0512	-	HW40	-	-

Available inserts E26

AFO(M)4000



(mm)

Designation		ØD	ØD1	ØD2	Ød	a	b	E	F	ap		Fig.
AFO 4080R/L	5	80	88	60	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	3.3	1.4	1
(AFOM) 4100R/L	6	100	108	80	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	3.3	2.0	1
4125R/L	8	125	133	100	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	3.3	3.1	1

() Metric size

Available inserts

	OFCW	OFKT-MF	OFKT-MM	OFKT-MA					
Designation	Cermet	Coated						Uncoated	page
	CN2000 CN30	NCM325 NC5330	NCM535 NCM545	PC2010 PC3600 PC3700	PC6510 PC9530	PC9540 PC5300	PC5400	ST30A G10 H01	
OFCW 05T3SN									E13
05T3FN									
05T308FN									
OFKT 05T3SN-MF					●				E13
05T308SN-MF									
05T3SN-MM		●			●				
05T308SN-MM									E14
05T3FN-MA								●	
05T3EN-MA									

Available arbors

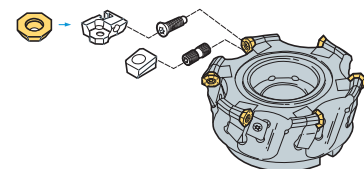
Designation	General arbor	NC arbors	
		AFO	AFOM
AFO 4080R/L	NT*□□ (MU)-FMA25.4-25	BT**□□ -FMA25.4-□□	FMC27
(AFOM) 4100R/L	NT*□□ (MU)-FMA31.75-□□	BT**□□ -FMA31.75-□□	FMC32
4125R/L	NT*□□ (MU)-FMA38.1-□□	BT**□□ -FMA38.1-□□	FMB40

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320	0.05~0.20	NCM325 PC3500 ST30A
	161~270	0.05~0.20	
	80~140	0.05~0.20	
M	90~150	0.05~0.20	PC9530
K	140~230	0.05~0.30	PC6510 G10
	50~90	0.05~0.30	

Assembling



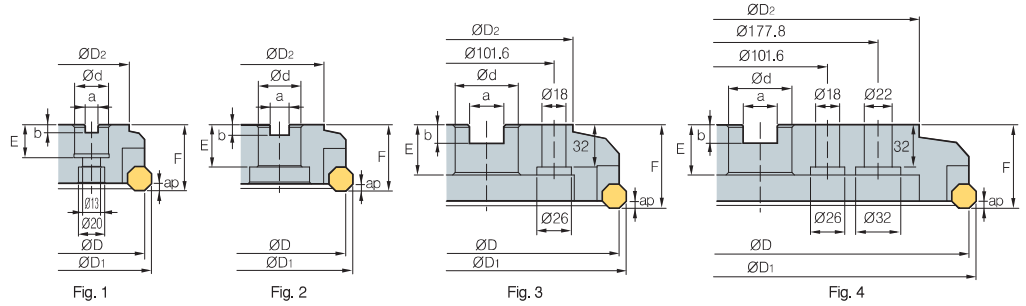
Parts

Specification					
Ø80~Ø125	LAF04R/L	WAF04R/L	DHA0815	FTKA0408	TW15S

Available inserts E13, E14

Available arbors and bolt E400~E402

AFO(M)5000



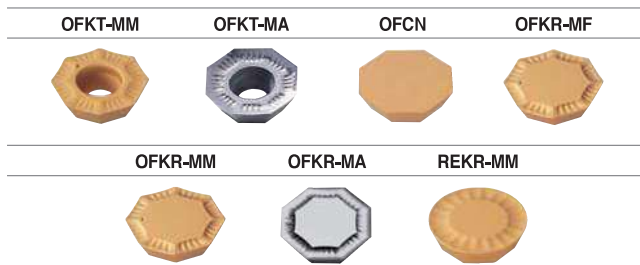
AA
45°
• AR: 15°
• RR: 5°

(mm)

Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.	
AFO 5080R/L	5	80	91	60	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	4.8	1.4	1
(AFOM) 5100R/L	6	100	111	80	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	4.8	2.0	2
5125R/L	8	125	136	100	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	4.8	3.1	2
5160R/L	10	160	171	120	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	4.8	5.2	2
5200R/L	12	200	211	130	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	4.8	7.5	3
5250R/L	16	250	261	180	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	4.8	16.1	3
5315R/L	20	315	326	240	47.625 (60)	25.4 (25.7)	13.5 (14)	38 (38)	63	4.8	22.8	4

() Metric size

Available inserts



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NCM335	NC5330	NCM535	NCM545	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
OFCN 0704SN										●								E13
0704FN																		
070408SN																		
070408FN																		
OFKR 0704SN-MF			●	●														E13
070408SN-MF																		
0704SN-MM			●	●				●	●		●							
070408SN-MM			●															
0704FN-MA																	●	E13
0704EN-MA																		
OFKT 0704SN-MM																		E13
0704FN-MA																	●	
0704EN-MA																		
REKR 170400-MM																		E16

Available arbors

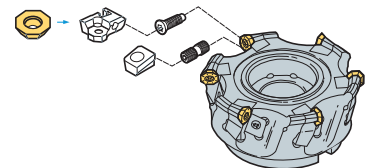
Designation	General arbor	NC arbors	
		AFO	AFOM
AFO 5080R/L	NT*□□(MU)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
(AFOM) 5100R/L	NT*□□(MU)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
5125R/L	NT*□□(MU)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
5160R/L	NT*□□(MU)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
5200R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5250R/L	NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
5315R/L	KCP-8*** (Center ring plug)		

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
P	190~320 161~270 80~140	0.05~0.20 0.05~0.20 0.05~0.20	NCM325 PC3500 ST30A
M	90~150	0.05~0.20	PC9530
K	140~230 50~90	0.05~0.30 0.05~0.30	PC6510 G10

Assembling



Parts

Specification	Locator	Wedge	Wedge screw	Locator screw	Wrench
Ø80~Ø315	LAF05R/L LAF05R*/L-1*	WEFR/L	DHA0821F	LTX0512	HW40

*: Ø80~Ø100

Available inserts E13, E16 Available arbors and bolt E400~E402

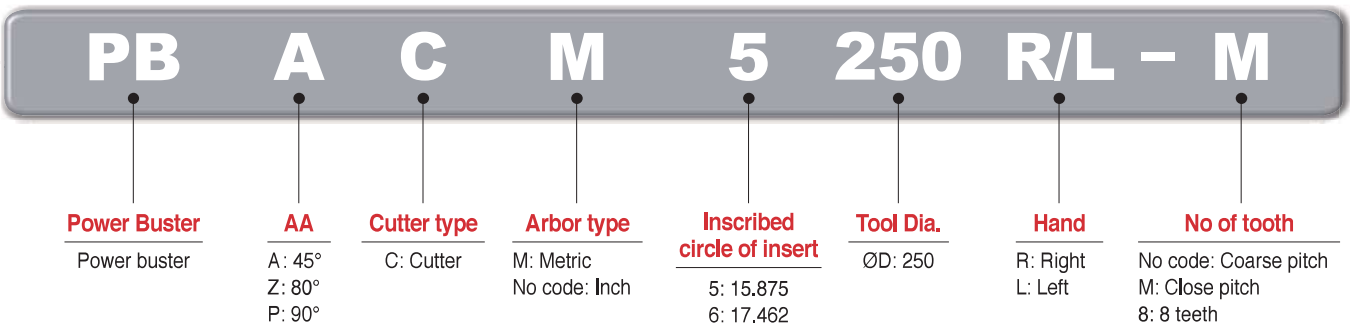


New serrated edge design increases productivity by reducing insert cutting load

Power Buster

- New tooling utilizing a specially designed serrated edge to increase productivity by reducing the cutting load.
- Double-sided 6 corner insert geometry ensures high rigidity, long tool life and cost efficiency
- The serrated edge divides the chips into smaller pieces. This feature provides excellent chip control, reduces interference of the cutter and ensures good durability of the cutter body.
- Two types of inserts are available-TNMX27 for PBA (Approach angle: 45°) and PBZ (AA: 80°), and TNMX30 for PBP (AA: 90°)
- Application: High depth of cut and feed rate (Steel, Cast iron)

Code system

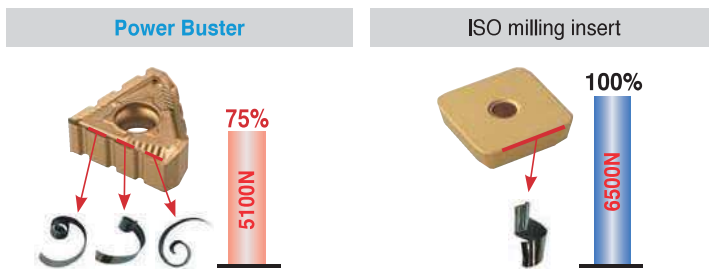


Features of insert

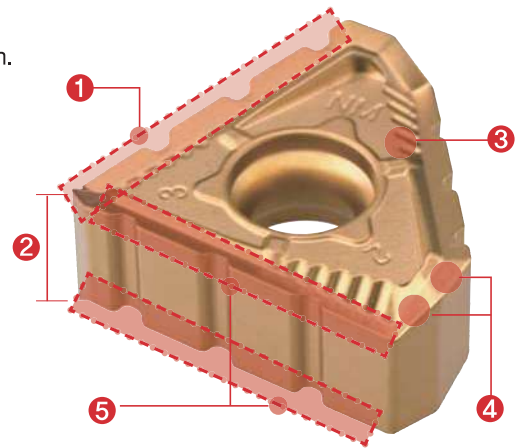
1 Major cutting-edge (Serrated edge)

- Low cutting force
- Ideal for chip control, divides chips into small pieces for proper chip evacuation.
- Ideal edge design for Steel and Cast iron rough milling

Comparison of chip control and cutting force

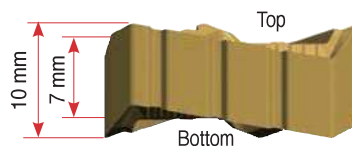


- **Workpiece** SCM440
- **Cutting condition** $vc = 200 \text{ m/min}$, $ap = 8 \text{ mm}$, $ae = 90 \text{ mm}$, $fz = 0.3 \text{ mm/t}$



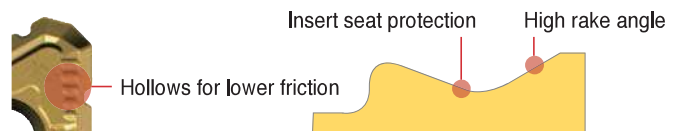
2 Thicker insert

- Thick insert guarantees high rigidity
- Balanced insert design for stable mounting



3 NM Chip breaker

- High rake angle for low cutting force
- Good chip flow at various feed and depth of cut
- Inserts are protected with seats for a precise mounting
- Low friction and good heat evacuation at high depth cut

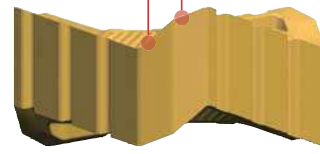


E Technical Information for Power Buster

4 Insert shape applied to PBA/Z cutters (AA: 45°/80°)

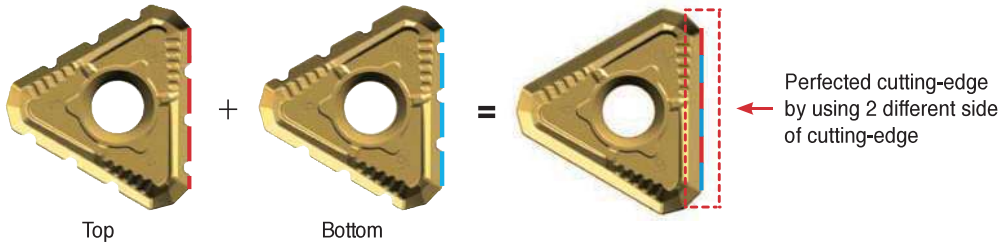
- High rake angle to avoid interference with chip
- Calculated minor cutting-edge angel for both AA 45° & 80° cutter

2nd minor cutting-edge for AA 80° 1st minor cutting-edge for AA 45°



5 Mirror system

- Cutting-edge on the both side of insert covers all overlapped cutting area



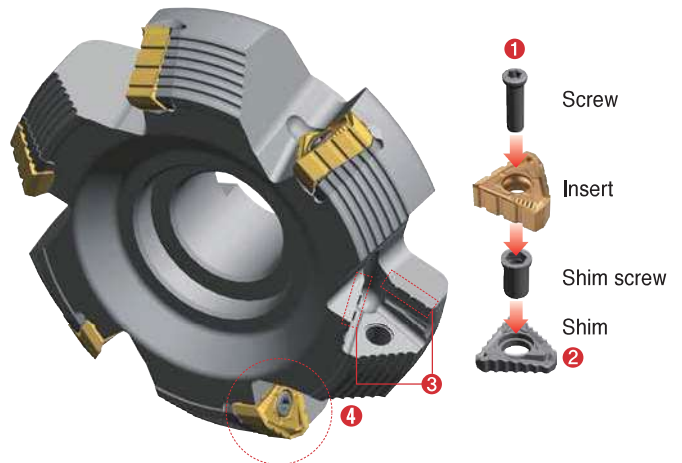
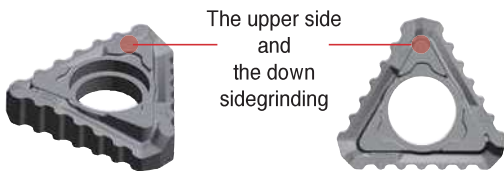
Features of cutter

1 Screw-on clamping system

- Simple and strong screw on clamping system

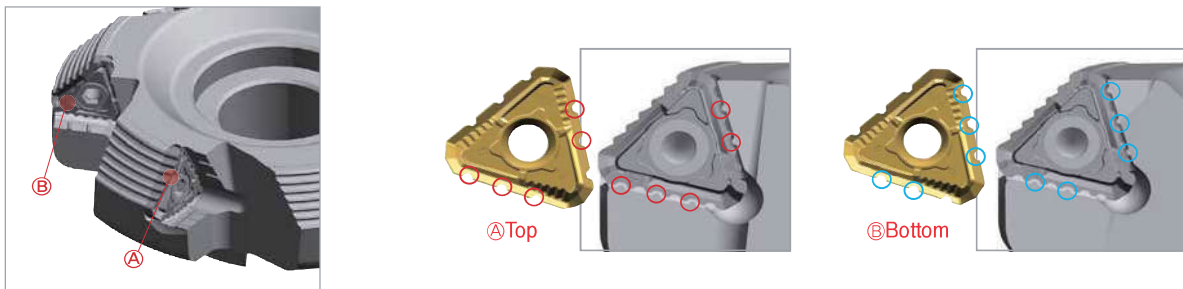
2 Better rigidity & Stable Assembly system

- The shim protects the cutter from insert damage
- High accuracy shim ensures tighter clamping



3 Foolproof System

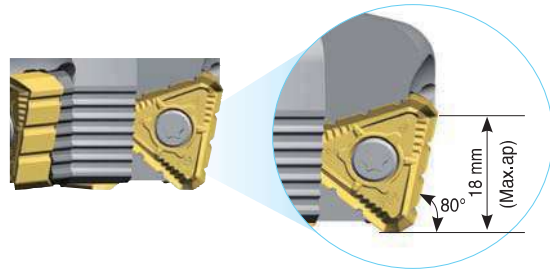
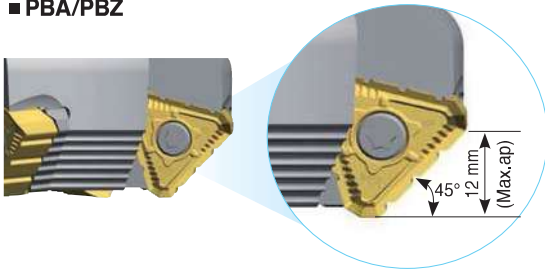
- Insert serrations match pocket design to prevent improper seating and alignment



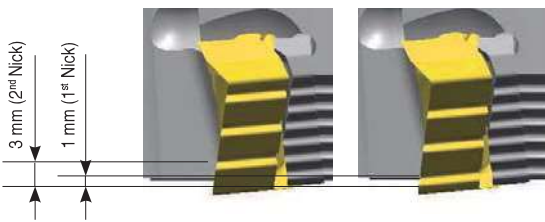
4 Multi-application system

- Same insert for multi-use (45° and 80°)

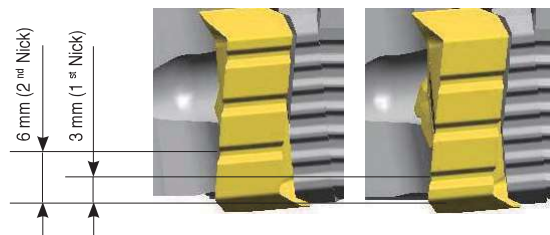
■ PBA/PBZ



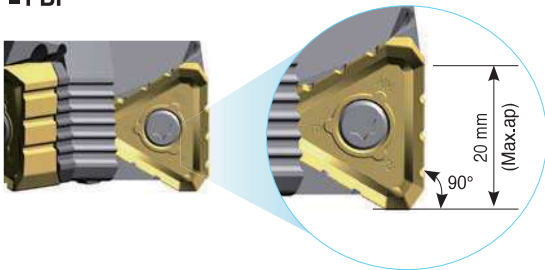
The serrations are effective with a depth of cut larger than 1 mm



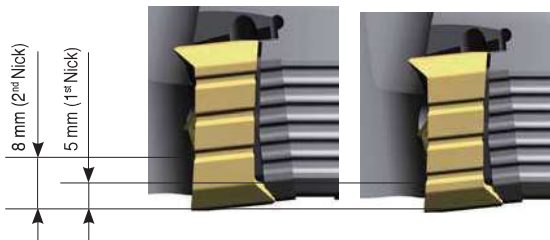
The serrations are effective with a depth of cut larger than 3 mm



■ PBP

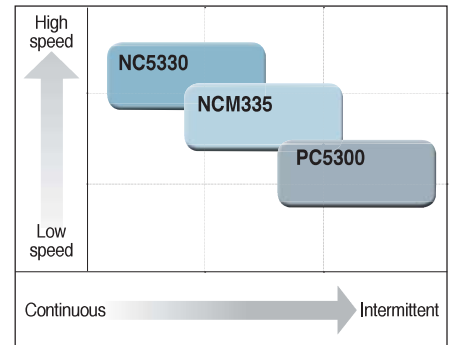


For the AA 90° cutter, nicks function properly at depth of cuts over 5 mm



Recommended cutting condition

ISO	Workpiece		Material	NC5330	NCM335	PC5300
				fz (mm/t)		
				0.1-0.2-0.3	0.1-0.2-0.3	0.1-0.2-0.3
			vc (m/min)			
P	Carbon steel	-	SUM22, C = 0.1~25	400	335	280
		-	C = 0.30~55	365	305	255
		-	C = 0.55~80	340	285	240
	Low alloy steel (Alloy constituent < 5%)	-	SCM415(H), SCM420, SCM440	280	235	195
		Hardened		165	140	115
		High alloy steel (Alloy constituent > 5%)	Annealed	SKD61	210	180
K	Gray cast iron	Hardened	SKH51, SKH55	175	145	120
		Low tensile	FC200, FC250	125	-	145
		High tensile	FC300, FC350	105	-	120
		Ferric	FCD400, FCD500	80	-	95
		Pearlitic	FCD600, FCD700	75	-	85

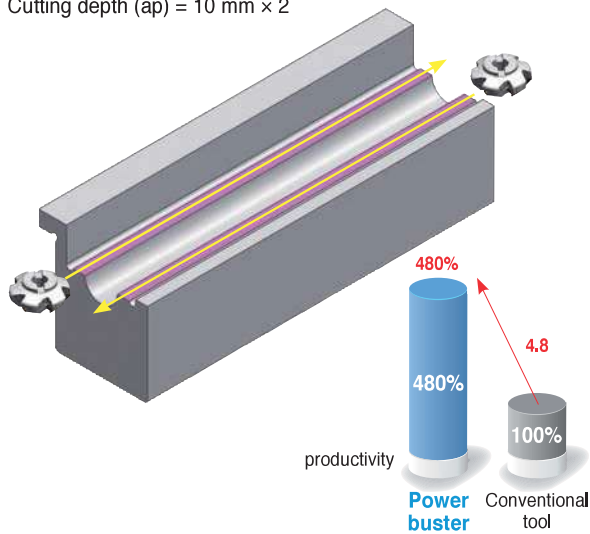


Power Buster test

■ Cylinder block for ship engine (Cast iron)

Cutting width (ae) = 160 mm × 2

Cutting depth (ap) = 10 mm × 2

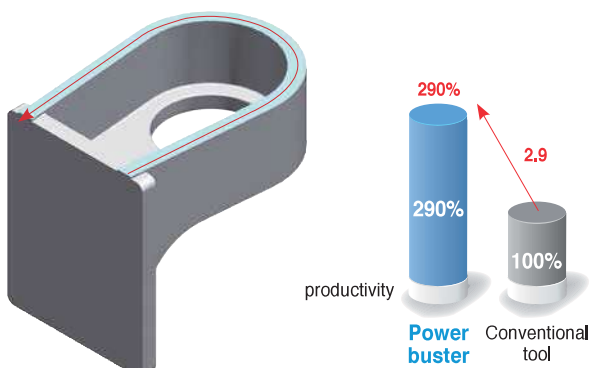


Item	Power buster	Conventional tool
Diameter (ØD)	200 mm	200 mm
	12 tooth	12 tooth
Grades	NC5330	PVD coating for Cast iron
vc	170 m/min	130 m/min
fz	0.24 mm/t	0.16 mm/t
ap	10 mm x 2 passes	4 mm x 5 passes
min	28.2 min/ea	137.5 min/ea
4.8 times productivity increased		<ul style="list-style-type: none"> • One-sided 4 corner insert (Without nick) • AA 45° cutter

■ Heavy machinery part (Alloy steel)

Cutting width (ae) = 160 mm × 2

Cutting depth (ap) = 10 mm × 2



Item	Power Buster	Conventional tool
Diameter (ØD)	125 mm	100 mm
	8 tooth	8 tooth
Grades	NCM335	PVD coating for Cast iron
vc	180 m/min	150 m/min
fz	0.15 mm/t	0.10 mm/t
ap	5 mm x 2 passes	2.5 mm x 4 passes
min	5 min/ea	14.7 min/ea
2.9 times productivity increased		<ul style="list-style-type: none"> • Double-sided 8 corner insert (Without nick) • AA 45° cutter

PBAC(M)5000

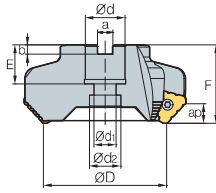


Fig. 1

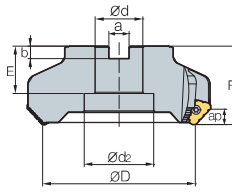


Fig. 2

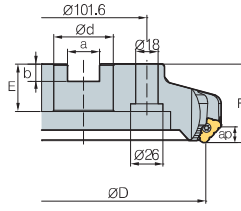


Fig. 3

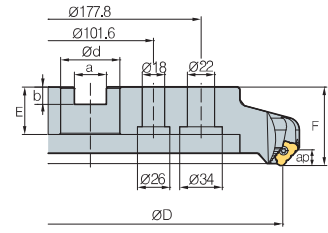


Fig. 4



AA
45°

• AR: -5°
• RR: -11°

(mm)

Designation		⊙	ØD	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	Fig.
Coarse pitch	PBAC (PBACM) 5080R/L	4	80	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (22)	50	12	1
	5100R/L	4	100	31.75 (32)	-	45	12.7 (14.4)	8 (8)	32 (28)	50	12	2
	5125R/L	6	125	38.1 (40)	-	56	15.9 (16.4)	10 (9)	38 (32)	63	12	2
	5160R/L	8	160	50.8 (40)	-	100	19 (16.4)	11 (9)	38 (32)	63	12	2
	5200R/L	10	200	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	12	3
	5250R/L	12	250	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	12	3
5315R/L	14	315	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	12	4	
Close pitch	PBAC (PBACM) 5080R/L-M	6	80	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (22)	50	12	1
	5100R/L-M	6	100	31.75 (32)	-	45	12.7 (14.4)	8 (8)	32 (28)	50	12	2
	5125R/L-M	8	125	38.1 (40)	-	56	15.9 (16.4)	10 (9)	38 (32)	63	12	2
	5160R/L-M	10	160	50.8 (40)	-	100	19 (16.4)	11 (9)	38 (32)	63	12	2
	5200R/L-M	12	200	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	12	3
	5250R/L-M	14	250	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	12	3
5315R/L-M	16	315	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	12	4	

() Metric size

Available inserts

TNMX-NM



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10
TNMX 2710AZNR-NM				●	●				●		●			●				
2710AZNL-NM																		

Available arbors

Designation	Available arbors	
	PBAC	PBACM
PBAC (PBACM) 5080R/L-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
5100R/L-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
5125R/L-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
5160R/L-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
5200R/L-□		
5250R/L-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
5315R/L-□		

Parts

Specification				
Ø80-Ø315	FTGA0518	ST53AZR	SHXN0712F	TW20-100

Available inserts E26 Available arbors and bolt E400~E402

PBZC(M)5000

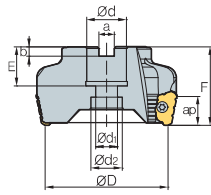
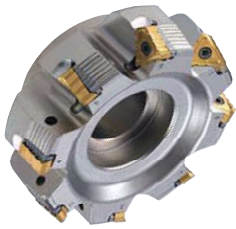


Fig. 1

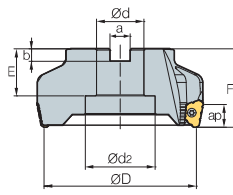


Fig. 2

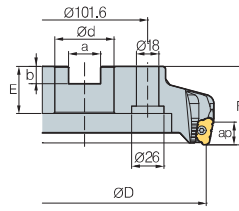


Fig. 3

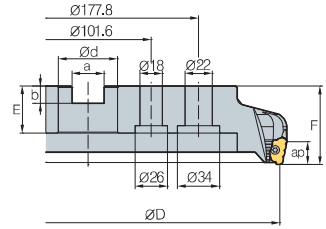


Fig. 4



AA
80°

- AR: -5°
- RR: -12°

(mm)

Designation		⊙	ØD	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	Fig.
Coarse pitch	PBZC (PBZCM) 5080R/L	4	80	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (22)	50	18	1
	5100R/L	4	100	31.75 (32)	-	45	12.7 (14.4)	8 (8)	32 (28)	50	18	2
	5125R/L	6	125	38.1 (40)	-	56	15.9 (16.4)	10 (9)	38 (32)	63	18	2
	5160R/L	8	160	50.8 (40)	-	100	19 (16.4)	11 (9)	38 (32)	63	18	2
	5200R/L	10	200	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	18	3
	5250R/L	12	250	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	18	3
	5315R/L	14	315	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	18	4
Close pitch	PBZC (PBZCM) 5080R/L-M	6	80	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (22)	50	18	1
	5100R/L-M	6	100	31.75 (32)	-	45	12.7 (14.4)	8 (8)	32 (28)	50	18	2
	5125R/L-M	8	125	38.1 (40)	-	56	15.9 (16.4)	10 (9)	38 (32)	63	18	2
	5160R/L-M	10	160	50.8 (40)	-	100	19 (16.4)	11 (9)	38 (32)	63	18	2
	5200R/L-M	12	200	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	18	3
	5250R/L-M	14	250	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	18	3
	5315R/L-M	16	315	47.625 (60)	-	-	25.4 (25.7)	14 (14)	38 (38)	63	18	4

() Metric size

Available inserts

TNMX-NM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
TNMX 2710AZNR-NM 2710AZNL-NM				●	●					●		●							E26

Available arbors

Designation	Available arbors	
	PBZC	PBZCM
PBZC (PBZCM) 5080R/L-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
5100R/L-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
5125R/L-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
5160R/L-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
5200R/L-□		
5250R/L-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
5315R/L-□		

Parts

Specification	 Screw	 Shim	 Shim Screw	 Wrench
Ø80~Ø315	FTGA0518	ST53AZR	SHXN0712F	TW20-100

Available inserts E26 Available arbors and bolt E400~E402



PBPCM6000 new

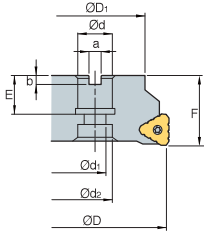
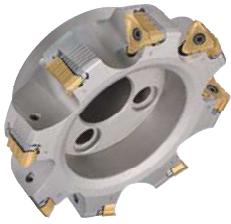


Fig. 1

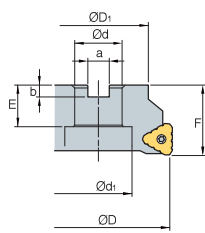


Fig. 2

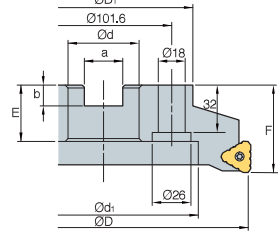


Fig. 3

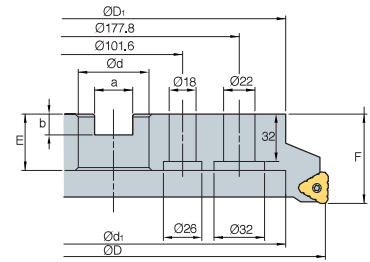


Fig. 4



AA
90°

• AR: -5°
• RR: -12°

(mm)

Designation	ØD	ØD1	Ød	Ød2	Ød2	a	b	E	F	ap	kg	Fig.
PBPCM 6080R-4	80	60	27	14	20	12.4	7	24	50	20	0.85	1
6100R-6	100	70	32	-	54	14.4	8	30	50	20	1.16	2
6125R-6	125	90	40	-	56	16.4	9	32	63	20	2.84	2
6160R-8	160	107	40	-	90	16.4	9	32	63	20	3.58	3
6200R-10	200	130	60	-	132	25.7	14	38	63	20	5.13	3
6250R-12	250	180	60	-	180	25.7	14	38	63	20	9.6	3
6315R-14	315	240	60	-	238	25.7	14	38	63	20	16.85	4

Available inserts

TNMX-NM



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10
TNMX 3012PNR-NM																		E26

Available arbors

Designation	General arbor
PBPCM 6080R-4	BT□□-FMC27-□□
6100R-6	BT□□-FMC32-□□
6125R-6	BT□□-FMC40-□□
6160R-8	
6200R-10	
6250R-12	BT□□-FMC60-□□
6315R-14	

Parts

Specification				
Ø80-Ø315	FTGA0518	ST53PNR	SHXN0712F	TW20-100

Available inserts **E26** Available arbors and bolt **E400~E402**



Rich Mill series is one of innovations that provides more available cutting-edges by double-sided insert and longer tool life for our customers

Rich Mill Series

- Rich Mill series is one of the innovations that provides more available cutting-edges with double-sided inserts and longer tool life for our customers
- The unique geometry and special cutting-edge guarantees low cutting loads and long tool life
- Rich Mill series has a wide application range from steel and stainless steel to cast iron and aluminum
- Applying negative inserts makes it even stronger and provides longer tool life
- Rich Mill series has both screw-on clamping system and latch clamping system

Code system

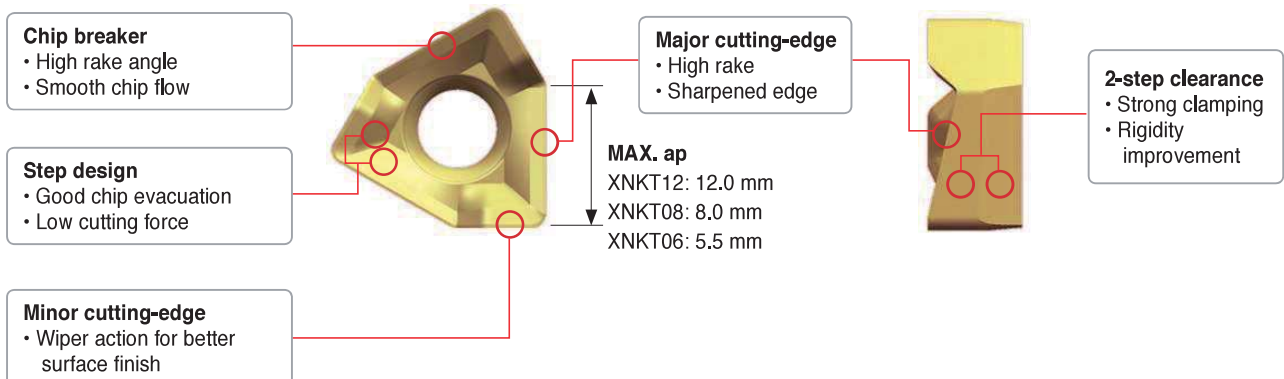
RM16	A	C	M	4	100	H	R - M	
Number of edges	Approach angle	Tool type	Arbors type	Inscribed circle of insert	Tool Dia.	Coolant type	Hand	Pitch type
RM3: Number of edges-3 RM4: Number of edges-4 RM6: Number of edges-6 RM8: Number of edges-8 RMH8: Number of edges-8 (Shim) RMT8: Number of edges-8 (Latch Clamp) RM16: Number of edges-16	A: 45° D: 30° E: 15° F: 5° P: 0° Q: 2° Z: Plunging	C: Cutter S: Shank	M: Metric A: Inch	3: 9,525 4: 12.7 5: 15.875	Ø100	H: Thru-Hole No code: None	R: Right L: Left	M: Close H: Extra Close

Rich Mill RM3

Features

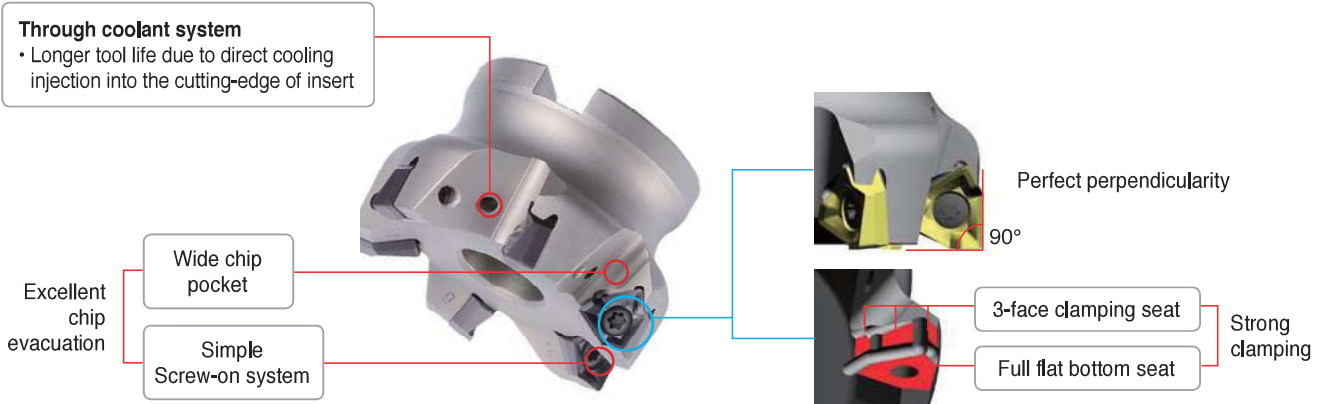
- High Quality - True 90° shouldering operation
- High Productivity - Strong thick insert and 3-face clamping ensure stable operation even tough condition.
- High Economics - Long tool life due to optimized manufacturing process

Features of insert



Rich Mill RM3

Features of cutter



Through coolant system

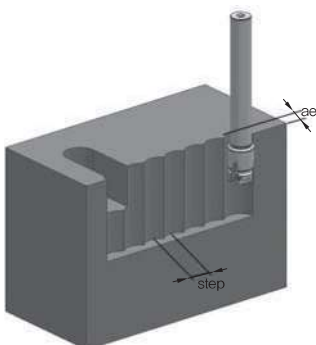
- Exclusive through coolant bolt required
- Effective coolant distribution directly to cutting-edge
- Coolant supporting arbor required



Features of chip breakers

Insert	Cutting-edge	Uses	Features
MA		Aluminum	Superior cutting quality for aluminum due to sharp cutting-edge and buffed surface
ML		Light	Superior cutting quality for light and light cutting, difficult-to-cut material machining through the low cutting load of chip breaker
MM		General	Suitable for various cutting due to special shape design for general cutting

Max Step in plunging



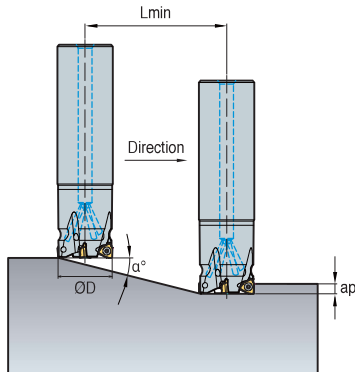
Type	max. ae
3000 type	2.5
4000 type	3.0
5000 type	3.5

ae	Cutter Diameter (mm)											
	Ø20	Ø21	Ø25	Ø26	Ø32	Ø33	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125
	max step (mm)											
1	8.5	8.9	9.7	10	11.1	11.3	12.4	14	15.7	17.7	19.9	22.2
2	12	12.3	13.5	13.8	15.4	15.7	17.4	19.5	22	24.9	28	31.3
3	-	-	-	-	-	-	21	23.7	26.8	30.3	34.1	38.2

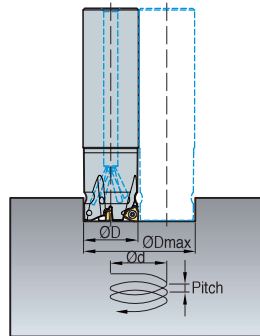
Rich Mill RM3

Ramping and helical cutting

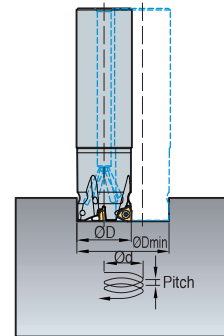
1. Ramping



2. Helical cutting for blind hole



3. Helical cutting for through hole



(mm)

Type	Tool Dia. ØD	ap	1. Ramping		2. Helical cutting for blind hole				3. Helical cutting for through hole	
			α°	Lmin	Minimum Hole Diameter Ød	Maximum Pitch	Maximum Hole Diameter Ød	Maximum Pitch	Minimum Hole Diameter Ød	Maximum Pitch
3000 type	20	5.5	15.5	19.8	36.5	5.5	38.5	5.5	33.0	5.5
	21	5.5	14.0	22.1	38.5	5.5	40.5	5.5	35.0	5.5
	25	5.5	10.0	31.2	46.5	5.5	48.5	5.5	43.0	5.5
	26	5.5	9.5	32.9	48.34	5.5	51.0	5.5	45.0	5.5
	32	5.5	6.5	48.3	60.5	5.5	62.5	5.5	59.0	5.5
	33	5.5	6.0	52.3	62.5	5.5	64.5	5.5	59.0	5.5
	40	5.5	4.5	69.9	46.5	5.5	78.5	5.5	73.0	5.5
	50	5.5	3.5	89.9	96.5	5.5	98.5	5.5	93.0	5.5
	63	5.5	2.5	126.0	122.5	5.5	124.5	5.5	119.0	5.5
	80	8	2.0	157.5	156.5	5.5	158.5	5.5	153.0	5.5
	100	8	1.5	210.0	194.5	5.5	198.5	5.5	193.0	5.5
125	8	1.0	315.1	246.5	5.5	248.5	5.5	243.0	5.5	
4000 type	25	8	24.0	18.0	44.5	8.0	48.0	8.0	38.5	8.0
	32	8	13.0	34.7	58.5	8.0	62.0	8.0	52.5	8.0
	33	8	12.0	37.6	60.02	8.0	64.4	8.0	54.5	8.0
	40	8	8.5	53.5	74.5	8.0	78.0	8.0	68.5	8.0
	50	8	6.0	76.1	94.5	8.0	98.0	8.0	88.5	8.0
	63	8	4.0	114.4	12.5	8.0	124.0	8.0	114.5	8.0
	80	8	3.0	152.6	154.5	8.0	158.0	8.0	148.5	8.0
	100	8	2.0	229.1	194.5	8.0	198.0	8.0	188.5	8.0
125	8	1.5	305.5	244.5	7.7	248.0	7.8	238.5	7.7	
5000 type	80	12	5.5	124.6	153.5	12.0	158.0	12.0	146.5	12.0
	100	12	4.5	152.5	193.5	12.0	198.0	12.0	159.5	12.0
	125	12	3.5	196.2	242.5	12.0	248.0	12.0	236.5	12.0

* Please be sure to use cutting oil or air for ramping and helical machining
 $L_{min} = ap / \tan(\alpha^\circ)$



Rich Mill RM3

Application guideline for grade

Workpiece		P	M	K	N	
		Carbon steel	Alloy steel	Stainless steel	Cast iron	Aluminum
Chip breaker	First choice	MM	MM	ML	ML	MA
	Second choice	ML	ML	-	MM	-
Grades	High speed machining	PC3600	PC3600	PC5300	PC6510	H01
	General machining	PC5400	PC5300	PC5400	PC5300	
	Interrupted machining	PC5400	PC5400	PC5400	PC5400	

Recommended cutting condition

• RM3 3000 type

Workpiece	Grades	Cutting conditions				Cutting conditions				
		vc (m/min)	fz (mm/t)	max ap (mm)	Available inserts	vc (m/min)	fz (mm/t)	max ap (mm)	Available inserts	
P	steel	PC3600	160~270	0.25~0.05	5.5	XNKT0604□□ PNSR-MM	160~270	0.2~0.05	5.5	XNKT0604□□ PNER-ML
		PC5300	150~240	0.25~0.05			150~240	0.25~0.05		
		PC5400	130~210	0.25~0.05			130~210	0.25~0.05		
M	Stainless steel	PC5300	90~150	0.2~0.05			90~150	0.1~0.05		
		PC5400	70~120	0.2~0.05			70~120	0.1~0.05		
K	Cast iron	PC6510	140~230	0.3~0.08			140~230	0.25~0.08		
		PC5300	120~200	0.3~0.08			120~200	0.25~0.08		

* Maximum cutting condition: vc = 350 m/min, fz = 0.5 mm/t according to cutting environment

• RM3 4000 type

Workpiece	Grades	Cutting conditions				Cutting conditions							
		vc (m/min)	fz (mm/t)	max ap (mm)	Available inserts	vc (m/min)	fz (mm/t)	max ap (mm)	Available inserts				
P	steel	PC3600	160~270	0.3~0.05	8.0	XNKT0805□□ PNSR-MM	160~270	0.25~0.05	8.0	XNKT0805□□ PNER-ML			
		PC5300	150~240	0.3~0.05			150~240	0.25~0.05					
		PC5400	130~210	0.3~0.05			130~210	0.25~0.05					
M	Stainless steel	PC5300	90~150	0.25~0.05			90~150	0.2~0.05					
		PC5400	70~120	0.25~0.05			70~120	0.2~0.05					
K	Cast iron	PC6510	140~230	0.35~0.08			140~230	0.3~0.08					
		PC5300	120~200	0.35~0.08			120~200	0.3~0.08					
N	Aluminum	H01	400~1200	0.4~0.1			XNCT0805□□PNFR-MA	-			-	-	-

* Maximum cutting condition: vc = 350 m/min, fz = 0.5 mm/t according to cutting environment

• RM3 5000 type

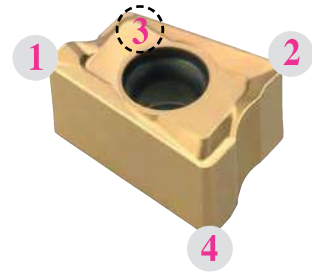
Workpiece	Grades	Cutting conditions				Cutting conditions							
		vc (m/min)	fz (mm/t)	max ap (mm)	Available inserts	vc (m/min)	fz (mm/t)	max ap (mm)	Available inserts				
P	steel	PC3600	160~270	0.3~0.05	12.0	XNKT1206□□ PNSR-MM	160~270	0.25~0.05	12.0	XNKT1206□□ PNER-ML			
		PC5300	150~240	0.3~0.05			150~240	0.25~0.05					
		PC5400	130~210	0.3~0.05			130~210	0.25~0.05					
M	Stainless steel	PC5300	90~150	0.25~0.05			90~150	0.2~0.05					
		PC5400	70~120	0.25~0.05			70~120	0.2~0.05					
K	Cast iron	PC6510	140~230	0.35~0.08			140~230	0.3~0.08					
		PC5300	120~200	0.35~0.08			120~200	0.3~0.08					
N	Aluminum	H01	400~1200	0.4~0.1			XNCT1206□□PNFR-MA	-			-	-	-

* Maximum cutting condition: vc = 350 m/min, fz = 0.5 mm/t according to cutting environment

Rich Mill RM4

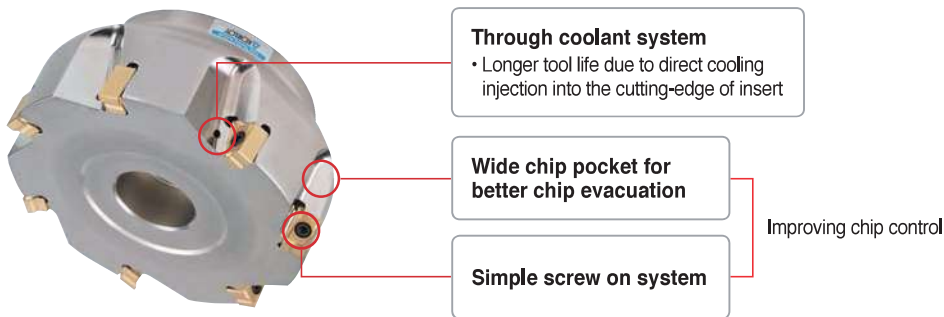
Features

- Economical 4 cutting-edges by using double-sided insert
- RM4, as a multi-functional milling tool, offers economical 4 cutting-edges by using an innovative double-sided insert
- Special designed chip breaker consists of high rake angle and strong cutting-edge to decrease the cutting load
- RM4 is multi-functional tool that can cover facing, side cutting, shouldering, slotting, ramping & helical cutting
- Optimal matching of the special cutting-edge geometry with variety of new grades provides consistence & long tool life of insert



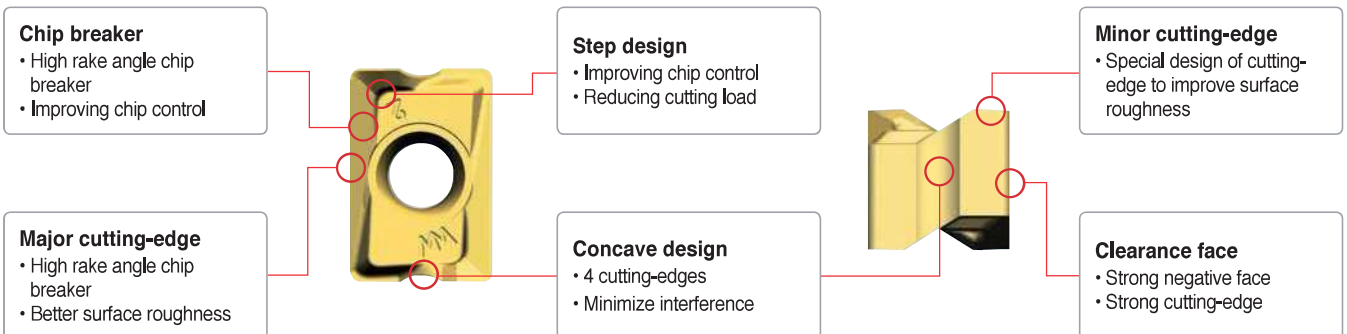
Features of cutter

- 4 cutting - edges can be used by using double-sided insert
- High rake angle chip breaker and cutting-edge can make smooth cutting with low cutting load
- Strong negative insert
- High efficiency, economical, multi-functional tool

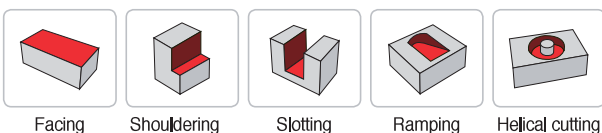


Features of insert

- Double-sided insert using 4 cutting-edges
- High rake angle chip breaker, cutting-edge
- Flexibility of product
- High efficiency, economical, multi-functional tool
- Negative insert has strong cutting-edge









Uses


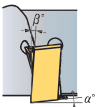
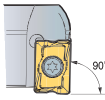


Rich Mill RM4

Features of chip breakers

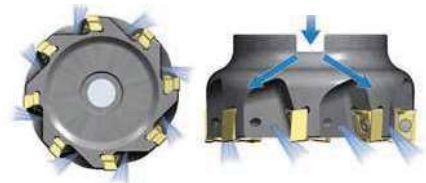
Insert	Cutting-edge	Uses	Features
MA 		Aluminum, Light machining	With sharp edge application the better productivity has been accomplished, especially for Aluminum or low force cut
MF 		Light cutting	Due to low cutting load, it is good for light cutting and difficult-to-cut material
MM 		General cutting	It is suitable design for general milling

Setting configuration

Shape	Setting angle of insert	Features
	 β α	High rake chip breaker & positive setting angle for low cutting load → Improving machinability
	 90°	Multi applications for facing, shouldering, slotting, ramping, helical cutting, etc

Through coolant system

- By using on exclusive coolant bolt (hexagonal socket bolt) powerful cooling & better chip evacuation can be acquired
- To get optimal chip control, the direction of coolant injection has been designed to reach to each cutting-edge directly (through coolant arbor is required)

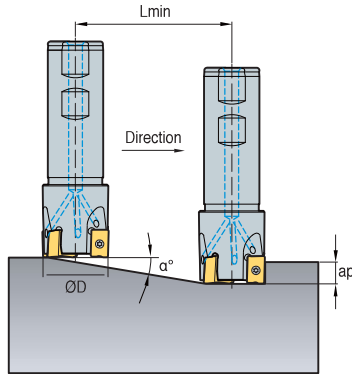


Through coolant system for decreasing cutting heat and good chip evacuation

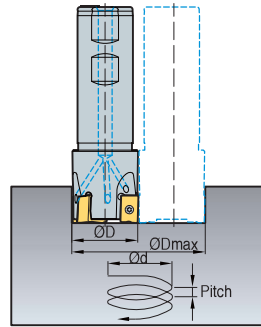
Rich Mill RM4

➤ Ramping and helical cutting

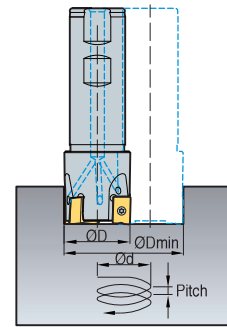
1. Ramping



2. Helical cutting for blind hole



3. Helical cutting for through hole



(mm)

