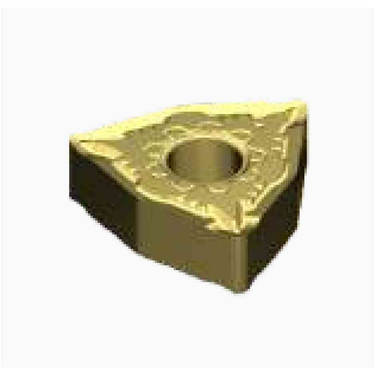
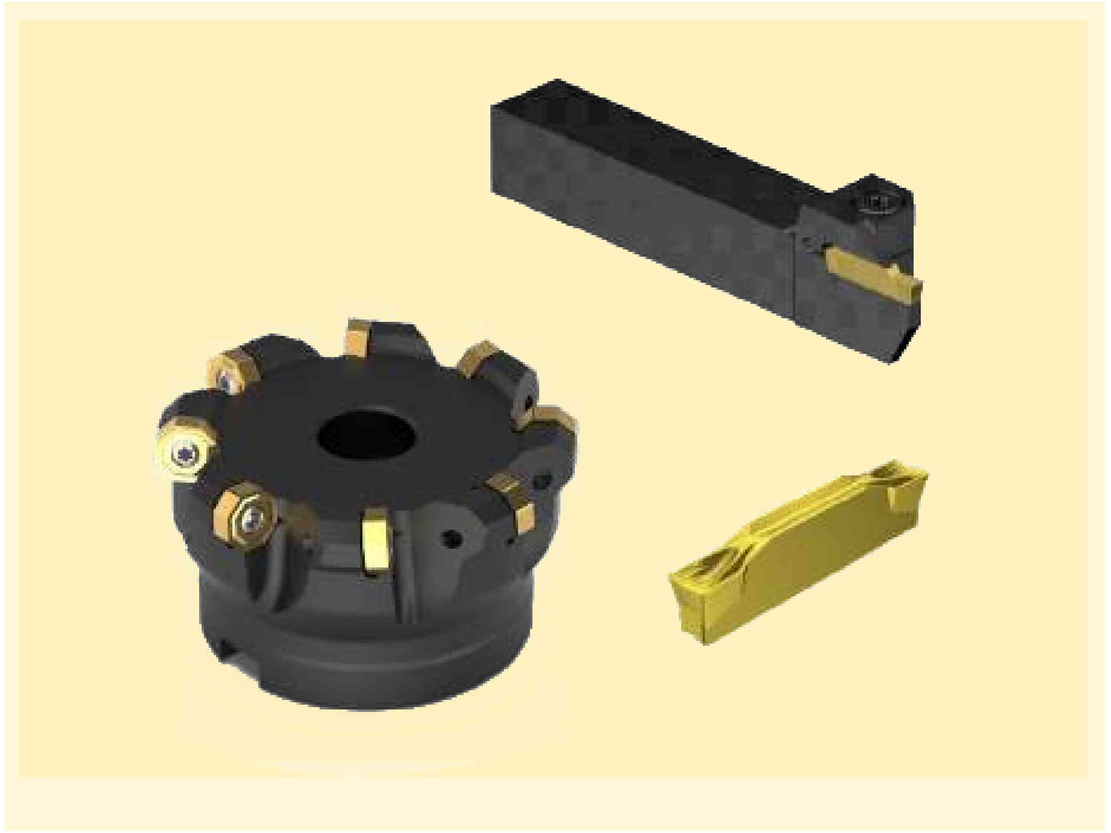
GZVictor

2026 切削工具
Cutting tools

综合样本
General catalogue





广州威拓精密工具有限公司
Guangzhou Victor Precision Tools Co., Ltd.

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A

可转位铣削刀具

Indexable milling tool

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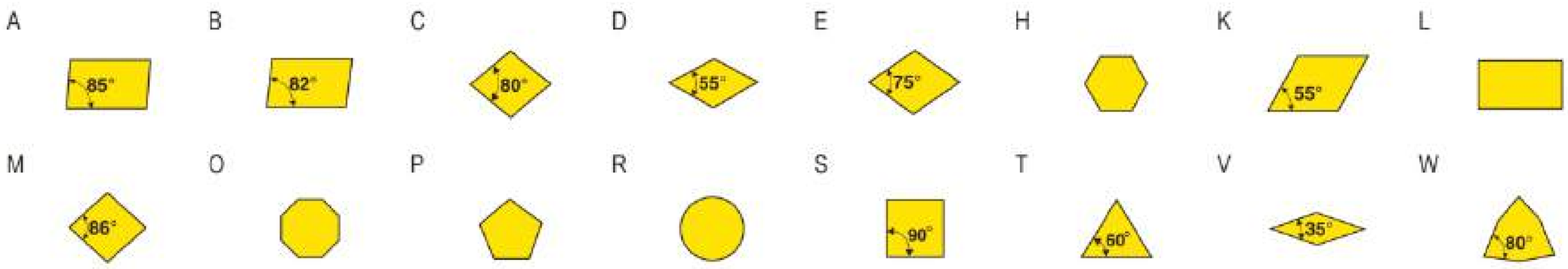
可转位铣削刀具 Indexable milling tool

铣削刀片型号编码 Milling insert model codes

H	N	G	U	06	04	08DN	N	–	M30
1	2	3	4	5	6	7	8		9

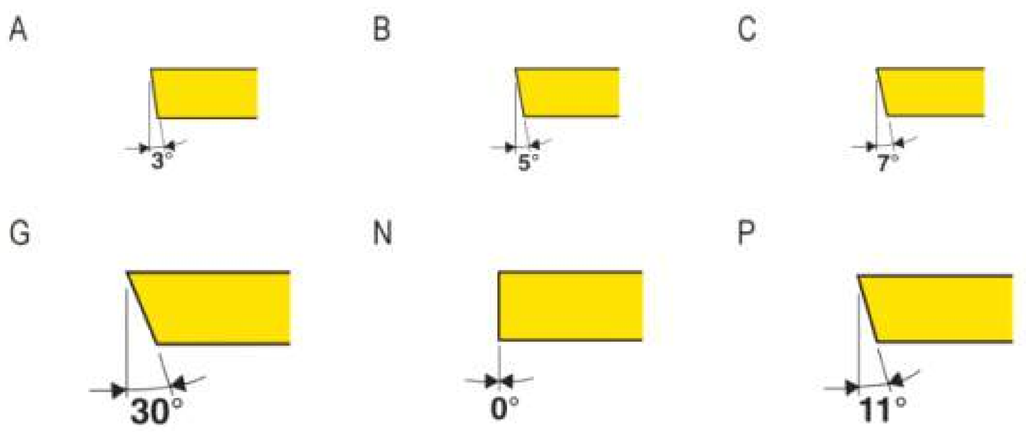
1.刀片形状 Insert shape



X=特殊形状 Special shape

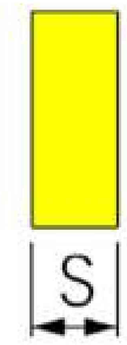
Z=特殊形状 Special shape

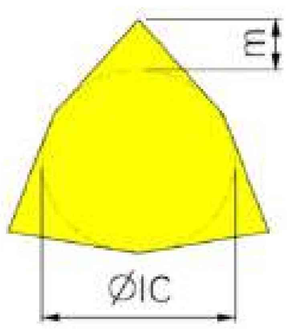
2.刀片后角 Insert relief angle

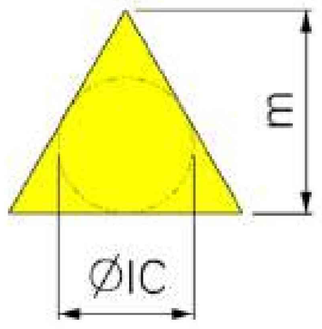


O=特殊 Special

3.公差 Tolerance







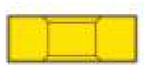
代号 Code name	刀尖高度m 公差(mm) Insert tip height (m) Tolerance (mm)	内接圆∅D1 公差(mm) Inscribed Circle ∅D1 Tolerance (mm)	厚度S1 公差(mm) Thickness S1 Tolerance (mm)	(参考)M级精度详细情况(按形状、大小分) ·刀尖高度公差(mm) (Reference) M-Class Precision Details (Classified by Shape and Size) · Insert Tip Height Tolerance (mm)						
				内接圆 Inscribed circle	正三角形 Equilateral triangle	正方形 Square	80° 菱形 80°Rhombus	55° 菱形 55°Rhombus	35° 菱形 35°Rhombus	圆形 Round
A	±0.005	±0.025	±0.025							
F	±0.005	±0.013	±0.025	6.35	±0.08	±0.08	±0.08	±0.11	±0.16	
C	±0.013	±0.025	±0.025	9.525	±0.08	±0.08	±0.08	±0.11	±0.16	
H	±0.013	±0.013	±0.025	12.7	±0.13	±0.13	±0.13	±0.15		
E	±0.025	±0.025	±0.025	15.875	±0.15	±0.15	±0.15	±0.18		
G	±0.025	±0.025	±0.13	19.05	±0.15	±0.15	±0.15	±0.18		
				25.4		±0.18				
J	±0.005	±0.05–±0.13	±0.025	·内接圆 D1公差 (mm)· Inscribed Circle ØD1 Tolerance (mm)						
K	±0.013	±0.05–±0.13	±0.025	内接圆 Inscribed circle	正三角形 Equilateral triangle	正方形 Square	80° 菱形 80°Rhombus	55° 菱形 55°Rhombus	35° 菱形 35°Rhombus	圆形 Round
				6.35	±0.05	±0.05	±0.05	±0.05	±0.05	
L	±0.025	±0.05–±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
M	±0.08–±0.18	±0.05–±0.13	±0.13	12.7	±0.08	±0.08	±0.08	±0.08		±0.08
N	±0.08–±0.18	±0.05–±0.13	±0.025	15.875	±0.10	±0.10	±0.10	±0.10		±0.10
				19.05	±0.10	±0.10	±0.10	±0.10		±0.10
U	±0.08–±0.18	±0.08–±0.25	±0.13	25.4		±0.13				±0.13