Type	Tool Dia. ØD	ap	1. Ramping		2. Helical cutting for blind hole				3. Helical cutting for through hole	
			α°	Lmin	Minimum Hole Diameter Ød	Maximum Pitch	Maximum Hole Diameter Ød	Maximum Pitch	Minimum Hole Diameter Ød	Maximum Pitch
RM4PS3014HR	14	9	4.5	125	25	2.7	27	3.1	19	1.3
RM4PS3016HR	16	9	3.5	160	29	2.5	31	2.7	23	1.4
RM4PS3018HR	18	9	3.0	185	33	2.4	35	2.7	27	1.5
RM4PS3020HR	20	9	2.7	204	37	2.5	39	2.7	31	1.6
RM4PS3025HR	25	9	1.8	301	47	2.1	49	2.3	41	1.6
RM4PS3032HR	32	9	1.2	451	61	1.9	63	2.0	55	1.5
RM4PS3040HR	40	9	0.9	616	77	1.8	79	1.8	71	1.5
RM4PS3050HR	50	9	0.6	843	97	1.5	99	1.5	91	1.3
RM4PC(M)3040HR	40	9	0.9	616	77	1.8	79	1.8	71	1.5
RM4PC(M)3050HR	50	9	0.6	843	97	1.5	99	1.5	91	1.3
RM4PC(M)3063HR	63	9	0.5	1123	123	1.6	125	1.6	117	1.4
RM4PC(M)3080HR	80	9	0.3	1508	157	1.2	159	1.2	151	1.1
RM4PC(M)3100HR	100	9	0.2	1910	197	1.0	199	1.0	191	0.9
RM4PS4032HR	32	14	2.5	229	59.5	3.0	62	4	49	2.0
RM4PS4040HR	40	14	2.0	286	75.5	3.0	78	4	65	2.0
RM4PS4050HR	50	14	2.0	286	95.5	4.0	98	5	85	3.5
RM4PS4063HR	63	14	2.0	286	121.5	5.0	124	5	111	5.0
RM4PC(M)4050HR	50	14	2.0	286	95.5	4.0	98	5	85	3.5
RM4PC(M)4063HR	63	14	2.0	286	121.5	5.0	124	5	111	5.0
RM4PC(M)4080HR	80	14	1.5	382	155.5	5.0	158	5	145	5.0
RM4PC(M)4100HR	100	14	1.0	573	195.5	4.5	198	5	185	4.0
RM4PC(M)4125HR	125	14	1.0	573	245.5	5.0	248	5	235	5.0
RM4PC(M)4160R	160	14	0.5	1146	315.5	3.5	318	4	305	3.5

* Please be sure to use cutting oil or air for ramping and helical machining
 $L_{min} = ap / \tan(\alpha^\circ)$

➤ Recommended cutting condition

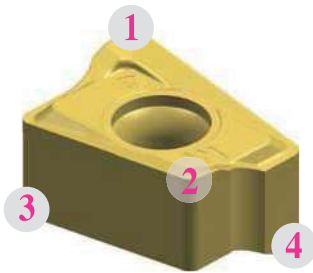
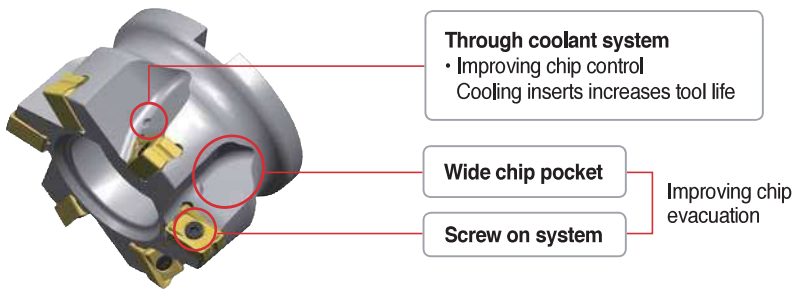
ISO	Grades	LNM(E)X100605PNR-MF		LNM(E)X100605PNR-MM		LNEX100605PNR-MA		Max-ap (mm)	LNM(E)X151008PNR-MF		LNM(E)X151008PNR-MM		LNEX151008PNR-MA		Max-ap (mm)
		vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)		vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	
P	NCM325	-	-	-	-	-	-	9.0	150~300	0.05~0.30	120~300	0.05~0.35	150~300	0.03~0.20	14.0
	PC3500	150~300	0.05~0.25	120~300	0.05~0.30	150~300	0.03~0.20		150~300	0.05~0.30	120~300	0.05~0.35	150~300	0.03~0.20	
M	PC5300	120~180	0.05~0.25	100~180	0.05~0.30	120~200	0.03~0.20		120~180	0.05~0.30	100~180	0.05~0.3	120~200	0.03~0.20	
K	PC6510	150~300	0.08~0.30	120~300	0.08~0.35	-	-		150~300	0.08~0.35	120~300	0.08~0.35	-	-	



Rich Mill RM4Z

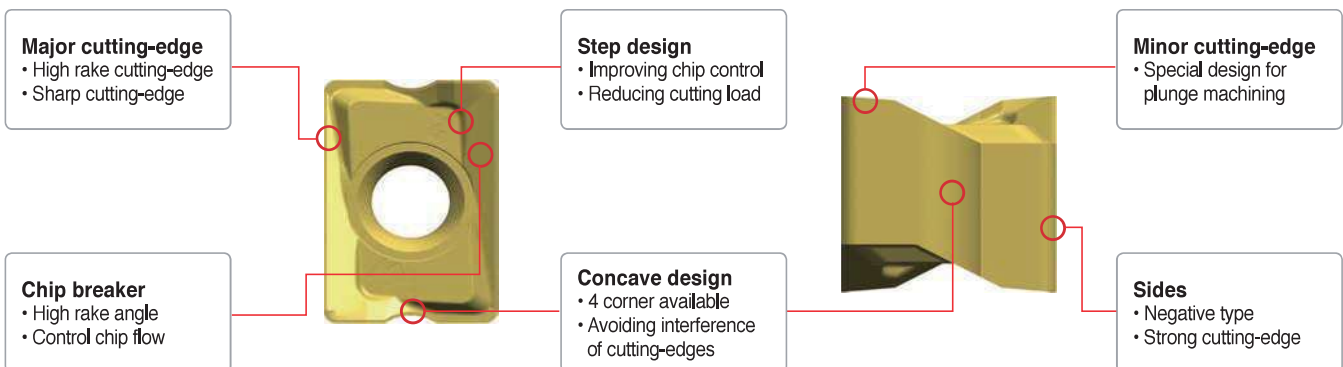
Features

- Rich mill series RM4Z is a plunge mill for high efficiency vertical machining such as slotting and pocketing in roughing applications
- Rich mill series RM4Z is a highly efficient milling tool for plunging, shouldering and facing. It makes operations more economical with the use of its double-sided 4-corner insert
- Plunge machining reduces lead time for high productivity and precision machining.
- In plunging the max depth of RM4Z 3000 type is 9.0 mm and that of RM4Z 4000 type is 14.0 mm

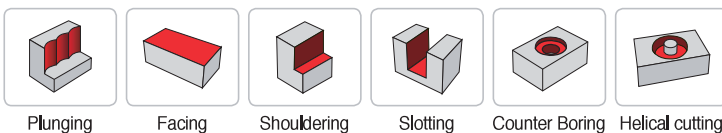


- Double-sided insert ... 4 corner available
- High rake angle chip breaker and cutting-edge
- Various available machining types
- High efficiency and economical insert
- Negative type insert - Strong cutting-edge

Features of insert



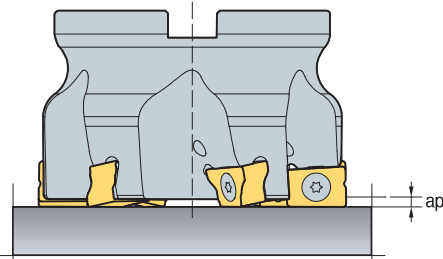
Uses



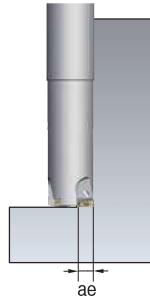
Rich Mill RM4Z

➤ The depth of cut by machining type

• In horizontal machining, Depth of cut = a_p (mm)

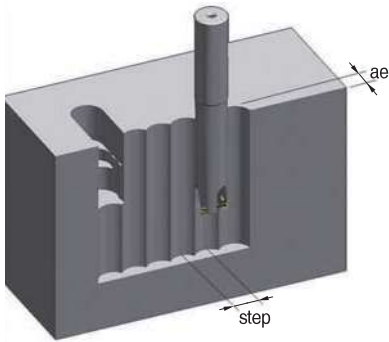


• In plunging, Depth of cut = a_e (mm)



RM4Z	Horizontality	Verticality	
	max a_p (mm)	max a_e (mm)	step
RM4Z 3000	1.5	9	< 0.7D
RM4Z 4000	2.5	14	< 0.7D

➤ Max step in plunging

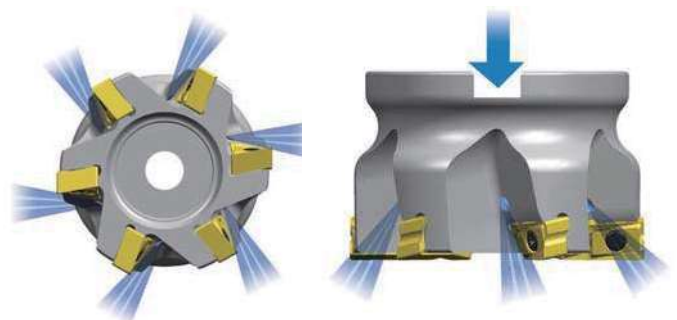


ae	Cutter Diameter (mm)								
	25	32	40	50	52	63	66	80	100
	Max step (mm)								
1	9.7	11.1	12.4	14	14.2	15.7	16.1	17.7	19.9
2	13.5	15.4	17.4	19.5	20	22	22.6	24.9	28
3	16.2	18.6	21	23.7	24.2	26.8	27.4	30.3	34.1
4	18.3	21.1	24	27.1	27.7	30.7	31.4	34.8	39.1
5	20	23.2	26.4	30	30.6	34	34.9	38.7	43.5
6	21.3	24.9	28.5	32.4	33.2	36.9	37.9	42.1	47.4
7	22.4	26.4	30.3	34.6	35.4	39.5	40.6	45.2	51
8	23.3	27.7	32	36.6	37.5	41.9	43	48	54.2
9	24	28.7	33.4	38.4	39.3	44	45.2	50.5	57.2
10	-	-	-	-	-	46	47.3	52.9	60
11	-	-	-	-	-	47.8	49.1	55.1	62.5
12	-	-	-	-	-	49.4	50.9	57.1	64.9
13	-	-	-	-	-	50.9	52.4	59	67.2
14	-	-	-	-	-	52.3	53.9	60.7	69.3

➤ Through coolant system

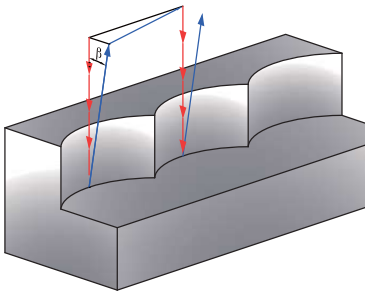
- Exclusive hexagonal coolant socket bolt provides excellent cooling and chip evacuation
- Direct coolant injection to cutting-edge improves cooling effectiveness
- Coolant type arbor should be used

* Coolant bolt is not included, it is for sale



Rich Mill RM4Z

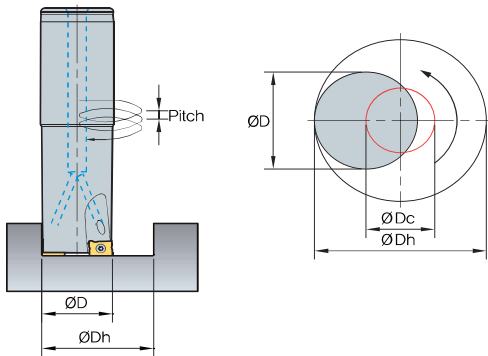
Programming tip



- - - Plunging feed direction
- Tool escape
- β Escape angle ($\beta \geq 1^\circ$)

• When your tool steps back after plunging, please get over 1° more escape angle

Helical machining



$$\text{ØDc} = \text{ØDh} - \text{ØD}$$

- ØDc = Tool center path
- ØDh = Desired hole diameter
- ØD = Tool Dia.

(mm)

Designation	Diameter ØD (mm)	Helical data				
		ØDh max (mm)	Max. Pitch (mm)	ØDh min (mm)	Max. Pitch (mm)	
RM4ZS	3025HR-L25	25	30	0.4	48	1.8
	3032HR-L32	32	43	0.3	62	0.9
	3040HR-L32	40	59	0.3	78	0.6
RM4ZC	M3040HR	40	59	0.3	78	0.6
	M3050HR	50	79	0.3	98	0.5
	M3052HR	52	83	0.3	102	0.5
RM4ZM	3025HR-M12	25	30	0.4	48	1.8
	3032HR-M16	32	43	0.3	62	0.9
	3040HR-M16	40	59	0.3	78	0.6
RM4ZC	M4063HR	63	95	0.5	124	1.0
	M4066HR	66	101	0.5	130	1.0
	M4080HR	80	129	0.5	158	0.8
	M4100HR	100	169	0.3	198	0.5

Recommended cutting condition

ISO	Grades	LNM(E)X100605PNL-MM				LNM(E)X151008PNL-MM			
		vc (m/min)	fz (mm/t)	* max ae (mm)	** max ap (mm)	vc (m/min)	fz (mm/t)	* max ae (mm)	** max ap (mm)
P	PC3500	100~250	0.05~0.25	9	1.5	120~250	0.05~0.25	14	2.5
M	PC5300	100~250	0.08~0.30			120~250	0.08~0.30		
K	PC6510	80~180	0.05~0.20			100~180	0.05~0.20		

* max ae (mm): (Plunging) max. radial depth of cut

** max ap (mm): (Shouldering/Facing) max depth of cut

Rich Mill RM6

Features

- Stable clamping - 3 clamping surfaces on the side and strong clamping screws
→ Improves cutting stability
- High quality results - High precision, excellent perpendicularity, outstanding surface finish on the flank, accurate tolerance
- High productivity - High rake angle and sharp cutting-edges for lower cutting resistance
→ Ideal for high speed and high feed machining

Features of insert

Higher clamping stability

- Wide clamping areas and strong clamping screws for rigid clamping

High rake angle chip breaker

- Maintains stable clamping
- Induces smooth chip flow
→ Increases insert life

Wide minor cutting-edges

- Improved surface finish
- Enable multi-purpose machining incl. plunging

High rake cutting-edges

- Improved machinability and reduces cutting resistance

3-level flank relief surface

- Enhances rigidity and enables stable clamping
→ Improves cutting stability

MAX. ap
WNGX08: 8.2 mm
WNGX04: 4.3 mm

Labels A, B, C are shown on the side view of the insert.

Features of cutter

Streamlined holder design

- Improved chip evacuation in deep shouldering and slotting

Through coolant system

- Improved chip flow and tool life thanks to insert cooling

Strong clamping screws




- Strong clamping screws enable rigid clamping

3-side supporting system

- Stable tool life

Rich Mill RM6

Features of chip breakers

Insert	Cutting-edge	Uses	Features
MA		For aluminum	Sharp cutting-edges for excellent cutting performance in aluminum machining Buffed surface for excellent chip flow and welding resistance
ML		For light cutting	Chip breaker design of low cutting resistance, ideal for light cutting and machining hard-to-cut materials Excellent tool life and quality results
MM		For general cutting	Chip breaker design ideal for general shoulder milling and most applications

Application guideline for grade

Workpiece		P	M	K	N	
		Carbon steel	Alloy steel	Stainless steel	Cast iron	Non-ferrous metal
Shape	1st recommended	MM	MM	ML	ML	MA
	2nd recommended	ML	ML	-	MM	MA
Grades	High speed milling	PC3600	PC3600	PC5300	PC6510	H01
	General milling	PC5400	PC5300	PC5400	PC5300	H01
	Interrupted milling	PC5400	PC5400	PC5400	PC5400	H01

Recommended cutting condition

• WNGX04

Workpiece	Grades	WNGX040304PNSR-MM			WNGX040304PNER-ML			WNGX040304PNFR-MA			
		vc (m/min)	fz (mm/t)	max. ap(mm)	vc (m/min)	fz (mm/t)	max. ap (mm)	vc (m/min)	fz (mm/t)	max. ap (mm)	
P	Steel	PC3600	160~270	0.25~0.05	4.3	160~270	0.20~0.05	4.3	-	-	4.3
		PC5300	150~240	0.25~0.05	4.3	150~240	0.25~0.05	4.3	-	-	4.3
		PC5400	130~210	0.25~0.05	4.3	130~210	0.25~0.05	4.3	-	-	4.3
M	Stainless steel	PC5300	90~150	0.20~0.05	4.3	90~150	0.10~0.05	4.3	-	-	4.3
		PC5400	70~120	0.20~0.05	4.3	70~120	0.10~0.05	4.3	-	-	4.3
K	Cast iron	PC6510	140~230	0.30~0.08	4.3	140~230	0.25~0.08	4.3	-	-	4.3
		PC5300	120~200	0.30~0.08	4.3	120~200	0.25~0.08	4.3	-	-	4.3
N	Non-ferrous metal	H01	-	-	4.3	-	-	4.3	500~1000	0.2~0.05	4.3

※ The above data refer to general cutting conditions and can be adjustable up to 300 m/min and 0.4 mm/t depending on user environment.

• WNGX08

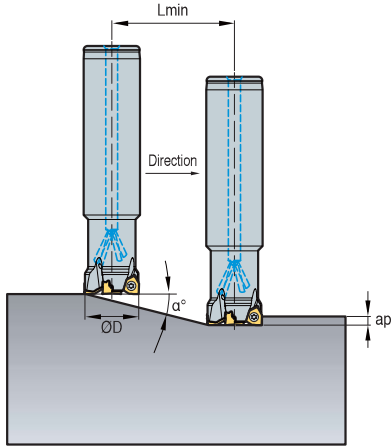
Workpiece	Grades	WNGX080608PNSR-MM			WNGX080608PNER-ML			WNGX080608PNFR-MA			
		vc (m/min)	fz (mm/t)	max. ap (mm)	vc (m/min)	fz (mm/t)	max. ap (mm)	vc (m/min)	fz (mm/t)	max. ap (mm)	
P	Steel	PC3600	160~270	0.25~0.05	8.2	160~270	0.20~0.05	8.2	-	-	8.2
		PC5300	150~240	0.25~0.05	8.2	150~240	0.25~0.05	8.2	-	-	8.2
		PC5400	130~210	0.25~0.05	8.2	130~210	0.25~0.05	8.2	-	-	8.2
M	Stainless steel	PC5300	90~150	0.20~0.05	8.2	90~150	0.10~0.05	8.2	-	-	8.2
		PC5400	70~120	0.20~0.05	8.2	70~120	0.10~0.05	8.2	-	-	8.2
K	Cast iron	PC6510	140~230	0.30~0.08	8.2	140~230	0.25~0.08	8.2	-	-	8.2
		PC5300	120~200	0.30~0.08	8.2	120~200	0.25~0.08	8.2	-	-	8.2
N	Non-ferrous metal	H01	-	-	8.2	-	-	8.2	500~1000	0.2~0.05	8.2

※ The above data refer to general cutting conditions and can be adjustable up to 300 m/min and 0.4 mm/t depending on user environment.

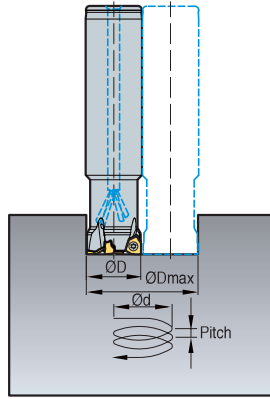
Rich Mill RM6

Ramping

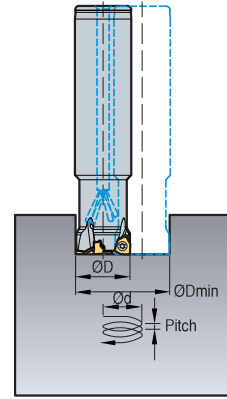
1. Ramping



2. Helical cutting for blind holes



3. Helical cutting for through holes



(mm)

Designation	Tool Dia. ØD	Depth of cut ap	1. Ramping		2. Helical cutting for blind holes				3. Helical cutting for through holes		
			Max. rake angle α°	Lmin	Min. machining Dia. Ø DHmin	Max. pitch dmax	Max. machining Dia. Ø DHmax	Max. pitch dmax	Min. machining Dia. Ø DHmin	Max. pitch dmax	
RM6PS	032R-2W32-120-WN08	32	8	0,8	572,9	54	0,96	62	1,3	38,5	0,5
	040R-3W32-120-WN08	40	8	0,5	916,7	70	0,82	78	1,0	54,5	0,4
	050R-4W32-120-WN08	50	8	0,3	1527,9	90	0,66	98	0,8	74,5	0,3
RM6PCM	063R-22-6-WN08	63	8	0,2	2291,3	116	0,58	124	0,6	100,5	0,3
	080R-27-7-WN08	80	8	0,1	4583,7	150	0,38	158	0,4	134,5	0,2
	100R-32-8-WN08	100	8	0,1	4583,7	190	0,49	198	0,5	174,5	0,3
	125R-40-11-WN08	125	8	0,1	4583,7	240	0,63	248	0,6	224,5	0,3

$L_{min} = ap / \tan(\alpha^\circ)$

Lmin: Cutting length at min. rake angle
 ap: Axial depth of cut
 α°: Available rake angle for ramping



Rich Mill RM8

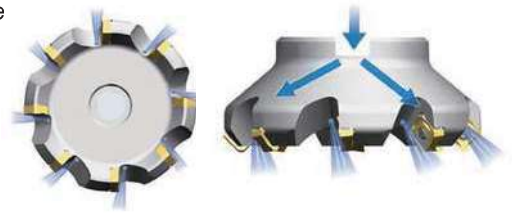
Features

- Double-sided insert to use 8 cutting-edges
- Innovative double-sided insert makes it possible to use 8 cutting-edges
It is more economical than conventional single sided insert
- The unique geometry and high rake angle of cutting-edge guarantees excellent surface finish
Applicable for various workpieces like steel, stainless steel, cast iron, aluminum
- Combined with the innovative geometry and various grades provided the tool offers durability and excellent tool life
- Various pitches and chip breakers can be applicable for diverse machining
- Light Rich Mill cutter can be useful for high speed machining and low power machine



Through coolant system

- Exclusive coolant bolt is adapted to get better chip evacuation and more powerful cooling. To get optimal chip evacuation, the direction of coolant injection has been designed to reach to each cutting-edge directly.
Through coolant arbor is required

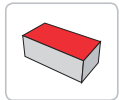


Through coolant system for decreasing cutting heat and good chip evacuation

Features of chip breaker

Insert	Cutting-edge	Uses	Features
MA		For aluminum	Due to sharp cutting-edge and buffed surface, it has good chip flow and welding resistance
ML		For hard-to-cut material	Chip breaker with low cutting load is optimal for machining hard-to-cut materials
MF		For light cutting	Due to low cutting load, it is good for light cutting and difficult-to-cut material
MM		For general cutting	It is suitable design for general milling
W		For wiper	Specialized edge design can be suitable for excellent surface roughness operation

Uses




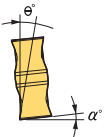
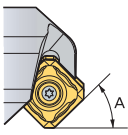
Facing

Features of insert

Insert	Cutting-edge	Features
		High rake chip breaker & positive setting angle for low cutting load
		Designed wiper technology in minor cutting-edge for improved surface roughness
		Low cutting load due to the positive setting and high rake angle chip breaker

Rich Mill RM8

Features of cutter

Shape	Setting angle of insert	Features
		High rake angle makes positive setting angle for low cutting load
		Suitable for facing and chamfering • RM8A A = 45° • RM8E A = 75° • RM8Q A = 88°

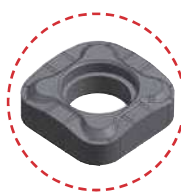
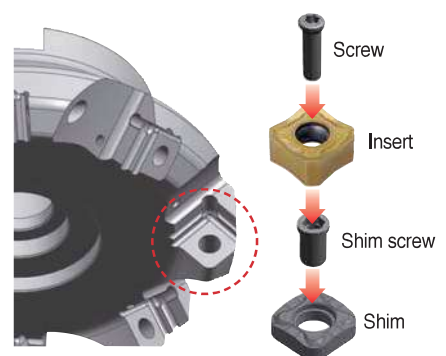
Recommended cutting condition

ISO	Grades	SNM(E)X1206A(E)NN-MF		SNM(E)X1206A(E)NN-MM		SNEX1206A(E)NN-MA		Max-ap (mm)	SNM(E)X1507A(E)NN-MF		SNM(E)X1507A(E)NN-MM		Max-ap (mm)	
		vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)		vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)		
P	NC5330	-	-	150~300	0.10~0.35	150~300	0.10~0.35	RM8A 6.0mm	-	-	150~300	0.10~0.35	RM8A 7.5 mm	
	NCM325	200~300	0.05~0.30	150~300	0.10~0.35	150~300	0.10~0.35		200~300	0.05~0.30	150~300	0.10~0.35		
	PC3500	200~300	0.05~0.30	150~300	0.10~0.35	150~300	0.10~0.35		200~300	0.05~0.30	150~300	0.10~0.35		
M	PC9530	90~150	0.05~0.25	90~150	0.10~0.35	-	-	RM8E 9.0mm	90~150	0.10~0.30	90~150	0.10~0.35		RM8E 11 mm
	PC5300	90~150	0.05~0.25	90~150	0.10~0.35	-	-		90~150	0.10~0.30	90~150	0.10~0.35		
K	PC6510	150~300	0.08~0.35	150~300	0.10~0.40	150~300	0.10~0.40	RM8Q 11.5mm	150~300	0.08~0.35	150~300	0.10~0.40		
	PC5300	150~300	0.08~0.35	150~300	0.10~0.40	150~300	0.10~0.40		150~300	0.08~0.35	150~300	0.10~0.40		

Rich Mill RMH8

Features

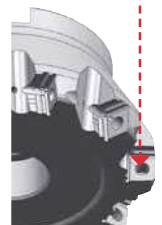
- Screw on clamping system - Adaptable and Stable clamping system
- Reinforced rigidity and enhanced clamping power
 - Applying shim system, prevent cutter damage when insert breaks
- Adapting/exchangeable shim
 - Using various kinds of cutter (Approach angle 45°, 75°, 88°)
 - Stable clamping power with insert



RMH8A
(AA 45°)



RMH8E
(AA 75°)



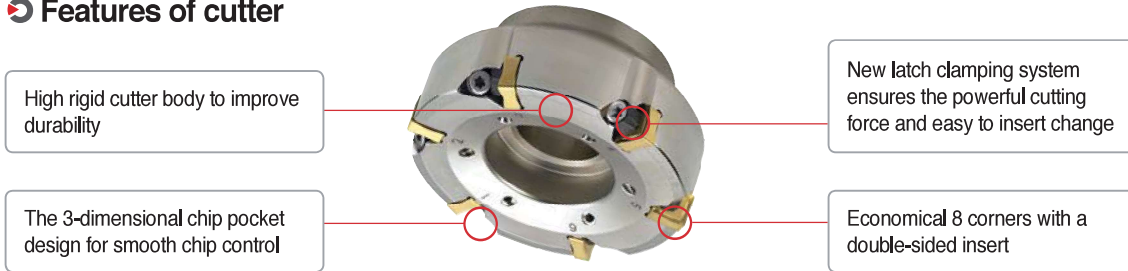
RMH8Q
(AA 88°)

Rich Mill RMT8

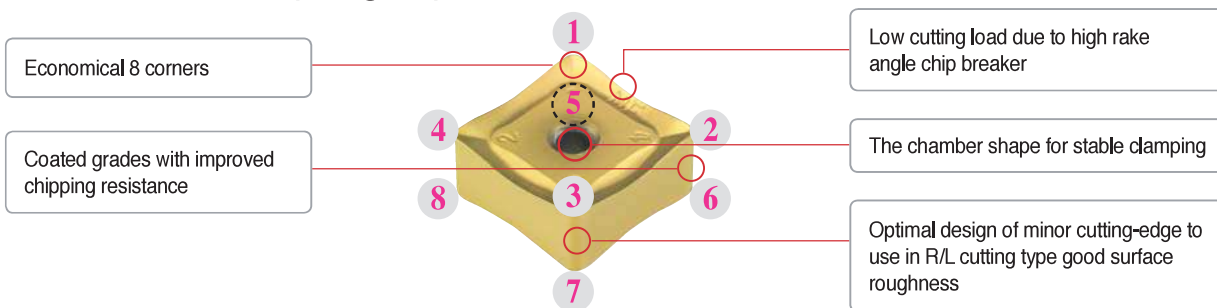
Features

- New latch clamping system provides a powerful cutting force and an easy insert change
- New grades with chipping resistance provides good surface roughness and better tool life
- Due to the specially designed chip breaker, all operations are possible
- RMT with various pitches can replace conventional ISO milling tool

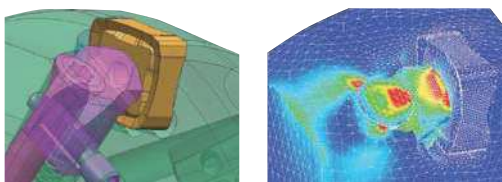
Features of cutter



Features of insert (Using R/L)



Clamping force analysis



Features of chip breakers

	Insert	Cutting-edge	Uses	Features
MF			For fine finishing	Our specialized insert design creates low cutting forces suitable for light cutting, HRSA
MM			For strengthen	Suitable geometry design for general milling has wider ranges of machining

Recommended grades and chip breakers

ISO	Grades	MM	MF
P	NCM325	◎	○
	PC5300	◎	○
M	PC9530	○	◎
K	PC6510	○	◎

◎: Optimum ○: Proper

Recommended cutting condition






ISO	Grades	MM		MF	
		vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)
P	NC5330	190~310	0.10~0.35	190~310	0.05~0.30
	NCM325	160~270	0.10~0.35	160~270	0.05~0.30
	PC3500	130~210	0.10~0.35	130~210	0.05~0.30
M	PC9530	90~150	0.05~0.30	90~150	0.05~0.30
K	PC6510	140~230	0.10~0.40	140~230	0.08~0.35

Rich Mill RM16











Features

- Economical 16 cutting-edges
- Reduces cost in medium cutting
- Wiper insert can be used for good surface roughness
- Optimal matching of the special cutting-edge geometry with variety of new grades provides consistence & long tool
- When it is used 16 corners, maximum cutting depth is 5.5 mm, but it is used 8 corners, maximum cutting depth is 13 mm
- Wiper insert is placed 0.05 mm lower than facing insert in cutter
- When feed is bigger than wiper cutting-edge length (7 mm), 2 wiper inserts are placed in symmetrical position

Features of chip breakers

Insert	Cutting-edge	Uses	Features
MA		For aluminum cutting light	With sharp edge application, the better productivity has been accomplished, especially for aluminum cutting
ML		For hard-to-cut material	Chip breaker with low cutting load is optimal for machining hard-to-cut materials
MF		For light cutting	Due to low cutting load, it is good for light cutting and difficult-to-cut material
MM		For general cutting	It is suitable design for general milling
W		For wiper	It has better surface roughness than MM and MF chip breakers

Instruction for wiper insert

Hand	Correct setting	Incorrect setting			
Right hand					
Decision	○	×	×	×	×
Left hand					
Decision	○	×	×	×	×

Through coolant system

- Well designed chip pocket for better chip flow
- Through coolant system reduces cutting heat and improves chip evacuation



Recommended cutting condition

(mm)

ISO	Grades	ONM(H)X060608-MM		ONM(H)X060608-MF		ONHX060608-W		ONM(H)X080608-MM		ONM(H)X080608-MF		ONHX080608-W	
		vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)
P	NCM325	150~300	0.10~0.35	200~300	0.05~0.30	200~300	0.05~0.20	150~300	0.10~0.40	200~300	0.05~0.35	200~300	0.05~0.25
	PC3500	150~300	0.10~0.35	200~300	0.05~0.30	200~300	0.05~0.20	150~300	0.10~0.40	200~300	0.05~0.35	200~300	0.05~0.25
M	PC6510	120~180	0.10~0.35	100~180	0.05~0.30	100~180	0.05~0.20	120~180	0.10~0.40	100~180	0.05~0.35	100~180	0.05~0.25
K	PC9530	150~300	0.10~0.40	150~300	0.08~0.35	150~300	0.05~0.25	150~300	0.10~0.45	150~300	0.08~0.40	150~300	0.05~0.30



Cutters

Type	A.A	Designation	Shape	Cutter Diameter	Application	Features	Page		
RM3	90°	RM3PC(M)3000 ^{new}		Ø40~Ø80	XNKT060405PNER-ML XNKT060405PNSR-MM		E89		
		RM3PC(M)4000 ^{new}		Ø40~Ø125	XNCT080508PNFR-MA XNKT080508PNER-ML XNKT080508PNSR-MM			XNKT080512PNSR-MM XNKT080516PNSR-MM XNKT080520PNSR-MM	E90
		RM3PC(M)5000 ^{new}		Ø80~Ø125	XNCT120608PNER-MA XNKT120608PNER-ML XNKT120612PNER-ML XNKT120616PNER-ML XNKT120620PNER-ML			XNKT120608PNSR-MM XNKT120612PNSR-MM XNKT120616PNSR-MM XNKT120620PNSR-MM	E91
RM4	90°	RM4PC(M)3000		Ø40~Ø100	LNEX100605PNER-MF LNMX100605aPNER-MF LNEX100605PNER-MM LNMX100605PNER-MM LNEX100608PNER-MF LNMX100608PNER-MF	LNEX100608PNER-MM LNMX100608PNER-MM LNEX100605PNER-MA LNEX100605PNL-MM LNMX100605PNL-MM		E95	
		RM4PC(M)4000		Ø50~Ø160	LNEX151004PNER-MF LNMX151004PNER-MF LNEX151004PNER-MM LNMX151004PNER-MM LNEX151008PNER-MF LNMX151008PNER-MF LNEX151008PNER-MM LNMX151008PNER-MM	LNEX151016PNER-MF LNMX151016PNER-MF LNEX151016PNER-MM LNMX151016PNER-MM LNEX151004PNER-MA LNEX151008PNER-MA LNEX151008PNL-MM LNMX151008PNL-MM			
		RM4ZCM3000		Ø40~Ø52	LNEX100605PNL-MM	LNMX100605PNL-MM		E108	
		RM4ZC(M)4000		Ø63~Ø100	LNEX151008PNL-MM	LNMX151008PNL-MM			
RM6	90°	RM6PCM-WN04 ^{new}		Ø40~Ø63	WNGX040304PNFR-MA WNGX040308PNFR-MA WNGX040312PNFR-MA WNGX040316PNFR-MA WNGX040304PNER-ML WNGX040308PNER-ML	WNGX040312PNER-ML WNGX040316PNER-ML WNGX040304PNSR-MM WNGX040308PNSR-MM WNGX040312PNSR-MM WNGX040316PNSR-MM		E110	
		RM6PC(M)-WN08 ^{new}		Ø50~Ø125	WNGX080604PNFR-MA WNGX080608PNFR-MA WNGX080612PNFR-MA WNGX080616PNFR-MA WNGX080604PNER-ML WNGX080608PNER-ML WNGX080612PNER-ML	WNGX080616PNER-ML WNGX080620PNER-ML WNGX080604PNSR-MM WNGX080608PNSR-MM WNGX080612PNSR-MM WNGX080616PNSR-MM WNGX080620PNSR-MM			









Cutters

Type	A.A	Designation	Shape	Cutter Diameter	Application		Features	Page	
RM8	45°	RM8AC(M)4000		Ø50~Ø400	SNEX1206ANN-MA SNEX1206ANN-MF SNMX1206ANN-MF SNEX1206ANN-ML	SNEX1206ANN-MM SNMX1206ANN-MM SNEX1206ANN-W		E115	
		RM8AC(M)5000		Ø80~Ø400	SNEX1507ANN-MF SNMX1507ANN-MF SNEX1507ANN-ML	SNEX1507ANN-MM SNMX1507ANN-MM		E117	
	75°	RM8EC(M)4000		Ø50~Ø400	SNEX1206ENN-MA SNEX1206ENN-MF SNMX1206ENN-MF	SNEX1206ENN-ML SNEX1206ENN-MM SNMX1206ENN-MM		E119	
		RM8EC(M)5000		Ø80~Ø400	SNEX1507ENN-MF SNMX1507ENN-MF SNEX1507ENN-ML	SNEX1507ENN-MM SNMX1507ENN-MM		E121	
	88°	RM8QC(M)4000		Ø63~Ø200	SNEX1206QNN-MA SNEX1206QNN-MF SNMX1206QNN-MF SNEX1206QNN-ML SNEX1206QNN-MM SNMX1206QNN-MM	SNEX120612-MA SNEX120612-MF SNMX120612-MF SNEX120612-ML SNEX120612-MM SNMX120612-MM		E123	
	45°	RMH8AC(M)4000		Ø50~Ø400	SNEX1206ANN-MA SNEX1206ANN-MF SNMX1206ANN-MF	SNEX1206ANN-ML SNEX1206ANN-MM SNMX1206ANN-MM SNEX1206ANN-W			E116
		RMH8AC(M)5000		Ø80~Ø400	SNEX1507ANN-MF SNMX1507ANN-MF SNEX1507ANN-ML	SNEX1507ANN-MM SNMX1507ANN-MM			E118
	75°	RMH8EC(M)4000		Ø50~Ø400	SNEX1206ENN-MA SNEX1206ENN-MF SNMX1206ENN-MF	SNEX1206ENN-ML SNEX1206ENN-MM SNMX1206ENN-MM			E120
		RMH8EC(M)5000		Ø80~Ø400	SNEX1507ENN-MF SNMX1507ENN-MF SNEX1507ENN-ML	SNEX1507ENN-MM SNMX1507ENN-MM			E122
	88°	RMH8QC(M)4000		Ø63~Ø200	SNEX1206QNN-MA SNEX1206QNN-MF SNMX1206QNN-MF SNEX1206QNN-ML SNEX1206QNN-MM SNMX1206QNN-MM	SNEX120612-MA SNEX120612-MF SNMX120612-MF SNEX120612-ML SNEX120612-MM SNMX120612-MM			E124

- Economical 8 corners.
- Low cutting load and excellent smooth cutting.



Cutters

Type	A.A	Designation	Shape	Cutter Diameter	Application		Features	Page	
RMT8	45°	RMT8A(M) 4000/5000		Ø80~Ø315	SNCF1206ANN-MF SNCF1507ANN-MF SNMF1206ANN-MF SNMF1507ANN-MF	SNCF1206ANN-MM SNCF1507ANN-MM SNMF1206ANN-MM SNMF1507ANN-MM		<ul style="list-style-type: none"> Economical 8 corners. Excellent tool life and surface toughness due to low cutting resistance and high rake edge geometry. 	E125 E126
	75°	RMT8E(M) 4000/5000		Ø80~Ø315	SNCF1206ENN-MF SNCF1507ENN-MF SNMF1206ENN-MF SNMF1507ENN-MF	SNCF1206ENN-MM SNCF1507ENN-MM SNMF1206ENN-MM SNMF1507ENN-MM		<ul style="list-style-type: none"> Good performance with increased chipping resistance and grade 	E127 E128
	88°	RMT8Q(M)4000		Ø80~Ø315	SNCF1206QNN-MF	SNMF1206QNN-MF		<ul style="list-style-type: none"> Good performance with increased chipping resistance and grade 	E129
RMT16	45°	RM16AC(M) 6000/8000		Ø63~Ø400	ONHX060608-MF ONMX060608-MF ONHX0606ANN-MF ONMX0606ANN-MF ONHX080608-MF ONMX080608-MF ONHX0806ANN-MF ONMX0806ANN-MF ONHX060608-ML ONMX060608-ML ONHX080608-ML ONMX080608-ML	ONMX060608-MM ONHX0606ANN-MM ONMX0606ANN-MM ONHX080608-MM ONMX080608-MM ONHX0806ANN-MM ONMX0806ANN-MM ONHX060608-MA ONMX060608-MA ONHX080608-MA ONMX080608-MA		<ul style="list-style-type: none"> Economical 16 corners. Wiper insert for surface roughness. 	E130 E131

Shanks/Modulars

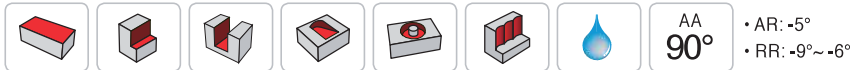
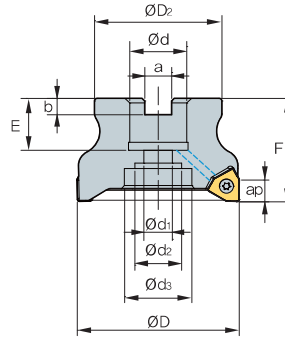
Type	A.A	Designation	Shape	Cutter Diameter	Application		Features	Page	
RM3	90°	RM3PS3000 new		Ø20~Ø40	XNKT060405PNER-ML	XNKT060405PNSR-MM		<ul style="list-style-type: none"> Economical 3 corners. Perfect perpendicular shouldering operation multi milling tool 	E92
		RM3PS4000 new		Ø32~Ø63	XNKT080508PNER-ML XNKT080508PNSR-MM XNKT080512PNSR-MM	XNKT080516PNSR-MM XNKT080520PNSR-MM			E93
		RM3PM new 3000/4000	Ø20~Ø50	XNKT060405PNER-ML XNKT060405PNSR-MM XNKT060408PNER-ML XNKT060408PNSR-MM XNCT080504PNFR-MA XNCT080508PNFR-MA XNCT080512PNFR-MA XNCT080520PNFR-MA	XNKT080508PNER-ML XNKT080508PNSR-MM XNKT080512PNER-ML XNKT080512PNSR-MM XNKT080516PNER-ML XNKT080516PNSR-MM XNKT080520PNER-ML XNKT080520PNSR-MM	E94			
RM4	90°	RM4PS3000		Ø14~Ø50	LNEX100605PNR-MF LNMX100605PNR-MF LNEX100605PNR-MM LNMX100605PNR-MM LNEX100608PNR-MF LNMX100608PNR-MF	LNEX100608PNR-MM LNMX100608PNR-MM LNEX100605PNR-MA LNMX100605PNL-MM LNEX100605PNL-MM		<ul style="list-style-type: none"> Economical 4 corners. Screw on type for slotting, facing. 	E105
		RM4PS4000		Ø32~Ø63	LNEX151004PNR-MF LNMX151004PNR-MF LNEX151004PNR-MM LNMX151004PNR-MM LNEX151008PNR-MF LNMX151008PNR-MF LNEX151008PNR-MM LNMX151008PNR-MM	LNEX151016PNR-MF LNMX151016PNR-MF LNEX151016PNR-MM LNMX151016PNR-MM LNEX151004PNR-MA LNMX151004PNR-MA LNEX151008PNR-MA LNMX151008PNL-MM LNMX151008PNL-MM			E106

Shanks/Modulars

Type	A.A	Designation	Shape	Cutter Diameter	Application		Features	Page
RM4	90°	RM4ZS3000		Ø25~Ø40	LNEX100605PNL-MM	LNMX100605PNL-MM	<ul style="list-style-type: none"> Economical 4 corners. Optimal insert application for vertical machining 	E109
		RM4PM3000		Ø14~Ø50	LNEX100605PNR-MF LNMX100605PNR-MF LNEX100605PNR-MM LNMX100605PNR-MM LNEX100608PNR-MF LNMX100608PNR-MF	LNEX100608PNR-MM LNMX100608PNR-MM LNEX100605PNR-MA LNMX100605PNR-MA LNEX100605PNL-MM LNMX100605PNL-MM	 <ul style="list-style-type: none"> Economical 4 corners. Screw on type for slotting, facing. 	E107
		RM4ZM3000		Ø25~Ø40	LNEX100605PNL-MM	LNMX100605PNL-MM	<ul style="list-style-type: none"> Economical 4 corners. Optimal insert application for vertical machining 	E109
RM6	90°	RM6PS-WN04 new		Ø20~Ø32	WNGX040304PNFR-MA WNGX040308PNFR-MA WNGX040312PNFR-MA WNGX040316PNFR-MA WNGX040304PNER-ML WNGX040308PNER-ML	WNGX040312PNER-ML WNGX040316PNER-ML WNGX040304PNSR-MM WNGX040308PNSR-MM WNGX040312PNSR-MM WNGX040316PNSR-MM	 <ul style="list-style-type: none"> Improved productivity and high-quality shouldering through high speed and high feed machining 	E112
		RM6PS-WN08 new		Ø32~Ø50	WNGX080604PNFR-MA WNGX080608PNFR-MA WNGX080612PNFR-MA WNGX080616PNFR-MA WNGX080620PNFR-MA WNGX080604PNER-ML WNGX080608PNER-ML WNGX080612PNER-ML	WNGX080616PNER-ML WNGX080620PNER-ML WNGX080604PNSR-MM WNGX080608PNSR-MM WNGX080612PNSR-MM WNGX080616PNSR-MM WNGX080620PNSR-MM		E113
		RM6PM-WN04 new	Ø20~Ø32	WNGX040304PNFR-MA WNGX040308PNFR-MA WNGX040312PNFR-MA WNGX040316PNFR-MA WNGX040304PNER-ML WNGX040308PNER-ML	WNGX040312PNER-ML WNGX040316PNER-ML WNGX040304PNSR-MM WNGX040308PNSR-MM WNGX040312PNSR-MM WNGX040316PNSR-MM	E114		
		RM6PM-WN08 new	Ø32~Ø40	WNGX080604PNFR-MA WNGX080608PNFR-MA WNGX080612PNFR-MA WNGX080616PNFR-MA WNGX080620PNFR-MA WNGX080604PNER-ML WNGX080608PNER-ML WNGX080612PNER-ML	WNGX080616PNER-ML WNGX080620PNER-ML WNGX080604PNSR-MM WNGX080608PNSR-MM WNGX080612PNSR-MM WNGX080616PNSR-MM WNGX080620PNSR-MM	E114		



RM3PC(M)3000 new



Designation		⚙️	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	F	ap	⚖️
RM3PCM	3040HR	5	40	35	16	9	14	-	8.4	5.6	16	40	5.5	0.2
	3040HR-M	6	40	35	16	9	14	-	8.4	5.6	16	40	5.5	0.2
	3050HR	6	50	41	22	11	18	-	10.4	6.3	20	40	5.5	0.3
	3050HR-M	7	50	41	22	11	18	-	10.4	6.3	20	40	5.5	0.3
	3063HR	7	63	49	22	11	18	-	10.4	6.3	20	40	5.5	0.49
	3063HR-M	8	63	49	22	11	18	-	10.4	6.3	20	40	5.5	0.49
RM3PC (RM3PCM)	3080HR	8	80	57	25.4 (27)	14	25	35	9.5 (12.4)	6 (7)	25 (23)	50	5.5	0.87
	3080HR-M	10	80	57	25.4 (27)	14	25	35	9.5 (12.4)	6 (7)	25 (23)	50	5.5	0.88

() Metric size

Available inserts

XNKT-ML XNKT-MM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
XNKT	060405PNER-ML							●	●	●	●		●	●	●				E30
	060405PNSR-MM							●	●	●	●		●	●	●				
	060408PNER-ML									●	●			●	●				
	060408PNSR-MM							●	●	●	●			●	●				

Available arbors

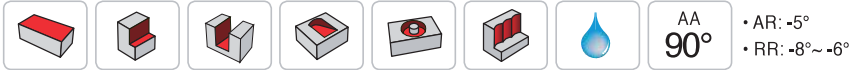
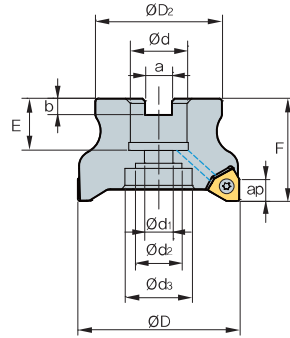
Designation	Available arbors	
	RM3PC	RM3PCM
RM3PC(M) 3040HR	-	BT□□-FMC16-□□
3040HR-M		
3050HR		
3050HR-M		
3063HR	-	BT□□-FMC22-□□
3063HR-M		
3080HR	BT□□-FMA25.4-□□	BT□□-FMC27-□□
3080HR-M		

Parts

Specification	Screw	Wrench
Ø40~Ø80	FTNA0306	TW09S

Available inserts E30 Available arbors and bolt E400~E402

RM3PC(M)4000 new



(mm)

Designation	Flutes	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	F	ap	kg	
RM3PCM	4040HR	3	40	35	16	9	14	-	8.4	5.6	19	40	8.0	0.19
	4040HR-M	4	40	35	16	9	14	-	8.4	5.6	19	40	8.0	0.19
	4050HR	4	50	42	22	11	18	-	10.4	6.3	20	40	8.0	0.28
	4050HR-M	5	50	42	22	11	18	-	10.4	6.3	20	40	8.0	0.29
	4063HR	5	63	49	22	11	18	-	10.4	6.3	20	40	8.0	0.54
	4063HR-M	6	63	49	22	11	18	-	10.4	6.3	20	40	8.0	0.53
RM3PC (RM3PCM)	4080HR	5	80	57	25.4 (27)	14	20	35	9.5 (12.4)	6 (7)	25 (23)	50	8.0	1.08
	4080HR-M	7	80	57	25.4 (27)	14	20	35	9.5 (12.4)	6 (7)	25 (23)	50	8.0	1.06
	4100HR	7	100	67	31.75 (32)	18	26	42	12.7 (14.4)	8 (8)	33 (25)	63 (50)	8.0	1.68
	4100HR-M	8	100	67	31.75 (32)	18	26	42	12.7 (14.4)	8 (8)	33 (25)	63 (50)	8.0	1.67
	4125HR	8	125	90	38.1 (40)	22	32	52	15.9 (16.4)	9 (10)	38 (29)	63	8.0	3.45
	4125HR-M	10	125	90	38.1 (40)	22	32	52	15.9 (16.4)	9 (10)	38 (29)	63	8.0	3.45

Available inserts

() Metric size



Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
XNCT	080504PNFR-MA																		●
	080508PNFR-MA																		●
	080512PNFR-MA																		●
	080520PNFR-MA																		●
XNKT	080504PNER-ML																		
	080504PNSR-MM																		
	080508PNER-ML					●													
	080508PNSR-MM					●		●	●	●	●		●	●	●				E29
	080512PNER-ML																		
	080512PNSR-MM							●	●	●									
	080516PNER-ML																		
	080516PNSR-MM							●	●	●									
	080520PNER-ML																		
	080520PNSR-MM							●	●	●									E30

Available arbors

Designation	Available arbors	
	RM3PC	RM3PCM
RM3PC(M)	4040HR	BT□□-FMC16-□□
	4050HR	BT□□-FMC22-□□
	4063HR	
	4080HR	BT□□-FMA25.4-□□
	4100HR	BT□□-FMA31.75-□□
	4125HR	BT□□-FMA38.1-□□

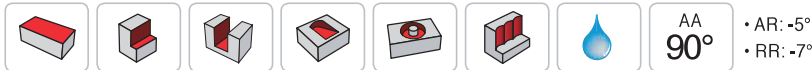
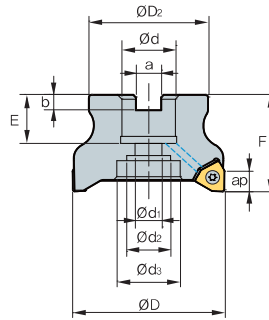
Parts

Specification	Screw	Wrench
Ø40~Ø125	FTNA0408	TW15S

Available inserts E29, E30 Available arbors and bolt E400~E402



RM3PC(M)5000 new



Designation		⊙	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	F	ap	kg
RM3PC (RM3PCM)	5080HR	5	80	57	25.4 (27)	14	20	35	9.5 (12.4)	6 (7)	24 (23)	50	12.0	0.84
	5080HR-M	7	80	57	25.4 (27)	14	20	35	9.5 (12.4)	6 (7)	24 (23)	50	12.0	0.84
	5100HR	7	100	67	31.75 (32)	18	28	45	12.7 (14.4)	8 (8)	32 (25)	63	12.0	1.76
	5100HR-M	8	100	67	31.75 (32)	18	28	45	12.7 (14.4)	8 (8)	32 (25)	63	12.0	1.76
	5125HR	8	125	90	38.1 (40)	22	32	52	15.9 (16.4)	9 (10)	38 (30)	63	12.0	2.70
	5125HR-M	10	125	90	38.1 (40)	22	32	52	15.9 (16.4)	9 (10)	38 (30)	63	12.0	2.70