可转位铣削刀具 Indexable milling tool

铣削刀片型号编码 Milling insert model codes

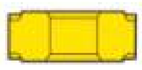
4.断屑槽和夹固形式 Chipbreaker and clamping methods

A

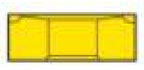


B

G



M

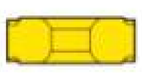


N

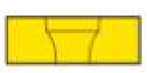
R

T

U



W

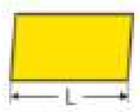


X=特殊形状 Special shape

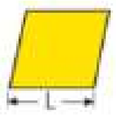
Z=特殊形状Special shape

5.切削刃长度 Cutting edge length

A, B, K

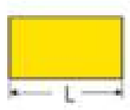


C, D, E, M, V



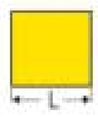
H, O, P

L



R

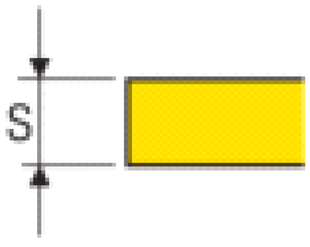
S



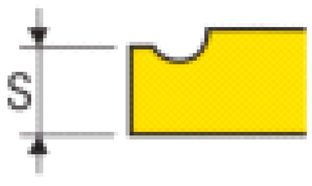
T

W

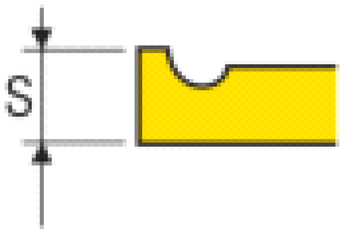
6.厚度 Thickness



01=1,59 mm
T1= 1,98 mm
02= 2,38 mm
03=3,18 mm



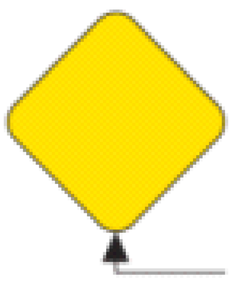
T3=3,97 mm
04=4,76 mm
05=5,56 mm
06=6,35 mm



07=7,94 mm
08=8,00 mm
09=9,52 mm

7.刀尖信息 Insert tip information

刀尖圆角 Corner radius



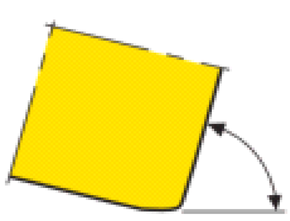
M0 = 圆刀片 Round insert

005 = 0,05 mm
01 = 0,1 mm
02 = 0,2 mm
04 = 0,4 mm
08 = 0,8 mm
12 = 1,2 mm
.....

M0 = 圆刀片 Round insert

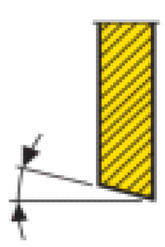
005 = 0.0020
01 = 0.0039
02 = 0.0079
04 = 0.0157
08 = 0.0315
12 = 0.0472
.....

第一位字母 The first letter



A=45°
D=60°
E=75°
F=85°
P=90°
Z=特殊 special

第二位字母 The second letter

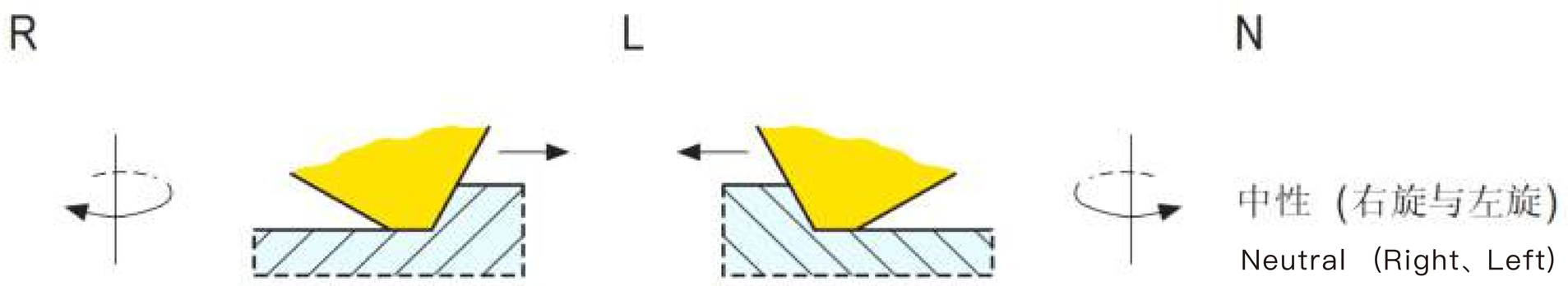


A=45°
B=5°
C=7°
D=15°
E=20°
F=25°
G=30°
N=0°
P=11°
Z=特殊 special

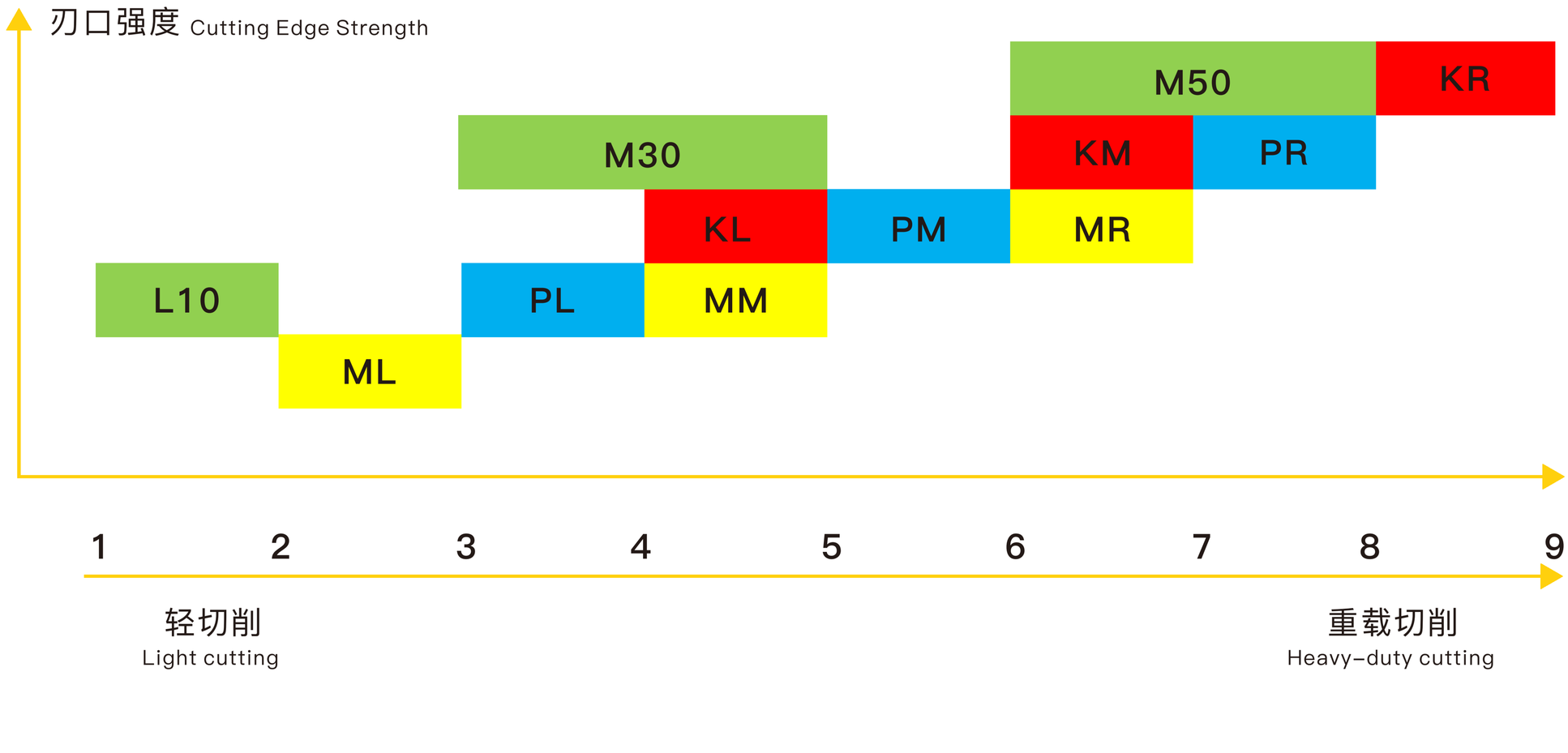
可转位铣削刀具 Indexable milling tool

铣削刀片型号编码 Milling insert model codes

8.切削方向 Cutting direction



9.槽型 Geometry



槽型分类参数 Groove Type Classification Parameters

整体槽型等级划分，P类材料高于M级材料一个等级，K类材料高于P类材料一个等级

In the overall classification of groove geometries, P–class materials rank one level higher than M–class materials, and K–class materials rank one level higher than P–class materials.

通用槽型，L10、M30、M50

Universal Slot Type: L10, M30, M50

铣削刀体编码规则 Milling tools model codes

R	FM	C	–	50	A	22	Z3	(L80)	–	(S45)	O	N	05	A
1	2	3		4	5	6	7	8		9	10	11	12	13

1.切削方向 Cutting Direction

R=右旋 Right

L=左旋 Left

2.刀具类型 Tool Type

FM=平面铣刀 Face milling

SM=方肩铣刀 Square shoulder milling

DM=三面刃槽铣 Three-sided slot milling

HM=玉米铣刀 Corn milling

PM=仿形铣刀 Profiling milling

EM=高进给铣刀 High feed milling

CM=倒角铣刀 Chamfer milling

XM=特殊铣刀 Special milling

3.冷却方式 coolant method

C=内冷 Internal coolant

N=外冷 External coolant

4.刀具直径 Tool diameter

50=50mm

5.接口类型 Interface type

A=A型接口 Type A interface

B=B型接口 Type B interface

C=C型接口 Type C interface

D=D型接口 Type D interface

M=螺纹接口 Thread interface

S=直柄 Straight Handle

N=削平直柄 Flattened straight handle

G=盘式接口 Disk interface

BT=BT型接口 Type BT interface

HS=HSK-A接口 Type HSK-A interface

6.接口尺寸 Interface dimensions

22=22mm

7.刀齿数 Teeth no

Z3=3齿 3-flute

8.刀杆长度（如是） Toolholder length(If yes)

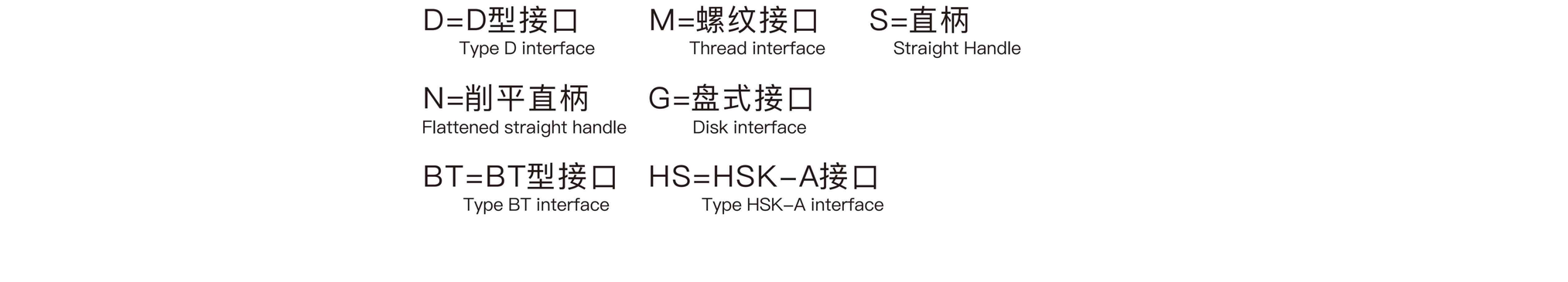
L+长度 Length

9.主偏角（如是FM类型） Leading angle / If it is FM type

S=主偏角 Leading angle

45=45°

10.刀片形状 Insert type



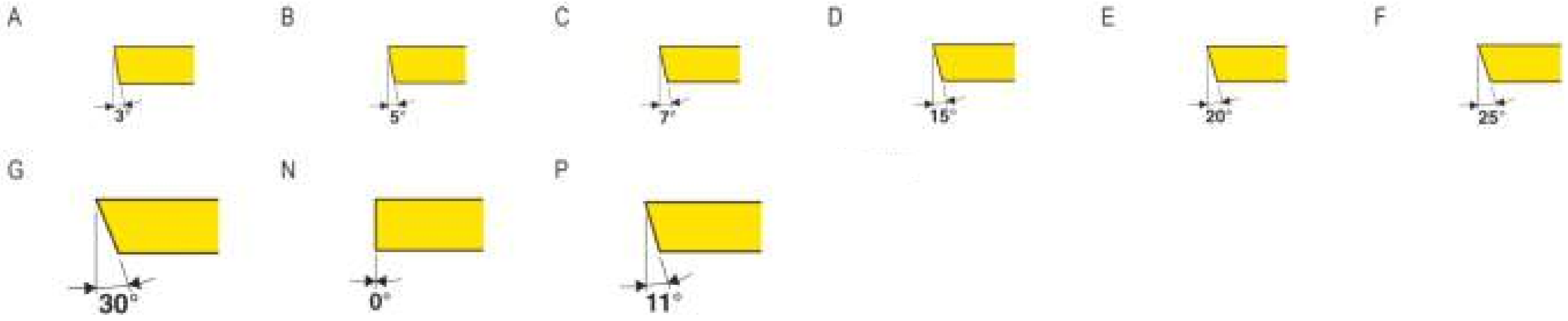
X=特殊形状 Special shape

Z=特殊形状 Special shape

可转位铣削刀具 Indexable milling tool

铣削刀体编码规则 Milling tools model codes

11.刀片后角 Relief angle

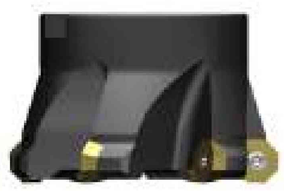
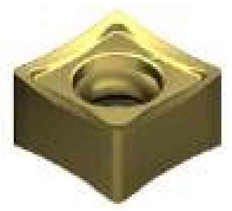


12.切削刃长度 Cutting edge length

05=5mm

13.伊特纳刀体识别码 ETN Tool Body Identification Code

可转位铣削刀具一览表 Indexable milling tools list

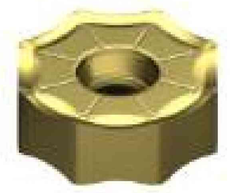
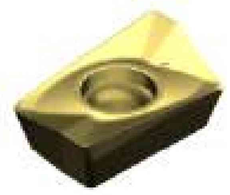
加工类型 Machining type	刀体 Tool Body	适配刀片 Compatible Inserts	简介 Introduction	
平面铣削 Face Milling	RFM..S45..SE12V A15	SE..12T3 A15	•刀体直径:45-160mm •最大切深:6mm •适用于钢件、不锈钢、铸铁、高温合金的平面铣削加工 •分M级和G级精度刀片，可应对粗加工至半精加工的应用场景	•Cutter Body Diameter: 45—160 mm •Maximum Cutting Depth: 6 mm •Suitable for face milling of steel, stainless steel, cast iron, and high–temperature alloys •Available with M–grade and G–grade precision inserts, capable of handling applications ranging from roughing to semi–finishing
	 RFM..S43..OD05W A17	OD..0504 A17	•刀体直径:55-125mm •最大切深:3mm •适用于钢件、不锈钢、高温合金的平面铣削加工 •刀片自带一体式修光刃，可应对粗加工至半精加工的应用场景	•Cutter Body Diameter: 55—125 mm •Maximum Cutting Depth: 3 mm •Suitable for face milling of steel, stainless steel, and high–temperature alloys •Inserts feature an integrated wiper edge, capable of handling applications ranging from roughing to semi–finishing
	RFM..S45..SD09W A18	SD..09T3 A18	•刀体直径:20-80mm •最大切深:4.5mm •适用于钢件、不锈钢、铸铁、高温合金的平面铣削加工 •刀片圆弧角范围:R0.4-R2.0	•Cutter Body Diameter: 20—80 mm •Maximum Cutting Depth: 4.5 mm •Suitable for face milling of steel, stainless steel, cast iron, and high–temperature alloys •Insert Corner Radius Range: R0.4—R2.0
	RFM..S75..SP12W A20	SP..1204 20	•刀体直径:80-200mm •最大切深:10mm •适用于钢件、不锈钢、铸铁的平面铣削加工 •刀片圆弧角范围:R0.8-R2.0	•Cutter Body Diameter: 80—200 mm •Maximum Cutting Depth: 10 mm •Suitable for face milling of steel, stainless steel, and cast iron •Insert Corner Radius Range: R0.8—R2.0
	RFM..S45..SN12E A21	SN..1206ZNN A21	•刀体直径:50-250mm •最大切深:6.5mm •适用于钢件、不锈钢、铸铁的平面铣削加工	•Cutter Body Diameter: 50—250 mm •Maximum Cutting Depth: 6.5 mm •Suitable for face milling of steel, stainless steel,and cast iron
	RFM..S88..SN12E A22	 SN..1206ANN A22	•刀体直径:50-250mm •最大切深:10mm •适用于钢件、不锈钢、铸铁的平面铣削加工	•Cutter Body Diameter: 50—250 mm •Maximum Cutting Depth: 10 mm •Suitable for face milling of steel, stainless steel, and cast iron
	RFM..S65..SN15V A23	SN..1505 A23	•刀体直径:50-150mm •最大切深:6mm •高金属去除率，适用于铸铁的粗加工	•Tool diameter: 50–150mm •Maximum depth of cut: 6mm •High metal removal rate, suitable for rough machining of cast iron.
	RFM..S70..PN09G A24	PN..0905 A25	•刀体直径:38-160mm •最大切深:6.4mm •适用于钢件、不锈钢、高温合金的平面铣削加工 •分M级和H级精度刀片，可应对粗加工至精加工的场景	• Tool body diameter: 38–160mm • Maximum depth of cut: 6.4mm • Suitable for face milling of steel, stainless steel, and high–temperature alloys • Available in M–grade and H–grade precision inserts, suitable for roughing to finishing applications.