() Metric size

Available inserts



Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
XNCT 120608PNFR-MA																			
XNKT 120604PNSR-MM																			
120608PNER-ML																			
120608PNSR-MM																			
120612PNER-ML																			
120612PNSR-MM																			
120616PNER-ML																			
120616PNSR-MM																			
120620PNER-ML																			
120620PNSR-MM																			

E29
E30

Available arbors

Designation	Available arbors	
	RM3PC	RM3PCM
RM3PC(M) 5080HR	BT□□-FMA25.4-□□	BT□□-FMC27-□□
5100HR	BT□□-FMA31.75-□□	BT□□-FMC32-□□
5125HR	BT□□-FMA38.1-□□	BT□□-FMC40-□□

Parts

Specification	Screw	Wrench
Ø80~Ø125	FTNA0511	TW20-100

Available inserts E29, E30 Available arbors and bolt E400~E402

RM3PS3000 new

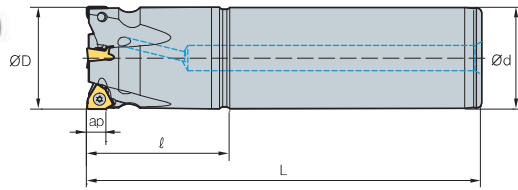


Fig. 1

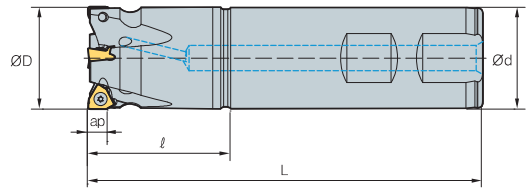
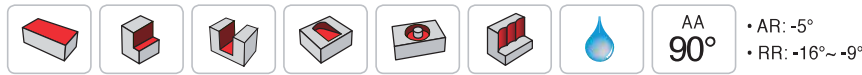


Fig. 2



AA
90°

• AR: -5°
• RR: +16°~+9°

(mm)

Designation		ØD	Ød	ℓ	L	ap		Fig.
RM3PS 3020HR-2S20	2	20	20	35	100	5.5	0.21	2
3020HR-2L20	2	20	20	35	200	5.5	0.43	1
3021HR-2S20	2	21	20	30	100	5.5	0.21	2
3021HR-2L20	2	21	20	30	200	5.5	0.43	1
3025HR-3S20	3	25	20	35	115	5.5	0.27	2
3025HR-3L20	3	25	20	35	200	5.5	0.46	1
3025HR-3S25	3	25	25	40	115	5.5	0.36	2
3025HR-3L25	3	25	25	40	200	5.5	0.66	1
3026HR-2S20	2	26	20	35	115	5.5	0.29	2
3026HR-2L20	2	26	20	35	200	5.5	0.47	1
3026HR-3S20	3	26	20	35	115	5.5	0.28	2
3026HR-3L20	3	26	20	35	200	5.5	0.47	1
3026HR-2S25	2	26	25	35	115	5.5	0.37	2
3026HR-2L25	2	26	25	35	200	5.5	0.68	1
3026HR-3S25	3	26	25	35	115	5.5	0.37	2
3026HR-3L25	3	26	25	35	200	5.5	0.68	1
3032HR-3S25	3	32	25	42	125	5.5	0.48	2
3032HR-3L25	3	32	25	42	200	5.5	0.74	1
3032HR-4S25	4	32	25	42	125	5.5	0.48	2
3032HR-4L25	4	32	25	42	200	5.5	0.74	1
3032HR-4S32	4	32	32	42	125	5.5	0.68	2
3032HR-4L32	4	32	32	42	200	5.5	1.13	1
3033HR-3S25	3	33	25	42	125	5.5	0.49	2
3033HR-3L25	3	33	25	42	200	5.5	0.75	1
3033HR-4S25	4	33	25	42	125	5.5	0.49	2
3033HR-4L25	4	33	25	42	200	5.5	0.75	1
3033HR-4S32	4	33	32	42	125	5.5	0.70	2
3033HR-4L32	4	33	32	42	200	5.5	1.14	1
3040HR-4S32	4	40	32	45	130	5.5	0.83	2
3040HR-4L32	4	40	32	45	200	5.5	1.24	1
3040HR-5S32	5	40	32	45	130	5.5	0.83	2
3040HR-5L32	5	40	32	45	200	5.5	1.24	1

() Metric size

Available inserts

XNKT-ML XNKT-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
XNKT 060405PNER-ML							●	●	●	●	●		●	●	●			
060405PNSR-MM							●	●	●	●	●		●	●	●			
060408PNER-ML							●	●	●	●	●		●	●	●			
060408PNSR-MM							●	●	●	●	●		●	●	●			

Parts

Specification		
Ø20~Ø40	FTNA0306	TW09S

Available inserts E30



RM3PS4000 new

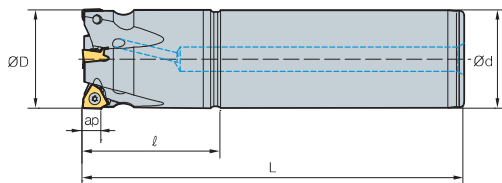


Fig. 1

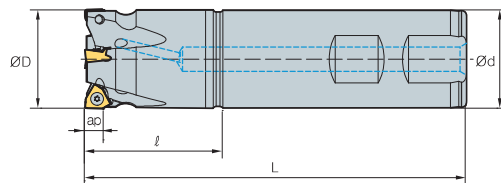


Fig. 2



(mm)

Designation		ØD	Ød	l	L	ap		Fig.
RM3PS 4032HR-3S32	3	32	32	42	125	8	0.67	2
4032HR-3L32	3	32	32	42	200	8	1.11	1
4033HR-3S32	3	33	32	42	125	8	0.68	2
4033HR-3L32	3	33	32	42	200	8	1.13	1
4040HR-3S32	3	40	32	42	130	8	0.8	2
4040HR-3L32	3	40	32	42	200	8	1.21	1
4040HR-4S32	4	40	32	42	130	8	0.81	2
4040HR-4L32	4	40	32	42	200	8	1.22	1
4050HR-4S32	4	50	32	42	135	8	0.99	2
4050HR-4L32	4	50	32	42	200	8	1.38	1
4050HR-4S40	4	50	40	42	135	8	1.32	2
4050HR-4L40	4	50	40	42	200	8	1.94	1
4050HR-5S32	5	50	32	42	135	8	1.02	2
4050HR-5L32	5	50	32	42	200	8	1.4	1
4050HR-5S40	5	50	40	42	135	8	1.35	2
4050HR-5L40	5	50	40	42	200	8	1.96	1
4063HR-5S32	5	63	32	42	135	8	1.31	2
4063HR-5L32	5	63	32	42	200	8	1.7	1
4063HR-5S40	5	63	40	42	135	8	1.64	2
4063HR-5L40	5	63	40	42	200	8	2.25	1
4063HR-6S32	6	63	32	42	135	8	1.31	2
4063HR-6L32	6	63	32	42	200	8	1.7	1
4063HR-6S40	6	63	40	42	135	8	1.64	2
4063HR-6L40	6	63	40	42	200	8	2.26	1

Available inserts



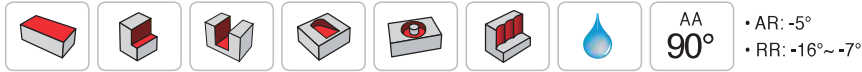
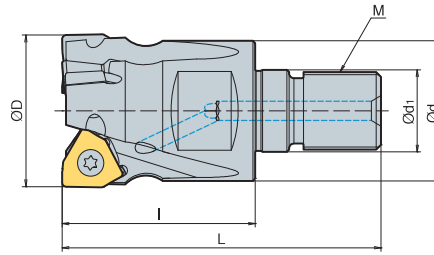
Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
XNCT 080504PNFR-MA																		●	E29 E30
080508PNFR-MA																		●	
080512PNFR-MA																		●	
080520PNFR-MA																		●	
XNKT 080504PNER-ML										●				●	●				
080504PNSR-MM										●	●			●	●				
080508PNER-ML					●					●	●			●	●				
080508PNSR-MM					●					●	●			●	●				
080512PNER-ML										●	●			●	●				
080512PNSR-MM										●	●			●	●				
080516PNER-ML														●	●				
080516PNSR-MM										●	●			●	●				
080520PNER-ML														●	●				
080520PNSR-MM										●	●			●	●				

Parts

Specification		
Ø32~Ø63	FTNA0408	TW15S

Available inserts E29, E30

RM3PM3000/4000 new



Designation		⊙	ØD	Ød	Ød ₁	I	L	M	ap	kg
RM3PM	3020HR-2-M10	2	20	18	10.5	30	50	M10	5.5	0.06
	3025HR-3-M12	3	25	21	12.5	35	58	M12	5.5	0.1
	3032HR-4-M16	4	32	29	17	40	66	M16	5.5	0.21
	3040HR-5-M16	5	40	29	17	40	66	M16	5.5	0.26
RM3PM	4032HR-3-M16	3	32	29	17	40	66	M16	8	0.21
	4040HR-4-M16	4	40	29	17	50	76	M16	8	0.33
	4050HR-5-M16	5	50	29	17	55	81	M16	8	0.49

Available inserts



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
3000 type	XNKT	060405PNER-ML						●	●	●	●		●	●	●				
		060405PNSR-MM					●	●	●	●	●			●	●				
		060408PNER-ML							●	●	●			●	●				
		060408PNSR-MM						●	●	●	●			●	●				
4000 type	XNCT	080504PNFR-MA																●	
		080508PNFR-MA																●	
		080512PNFR-MA																●	
		080520PNFR-MA																●	
	XNKT	080504PNER-ML								●					●	●			
		080504PNSR-MM								●	●			●	●	●			
		080508PNER-ML					●			●	●	●		●	●	●			
		080508PNSR-MM					●			●	●	●		●	●	●			
		080512PNER-ML								●	●	●			●	●			
		080512PNSR-MM								●	●	●			●	●			
		080516PNER-ML								●	●	●			●	●			
		080516PNSR-MM								●	●	●			●	●			
080520PNER-ML													●	●					
080520PNSR-MM													●	●					

Available adaptor

Designation	Available adaptor	
RM3PM	3020HR-2-M10	MAT-M10
	3025HR-3-M12	MAT-M12
	3032HR-4-M16	MAT-M16
	3040HR-5-M16	MAT-M16
RM3PM	4032HR-3-M16	MAT-M16
	4040HR-4-M16	MAT-M16
	4050HR-5-M16	MAT-M16

Designation: RM3PM4032HR-M16
Modular head threading measure size (M16)

||

Adaptor spec.: MAT-M16-035-S32S
Adaptor threading measure (M16)

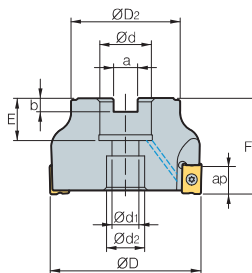
Parts

Specification	Screw	Wrench
Ø20~Ø40 (3000 type)	FTNA0306	TW09S
Ø32~Ø50 (4000 type)	FTNA0408	TW15S

Available inserts E29, E30 Available adaptor E371~E372



RM4PC(M)3000



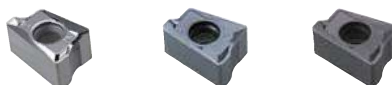
(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap		Bolt	
RM4PCM	3040HR	4	40	35	16	9	14	8.4	5.6	19	40	9.0	0.24	SB0825
	3040HR-M	5	40	35	16	9	14	8.4	5.6	19	40	9.0	0.23	SB0825
	3050HR	5	50	42	22	11	18	10.4	6.3	20	40	9.0	0.36	SB1025
	3050HR-M	7	50	42	22	11	18	10.4	6.3	20	40	9.0	0.35	SB1025
	3063HR	7	63	49	22	11	18	10.4	6.3	20	40	9.0	0.61	SB1025
	3063HR-M	9	63	49	22	11	18	10.4	6.3	20	40	9.0	0.6	SB1025
RM4PC (RM4PCM)	3080HR	8	80	57	25.4 (27)	14	20	9.5 (12.4)	6.0 (7.0)	25 (23)	50	9.0	1.25 (1.24)	SB1230
	3080HR-M	10	80	57	25.4 (27)	14	20	9.5 (12.4)	6.0 (7.0)	25 (23)	50	9.0	1.24 (1.23)	SB1230
	3100HR	9	100	67	31.75(32)	18	26	12.7 (14.4)	8.0 (8.0)	33 (25)	63 (50)	9.0	2.46 (1.94)	SB1630
	3100HR-M	12	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0 (8.0)	33 (25)	63 (50)	9.0	2.44 (1.93)	SB1630

() Metric size

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
LNEX	100605PNR-MF																		E11
	100605PNR-MM									●	●			●	●				
	100605PNR-MA																	●	
	100608PNR-MF										●	●			●	●			
	100608PNR-MM										●	●			●	●			
LNMX	100605PNR-MF								●		●			●	●				
	100605PNR-MM								●	●	●	●		●	●				
	100608PNR-MF								●		●			●	●				
	100608PNR-MM								●	●	●			●	●				

Available arbors

Designation	Available arbors	
	RM4PC	RM4PCM
RM4PC(M)	3040HR	BT□□-FMC16-□□
	3040HR-M	
	3050HR	
	3050HR-M	BT□□-FMC22-□□
	3063HR	
	3063HR-M	

Designation	Available arbors	
	RM4PC	RM4PCM
RM4PC(M)	3080HR	BT□□-FMA25.4-□□
	3080HR-M	
	3100HR	BT□□-FMA31.75-□□
	3100HR-M	

Parts

Specification		
Ø40-Ø100	FTKA0307	TW09S

Available inserts E11 Available arbors and bolt E400~E402

RM4PC(M)4000

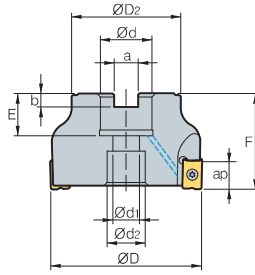


Fig. 1

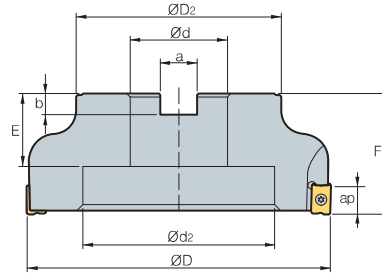


Fig. 2



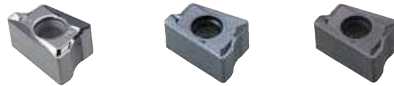
(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	kg	Bolt	Fig.		
RM4PCM	4040HR	3	40	36	16	11	18	8,4	5,6	19	40	14	0,23	SB0825	1
	4050HR	3	50	46	22	11	18	10,4	6,3	20	40	14	0,36	SB1025	1
	4050HR-M	4	50	46	22	11	18	10,4	6,3	20	40	14	0,35	SB1025	1
	4050HR-H	5	50	46	22	11	18	10,4	6,3	20	40	14	0,36	SB1025	1
	4063HR	4	63	49	22	11	18	10,4	6,3	20	40	14	0,56	SB1025	1
4063HR-M	6	63	49	22	11	18	10,4	6,3	20	40	14	0,57	SB1025	1	
RM4PC (RM4PCM)	4080HR	5	80	57	25,4 (27)	14	20	9,5 (12,4)	6,0 (7,0)	25 (23)	50	14	1,18 (1,16)	SB1230	1
	4080HR-M	7	80	57	25,4 (27)	14	20	9,5 (12,4)	6,0 (7,0)	25 (23)	50	14	1,17 (1,14)	SB1230	1
	4080HR-H	8	80	57	25,4 (27)	14	20	9,5 (12,4)	6,0 (7,0)	25 (23)	50	14	1,17 (1,14)	SB1230	1
	4100HR	5	100	67	31,75 (32)	18	26	12,7 (14,4)	8,0 (8,0)	33 (25)	63 (50)	14	2,35 (1,84)	SB1630	1
	4100HR-M	8	100	67	31,75 (32)	18	26	12,7 (14,4)	8,0 (8,0)	33 (25)	63 (50)	14	2,31 (1,82)	SB1630	1
	4100HR-H	9	100	67	31,75 (32)	18	26	12,7 (14,4)	8,0 (8,0)	33 (25)	63 (50)	14	2,31 (1,82)	SB1630	1
	4125HR	7	125	87	38,1 (40)	22	32	15,9 (16,4)	10 (9,0)	35 (30)	63	14	3,87 (3,79)	SB2040	1
	4125HR-M	10	125	87	38,1 (40)	22	32	15,9 (16,4)	10 (9,0)	35 (30)	63	14	3,82 (3,70)	SB2040	1
	4160R	8	160	107	50,8 (40)	-	100	19 (16,4)	11 (9,0)	38 (32)	63	14	5,0 (4,75)	MBA	2
	4160R-M	12	160	107	50,8 (40)	-	100	19 (16,4)	11 (9,0)	38 (32)	63	14	4,97 (4,71)	MBA	2

() Metric size

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Coated								Uncoated	page	Designation	Coated								Uncoated	page																
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010				PC3600	PC3700	PC6510	PC9530	PC9540	PC3300	PC5400	ST30A			H01	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC3300	PC5400
LNEX	151004PNR-MF									●	●	●						E11	LNMX	151004PNR-MF									●	●	●	●	●			E11	
	151004PNR-MM									●	●	●								151004PNR-MM																	
	151004PNR-MA																			151008PNR-MF																	
	151008PNR-MF										●	●	●								151008PNR-MM																
	151008PNR-MM										●	●	●								151016PNR-MF																
	151008PNR-MA																				151016PNR-MM																
	151016PNR-MF										●	●	●																								
151016PNR-MM										●	●	●																									

Available arbors

Designation	Available arbors		Designation	Available arbors	
	RM4PC	RM4PCM		RM4PC	RM4PCM
RM4PC(M)	4050HR		RM4PC(M)	4100HR	BT□□-FMA31.75-□□
	4050HR-M			4100HR-M	BT□□-FMC32-□□
	4063HR	-		4125HR	
	4063HR-M			4125HR-M	BT□□-FMA38.1-□□
	4080HR	BT□□-FMA25.4-□□		4160R	BT□□-FMB40-□□
	4080HR-M			4160R-M	BT□□-FMC40-□□

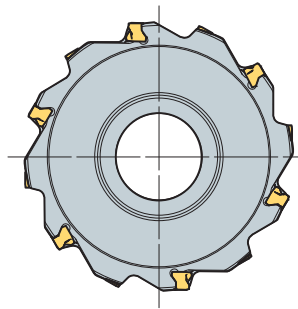
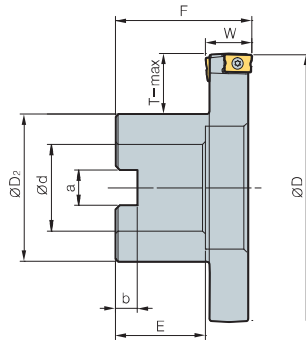
Parts

Specification	Screw	Wrench
Ø50~Ø160	FTKA0412B	TW15S

Available inserts E11 Available arbors and bolt E400~E402



RM4PFCB3000



(mm)

Designation		ØD	ØD ₂	Ød	a	b	E	F	W	T-max
RM4PFCB 308015R	10	80	40	25.4	9.5	6	25	50	15	19
	10	80	40	25.4	9.5	6	25	50	17	19
310015R	12	100	54	31.75	12.7	8	32	50	15	22
	12	100	54	31.75	12.7	8	32	50	17	22
312515R	14	125	70	38.1	15.9	10	38	60	15	26
	14	125	70	38.1	15.9	10	38	60	17	26
316015R	16	160	70	38.1	15.9	10	38	60	15	44
	16	160	70	38.1	15.9	10	38	60	17	44

Available inserts

LNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10
LNEX 100605PNR-MM									●	●				●	●			
	100605PNL-MM									●				●	●			
LNMX 100605PNR-MM									●	●	●	●		●	●			
	100605PNL-MM								●	●	●			●	●			

Available arbors

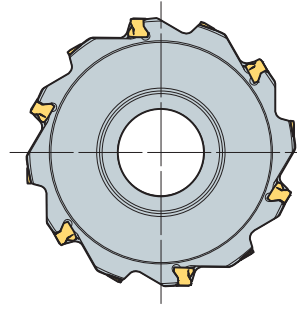
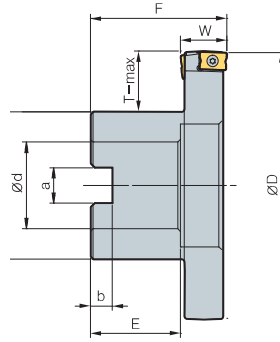
Designation	Available arbors
RM4PFCB 308015R	BT□□-FMA25.4-□□
	BT□□-FMA31.75-□□
308017R	
310015R	
310017R	
312515R	
312517R	
316015R	BT□□-FMA38.1-□□
316017R	

Parts

Specification		
Ø80-Ø160	FTKA0307	TW09S

Available inserts E11 Available arbors and bolt E400-E402

RM4PFCB4000



(mm)

Designation		ØD	ØD ₂	Ød	a	b	E	F	W	T-max	
RM4PFCB	408022R	6	80	40	25.4	9.5	6	25	50	22	19
	408024R	6	80	40	25.4	9.5	6	25	50	24	19
	408026R	6	80	40	25.4	9.5	6	25	50	26	19
	408028R	6	80	40	25.4	9.5	6	25	50	28	19
	410022R	8	100	54	31.75	12.7	8	32	50	22	22
	410024R	8	100	54	31.75	12.7	8	32	50	24	22
	410026R	8	100	54	31.75	12.7	8	32	50	26	22
	410028R	8	100	54	31.75	12.7	8	32	50	28	22
	412522R	10	125	70	38.1	15.9	10	38	60	22	26
	412524R	10	125	70	38.1	15.9	10	38	60	24	26
	412526R	10	125	70	38.1	15.9	10	38	60	26	26
	412528R	10	125	70	38.1	15.9	10	38	60	28	26
416022R	12	160	70	38.1	15.9	10	38	60	22	44	
416024R	12	160	70	38.1	15.9	10	38	60	24	44	
416026R	12	160	70	38.1	15.9	10	38	60	26	44	
416028R	12	160	70	38.1	15.9	10	38	60	28	44	

Available inserts

LNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10
LNEX	151008PNR-MM									●	●			●	●			
	151008PNL-MM									●	●			●	●			
LNMX	151008PNR-MM				●				●	●	●	●		●	●			
	151008PNL-MM								●	●				●	●			

Available arbors

Designation	Available arbors	Designation	Available arbors
RM4PFCB	408022R	RM4PFCB	412522R
	408024R		412524R
	408026R		412526R
	408028R		412528R
	410022R		416022R
	410024R		416024R
410026R	416026R		
410028R	416028R		

BT□□-FMA25.4-□□

BT□□-FMA31.75-□□

BT□□-FMA38.1-□□

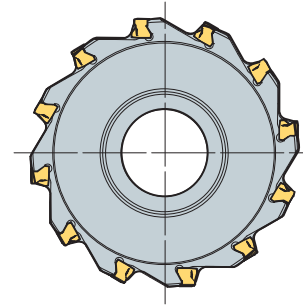
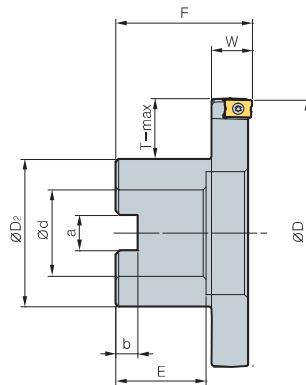
Parts

Specification		
Ø80~Ø160	FTKA0412B	TW15S

Available inserts E11 Available arbors and bolt E400-E402



RM4PHCB3000



(mm)

Designation		ØD	ØD2	Ød	a	b	E	F	W	T-max	
RM4PHCB	308015R	10	80	40	25.4	9.5	6	25	50	15	19
	310015R	12	100	54	31.75	12.7	8	32	50	15	22
	312515R	14	125	70	38.1	15.9	10	38	60	15	26
	316015R	16	160	70	38.1	15.9	10	38	60	15	44

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10
LNEX	100605PNR-MF										●			●	●			
	100605PNR-MM									●	●			●	●			
	100605PNR-MA																	●
	100608PNR-MF									●	●			●	●			
	100608PNR-MM										●			●	●			
LNMX	100605PNR-MF							●		●				●	●			
	100605PNR-MM							●	●	●	●			●	●			
	100608PNR-MF							●		●				●	●			
	100608PNR-MM							●	●	●				●	●			

Available arbors

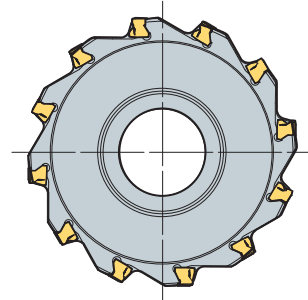
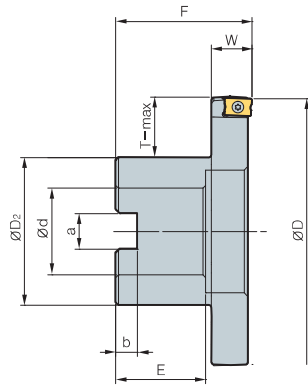
Designation	Available arbors	
RM4PHCB	308015R	BT□□ -FMA25.4-□□
	310015R	BT□□ -FMA31.75-□□
	312515R	BT□□ -FMA38.1-□□
	316015R	

Parts

Specification		
Ø80-Ø160	FTKA0307	TW09S

Available inserts E11 Available arbors and bolt E400~E402

RM4PHCB4000



(mm)

Designation		ØD	ØD ₂	Ød	a	b	E	F	W	T-max	
RM4PHCB	408020R	6	80	40	25.4	9.5	6	25	50	20	19
	410020R	8	100	54	31.75	12.7	8	32	50	20	22
	412520R	10	125	70	38.1	15.9	10	38	60	20	26
	416020R	12	160	70	38.1	15.9	10	38	60	20	44

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
LNEX	151004PNR-MF										●			●	●				E11
	151004PNR-MM										●			●	●				
	151004PNR-MA																	●	
	151008PNR-MF										●			●	●				
	151008PNR-MM									●	●			●	●				
	151008PNR-MA																	●	
	151016PNR-MF											●			●	●			
	151016PNR-MM											●			●	●			
LNMX	151004PNR-MF								●	●	●			●	●				
	151004PNR-MM								●	●	●			●	●				
	151008PNR-MF					●			●	●	●			●	●				
	151008PNR-MM					●			●	●	●	●		●	●				
	151016PNR-MF								●	●	●			●	●				
	151016PNR-MM								●	●	●			●	●				

Available arbors

Designation	Available arbors
RM4PHCB 408020R	BT□□-FMA25.4-□□
410020R	BT□□-FMA31.75-□□
412520R	BT□□-FMA38.1-□□
416020R	

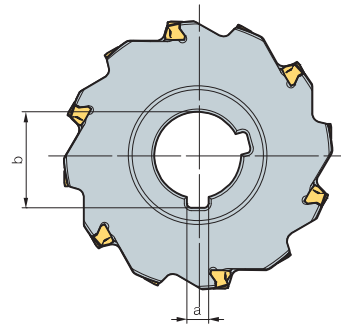
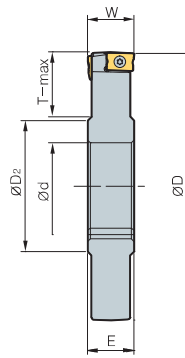
Parts

Specification		
Ø80~Ø160	FTKA0412B	TW15S

Available inserts E11 Available arbors and bolt E400~E402



RM4PFCP3000



(mm)

Designation		ØD	ØD ₂	Ød	a	b	E	W	T-max
RM4PFCP 308015R	10	80	41,5	25,4	6,35	28	15	15	17
	10	80	41,5	25,4	6,35	28	17	17	17
310015R	12	100	48	31,75	7,94	35,2	15	15	24
	12	100	48	31,75	7,94	35,2	17	17	24
312515R	14	125	58	38,1	9,53	42,3	15	15	32
	14	125	58	38,1	9,53	42,3	17	17	32
316015R	16	160	58	38,1	9,53	42,3	15	15	49
	16	160	58	38,1	9,53	42,3	17	17	49

Available inserts

LN_M(E)X-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
LNEX 100605PNR-MM									●	●				●	●			
										●				●	●			
LNMX 100605PNR-MM								●	●	●	●			●	●			
								●	●	●				●	●			

Available arbors

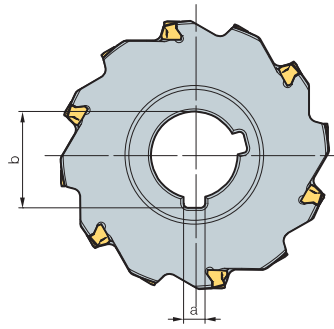
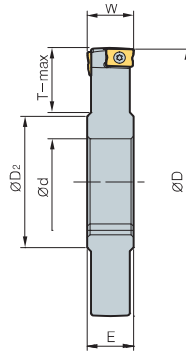
Designation	Available arbors
RM4PFCP 308015R	BT□□-SCA25.4-□□
	BT□□-SCA31.75-□□
	BT□□-SCA38.1-□□
	BT□□-SCA38.1-□□

Parts

Specification		
Ø80-Ø160	FTKA0307	TW09S

Available inserts E11 Available arbors and bolt E400~E402

RM4PFCP4000



(mm)

Designation	⊙	ØD	ØD ₂	Ød	a	b	E	W	T-max	
RM4PFCP	408022R	6	80	41.5	25.4	6.35	28	22	22	17
	408024R	6	80	41.5	25.4	6.35	28	24	24	17
	408026R	6	80	41.5	25.4	6.35	28	26	26	17
	408028R	6	80	41.5	25.4	6.35	28	28	28	17
	410022R	8	100	48	31.75	7.94	35.2	22	22	24
	410024R	8	100	48	31.75	7.94	35.2	24	24	24
	410026R	8	100	48	31.75	7.94	35.2	26	26	24
	410028R	8	100	48	31.75	7.94	35.2	28	28	24
	412522R	10	125	58	38.1	9.53	42.3	22	22	32
	412524R	10	125	58	38.1	9.53	42.3	24	24	32
	412526R	10	125	58	38.1	9.53	42.3	26	26	32
	412528R	10	125	58	38.1	9.53	42.3	28	28	32
	416022R	12	160	58	38.1	9.53	42.3	22	22	49
	416024R	12	160	58	38.1	9.53	42.3	24	24	49
	416026R	12	160	58	38.1	9.53	42.3	26	26	49
	416028R	12	160	58	38.1	9.53	42.3	28	28	49

Available inserts

LNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
LNEX	151008PNR-MM									●	●			●	●				E11
	151008PNL-MM										●			●	●				
LNMX	151008PNR-MM				●					●	●	●		●	●				
	151008PNL-MM								●					●	●				

Available arbors

Designation	Available arbors	Designation	Available arbors
RM4PFCP	408022R	RM4PFCP	412522R
	408024R		412524R
	408026R		412526R
	408028R		412528R
	410022R		416022R
	410024R		416024R
	410026R		416026R
410028R	416028R		

BT□□-SCA25.4-□□

BT□□-SCA31.75-□□

BT□□-SCA38.1-□□

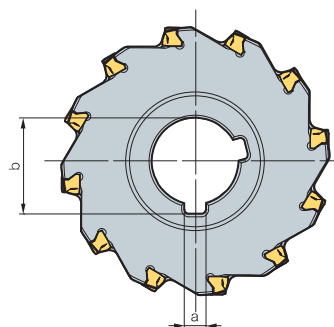
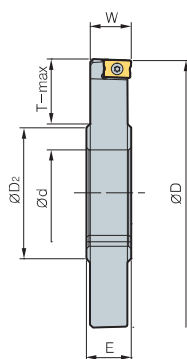
Parts

Specification	 Screw	 Wrench
Ø80~Ø160	FTKA0412B	TW15S

Available inserts E11 Available arbors and bolt E400~E402



RM4PHCP3000

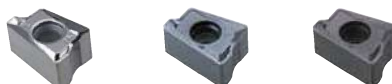


(mm)

Designation		ØD	ØD ₂	Ød	a	b	E	W	T-max	
RM4PHCP	308015R	10	80	41.5	25.4	6.35	28	16.5	15.1	17
	310015R	12	100	48	31.75	7.94	35.2	16.5	15.1	24
	312515R	14	125	58	38.1	9.52	42.3	16.5	15.1	32
	316015R	16	160	58	38.1	9.52	42.3	16.5	15.1	49

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10
LNEX	100605PNR-MF										●			●	●			
	100605PNR-MM									●	●			●	●			
	100605PNR-MA																	●
	100608PNR-MF									●	●			●	●			
	100608PNR-MM										●			●	●			
LNMX	100605PNR-MF							●		●				●	●			
	100605PNR-MM							●	●	●	●			●	●			
	100608PNR-MF							●		●				●	●			
	100608PNR-MM							●	●	●				●	●			

Available arbors

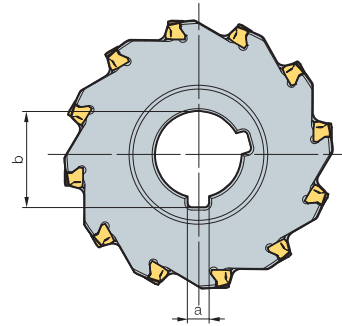
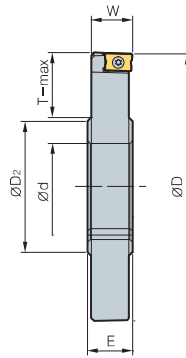
Designation	Available arbors
RM4PHCP 308015R	BT□□-SCA25.4-□□
310015R	BT□□-SCA31.75-□□
312515R	BT□□-SCA38.1-□□
316015R	

Parts

Specification		
Ø80-Ø160	FTKA0307	TW09S

Available inserts E11 Available arbors and bolt E400-E402

RM4PHCP4000

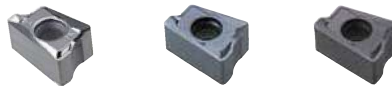


(mm)

Designation		ØD	ØD ₂	Ød	a	b	E	W	T-max	
RM4PHCP	408020R	6	80	41.5	25.4	6.35	28	22	19.8	17
	410020R	8	100	48	31.75	7.94	35.2	22	19.8	24
	412520R	10	125	58	38.1	9.53	42.3	22	19.8	32
	416020R	12	160	58	38.1	9.53	42.3	22	19.8	49

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCN325	NC5330	NCN535	NCN545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
LNEX	151004PNR-MF										●			●	●				E11
	151004PNR-MM										●			●	●				
	151004PNR-MA																		
	151008PNR-MF										●			●	●				
	151008PNR-MM									●	●			●	●				
	151008PNR-MA																		
	151016PNR-MF											●			●	●			
151016PNR-MM											●			●	●				
LNMX	151004PNR-MF								●	●	●			●	●				
	151004PNR-MM								●	●	●			●	●				
	151008PNR-MF				●				●	●	●			●	●				
	151008PNR-MM				●				●	●	●			●	●				
	151016PNR-MF								●	●	●			●	●				
151016PNR-MM								●	●	●			●	●					

Available arbors

Designation	Available arbors
RM4PHCP 408020R	BT□□-SCA25.4-□□
410020R	BT□□-SCA31.75-□□
412520R	
416020R	BT□□-SCA38.1-□□

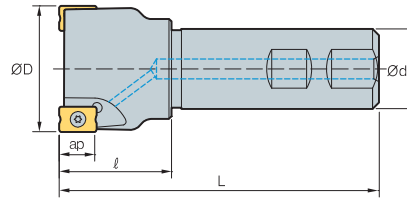
Parts

Specification		
Ø80~Ø160	FTKA0412B	TW15S

Available inserts E11 Available arbors and bolt E400~E402



RM4PS3000



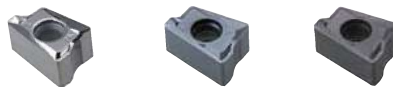
• AR: -6°
• RR: -39°~-16°

(mm)

Designation		ØD	Ød	l	L	ap	
RM4PS 3014HR-S16	1	14	16	23	90	9.0	0.11
3016HR-S16	1	16	16	25	90	9.0	0.11
3018HR-S16	2	18	16	23	90	9.0	0.12
3020HR-S20	2	20	20	30	100	9.0	0.21
3020HR-S20M	3	20	20	30	100	9.0	0.21
3025HR-S25	2	25	25	35	115	9.0	0.38
3025HR-S25M	3	25	25	35	115	9.0	0.38
3032HR-S32	3	32	32	40	125	9.0	0.69
3032HR-S32M	4	32	32	40	125	9.0	0.7
3040HR-S32	4	40	32	42	130	9.0	0.86
3040HR-S32M	5	40	32	42	130	9.0	0.85
3040HR-S40	4	40	40	42	130	9.0	1.17
3040HR-S40M	5	40	40	42	130	9.0	1.17
3040HR-S42	4	40	42	42	130	9.0	1.26
3040HR-S42M	5	40	42	42	130	9.0	1.25
3050HR-S32	5	50	32	45	135	9.0	1.06
3050HR-S32M	7	50	32	45	135	9.0	1.05
3050HR-S40	5	50	40	45	135	9.0	1.38
3050HR-S40M	7	50	40	45	135	9.0	1.37
3050HR-S42	5	50	42	45	135	9.0	1.48
3050HR-S42M	7	50	42	45	135	9.0	1.48

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
LNEX 100605PNR-MF																		
100605PNR-MM																		
100605PNR-MA																		
100605PNL-MM																		
100608PNR-MF																		
100608PNR-MM																		
LNMX 100605PNR-MF																		
100605PNR-MM																		
100608PNR-MF																		
100608PNR-MM																		

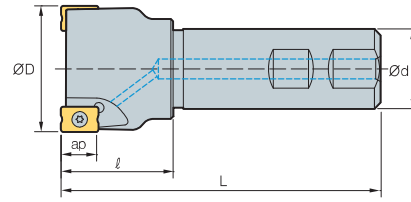
Parts

Specification		
Ø14~Ø50	FTKA0307	TW09S

Available inserts E11



RM4PS4000



• AR: -6°
• RR: +24° ~ -14°

(mm)

Designation		ØD	Ød	ℓ	L	ap	
RM4PS	4032HR-S32	2	32	32	40	125	0.68
	4032HR-S32M	3	32	32	40	125	0.69
	4040HR-S32	3	40	32	42	125	0.83
	4040HR-S32M	4	40	32	42	125	0.83
	4040HR-S40	3	40	40	42	125	1.14
	4040HR-S42	3	40	42	42	125	1.23
	4050HR-S32	3	50	32	45	125	1.02
	4050HR-S32M	4	50	32	45	125	1.02
	4050HR-S40	3	50	40	45	125	1.35
	4050HR-S40M	4	50	40	45	125	1.34
	4050HR-S42	3	50	42	45	125	1.45
	4050HR-S42M	4	50	42	45	125	1.45
	4063HR-S32	4	63	32	45	125	1.25
	4063HR-S32M	6	63	32	45	125	1.24
	4063HR-S40	4	63	40	45	125	1.62
	4063HR-S40M	6	63	40	45	125	1.61
4063HR-S42	4	63	42	45	125	1.71	
4063HR-S42M	6	63	42	45	125	1.7	

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
LNEX	151004PNR-MF										●			●	●			
	151004PNR-MM													●	●			
	151004PNR-MA																	●
	151008PNR-MF										●			●	●			
	151008PNR-MM										●			●	●			
	151008PNR-MA																	●
	151016PNR-MF											●			●	●		
	151016PNR-MM											●			●	●		
LNMX	151004PNR-MF								●	●	●			●	●			
	151004PNR-MM								●	●	●			●	●			
	151008PNR-MF					●			●	●	●			●	●			
	151008PNR-MM					●			●	●	●			●	●			
	151016PNR-MF								●	●	●	●		●	●			
	151016PNR-MM								●	●	●	●		●	●			

E11

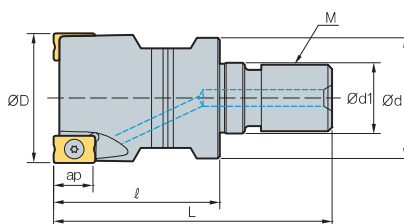
Parts

Specification		
Ø32~Ø63	FTKA0412B	TW15S

Available inserts E11



RM4PM3000



Designation		ØD	Ød	Ød1	l	L	M	ap	
RM4PM 3014HR-M06	1	14	12	6.5	25	40	M06	9.0	0.02
3016HR-M08	1	16	14.5	8.5	25	42	M08	9.0	0.02
3018HR-M08	2	18	14.5	8.5	25	42	M08	9.0	0.03
3020HR-M10	2	20	18	10.5	30	51	M10	9.0	0.06
3025HR-M12	2	25	23	12.5	35	59	M12	9.0	0.11
3032HR-M16	3	32	28	17	40	67	M16	9.0	0.21
3040HR-M16	4	40	28	17	40	67	M16	9.0	0.26
3050HR-M16	5	50	30	17	45	72	M16	9.0	0.41

Available inserts

LNEX-MA LNM(E)X-MF LNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
LNEX 100605PNR-MF											●			●	●			
100605PNR-MM										●	●			●	●			
100605PNR-MA																		●
100608PNR-MF										●	●			●	●			
100608PNR-MM											●			●	●			
LNMX 100605PNR-MF									●		●			●	●			
100605PNR-MM									●	●	●	●		●	●			
100608PNR-MF									●	●	●			●	●			
100608PNR-MM									●	●				●	●			

Available adaptor

Designation	Available adaptor
RM4PM 3014HR-M06	MAT-M06
3016HR-M08	MAT-M08
3018HR-M08	
3020HR-M10	
3025HR-M12	MAT-M12
3032HR-M16	MAT-M16
3040HR-M16	
3050HR-M16	

Designation: RM4PM3032HR-M16
Modular Head Threading Measure size (M16)

||

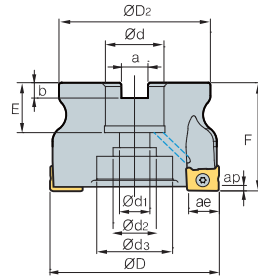
Adaptor spec.: MAT-M16-035-S32S
Adaptor Threading Measure (M16)

Parts

Specification		
Ø14~Ø50	FTKA0307	TW09S

Available inserts E11 Available adaptor E371~E372

RM4ZC(M)3000/4000



AA
90°
• AR: -11°
• RR: +12°~+10°

(mm)

Designation	齿数	ØD	ØD2	Ød	Ød1	Ød2	Ød3	a	b	E	F	ap	ae	kg	
RM4ZCM	3040HR	4	40	37	16	9	14	-	8.4	5.6	19	40	1.5	9.0	0.21
	3050HR	5	50	47	22	11	18	-	10.4	6.3	20	40	1.5	9.0	0.33
	3052HR	5	52	48	22	11	18	-	10.4	6.3	20	40	1.5	9.0	0.37
	4063HR	5	63	58	22	11	18	-	10.4	6.3	20	40	2.5	14.0	0.56
RM4ZC (RM4ZCM)	4066HR	5	66	61	25.4 (27)	14	20	-	9.5 (12.4)	6 (7)	25	50	2.5	14.0	0.74
	4080HR	6	80	70	25.4 (27)	14	20	35	9.5 (12.4)	6 (7)	25 (23)	50	2.5	14.0	1.09
	4100HR	7	100	80	31.75 (32)	18	26	42	12.7 (14.4)	8 (8)	25 (33)	63 (50)	2.5	14.0	1.71

() Metric size

Available inserts

LNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
3000 type	LNEX	100605PNL-MM									●			●	●			
	LNMX	100605PNL-MM							●	●	●			●	●			
4000 type	LNEX	151008PNL-MM									●			●	●			
	LNMX	151008PNL-MM							●					●	●			

E11

Available arbors

Designation	Available arbors	
	RM4ZC	RM4ZCM
RM4ZCM	3040HR 3050HR 3052HR	BT□□-FMC16-□□ BT□□-SCA16-□□
		BT□□-FMC22-□□
		BT□□-FMC22-□□
RM4ZCM RM4ZC(M)	4063HR 4066HR 4080HR 4100HR	BT□□-FMA25.4-□□
		BT□□-FMA31.75-□□ BT□□-SCA31.75-□□
		BT□□-FMC27-□□ BT□□-FMC32-□□

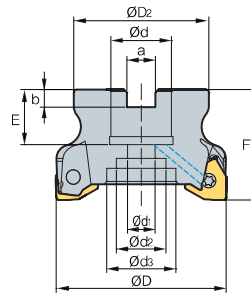
Parts

Specification	Screw	Wrench
Ø40~Ø52	FTKA0307	TW09S
Ø63~Ø100	FTKA0412B	TW15S

Available inserts E11 Available arbors and bolt E400~E402



RM6PCM-WN04 new



• AR: -6°
• RR: +14°~+11°

(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	Ød3	a	b	E	F	ap	
RM6PCM 040R-16-6-WN04	6	40	35	16	9	14	-	8.4	5.6	19	40	4.3	0.19
040R-16-7-WN04	7	40	35	16	9	14	-	8.4	5.6	19	40	4.3	0.19
050R-22-8-WN04	8	50	42	22	11	18	-	10.4	6.3	20	40	4.3	0.28
050R-22-9-WN04	9	50	42	22	11	18	-	10.4	6.3	20	40	4.3	0.28
063R-22-10-WN04	10	63	49	22	11	18	-	10.4	6.3	20	40	4.3	0.47
063R-22-11-WN04	11	63	49	22	11	18	-	10.4	6.3	20	40	4.3	0.47

Available inserts

WNGX-MA WNGX-ML WNGX-MM



Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
WNGX 040304PNFR-MA																			●
040308PNFR-MA																			●
040312PNFR-MA																			●
040316PNFR-MA																			●
040304PNER-ML								●		●				●	●				
040308PNER-ML								●		●				●	●				
040312PNER-ML														●					
040316PNER-ML														●					
040304PNSR-MM								●		●				●	●				
040308PNSR-MM								●		●				●	●				
040312PNSR-MM														●					
040316PNSR-MM														●					

Available arbors

Designation	NC arbors
RM6PCM 040R-16-6-WN04	BT□□-FMC16-□□
040R-16-7-WN04	
050R-22-8-WN04	BT□□-FMC22-□□
050R-22-9-WN04	
063R-22-10-WN04	
063R-22-11-WN04	

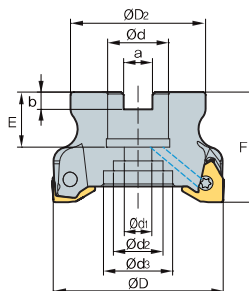
Parts

Specification		
Ø40~Ø63	Screw ETNA02506	Wrench TW07S

Available inserts E28 Available arbors and bolt E400~E402



RM6PC(M)-WN08 new



AA
90°

• AR: -6°
 • RR: -14° ~ -11°

(mm)

Designation		⚙️	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	F	ap	⚖️
RM6PCM	050R-22-4-WN08	4	50	42	22	11	18	-	10.4	6.3	20	40	8.2	0.28
	050R-22-5-WN08	5	50	42	22	11	18	-	10.4	6.3	20	40	8.2	0.27
	063R-22-5-WN08	5	63	49	22	11	18	-	10.4	6.3	20	40	8.2	0.45
	063R-22-6-WN08	6	63	49	22	11	18	-	10.4	6.3	20	40	8.2	0.45
	080R-27-7-WN08	7	80	57	27	14	20	35	12.4	7	23	50	8.2	0.90
	080R-27-9-WN08	9	80	57	27	14	20	35	12.4	7	23	50	8.2	0.89
	100R-32-8-WN08	8	100	67	32	18	26	42	14.4	8	25	50	8.2	1.47
	100R-32-11-WN08	11	100	67	32	18	26	42	14.4	8	25	50	8.2	1.45
	125R-40-11-WN08	11	125	90	40	22	32	52	16.4	9	29	63	8.2	2.94
125R-40-14-WN08	14	125	90	40	22	32	52	16.4	9	29	63	8.2	2.91	
RM6PC	080R-25.4-7-WN08	7	80	57	25.4	14	20	35	9.5	6	25	50	8.2	0.91
	080R-25.4-9-WN08	9	80	57	25.4	14	20	35	9.5	6	25	50	8.2	0.91
	100R-31.75-8-WN08	8	100	67	31.75	18	26	42	12.7	8	32	63	8.2	1.69
	100R-31.75-11-WN08	11	100	67	31.75	18	26	42	12.7	8	32	63	8.2	1.73
	125R-38.1-11-WN08	11	125	90	38.1	22	32	52	15.9	10	35	63	8.2	1.98
	125R-38.1-14-WN08	14	125	90	38.1	22	32	52	15.9	10	35	63	8.2	2.90

Available inserts

WNGX-MA WNGX-ML WNGX-MM



Designation	Cement										page	Designation	Cement										page																																											
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2010	PC3600	PC6510	PC9530			PC9540	PC5300	PC5400	ST30A	H01	CN2000	CN30	NCM325	NC5330	NCM535		NCM545	PC2010	PC3600	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01																																	
WNGX 080604PNFR-MA																																	E28	WNGX 080616PNER-ML																																E28
080608PNFR-MA																																																																		
080612PNFR-MA																																																																		
080616PNFR-MA																																																																		
080620PNFR-MA																																																																		
080604PNER-ML																																																																		
080608PNER-ML																																																																		
080612PNER-ML																																																																		

Available arbors

Designation	NC arbors	Designation	NC arbors	
RM6PC 080R-25.4-7-WN08	BT□□-FMA25.4-□□	RM6PCM 063R-22-5-WN08	BT□□-FMC22-□□	
080R-25.4-9-WN08				
100R-31.75-8-WN08		BT□□-FMA31.75-□□	080R-27-7-WN08	BT□□-FMC27-□□
100R-31.75-11-WN08				
125R-38.1-11-WN08	BT□□-FMA38.1-□□	100R-32-8-WN08	BT□□-FMC32-□□	
125R-38.1-14-WN08				
RM6PCM 050R-22-4-WN08	BT□□-FMC22-□□	125R-40-11-WN08	BT□□-FMC40-□□	
050R-22-5-WN08				

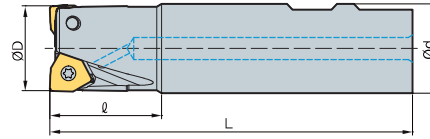
Parts

Specification		
Ø50-Ø125	FTNA0512	TW20-100

Available inserts **E28** Available arbors and bolt **E400~E402**



RM6PS-WN04 new

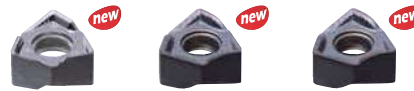


(mm)

Designation		ØD	Ød	ℓ	L	ap		
RM6PS	020R-2W20-110-WN04	2	20	20	35	110	4.3	0.22
	020R-3W20-110-WN04	3	20	20	35	110	4.3	0.22
	025R-3W25-110-WN04	3	25	25	35	110	4.3	0.36
	025R-4W25-110-WN04	4	25	25	35	110	4.3	0.35
	032R-5W32-110-WN04	5	32	32	35	110	4.3	0.60
	025R-6W32-110-WN04	6	32	32	35	110	4.3	0.60