可转位铣削刀具 Indexable milling tool

可转位铣削刀具一览表 Indexable milling tools list

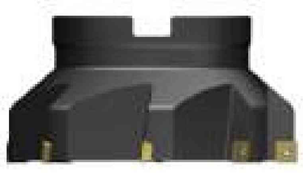
加工类型 Machining type	刀体 Tool body	适配刀片 Compatible inserts	简介 Introduction
平面铣削 Face milling	RFM..S45..HN06K A26	HN..0604 A26	•刀体直径:25-125mm •最大切深:3.2mm •分粗加工和精加工刀片,可应对粗加工至精加工的场景 •相同直径下刀齿最多,在各种材料加工应用中可以提供加工效率 •Tool body diameter: 25–125mm •Maximum depth of cut: 3.2mm •Available in roughing and finishing inserts to handle various machining applications •Maximum number of teeth in the same diameter, providing high machining efficiency across a wide rangeof materials.
	RFM..S60..HN06K A28	HN..0604 A26	•刀体直径:40-125mm •最大切深:3.2mm •分粗加工和精加工刀片,可应对粗加工至精加工的场景 •相同直径下刀齿最多,在各种材料加工应用中可以提供加工效率 •Tool body diameter: 40–125mm •Maximum depth of cut: 3.2mm •Available in roughing and finishing inserts to handle various machining applications •Maximum number of teeth per diameter, providing high machining efficiency across a wide range of materials.
	RFM..S45..HN09P A29	HN..0906 A29	•刀体直径:50-160mm •最大切深:5mm •适用于P、M材料的粗加工 •Tool diameter: 50–160mm •Maximum depth of cut: 5mm •Suitable for roughing P and M materials
	RFM..S60..HN09E A30	HN..0905 A30	•刀体直径:80-250mm •最大切深:6mm •带修光刃及不带修光刃两种产品可选择,磨制级产品,尺寸精度高,适用于K类材料精加工 •Insert diameter: 80–250mm •Maximum depth of cut: 6mm •Available in both wiper and without wiper versions; ground class, high dimensional accuracy, suitable for finishing K–grade materials.
	RFM..S45..HN10T A31	HN..1006 A31	•刀体直径:63-200mm •最大切深:6.1mm •适用于P、K材料的粗加工 •Tool diameter: 63–200mm •Maximum depth of cut: 6.1mm •Suitable for roughing of P and K materials
	RFM..S45..XN07E A32	XN..0705 A33	•刀体直径:40-160mm •最大切深:4mm •两种不同槽型,适用于钢件、不锈钢、铸铁、高温合金的平面铣削加工 •分粗加工和精加工刀片,可应对粗加工至精加工的场景 •Tool body diameter: 40–160mm •Maximum depth of cut: 4mm •Two different chipbreakers, suitable for face milling of steel, stainless steel, cast iron, and high–temperature alloys •Available with roughing and finishing inserts, suitable for roughing to finishing applications.
	RFM..S45..XN07W A34	XNHF0705 A34	•刀体直径:63-125mm •最大切深:4mm •加工铸铁专用刀片 •Tool diameter: 63–125mm •Maximum depth of cut: 4mm •Special tool for machining cast iron
	RFM..S45..XN09W A35	XN..09T5 A35	•刀体直径:63-160mm •最大切深:6mm •适用于钢件、不锈钢、铸铁的平面铣削加工 •分粗加工和半精加工刀片 •Tool body diameter: 63–160mm •Maximum depth of cut: 6mm •Suitable for face milling of steel, stainless steel, and cast iron •Available with roughing and semi–finishing inserts

可转位铣削刀具一览表 Indexable milling tools list

加工类型 Machining type	刀体 Tool Body	适配刀片 Compatible Inserts	简介 Introduction	
平面铣削 Face Milling	RFM..S45..XN09T A36	XN..0906 A36	•刀体直径:63-160mm •最大切深:5mm	• Insert diameter: 63–160mm • Maximum cutting depth: 5mm
	RFM..S42..ON05W A37	ON..0504 A37	• 刀体直径:50-125mm • 最大切深:3mm •分M、G、H级三款公差刀片,H级刀片自带修光刃,可应对粗加工至精加工的场景	• Tool body diameter: 50–125mm • Maximum depth of cut: 3mm • Available in three tolerances: M, G, and H. The H–class insert has a wiper and can handle roughing to finishing applications.
	RFM..S44..ON06E A38	ON..0604 A38	• 刀体直径:50-125mm • 最大切深:3.5mm • 带修光刃及不带修光刃两款刀片可供选择 • 大前角刀片针对加工M S类材料	• Insert diameter: 50–125mm • Maximum depth of cut: 3.5mm • Two types of inserts available: with and without wiper • Big rake angle inserts for machining M and S materials
	RFM..S43..ON07B A39	 ON..0707 A39	• 刀体直径:50-160mm • 最大切深:4mm •P、M、S材料稳定工况粗加工及中等加工	• Tool diameter: 50–160mm • Maximum depth of cut: 4mm • Roughing and medium machining of P, M, and S materials under stable working conditions
	RFM..S43..ON08C A40	ON..0806 A40	•刀体直径:63-160mm •最大切深:5.5mm •两种槽型可供选择 ML槽型适用于S、M和P材料加工 MM槽型适用于P、K材料粗加工	• Tool body diameter: 63–160mm • Maximum depth of cut: 5.5mm • Two chipbreakers available: ML chipbreaker suitable for machining S, M, and P materials; MM chipbreaker suitable for roughing P and K materials.
方肩铣削 Shoulder Milling	RSM..AD10S A41	AD..10T3 A41	•刀体直径:16-100mm •最大切深:10mm •适用于M、S、P材料的面铣、方肩铣、摆线铣以及螺旋插补铣	• Tool diameter: 16–100mm • Maximum depth of cut: 10mm • Suitable for face milling, square shoulder milling, trochoidal milling, and helical interpolation milling of M, S,and P materials.
	RSM..AD16S A44	AD..1605 A44	•刀体直径:25-125mm •最大切深:10mm •适用于M、S、P材料的面铣、方肩铣、摆线铣以及螺旋插补铣	• Tool diameter: 25–125mm • Maximum depth of cut: 10mm • Suitable for face milling, square shoulder milling, trochoidal milling, and helical interpolation milling of M, S, and P materials.
	RSM..AD18S A47	 AD..1806 A47	•刀体直径:32-125mm •最大切深:17mm •适用于P、M、K材料的面铣、方肩铣、槽铣、坡走铣和螺旋插补铣的粗加工	• Tool diameter: 32–125mm • Maximum depth of cut: 17mm • Suitable for roughing operations of face milling, shoulder milling, slot milling, ramp milling, and helical interpolation milling on P, M, and K materials.

可转位铣削刀具 Indexable milling tool

可转位铣削刀具一览表 Indexable milling tools list

加工类型 Machining type	刀体 Tool body	适配刀片 Compatible Inserts	简介 Introduction
方肩铣削 Shoulder milling	RSM..AO10R A49	AO..1004 A49	•刀体直径:16-63mm •最大切深:10mm •大切入角设计,极低的切削阻力。逆正角刃口结构设计提升切削刃强度同时实现高进给稳定加工。适用于M、S、P类材料面铣、方肩铣的半精加工和精加工 • Tool body diameter: 16–63mm • Maximum depth of cut: 10mm • Large entry angle design, extremely low cutting resistance. The reverse positive angle cutting edge structure design enhances cutting edge strength while achieving stable high feed rate machining. Suitable for semi–finishingand finishing of face milling and square shoulder milling of M, S, and P type materials.
	RSM..LN09W A52	LN..0904 A52	•刀体直径:25-125mm •最大切深:9mm •立装刀片。磨制级精度,可提供R0.8、R1.2两种圆弧角选择。适用于P、M、S材料方肩铣、面铣、开槽铣、玉米铣的半精加工和精加工 • Tool body diameter: 25–63mm • Maximum depth of cut: 9mm • Vertical mounting inserts. Grind class precision, with R0.8 and R1.2 radius options available. Suitable for semi–finishing and finishing of square shoulder milling, face milling, grooving, and corn milling on P, M, and S materials.
	RSM..LN13C A55	LN..1306 A55	• 刀体直径:32-125mm • 最大切深:12.5mm • 立装刀片,磨制级精度,圆角R0.4/R0.8/R1.2可选,适用于P/M/S材料方肩、面铣、开槽、玉米铣的粗加工与半精加工。 • Tool body diameter: 32–125mm • Maximum depth of cut: 12.5mm • Vertical insert, ground class precision, corner radius R0.4/R0.8/R1.2 optional, suitable for roughing andsemi–finishing of P/M/S materials with square shoulders milling, face milling, grooving, and corn milling.
	RSM..TN07G A58	TN..0703 A58	• 刀体直径:18-80mm • 最大切深:6.5mm • 磨制级刀片,圆角R0.4/R0.8可选,带修光刃,表面质量优异,适用于P/M/S材料方肩、面铣的半精与精加工。 • Tool body diameter: 18–80mm • Maximum depth of cut: 6.5mm • Ground class inserts, corner radius R0.4/R0.8 optional, with wiper, excellent surface quality, suitable for semi–finishing and finishing of square shoulders and face milling of P/M/S materials.
	RSM..TN12G A60	TN..1207 A60	•刀体直径:32-125mm •最大切深:11mm •压制级刀片,带修光刃,大切深仍可保证良好表面质量,适用于 P/M/S 材料方肩、面铣的粗加工与中等加工。 • Tool body diameter: 32–125mm • Maximum depth of cut: 11mm • Press–class insert with wiper; maintains good surface quality even at large depths of cut; suitable for roughing and medium machining of square shoulders and face milling on P/M/S materials.
	RSM..SN12L A62	SN..1204 A62	•刀体直径:32-160mm •最大切深:8mm •磨制级刀片,圆角 R0.8/R1.2/R1.6 可选,锋利刃口适用于 P/M/S材料精加及半精加。 • Insert diameter: 32–160mm • Maximum depth of cut: 8mm • Ground insert, corner radius R0.8/R1.2/R1.6 optional, sharp cutting edge suitable for finishing and semi–finishing P/M/S materials.
	RSM..SD09W A64	SD..09T3 A64	•刀体直径:25-80mm •最大切深:8.4mm •压制级 S 型正型刀片,圆角 R0.4/R0.8/R1.2/R1.6/R2.0 可选,适用于 P/M/S 材料方肩、面铣、坡走、螺旋插补、型腔铣的中切及半精铣。 • Tool body diameter: 25–80mm • Maximum depth of cut: 8.4mm • Press–class S–type positive profile inserts, with selectable fillet radius R0.4/R0.8/R1.2/R1.6/R2.0. Suitable for center and semi–finish milling of P/M/S materials with square shoulders milling, face milling, ramp milling, helical interpolation, and cavity milling.
	 RSM..SP12W A66	SP..1204 A66	•刀体直径:63-200mm •最大切深:11mm •压制级S型正型刀片,有R0.8 R1.6 R2.0三种圆弧角可选择,适用于P、M、S材料方肩铣、面铣和玉米铣的粗加工 • Tool body diameter: 63–200mm • Maximum depth of cut: 11mm • Press–class S–type positive inserts, available in three radius angles: R0.8, R1.6, and R2.0, suitable for roughing of P, M, and S materials using square shoulder milling, face milling, and corn milling.

可转位铣削刀具一览表 Indexable milling tools list

加工类型 Machining type	刀体 Tool body	适配刀片 Compatible Inserts	简介 Introduction	
高进给铣削 High feed milling	REM..LN03G A67	LN..0303 A67	• 刀体直径:16-50mm • 最大切深:1mm •小主偏角设计,加工性能优异。 •PM 通用槽型,适配P/M/K/S; •ML 低切削力槽型,适配M/S。 •适用方肩、面铣、槽铣、型腔、坡走、螺旋插补铣。	• Tool body diameter: 16–50mm • Maximum depth of cut: 1mm • Small lead angle design for excellent machining performance. PM universal chipbreaker, compatible with P/M/K/S; ML low cutting force slot type, compatible with M/S. • Suitable for square shoulder milling, face milling, slot milling, cavity milling, ramp milling, and helical interpolation milling.
	REM..LN06T A69	LN..0603 A69	•刀体直径:16-63mm •最大切深:1mm •通用槽型,适用于P、M、K、S材料的方肩铣、面铣、槽铣、型腔铣、坡走铣以及螺旋插补铣。	• Tool body diameter: 16–63mm • Maximum depth of cut: 1mm • Universal slot type, suitable for square shoulder milling, face milling, slot milling, cavity milling, ramp milling, and helical interpolation milling of P, M, K, and S materials.
	REM..LN09T A71	LN..0904 A71	• 刀体直径:25-100mm •最大切深:1.5mm •通用槽型,适用于P、M、K、S材料的方肩铣、面铣、槽铣、型腔铣、坡走铣以及螺旋插补铣。	• Tool body diameter: 25–100mm • Maximum depth of cut: 1.5mm • Universal slot type, suitable for square shoulder milling, face milling, slot milling, cavity milling, ramp milling, and helical interpolation milling of P, M, K, and S materials.
	REM..SO13T A73	SO..1306 A73	• 刀体直径:32-125mm • 最大切深:2mm •抗崩性强,适用于P、M、K材料的方肩铣、面铣、槽铣、坡走铣以及螺旋插补铣。	• Tool body diameter: 32–125mm • Maximum depth of cut: 2mm • High chip resistance, suitable for square shoulder milling, face milling, slot milling, ramp milling, and helical interpolation milling of P, M, and K materials.
	REM..PD09P A75	PD..0905 A75	• 刀体直径:32-125mm • 最大切深:2mm •大正前角槽型,切削阻力小,适用于 P/M/K/S 材料轻中载快进给加工。	• Tool body diameter: 32–125mm • Maximum depth of cut: 2mm • Large positive rake chipbreaker design, low cutting resistance, suitablefor light to medium load high feed machiningof P/M/K/S materials.
	REM..HN06K A77	HN..060432 A77	•刀体直径:25-32mm •最大切深:1.6mm •压制级双面 12 刃快进给刀片,P/M/K/S 材料快进给粗加工,具有极高的经济性。	• Insert diameter: 25–32mm •Maximum cutting depth: 1.6mm •Press–class, double–sided, 12 edges high feed insert, for high feed roughing of P/M/K/S materials, offering extremely high economic efficiency.
	RPM..RP12S A78	RP..1204 A78	•刀体直径:25-63mm •最大切深:6mm •底部防转槽设计,装夹更牢固,可精准设定刃口使用次数。 •MR 槽型:通用粗加工,适配 P、M、K、S 材料。 •M30 槽型:轻中载加工,适配 P、M、S 材料。	• Tool body diameter: 25–63mm • Maximum depth of cut: 6mm • Bottom anti–rotation groove design for more secure clamping and precise setting of cutting edge usage cycles. • MR groove type: Universal roughing, suitable for P, M, K, and S materials. • M30 groove type: Light to medium load machining, suitable for P, M, and S materials.
	RPM..RP16S A80	RP..16 A80	•刀体直径:50-100mm •最大切深:8mm •M50槽型:底部防转槽,装夹牢固,通用粗加工槽型,适配P/M/K/S。 •ML槽型:轻载加工槽型,适配P/M/S。	• Tool body diameter: 50–100mm • Maximum depth of cut: 8mm • M50 groove type: Bottom anti–rotation groove, secure clamping, universal roughing groove type, suitable for P/M/K/S. • ML groove type: Light–load machining groove type, suitable for P/M/S.

可转位铣削刀具 Indexable milling tool

硬质合金铣削牌号简介 Cemented carbide milling grade introduction

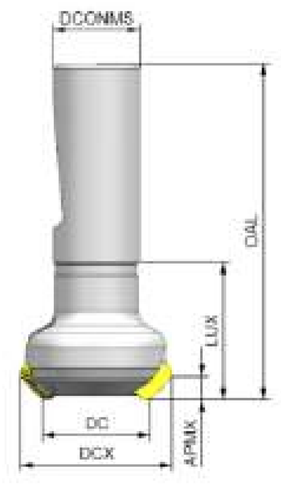
牌号 Grade	ISO	特性及应用 Features and Applications
MK10A 无涂层 Uncoated	K05–K15 N05–N15 S05–S15	·适用于铸铁，铝合金，有色金属的通用加工 Suitable for general machining of cast iron, aluminum alloys, and non–ferrous metals.
MK1017 PVD	K05–K25 H05–H25	·适用于灰口铸铁和球墨铸铁的通用加工 ·适用于淬硬钢的中等加工和精加工 · Suitable for general machining of gray cast iron and ductile iron · Suitable for medium and finishing machining of hardened steel
MK2017 PVD	P05–P25 K05–K25	·适用于钢的通用铣削 ·适用于铸铁的重型断续铣削 · Suitable for general milling of steel · Suitable for heavy–load interrupted milling of cast iron
MP3017 PVD	P20–P40 M20–M40 S20–S40	·适用于钢，不锈钢和耐热合金的通用加工 Suitable for general machining of steel, stainless steel, and heat–resistant alloys.
MP3015 PVD	P20–P40 M20–M40 S20–S40	·适用于钢，不锈钢和耐热合金的通用加工 Suitable for general machining of steel, stainless steel, and heat–resistant alloys.
SM3517 PVD	P30–P50 M30–M50 S30–S50	·适用于钢和不锈钢的断续和粗加工 ·适用于耐热合金的低速和断续加工 · Suitable for interrupted and rough machining of steel and stainless steel. · Suitable for low–speed and interrupted machining of heat–resistant alloys.
SM3515 PVD	P30–P50 M30–M50 S30–S50	·适用于钢和不锈钢的断续和粗加工 ·适用于耐热合金的低速和断续加工 · Suitable for interrupted and rough machining of steel and stainless steel. · Suitable for low–speed and interrupted machining of heat–resistant alloys.