Available inserts

WNGX-MA WNGX-ML WNGX-MM



Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
WNGX 040304PNFR-MA																		●	E28
040308PNFR-MA																		●	
040312PNFR-MA																		●	
040316PNFR-MA																		●	
040304PNER-ML								●		●				●	●				
040308PNER-ML								●						●					
040312PNER-ML														●					
040316PNER-ML														●					
040304PNSR-MM								●		●				●	●				
040308PNSR-MM								●						●	●				
040312PNSR-MM														●					
040316PNSR-MM														●					

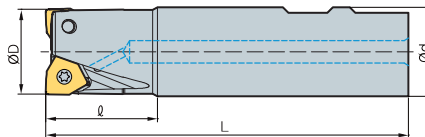
Parts

Specification		
Ø20~Ø32	ETNA02506	TW07S

Available inserts E28



RM6PS-WN08 new



Designation			ØD	Ød	l	L	ap	
RM6PS	032R-2W32-120-WN08	2	32	32	40	120	8.2	0.65
	040R-3W32-120-WN08	3	40	32	40	120	8.2	0.69
	040R-4W32-120-WN08	4	40	32	40	120	8.2	0.69
	050R-4W32-120-WN08	4	50	32	40	120	8.2	0.76
	050R-5W32-120-WN08	5	50	32	40	120	8.2	0.76

(mm)

Available inserts

WNGX-MA WNGX-ML WNGX-MM



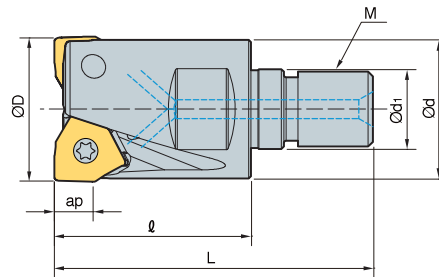
Designation	Cermet		Coated											Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01
WNGX	080604PNFR-MA																		●
	080608PNFR-MA																		●
	080612PNFR-MA																		●
	080616PNFR-MA																		●
	080620PNFR-MA																		●
	080604PNER-ML								●	●				●	●				
	080608PNER-ML				●				●	●	●			●	●				
	080612PNER-ML													●	●				
	080616PNER-ML													●	●				
	080620PNER-ML													●	●				
	080604PNSR-MM								●	●				●	●				
	080608PNSR-MM				●				●	●	●			●	●				
	080612PNSR-MM													●	●				
	080616PNSR-MM													●	●				
	080620PNSR-MM													●	●				

Parts

Specification		
Ø32~Ø50	FTNA0512	TW20-100

Available inserts E28

RM6PM new

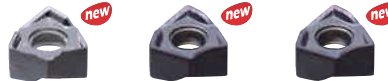


(mm)

Designation		ØD	Ød	Ød ₁	l	L	M	ap	
RM6PM 020R-2-M10-WN04	2	20	18	10.5	30	50	10	4.3	0.06
020R-3-M10-WN04	3	20	18	10.5	30	50	10	4.3	0.06
025R-4-M12-WN04	4	25	23	12.5	30	53	12	4.3	0.1
025R-5-M12-WN04	5	25	23	12.5	30	53	12	4.3	0.09
032R-5-M16-WN04	5	32	29	17	40	66	16	4.3	0.25
032R-6-M16-WN04	6	32	29	17	40	66	16	4.3	0.24
032R-2-M16-WN08	2	32	29	17	43	69	16	8.2	0.22
040R-3-M16-WN08	3	40	29	17	43	69	16	8.2	0.31
040R-4-M16-WN08	4	40	29	17	43	69	16	8.2	0.30

Available inserts

WNGX-MA WNGX-ML WNGX-MM



Designation	Coated										Uncolated	page	Designation	Coated										Uncolated	page									
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510			PC9530	PC9540	PC5300	PC5400	ST30A	H01	CN2000	CN30	NCM325	NC5330	NCM535		NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300
WNGX 040304PNFR-MA																	●	WNGX 080604PNFR-MA																●
040308PNFR-MA																	●	080608PNFR-MA																●
040312PNFR-MA																	●	080612PNFR-MA																●
040316PNFR-MA																	●	080616PNFR-MA																●
040304PNER-ML								●		●						●	080620PNFR-MA																●	
040308PNER-ML								●								●	080604PNER-ML								●	●							●	
040312PNER-ML								●								●	080608PNER-ML							●	●	●							●	
040316PNER-ML								●								●	080612PNER-ML								●	●							●	
040304PNSR-MM								●		●						●	080616PNER-ML								●	●							●	
040308PNSR-MM								●								●	080620PNER-ML								●	●							●	
040312PNSR-MM								●								●	080604PNSR-MM								●	●							●	
040316PNSR-MM								●								●	080608PNSR-MM							●	●	●							●	
																	080612PNSR-MM								●	●							●	
																	080616PNSR-MM								●	●							●	
																	080620PNSR-MM								●	●							●	

Available adaptor

Designation	Available adaptor	Designation	Available adaptor
RM6PM 020R-2-M10-WN04	MAT-M10	RM6PM 032R-6-M16-WN04	MAT-M16
020R-3-M10-WN04	MAT-M10	032R-2-M16-WN08	MAT-M16
025R-4-M12-WN04	MAT-M12	040R-3-M16-WN08	MAT-M16
025R-5-M12-WN04	MAT-M12	040R-4-M16-WN08	MAT-M16
032R-5-M16-WN04	MAT-M16		

Designation: RM6PM032R-5-M16-WN04
 Modular Head Threading Measure size (M16)

II

Adaptor spec.: MAT-M16-035-S32S
 Adaptor Threading Measure (M16)

Parts

Specification		
WNGX04 Ø20-Ø32	ETNA02506	-
WNGX08 Ø32-Ø40	FTNA0512	TW20-100

Available inserts E28 Available adaptor E371~E372



RM8AC(M)4000

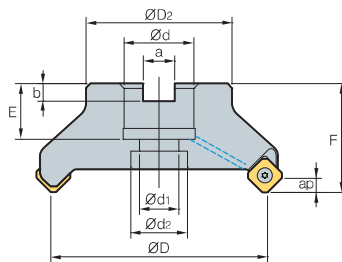


Fig. 1

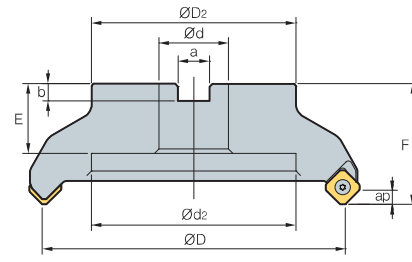


Fig. 2



AA
45°

- AR: -6°
- RR: -9°~ -6°

(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap		Fig.	
RM8ACM	4050HR-M	4	50	49	22	11	10.4	6.3	20	40	6.0	0.5	1	
	4050HR-H	6	50	49	22	11	10.4	6.3	20	40	6.0	0.5	1	
	4063HR-M	6	63	49	22	11	10.4	6.3	20	40	6.0	0.7	1	
	4063HR-H	8	63	49	22	11	10.4	6.3	20	40	6.0	0.7	1	
RM8AC (RM8ACM)	4080HR	5	80	57	25.4 (27)	14	9.5 (12.4)	6 (7)	25 (23)	50	6.0	1.2	1	
	4080HR-M	7	80	57	25.4 (27)	14	9.5 (12.4)	6 (7)	25 (23)	50	6.0	1.2	1	
	4080HR-H	10	80	57	25.4 (27)	14	9.5 (12.4)	6 (7)	25 (23)	50	6.0	1.3	1	
	4100HR	6	100	67	31.75 (32)	18	12.7 (14.4)	8	33 (25.5)	63 (50)	6.0	1.7	1	
	4100HR-M	8	100	67	31.75 (32)	18	12.7 (14.4)	8	33 (25.5)	63 (50)	6.0	1.7	1	
	4100HR-H	12	100	67	31.75 (32)	18	12.7 (14.4)	8	33 (25.5)	63 (50)	6.0	1.7	1	
	4125HR	8	125	87	38.1 (40)	22	15.9 (16.4)	10 (9)	36 (30)	63	6.0	3.6	1	
	4125HR-M	10	125	87	38.1 (40)	22	15.9 (16.4)	10 (9)	36 (30)	63	6.0	3.6	1	
	4125HR-H	16	125	87	38.1 (40)	22	15.9 (16.4)	10 (9)	36 (30)	63	6.0	3.7	1	
	4160R	10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	6.0	4.8	2
	4160R-M	12	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	6.0	5.3	2
	4160R-H	20	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	6.0	5.4	2
	4200R-M	14	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	6.0	7.1	2
	4200R-H	24	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	6.0	7.1	2
	4250R-M	16	250	180	47.625 (60)	-	180	25.4 (25.7)	14	38 (32)	63	6.0	11.9	2
	4250R-H	30	250	180	47.625 (60)	-	180	25.4 (25.7)	14	38 (32)	63	6.0	12.0	2
4315R	18	315	240	47.625 (60)	-	238	25.4 (25.7)	14	38	63	6.0	18.8 (18.6)	2	
4315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14	38	63	6.0	18.8 (18.6)	2	
4400R-M	28	400	260	47.625 (60)	-	238	25.4 (25.7)	14	38	80	6.0	37.7 (37.4)	2	

() Metric size

Available inserts

SNM(E)X-MF	SNEX-ML	SNM(E)X-MM	SNEX-MA	SNEX-W														
Designation	Cermet		Coated			Uncoated	page											
	CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A	H01	
SNEX 1206ANN-MF																		
1206ANN-ML																		
1206ANN-MM																		E22
1206ANN-MA																		E23
1206ANN-W																		E24
SNMX 1206ANN-MF																		
1206ANN-MM																		

Available arbors

Designation	Available arbors	
	RM8AC	RM8ACM
RM8ACM 4050HR-□	-	BT□□-FMC22-□□
4063HR-□		
RM8AC 4080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
(RM8ACM) 4100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
4125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
4160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
4200R-□		
4250R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
4315R-□		
4400R-□		

Parts

Specification		
Ø50~Ø400	FTKA0410	TW15S

Available inserts E22~E24

Available arbors and bolt E400~E402

RMH8AC(M)4000

Shim type

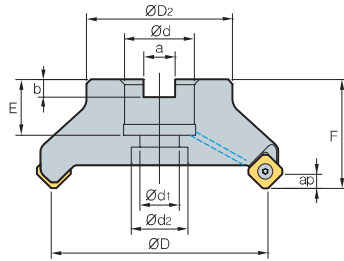


Fig. 1

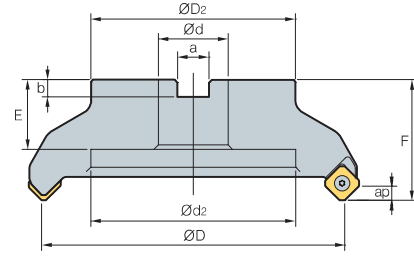


Fig. 2



AA
45°

• AR: -6°
• RR: -9° ~ -6°

(mm)

Designation	ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap	Fig.		
RMH8AC (RMH8ACM)													
4080HR-M	7	80	57	25.4 (27)	14	20	9.5 (12.4)	25 (23)	50	6.0	6.0	1.2	1
4100HR-M	8	100	67	31.75 (32)	18	26	12.7 (14.4)	33 (25.5)	63 (50)	6.0	6.0	1.7	1
4125HR-M	10	125	87	38.1 (40)	22	32	15.9 (16.4)	36 (30)	63	6.0	6.0	3.6	1
4160R-M	12	160	107	50.8 (40)	-	107	19 (16.4)	38 (32)	63	6.0	6.0	5.3	2
4200R-M	14	200	130	47.625 (60)	-	135	25.4 (25.7)	38 (32)	63	6.0	6.0	7.1	2
4250R-M	16	250	180	47.625 (60)	-	180	25.4 (25.7)	38 (32)	63	6.0	6.0	11.9	2
4315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	38	63	6.0	6.0	18.8 (18.6)	2
4400R-M	26	400	260	47.625 (60)	-	238	25.4 (25.7)	38	80	6.0	6.0	37.7 (37.4)	2

() Metric size

Available inserts

SNM(E)X-MF

SNEX-ML

SNM(E)X-MM

SNEX-MA

SNEX-W



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
SNEX																		
1206ANN-MF									●	●	●			●	●			
1206ANN-ML														●	●			
1206ANN-MM									●	●	●	●		●	●			
1206ANN-MA																		●
1206ANN-W										●	●			●				
SNMX																		
1206ANN-MF					●				●	●	●		●	●	●			
1206ANN-MM				●	●				●		●	●		●	●			

Available arbors

Designation	Available arbors	
	RMH8AC	RMH8ACM
RMH8AC (RMH8ACM)		
4080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
4100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
4125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
4160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
4200R-□		
4250R-□		
4315R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
4400R-□		

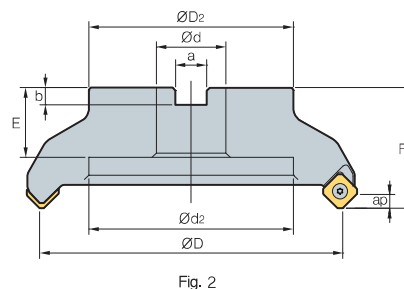
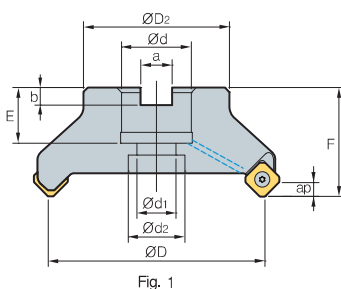
Parts

Specification	Screw	Shim	Shim Screw	Wrench
Ø80~Ø400	FTKA0412B	SS42RM8	SHXN0609F	TW15S

Available inserts E22~E24 Available arbors and bolt E400~E402



RM8AC(M)5000



AA
45°

• AR: -6°
• RR: -9°~ -6°

(mm)

Designation	⊙	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	⊙	Fig.	
RM8AC (RM8ACM)	5080HR-M	6	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	7.5	1.2	1
	5100HR-M	7	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0	33 (25)	63 (50)	7.5	2.5 (1.8)	1
	5125HR-M	8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	35 (30)	63	7.5	3.6	1
	5160R-M	10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	7.5	5 (4.56)	2
	5200R-M	12	200	130	47.625 (60)	-	135	25.4 (25.7)	14.0	38	63	7.5	7.1 (6.8)	2
	5250R-M	15	250	180	47.625 (60)	-	180	25.4 (25.7)	14.0	38	63	7.5	11.9 (10.6)	2
	5315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14.0	38	63	7.5	19.1 (18.9)	2
	5400R-M	28	400	260	47.625 (60)	-	238	25.4 (25.7)	14.0	38	80	7.5	37.7 (37.5)	2

() Metric size

Available inserts

SNM(E)X-MF

SNEX-ML

SNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page				
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01	
SNEX	1507ANN-MF										●			●	●				E22	
	1507ANN-ML													●	●					E23
	1507ANN-MM										●			●	●					
SNMX	1507ANN-MF				●				●	●	●			●	●				E24	
	1507ANN-MM				●				●	●	●			●	●					

Available arbors

Designation	Available arbors		
	RM8AC	RM8ACM	
RM8AC	5080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
(RM8ACM)	5100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
	5125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
	5160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
	5200R-□		
	5250R-□		
	5315R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
	5400R-□		

Parts

Specification	 Screw	 Wrench
Ø80~Ø400	FTGA0513	TW20-100

Available inserts E22~E24

Available arbors and bolt E400~E402



RMH8AC(M)5000

Shim type

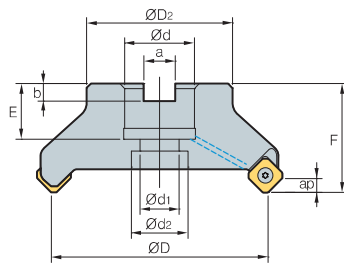


Fig. 1

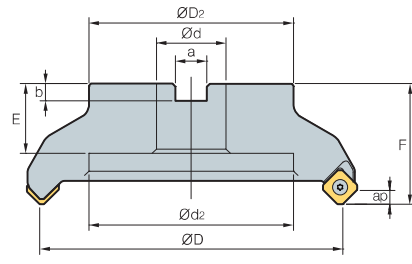


Fig. 2

AA
45°

- AR: -6°
- RR: -9° ~ -6°

(mm)

Designation			ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap		Fig.
RMH8AC (RMH8ACM)	5080HR-M	6	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	7.5	1.2	1
	5100HR-M	7	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0	33 (25)	63 (50)	7.5	2.5 (1.8)	1
	5125HR-M	8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	36 (30)	63	7.5	3.6	1
	5160R-M	10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	7.5	5 (4.56)	2
	5200R-M	12	200	130	47.625 (60)	-	135	25.4 (25.7)	14.0	38 (32)	63	7.5	7.1 (6.8)	2
	5250R-M	15	250	180	47.625 (60)	-	180	25.4 (25.7)	14.0	38 (32)	63	7.5	11.9 (10.6)	2
	5315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14.0	38	63	7.5	19.1 (18.9)	2
5400R-M	22	400	260	47.625 (60)	-	238	25.4 (25.7)	14.0	38	80	7.5	37.7 (37.5)	2	

() Metric size

Available inserts

SNM(E)X-MF SNEX-ML SNM(E)X-MM



Designation	Cermet		Coated											Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	ST30A		G10	H01	
SNEX	1507ANN-MF																		E22	
	1507ANN-ML																			E23
	1507ANN-MM																			E24
SNMX	1507ANN-MF				●				●	●	●			●	●					
	1507ANN-MM				●				●	●	●			●	●					

Available arbors

Designation	Available arbors		
	RMH8AC	RMH8ACM	
RMH8AC (RMH8ACM)	5080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
	5100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
	5125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
	5160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
	5200R-□		
	5250R-□		
	5315R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
	5400R-□		

Parts

Specification				
Ø80~Ø400	FTGA0513	SS53RM8	SHXN0712F	TW20-100

Available inserts E22~E24 Available arbors and bolt E400~E402



RM8EC(M)4000

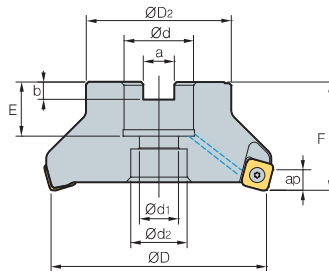


Fig. 1

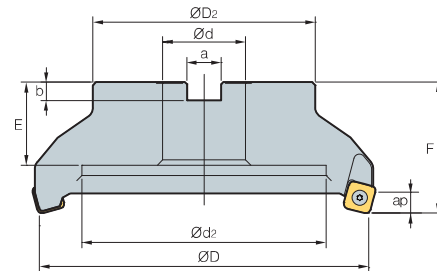


Fig. 2



AA
75°

• AR: -6°
• RR: -8°~ -6°

(mm)

Designation	Inserts	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	Weight (kg)	Fig.	
RM8ECM	4050HR-M	4	50	49	22	11	18	10.4	6.3	20	40	9.0	0.4	1
	4063HR-M	6	63	49	22	11	18	10.4	6.3	20	40	9.0	0.6	1
RM8EC (RM8ECM)	4080HR	5	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	9.0	1.2	1
	4080HR-M	7	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	9.0	1.1	1
	4100HR	6	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25)	63 (50)	9.0	1.6	1
	4100HR-M	8	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25)	63 (50)	9.0	2.5	1
	4125HR	8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	35 (29)	63	9.0	2.9 (3.3)	1
	4125HR-M	10	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	35 (29)	63	9.0	3.0	1
	4160R	10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	9.0	4.4	2
	4160R-M	12	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	9.0	4.0	2
	4200R-M	16	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	9.0	5.9	2
	4250R-M	16	250	180	47.625 (60)	-	180	25.4 (25.7)	14	38	63	9.0	10.9 (10.6)	2
	4315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14	38	63	9.0	18.1 (17.9)	2
	4400R-M	28	400	260	47.625 (60)	-	238	25.4 (25.7)	14	38	80	9.0	31.8 (31.5)	2

Available inserts

() Metric size

SNM(E)X-MF

SNEX-ML

SNM(E)X-MM

SNEX-MA



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNEX	1206ENN-MF										●			●	●				E22
	1206ENN-ML										●			●	●				
	1206ENN-MM										●			●	●				
	1206ENN-MA										●			●	●			●	
SNMX	1206ENN-MF				●					●	●	●	●	●	●				E24
	1206ENN-MM				●				●	●	●	●	●	●	●				

Available arbors

Designation	NC arbors	
	RM8EC	RM8ECM
RM8ECM	4050HR-□ 4063HR-□	- BT□□-FMC22-□□
RM8EC (RM8ECM)	4080HR-□	BT□□-FMA25.4-□□
	4100HR-□	BT□□-FMA31.75-□□
	4125HR-□	BT□□-FMA38.1-□□
	4160R-□	BT□□-FMA50.8-□□
	4200R-□ 4250R-□ 4315R-□ 4400R-□	BT□□-FMA47.625-□□
		BT□□-FMB60-□□

Parts

Specification	 Screw	 Wrench
Ø50~Ø400	PTKA0411-R3	TW15S

Available inserts E22~E24

Available arbors and bolt E400~E402



RMH8EC(M)4000

Shim type

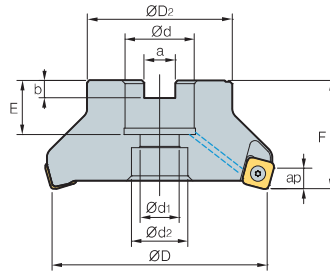


Fig. 1

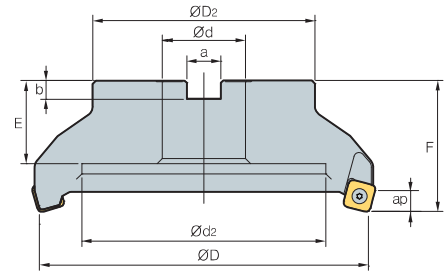


Fig. 2



AA
75°

• AR: -6°
• RR: +8° ~ -6°

(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	kg	Fig.		
RMH8EC (RMH8ECM)	4080HR-M	7	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	9.0	1.1	1
	4100HR-M	8	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25.5)	63 (50)	9.0	2.5	1
	4125HR-M	10	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	36 (30)	63	9.0	3.0	1
	4160R-M	12	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	9.0	4.0	2
	4200R-M	16	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	9.0	5.9	2
	4250R-M	16	250	180	47.625 (60)	-	180	25.4 (25.7)	14	38 (32)	63	9.0	10.9 (10.6)	2
	4315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14	38	63	9.0	18.1 (17.9)	2
	4400R-M	24	400	260	47.625 (60)	-	238	25.4 (25.7)	14	38	80	9.0	31.8 (31.5)	2

()Metric size

Available inserts

SNM(E)X-MF

SNEX-ML

SNM(E)X-MM

SNEX-MA



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNEX	1206ENN-MF										●			●	●				E22 E23 E24
	1206ENN-ML													●	●				
	1206ENN-MM								●					●	●				
	1206ENN-MA																	●	
SNMX	1206ENN-MF				●				●	●	●		●	●	●				
	1206ENN-MM				●				●	●	●		●	●	●				

Available arbors

Designation	Available arbors	
	RMH8EC	RMH8ECM
RMH8EC (RMH8ECM)	4080HR-□ BT□□-FMA25.4-□□	BT□□-FMC27-□□
	4100HR-□ BT□□-FMA31.75-□□	BT□□-FMC32-□□
	4125HR-□ BT□□-FMA38.1-□□	BT□□-FMB40-□□
	4160R-□ BT□□-FMA50.8-□□	BT□□-FMC40-□□
	4200R-□	
	4250R-□	
	4315R-□	
	4400R-□ BT□□-FMA47.625-□□	BT□□-FMB60-□□

Parts

Specification	 Screw	 Shim	 Shim Screw	 Wrench
Ø80~Ø400	PTKA0411-R3	SS42RM8	SHXN0609F	TW15S

Available inserts E22~E24 Available arbors and bolt E400~E402



RM8EC(M)5000

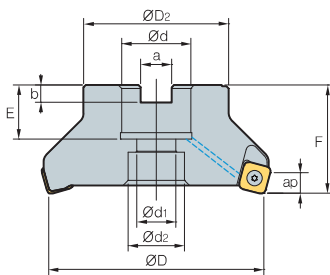


Fig. 1

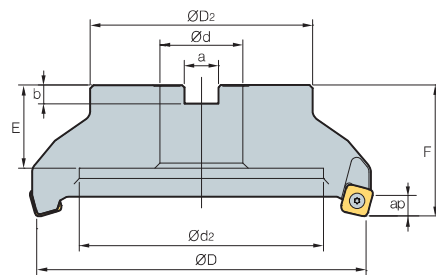


Fig. 2



AA
75°

• AR: -6°
• RR: -8°~ -6°

(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap		Fig.		
RM8EC (RM8ECM)	5080HR-M	6	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	11.0	1.1	1
	5100HR-M	7	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0	33 (25)	63 (50)	11.0	2.1 (1.7)	1
	5125HR-M	8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	35 (30)	63	11.0	3.4 (3.3)	1
	5160R-M	10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	11.0	4.4 (4.1)	2
	5200R-M	12	200	130	47.625 (60)	-	135	25.4 (25.7)	14.0	38	63	11.0	6.4 (6.1)	2
	5250R-M	15	250	180	47.625 (60)	-	180	25.4 (25.7)	14.0	38	63	11.0	11.0 (10.7)	2
	5315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14.0	38	63	11.0	18.0 (17.7)	2
	5400R-M	28	400	260	47.625 (60)	-	238	25.4 (25.7)	14.0	38	80	11.0	35.7 (35.4)	2

() Metric size

Available inserts

SNM(E)X-MF SNEX-ML SNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNEX	1507ENN-MF										●			●	●				E22 E23 E24
	1507ENN-ML										●			●	●				
	1507ENN-MM										●			●	●				
SNMX	1507ENN-MF				●			●	●	●				●	●				E24
	1507ENN-MM				●			●	●	●				●	●				

Available arbors

Designation	Available arbors	
	RM8EC	RM8ECM
RM8EC (RM8ECM)	5080HR-□ BT□□-FMA25.4-□□	BT□□-FMC27-□□
	5100HR-□ BT□□-FMA31.75-□□	BT□□-FMC32-□□
	5125HR-□ BT□□-FMA38.1-□□	BT□□-FMB40-□□
	5160R-□ BT□□-FMA50.8-□□	BT□□-FMC40-□□
	5200R-□	
	5250R-□ BT□□-FMA47.625-□□	BT□□-FMB60-□□
	5315R-□	
	5400R-□	

Parts

Specification		
Ø80~Ø400	FTGA0513	TW20-100

Available inserts E22~E24

Available arbors and bolt E400~E402



RMH8EC(M)5000

Shim type

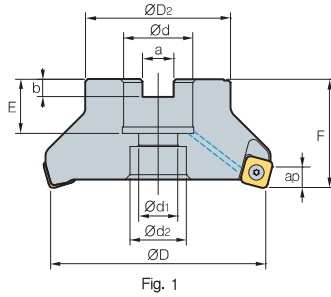


Fig. 1

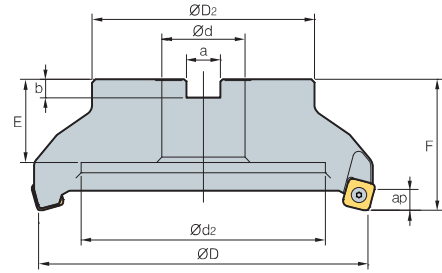


Fig. 2



AA
75°

• AR: -6°
• RR: +8°~ -6°

(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	kg	Fig.		
RMH8EC (RMH8ECM)	5080HR-M	6	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	11.0	1.1	1
	5100HR-M	7	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0	33 (25.5)	63 (50)	11.0	2.1 (1.7)	1
	5125HR-M	8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	36 (30)	63	11.0	3.4 (3.3)	1
	5160HR-M	10	160	107	50.8 (60)	-	107	19 (16.4)	11 (9)	38 (32)	63	11.0	4.4 (4.1)	2
	5200R-M	12	200	130	47.625 (60)	-	135	25.4 (25.7)	14.0	38 (32)	63	11.0	6.4 (6.1)	2
	5250R-M	15	250	180	47.625 (60)	-	180	25.4 (25.7)	14.0	38 (32)	63	11.0	110 (10.7)	2
	5315R-M	20	315	240	47.625 (60)	-	238	25.4 (25.7)	14.0	38	63	11.0	18.0 (17.7)	2
	5400R-H	22	400	260	47.625 (60)	-	238	25.4 (25.7)	14.0	38	80	11.0	35.7 (35.4)	2

() Metric size

Available inserts

SNM(E)X-MF

SNEX-ML

SNM(E)X-MM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNEX	1507ENN-MF										●			●	●				E22
	1507ENN-ML													●	●				
	1507ENN-MM										●			●	●				
SNMX	1507ENN-MF				●				●	●	●			●	●				E24
	1507ENN-MM				●				●	●	●			●	●				

Available arbors

Designation	Available arbors		
	RMH8EC	RMH8ECM	
RMH8EC (RMH8ECM)	5080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
	5100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
	5125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
	5160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
	5200R-□		
	5250R-□		
	5315R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□
	5400R-□		

Parts

Specification	Screw	Shim	Shim Screw	Wrench
Ø80~Ø400	FTGA0513	SS53RM8	SHXN0712F	TW20-100

Available inserts E22~E24 Available arbors and bolt E400~E402



RM8QC(M)4000

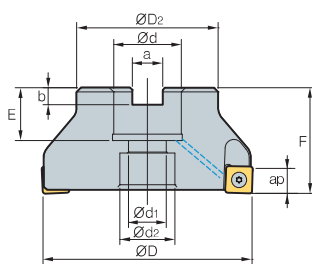


Fig. 1

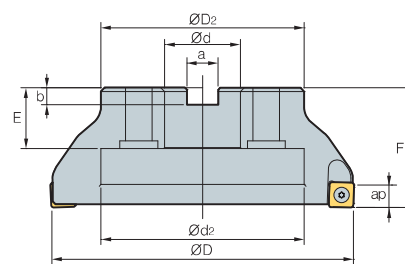


Fig. 2



AA
88°

• AR: -6°
• RR: -8°~ -6°

(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap		Fig.	
RM8QCM	4063HR-M	6	63	49	22	11	18	10.4	6.3	20	40	11.5	0.6	1
	4063HR-H	8	63	49	22	11	18	10.4	6.3	20	40	11.5	0.6	1
RM8QC (RM8QCM)	4080HR-M	7	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	11.5	1.1	1
	4080HR-H	10	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	11.5	1.0	1
	4100HR-M	8	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25.5)	63 (50)	11.5	1.7	1
	4100HR-H	12	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25.5)	63 (50)	11.5	1.6	1
	4125HR-M	10	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	36 (30)	63	11.5	3.3	1
	4125HR-H	14	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	36 (30)	63	11.5	3.3	1
	4160R-M	12	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	11.5	3.9	2
	4160R-H	18	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	11.5	3.9	2
	4200R-M	14	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	11.5	6.4	2
	4200R-H	22	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	11.5	6.4	2

Available inserts

()Metric size

SNM(E)X-MF

SNEX-ML

SNM(E)X-MM

SNEX-MA



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNEX	1206QNN-MF									●	●			●	●				E22 E23 E24
	1206QNN-ML													●	●				
	1206QNN-MM										●			●	●				
	1206QNN-MA																	●	
	120612-MF										●			●	●				
	120612-ML											●		●	●				
	120612-MM											●		●	●				
120612-MA																	●		
SNMX	1206QNN-MF				●			●	●	●			●	●					
	1206QNN-MM				●			●	●	●		●	●						
	120612-MF							●	●	●			●	●					
	120612-MM							●	●	●			●	●					

Available arbors

Designation	Available arbors	
	RM8QC	RM8QCM
RM8QCM 4063HR-□	-	BT□□-FMC22-□□
RM8QC 4080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
(RM8QCM) 4100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
4125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
4160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
4200R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□

Parts

Specification		
Ø63~Ø200	PTKA0411-R3	TW15S

Available inserts E22~E24

Available arbors and bolt E400~E402

RMH8QC(M)4000

Shim type

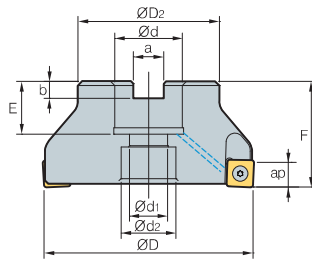


Fig. 1

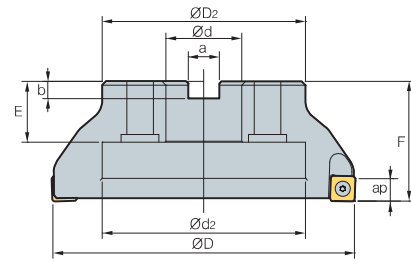


Fig. 2



AA
88°

• AR: -6°
• RR: +8° ~ -6°

(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	kg	Fig.	
RMH8QC (RMH8QCM)													
4080HR-M	7	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	11.5	1.1	1
4100HR-M	8	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25.5)	63 (50)	11.5	2.5	1
4125HR-M	10	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	36 (30)	63	11.5	3.0	1
4160R-M	12	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	11.5	4.0	2
4200R-M	16	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	11.5	5.9	2

() Metric size

Available inserts

SNM(E)X-MF SNEX-ML SNM(E)X-MM SNEX-MA



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNEX																			
1206QNN-MF										●	●			●	●				
1206QNN-ML														●	●				
1206QNN-MM											●			●	●				
1206QNN-MA																			●
120612-MF											●			●	●				
120612-ML														●	●				
120612-MM												●							
120612-MA																			●
SNMX																			
1206QNN-MF					●				●	●	●			●	●				
1206QNN-MM					●				●	●	●		●	●	●				
120612-MF									●	●	●			●	●				
120612-MM									●	●	●			●	●				

E22
E23
E24

Available arbors

Designation	Available arbors	
	RMH8QC	RMH8QCM
RMH8QC (RMH8QCM)		
4080HR-□	BT□□-FMA25.4-□□	BT□□-FMC27-□□
4100HR-□	BT□□-FMA31.75-□□	BT□□-FMC32-□□
4125HR-□	BT□□-FMA38.1-□□	BT□□-FMB40-□□
4160R-□	BT□□-FMA50.8-□□	BT□□-FMC40-□□
4200R-□	BT□□-FMA47.625-□□	BT□□-FMB60-□□

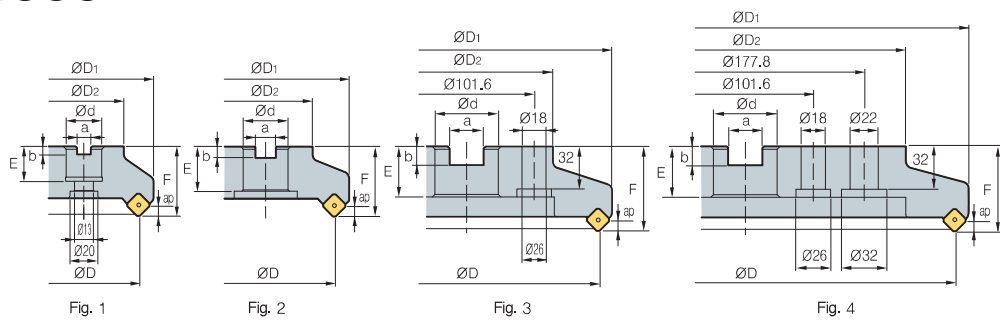
Parts

Specification				
Ø80~Ø200	PTKA0411-R3	SS42RM8	SHXN0609F	TW15S

Available inserts E22~E24 Available arbors and bolt E400~E402



RMT8A(M)4000



• AR: -6°
• RR: -6°

(mm)

Designation	⊙	ØD	ØD ₁	ØD ₂	Ød	a	b	E	F	ap	kg	Fig.
RMT8A (RMT8AM) 4080R	5	80	100	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	4	1.6	1
4080R-M	6	80	100	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	4	1.6	1
4100R	6	100	120	70	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	4	2.3	2
4100R-M	8	100	120	70	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	4	2.3	2
4125R	8	125	144	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	4	4.3	2
4125R-M	10	125	144	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	4	4.3	2
4160R	10	160	179	110	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	4	6.5	2
4160R-M	14	160	179	110	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	4	6.5	2
4200R	12	200	219	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	4	8.8	3
4200R-M	18	200	219	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	4	8.8	3
4250R	16	250	269	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	4	14.1	3
4250R-M	22	250	269	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	4	14.1	3
4315R	20	315	334	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	4	22.3	4
4315R-M	28	315	334	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	4	22.3	4

Available inserts

() Metric size

SNC(M)F-MF SNC(M)F-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM335	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
SNCF 1206ANN-MF																		
SNMF 1206ANN-MM																		

Available arbors

Designation	General arbor	NC arbors		
		RMT8A	RMT8AM	
RMT8A (RMT8AM)	□080R	NT*□□(M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
	□100R	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
	□125R	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
	□160R	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	
	□200R	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
	□250R			
□315R	KCP-8*** (Center ring plug)	-	-	

*□□-NT number **□□-BT number ***Over milling 5

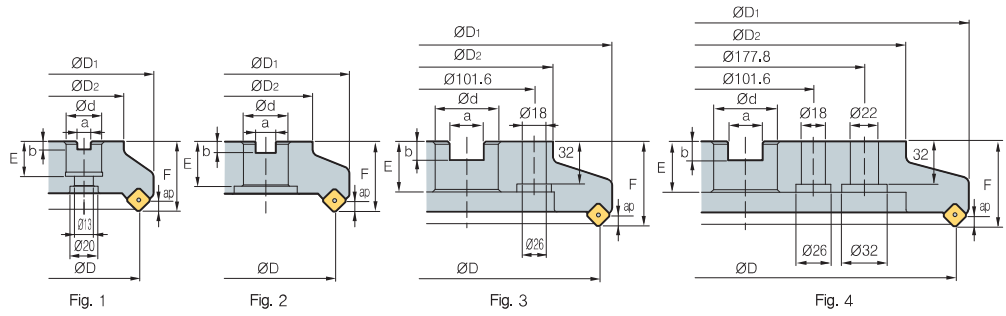
Parts

Specification					
Ø80-Ø315	ETKA0523	KHB0417	SPR0315	LTC05SR-RM4	TW20-100

Available inserts E20, E21

Available arbors and bolt E400~E402

RMT8A(M)5000



• AR: -6°
• RR: +6°

(mm)

Designation	⊙	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	ρ_{kg}	Fig.
RMT8A (RMT8AM) 5080R	5	80	104	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	6	1.8	1
5080R-M	6	80	104	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	6	1.8	1
5100R	6	100	124	70	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	6	2.6	2
5100R-M	8	100	124	70	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	6	2.6	2
5125R	8	125	149	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	6	4.3	2
5125R-M	10	125	149	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	6	4.3	2
5160R	10	160	184	110	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	6	6.5	2
5160R-M	14	160	184	110	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	6	6.5	2
5200R	12	200	224	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	9.0	3
5200R-M	18	200	224	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	9.0	3
5250R	16	250	274	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	14.4	3
5250R-M	22	250	274	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	14.4	3
5315R	20	315	339	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	22.2	4
5315R-M	28	315	339	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	6	22.2	4

Available inserts

() Metric size

SNC(M)F-MF SNC(M)F-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN80	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC3300	PC4000		ST30A	G10
SNCF 1507ANN-MF											●							
1507ANN-MM																		
SNMF 1507ANN-MF																		
1507ANN-MM																		

Available arbors

Designation	General arbor	NC arbors	
		RMT8A	RMT8AM
RMT8A (RMT8AM) □080R	NT*□□(M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
□100R	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75	FMC32
□125R	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1	FMC32
□160R	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8	FMC32
□200R	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
□250R			
□315R	KCP-8*** (Center ring plug)	-	-

*□□-NT number **□□-BT number ***Over milling 5

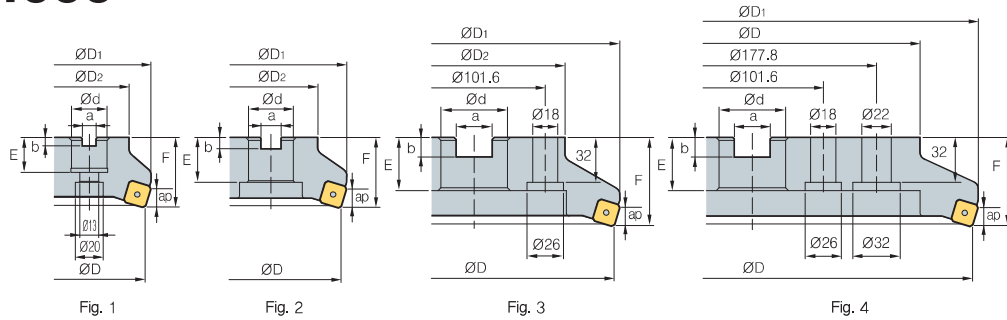
Parts

Specification					
Ø80~Ø315	ETKA0625	KHB0417	SPR0415	LTC06SR-RM5	TW20-100

Available inserts E20, E21 Available arbors and bolt E400~E402



RMT8E(M)4000



• AR: -6°
• RR: -8°~ -6°

(mm)

Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.
RMT8E											
(RMT8EM)											
4080R	80	100	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	5	1.5	1
4080R-M	80	100	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	5	1.5	1
4100R	100	120	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	5	2	2
4100R-M	100	120	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	5	2	2
4125R	125	144	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	5	3.8	2
4125R-M	125	144	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	5	3.8	2
4160R	160	179	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	5	5.8	2
4160R-M	160	179	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	5	5.8	2
4200R	200	219	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	7.9	3
4200R-M	200	219	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	7.9	3
4250R	250	269	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	13.0	3
4250R-M	250	269	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	13.0	3
4315R	315	334	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	20.5	4
4315R-M	315	334	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	20.5	4

Available inserts

() Metric size

SNC(M)F-MF SNC(M)F-MM



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10	H01
SNCF	1206ENN-MF										●								E20
	1206ENN-MM																		
SNMF	1206ENN-MF									●									E21
	1206ENN-MM									●									

Available arbors

Designation	General arbor	NC arbors		
		RMT8E	RMT8EM	
RMT8E (RMT8EM)	□080R	NT*□□(M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
	□100R	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
	□125R	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
	□160R	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	
	□200R	NT*□□(M/U)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□	FMB60
	□250R			
□315R	KCP-8*** (Center ring plug)	-	-	

*□□-NT number **□□-BT number ***Over milling 5

Parts

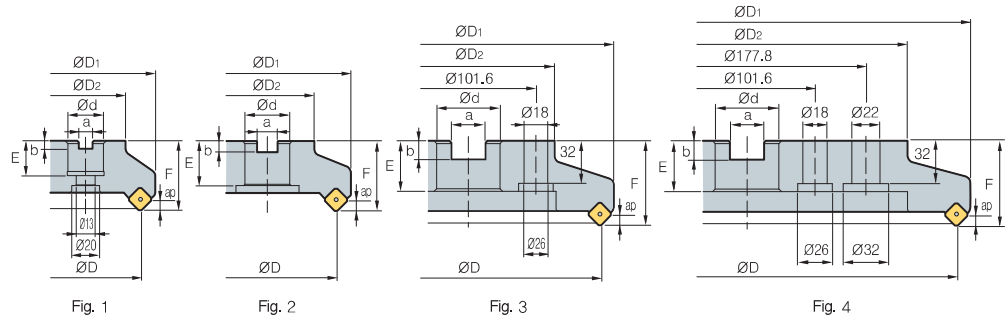
Specification	Screw	Screw	Spring	Latch	Wrench
Ø80-Ø315	ETKA0523	KHB0417	SPR0315	LTC05SR-RM4	TW20-100

Available inserts E20, E21

Available arbors and bolt E400~E402



RMT8E(M)5000



(mm)

Designation	⊙	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.	
RMT8E (RMT8EM)	5080R	5	80	88	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	8	1.4	1
	5080R-M	6	80	88	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	8	1.4	1
	5100R	6	100	108	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	8	1.9	2
	5100R-M	8	100	108	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	8	1.9	2
	5125R	8	125	133	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	8	3.7	2
	5125R-M	10	125	133	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	8	3.7	2
	5160R	10	160	168	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	8	5.7	2
	5160R-M	14	160	168	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	8	5.7	2
	5200R	12	200	208	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	7.5	3
	5200R-M	18	200	208	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	7.5	3
	5250R	16	250	258	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	12.4	3
	5250R-M	22	250	258	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	12.4	3
	5315R	20	315	323	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	19.9	4
	5315R-M	28	315	323	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	8	19.9	4

() Metric size

Available inserts

SNC(M)F-MF SNC(M)F-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
SNCF 1507ENN-MF											●							
SNMF 1507ENN-MM																		

Available arbors

Designation	General arbor	NC arbors		
		RMT8E	RMT8EM	
RMT8E (RMT8EM)	□080R	NT*□□(M/U)-FMA25.4-25	BT**□□-FMA25.4-□□	FMC27
	□100R	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□	FMC32
	□125R	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□	FMB40
	□160R	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□	FMB40
	□200R	NT*□□(M/U)-FMA47.625-25,	BT**□□-FMA47.625-□□	FMB60
	□250R	KCP-8***		
□315R	KCP-8*** (Center ring plug)			

*□□-NT number **□□-BT number ***Over milling 5

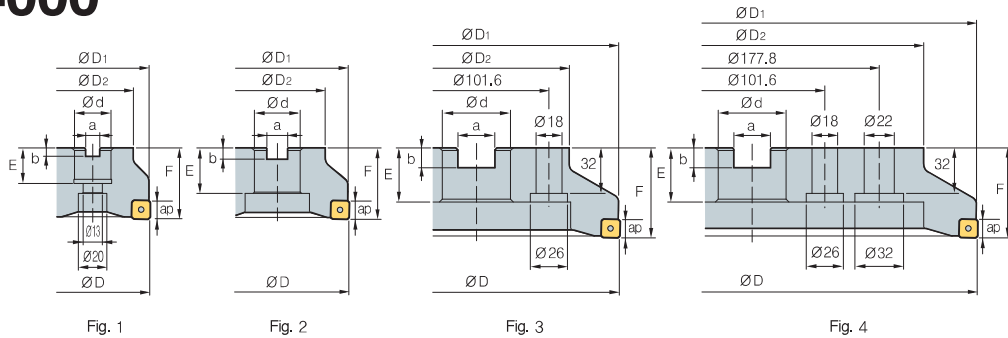
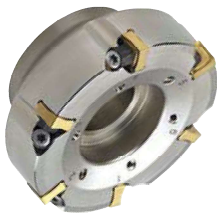
Parts

Specification					
Ø80~Ø315	ETKA0625	KHB0417	SPR0415	LTC06SR-RM5	TW20-100

Available inserts E20, E21 Available arbors and bolt E400~E402



RMT8Q(M)4000



AA
88°
• AR: -6°
• RR: -11°~-6°

Designation	ØD	ØD1	ØD2	Ød	a	b	E	F	ap	kg	Fig.	
RMT8Q												
(RMT8QM)												
4080R	5	80	79	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	5	1.4	1
4080R-M	6	80	79	57	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	5	1.4	1
4100R	6	100	99	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	5	1.8	2
4100R-M	8	100	99	67	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	5	1.8	2
4125R	8	125	124	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	5	3.6	2
4125R-M	10	125	124	87	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	5	3.6	2
4160R	10	160	159	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	5	5.7	2
4160R-M	14	160	159	107	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	5	5.7	2
4200R	12	200	199	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	7.5	3
4200R-M	18	200	199	130	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	7.5	3
4250R	16	250	249	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	12.5	3
4250R-M	22	250	249	180	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	12.5	3
4315R	20	315	314	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	19.9	4
4315R-M	28	315	314	240	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	5	19.9	4

() Metric size

Available inserts

SNC(M)F-MF SNC(M)F-MM



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
SNCF											●							
1206QNN-MM											●							
SNMF										●								
1206QNN-MM																		

Available arbors

Designation	General arbor	NC arbors	
		RMT8Q	RMT8QM
RMT8Q	□080R	NT*□□(M/U)-FMA25.4-□□	BT**□□-FMA25.4-□□
(RMT8QM)	□100R	NT*□□(M/U)-FMA31.75-□□	BT**□□-FMA31.75-□□
	□125R	NT*□□(M/U)-FMA38.1-□□	BT**□□-FMA38.1-□□
	□160R	NT*□□(M/U)-FMA50.8-□□	BT**□□-FMA50.8-□□
	□200R	NT*□□(M/U)-FMA47.625-25,	BT**□□-FMA47.625-□□
	□250R	KCP-8***	
	□315R	KCP-8*** (Center ring plug)	

*□□-NT number **□□-BT number ***Over milling 5

Parts

Specification	Screw	Screw	Spring	Latch	Wrench
Ø80-Ø315	ETKA0523	KHB0417	SPR0315	LTC05SR-RM4	TW20-100

Available inserts **E20** Available arbors and bolt **E400~E402**



RM16AC(M)6000

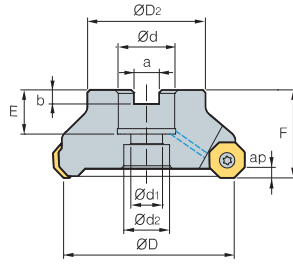


Fig. 1

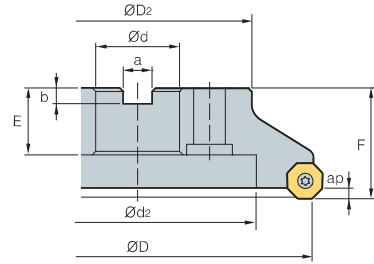


Fig. 2

AA
45°

- AR: -6°
- RR: -6°

(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap		Fig.	
RM16ACM 6063HR-M		5	63	49	22	11	18	10.4	6.3	20	40	4.0	0.7	1
RM16AC 6080HR-M		6	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	4.0	1.2	1
(RM16ACM) 6100HR-M		7	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25)	63 (50)	4.0	1.9	1
6125HR-M		8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	35 (29)	63	4.0	3.5	1
6160R-M		10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	4.0	4.1	2
6200R-M		12	200	130	47.625 (60)	-	135	25.4 (25.7)	14	38 (32)	63	4.0	6.1	2
6250R-M		15	250	180	47.625 (60)	-	180	25.4 (25.7)	14	38	63	4.0	11.5	2
6315R-M		20	315	240	47.625 (60)	-	238	25.4 (25.7)	14	38	63	4.0	18.9	2
6400R-M		26	400	260	47.625 (60)	-	238	25.4 (25.7)	14	38	80	4.0	32.7	2

() Metric size

Available inserts



Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
ONHX 060608-MM											●			●	●			
060608-MF											●			●	●			
060608-ML														●	●			
060608-MA																		●
060608-W											●	●						
0606ANN-MM											●			●	●			
0606ANN-MF											●			●	●			
ONMX 060608-MM					●				●	●	●		●	●	●			
060608-MF					●				●	●	●		●	●	●			
0606ANN-MM					●				●	●	●		●	●	●			
0606ANN-MF					●				●	●	●		●	●	●			

E14

Available arbors

Designation	Available arbors	
	RM16AC	RM16ACM
RM16AC 6063HR-M		BT□□-FMC22-□□
(RM16ACM) 6080HR-M	BT□□-FMA25.4-□□	BT□□-FMC27-□□
6100HR-M	BT□□-FMA31.75-□□	BT□□-FMC32-□□
6125HR-M	BT□□-FMA38.1-□□	BT□□-FMB40-□□
6160R-M	BT□□-FMA50.8-□□	BT□□-FMC40-□□
6200R-M		
6250R-M		
6315R-M		
6400R-M	BT□□-FMA47.625-□□	BT□□-FMB60-□□