切削速度推荐(m/min) Vc recommendation

P1-P2	P3-P11	P12	M1-M2	M3-M5	K1-K4	K5-K7	S1-S3、S13	S11-S12
					50-130	40-90	35-70	120-145
					115-300	100-260		
200-350	140-250	90-150			95-250	90-200		
180-320	115-215	75-135	115-270	100-230			35-80	90-130
150-280	100-185	60-110	90-240	70-180			20-65	60-100
120-210	70-170	40-80	80-180	60-130			20-50	45-85
105-195	50-145	30-65	70-165	50-115			20-50	45-85

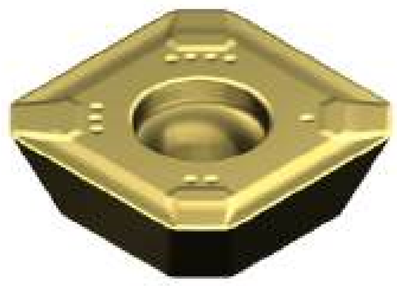
可转位铣削刀具 Indexable milling tool

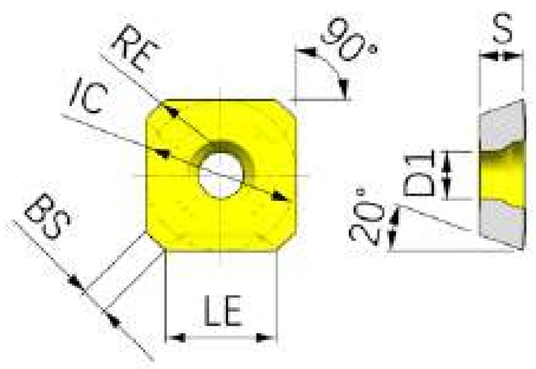
SE12 45°平面铣削刀具 SE12 45°Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
RFMN32-N32Z3L117-S45-SE12V	32	44.5	39	117	32	3	6.0	0.66	SE*12T3
RFMN40-N32Z3L120-S45-SE12V	40	52.5	39	120	32	3	6.0	0.80	
RFMN50-N32Z3L120-S45-SE12V	50	62.5	39	120	32	3	6.0	1.03	
RFMN50-N32Z4L120-S45-SE12V	50	62.5	39	120	32	4	6.0	1.03	
RFMN63-N32Z4L120-S45-SE12V	63	75.5	39	120	32	4	6.0	1.10	
RFMN63-N32Z5L120-S45-SE12V	63	75.5	39	120	32	5	6.0	1.10	
RFMN80-N32Z4L120-S45-SE12V	80	92.5	39	120	32	4	6.0	1.06	
RFMN80-N32Z6L120-S45-SE12V	80	92.5	39	120	32	6	6.0	1.06	



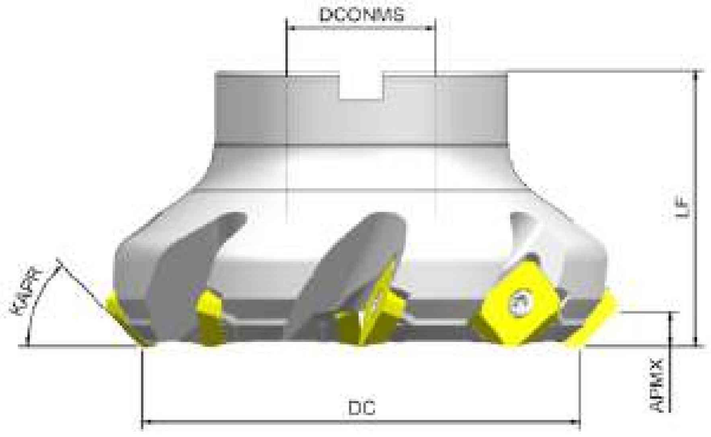


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
SEGT12T3N-PM	13.40	3.97	13.40	2.00	1.00	4.10
SEMT12T3N-PM	13.40	3.97	13.40	2.00	1.00	4.10

配件
Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..SE12V	SG3585-P	TS10W-P

SE12 45°平面铣削刀具 SE12 45°Face milling tools



Kr=45°

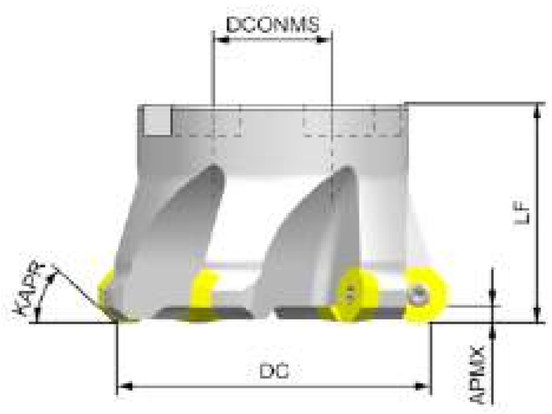
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z5-S45-SE12V	50	40	22	5	6.0	0.37	SE*12T3
RFMN50-A22Z3-S45-SE12V	50	40	22	3	6.0	0.37	
RFMN50-A22Z4-S45-SE12V	50	40	22	4	6.0	0.37	
RFMN63-A22Z6-S45-SE12V	63	40	22	6	6.0	0.59	
RFMN80-A27Z8-S45-SE12V	80	50	27	8	6.0	1.03	
RFMN100-B32Z10-S45-SE12V	100	50	32	10	6.0	2.18	
RFMN125-B40Z12-S45-SE12V	125	63	40	12	6.0	3.53	
RFMN160-C40Z16-S45-SE12V	160	63	40	16	6.0	4.10	

配件
Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..SE12V	SG3585-P	TS10W-P

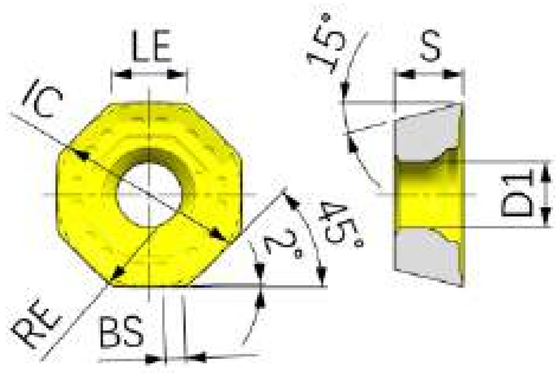
可转位铣削刀具 Indexable milling tool

OD05 43°平面铣削刀具 OD05 43°Face milling tools



Kr=43°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63-A22Z5-S43-OD05W	63	40	22	5	3.0	0.43	OD*0504
RFMN63-A22Z6-S43-OD05W	63	40	22	6	3.0	0.72	
RFMN72-A27Z6-S43-OD05W	72	50	27	6	3.0	1.08	
RFMN72-A27Z7-S43-OD05W	72	50	27	7	3.0	1.18	
RFMN92-B32Z8-S43-OD05W	92	50	32	8	3.0	2.15	
RFMN125-B40Z10-S43-OD05W	125	63	40	10	3.0	4.14	

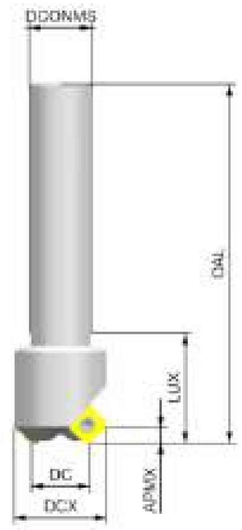


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
ODHT050408AD-MM	12.70	4.76	5.20	1.37	0.80	4.50
ODMT050408AD-MM	12.70	4.76	5.20	1.37	0.80	4.50

配件
Spare part

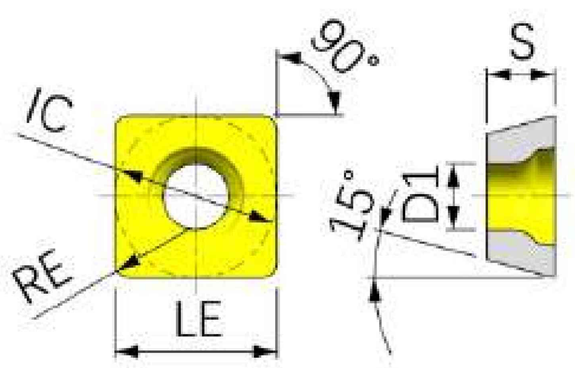
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S43..OD05W	SD4010	TS15W