Parts

Specification		
Ø63~Ø400	FTGA0513	TW20-100

Available inserts E14 Available arbors and bolt E400~E402



RM16AC(M)8000

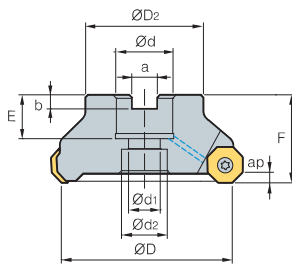


Fig. 1

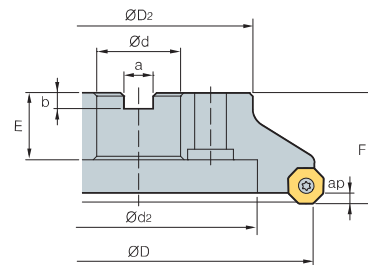


Fig. 2

AA
45°

- AR: -6°
- RR: -6°

(mm)

Designation		ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap		Fig.
RM16ACM 8063HR-M	5	63	49	22	11	18	10.4	6.3	20	40	5.5	0.7	1
RM16AC 8080HR-M	6	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (23)	50	5.5	1.2	1
(RM16ACM) 8100HR-M	7	100	67	31.75 (32)	18	26	12.7 (14.4)	8	33 (25)	63 (50)	5.5	1.8	1
8125HR-M	8	125	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	35 (29)	63	5.5	3.5	1
8160R-M	10	160	107	50.8 (40)	-	107	19 (16.4)	11 (9)	38 (32)	63	5.5	4.5	2
8200R-M	12	200	130	47.625 (60)	-	135	25.4 (25.7)	14 (14)	38 (32)	63	5.5	5.8	2
8250R-M	14	250	180	47.625 (60)	-	180	25.4 (25.7)	14	38	63	5.5	11.4	2
8315R-M	18	315	240	47.625 (60)	-	238	25.4 (25.7)	14	38	63	5.5	18.8	2
8400R-M	24	400	260	47.625 (60)	-	238	25.4 (25.7)	14	38	80	5.5	32.7	2

() Metric size

Available inserts

ONHX-MF	ONHX-ML	ONHX-MM	ONHX-W	ONHX-MA	ONMX-MF	ONMX-MM

Designation	Cermet		Coated										Uncoated			page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		ST30A	G10
ONHX 080608-MM											●			●	●			
080608-MF											●			●	●			
080608-ML														●	●			
080608-MA																		●
080608-W											●			●	●			
0806ANN-MM											●			●	●			
0806ANN-MF											●			●	●			
ONMX 080608-MM					●			●	●	●	●			●	●			
080608-MF					●			●	●	●	●			●	●			
0806ANN-MM					●			●	●	●	●			●	●			
0806ANN-MF					●			●	●	●	●			●	●			

E14

Available arbors

Designation	Available arbors	
	RM16AC	RM16ACM
RM16AC 8063HR-M	-	BT□□-FMC22-□□
(RM16ACM) 8080HR-M	BT□□-FMA25.4-□□	BT□□-FMC27-□□
8100HR-M	BT□□-FMA31.75-□□	BT□□-FMC32-□□
8125HR-M	BT□□-FMA38.1-□□	BT□□-FMB40-□□
8160R-M	BT□□-FMA50.8-□□	BT□□-FMC40-□□
8200R-M		
8250R-M		
8315R-M		
8400R-M	BT□□-FMA47.625-□□	BT□□-FMB60-□□

Parts

Specification		
Ø63-Ø400	FTGA0513	TW20-100

Available inserts E14 Available arbors and bolt E400~E402

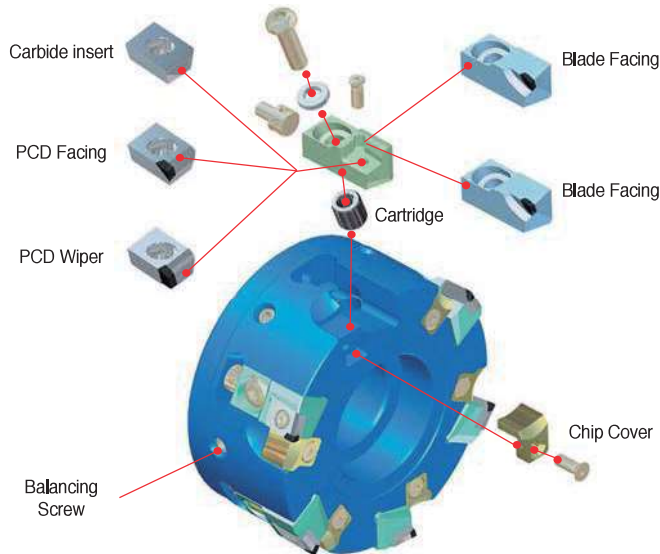
E Technical Information for Aero Mill

Lighter tool ensures excellent performance in high speed machining

Aero Mill

- Excellent machining performance can be acquired especially at the high speeds due to the light aluminum cutter body that is 50% of the weight of a conventional steel cutter body
- High speed milling cutter for precise machining
- Special aluminum material and high rake angle of insert provide rigid & stable machining
- High tolerance surface finishes can be acquired due to the low cutting load provided from the high rake angle
- Balanceable up to G2.5 level

Assembly structure of cutter



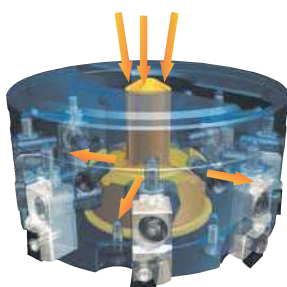
Features of cutter

- Increased stability based on cartridge type application
- Both insert and blade can be available in the same cutter
- Finishing to roughing can be possible because of wide chip pocket space
- Roughing and finishing available with carbide, PCD insert application
- Cutter breakage can be solved by making use of the chip cover

Coolant through system

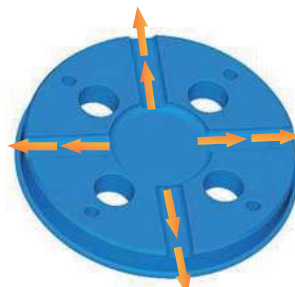
- Specially designed coolant through system provides coolant from the center of the cutter to the insert enhances the cooling rate and chip evacuation.
- Direction of coolant has designed to focus directly to the insert cutting-edge to maximize chip evacuation and improve tool life
- Coolant bolt is applicable up to $\varnothing 160$, coolant cover is applicable from $\varnothing 200$ and over.
Coolant devices are sold separately for through coolant system, through coolant arbor has to be used

Coolant Bolt



For $\varnothing 80\text{--}\varnothing 160$

Coolant Cover

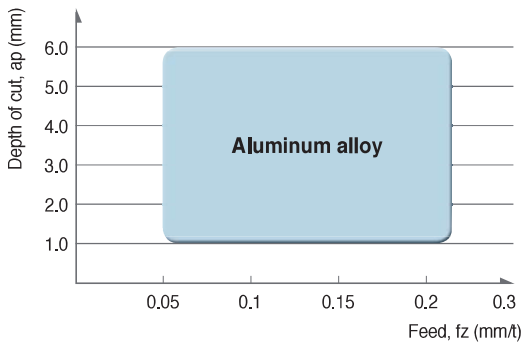


For $\varnothing 200$ and over

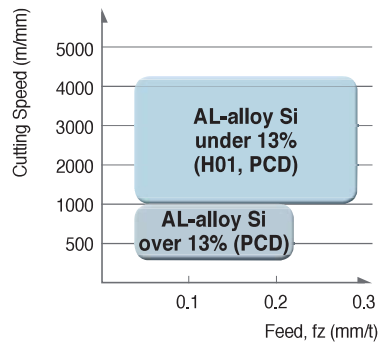


Aero Mill

Application range

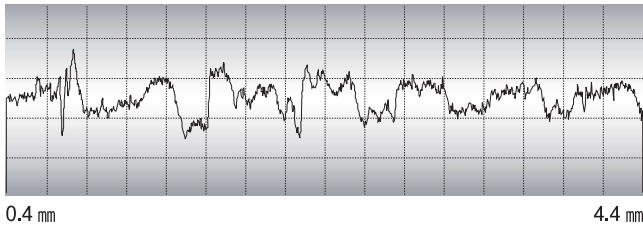


Recommended cutting condition



Surface finish

- **Workpiece** A6061
- **Cutting condition** vc = 1570 m/min vf = 3000 mm/min
S = 5000 rpm fz = 0.1 mm/t
ap = 0.5 mm Machine = PCV620
- **Designation** **Cutter** APD100R-A6Z (6 Flutes)
Insert CDEW1204R-XCF (H01)



- Rmax: 2.1 μm
- Rz: 1.6 μm
- Ra: 0.3 μm

Max. revolution

Diameter (mm)	Max. revolution (rpm)
Ø80	16,000
Ø100	15,000
Ø125	12,500
Ø160	10,000
Ø200	8,000
Ø250	6,500
Ø315	5,000

Coolant parts

Diameter (mm)	Type	Designation		Shape	Note
Ø80	Coolant Bolt	CBP080-IN/MM			Extra charge
Ø100	Coolant Bolt	CBP100-IN	CBP100-MM-1		
Ø125	Coolant Bolt	CBP125-IN	CBP125-MM-1		
Ø160	Coolant Bolt	CBP160-IN	CBP160-MM		
Ø200	Coolant Cover	CCP200			
Ø250	Coolant Cover	CCP250			
Ø315	Coolant Cover	CCP315			

• Choice: CBP100-IN:APD type, General for unmarked item

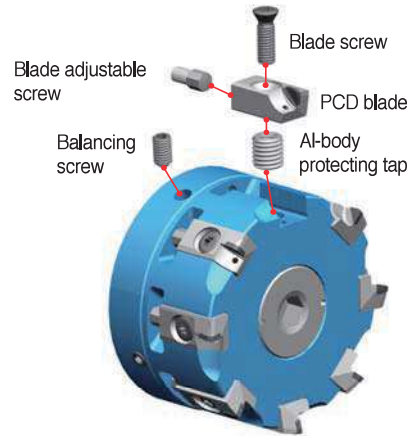
E Technical Information for Aero Mill-Plus

High speed milling tool with PCD blade

Aero Mill-Plus

- Improve tool life up to 20% with a coolant system that enables direct spray cooling to cutting blades
- Enable high feed milling by increasing the number of cutting blades by 20% through a simply structured coupling method for clamps
- Reduces set up time up to 40% by applying a spanner adjustment method
- Introduce an aluminum cutter body to provide a superior cutting performance during high speed milling

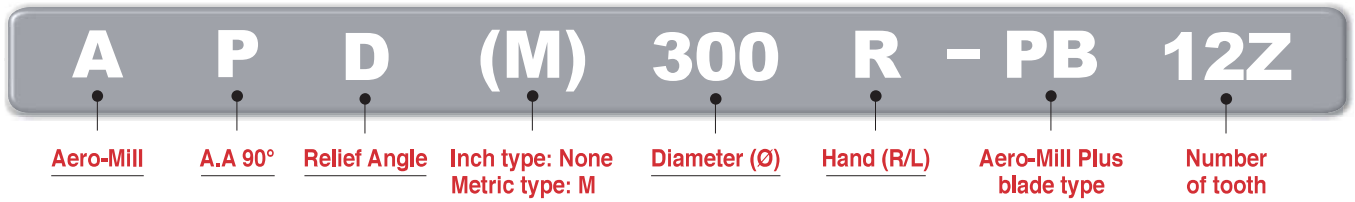
Assembly structure of cutter



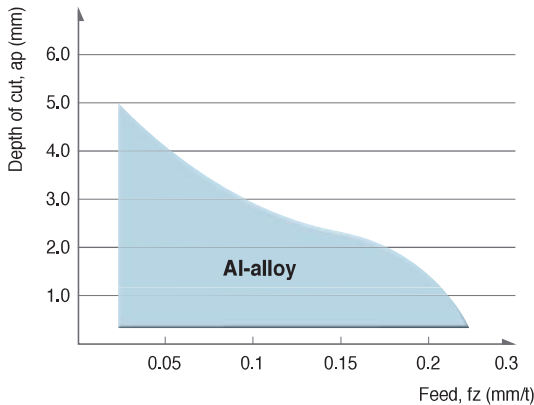
Features of cutter

- Prevent overload to the spindle bearings through weight reduction of the Al alloy body and enable high-speed processing
- Provide PCD Blade-dedicated cutter design to offer stable tool life and increase of applied blades
- Improve the blade life by applying a coolant system that enables direct spray cooling to cutting blades
- Adopt a clamping method with simple structure without set screw
- Reduce weight and apply a coolant bolt that is exclusively used for Aero-Mill Plus that applies coolant to remove internal chip

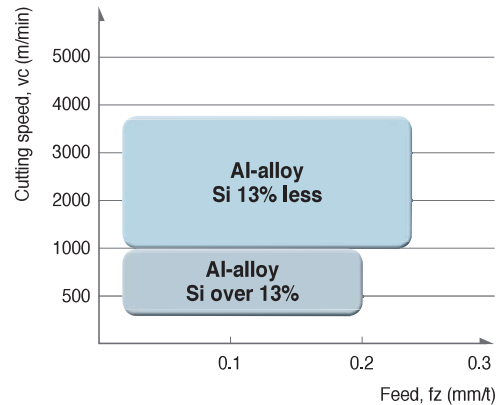
Code system



Application range



Recommended cutting speed



Max. RPM

Diameter (mm)	Max. revolution (rpm)
Ø80	20,000
Ø100	18,000
Ø125	16,000
Ø160	13,000
Ø200	10,000
Ø250	8,000
Ø315	7,000

Coolant parts

Diameter (mm)	Type	inch/mm	Designation	Shape	Material	Note
Ø80	Coolant bolt	inch, mm	CB12-AMaP80		Steel	Included
		inch	CB16-AMP100			
		mm	CB16-AMP100M			
		inch	CB20-AMP125			
		mm	CB20-AMP125M			
		inch	CB24-AMP160			
Ø160	Coolant cover	inch, mm	CCV-AMP200		Aluminum	Extra charge
		inch, mm	CCV-AMP250			
		inch, mm	CCV-AMP315			



Good performance in small-medium size of operations

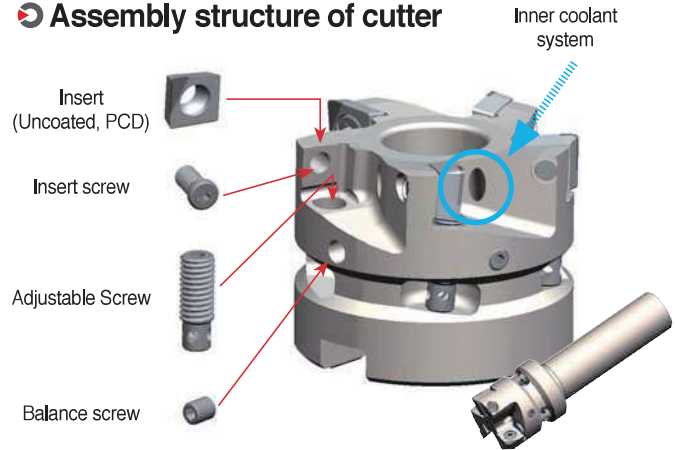
Aero Mill-Mini

- Good performance in small-medium size of operations
- Good duration of the steel body
- Choice of Uncoated carbide/PCD grades can be applied to various kind of work material
- Balance level: G25

Features of cutter

- Simple and strong design of Screw-on clamping.
- Adjustable range: ± 0.1 mm Max
- Adjustable step: Min. 2 micro meter
- Wide chip pocket area for Roughing and Aluminum machining.
- Inner coolant system

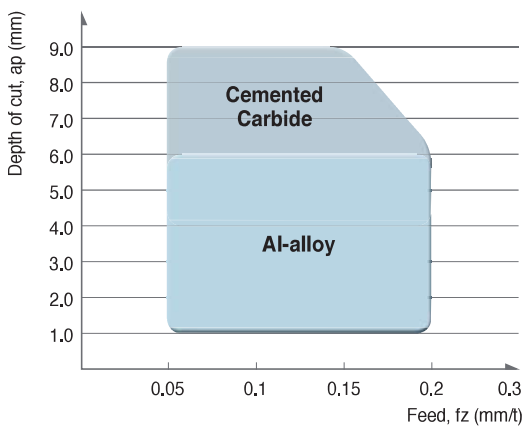
Assembly structure of cutter



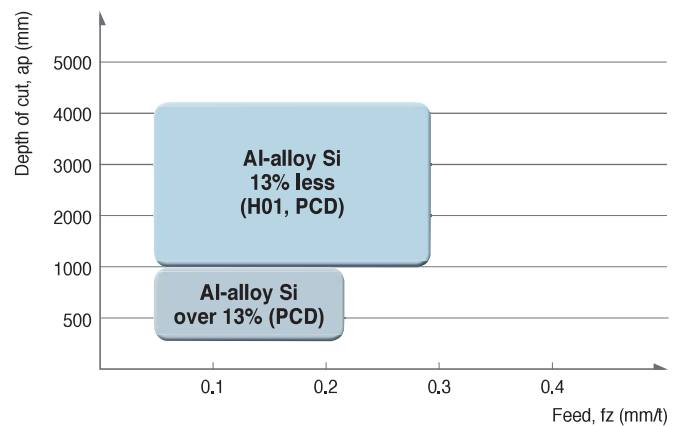
Code system



Application range



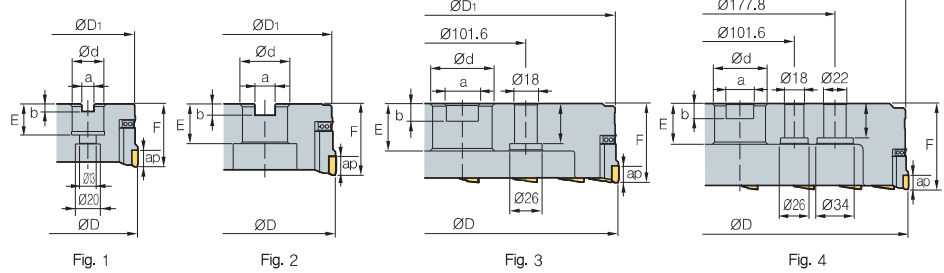
Recommended cutting condition



Max. RPM

Diameter	Max. RPM (min ⁻¹)
Ø32	26,000
Ø40	24,500
Ø50	22,000
Ø63	20,000

APD(M)-A



Cartridge + insert



Designation	⊙	ØD	ØD ₁	Ød	a	b	E	F	ap	Max rpm	kg	Fig.	
APD	080R/L-A6Z	6	80	76	25.4 (27)	9.5 (12.4)	6 (7)	25 (22)	50	10	16000	0.75	1
(APDM)	100R/L-A6Z	6	100	95	31.75 (32)	12.7 (14.4)	8 (8)	32 (28)	50	10	15000	0.95	2
	125R/L-A8Z	8	125	120	38.1 (40)	15.9 (16.4)	10 (9)	38 (30)	63	10	12500	1.8	2
	160R/L-A10Z	10	160	155	50.8 (40)	19.0 (16.4)	11 (9)	38 (30)	63	10	10000	2.9	2
	200R/L-A12Z	12	200	195	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	10	8000	4.0	3
	250R/L-A16Z	16	250	245	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	63	10	6500	6.3	3
	315R/L-A18Z	18	315	310	47.625 (60)	25.4 (25.7)	14 (14)	38 (38)	80	10	5000	11.3	4

() Metric size

Available inserts

CDEW-XCF CDEW-XAF, NAF CDEW-XAW, NAW



Designation	Uncoated			PCD	page
	H01	G10	ST30A	DP200	
CDEW	1204R-XCF				E06 E07
	1204L-XCF				
	1204R-XAF				
	1204L-XAF				
	1204R-NAF				
	1204L-NAF				
	1204R-XAW				
	1204L-XAW				
	1204R-NAW				
	1204L-NAW				

Available arbors

Designation	General arbor	NC arbors
APD	080R/L NT*□□(MU)-FMA25.4-25	BT**□□-FMA25.4
(APDM)	100R/L NT*□□(MU)-FMA31.75-□□	BT**□□-FMA31.75
	125R/L NT*□□(MU)-FMA38.1-□□	BT**□□-FMA38.1
	160R/L NT*□□(MU)-FMA50.8-□□	BT**□□-FMA50.8
	200R/L NT*□□(MU)-FMA47.625-25, KCP-8***	BT**□□-FMA47.625-□□
	315R/L KCP-8*** (Center ring plug)	-

*□□-NT number **□□-BT number ***Over milling 5

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
Aluminum	1,000~4,000 500~2,500	0.05~0.30 0.05~0.20	DP200 H01

Parts

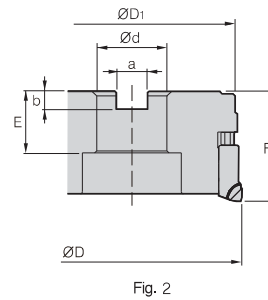
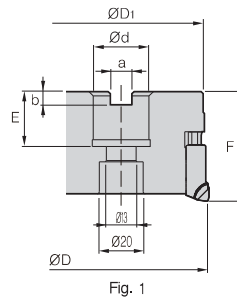
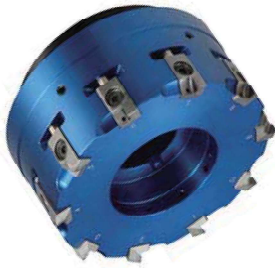
Specification								
Ø80~Ø315	LAPDR/L-AJ	CAPDR/L-AJ	PTMA0411	FTNA0411	AZ0514	BHA0619-NYLOK	TW15S	HW50

Available inserts E06, E07 Available arbors and bolt E400~E402



APD(M)-PB

Blade



AA
90°

• AR: 6°
• RR: -4°~1°

Designation		⊙	Max ⊙	ØD	ØD ₁	Ød	a	b	E	F	ap	kg	Fig.
APD (APDM)	080R/L-PB6Z	6	10	80	77	25.4 (27)	9.5 (12.4)	6 (7)	23.5	50	5	0.55	1
	080R/L-PB8Z	8	10	80	77	25.4 (27)	9.5 (12.4)	6 (7)	23.5	50	5	0.55	1
	100R/L-PB6Z	6	12	100	97	31.75 (32)	12.7 (14.4)	8	34 (32)	50	5	0.92	2
	100R/L-PB8Z	8	12	100	97	31.75 (32)	12.7 (14.4)	8	34 (32)	50	5	0.92	2
	125R/L-PB8Z	8	14	125	122	38.1 (40)	15.9 (16.4)	10 (9)	40 (35)	63	5	1.9	2
	125R/L-PB10Z	10	14	125	122	38.1 (40)	15.9 (16.4)	10 (9)	40 (35)	63	5	1.9	2
	160R/L-PB10Z	10	20	160	157	50.8 (40)	19.0 (16.4)	11 (9)	41 (35)	63	5	3.3	2
160R/L-PB12Z	12	20	160	157	50.8 (40)	19.0 (16.4)	11 (9)	41 (35)	63	5	3.3	2	

() Metric size

Available blades

BAMPR-XAF BAMPR-XAW BAMPR-XAWR



Designation	PCD	page
	DP150	
BAMPR-XAF	●	E06
BAMPR-XAW	●	
BAMPR-XAWR		

Available arbors

Designation	NC arbors
APD-PB (APDM-PB) 080R/L-PB□□Z	BT□□-FMA25.4(FMC27)-□□
100R/L-PB□□Z	BT□□-FMA31.75(FMC32)-□□
125R/L-PB□□Z	BT□□-FMA38.1(FMB40)-□□
160R/L-PB□□Z	BT□□-FMA50.8(FMB/FMC40)-□□

Parts

Specification						
Ø80-Ø160	ETKA0620	AZ0514-SPN6	UZD1010	KHE0610	SPN-6	TW25-100

Available inserts E06 Available arbors and bolt E400~E402

APD(M)-PB

Blade

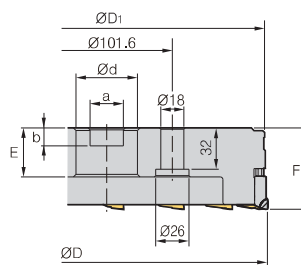


Fig. 1

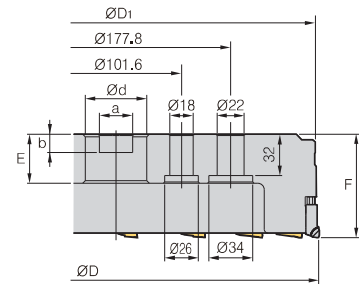


Fig. 2



AA
90°

• AR: -6°
• RR: +39°~-16°

(mm)

Designation		Max	ØD	ØD1	Ød	a	b	E	F	ap	kg	Fig.	
APD	200R/L-PB12Z	12	26	200	197	47.625 (60)	25.4 (25.7)	14	40	63	5	4.0	1
(APDM)	250R/L-PB16Z	16	32	250	247	47.625 (60)	25.4 (25.7)	14	40	63	5	6.5	1
	315R/L-PB18Z	18	42	315	312	47.625 (60)	25.4 (25.7)	14	40	63	5	11.3	2

() Metric size

Available blades

BAMPR-XAF BAMPR-XAW BAMPR-XAWR



Designation	PCD	page
	DP150	
BAMPR-XAF	•	E06
BAMPR-XAW	•	
BAMPR-XAWR		

Available arbors

Designation	NC arbors
APD-PB	BT□□-FMA47.625(FMB60)-□□
(APDM-PB)	

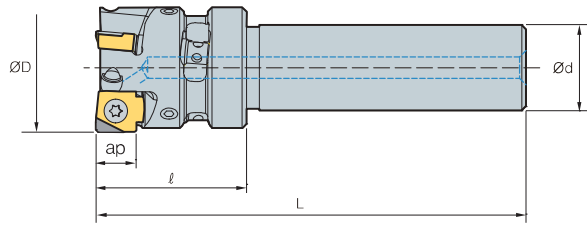
Parts

Specification						
Ø200-Ø315	ETKA0620	AZ0514-SPN6	UZD1010	KHE0610	SPN-6	TW25-100

Available inserts E06 Available arbors and bolt E400-E402



MAPDS000HR/L-Z0



* PCD ap: 5mm



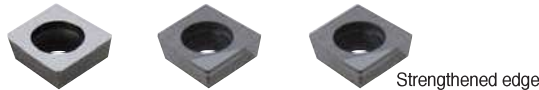
• AR: 6°
• RR: -4°~1°

Designation			ØD	Ød	l	L	ap	Max rpm	
MAPDS	032HR/L-Z3	3	32	20	35	100	9.5	26,000	0.35
	040HR/L-Z4	4	40	20	35	100	9.5	24,500	0.42

(mm)

Available inserts

SNEW SNEW-XAF SNEW-NAF



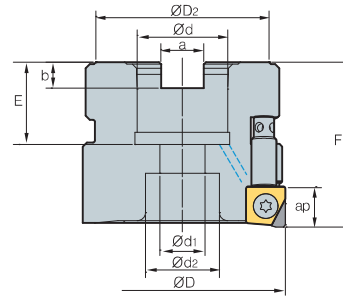
Designation	Uncoated			PCD	page
	H01	G10	ST30A	DP200	
SNEW 09T3ADFR	●				E22 E23
09T3ADTR-XAF				●	
09T3ADTR-XAW				●	
09T3ADTR-NAF				●	
09T3ADTR-NAW				●	

Parts

Specification					
Ø32~Ø63	FTKA0408	AHX0617F-NYLOK	KHD0405	TW15S	HW20L

Available inserts E22, E23

MAPD000HR/L-Z0



* PCD ap: 5 mm



AA
90°

• AR: 6°
• RR: +1°~12°

(mm)

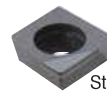
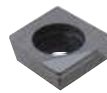
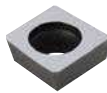
Designation		ØD	ØD ₂	Ød	a	b	E	F	Ød ₁	Ød ₂	ap	Max rpm		
MAPD	040HR/L-Z4	4	40	34	16	8.4	5.6	18	40	9	14	9.5	24,000	0.24
	050HR/L-Z5	5	50	42	22	10.4	6.3	20	40	11	18	9.5	22,000	0.35
	063HR/L-Z6	6	63	42	22	10.4	6.3	20	40	11	18	9.5	20,000	0.65

Available inserts

SNEW

SNEW-XAF

SNEW-NAF



Strengthened edge

Designation	Uncoated				PCD	page
	H01	G10	ST30A	ST20	DP200	
SNEW	09T3ADFR	●				E22 E23
	09T3ADTR-XAF				●	
	09T3ADTR-XAW				●	
	09T3ADTR-NAF				●	
	09T3ADTR-NAW				●	

Available arbors

Designation	NC arbors
MAPD	
040HR/L-Z4	BT**□□-FMC16-□□
050HR/L-Z5	BT**□□-FMC22-□□
063HR/L-Z6	BT**□□-FMC22-□□

Recommended cutting condition

Workpiece	Cutting condition		Grades
	vc (m/min)	fz (mm/t)	
Aluminum	1,000~4,000	0.05~0.30	DP200 H01
	500~2,500	0.05~0.20	

Coolant bolt (Not included)

Designation	Applicable cutter	Available cutters
CB0525	MAPD040HR/L-Z4	Ø40
CB1025	MAPD050HR/L-Z5	Ø50
	MAPD063HR/L-Z6	Ø63

Parts

Specification					
Ø32~Ø63	FTKA0408	AHX0617F-NYLK	KHD0405	TW15S	HW20L

Available inserts E22, E23 Available arbors and bolt E400~E402

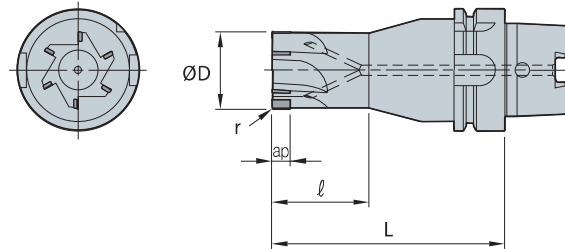


Code system

PDF 6 032 – HSK63A

PCD Face cutter
Tooth
Diameter
Shank

PCD Face cutter



Designation		ØD	r	ap	l	L	(mm)
PDF	4032-HSK50A	4	32	0.5	8	50	120
	4040-HSK50A	4	40	0.5	8	50	120
	4032-HSK63A	4	32	0.5	8	50	120
	4040-HSK63A	4	40	0.5	8	50	120
	4050-HSK63A	4	50	0.5	8	50	120
	6063-HSK63A	6	63	0.5	12	-	100
	6063-HSK100A	6	63	0.5	12	-	100

Recommended cutting condition

Workpiece	vc (m/min)	fz (mm/t)	ap (mm)
Al, Brass, Alloy	200~2,000	0.02~0.1	0.05~4.0

Special PCD order sheet

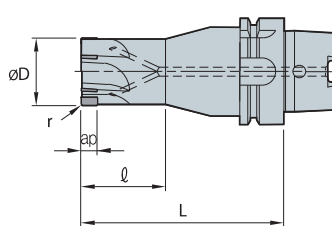
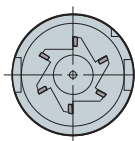


Fig. 1

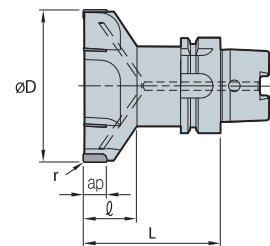


Fig. 2

Designation	Fig.	tooth	Dimensions (mm)					Shank spec.
			ØD	r	ap	l	L	
PDF								

E Technical Information for Alpha Mill-X

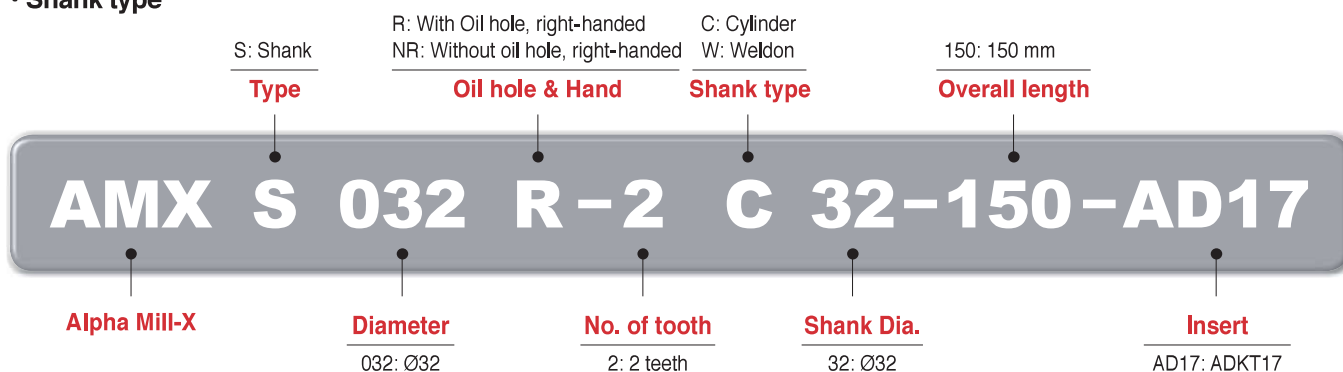
Milling tool for high productivity with good perpendicularity and minimized cutting load

Alpha Mill-X new

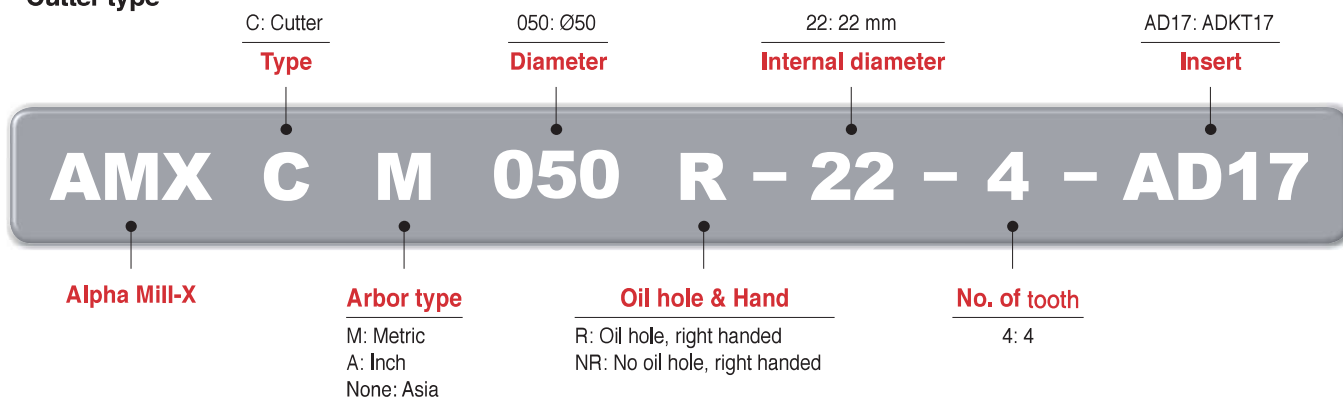
- Superior perpendicularity is achieved by its design and optimized for high quality surface finish.
- Lower cutting load and minimized burr due to high rake angle cutting edge
- Improved productivity due to high-speed capability and high feed machining
(Compared to existing tools, cutting speed and feed per tooth are improved by 15%)

Code system

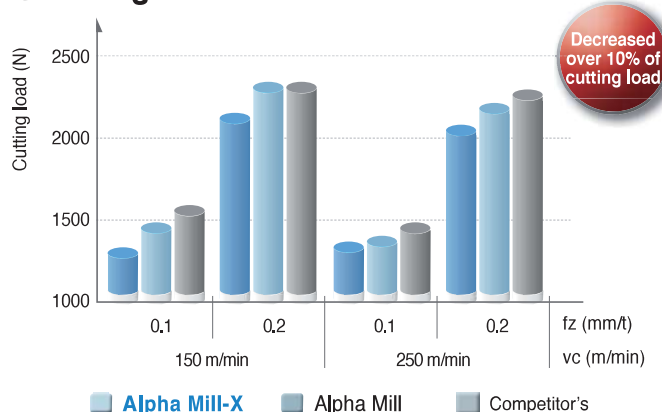
• Shank type



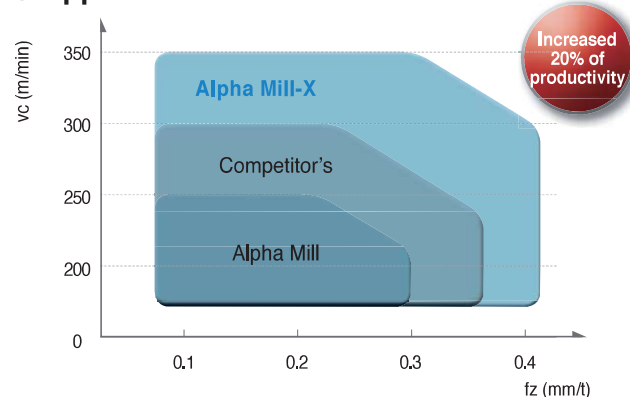
• Cutter type



▶ Cutting load



▶ Application area



Features

High rake angle chip breaker

- Applied high rake angle
- Improved chip control

Applied minor cutting edge with a wiper function

- Minor cutting edge design optimized to excellent surface in machined surfaces

Flat clamping area

- Stable clamping in high speed and high feed machining

High rake cutting edge

- Better surface roughness
- Lower cutting load

Wider chip pocket

- Maximized chip control
- Outstanding chip control in high speed and high feed machining

Perfect perpendicularity

Increased thickness

High rake cutting edge

Existing Alpha Mill
APMT1604PDSR-MM

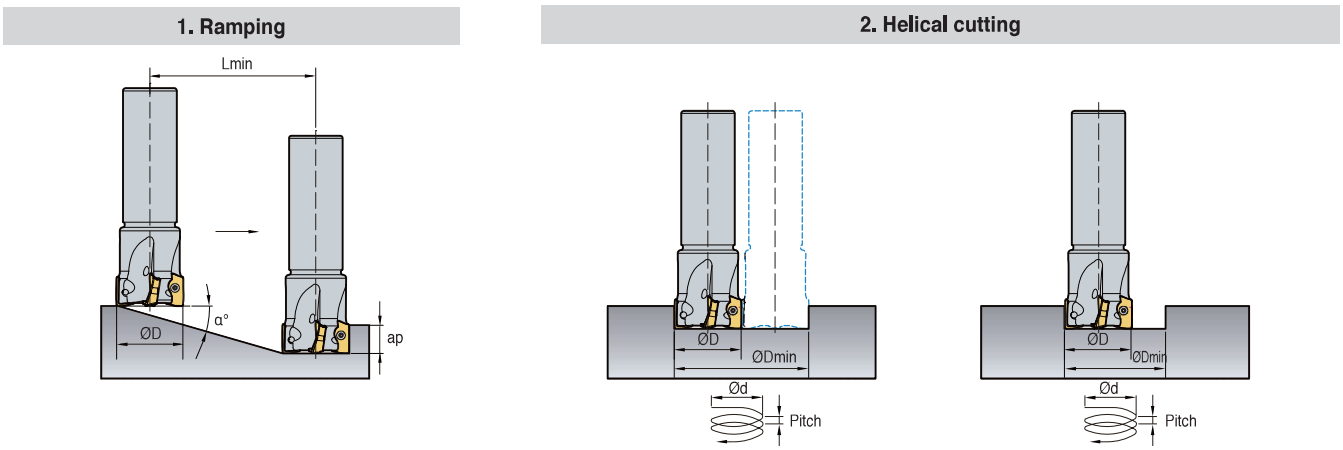
Alpha Mill-X
ADKT170608PESR-MM

- Applying cutting edge with high rake angle: decreased cutting load
- Thicker insert: high rigidity of insert

→

- Optimal for high speed and high feed machining

Cutting condition for ramping and helical operation



Designation	Tool dia. ØD (min)	ap	1. Ramping		2. Helical cutting					
			Maximum angle α (°)	Lmin (mm)	Blind hole				Through hole	
					Max. desirable hole dia. ØDH Max (mm)	Max. pitch dmax (mm)	Min. desirable hole dia. ØDH Min (mm)	Max. pitch dmax (mm)	Min. desirable hole dia. ØDH Min (mm)	Max. pitch dmax (mm)
ADKT17	20	16.5	13.0	71.5	30.4	7.0	38.4	8.9	20.8	4.8
	25	16.5	8.0	117.4	40.4	5.7	48.4	6.8	30.8	4.3
	32	16.5	3.7	255.2	54.4	3.5	62.4	4.0	44.8	2.9
	33	16.5	3.6	262.3	56.4	3.5	64.4	4.1	46.8	2.9
	40	16.5	2.6	363.4	70.4	3.2	78.4	3.6	60.8	2.8
	50	16.5	1.9	497.4	90.4	3.0	98.4	3.3	80.8	2.7
	63	16.5	1.3	727.1	116.4	2.6	124.4	2.8	106.8	2.4
	80	16.5	1.1	859.3	150.4	2.9	158.4	3.0	140.8	2.7

※ In ramping and helical machining, use coolant and air. Lmin - ap/tan (α)

Recommended cutting conditions

• ADKT17 (Surface machining and shouldering)

ISO	Recommended grade	ADKT1706 <input type="checkbox"/> <input type="checkbox"/> PESR-MM / ML		
		vc	fz	max ap
P	PC5300	150~240 m/min (492~787 sfm)	0.3~0.05 mm/t (0.012~0.002 ipt)	16.5 mm (0.65 in)
	PC5400	130~210 m/min (426~688 sfm)	0.3~0.05 mm/t (0.002~0.012 ipt)	
	PC3700	160~270 m/min (426~688 sfm)	0.3~0.05 mm/t (0.002~0.012 ipt)	
M	PC5300	90~150 m/min (295~492 sfm)	0.25~0.05 mm/t (0.01~0.002 ipt)	
	PC5400	70~120 m/min (229~393 sfm)	0.25~0.05 mm/t (0.01~0.002 ipt)	
K	PC5300	120~200 m/min (393~656 sfm)	0.35~0.08 mm/t (0.014~0.003 ipt)	
S	PC5300	40~70m/min (131~229 sfm)	0.2~0.05 mm/t (0.014~0.002 ipt)	
	PC5400	30~50m/min (98~164 sfm)	0.2~0.05 mm/t (0.014~0.002 ipt)	

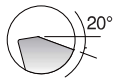
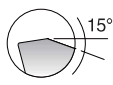
※ Maximum cutting condition: vc = 350 m/min, fz = 0.4 mm/t according to cutting environment

• ADKT17 (Grooving, ramping and helical machining)

ISO	Recommended grade	ADKT1706 <input type="checkbox"/> <input type="checkbox"/> PESR-MM / ML		
		vc	fz	max ap
P	PC5300	150~240 m/min (492~787 sfm)	0.15~0.05 mm/t (0.012~0.002 ipt)	16.5 mm (0.65 in)
	PC5400	130~210 m/min (426~688 sfm)	0.15~0.05 mm/t (0.002~0.012 ipt)	
	PC3700	160~270 m/min (426~688 sfm)	0.3~0.05 mm/t (0.002~0.012 ipt)	
M	PC5300	90~150 m/min (295~492 sfm)	0.15~0.05 mm/t (0.01~0.002 ipt)	
	PC5400	70~120 m/min (229~393 sfm)	0.15~0.05 mm/t (0.01~0.002 ipt)	
K	PC5300	120~200 m/min (393~656 sfm)	0.2~0.08 mm/t (0.014~0.003 ipt)	
S	PC5300	40~70m/min (131~229 sfm)	0.15~0.05 mm/t (0.006~0.002 ipt)	
	PC5400	30~50m/min (98~164 sfm)	0.15~0.05 mm/t (0.006~0.002 ipt)	

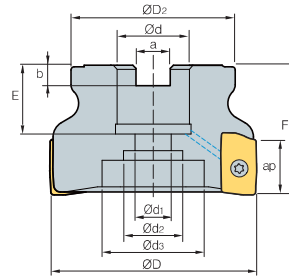
※ In deep grooving, set ap under 5 mm and use coolant and air.

Recommended Chip Breakers for workpiece

Chip breaker	Cutting edge shape	Recommended C/B and grade as per workpiece (●: 1st recommendation)											
		P		M		K		N		S			
		Low carbon steel/ Mild steel		High carbon steel/ Alloy steel		Stainless steel		Cast iron		Aluminum alloy steel		Ti/Inconel	
		C/B	Grades	C/B	Grades	C/B	Grades	C/B	Grades	C/B	Grades	C/B	Grades
ML		-	● PC3700 ○ PC5300 ○ PC5400	-	● PC3700 ○ PC5300 ○ PC5400	●	● PC5300 ○ PC5400	-	● PC6510 ○ PC5300 ○ PC5400	-	-	●	● PC5300 ○ PC5400
MM		-	● PC3700 ○ PC5300 ○ PC5400	●	● PC3700 ○ PC5300 ○ PC5400	-	● PC5300 ○ PC5400	●	● PC6510 ○ PC5300 ○ PC5400	-	-	-	● PC5300 ○ PC5400



AMXCM new



AA
90°
• AR: 8°
• RR: +10°~3°

(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	Ød3	a	b	E	F	ap	
AMXCM 040R-16-3-AD17	3	40	35	16	9	14	-	8.4	5.6	19	40	16.5	0.18
040R-16-4-AD17	4	40	35	16	9	14	-	8.4	5.6	19	40	16.5	0.18
050R-22-4-AD17	4	50	42	22	11	18	-	10.4	6.3	20	40	16.5	0.23
050R-22-5-AD17	5	50	42	22	11	18	-	10.4	6.3	20	40	16.5	0.20
063R-22-5-AD17	5	63	49	22	11	18	-	10.4	6.3	20	40	16.5	0.44
063R-22-6-AD17	6	63	49	22	11	18	-	10.4	6.3	20	40	16.5	0.49
080R-27-6-AD17	6	80	57	27	14	25	38	12.4	7.0	23	50	16.5	0.88
080R-27-7-AD17	7	80	57	27	14	25	38	12.4	7.0	23	50	16.5	0.90

Available inserts

ADKT-ML ADKT-MM



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
ADKT 170604PESR-MM																		E04
170608PESR-MM					●					●	●		●	●	●			
170608PESR-ML					●					●	●		●	●	●			
170616PESR-MM														●	●			
170620PESR-MM														●	●			

Available arbors

Designation	NC arbors
AMXCM 040R-16-3-AD17	BT□□-FMC26-□□
040R-16-4-AD17	BT□□-FMC26-□□
050R-22-4-AD17	BT□□-FMC22-□□
050R-22-5-AD17	BT□□-FMC22-□□
063R-22-5-AD17	BT□□-FMC22-□□
063R-22-6-AD17	BT□□-FMC22-□□
080R-27-6-AD17	BT□□-FMC27-□□
080R-27-7-AD17	BT□□-FMC27-□□

Parts

Specification		
Ø40~Ø80	FTKA0410	TW15S

Available inserts E04 Available arbors and bolt E400~E402

AMXS new

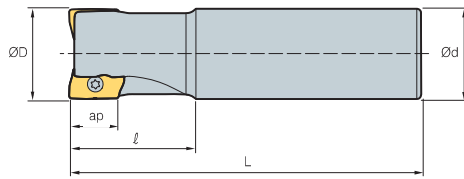


Fig. 1

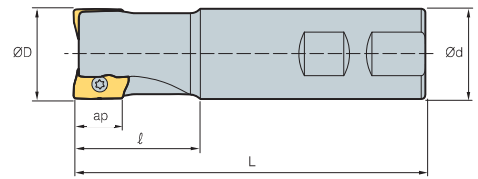


Fig. 2



AA
90°
• AR: 8°
• RR: -10°~3°

(mm)

Designation		ØD	Ød	ℓ	L	ap		Fig.
AMXS 020R-1C20-180-AD17	1	20	20	35	180	16.5	0.36	1
020R-1W20-090-AD17	1	20	20	35	90	16.5	0.16	2
025R-2C25-200-AD17	2	25	25	35	200	16.5	0.66	1
025R-2W25-115-AD17	2	25	25	35	115	16.5	0.34	2
032R-3C32-200-AD17	3	32	32	45	200	16.5	1.05	1
032R-3W32-125-AD17	3	32	32	45	125	16.5	0.62	2
033R-3C32-200-AD17	3	33	32	45	200	16.5	1.05	1
033R-3W32-125-AD17	3	33	32	45	125	16.5	0.62	2
040R-3C32-200-AD17	3	40	32	50	200	16.5	1.17	1
040R-3W32-130-AD17	3	40	32	50	130	16.5	0.75	2
040R-4C32-200-AD17	4	40	32	50	200	16.5	1.20	1
040R-4W32-130-AD17	4	40	32	50	130	16.5	0.74	2

Available inserts

ADKT-ML ADKT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
ADKT 170604PESR-MM																		E04
170608PESR-MM					●				●	●		●	●	●				
170608PESR-ML					●				●	●		●	●	●				
170616PESR-MM														●	●			
170620PESR-MM														●	●			

Parts

Specification		
Ø40~Ø80	FTKA0410	TW15S

Available inserts E04 Available arbors and bolt E400~E402



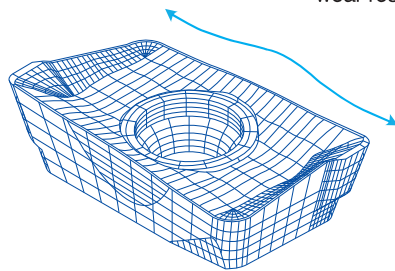
Various applications are available with multi-functional cutters

Alpha Mill

- Innovative curve cutting-edge and chip-breaker design ensures ideal 90-degree cutting, lower cutting resistance, and improved insert life.
- Various applications are available with multi-functional cutters. (Facing, Slotting, Square shoulder milling, etc.)
- Excellent performance ensured at large depth of cut operations due to strong cutting-edge and low cutting resistance.

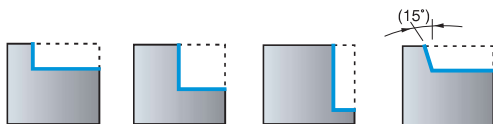
Features of insert

- Long tool life at high speed, high feed and deeper cutting by low cutting resistance and strong cutting-edge
- Distinguished features of Alpha-Curve reduce cutting resistance and improve cutting-edge strength and wear resistance
- Low cutting resistance is realized by KORLOY unique design-the alpha curve cutting-edge and optimal convex and concave design
- Highly efficient machining is available by the ideal application of the grade to material



Application example

Shouldering



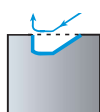
Slotting



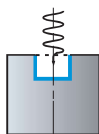
Drilling



Ramping



Helical cutting

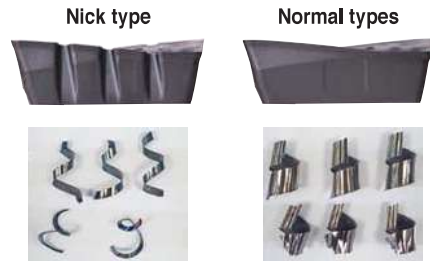


Alpha Mill Nick new




- New nick cutting edge reduces cutting load
- High productivity
- APMT standard holders are compatible with Alpha Mill nick that is reducing stock management cost.

Features

- Lower cutting load due to the overlapping system

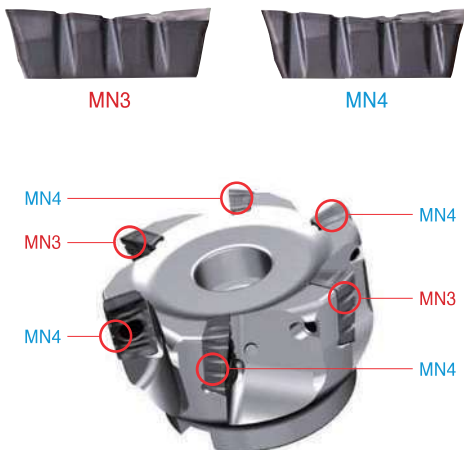


- ※ Nick types require both chip breaker types for application.
- ※ Can be used with the existing Alpha Mill holders. Use multi-edges for maximum results. (cutters with even-numbered teeth)

Type	Nick type		General type
Required No. of teeth	20		20
For AMCM3080M (4 Flute x 5 teeth)	 x 10 APMT16-MN3	 x 10 APMT16-MN4	 x 20 APMT16-MM, MF, ML, MA

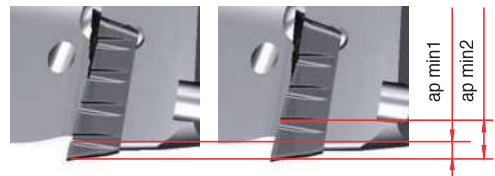
How to clamp

- Alternate the two types of chip breakers when clamping an insert.



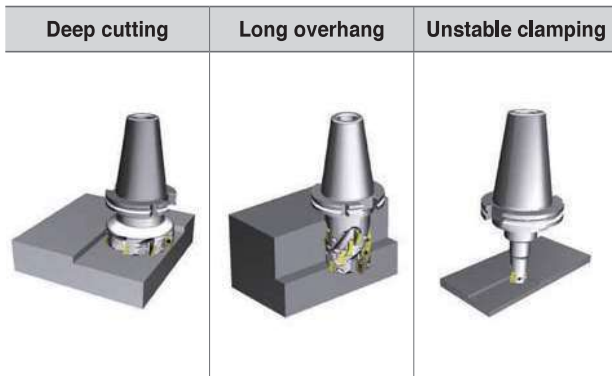
Min. depth of cut

- The depth of cut must be greater than ap_{min1} for chip breaking.

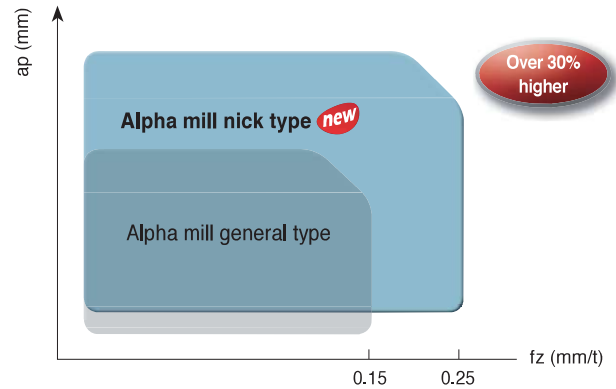


Type	ap_{min1}	ap_{min2}
APMT11 (2000 type)	1.6 mm	4.1 mm
APMT16 (3000 type)	2.2 mm	5 mm
APMT18 (4000 type)	2.3 mm	5.5 mm

Application examples



Application area



• 30% or higher cutting conditions available compared to normal types

Recommended cutting condition

ISO	Grades	APMT 2000 type			APMT 3000 type			APMT 4000 type		
		vc (m/min)	fz (mm/t)	ap (mm)	vc (m/min)	fz (mm/t)	ap (mm)	vc (m/min)	fz (mm/t)	ap (mm)
P	PC3700	180~280	0.05~0.15	11	160~270	0.05~0.18	16	160~270	0.05~0.18	17
	PC5300	150~250	0.05~0.15		150~240	0.05~0.18		150~240	0.05~0.18	
M	PC5300	90~170	0.05~0.15		90~150	0.05~0.18		90~150	0.05~0.18	
K	PC5300	120~240	0.1~0.2		120~200	0.1~0.23		120~200	0.1~0.23	

※ Above cutting conditions can be applied up to cutting speed of 300 m/min and feed per tooth of 0.4 mm/t.

Features of chip breakers

Insert	Cutting-edge	Uses	Features
MA		Al	Optimal cutting-edge and buffed surface for aluminum workpieces ensure high performance in machining
ML		Hard-to-cut material	Chip breaker with low cutting load is optimal for machining hard-to-cut materials
MF		Light cutting	Chip breaker with low cutting load and harder cutting-edge than ML's are optimal for light cutting
MM		General cutting	Optimal for milling in general ranges
MN		Roughing (nick)	Design for easy chip cutting ensures high machinability in toughing

Product constitution

Item description	Type	Nose R	MA	ML	
APMT	1000Type	0.4	APMT0602PDRFR-MA	-	
		0.8	APMT060208PDRFR-MA	-	
	1500Type	0.4	APMT0903PDRFR-MA	APMT0903PDER-ML	
		0.8	APMT090308PDRFR-MA	APMT090308PDER-ML	
	2000Type	0.5	APMT11T3PDRFR-MA	APMT11T3PDER-ML	
		0.8	APMT11T308PDRFR-MA	APMT11T308PDER-ML	
	3000Type	0.4	APMT160404PDRFR-MA	APMT160404PDER-ML	
		0.8	APMT1604PDRFR-MA	APMT1604PDER-ML	
	4000Type	0.4	APMT180604PDRFR-MA	APMT180604PDER-ML	
		0.8	APMT1806PDRFR-MA	APMT1806PDER-ML	
		1.2	APMT180612PDRFR-MA	APMT180612PDER-ML	
		1.6	APMT180616PDRFR-MA	APMT180616PDER-ML	
		2.0	APMT180620PDRFR-MA	APMT180620PDER-ML	
		2.4	APMT180624PDRFR-MA	APMT180624PDER-ML	
			3.0	APMT180630R-MA	APMT180630R-ML

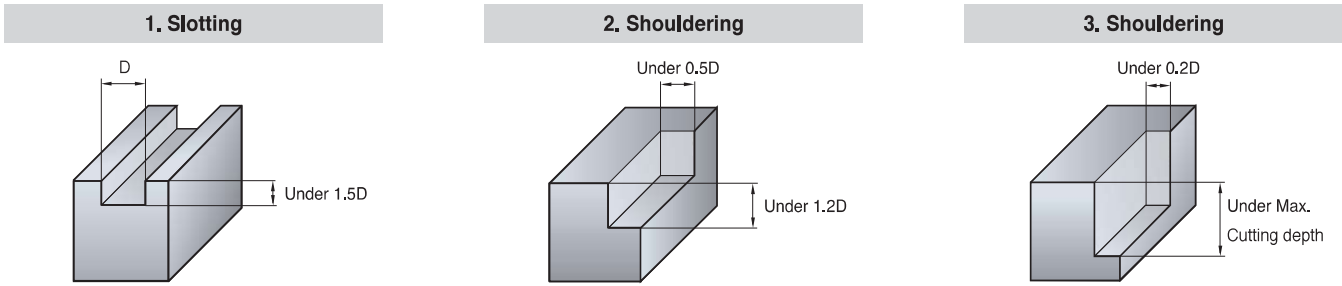
- The inserts can switch to the APMT type holders.

Recommended grades and chip breakers by workpiece

Chip breaker	Cutter edge	Recommended C/B and grade as per workpiece (●: 1st)											
		P		M		K		N		S			
		Low carbon steel/Mild steel	High carbon steel/Mild steel	Stainless steel	Cast iron	Aluminum alloy	Ti/Inconel						
		C/B	Grades	C/B	Grades	C/B	Grades	C/B	Grades	C/B	Grades	C/B	Grades
MA		-	-	-	-	-	-	-	-	●	● H01	-	-
ML		-	-	-	-	●	● PC5300 ○ PC5400 ○ PC3545 ○ PC9530	-	-	-	-	●	● PC5300 ○ PC5400 ○ PC3545
MF		●	● PC3700 ○ PC5300 ○ PC5400 ○ NCM325 ○ NCM335	-	○ PC3700 ○ PC3545 ○ NCM325 ○ NCM335	-	● PC5300 ○ PC5400 ○ PC3545 ○ PC9530	-	● PC6510 ○ PC5300 ○ PC5400	-	-	-	● PC5300 ○ PC5400 ○ PC3545
MM		-	● PC3700 ○ PC5300 ○ PC5400 ○ NCM325 ○ NCM335	●	● PC3700 ○ PC5300 ○ PC5400 ○ NCM325 ○ NCM335	-	● PC5300 ○ PC5400 ○ PC3545 ○ PC9530	●	● PC6510 ○ PC5300 ○ PC5400	-	-	-	● PC5300 ○ PC5400 ○ PC3545
MN		-	● PC3500 ○ PC5300 ○ PC5400	-	-	-	● PC5300 ○ PC5400 ○ PC9530	-	● PC6510 ○ PC5300 ○ PC5400	-	-	-	● PC5300 ○ PC5400 ○ PC3545



Recommended depth of cut



Recommended cutting condition (for Multi-edge type)

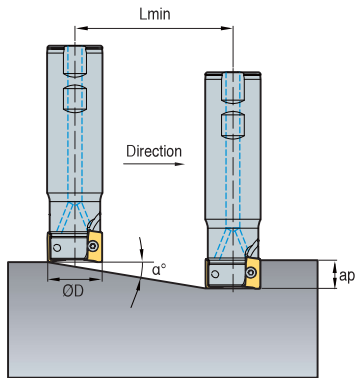
Workpiece	Grades	Fig.	Tool dia.									
			Ø10, 16		Ø20, 25		Ø32, 40		Ø50, 63		Ø80, 100	
			vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)
Mild steel, Low carbon steel)	NC5340 NCM325 PC5400 PC5300 PC3500 PC3600	①	50~80	0.05~0.08	80~100	0.05~0.08	100~120	0.05~0.08	100~120	0.05~0.08	100~120	0.05~0.08
		②	65~90	0.08~0.1	100~120	0.08~0.1	120~140	0.08~0.1	120~140	0.08~0.1	120~140	0.08~0.1
		③	65~95	0.1~0.15	100~120	0.1~0.15	120~140	0.1~0.15	120~140	0.1~0.15	130~150	0.1~0.15
		④	65~95	0.1~0.15	100~120	0.1~0.15	120~140	0.1~0.15	120~140	0.1~0.15	130~150	0.1~0.15
High carbon steel, Alloy steel	NC5340 NCM325 PC5300 PC3500 PC3600	①	45~60	0.05	60~80	0.05	80~100	0.05	80~100	0.05	80~100	0.05
		②	50~80	0.05~0.08	80~100	0.05~0.08	100~120	0.08~0.1	100~120	0.08~0.1	100~120	0.08~0.1
		③	50~80	0.1~0.15	80~100	0.1~0.15	110~130	0.1~0.15	100~120	0.1~0.15	110~130	0.1~0.15
		④	50~80	0.1~0.15	80~100	0.1~0.15	110~130	0.1~0.15	100~120	0.1~0.15	110~130	0.1~0.15
Alloy tool steel	PC5300 PC3500 PC3600 PC2510 PC2505	①	40~55	0.05	50~70	0.05	70~90	0.05	70~90	0.05	70~90	0.05
		②	45~60	0.05~0.08	60~80	0.05~0.08	90~120	0.05~0.08	100~120	0.05~0.08	100~120	0.05~0.08
		③	50~75	0.12~0.18	90~110	0.12~0.18	100~130	0.1~0.15	100~120	0.1~0.15	110~130	0.1~0.15
		④	50~75	0.12~0.18	90~110	0.12~0.18	100~130	0.1~0.15	100~120	0.1~0.15	110~130	0.1~0.15
Stainless steel	PC5300 PC9530	①	35~50	0.054	50~70	0.054	70~90	0.05	70~90	0.05	70~90	0.05
		②	45~60	0.05~0.08	60~80	0.05~0.08	90~120	0.05~0.08	100~120	0.05~0.08	100~120	0.05~0.08
		③	50~75	0.1~0.15	90~110	0.1~0.15	100~130	0.1~0.15	110~130	0.1~0.15	110~130	0.1~0.15
		④	50~75	0.1~0.15	90~110	0.1~0.15	100~130	0.1~0.15	110~130	0.1~0.15	110~130	0.1~0.15
Cast iron	PC6510 PC5300	①	50~70	0.1~0.12	70~90	0.1~0.12	70~90	0.1~0.12	90~120	0.1~0.12	90~120	0.1~0.12
		②	50~80	0.12	80~100	0.12	90~120	0.12	100~140	0.12	100~140	0.12
		③	50~80	0.15~0.2	80~100	0.15~0.2	100~130	0.15~0.2	120~150	0.15~0.2	120~150	0.15~0.2
		④	50~80	0.15~0.2	80~100	0.15~0.2	100~130	0.15~0.2	120~150	0.15~0.2	120~150	0.15~0.2
Aluminum alloy	H01	①	160~600	0.1~0.2	200~800	0.1~0.2	300~900	0.1~0.2	400~1,000	0.1~0.2	400~1,000	0.1~0.2
		②	200~650	0.15~0.3	250~900	0.15~0.3	300~950	0.15~0.3	400~1,000	0.1~0.4	400~1,000	0.1~0.4
		③	200~650	0.15~0.3	250~900	0.15~0.3	300~950	0.15~0.3	400~1,000	0.1~0.4	400~1,000	0.1~0.4
		④	200~650	0.15~0.3	250~900	0.15~0.3	300~950	0.15~0.3	400~1,000	0.1~0.4	400~1,000	0.1~0.4
Hardened steel	PC5300 PC2510 PC2505	①	35~50	0.03	50~70	0.03	60~90	0.03	60~90	0.03	60~90	0.03
		②	45~60	0.05~0.08	60~80	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08
		③	45~60	0.05~0.08	60~80	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08
		④	50~80	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08

Recommended cutting condition (for Single-edge type)

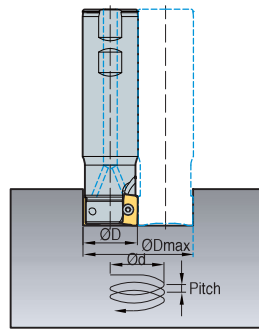
Workpiece	Grades	Fig.	Tool dia.									
			Ø10, 16		Ø20, 25		Ø32, 40		Ø50, 63		Ø80, 100	
			vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)	vc (m/min)	fz (mm/t)
Mild steel, low carbon steel	NC5340 NCM325 PC5400 PC5300 PC3500 PC3600	①	45~60	0.05~0.08	60~80	0.05~0.08	80~120	0.05~0.08	120~200	0.05~0.08	150~200	0.05~0.08
		②	60~90	0.08~0.1	80~120	0.08~0.1	120~180	0.08~0.1	180~250	0.08~0.1	200~250	0.08~0.1
		③	60~90	0.1~0.15	80~120	0.1~0.15	120~180	0.1~0.15	180~250	0.1~0.15	200~250	0.1~0.15
		④	60~90	0.1~0.15	80~120	0.1~0.15	120~180	0.1~0.15	180~250	0.1~0.15	200~250	0.1~0.15
High carbon steel, alloy steel	NC5340 NCM325 PC5300 PC3500 PC3600	①	40~60	0.05	50~80	0.05	80~110	0.05	100~150	0.05	100~150	0.05
		②	50~80	0.05~0.08	80~100	0.05~0.08	110~150	0.05~0.1	150~200	0.05~0.1	150~200	0.05~0.1
		③	50~80	0.1~0.15	80~100	0.1~0.15	120~150	0.1~0.15	180~200	0.1~0.15	180~200	0.1~0.15
		④	50~80	0.1~0.15	80~100	0.1~0.15	120~150	0.1~0.15	180~200	0.1~0.15	180~200	0.1~0.15
Alloy tool steel	PC5300 PC3500 PC3600 PC2510 PC2505	①	35~50	0.05	50~70	0.05	80~100	0.05	100~130	0.05	100~130	0.05
		②	45~70	0.05~0.08	70~100	0.05~0.08	100~130	0.05~0.1	130~180	0.05~0.1	130~180	0.05~0.1
		③	45~70	0.1~0.15	70~100	0.1~0.15	100~150	0.1~0.15	130~180	0.1~0.15	130~180	0.1~0.15
		④	45~70	0.1~0.15	70~100	0.1~0.15	100~150	0.1~0.15	130~180	0.1~0.15	130~180	0.1~0.15
Stainless steel	PC5300 PC9530	①	35~50	0.05	50~70	0.05	80~100	0.05	100~130	0.05	100~130	0.05
		②	45~70	0.05~0.08	70~100	0.05~0.08	100~130	0.05~0.1	130~180	0.05~0.1	130~180	0.05~0.1
		③	45~70	0.1~0.15	70~100	0.1~0.15	100~150	0.1~0.15	130~180	0.1~0.15	130~180	0.1~0.15
		④	45~70	0.1~0.15	70~100	0.1~0.15	100~150	0.1~0.15	130~180	0.1~0.15	130~180	0.1~0.15
Cast iron	PC6510 PC5300	①	50~80	0.08~0.12	80~100	0.08~0.12	80~100	0.15	120~150	0.15	120~150	0.15
		②	65~90	0.12~0.15	100~120	0.12~0.15	100~130	0.15~0.18	150~200	0.15~0.18	150~200	0.15~0.18
		③	65~90	0.15~0.2	100~120	0.15~0.2	100~130	0.15~0.2	150~200	0.15~0.2	150~200	0.15~0.2
		④	65~90	0.15~0.2	100~120	0.15~0.2	100~130	0.15~0.2	150~200	0.15~0.2	150~200	0.15~0.2
Aluminum alloy	H01	①	200~600	0.15~0.2	250~800	0.15~0.2	300~900	0.15~0.2	400~1,000	0.1~0.2	400~1,000	0.1~0.2
		②	200~650	0.2~0.25	250~900	0.2~0.25	350~950	0.2~0.25	400~1,000	0.2~0.3	400~1,000	0.2~0.3
		③	200~650	0.25~0.3	250~900	0.25~0.3	350~950	0.25~0.3	400~1,000	0.3~0.4	400~1,000	0.3~0.4
		④	200~650	0.25~0.3	250~900	0.25~0.3	350~950	0.25~0.3	400~1,000	0.3~0.4	400~1,000	0.3~0.4
Hardened steel	PC5300 PC2510 PC2505	①	35~50	0.03	50~70	0.03	60~90	0.03	60~90	0.03	60~90	0.03
		②	45~65	0.05~0.08	60~80	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08
		③	45~65	0.05~0.08	60~80	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08
		④	50~80	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08	80~100	0.05~0.08

➤ Cutting condition for ramping and helical operation

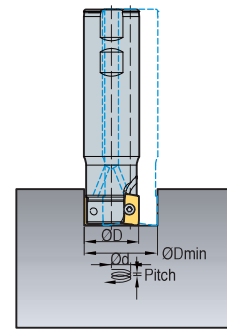
1. Ramping



2. Helical cutting for blind hole



3. Helical cutting for through hole



(mm)

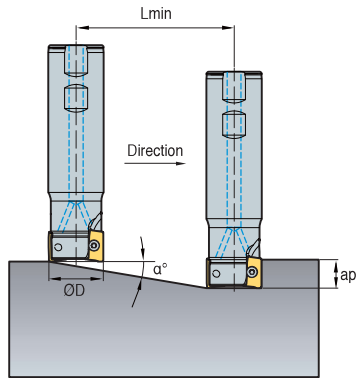
Designation	Tool dia. ØD (min)	ap	1. Ramping		2. Helical cutting for blind hole				3. Helical cutting for through hole	
			Maximum angle α(°)	Lmin (mm)	Max. desirable hole dia. ØDH Max (mm)	Max. pitch dmax (mm)	Min. desirable hole dia. ØDH Min (mm)	Max. pitch dmax (mm)	Min. desirable hole dia. ØDH Min (mm)	Max. pitch dmax (mm)
AMS1010HS	10	5	6.5	44	17.6	2.0	18.8	2.1	13	1.5
AMS1011HS	11		5.6	51	19.6	1.9	20.8	2.0	15	1.5
AMS1012HS	12		4.9	58	21.6	1.9	22.8	2.0	17	1.5
AMS1014HS	14		3.9	73	25.6	1.8	26.8	1.8	21	1.4
AMS1015HS	15		3.6	80	27.6	1.7	28.8	1.8	23	1.4
AMS1016HS	16		3.3	87	29.6	1.7	30.8	1.8	25	1.4
AMS1017HS	17		3.0	94	31.6	1.7	32.8	1.7	27	1.4
AMS1018HS	18		2.8	101	33.6	1.7	34.8	1.7	29	1.4
AMS1020HS	20		2.5	115	37.6	1.6	38.8	1.7	33	1.4
AMS1021HS	21		2.3	123	39.6	1.6	40.8	1.7	35	1.4
AMS1022HS	22		2.2	130	41.6	1.6	42.8	1.6	37	1.4
AMS1025HS	25		1.9	151	47.6	1.6	48.8	1.6	43	1.4
AMS1026HS	26		1.8	158	49.6	1.6	50.8	1.6	45	1.4
AMS1032HS	32		1.4	201	61.6	1.5	62.8	1.6	57	1.4
AMS1033HS	33		1.4	208	63.6	1.5	64.8	1.6	59	1.4
AMCM1032HS	32		1.4	201	61.6	1.5	62.8	1.6	57	1.4
AMCM1040HS	40		1.1	258	77.6	1.5	78.8	1.5	73	1.4
AMCM1050HS	50		0.9	330	97.6	1.5	98.8	1.5	93	1.4
AMCM1063HS	63		0.7	423	123.6	1.5	124.8	1.5	119	1.4
AMS1510HS	10		9	7.5	68	17.4	2.3	18.8	2.5	11
AMS1512HS	12	6.5		79	21.4	2.4	22.8	2.6	15	1.7
AMS1513HS	13	5.7		90	23.4	2.3	24.8	2.5	17	1.7
AMS1514HS	14	6.3		82	25.4	2.8	26.8	2.9	19	2.1
AMS1516HS	16	5.0		102	29.4	2.6	30.8	2.7	23	2.0
AMS1517HS	17	4.6		112	31.4	2.5	32.8	2.6	25	2.0
AMS1518HS	18	4.2		122	33.4	2.5	34.8	2.6	27	2.0
AMS1519HS	19	3.9		132	35.4	2.4	36.8	2.5	29	2.0
AMS1520HS	20	3.6		142	37.4	2.4	38.8	2.5	31	2.0
AMS1521HS	21	3.4		152	39.4	2.3	40.8	2.4	33	2.0
AMS1522HS	22	3.2		162	41.4	2.3	42.8	2.4	35	1.9
AMS1524HS	24	2.8		182	45.4	2.2	46.8	2.3	39	1.9
AMS1525HS	25	2.7		192	47.4	2.2	48.8	2.3	41	1.9
AMS1528HS	28	2.3		222	53.4	2.2	54.8	2.2	47	1.9
AMS1530HS	30	2.1		242	57.4	2.1	58.8	2.2	51	1.9
AMS1532HS	32	2.0		262	61.4	2.1	62.8	2.2	55	1.9
AMS1535HS	35	1.8		292	67.4	2.1	68.8	2.1	61	1.9
AMS1540HS	40	1.5		342	77.4	2.0	78.8	2.1	71	1.9
AMCM15040HS	40	1.5		342	77.4	2.0	78.8	2.1	71	1.9
AMCM15050HS	50	1.2		442	97.4	2.0	98.8	2.0	91	1.9
AMCM15063HS	63	0.9	572	123.4	1.9	124.8	2.0	117	1.8	
AMCM15080HS	80	0.7	742	157.4	1.9	158.8	1.9	151	1.8	
AMCM15100HS	100	0.5	942	197.4	1.9	198.8	1.9	191	1.8	

$$Lmin = \frac{ap}{\tan \alpha^\circ} \text{ (mm)}$$

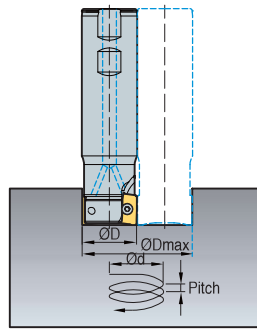


➤ Cutting condition for ramping and helical operation

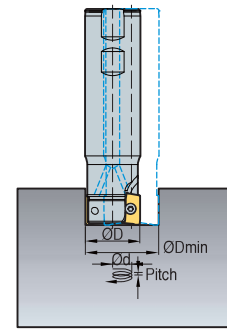
1. Ramping



2. Helical cutting for blind hole



3. Helical cutting for through hole

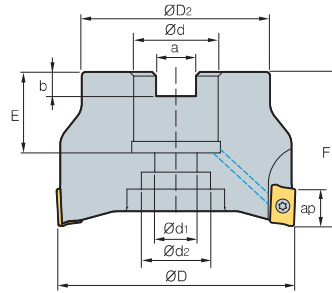


(mm)

Designation	Tool dia. ØD (min)	ap	1. Ramping		2. Helical cutting for blind hole				3. Helical cutting for through hole		
			Maximum angle α(°)	Lmin (mm)	Max. desirable hole dia. ØDH Max (mm)	Max. pitch dmax (mm)	Min. desirable hole dia. ØDH Min (mm)	Max. pitch dmax (mm)	Min. desirable hole dia. ØDH Min (mm)	Max. pitch dmax (mm)	
AMS2010HS	10	10	16.82	33	16.4	5.0	18	5.4	11	3.3	
AMS2012HS	12		11.69	48	20.4	4.2	22	4.6	15	3.1	
AMS2014HS	14		7.55	75	24.4	3.2	26	3.4	19	2.5	
AMS2016HS	16		10.30	55	28	5.1	30	5.5	23	4.2	
AMS2018HS	18		8.23	69	32	4.6	34	4.9	27	3.9	
AMS2020HS	20		5.60	102	36	3.5	38	3.7	31	3.0	
AMS2022HS	22		5.15	111	40	3.6	42	3.8	35	3.2	
AMS2025HS	25		3.92	146	46	3.2	48	3.3	41	2.8	
AMS2032HS	32		2.70	212	60	2.8	62	2.9	55	2.6	
AMS2040HS	40		1.98	289	76	2.6	78	2.7	71	2.5	
AMS2050HS	50		1.48	386	96	2.5	98	2.5	91	2.4	
AMS2063HS	63		1.11	514	122	2.4	124	2.4	117	2.3	
AMCM2040HS	40		1.29	445	76	2.5	78	2.6	71	2.1	
AMCM2050HS	50		0.36	1576	96	0.6	98	0.6	91	0.6	
AMCM2063HS	63		0.27	2104	122	0.6	124	0.6	117	0.6	
AMCM2080HS	80		0.21	2784	156	0.6	158	0.6	151	0.5	
AMCM2100HS	100		0.16	3584	196	0.5	198	0.6	191	0.5	
AMS3025HS	25		10	4.72	121	46	3.8	48	4.0	36	3.0
AMS3032HS	32			3.00	191	60	3.1	62	3.2	50	2.6
AMS3040HS	40	2.29		250	76	3.0	78	3.1	66	2.6	
AMS3050HS	50	1.64		350	96	2.7	98	2.8	86	2.5	
AMS3063HS	63	1.22		470	122	2.6	124	2.6	112	2.4	
AMCM3040HS	40	1.99		288	76	2.6	78	2.7	66	2.3	
AMCM3050HS	50	1.67		343	96	2.8	98	2.9	86	2.5	
AMCM3063HS	63	1.22		470	122	2.6	124	2.6	112	2.4	
AMCM3080HS	80	0.90		636	156	2.5	158	2.5	146	2.3	
AMCM3100HS	100	0.69		830	196	2.4	198	2.4	186	2.2	
AMS2025MH	25	10	1.50	764	46	1.2	48	1.3	-	-	
AMS2032MH	32		1.50	1146	60	1.6	62	1.6	-	-	
AMS3040MH	40	16	1.50	1528	76	2.0	78	2.0	-	-	
AMS4020HS	20	16	9.5	98	37.4	6.2	38.8	6.5	31	5.2	
AMS4021HS	21		5.2	179	39.4	3.6	40.8	3.7	33	3.0	
AMS4025HS	25		7.6	122	47.4	6.3	48.8	6.5	41	5.5	
AMS4026HS	26		7.1	130	49.4	6.2	50.8	6.4	43	5.4	
AMS4032HS	32		3.4	276	61.4	3.6	62.8	3.7	55	3.3	
AMS4033HS	33		3.2	288	63.4	3.6	64.8	3.7	57	3.2	
AMS4040HS	40		2.5	376	77.4	3.4	78.8	3.4	71	3.1	
AMS4050HS	50		1.9	502	97.4	3.2	98.8	3.2	91	3.0	
AMS4063HS	63		1.4	665	123.4	3.0	124.8	3.1	117	2.9	
AMCM4050HS	50		1.9	502	97.4	3.2	98.8	3.2	91	3.0	
AMCM4063HS	63		1.4	665	123.4	3.0	124.8	3.1	117	2.9	
AMCM4080HS	80		1.1	878	157.4	2.9	158.8	2.9	151	2.8	
AMCM4100HS	100		0.8	1128	197.4	2.9	198.8	2.9	191	2.8	
AMCM4125HS	125		0.6	1442	247.4	2.8	248.8	2.8	241	2.7	

$$Lmin = \frac{ap}{\tan \alpha} \text{ (mm)}$$

AMC(M)1000S



AA
90°
• AR: 9°~13°
• RR: -14°~5°

(mm)

Designation		ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap		
AMCM	1032HS	8	32	30	16	9	14	8.4	5.6	19	40	5.6	0.15
	1040HS-16	10	40	34	16	9	14	8.4	5.6	19	40	5.6	0.24
	1040HS-22	10	40	34	22	11	18	10.4	6.3	21	40	5.6	0.24
	1050HS	12	50	42	22	11	18	10.4	6.3	21	40	5.6	0.36
	1063HS	14	63	49	22	11	18	10.4	6.3	21	40	5.6	0.61

Available inserts

APMT-MA APMT-MM



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT	0602PDFR-MA																	●
	060208PDFR-MA																	
	060202PDSR-MM			●						●				●	●			
	0602PDSR-MM			●			●	●	●	●	●	●		●	●			
	060208PDSR-MM			●				●	●				●	●	●			
	060212R-MM			●				●					●	●				

Available arbors

Designation	Ød	NC arbors
AMCM	1032HS	BT□□-FMC16-□□
	1040HS-16	
	1040HS-22	
	1050HS	BT□□-FMC22-□□
	1063HS	

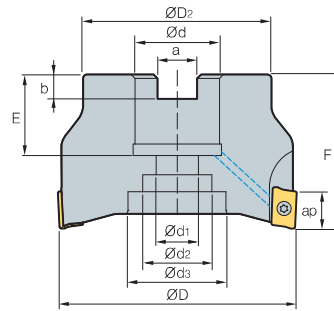
Parts

Specification		
Ø32~Ø63	FTKA01842	TW06S-A

Available inserts E05 Available arbors and bolt E400~E402



AMC(M)1500S



AA 90°
 • AR: 9°~13°
 • RR: +14°~5°

(mm)

Designation		ØD	ØD ₂	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	F	ap		
AMCM	15040HS	5	40	34	16	9	14	-	8.4	5.6	19	40	9	0.22
	15050HS	6	50	42	22	11	18	-	10.4	6.3	21	40	9	0.34
	15063HS	8	63	49	22	11	18	-	10.4	6.3	21	40	9	0.57
AMC (AMCM)	15080HS	10	80	57	25.4 (27)	14	25	35	9.5 (12.4)	6 (7)	24 (23)	50	9	1.10
	15100HS	12	100	67	31.75 (32)	18	26	42	12.7 (14.4)	8 (8)	32 (26)	63	9	2.10

() Metric size

Available inserts

APMT-MA APMT-ML APMT-MM



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 0903PDFR-MA																	●	E05
090308PDFR-MA																		
0903PDER-ML														●	●			
090308PDER-ML														●	●			
0903PDSR-MM				●			●	●	●	●	●			●	●			
090308PDSR-MM				●					●	●				●	●			
090312R-MM									●	●				●	●			
090316R-MM				●					●	●				●	●			
090320R-MM									●	●				●	●			

Available arbors

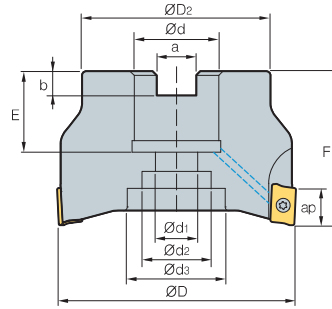
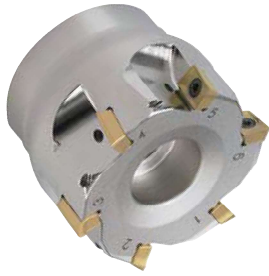
Designation	Ød	NC arbors
AMCM 15040HS	16	BT□□-FMC16-□□
15050HS	22	BT□□-FMC22-□□
15063HS		
AMC (AMCM) 15080HS	25.4	BT□□-FMA25.4-□□
	27	BT□□-FMC27-□□
15100HS	31.75	BT□□-FMA31.75-□□
	32	BT□□-FMC32-□□

Parts

Specification		
Ø40-Ø100	FTKA02565S	TW08S

Available inserts E05 Available arbors and bolt E400~E402

AMC(M)2000S



AA 90°
 • AR: 9°~13°
 • RR: -14°~5°

(mm)

Designation	⊘	ØD	ØD2	Ød	Ød1	Ød2	Ød3	a	b	E	F	ap	kg	
AMCM	2040HS	5	40	34	16	9	14	-	8.4	5.6	18	40	11	0.22
	2050HS	6	50	42	22	11	18	-	10.4	6.3	20	40	11	0.34
	2063HS	8	63	49	22	11	18	-	10.4	6.3	20	40	11	0.57
AMC (AMCM)	2080HS	8	80	57	25.4 (27)	14	25	35	9.5 (12.4)	6 (7)	25 (22)	50	11	1.10
	2100HS	10	100	67	31.75 (32)	18	26	42	12.7 (14.4)	8 (8)	32 (28)	63	11	2.10

() Metric size

Available inserts



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT	11T3PDFR-MA																●	E05
	11T308PDFR-MA																	
	11T3PDER-ML													●	●			
	11T308PDER-ML													●	●			
	11T3PDSR-MM			●	●	●		●	●	●	●	●		●	●			
	11T3PDSR-MF				●			●	●	●				●	●			
	11T308PDSR-MM				●			●	●	●		●	●	●	●			
	11T312PDSR-MM				●			●	●		●			●	●			
	11T316R-MM				●			●	●					●	●			
	11T318R-MM				●			●	●					●	●			
	11T324R-MM				●			●	●					●	●			
	11T3PDSR-MN2													●				
	11T3PDSR-MN3													●				

* Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. * Please use the cutters with even teeth.

Available arbors

Designation	Ød	NC arbors	
AMCM	2040HS	16	BT□□-FMC16-□□
	2050HS	22	BT□□-FMC22-□□
	2063HS		
AMC (AMCM)	2080HS	25.4	BT□□-FMA25.4-□□
		27	BT□□-FMC27-□□
	2100HS	31.75	BT□□-FMA31.75-□□
		32	BT□□-FMC32-□□

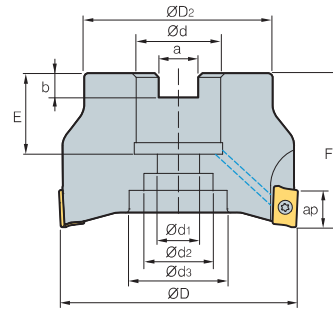
Parts

Specification	Screw	Wrench
Ø40~Ø100	FTKA02565S	TW08S

Available inserts E05 Available arbors and bolt E400~E402



AMC(M)3000S



AA
90°
• AR: 14°
• RR: -12°~8°

(mm)

Designation	⊙	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	Ød ₃	a	b	E	F	ap	kg	
AMCM	3040HS	4	40	34	16	9	14	-	8.4	5.6	18	40	16	0.18
	3050HS	5	50	42	22	11	18	-	10.4	6.3	20	40	16	0.28
	3063HS	6	63	49	22	11	18	-	10.4	6.3	20	40	16	0.50
AMC (AMCM)	3080HS	7	80	57	25.4 (27)	14	25	35	9.5 (12.4)	6 (7)	25 (22)	50	16	1.02
	3100HS	8	100	67	31.75 (32)	18	26	42	12.7 (14.4)	8 (8)	32 (28)	63	16	2.05

() Metric size

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1604PDFR-MA																		●
160404PDFR-MA																		
1604PDER-ML																		
160404PDER-ML																		
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
1604PDSR-MF				●				●	●	●			●	●				
160410PDSR-MM								●	●				●	●				
160416PDSR-MM				●				●	●				●	●				
160424R-MM				●				●	●				●	●				
160430R-MM								●	●				●	●				
160432R-MM				●				●	●				●	●				
1604PDSR-MN3													●					
1604PDSR-MN4													●					

E05

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Available arbors

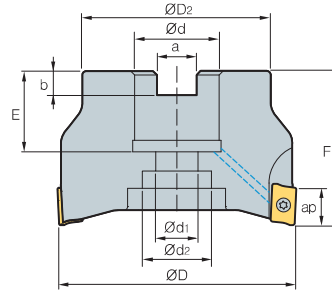
Designation	Ød	NC arbors
AMCM 3040HS	16	BT□□-FMC16-□□
3050HS	22	BT□□-FMC22-□□
3063HS		
AMC (AMCM) 3080HS	25.4	BT□□-FMA25.4-□□
	27	BT□□-FMC27-□□
	31.75	BT□□-FMA31.75-□□
3100HS	32	BT□□-FMA32-□□
		BT□□-FMC32-□□

Parts

Specification	Screw	Wrench
Ø40~Ø100	FTKA0410	TW15S

Available inserts E05 Available arbors and bolt E400~E402

AMC(M)3000S-K



(mm)

Designation	ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap	$\frac{m}{kg}$	
AMCM	3040HS-K	40	34	16	9	14	8.4	5.6	18	40	16	0.15
	3050HS-K	50	42	22	11	18	10.4	6.3	20	40	16	0.24
	3063HS-K	63	49	22	11	18	10.4	6.3	20	40	16	0.24
AMC (AMCM)	3080HS-K	80	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	25 (22)	50	16	0.36
	3100HS-K	100	67	31.75 (32)	18	26	12.7 (14.4)	8 (8)	32 (28)	63	16	0.61

() Metric size

Available inserts



Designation	Cermet		Coated										Uncoated			page			
	CN2000	CN30	NCM325	NCM335	NCM535	NCM545	PC2505	PC2510	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	PD2000		G10	H01	H05
APKT 1604PDSR			●						●	●									
1604PDSR-MF			●										●						
1604PDSR-MM			●	●					●	●	●		●						
160432R-MM1																			
1604PDFR-MA														●			●	●	
1604PDFR-MA2																	●		
160416FR-MA2																			
160432FR-MA2																			
1604PDFR-MA3																	●	●	
160420FR-MA3																			

E05

Available arbors

Designation	Ød	NC arbors
AMCM 3040HS-K	16	BT□□-FMC16-□□
3050HS-K	22	BT□□-FMC22-□□
3063HS-K		
AMC (AMCM)	3080HS-K	BT□□-FMA25.4-□□
		BT□□-FMC27-□□
		BT□□-FMA31.75-□□
3100HS-K	32	BT□□-FMC32-□□

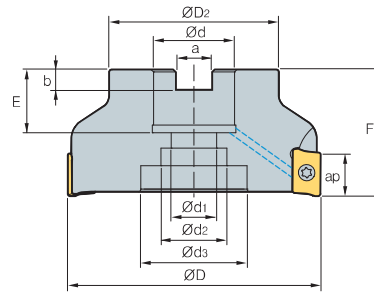
Parts

Specification	Screw	Wrench
Ø40~Ø100	FTKA0410	TW15S

Available inserts E05 Available arbors and bolt E400~E402



AMC(M)4000S



• AR: 13°~15°
• RR: -12°~7°

(mm)

Designation	⊙	ØD	ØD2	Ød	Ød1	Ød2	Ød3	a	b	E	F	ap	kg	
AMCM	4050HS	5	50	42	22	11	18	-	10.4	6.3	21	40	17	0.28
	4063HS	6	63	49	22	11	18	-	10.4	6.3	21	40	17	0.50
AMC (AMCM)	4080HS	7	80	57	25.4 (27)	14	25	35	9.5(12.4)	6(7)	24(23)	50	17	1.00
	4100HS	8	100	67	31.75(32)	18	26	42	12.7(14.4)	8(9)	32(25)	63(50)	17	2.10
	4125HS	9	125	87	38.1(40)	22	32	52	15.9(16.4)	10(9)	35(29)	63	17	3.30
	4160S	10	160	107	50.8(40)	-	-	100	19(16.4)	11(9)	38(32)	63	17	3.6
	4200S	10	200	108	47.625(60)	-	-	132	25.4(25.7)	14(14)	40(38)	63	17	6

() Metric size

Available inserts



Designation	Cemented										page	Designation	Cemented										page										
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC3600	PC3700	PC6510			PC9530	PC9540	PC5300	PC5400	G10	H01	Designation	CN2000	CN30	NCM325		NC5330	NCM535	NCM545	PC2505	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300
APMT 1806PDR-MA																●	APMT 180624PDR-ML																●
180604PDR-MA																●	180630R-ML																●
180612PDR-MA																●	1806PDR-MM				●		●	●	●	●	●	●	●	●	●	●	●
180616PDR-MA																●	1806PDR-MF				●				●				●				●
180620PDR-MA																●	180612PDR-MM				●				●				●				●
180624PDR-MA																●	180616PDR-MM				●				●				●				●
180630R-MA																●	180620PDR-MM				●				●				●				●
1806PDR-ML																	180624PDR-MM				●				●				●				●
180604PDR-ML																	180630R-MM				●				●				●				●
180612PDR-ML																	180632R-MM				●				●				●				●
180616PDR-ML																	1806PDR-MN3																●
180620PDR-ML																	1806PDR-MN4																●

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Available arbors

Designation	Ød	NC arbors
AMCM 4050HS	22	BT□□-FMC22-□□
4063HS		
AMC (AMCM) 4080HS	25.4	BT□□-FMA25.4-□□
	27	BT□□-FMC27-□□
4100HS	31.75	BT□□-FMA31.75-□□
	32	BT□□-FMC32-□□

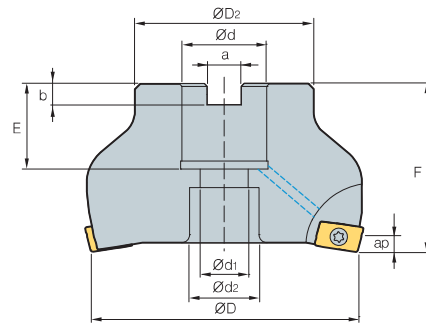
Designation	Ød	NC arbors
AMC (AMCM) 4125HS	38.1	BT□□-FMA38.1-□□
	40	BT□□-FMC40-□□
4160S	50.8	BT□□-FMA50.8-□□
	40	BT□□-FMC40-□□
4200S	47.625	BT□□-FMA47.625-□□
	60	BT□□-FMB60-□□

Parts

Specification		
Ø50-Ø200	FTKA0410	TW15S

Available inserts E05 Available arbors and bolt E400~E402

AMC(M)1000SE/2000SE



(mm)

Designation	⊙	ØD	ØD2	Ød	Ød1	Ød2	a	b	E	F	ap	$\frac{g}{kg}$
AMCM 1040HSE	4	40	34	16	9	14	8.4	5.6	19	40	2.5	0.26
	5	50	42	22	11	18	10.4	6.3	21	40	2.5	0.39
AMC (AMCM) 2080HSE	5	80	57	25.4 (27)	14	20	9.5 (12.4)	6.0 (7.0)	25 (22)	50	4	1.2
	6	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0 (8.0)	32 (28)	63	4	2.33

() Metric size

Available inserts

APMT-MM APMT-MF



Type	Designation	Cermet		Coated											Uncoated		page	
		CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10
1000 type	APMT 060202PDSR-MM				●						●				●	●		
	0602PDSR-MM				●			●	●	●	●	●			●	●		
	060208PDSR-MM				●					●	●				●	●		
	060212R-MM				●					●					●	●		
2000 type	APMT 11T3PDSR-MM			●	●	●		●	●	●	●	●			●	●		
	11T3PDSR-MF				●					●	●	●			●	●		
	11T308PDSR-MM				●					●	●		●	●	●	●		
	11T312PDSR-MM				●					●	●		●		●	●		
	11T316R-MM				●					●	●				●	●		
	11T318R-MM				●					●	●				●	●		
	11T324R-MM				●					●	●				●	●		

E05

Available arbors

Type	Designation	Ød	NC arbors
1000 type	AMC (AMCM) 1040HSE	16	BT□□-FMC16-□□
	1050HSE	22	BT□□-FMC22-□□
2000 type	AMC (AMCM) 2080HSE	25.4	BT□□-FMA25.4-□□
		27	BT□□-FMC27-□□
	2100HSE	31.75	BT□□-FMA31.75-□□
		32	BT□□-FMC32-□□

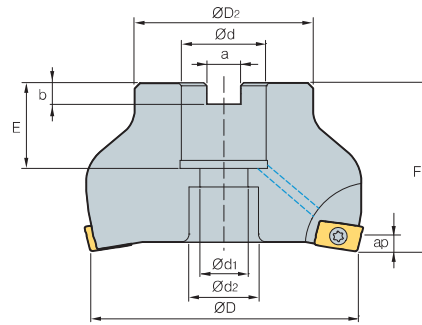
Parts

Specification	Screw	Wrench	Wrench
Ø40~Ø50 (1000 type)	FTKA01842	-	TW06S-A
Ø80~Ø100 (2000 type)	FTKA02565S	TW08S	-

Available inserts E05 Available arbors and bolt E400~E402



AMC(M)3000SE



•AR: 45°
•RR: 0°

(mm)

Designation		ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	ap	
AMC 3080HSE	4	80	57	25.4 (27)	14	20	9.5 (12.4)	6.0 (7.0)	25 (22)	50	6	1.3
(AMCM) 3100HSE	5	100	67	31.75 (32)	18	26	12.7 (14.4)	8.0 (8.0)	32 (28)	63	6	2.3

() Metric size

Available inserts

APMT-MM APMT-MF



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			E05
1604PDSR-MF				●					●	●	●			●	●			
160410PDSR-MM									●					●	●			
160416PDSR-MM				●					●	●				●	●			
160424R-MM				●					●	●				●	●			
160430R-MM									●	●				●	●			
160432R-MM				●					●	●				●	●			

Available arbors

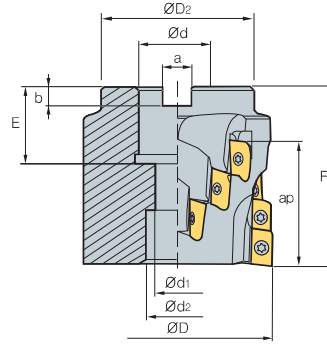
Designation	Ød	NC arbors
AMC (AMCM) 3080HSE	25.4	BT□□-FMA25.4-□□
	27	BT□□-FMC27-□□
3100HSE	31.75	BT□□-FMA31.75-□□
	32	BT□□-FMC32-□□

Parts

Specification		
Ø80~Ø100	FTKA0410	TW08S

Available inserts E05 Available arbors and bolt E400~E402

AMC(M)2000M



(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	No. of flute	ap	kg	
AMCM 2050M	16	50	40	22	11	18	10.4	6.3	21	58	4	39	0.7
AMC (AMCM) 2063M	16	63	50	25.4 (27)	13.5	20	9.5 (12.4)	6 (7)	25 (25)	58	4	39	0.8
2080M	20	80	60	31.75 (32)	-	45	12.7 (14.4)	8 (8)	35 (28)	63	5	39	0.96
2100M	24	100	80	38.1 (40)	-	56	15.9 (16.4)	10 (9)	38 (30)	63	6	39	1.2

()Metric size

Available inserts



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 11T3PDFR-MA																		
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
11T3PDSR-MF				●				●	●	●	●			●	●			
11T308PDSR-MM				●				●	●	●	●	●	●	●	●			
11T312PDSR-MM				●				●	●	●	●	●	●	●	●			
11T316R-MM				●				●	●	●	●	●	●	●	●			
11T318R-MM				●				●	●	●	●	●	●	●	●			
11T324R-MM				●				●	●	●	●	●	●	●	●			
11T3PDSR-MN2													●	●				
11T3PDSR-MN3													●	●				

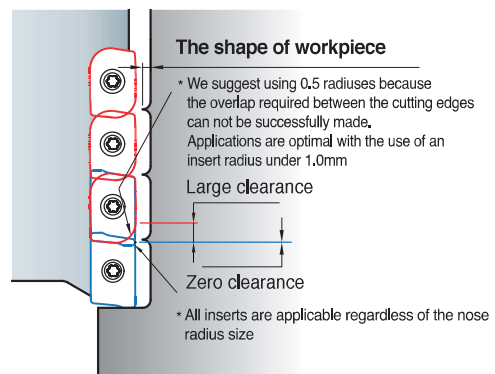
E05

* Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. * Please use the cutters with even teeth.