SD09 45°平面铣削刀具 SD09 45°Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
RFMN20-N20Z2L110-S45-SD09W	20	30	35	110	20	2	4.5	0.30	SD*09T3
RFMN25-N25Z3L110-S45-SD09W	25	35	35	110	25	3	4.5	0.47	



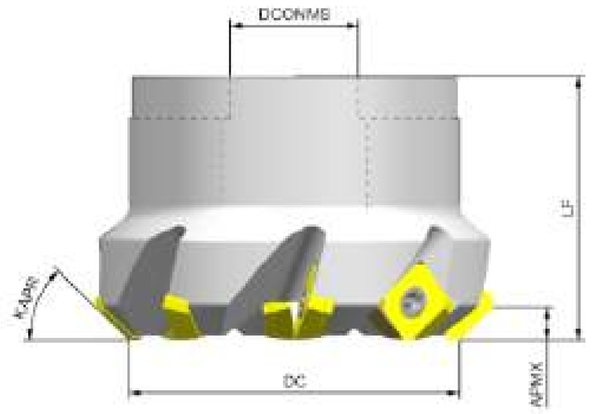
刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
SDMT09T304-MM	9.525	3.97	9.525	0.40	3.90
SDMT09T308-MM	9.525	3.97	9.525	0.80	3.90
SDMT09T312-MM	9.525	3.97	9.525	1.20	3.90
SDMT09T316-MM	9.525	3.97	9.525	1.60	3.90
SDMT09T320-MM	9.525	3.97	9.525	2.00	3.90

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..SD09E	SD3580	TS15W

可转位铣削刀具 Indexable milling tool

SD09 45°平面铣削刀具 SD09 45°Face milling tools



Kr=45°

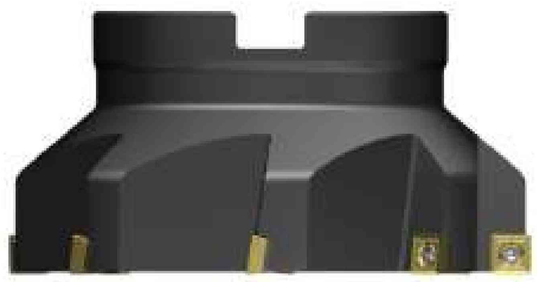
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN32-A16Z4-S45-SD09E	32	40	16	4	4.5	0.27	SD*09T3
RFMN40-A16Z6-S45-SD09E	40	40	16	6	4.5	0.29	
RFMN50-A22Z6-S45-SD09E	50	40	22	6	4.5	0.51	
RFMN50-A22Z8-S45-SD09E	50	40	22	8	4.5	0.51	
RFMN63-A22Z7-S45-SD09E	63	40	22	7	4.5	0.68	
RFMN63-A22Z10-S45-SD09E	63	40	22	10	4.5	0.68	
RFMN80-A27Z8-S45-SD09E	80	50	27	8	4.5	1.24	
RFMN80-A27Z12-S45-SD09E	80	50	27	12	4.5	1.24	

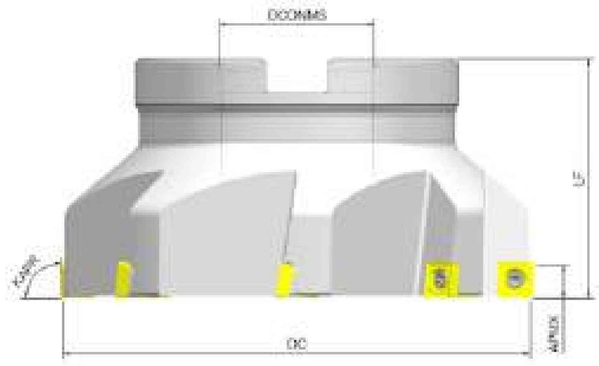
适配刀片第A18页
Compatible inserts, page A18

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..SD09E	SD3580	TS15W

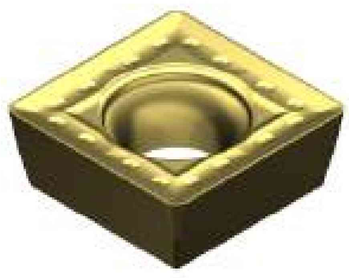
SP12 75°平面铣削刀具 SP12 75°Face milling tools

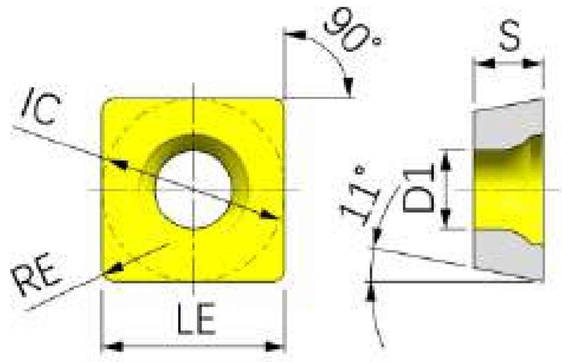




Kr=75°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN80-A27Z6-S75-SP12W	80	50	27	6	10.0	1.28	SP*1204
RFMN100-B32Z7-S75-SP12W	100	50	32	7	10.0	1.77	
RFMN125-B40Z8-S75-SP12W	125	63	40	8	10.0	3.54	
RFMN160-C40Z10-S75-SP12W	160	63	40	10	10.0	5.64	
RFMN200-C60Z12-S75-SP12W	200	63	60	12	10.0	8.81	





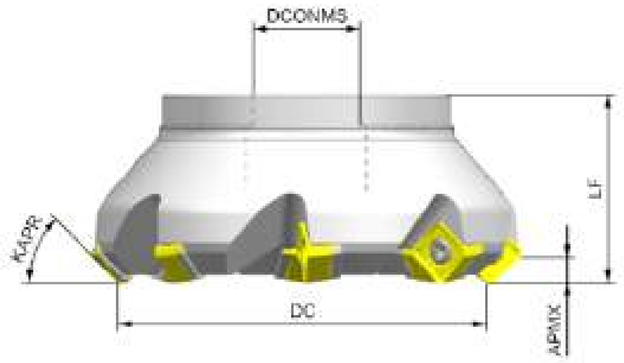
刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
SPMT120408-M30	12.70	4.76	12.70	0.80	5.50
SPMT120416-M30	12.70	4.76	12.70	1.60	5.50
SPMT120420-M30	12.70	4.76	12.70	2.00	5.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S75..SP12W	SG5016	TS20W

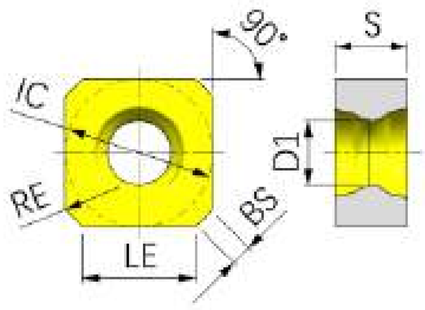
可转位铣削刀具 Indexable milling tool

SN12 45°平面铣削刀具 SN12 45°Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z4-S45-SN12E	50	40	22	4	6.5	0.5	SN*1206AN
RFMN50-A22Z6-S45-SN12E	50	40	22	6	6.5	0.5	
RFMN63-A22Z6-S45-SN12E	63	40	22	6	6.5	0.6	
RFMN63-A22Z8-S45-SN12E	63	40	22	8	6.5	0.6	
RFMN80-A27Z5-S45-SN12E	80	50	27	5	6.5	1.2	
RFMN80-A27Z7-S45-SN12E	80	50	27	7	6.5	1.2	
RFMN100-B32Z6-S45-SN12E	100	50	32	6	6.5	1.8	
RFMN100-B32Z8-S45-SN12E	100	50	32	8	6.5	1.8	
RFMN125-B40Z7-S45-SN12E	125	63	40	7	6.5	3.8	
RFMN125-B40Z8-S45-SN12E	125	63	40	8	6.5	3.8	
RFMN125-B40Z10-S45-SN12E	125	63	40	10	6.5	3.7	
RFMN160-C40Z10-S45-SN12E	160	63	40	10	6.5	4.7	
RFMN200-C60Z14-S45-SN12E	200	63	60	14	6.5	7.2	
RFMN250-C60Z16-S45-SN12E	250	63	60	16	6.5	13.0	

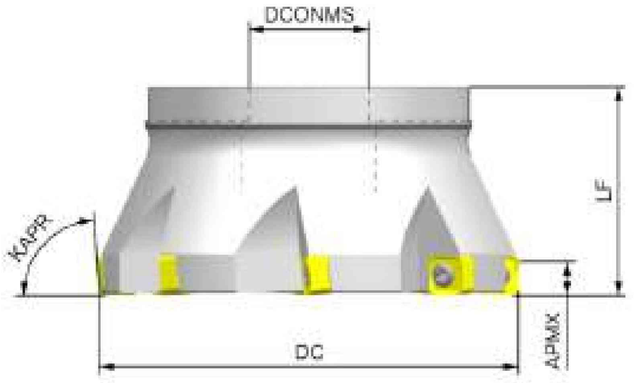


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
SNMX1206ANN-PM	12.70	6.22	9.50	1.79	0.40	5.50