Available arbors

Designation	Ød	NC arbors	
AMC (AMCM) 2050M	22.225	BT□□-FMA22.225-□□	BT□□-SMA22.225-□□
	22	BT□□-FMC22-□□	BT□□-SMC22-□□
2063M	25.4	BT□□-FMA25.4-□□	BT□□-SMA25.4-□□
	27	BT□□-FMC27-□□	BT□□-SMC27-□□
2080M	31.75	BT□□-FMA31.75-□□	BT□□-SMA31.75-□□
	32	BT□□-FMC32-□□	BT□□-SMC32-□□
2100M	38.1	BT□□-FMA38.1-□□	BT□□-SMA38.1-□□
	40	BT□□-FMC40-□□	BT□□-SMC40-□□

Caution when clamping the inserts



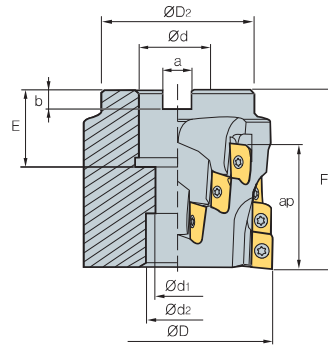
Parts

Specification	Screw	Wrench
Ø50~Ø100	FTKA02565S	TW08S

Available inserts E05 Available arbors and bolt E400~E402



AMC(M)3000M



AA
90°
• AR: 9°
• RR: -9° ~ -5°

(mm)

Designation	ØD	ØD ₂	Ød	Ød ₁	Ød ₂	a	b	E	F	No. of flute	ap	kg	
AMC 3063M	16	63	57	25.4 (27)	14	20	9.5 (12.4)	6 (7)	38 (38)	85	4	57	1.1
(AMCM) 3080M	20	80	67	31.75 (32)	14	26	12.7 (14.4)	8 (8)	40 (40)	100	4	71	2.23
3100M	30	100	87	38.1 (40)	22	32	15.9 (16.4)	10 (9)	40 (40)	100	6	71	3.59

() Metric size

Available inserts



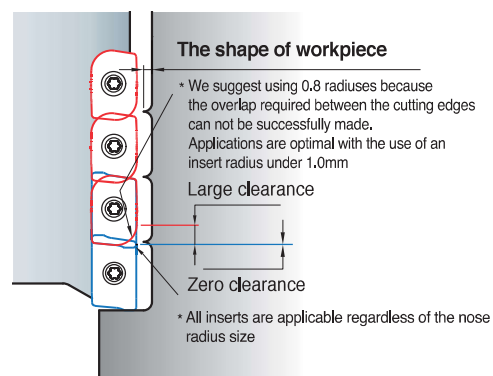
Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM635	NCM645	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1604PDFR-MA																		●
160404PDFR-MA																		
1604PDER-ML														●	●			
160404PDER-ML														●	●			
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
1604PDSR-MF				●					●	●	●	●	●	●	●			
160410PDSR-MM								●	●	●	●	●	●	●	●			
160416PDSR-MM				●					●	●				●	●			
160424R-MM				●					●	●				●	●			
160430R-MM									●	●				●	●			
160432R-MM				●					●	●				●	●			
1604PDSR-MN3														●	●			
1604PDSR-MN4														●	●			

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Available arbors

Designation	Ød	NC arbors	
AMC (AMCM) 3063M	25.4	BT□□-FMA25.4-□□	BT□□-SMA25.4-□□
	27	BT□□-FMC27-□□	BT□□-SMC27-□□
3080M	31.75	BT□□-FMA31.75-□□	BT□□-SMA31.75-□□
	32	BT□□-FMC32-□□	BT□□-SMC32-□□
3100M	38.1	BT□□-FMA38.1-□□	BT□□-SMA38.1-□□
	40	BT□□-FMC40-□□	BT□□-SMC40-□□

Caution when clamping the inserts



Parts

Specification	Screw	Wrench
Ø63-Ø100	FTKA0410	TW15S

Available inserts E05 Available arbors and bolt E400~E402

AMS1000S

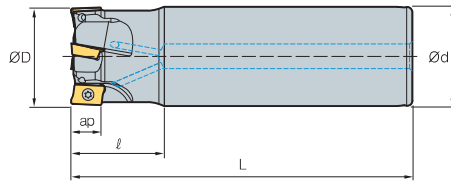


Fig. 1

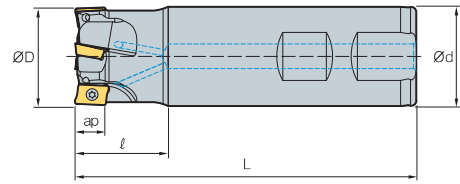


Fig. 2



AA **90°**
 • AR: 7.5°~13°
 • RR: -17°~ -6°

(mm)

Designation		ØD	Ød	ℓ	L	ap		Fig.
AMS 1010HS	2	10	10	20	80	5,6	0,04	2
1011HS	2	11	10	20	80	5,6	0,04	2
1012HS-2	2	12	12	25	80	5,6	0,06	2
1012HS-2L12	2	12	12	25	120	5,6	0,09	1
1012HS-3	3	12	12	25	80	5,6	0,06	2
1014HS-2	2	14	16	25	90	5,6	0,11	2
1014HS-2L16	2	14	16	25	140	5,6	0,18	1
1014HS-3	3	14	16	25	90	5,6	0,11	2
1015HS	3	15	16	25	90	5,6	0,11	2
1015HS-3L16	3	15	16	25	140	5,6	0,18	1
1016HS-3	3	16	16	25	90	5,6	0,12	2
1016HS-3L16	3	16	16	25	160	5,6	0,22	1
1016HS-4	4	16	16	25	90	5,6	0,12	2
1017HS	4	17	16	25	90	5,6	0,12	2
1017HS-3L16	3	17	16	25	160	5,6	0,22	1
1018HS	4	18	16	25	90	5,6	0,12	2
1018HS-4L16	4	18	16	25	180	5,6	0,25	1
1020HS-4	4	20	20	30	110	5,6	0,23	2
1020HS-4L20	4	20	20	30	200	5,6	0,43	1
1020HS-5	5	20	20	30	110	5,6	0,23	2
1021HS	5	21	20	30	110	5,6	0,24	2
1021HS-4L20	4	21	20	30	200	5,6	0,43	1
1022HS	5	22	20	30	110	5,6	0,27	2
1025HS	7	25	25	30	120	5,6	0,39	2
1026HS	7	26	25	30	120	5,6	0,39	2
1032HS	8	32	32	35	120	5,6	0,65	2
1033HS	8	33	32	35	120	5,6	0,65	2

Available inserts

APMT-MA APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0602PDFR-MA																	●	E05
060208PDFR-MA																		
060202PDSR-MM				●						●					●	●		
0602PDSR-MM				●			●	●	●	●	●				●	●		
060208PDSR-MM				●					●	●					●	●		
060212R-MM				●					●						●	●		
060216R-MM									●						●	●		

Parts

Specification		
Ø10~Ø33	FTKA01842	TW06S-A

Available inserts E05

AMS1500S

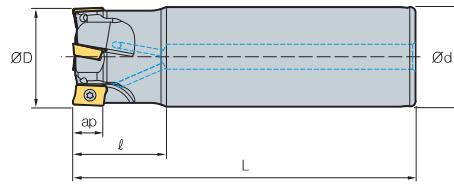


Fig. 1

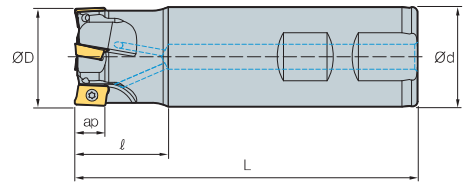


Fig. 2



AA
90°
• AR: 7.5°~12.5°
• RR: +28°~-14°

(mm)

Designation		ØD	Ød	ℓ	L	ap		Fig.
AMS 15010HS	1	10	10	25	80	9	0.04	2
15010HS-1L16	1	10	16	30	160	9	0.21	1
15012HS	1	12	16	25	80	9	0.10	2
15012HS-1L16	1	12	16	30	160	9	0.21	1
15013HS	1	13	16	25	80	9	0.10	2
15014HS	1	14	16	25	80	9	0.10	2
15014HS-1L16	1	14	16	30	160	9	0.21	1
15016HS	2	16	16	30	90	9	0.11	2
15016HS-2L16	2	16	16	30	160	9	0.21	1
15017HS	2	17	16	30	90	9	0.12	2
15017HS-2L16	2	17	16	30	160	9	0.21	1
15018HS	2	18	16	30	90	9	0.14	2
15018HS-2L16	2	18	16	30	160	9	0.21	1
15019HS	2	19	16	30	90	9	0.16	2
15020HS	2	20	20	30	90	9	0.18	2
15020HS-2L20	2	20	20	30	160	9	0.34	1
15020HS-3	3	20	20	30	90	9	0.18	2
15021HS	2	21	20	30	90	9	0.20	2
15021HS-2L20	2	21	20	30	160	9	0.34	1
15021HS-3	3	21	20	30	90	9	0.20	2
15022HS	3	22	20	30	110	9	0.23	2
15022HS-3L20	3	22	20	30	180	9	0.38	1
15024HS	3	24	20	30	110	9	0.30	2
15024HS-4	4	24	20	30	110	9	0.30	2
15025HS-3S20	3	25	20	30	110	9	0.35	2
15025HS	3	25	25	30	110	9	0.35	2
15025HS-3L25	3	25	25	30	180	9	0.59	1

Available inserts

APMT-MA APMT-ML APMT-MM



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 0903PDFR-MA																	●	E05
090308PDFR-MA																		
0903PDER-ML														●	●			
090308PDER-ML														●	●			
0903PDSR-MM				●			●	●	●	●				●	●			
090308PDSR-MM				●				●	●	●				●	●			
090312R-MM								●	●	●				●	●			
090316R-MM				●				●	●	●				●	●			
090320R-MM								●	●	●				●	●			

Parts

Specification		
Ø10~Ø14	FTKA02555S	TW08S
Ø16~Ø25	FTKA02565S	

Available inserts E05



AMS1500S

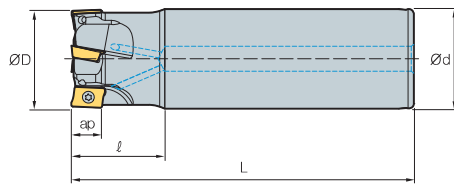


Fig. 1

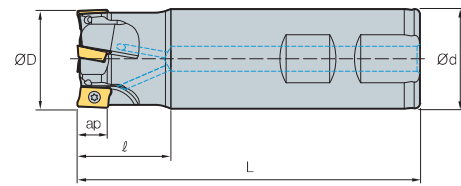


Fig. 2



AA
90°
• AR: 7.5°~12.5°
• RR: +28°~-14°

(mm)

Designation		ØD	Ød	ℓ	L	ap		Fig.
AMS 15025HS-4S20	4	25	20	30	110	9	0.25	2
15025HS-4S25	4	25	25	30	110	9	0.25	2
15028HS	4	28	25	30	110	9	0.36	2
15028HS-4L25	4	28	25	30	180	9	0.61	1
15028HS-5	5	28	25	30	110	9	0.36	2
15030HS	4	30	25	30	110	9	0.38	2
15030HS-4L25	4	30	25	30	180	9	0.62	1
15030HS-5	5	30	25	30	110	9	0.38	2
15032HS	4	32	32	30	110	9	0.60	2
15032HS-4L32	4	32	32	30	180	9	1.00	1
15032HS-5	5	32	32	30	110	9	0.60	2
15035HS	5	35	32	30	110	9	0.70	2
15035HS-6	6	35	32	30	110	9	0.70	2
15040HS-S32	5	40	32	35	130	9	0.80	2
15040HS-5L32	5	40	32	35	200	9	1.20	1
15040HS-6S32	6	40	32	35	130	9	0.80	2
15040HS-S40	5	40	40	35	130	9	1.13	2
15040HS-6S40	6	40	40	35	130	9	1.13	2
15040HS-S42	5	40	42	35	130	9	1.23	2
15040HS-6S42	6	40	42	35	130	9	1.23	2

Available inserts

APMT-MA APMT-ML APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0903PDFR-MA																	●	E05
090308PDFR-MA																		
0903PDER-ML														●	●			
090308PDER-ML														●	●			
0903PDSR-MM				●			●	●	●	●	●			●	●			
090308PDSR-MM				●					●	●				●	●			
090312R-MM									●	●				●	●			
090316R-MM				●					●	●				●	●			
090320R-MM									●	●				●	●			

Parts

Specification		
Ø25~Ø40	FTKA02565S	TW08S

Available inserts E05



AMS2000S

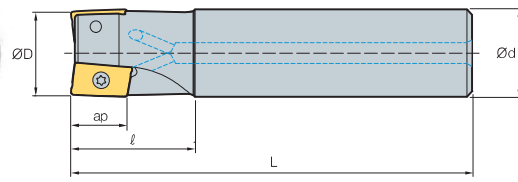


Fig. 1

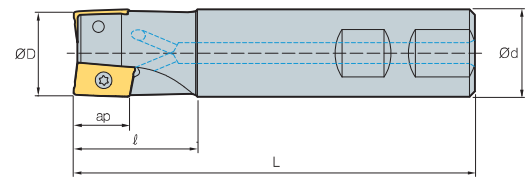


Fig. 2



AA
90°
• AR: 3°~14°
• RR: +25°~-18°

(mm)

Designation	Teeth	ØD	Ød	ℓ	L	ap	Weight (kg)	Fig.
AMS 2010HS	1	10	10	20	85	11	0.04	2
2010HS-1L16	1	10	16	30	160	11	0.21	1
2012HS	1	12	16	25	85	11	0.10	2
2012HS-1L16	1	12	16	30	160	11	0.21	1
2014HS	1	14	16	25	90	11	0.12	2
2014HS-1L16	1	14	16	30	160	11	0.21	1
2016HS	2	16	16	25	90	11	0.12	2
2016HS-2L16	2	16	16	30	180	11	0.21	1
2018HS	2	18	16	25	90	11	0.12	2
2018HS-2L16	2	18	16	30	180	11	0.21	1
2020HS	2	20	20	30	100	11	0.21	2
2020HS-2L20	2	20	20	30	210	11	0.49	1
2022HS	3	22	20	35	115	11	0.25	2
2022HS-3L20	3	22	20	35	180	11	0.38	1
2025HS	3	25	25	35	115	11	0.40	2
2025HS-3L25	3	25	25	40	180	11	0.59	1
2032HS	4	32	32	40	125	11	0.70	2
2032HS-4L32	4	32	32	50	180	11	1.00	1
2040HS	5	40	32	42	130	11	0.84	2
2040HS-5L32	5	40	32	50	200	11	1.20	1
2040HS-S40	5	40	40	42	130	11	1.15	2
2040HS-S42	5	40	42	42	130	11	2.00	2
2050HS	6	50	32	45	135	11	1.06	2
2050HS-S40	6	50	40	45	135	11	1.38	2
2050HS-S42	6	50	42	45	135	11	1.50	2
2063HS	8	63	32	45	135	11	1.31	2
2063HS-S40	8	63	40	45	135	11	1.62	2
2063HS-S42	8	63	42	45	135	11	1.70	2

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 11T3PDFR-MA																		●
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●		●	●			
11T3PDSR-MF				●				●	●	●	●			●	●			
11T308PDSR-MM				●				●	●	●	●	●		●	●			
11T312PDSR-MM				●				●	●	●	●	●		●	●			
11T316R-MM				●				●	●	●	●			●	●			
11T318R-MM				●				●	●	●	●			●	●			
11T324R-MM				●				●	●	●	●			●	●			
11T3PDSR-MN2														●	●			
11T3PDSR-MN3														●	●			

Parts

* Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. * Please use the cutters with even teeth.

Specification	Screw	Wrench
Ø10~Ø14	FTKA02555S	TW08S
Ø16~Ø63	FTKA02565S	



AMS3000S

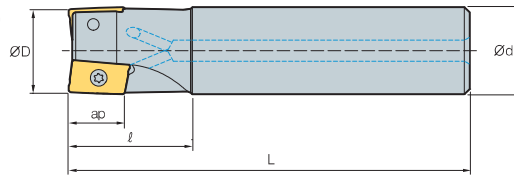


Fig. 1

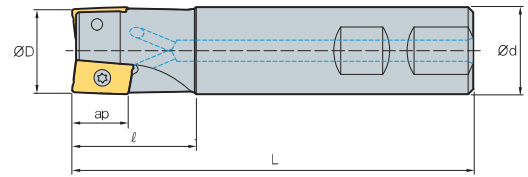


Fig. 2



AA
90°
• AR: 3°~14°
• RR: +18°~-10°

(mm)

Designation		ØD	Ød	l	L	ap		Fig.
AMS 3025HS	2	25	25	35	115	16	0.40	2
3025HS-2M25	2	25	25	35	180	16	0.65	1
3025HS-2L25	2	25	25	60	220	16	0.75	1
3032HS	3	32	32	40	125	16	0.69	2
3032HS-2M32	2	32	32	40	200	16	1.13	1
3032HS-2L32	2	32	32	65	260	16	1.52	1
3032HS-3M32	3	32	32	40	200	16	1.12	1
3032HS-3L32	3	32	32	65	260	16	1.48	1
3040HS	4	40	32	42	130	16	0.80	2
3040HS-3M32	3	40	32	42	200	16	1.24	1
3040HS-3L32	3	40	32	42	260	16	1.61	1
3040HS-4M32	4	40	32	42	200	16	1.21	1
3040HS-4L32	4	40	32	42	260	16	1.58	1
3040HS-S40	4	40	40	42	130	16	1.10	2
3040HS-S42	4	40	42	42	130	16	1.20	2
3050HS	5	50	32	45	135	16	1.00	2
3050HS-S40	5	50	40	45	135	16	1.30	2
3050HS-S42	5	50	42	45	135	16	1.40	2
3063HS	6	63	32	45	135	16	1.25	2
3063HS-S40	6	63	40	45	135	16	1.50	2
3063HS-S42	6	63	42	45	135	16	1.54	2

Available inserts

Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 1604PDFR-MA																		●
160404PDFR-MA																		
1604PDER-ML																		
160404PDER-ML																		
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
1604PDSR-MF				●				●	●	●	●	●	●	●	●			
160410PDSR-MM								●	●					●	●			
160416PDSR-MM				●				●	●					●	●			
160424R-MM				●				●	●					●	●			
160430R-MM								●	●					●	●			
160432R-MM				●				●	●					●	●			
1604PDSR-MN3														●	●			
1604PDSR-MN4														●	●			

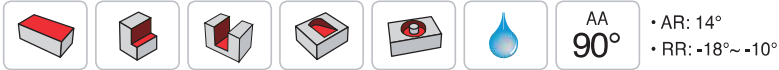
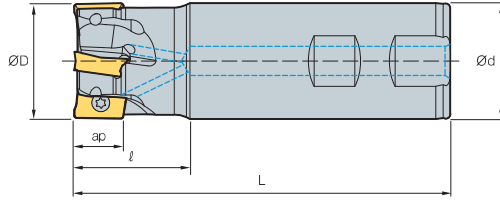
※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Parts

Specification		
Ø25	FTKA0408	TW15S
Ø32~Ø63	FTKA0410	

Available inserts E05

AMS3000S-K



(mm)

Designation		ØD	Ød	l	L	ap	
AMS 3025HS-K	2	25	25	35	115	16	0.4
3032HS-K	3	32	32	40	125	16	0.69
3040HS-K	4	40	32	42	130	16	0.8
3040HS-K-S40	4	40	40	42	130	16	1.1
3040HS-K-S42	4	40	42	42	130	16	1.2
3050HS-K	5	50	32	45	135	16	1.0
3050HS-K-S40	5	50	40	45	135	16	1.3
3050HS-K-S42	5	50	42	45	135	16	1.4
3063HS-K	6	63	32	45	135	16	1.25
3063HS-K-S40	6	63	40	45	135	16	1.5
3063HS-K-S42	6	63	42	45	135	16	1.54

Available inserts



Designation	Cermet		Coated											Uncoated			page	
	CN2000	CN30	NCM325	NCM335	NCM535	NCM545	PC2505	PC2510	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	PD2000	G10		H01
APKT 1604PDSR			●						●	●								
1604PDSR-MF			●										●					
1604PDSR-MM			●	●					●	●	●		●					
160432R-MM1																		
1604PDFR-MA														●			●	●
1604PDFR-MA2																	●	
160416FR-MA2																		
160432FR-MA2																		
1604PDFR-MA3																	●	●

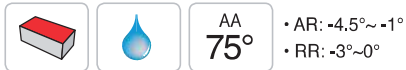
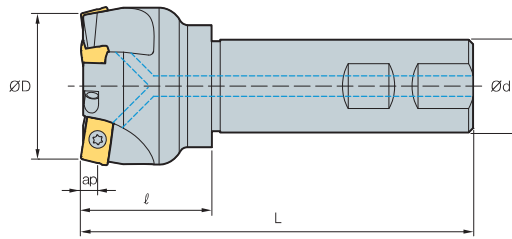
Parts

Specification		
Ø25 Ø32-Ø63	FTKA0408 FTKA0410	TW15S

Available inserts E05



AMS1000SE/2000SE



Designation			ØD	Ød	ℓ	L	ap	
AMS	1025HSE	3	25	25	30	115	2.5	0.41
AMS	2025HSE	2	25	25	30	115	4	0.4
	2032HSE	3	32	32	40	125	4	0.72
	2040HSE	3	40	32	40	130	4	0.86
	2040HSE-S40	3	40	40	40	130	4	1.2
	2040HSE-S42	3	40	42	40	130	4	1.3
	2050HSE	4	50	32	40	135	4	0.98
	2050HSE-S40	4	50	40	40	135	4	1.3
	2050HSE-S42	4	50	42	40	135	4	1.4
	2063HSE	5	63	32	40	135	4	1.24
	2063HSE-S40	5	63	40	40	135	4	1.57
	2063HSE-S42	5	63	42	40	135	4	1.62

(mm)

Available inserts

APMT-MF APMT-MM



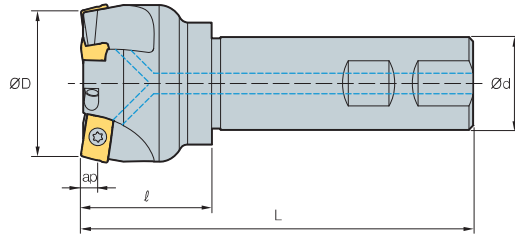
Type	Designation	Cermet		Coated											Uncoated		page	
		CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10
1000 type	APMT 060202PDSR-MM				●													
	0602PDSR-MM				●			●	●	●	●	●			●	●		
	060208PDSR-MM				●					●	●				●	●		
	060212R-MM				●					●					●	●		
	060216R-MM									●					●	●		
2000 type	APMT 11T3PDSR-MM			●	●	●		●	●	●	●	●			●	●		
	11T3PDSR-MF				●					●	●	●			●	●		
	11T308PDSR-MM				●					●	●		●		●	●		
	11T312PDSR-MM				●					●	●		●		●	●		
	11T316R-MM				●					●	●				●	●		
	11T318R-MM									●	●				●	●		
	11T324R-MM				●					●	●				●	●		

Parts

Specification			
Ø25 (1000 type)	FTKA01842	-	TW06S-A
Ø25~Ø63 (2000 type)	FTKA02565S	TW08S	-

Available inserts E05

AMS3000SE



AA
75°

• AR: -4.5°~ -1°
• RR: -3°~ 0°

(mm)

Designation		ØD	Ød	l	L	ap	
AMS 3050HSE	3	50	32	45	135	6	1.0
3050HSE-S40	3	50	40	45	135	6	1.3
3050HSE-S42	3	50	42	45	135	6	1.4
3063HSE	4	63	32	45	135	6	1.3
3063HSE-S40	4	63	40	45	135	6	1.6
3063HSE-S42	4	63	42	45	135	6	1.7

Available inserts

APMT-MF

APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN80	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			E05
1604PDSR-MF				●						●				●	●			
160410PDSR-MM														●	●			
160416PDSR-MM				●					●	●				●	●			
160424R-MM				●					●	●				●	●			
160430R-MM									●	●				●	●			
160432R-MM				●					●	●				●	●			

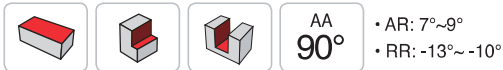
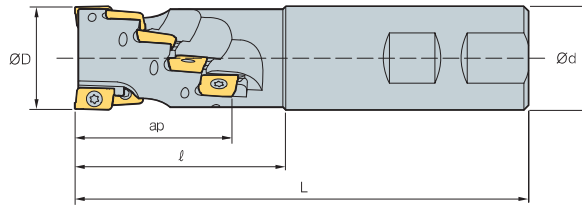
Parts

Specification		
Ø50~Ø63	FTKA0410	TW15S

Available inserts E05



AMS1000M/1500M



(mm)

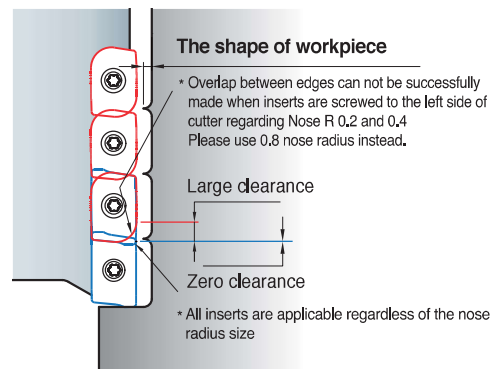
Designation		ØD	Ød	l	L	No. of flute	ap	
AMS 1016M	6	16	16	30	80	2	15.5	0.3
	12	20	20	32	85	3	20.5	0.3
	20	25	25	39	95	4	25.5	0.3
AMS 15020M	3	20	20	42	105	1	26.5	0.3
	8	25	25	50	110	2	35	0.3
	10	32	32	60	120	2	44	0.3

Available inserts



Type	Designation	Cermet		Coated										Uncoated		page			
		CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
1000 type	APMT 0602PDFR-MA																	●	E05
	APMT 060208PDFR-MA																		
	APMT 060202PDSR-MM				●						●				●	●			
	APMT 0602PDSR-MM				●			●	●		●	●	●		●	●			
	APMT 060208PDSR-MM				●					●	●				●	●			
	APMT 060212R-MM				●					●					●	●			
APMT 060216R-MM									●					●	●				
1500 type	APMT 0903PDFR-MA																	●	
	APMT 090308PDFR-MA																		
	APMT 0903PDER-ML														●	●			
	APMT 090308PDER-ML														●	●			
	APMT 0903PDSR-MM				●			●	●	●	●	●			●	●			
	APMT 090308PDSR-MM				●					●	●				●	●			
	APMT 090312R-MM									●	●				●	●			
	APMT 090316R-MM				●					●	●				●	●			
APMT 090320R-MM									●	●				●	●				

Caution when clamping the inserts

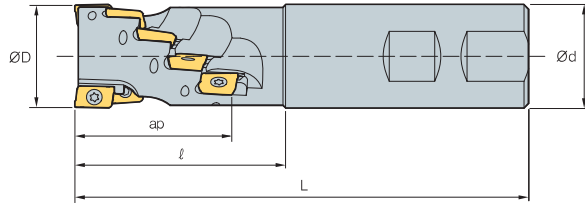


Parts

Specification			
Ø16~Ø25 (1000 type)	FTKA01842	-	TW06S-A
Ø20~Ø32 (1500 type)	FTKA02565S	TW08S	-

Available inserts E05

AMS2000M



(mm)

Designation		ØD	Ød	l	L	No. of flute	ap	
AMS	2020M	3	20	20	45	1	29.4	0.32
	2025M	8	25	25	55	2	38.9	0.40
	2032M	10	32	32	65	2	48.5	0.65
	2040M	14	40	40	75	2	58	0.75

Available inserts

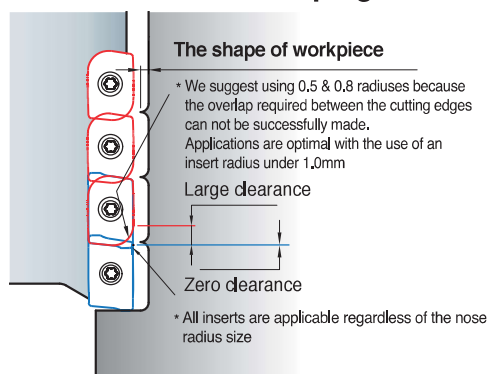


Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCN325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 11T3PDFR-MA																		●
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●		●	●			
11T3PDSR-MF				●				●	●	●	●			●	●			
11T308PDSR-MM				●				●	●	●	●		●	●	●			
11T312PDSR-MM				●				●	●	●		●	●	●	●			
11T316R-MM				●				●	●				●	●				
11T318R-MM								●	●									
11T324R-MM				●				●	●					●	●			
11T3PDSR-MN2														●	●			
11T3PDSR-MN3														●	●			

E05

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Caution when clamping the inserts



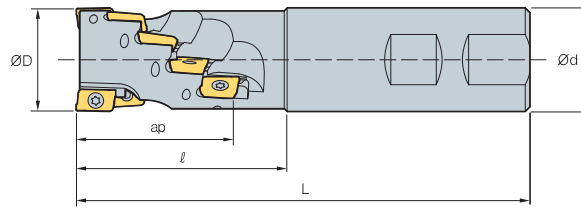
Parts

Specification		
Ø20~Ø40	FTKA02565S	TW08S

Available inserts E05



AMS4000M



AA 90°
 • AR: 7°~9°
 • RR: +13°~+10°

(mm)

Designation		ØD	Ød	ℓ	L	No. of flute	ap	
AMS	4032M	4	32	32	60	130	2	0.65
	4040M	6	40	40	70	140	2	1.11
	4050M-S40	6	50	40	55	125	2	1.22
	4050M	8	50	40	70	140	2	1.37

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN

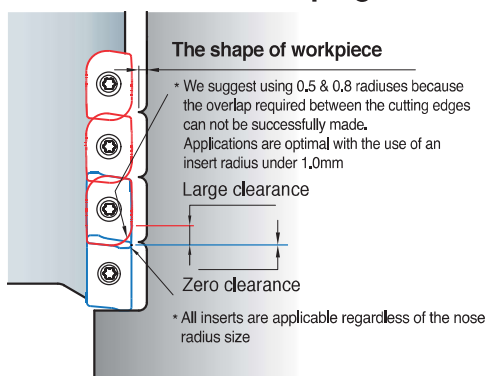


Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM625	NC5330	NCM635	NCM645	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1806PDFR-MA																	●	
180604PDFR-MA																	●	
180612PDFR-MA																	●	
180616PDFR-MA																	●	
180620PDFR-MA																	●	
180624PDFR-MA																	●	
180630R-MA																	●	
1806PDER-ML														●	●			
180604PDER-ML														●	●			
180612PDER-ML														●	●			
180616PDER-ML														●	●			
180620PDER-ML														●	●			
180624PDER-ML														●	●			
180630R-ML														●	●			
1806PDSR-MM				●			●	●	●	●	●	●	●	●	●			
1806PDSR-MF				●					●					●	●			
180612PDSR-MM				●					●					●	●			
180616PDSR-MM				●					●					●	●			
180620PDSR-MM				●					●					●	●			
180624PDSR-MM				●					●					●	●			
180630R-MM				●					●					●	●			
180632R-MM				●					●					●	●			
1806PDSR-MN3														●	●			
1806PDSR-MN4														●	●			

E05

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Caution when clamping the inserts



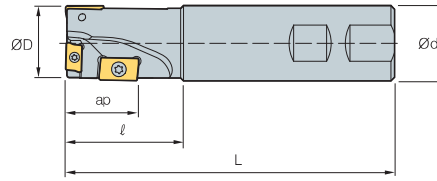
Parts

Specification		
Ø32~Ø50	FTKA0410	TW15S

Available inserts E05



AMS1000MH/1500MH



AA 90°
 • AR: 9°~12°
 • RR: -12°~-10°

(mm)

Designation		ØD	Ød	l	L	ap		APMT 0602	APMT 0903	APM(X)T 11T3 -	APMT 1604	APKT 1604 -
AMS 1014MH	3	14	12	30	120	11	0.16	3	-	-	-	-
	3	16	14	30	140	11	0.20	3	-	-	-	-
	3	18	16	30	140	11	0.21	3	-	-	-	-
AMS 15020MH	3	20	20	35	140	17	0.31	1	2	-	-	-

Available inserts

APMT-MA APMT-ML APMT-MM



Type	Designation	Cermet		Coated											Uncoated		page	
		CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10
1000 type	APMT 0602PDFR-MA																	●
	060208PDFR-MA																	
	060202PDSR-MM				●						●				●	●		
	0602PDSR-MM				●				●	●	●	●	●		●	●		
	060208PDSR-MM				●						●	●			●	●		
1500 type	APMT 0903PDFR-MA																	●
	090308PDFR-MA																	
	0903PDER-ML													●	●			
	090308PDER-ML													●	●			
	0903PDSR-MM				●				●	●	●	●	●		●	●		
090308PDSR-MM				●						●	●			●	●			

Parts

Specification			
	Screw	Wrench	Wrench
Ø14~Ø18 (1000 type)	FTKA01842	-	TW06S-A
Ø20 (1500 type)	FTKA02565S	TW08S	-

Recommended cutting condition

vc (m/min)	80~200	80~200	80~200
fz (mm/t)	0.03~0.06	0.05~0.25	0.05~0.20

- Please keep the drill depth under 0.25D when you're drilling
- Please keep the step depth from 0.2 to 0.3mm

Available inserts E05



AMS2000MH/3000MH(-K)

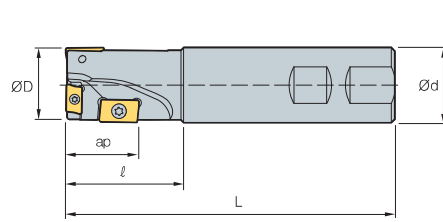


Fig. 1

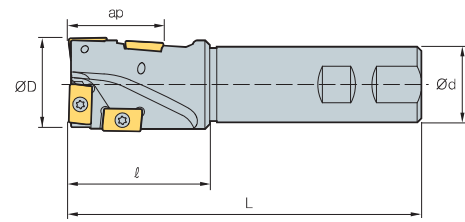


Fig. 2



• AR: 9°~12°
• RR: -12°~-10°

(mm)

Designation		ØD	Ød	l	L	ap		APMT 0602	APMT 0903	APM(X)T 11T3 -	APMT 1604	APKT 1604 -	Fig.
AMS 2025MH	3	25	25	40	130	20	0.45	-	-	3	-	-	1
2032MH	3	32	32	50	140	30	0.75	-	-	1	2	-	1
AMS 3040MH	4	40	32	60	150	40	0.90	-	-	-	4	-	2
3040MH-K	4	40	32	60	150	40	0.90	-	-	-	-	4	2

Available inserts



Type	Designation	Cermet		Coated										Uncoated	page			
		CN2000	CN30	NCN325	NCN335	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530		PC9540	PC5300	PC5400
2000 type	APMT 11T3PDFR-MA																	●
	11T308PDFR-MA																	
	11T3PDER-ML																	
	11T308PDER-ML																	
	11T3PDSR-MM			●		●	●		●	●	●	●	●		●	●		
	11T3PDSR-MF					●				●	●	●			●	●		
	11T308PDSR-MM					●				●	●		●	●	●	●		
	11T312PDSR-MM					●				●	●		●	●	●	●		
	11T316R-MM					●				●	●				●	●		
	11T318R-MM					●									●	●		
11T324R-MM					●					●	●			●	●			
3000 type	APMT 1604PDSR-MM			●		●			●	●	●	●	●	●	●	●		
	1604PDSR-MF					●				●	●	●		●	●			
3000-K type	APKT 1604PDSR-MM			●	●							●	●	●				
	1604PDSR-MF			●									●					

Parts

Specification			
	Screw	Wrench	Wrench
Ø25 (2000 type)	FTKA02565S	TW08S	-
Ø32 (2000 type)	FTKA02565S+FTKA0410	TW08S+TW15S	-
Ø40 (3000 type)	FTKA0410	TW15S	-

Available inserts E04, E05

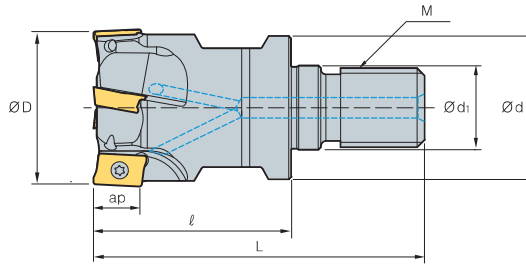
Recommended cutting condition

	Drilling	Shouldering	Slotting
vc (m/min)	80~200	80~200	80~200
fz (mm/t)	0.03~0.06	0.05~0.25	0.05~0.20

- Please keep the drill depth under 0.25D when you're drilling
- Please keep the step depth from 0.2 to 0.3mm



AMM1000



AA
90°
• AR: 7.5°~12.5°
• RR: -28°~-6°

(mm)

Designation		ØD	Ød	Ød1	ℓ	L	M	ap	
AMM 1012HR-M06	3	12	11	6.5	25	40	M06	5.6	0.02
1016HR-M08	4	16	14.5	8.5	25	42	M08	5.6	0.03
1020HR-M10	5	20	18	10.5	30	51	M10	5.6	0.07
1025HR-M12	7	25	23	12.5	35	59	M12	5.6	0.12
1032HR-M16	8	32	29	17	40	67	M16	5.6	0.23

Available inserts

APMT-MA APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0602PDFR-MA																		●
060208PDFR-MA																		
060202PDSR-MM				●						●				●	●			
0602PDSR-MM				●			●	●	●	●	●	●		●	●			
060208PDSR-MM				●					●	●				●	●			
060212R-MM				●					●					●	●			
060216R-MM									●					●	●			

Available adaptor

Designation	Available adaptor
AMM 1012HR-M06	MAT-M06
1016HR-M08	MAT-M08
1020HR-M10	MAT-M10
1025HR-M12	MAT-M12
1032HR-M16	MAT-M16

Designation: AMM1032HR-M16
Modular head threading measure size (M16)

II

Adaptor spec.: MAT-M16-035-S32S
Adaptor threading measure (M16)

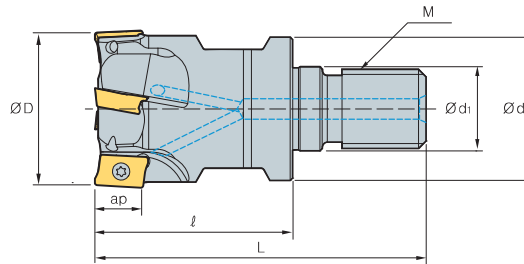
Parts

Specification		
Ø12~Ø32	Screw FTKA01842	Wrench TW06S-A

Available inserts E05 Available adaptor E371~E372



AMM1500



AA
90°
• AR: 7.5°~12.5°
• RR: -28°~-6°

(mm)

Designation		ØD	Ød	Ød1	l	L	M	ap	
AMM 15010HR-M06	1	10	9.5	6.5	25	40	M06	9	0.01
15012HR-M06	1	12	11	6.5	25	40	M06	9	0.02
15016HR-M08	2	16	14.5	8.5	25	42	M08	9	0.03
15020HR-M10	2	20	18	10.5	30	51	M10	9	0.06
15025HR-M12	3	25	23	12.5	35	59	M12	9	0.12
15032HR-M16	4	32	29	17	40	67	M16	9	0.22

Available inserts

APMT-MA APMT-ML APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0903PDFR-MA																		●
090308PDFR-MA																		
0903PDER-ML																		
090308PDER-ML																		
0903PDSR-MM				●			●	●	●	●	●							
090308PDSR-MM				●														
090312R-MM																		
090316R-MM				●														
090320R-MM																		

Available adaptor

Designation	Available adaptor
AMM 15010HR-M06	MAT-M06
15012HR-M06	
15016HR-M08	MAT-M08
15020HR-M10	MAT-M10
15025HR-M12	MAT-M12
15032HR-M16	MAT-M16

Designation: AMM1032HR-M16
Modular head threading measure size (M16)

||

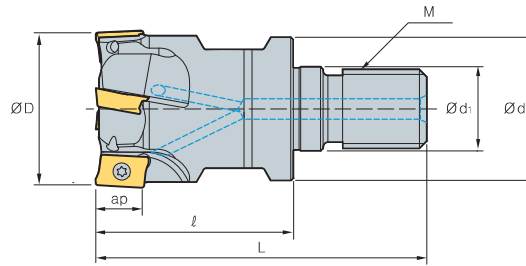
Adaptor spec.: MAT-M16-035-S32S
Adaptor threading measure (M16)

Parts

Specification		
Ø10~Ø14	FTKA02555S	TW08S
Ø16~Ø100	FTKA02565S	TW08S

Available inserts E05 Available adaptor E371~E372

AMM2000



AA
90°
• AR: 7.5°~12.5°
• RR: -28°~-6°

(mm)

Designation		ØD	Ød	Ød1	l	L	M	ap	
AMM 2016HR-M08	2	16	14.5	8.5	25	42	M08	11	0.04
2020HR-M10	2	20	18	10.5	30	51	M10	11	0.07
2025HR-M12	3	25	23	12.5	35	59	M12	11	0.04
2032HR-M16	4	32	29	17	40	67	M16	11	0.23
2040HR-M16	5	40	29	17	40	67	M16	11	0.25

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 11T3PDFR-MA																		●
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●		●	●			
11T3PDSR-MF				●				●	●	●				●	●			
11T308PDSR-MM				●				●	●	●		●	●	●	●			
11T312PDSR-MM				●				●	●		●			●	●			
11T316R-MM				●				●	●					●	●			
11T318R-MM																		
11T324R-MM				●				●	●					●	●			
11T3PDSR-MN2														●	●			
11T3PDSR-MN3														●	●			

* Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. * Please use the cutters with even teeth.

Available adaptor

Designation	Available adaptor
AMM 2016HR-M08	MAT-M08
2020HR-M10	MAT-M10
2025HR-M12	MAT-M12
2032HR-M16	MAT-M16
2040HR-M16	

Designation: AMM1032HR-M16
Modular head threading measure size (M16)

||

Adaptor spec.: MAT-M16-035-S32S
Adaptor threading measure (M16)

Parts

Specification		
Ø16~Ø40	FTKA02565S	TW08S

Available inserts E05 Available adaptor E371~E372



Guarantee strong constrain force by 2-side constraint

BT/HSK Tooling System

Code system (Single, Multi-edge type)

BT50	HAT	4	063	114	- 4	F
Arbor type	Item Name	Type	Diameter	Length (ap)	No. of flute	Front piece or total length
BT30/40/50 HSK40/50/63/100	AM HAT RM	1000 type 1500 type 2000 type 3000 type 4000 type	063: Ø63	Length: 114 HS: Coolant + Single	No. of flute: 4 No. of tooth: 4	Front Piece (Y/N) Y: F No code: No L: Long type

Code system (Modular type)

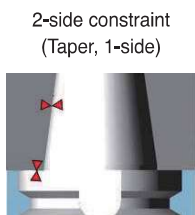
BT50	MAT	M16	092
Arbor type	Item category	M Dimensions	Total length (L)
BT30/40/50 HSK40/50/63/100	MAT	M16	092: 92

DBT system

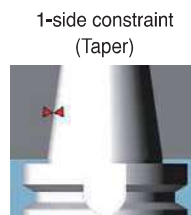
Feature of (D)BT arbor

- Guaranteed strong force by 2-side constraint
- Guarantee strengthen cutting at high speed
- Guaranteed superior surface roughness

DBT (Constrain, increased surface roughness)



BT

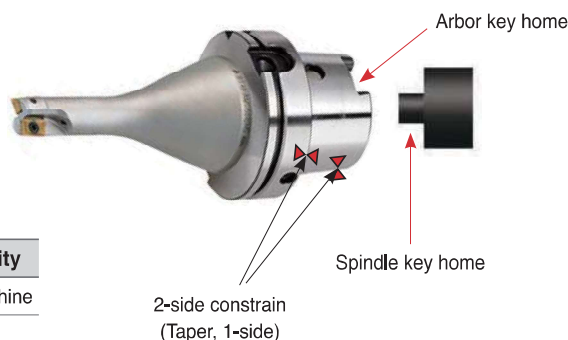


HSK system

Feature of HSK arbor

- Guaranteed strong constrain force by 2-side constraint
- Guaranteed strengthened cutting at high speeds
- Guaranteed superior surface roughness
- Guaranteed repeatability at axle direction and repeated direction

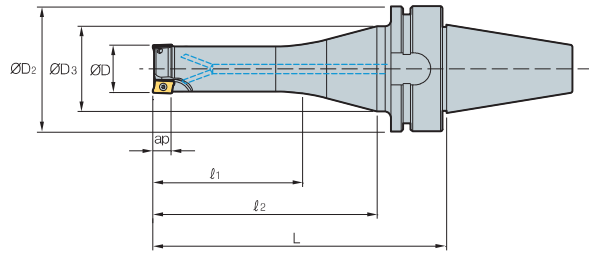
HSK A: HSK T key tolerance comparison



HSK tolerance comparison

Arbor type	Max. tolerance	Min. tolerance	Available facility
HSK-T	0.075	0.035	Multi-tasking machine
HSK-A	0.33	0.08 (General)	MCT

BT30 AM1000HS



AA
90°
• AR: 7.5°~13°
• RR: +28°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap
BT30	AM1010HS-2	10	46	41	35	83	112	5.6
	AM1012HS-2	12	46	41	35	83	112	5.6
	AM1012HS-3	12	46	41	35	83	112	5.6
	AM1016HS-3	16	46	41	35	83	112	5.6
	AM1016HS-4	16	46	41	35	83	112	5.6
	AM1020HS-4	20	46	41	45	98	127	5.6
	AM1020HS-5	20	46	41	45	98	127	5.6

Available inserts

APMT-MA APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0602PDFR-MA																		●
060208PDFR-MA																		
060202PDSR-MM				●						●				●	●			
0602PDSR-MM				●			●	●	●	●	●	●		●	●			
060208PDSR-MM				●					●	●				●	●			
060212R-MM				●					●	●				●	●			
060216R-MM									●	●				●	●			

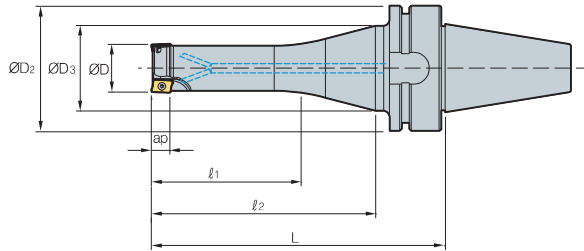
Parts

Specification	Screw	Wrench	Wrench
Ø10~Ø20	FTKA01842	-	TW06S-A

Available inserts E05



BT40 AM1500HS



• AR: 7.5°~13°
• RR: -28°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
BT40	AM15016HS-2	2	16	63	50	45	83	117	9
	AM15016HS-2L	2	16	63	50	35	118	152	9
	AM15020HS-2	2	20	63	50	60	98	132	9
	AM15020HS-3	3	20	63	50	60	98	132	9
	AM15020HS-2L	2	20	63	50	50	118	152	9
	AM15025HS-3	3	25	63	50	75	113	147	9
	AM15025HS-4	4	25	63	50	75	113	147	9
	AM15025HS-3L	3	25	63	50	65	133	167	9
	AM15032HS-4	4	32	63	50	80	113	147	9
	AM15032HS-5	5	32	63	50	80	113	147	9
	AM15032HS-4L	4	32	63	50	70	133	167	9
	AM15040HS-5	5	40	63	50	60	98	132	9
	AM15040HS-6	6	40	63	50	60	98	132	9
	AM15040HS-5L	5	40	63	50	50	118	152	9

Available inserts

APMT-MA APMT-ML APMT-MM



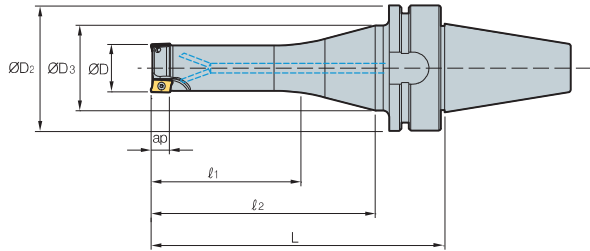
Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0903PDFR-MA																	●	E05
090308PDFR-MA																		
0903PDER-ML														●	●			
090308PDER-ML														●	●			
0903PDSR-MM				●			●	●	●	●	●			●	●			
090308PDSR-MM				●					●	●				●	●			
090312R-MM									●	●				●	●			
090316R-MM				●					●	●				●	●			
090320R-MM									●	●				●	●			

Parts

Specification	Screw	Wrench	Wrench
Ø16~Ø40	FTKA02565S	TW08S	-

Available inserts E05

BT40 AM2000HS



(mm)

Designation	齿数	ØD	ØD ₂	ØD ₃	ℓ ₁	ℓ ₂	L	ap	
BT40	AM2016HS-2	2	16	63	50	45	83	117	11
	AM2016HS-2L	2	16	63	50	35	118	152	11
	AM2020HS-2	2	20	63	50	60	98	132	11
	AM2020HS-2L	2	20	63	50	50	118	152	11
	AM2025HS-3	3	25	63	50	75	113	147	11
	AM2025HS-3L	3	25	63	50	65	133	167	11
	AM2032HS-4	4	32	63	50	80	113	147	11
	AM2032HS-4L	4	32	63	50	70	133	167	11
	AM2040HS-5	5	40	63	50	60	98	132	11
	AM2040HS-5L	5	40	63	50	50	118	152	11
	AM2050HS-6	6	50	63	50	60	98	132	11
	AM2050HS-6L	6	50	63	50	50	118	152	11

Available inserts



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM825	NC5330	NCM635	NCM645	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 11T3PDFR-MA																		
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
11T3PDSR-MF				●				●	●	●	●			●	●			
11T308PDSR-MM				●				●	●	●		●	●	●	●			
11T312PDSR-MM				●				●	●		●			●	●			
11T316R-MM				●				●	●					●	●			
11T318R-MM								●	●					●	●			
11T324R-MM				●				●	●					●	●			
11T3PDSR-MN2														●				
11T3PDSR-MN3														●				

* Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. * Please use the cutters with even teeth.

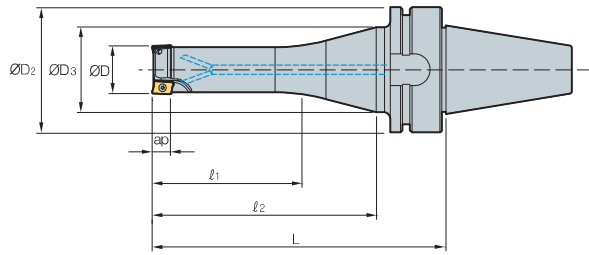
Parts

Specification	Screw	Wrench
Ø16~Ø50	FTKA02565S	TW08S

Available inserts E05



BT50 AM3000HS



• AR: 7°~10°
• RR: -20°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
BT50	AM3025HS-2	2	25	100	80	65	113	158	16
	AM3025HS-2L	2	25	100	80	55	123	168	16
	AM3032HS-3	3	32	100	80	70	113	158	16
	AM3032HS-3L	3	32	100	80	60	123	168	16
	AM3040HS-4	4	40	100	80	50	98	143	16
	AM3040HS-4L	4	40	100	80	40	108	153	16
	AM3050HS-5	5	50	100	80	50	98	143	16
	AM3050HS-5L	5	50	100	80	40	108	153	16

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1604PDFR-MA																	●	E05
160404PDFR-MA																		
1604PDER-ML														●	●			
160404PDER-ML														●	●			
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
1604PDSR-MF				●				●	●	●				●	●			
160410PDSR-MM								●						●	●			
160416PDSR-MM				●				●	●					●	●			
160424R-MM				●				●	●					●	●			
160430R-MM								●	●					●	●			
160432R-MM				●				●	●					●	●			
1604PDSR-MN3														●				
1604PDSR-MN4														●				

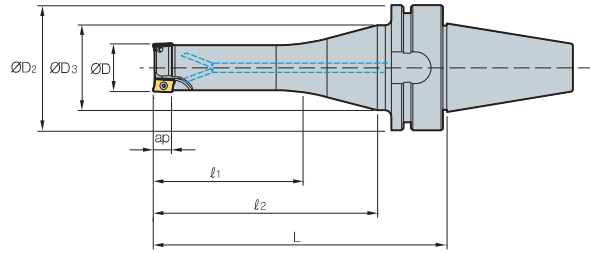
※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Parts

Specification		
Ø25	FTKA0408	TW15S
Ø32~Ø50	FTKA0410	

Available inserts E05

BT50 AM4000HS



AA
90°
• AR: 7°~10°
• RR: +20°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
BT50	AM4020HS-1	1	20	100	80	50	98	143	17
	AM4025HS-2	2	25	100	80	65	113	158	17
	AM4032HS-3	3	32	100	80	70	113	158	17
	AM4032HS-3L	3	32	100	80	60	123	168	17
	AM4040HS-4	4	40	100	80	50	98	143	17
	AM4040HS-4L	4	40	100	80	40	108	153	17
	AM4050HS-5	5	50	100	80	50	98	143	17
	AM4050HS-5L	5	50	100	80	40	108	153	17

Available inserts



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1806PDFR-MA																		●
180604PDFR-MA																		●
180612PDFR-MA																		●
180616PDFR-MA																		●
180620PDFR-MA																		●
180624PDFR-MA																		●
180630R-MA																		●
1806PDER-ML														●	●			
180604PDER-ML														●	●			
180612PDER-ML														●	●			
180616PDER-ML														●	●			
180620PDER-ML														●	●			
180624PDER-ML														●	●			
180630R-ML														●	●			
1806PDSR-MM				●				●	●	●	●	●	●	●	●			
1806PDSR-MF				●				●	●	●	●	●	●	●	●			
180612PDSR-MM				●				●	●	●	●	●	●	●	●			
180616PDSR-MM				●				●	●	●	●	●	●	●	●			
180620PDSR-MM				●				●	●	●	●	●	●	●	●			
180624PDSR-MM				●				●	●	●	●	●	●	●	●			
180630R-MM				●				●	●	●	●	●	●	●	●			
180632R-MM				●				●	●	●	●	●	●	●	●			
1806PDSR-MN3														●	●			
1806PDSR-MN4														●	●			

E05

* Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. * Please use the cutters with even teeth.

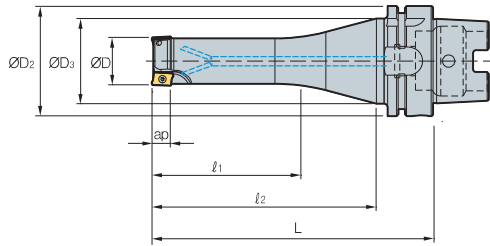
Parts

Specification	Screw	Wrench
Ø20~Ø25	FTKA0408	TW15S
Ø32~Ø50	FTKA0410	TW15S

Available inserts E05



HSK63A AM1000HS



AA
90°
• AR: 7.5°~13°
• RR: -28°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
HSK63A	AM1010HS-2	2	10	63	53	35	83	116	5.6
	AM1012HS-2	2	12	63	53	35	83	116	5.6
	AM1012HS-3	3	12	63	53	35	83	116	5.6
	AM1016HS-3	3	16	63	53	35	83	116	5.6
	AM1016HS-4	4	16	63	53	35	83	116	5.6
	AM1020HS-4	4	20	63	53	45	98	131	5.6
	AM1020HS-5	5	20	63	53	45	98	131	5.6

Available inserts

APMT-MA APMT-MM



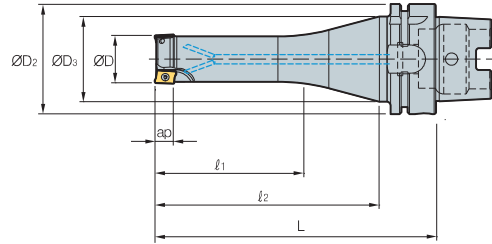
Designation	Cermet		Coated												Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	G10		H01	
APMT 0602PDFR-MA																		●	E05
060208PDFR-MA																			
060202PDSR-MM				●					●					●	●				
0602PDSR-MM				●			●	●	●	●	●			●	●				
060208PDSR-MM				●					●	●				●	●				
060212R-MM				●					●					●	●				
060216R-MM									●					●	●				

Parts

Specification			
Ø10~Ø20	FTKA01842	-	TW06S-A

Available inserts E05

HSK63A AM1500HS



AA
90°
• AR: 7.5°~13°
• RR: -28°~-7°

(mm)

Designation		ØD	ØD2	ØD3	l1	l2	L	ap	
HSK63A	AM15016HS-2	2	16	63	53	45	83	116	9
	AM15016HS-2L	2	16	63	53	35	118	151	9
	AM15020HS-2	2	20	63	53	60	98	131	9
	AM15020HS-3	3	20	63	53	60	98	131	9
	AM15020HS-2L	2	20	63	53	50	118	151	9
	AM15025HS-3	3	25	63	53	75	113	146	9
	AM15025HS-4	4	25	63	53	75	113	146	9
	AM15025HS-3L	3	25	63	53	65	133	166	9
	AM15032HS-4	4	32	63	53	80	113	146	9
	AM15032HS-5	5	32	63	53	80	113	146	9
	AM15032HS-4L	4	32	63	53	70	133	166	9
	AM15040HS-5	5	40	63	53	60	98	131	9
	AM15040HS-6	6	40	63	53	60	98	131	9
	AM15040HS-5L	5	40	63	53	50	118	151	9

Available inserts

APMT-MA APMT-ML APMT-MM



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 0903PDFR-MA																	●	E05
090308PDFR-MA																		
0903PDER-ML														●	●			
090308PDER-ML														●	●			
0903PDSR-MM				●			●	●	●	●	●			●	●			
090308PDSR-MM				●					●	●				●	●			
090312R-MM									●	●				●	●			
090316R-MM				●					●	●				●	●			
090320R-MM									●	●				●	●			

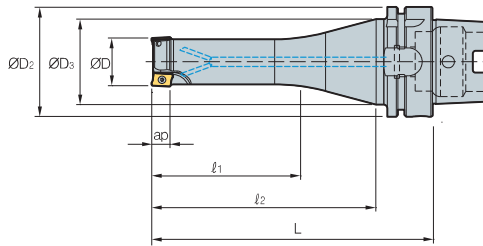
Parts

Specification			
Ø16~Ø40	FTKA02565S	TW08S	-

Available inserts E05



HSK63A AM2000HS



AA
90°
• AR: 7°~10°
• RR: +20°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
HSK63A	AM2016HS-2	2	16	63	53	45	83	116	11
	AM2016HS-2L	2	16	63	53	35	118	151	11
	AM2020HS-2	2	20	63	53	60	98	131	11
	AM2020HS-2L	2	20	63	53	50	118	151	11
	AM2025HS-3	3	25	63	53	75	113	146	11
	AM2025HS-3L	3	25	63	53	65	133	166	11
	AM2032HS-4	4	32	63	53	80	113	146	11
	AM2032HS-4L	4	32	63	53	70	133	166	11
	AM2040HS-5	5	40	63	53	60	98	131	11
	AM2040HS-5L	5	40	63	53	50	118	151	11
	AM2050HS-6	6	50	63	53	60	98	131	11
	AM2050HS-6L	6	50	63	53	50	118	151	11

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated												Uncoated		page	
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	G10		H01
APMT 11T3PDFR-MA																		●
11T308PDFR-MA																		
11T3PDER-ML															●	●		
11T308PDER-ML															●	●		
11T3PDSR-MM			●	●	●		●	●	●	●	●	●		●	●			
11T3PDSR-MF				●				●	●	●				●	●			
11T308PDSR-MM				●				●	●	●		●	●	●	●			
11T312PDSR-MM				●				●	●	●		●		●	●			
11T316R-MM				●				●	●	●				●	●			
11T318R-MM																		
11T324R-MM				●				●	●					●	●			
11T3PDSR-MN2														●				
11T3PDSR-MN3														●				

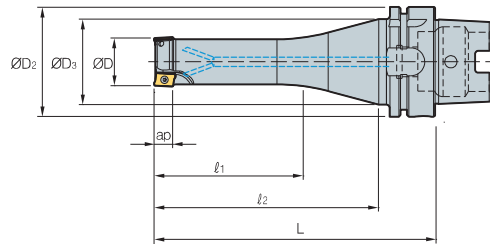
※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Parts

Specification		
Ø16~Ø50	FTKA02565S	TW08S

Available inserts E05

HSK63A AM3000HS



AA
90°
• AR: 7°~10°
• RR: -20°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
HSK63A	AM3025HS-2	2	25	63	53	65	113	146	16
	AM3025HS-2L	2	25	63	53	55	123	156	16
	AM3032HS-3	3	32	63	53	70	113	146	16
	AM3032HS-3L	3	32	63	53	60	123	156	16
	AM3040HS-4	4	40	63	53	50	98	131	16
	AM3040HS-4L	4	40	63	53	40	108	141	16
	AM3050HS-5	5	50	63	53	50	98	131	16
	AM3050HS-5L	5	50	63	53	40	108	141	16

Available inserts

APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated												Uncoated		page	
	CN2000	CN30	NCM825	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	G10		H01
APMT 1604PDFR-MA																		●
160404PDFR-MA																		
1604PDER-ML														●	●			
160404PDER-ML														●	●			
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
1604PDSR-MF				●				●	●	●				●	●			
160410PDSR-MM								●	●					●	●			
160416PDSR-MM				●				●	●					●	●			
160424R-MM				●				●	●					●	●			
160430R-MM								●	●					●	●			
160432R-MM				●				●	●					●	●			
1604PDSR-MN3														●				
1604PDSR-MN4														●				

E05

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

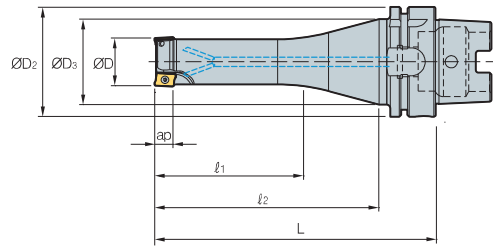
Parts

Specification		
Ø25 Ø32~Ø50	FTKA0408 FTKA0410	TW15S

Available inserts E05



HSK63A AM4000HS



AA
90°
• AR: 7°~10°
• RR: -20°~-7°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₁	l ₂	L	ap	
HSK63A	AM4020HS-1	1	20	63	53	50	98	131	17
	AM4025HS-2	2	25	63	53	65	113	146	17
	AM4032HS-3	3	32	63	53	70	113	146	17
	AM4032HS-3L	3	32	63	53	60	123	156	17
	AM4040HS-4	4	40	63	53	50	98	131	17
	AM4040HS-4L	4	40	63	53	40	108	141	17
	AM4050HS-5	5	50	63	53	50	98	131	17
	AM4050HS-5L	5	50	63	53	40	108	141	17

Available inserts



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC8510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT																		
1806PDFR-MA																		●
180604PDFR-MA																		●
180612PDFR-MA																		●
180616PDFR-MA																		●
180620PDFR-MA																		●
180624PDFR-MA																		●
180630R-MA																		●
1806PDER-ML														●	●			
180604PDER-ML														●	●			
180612PDER-ML														●	●			
180616PDER-ML														●	●			
180620PDER-ML														●	●			
180624PDER-ML														●	●			
180630R-ML														●	●			
1806PDSR-MM				●			●	●	●	●	●	●	●	●	●			
1806PDSR-MF				●					●	●				●	●			
180612PDSR-MM				●					●	●				●	●			
180616PDSR-MM				●					●	●				●	●			
180620PDSR-MM				●					●	●				●	●			
180624PDSR-MM				●					●	●				●	●			
180630R-MM				●					●	●				●	●			
180632R-MM				●					●	●				●	●			
1806PDSR-MN3														●	●			
1806PDSR-MN4														●	●			

E05

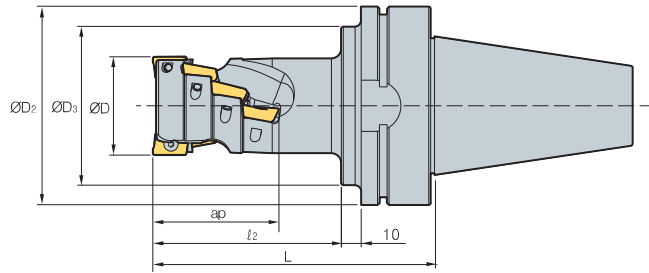
※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers. ※ Please use the cutters with even teeth.

Parts

Specification	Screw	Wrench
Ø20~Ø25	FTKA0408	
Ø32~Ø50	FTKA0410	TW15S

Available inserts E05

BT30/40 AM1000



(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap	
BT30	AM1016015-2	6	16	46	41	30	62	2	15.5
	AM1020020-3	12	20	46	41	32	64	3	20.5
	AM1025025-4	20	25	46	41	39	71	4	25.5
BT40	AM1016015-2	6	16	63	50	30	67	2	15.5
	AM1020020-3	12	20	63	50	32	69	3	20.5
	AM1025025-4	20	25	63	50	39	76	4	25.5

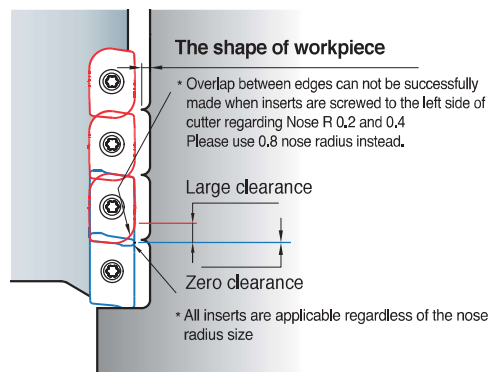
Available inserts

APMT-MA APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM825	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0602PDFR-MA																	●	E05
060208PDFR-MA																		
060202PDSR-MM				●						●				●	●			
0602PDSR-MM				●			●	●	●	●	●			●	●			
060208PDSR-MM				●					●	●				●	●			
060212R-MM				●					●					●	●			
060216R-MM									●					●	●			

Caution when clamping the inserts

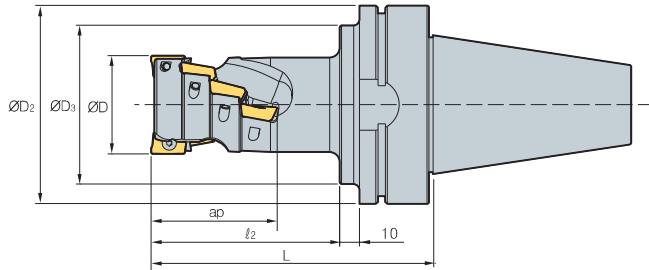


Parts

Specification			
Ø16~Ø25	FTKA01842	-	TW06S-A

Available inserts E05

BT30/40 AM1500



AA
90°
• AR: -12.5°~13°
• RR: -17°~-6°

(mm)

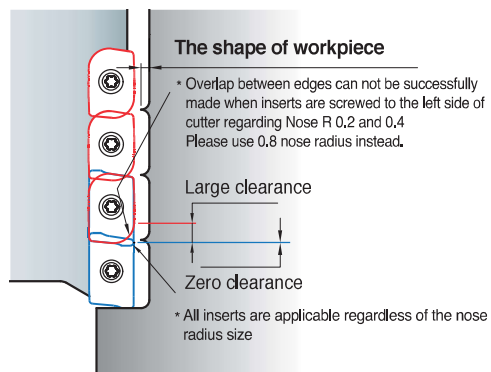
Designation		ØD	ØD2	ØD3	l2	L	No. of flute	ap	
BT30	AM15020026-1	3	20	46	41	42	74	1	26.5
	AM15025035-2	8	25	46	41	50	62	2	35
	AM15032044-2	10	32	46	41	60	92	2	44
BT40	AM15020026-1	3	20	63	50	42	79	1	26.5
	AM15025035-2	8	25	63	50	50	87	2	35
	AM15032044-2	10	32	63	50	60	97	2	44

Available inserts



Designation	Cermet		Coated												Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400	G10		H01	
APMT 0903PDFR-MA																		●	E05
090308PDFR-MA																			
0903PDER-ML														●	●				
090308PDER-ML														●	●				
0903PDSR-MM				●			●	●	●	●	●			●	●				
090308PDSR-MM				●					●	●				●	●				
090312R-MM									●	●				●	●				
090316R-MM				●					●	●				●	●				
090320R-MM									●	●				●	●				

Caution when clamping the inserts

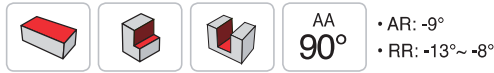
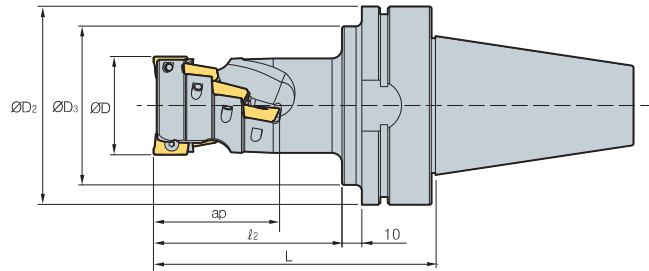


Parts

Specification			
Ø20~Ø32	FTKA02565S	TW08S	-

Available inserts E05

BT30/40 AM2000



(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap
BT30	AM2020029-1	3	20	46	41	45	77	29.4
	AM2025038-2	8	25	46	45	55	87	38.9
	AM2032048-2	10	32	46	45	65	97	48.5
	AM2040058-2	14	40	46	45	75	107	58
	AM2050039-4	16	50	46	45	58	90	39
	AM2063039-4	16	63	46	45	58	90	39
	AM2080039-5	20	80	46	45	63	95	39
BT40	AM2100039-6	24	100	46	45	63	95	39
	AM2020029-1	3	20	63	50	45	82	29.4
	AM2025038-2	8	25	63	50	55	92	38.9
	AM2032048-2	10	32	63	50	65	102	48.5
	AM2040058-2	14	40	63	50	75	112	58
	AM2050039-4	16	50	63	50	58	95	39
	AM2063039-4	16	63	63	50	58	95	39
AM2080039-5	20	80	63	50	63	100	39	
AM2100039-6	24	100	63	50	63	100	39	

Available inserts

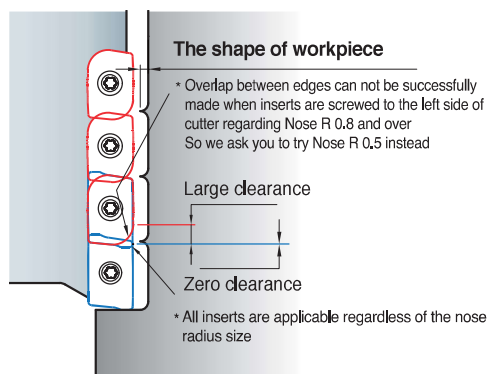
APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 11T3PDFR-MA																		
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●		●	●			
11T3PDSR-MF				●				●	●	●	●			●	●			
11T308PDSR-MM				●				●	●	●	●	●		●	●			
11T312PDSR-MM				●				●	●		●			●	●			
11T316R-MM				●				●	●					●	●			
11T318R-MM								●	●					●	●			
11T324R-MM				●				●	●					●	●			
11T3PDSR-MN3														●	●			
11T3PDSR-MN4														●	●			

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Caution when clamping the inserts



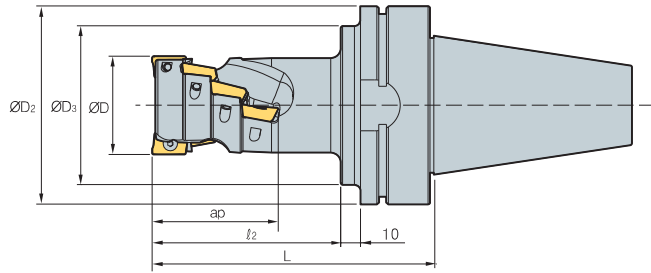
Parts

Specification	Screw	Wrench
Ø20~Ø100	FTKA02565S	TW08S

Available inserts E05



BT50 AM3000



AA
90°
• AR: 13°~15°
• RR: -11°~-4°

(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap
BT50 AM3050043-2	6	50	100	80	72	120	2	43
AM3063057-4	16	63	100	80	86	134	4	57
AM3080071-4	20	80	100	80	100	148	4	71
AM3100071-6	30	100	100	80	100	148	6	71

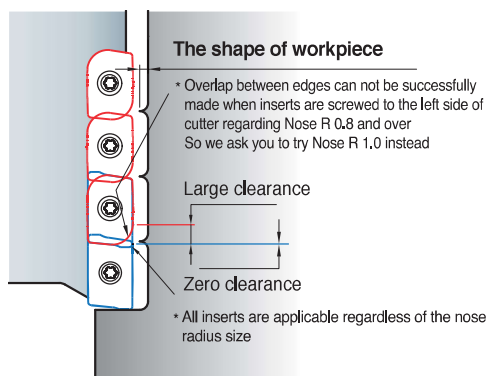
Available inserts



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 1604PDFR-MA																		●
160404PDFR-MA																		
1604PDER-ML																		● ●
160404PDER-ML																		● ●
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●	●	●	
1604PDSR-MF				●				●	●	●				●	●	●	●	
160410PDSR-MM								●	●	●				●	●	●	●	
160416PDSR-MM				●				●	●	●				●	●	●	●	
160424R-MM				●				●	●	●				●	●	●	●	
160430R-MM								●	●	●				●	●	●	●	
160432R-MM				●				●	●	●				●	●	●	●	
1604PDSR-MN3														●	●	●	●	
1604PDSR-MN4														●	●	●	●	

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Caution when clamping the inserts

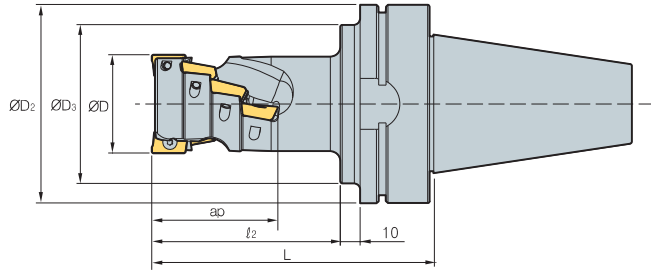


Parts

Specification		
Ø50~Ø100	FTKA0410	TW15S

Available inserts E05

BT50 AM4000



(mm)

Designation	ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap	
BT50 AM4040046-2	6	40	100	80	75	123	2	46
AM4050061-2	8	50	100	80	95	143	2	61
AM4063061-4	16	63	100	80	90	138	4	61
AM4080076-4	20	80	100	80	105	153	4	76
AM4100076-6	30	100	100	80	105	153	6	76

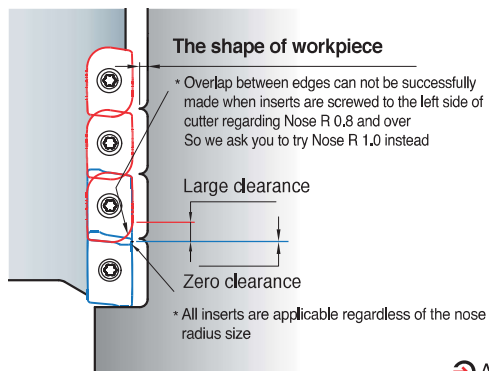
Available inserts



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 1806PDRF-MA																	●	E05
180604PDRF-MA																	●	
180612PDRF-MA																	●	
180616PDRF-MA																	●	
180620PDRF-MA																	●	
180624PDRF-MA																	●	
180630R-MA																	●	
1806PDER-ML														●	●			
180604PDER-ML														●	●			
180612PDER-ML														●	●			
180616PDER-ML														●	●			
180620PDER-ML														●	●			
180624PDER-ML														●	●			
180630R-ML														●	●			
1806PDSR-MM				●			●	●	●	●	●	●	●	●	●			
1806PDSR-MF				●					●					●	●			
180612PDSR-MM				●					●	●				●	●			
180616PDSR-MM				●					●					●	●			
180620PDSR-MM				●					●					●	●			
180624PDSR-MM				●					●					●	●			
180630R-MM				●					●					●	●			
180632R-MM				●					●					●	●			
1806PDSR-MN3														●				
1806PDSR-MN4														●				

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Caution when clamping the inserts



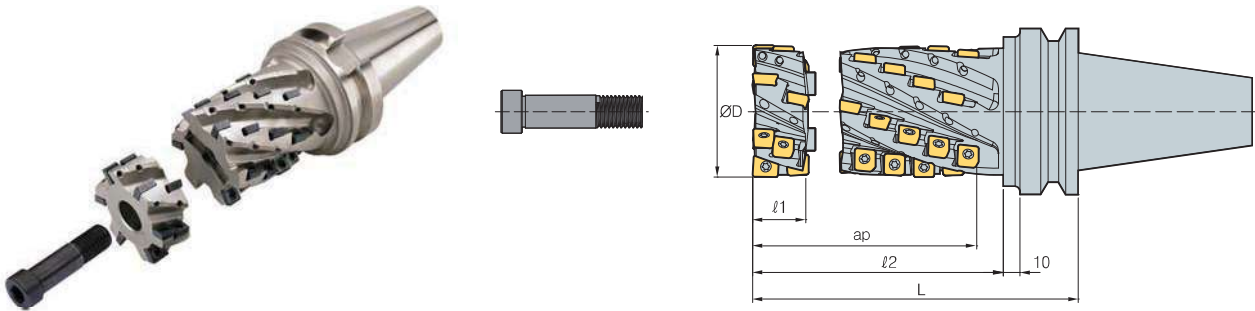
Parts

Specification	Screw	Wrench
Ø40~Ø100	FTKA0410	TW15S

Available inserts E05



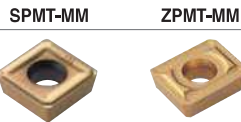
BT50 HAT4000



(mm)

Designation	SPMT		ØD	l1	l2	L	No. of flute	ap	Application	
	SPMT	ZPMT								
BT50- (Set)	HAT4050094-2F	10	1	50	32	119	160	2	94	HAT4050032-2F
	HAT4050104-2F	11	1	50	32	129	170	2	104	
	HAT4050114-2F	12	1	50	32	139	180	2	114	
	HAT4063094-4F	20	2	63	32	119	160	4	94	HAT4063032-4F
	HAT4063104-4F	22	2	63	32	129	170	4	104	
	HAT4063114-4F	24	2	63	32	139	180	4	114	
	HAT4080094-4F	20	2	80	33	119	160	4	94	HAT4080033-4F
	HAT4080104-4F	22	2	80	33	129	170	4	104	
HAT4080114-4F	24	2	80	33	139	180	4	114		
(Front Piece)	HAT4050032-2F	3	1	50	32	-	-	2	-	-
	HAT4063032-4F	6	2	63	32	-	-	4	-	
	HAT4080033-4F	6	2	80	33	-	-	4	-	

Available inserts



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
SPMT 120508-MMN																		E25
ZPMT 1505PPSR-MMN																		E31

Set specification

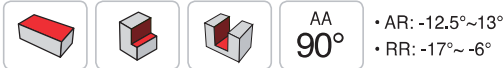
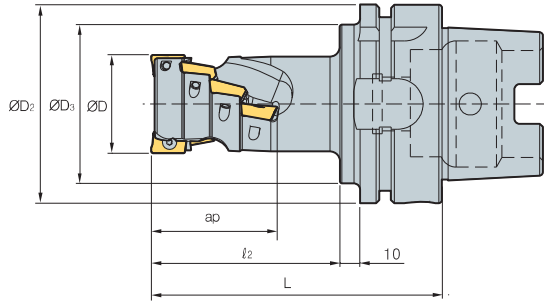
Set Designation	Designation	Front Piece	Clamping Bolt
HAT4050094-2F	HAT4050062-2F	HAT4050032-2F	HSB1255
HAT4050104-2F	HAT4050072-2F		
HAT4050114-2F	HAT4050082-2F		
HAT4063094-4F	HAT4063062-4F	HAT4063032-4F	HSB1670
HAT4063104-4F	HAT4063072-4F		
HAT4063114-4F	HAT4063082-4F		
HAT4080094-4F	HAT4080061-4F	HAT4080033-4F	HSB1682
HAT4080104-4F	HAT4080071-4F		
HAT4080114-4F	HAT4080081-4F		

Parts

Specification	 Screw	 Wrench
Ø50~Ø80	ETNA0511	TW20

Available inserts E25, E31

HSK63A AM1000



(mm)

Designation		$\varnothing D$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing l_2$	L	No. of flute	ap
HSK63A AM1016015-2	6	16	63	53	30	66	2	15.5
AM1020020-3	12	20	63	53	32	68	3	20.5
AM1025025-4	20	25	63	53	39	75	4	25.5

Available inserts

APMT-MA APMT-MM

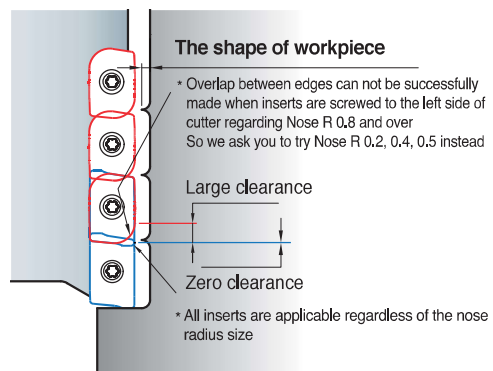


Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM635	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 0602PDFR-MA																		●
060208PDFR-MA																		
060202PDSR-MM				●						●					●	●		
0602PDSR-MM				●			●	●	●	●	●				●	●		
060208PDSR-MM				●					●						●	●		
060212R-MM				●					●						●	●		
060216R-MM									●						●	●		

Parts

Specification			
$\varnothing 16\sim\varnothing 25$	Screw FTKA01842	Wrench -	Wrench TW06S-A

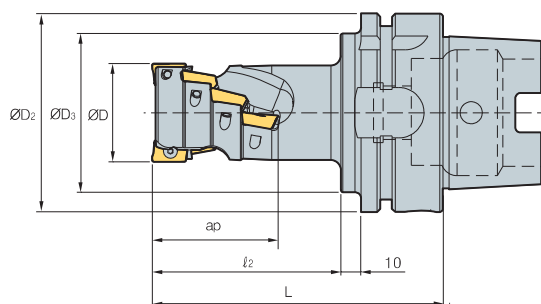
Caution when clamping the inserts



Available inserts E05



HSK63A AM1500



(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap
HSK63A AM15020026-1	3	20	63	53	42	78	1	26.5
AM15025035-2	8	25	63	53	50	86	2	35
AM15032044-2	10	32	63	53	60	96	2	44

Available inserts

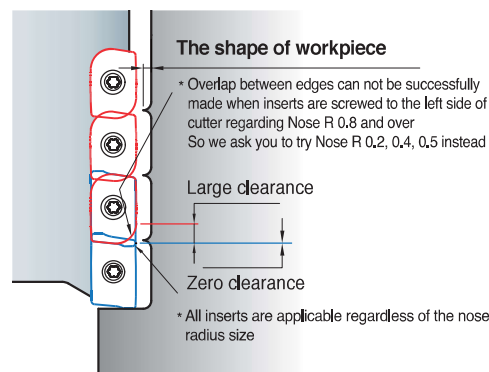
APMT-MA APMT-ML APMT-MM



Designation	Cermet		Coated											Uncoated		page		
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300	PC5400		G10	H01
APMT 0903PDFR-MA																		●
090308PDFR-MA																		
0903PDER-ML														●	●			
090308PDER-ML														●	●			
0903PDSR-MM				●			●	●	●	●	●			●	●			
090308PDSR-MM				●					●	●				●	●			
090312R-MM									●	●				●	●			
090316R-MM				●					●	●				●	●			
090320R-MM									●	●				●	●			

E05

Caution when clamping the inserts

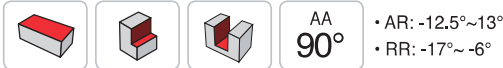
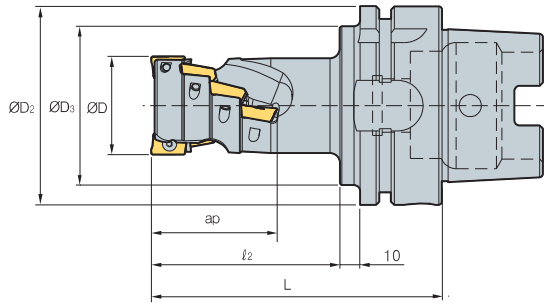


Parts

Specification			
Ø20~Ø32	FTKA02565S	TW08S	-

Available inserts E05

HSK63A AM2000



(mm)

Designation	Flutes	ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap
HSK63A	AM2020029-1	3	20	63	53	45	81	29.4
	AM2025038-2	8	25	63	53	55	91	38.9
	AM2032048-2	10	32	63	53	65	101	48.5
	AM2040058-2	14	40	63	53	75	111	58
	AM2050039-4	16	50	63	53	58	94	39
	AM2063039-4	16	63	63	53	58	94	39
	AM2080039-5	20	80	63	53	63	99	39
	AM2100039-6	24	100	63	53	63	99	39

Available inserts

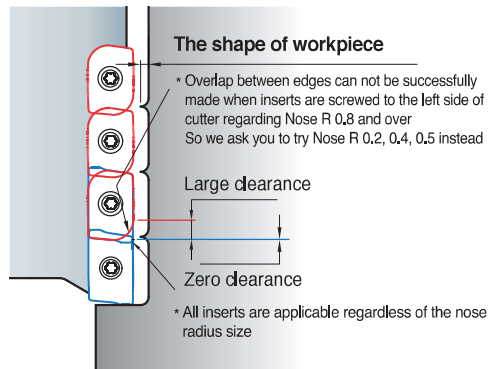
APMT-MA APMT-ML APMT-MM APMT-MF APMT-MN



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM825	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	H01
APMT 11T3PDFR-MA																		●
11T308PDFR-MA																		
11T3PDER-ML														●	●			
11T308PDER-ML														●	●			
11T3PDSR-MM			●	●	●		●	●	●	●	●	●		●	●			
11T3PDSR-MF				●				●	●	●				●	●			
11T308PDSR-MM				●				●	●	●				●	●			
11T312PDSR-MM				●				●	●	●				●	●			
11T316R-MM				●				●	●					●	●			
11T318R-MM				●				●	●					●	●			
11T324R-MM				●				●	●					●	●			
11T3PDSR-MN3														●				
11T3PDSR-MN4														●				

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Caution when clamping the inserts



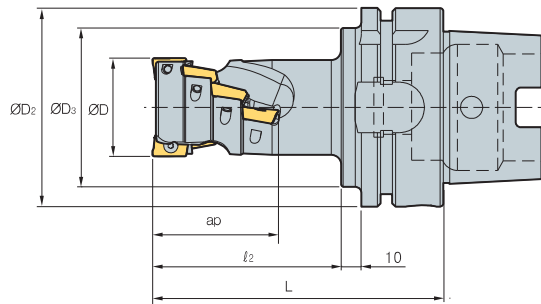
Parts

Specification	Screw	Wrench
Ø20~Ø100	FTKA02565S	TW08S

Available inserts E05



HSK100A AM3000



(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap
HSK100A AM3050043-2	6	50	100	88	72	111	2	43
AM3063057-4	16	63	100	88	86	125	4	57
AM3080071-4	20	80	100	88	100	139	4	71
AM3100071-6	30	100	100	88	100	139	6	71

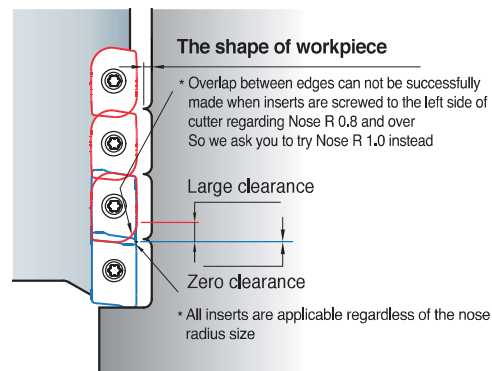
Available inserts



Designation	Cermet		Coated										Uncoated		page			
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510	PC3600	PC3700	PC6510	PC9530	PC9540	PC5300		PC5400	G10	HD1
APMT 1604PDFR-MA																	●	E05
160404PDFR-MA																		
1604PDER-ML														●	●			
160404PDER-ML														●	●			
1604PDSR-MM			●	●	●		●	●	●	●	●	●	●	●	●			
1604PDSR-MF				●				●	●	●				●	●			
160410PDSR-MM								●	●	●				●	●			
160416PDSR-MM				●				●	●	●				●	●			
160424R-MM				●				●	●	●				●	●			
160430R-MM								●	●	●				●	●			
160432R-MM				●				●	●	●				●	●			
1604PDSR-MN3														●	●			
1604PDSR-MN4														●	●			

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Caution when clamping the inserts

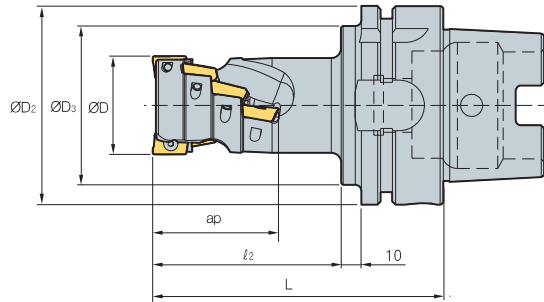


Parts

Specification		
Ø50-Ø100	FTKA0410	TW15S

Available inserts E05

HSK100A AM4000



(mm)

Designation		ØD	ØD ₂	ØD ₃	l ₂	L	No. of flute	ap
HSK100A AM4040046-2	6	40	100	88	75	114	2	46
AM4050061-2	8	50	100	88	95	134	2	61
AM4063061-4	16	63	100	88	90	129	4	61
AM4080076-4	20	80	100	88	105	144	4	76
AM4100076-6	30	100	100	88	105	144	6	76

Available inserts



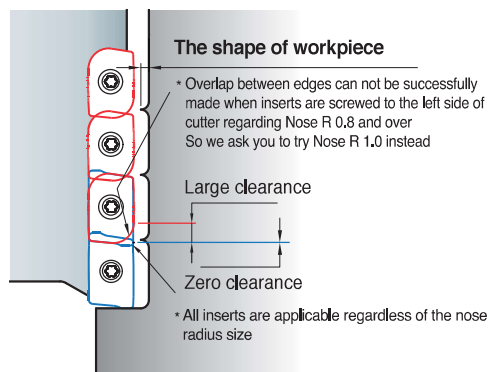
Designation	Coated										Uncoated		page	Designation	Coated										Uncoated		page							
	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2010	PC3600	PC3700	PC6510	PC9540			PC5300	PC5400	G10	H01	CN2000	CN30	NCM325	NC5330	NCM535	NCM545	PC2505	PC2510		PC3600	PC3700	PC6510	PC9540	PC5300	PC5400	G10
APMT 1806PDFR-MA															●	APMT 180624PDER-ML																●	E05	E05
180604PDFR-MA															●	180630R-ML															●			
180612PDFR-MA															●	1806PDSR-MM				●			●	●	●	●	●	●	●	●	●	●		
180616PDFR-MA															●	1806PDSR-MF				●				●								●		
180620PDFR-MA															●	180612PDSR-MM				●				●	●							●		
180624PDFR-MA															●	180616PDSR-MM				●				●								●		
180630R-MA															●	180620PDSR-MM				●												●		
1806PDER-ML															●	180624PDSR-MM				●				●								●		
180604PDER-ML															●	180630R-MM								●								●		
180612PDER-ML															●	180632R-MM				●				●								●		
180616PDER-ML															●	1806PDSR-MN3																●		
180620PDER-ML															●	1806PDSR-MN4																●		

※ Please purchase 2 types of APMT-MN (nick type) inserts with different chip breakers.
 ※ Please use the cutters with even teeth.

Parts

Specification		
Ø40~Ø100	FTKA0410	TW15S

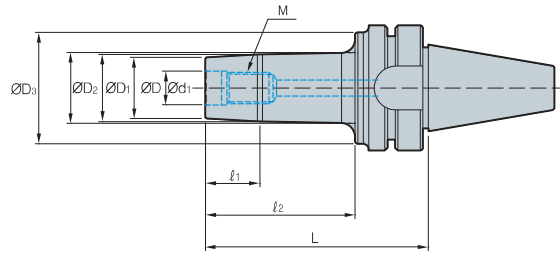
Caution when clamping the inserts



Available inserts E05



BT30/BT40/BT50

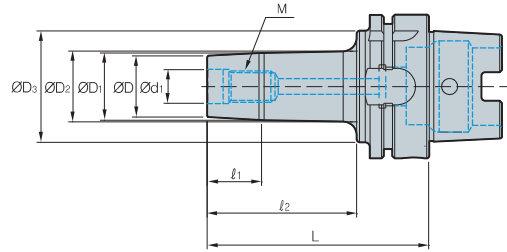


(mm)

Designation	ØD	ØD ₁	ØD ₂	ØD ₃	Ød ₁	ℓ ₁	ℓ ₂	L	M	
BT30-	MAT-M06-053	11	11.7	13	30	6.5	5	21	53	M06*1.0
	MAT-M08-057	14.5	15.7	17.5	35	8.5	7	25	57	M08*1.25
	MAT-M10-062	18	19.7	24	38	10.5	7	30	62	M10*1.5
	MAT-M12-067	23	24.7	27.5	41	12.5	10	35	67	M12*1.75
	MAT-M16-067	29	31.7	33.5	41	17	10	35	67	M16*2.0
BT40-	MAT-M06-062	11	11.7	14	40	6.5	5	25	62	M06*1.0
	MAT-M06-077	11	11.7	14	40	6.5	5	40	77	M06*1.0
	MAT-M06-092	11	11.7	14	40	6.5	5	55	92	M06*1.0
	MAT-M08-067	14.5	15.7	19	44	8.5	7	30	67	M08*1.25
	MAT-M08-082	14.5	15.7	19	44	8.5	7	45	82	M08*1.25
	MAT-M08-097	14.5	15.7	19	44	8.5	7	60	97	M08*1.25
	MAT-M10-072	18	19.7	23	50	10.5	10	35	72	M10*1.5
	MAT-M10-087	18	19.7	23	50	10.5	10	50	87	M10*1.5
	MAT-M10-102	18	19.7	23	50	10.5	10	65	102	M10*1.5
	MAT-M12-077	23	24.7	30	55	12.5	10	40	77	M12*1.75
	MAT-M12-092	23	24.7	30	55	12.5	13	55	92	M12*1.75
	MAT-M12-107	23	24.7	30	55	12.5	13	70	107	M12*1.75
	MAT-M16-077	29	31.7	37	55	17	13	40	77	M16*2.0
	MAT-M16-092	29	31.7	37	55	17	13	55	92	M16*2.0
	MAT-M16-107	29	31.7	37	55	17	13	70	107	M16*2.0
BT50-	MAT-M06-083	11	11.7	15	40	6.5	5	35	83	M06*1.0
	MAT-M06-098	11	11.7	15	40	6.5	5	50	98	M06*1.0
	MAT-M06-113	11	11.7	15	40	6.5	5	65	113	M06*1.0
	MAT-M08-088	14.5	15.7	20	45	8.5	7	40	88	M08*1.25
	MAT-M08-103	14.5	15.7	20	45	8.5	7	55	103	M08*1.25
	MAT-M08-118	14.5	15.7	20	45	8.5	7	70	118	M08*1.25
	MAT-M10-093	18	19.7	25	55	10.5	10	45	93	M10*1.5
	MAT-M10-113	18	19.7	25	55	10.5	10	65	113	M10*1.5
	MAT-M10-128	18	19.7	25	55	10.5	10	80	128	M10*1.5
	MAT-M12-103	23	24.7	33	65	12.5	10	55	103	M12*1.75
	MAT-M12-118	23	24.7	33	65	12.5	13	70	118	M12*1.75
	MAT-M12-133	23	24.7	33	65	12.5	13	85	133	M12*1.75
	MAT-M16-103	29	31.7	41	85	17	13	55	103	M16*2.0
	MAT-M16-118	29	31.7	41	85	17	13	70	118	M16*2.0
	MAT-M16-133	29	31.7	41	85	17	13	85	133	M16*2.0

➔ Available modular E42, E43

HSK63A/HSK100A



(mm)

Designation	ØD	ØD ₁	ØD ₂	ØD ₃	Ød ₁	ℓ ₁	ℓ ₂	L	M	
HSK63A-	MAT-M06-061	11	11.7	27	40	6.5	5	25	61	M06*1.0
	MAT-M06-076	11	11.7	27	40	6.5	5	40	76	M06*1.0
	MAT-M06-091	11	11.7	27	40	6.5	5	55	91	M06*1.0
	MAT-M08-066	14.5	15.7	30.5	44	8.5	7	30	66	M08*1.25
	MAT-M08-081	14.5	15.7	30.5	44	8.5	7	45	81	M08*1.25
	MAT-M08-096	14.5	15.7	30.5	44	8.5	7	60	96	M08*1.25
	MAT-M10-071	18	19.7	34	50	10.5	10	35	71	M10*1.5
	MAT-M10-086	18	19.7	34	50	10.5	10	50	86	M10*1.5
	MAT-M10-101	18	19.7	34	50	10.5	10	65	101	M10*1.5
	MAT-M12-076	23	24.7	36.5	55	12.5	10	40	76	M12*1.75
	MAT-M12-091	23	24.7	36.5	55	12.5	13	55	91	M12*1.75
	MAT-M12-106	23	24.7	36.5	55	12.5	13	70	106	M12*1.75
	MAT-M16-076	29	31.7	38.5	55	17	13	40	76	M16*2.0
MAT-M16-091	29	31.7	38.5	55	17	13	55	91	M16*2.0	
MAT-M16-106	29	31.7	38.5	55	17	13	70	106	M16*2.0	
HSK100A-	MAT-M06-074	11	11.7	15	40	6.5	5	35	74	M06*1.0
	MAT-M06-089	11	11.7	15	40	6.5	5	50	89	M06*1.0
	MAT-M06-104	11	11.7	15	40	6.5	5	65	104	M06*1.0
	MAT-M08-079	14.5	15.7	20	45	8.5	7	40	79	M08*1.25
	MAT-M08-094	14.5	15.7	20	45	8.5	7	55	94	M08*1.25
	MAT-M08-109	14.5	15.7	20	45	8.5	7	70	109	M08*1.25
	MAT-M10-084	18	19.7	25	55	10.5	10	45	84	M10*1.5
	MAT-M10-104	18	19.7	25	55	10.5	10	65	104	M10*1.5
	MAT-M10-119	18	19.7	25	55	10.5	10	80	119	M10*1.5
	MAT-M12-094	23	24.7	33	65	12.5	10	55	94	M12*1.75
	MAT-M12-109	23	24.7	33	65	12.5	13	70	109	M12*1.75
	MAT-M12-124	23	24.7	33	65	12.5	13	85	124	M12*1.75
	MAT-M16-094	29	31.7	41	85	17	13	55	94	M16*2.0
	MAT-M16-109	29	31.7	41	85	17	13	70	109	M16*2.0
	MAT-M16-124	29	31.7	41	85	17	13	85	124	M16*2.0

Available modular E42, E43



Rigid body employs high tensile aluminum

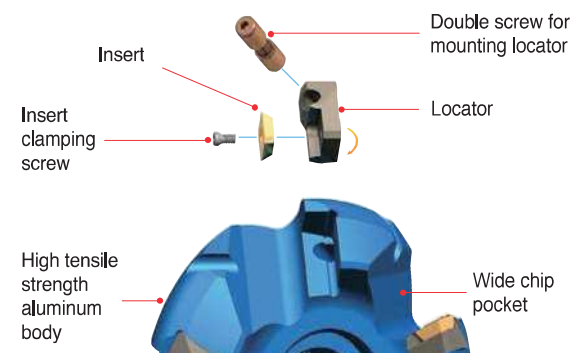
Future Mill

- Light-weight aluminum body (50% of steel body) can be used for high speed cutting, tapping center, and on low power machines
- Easy handling
- It can be used for aluminum alloys, medium cutting of steel, and cast iron
- Rigid body employs high tensile aluminum
- Locators for excellent durability
- A variety of chip breaker are available
- The high rake angle provides low cutting loads and good surface roughness

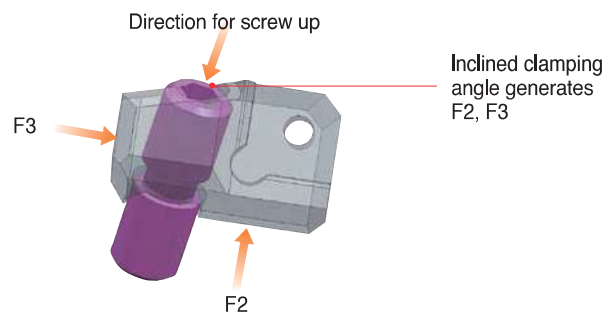
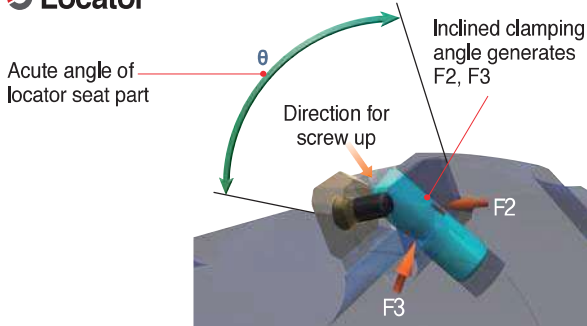
Features of cutter

- Strong clamping between aluminum body and locator with double screw provides high efficiency
- Acute angle of locator seat provides strong clamping
- Wide chip pocket area provides good chip evacuation
- High tensile strength aluminum body

Assembly structure of cutter

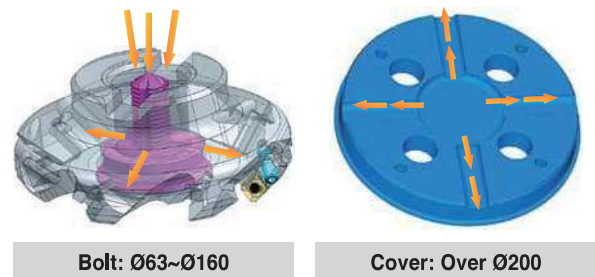


Locator

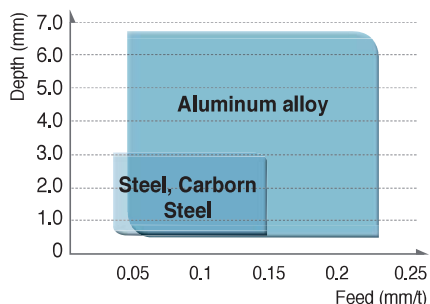


Through coolant system

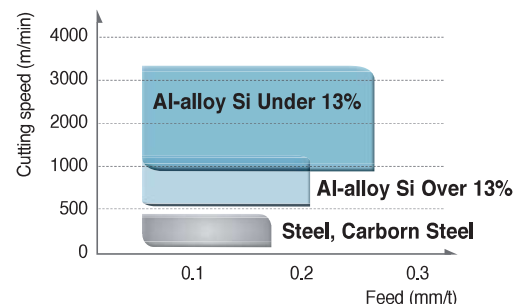
- Exclusively designed coolant bolt and cover provide excellent coolant action and chip evacuation for improved tool life
- Exact coolant direction to cutting area
- Exclusive coolant bolt and cover are sold separately. Through coolant arbor is required



Application range as per workpiece



Cutting speed



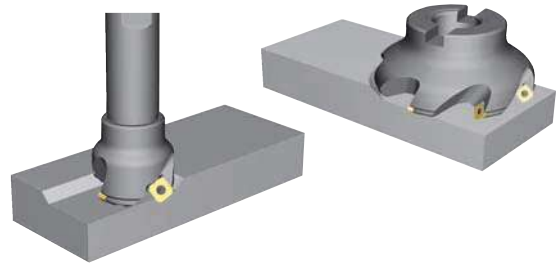
Max. available revolution

Cutter diameter	Max. revolution
Ø63	20,000
Ø80	16,000
Ø100	13,000
Ø125	10,000
Ø160	8,000
Ø200	6,500
Ø250	5,000
Ø315	4,000

Future Mill (FMA)

Features

- General milling cutter for high productivity
- Adjustable pitch of cutter and various chip breaker offer wide application range.
- Light cutter body allows high speed cutting and can be used in low horse power machine
- Smooth cutting with low cutting load is accomplished with high-rake angle



Features of chip breaker

Insert	Cutting-edge	Uses	Features
None C/B		Light cutting	Superior surface roughness at finishing due to ground type cermet insert
MF		Light cutting	Superior cutting quality for light and difficult-to-cut material machining through the low cutting load of chip breaker
MM		General cutting	Suitable for various cutting due to special shape design for general cutting
MR		Roughing	Tough cutting-edge provides stable cutting performance in severe interruption
MA		For aluminum	Superior cutting quality for aluminum due to sharp cutting-edge and buffed surface - S□ET-MA: Sharp cutting-edge due to high accurate grinding - S□XT-MA: Suitable cutting-edge for roughing

Recommended cutting condition

ISO	Grades	vc (m/min)	MF	MM	MR	MA
			fz (mm/t)	fz (mm/t)	fz (mm/t)	fz (mm/t)
P	NC5330	210~350	0.05~0.20	0.10~0.30	0.10~0.30	-
	NCM325	190~310	0.05~0.20	0.10~0.30	0.10~0.30	-
	PC3500	160~270	0.05~0.20	0.10~0.30	0.10~0.30	-
M	PC9530	90~150	0.05~0.15	0.10~0.30	-	-
	NCM335	70~120	0.05~0.15	0.10~0.30	-	-
K	PC5300	110~180	0.05~0.20	0.10~0.30	-	-
N	H01	260~440	-	-	-	0.10~0.35