配件 Spare part

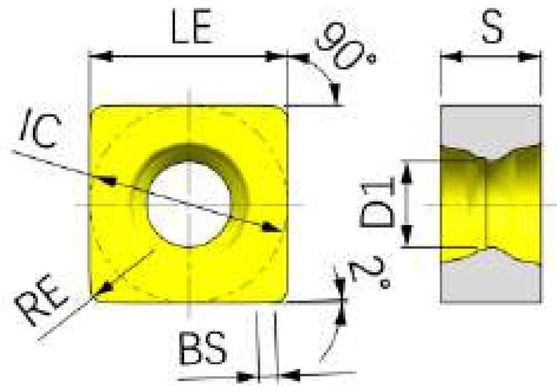
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..SN12E	SG5012-P	TS20W-P

SN12 88°平面铣削刀具 SN12 88° Face milling tools



Kr=88°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50–A22Z4–S88–SN12E	50	40	22	4	10.0	0.4	SN*1206ZN
RFMN63–A22Z6–S88–SN12E	63	40	22	6	10.0	0.6	
RFMN80–A27Z7–S88–SN12E	80	50	27	7	10.0	1.2	
RFMN100–B32Z8–S88–SN12E	100	50	32	8	10.0	1.8	
RFMN100–B32Z11–S88–SN12E	100	50	32	11	10.0	1.6	
RFMN125–B40Z10–S88–SN12E	125	63	40	10	10.0	3.5	
RFMN125–B40Z13–S88–SN12E	125	63	40	13	10.0	3.5	
RFMN160–C40Z12–S88–SN12E	160	63	40	12	10.0	4.5	
RFMN200–C60Z14–S88–SN12E	200	63	60	14	10.0	7.2	



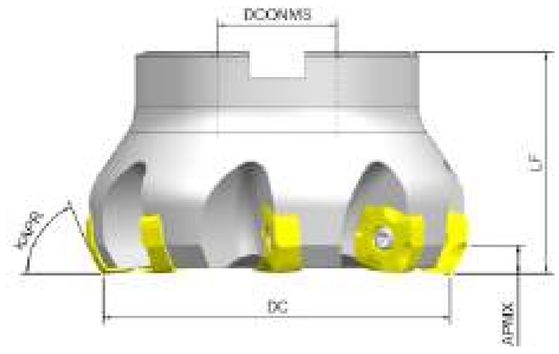
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
SNMX1206ZNN–PM	12.70	6.47	12.70	1.20	0.80	5.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S88..SN12E	SG5012–P	TS20W–P

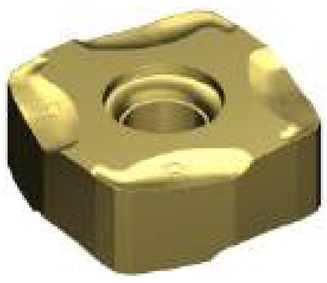
可转位铣削刀具 Indexable milling tool

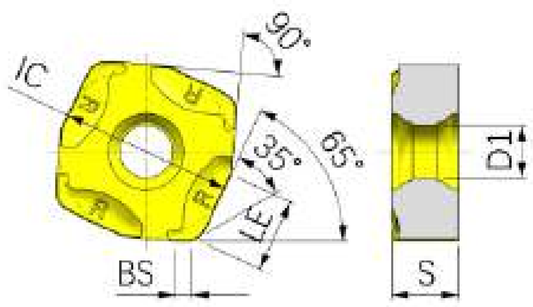
SN15 65°平面铣削刀具 SN15 65°Face milling tools



Kr=65°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z5-S65-SN15V	50	50	22	5	6.0	0.43	SN*1505
RFMN63-A63Z5-S65-SN15V	63	60	22	5	6.0	1.53	
RFMN63-A22Z6-S65-SN15V	63	50	22	6	6.0	0.79	
RFMN63-A22Z5-S65-SN15V	63	50	22	5	6.0	0.78	
RFMN80-A27Z8-S65-SN15V	80	50	27	8	6.0	1.20	
RFMN80-A27Z6-S65-SN15V	80	50	27	6	6.0	1.20	
RFMN80-A27Z10-S65-SN15V	80	50	27	10	6.0	1.32	
RFMN100-B32Z10-S65-SN15V	100	50	32	10	6.0	1.85	
RFMN100-B32Z7-S65-SN15V	100	50	32	7	6.0	1.85	
RFMN100-B32Z14-S65-SN15V	100	50	32	14	6.0	1.93	
RFMN125-B40Z12-S65-SN15V	125	63	40	12	6.0	3.52	



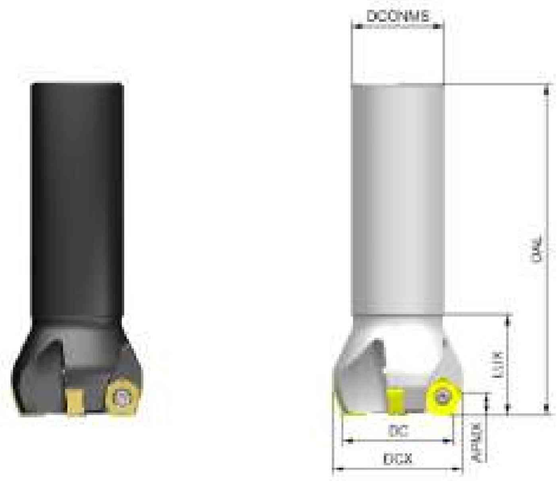


刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	BS	D1
SNMX1505R-KM	15.00	5.75	6.40	1.13	4.60

配件 Spare part

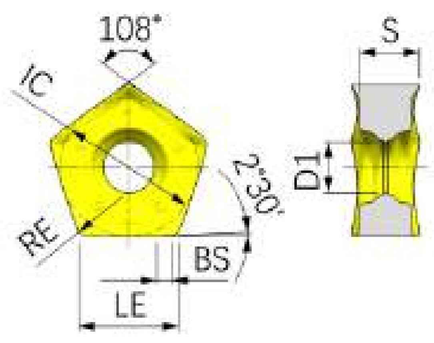
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S65..SN15V	SD4010	TS15W

PN09 70°平面铣削刀具 PN09 70°Face milling tools



Kr=70°

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
RFMN32-S32Z3L115-S70-PN09G	32	38	35	115	32	3	6.4	0.7	PN*0905
RFMN40-S32Z4L115-S70-PN09G	40	46	35	115	32	4	6.4	0.7	
RFMN50-S32Z4L120-S70-PN09G	50	56	40	120	32	4	6.4	0.9	



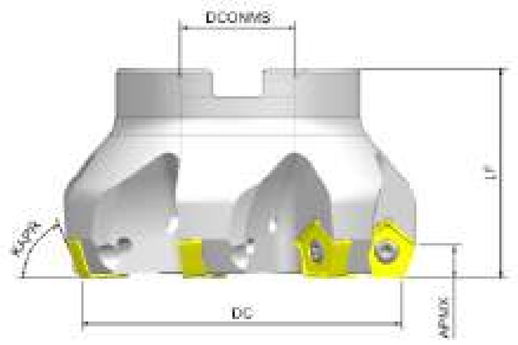
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
PNMU090508-MM	12.20	5.30	9.00	1.36	0.80	4.60
PNHU090508-MM	12.20	5.30	9.00	1.36	0.80	4.60

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S70..PN09G	SD4010	TS15W

可转位铣削刀具 Indexable milling tool

PN09 70°平面铣削刀具 PN09 70°Face milling tools



Kr=70°

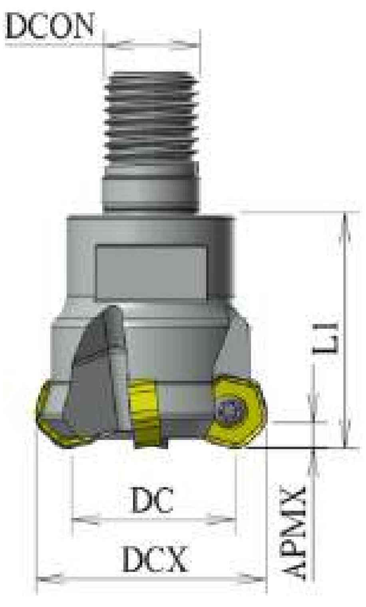
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z3-S70-PN09G	50	40	22	3	6.4	0.3	PN*0905
RFMN50-A22Z4-S70-PN09G	50	40	22	4	6.4	0.3	
RFMN50-A22Z6-S70-PN09G	50	40	22	6	6.4	0.3	
RFMN63-A22Z4-S70-PN09G	63	40	22	4	6.4	0.5	
RFMN63-A22Z6-S70-PN09G	63	40	22	6	6.4	0.5	
RFMN63-A22Z8-S70-PN09G	63	40	22	8	6.4	0.5	
RFMN80-A27Z7-S70-PN09G	80	50	27	7	6.4	0.9	
RFMN80-A27Z10-S70-PN09G	80	50	27	10	6.4	1.0	
RFMN100-B32Z8-S70-PN09G	100	50	32	8	6.4	1.3	
RFMN100-B32Z12-S70-PN09G	100	50	32	12	6.4	1.4	
RFMN125-B40Z10-S70-PN09G	125	63	40	10	6.4	2.3	
RFMN125-B40Z16-S70-PN09G	125	63	40	16	6.4	2.5	
RFMN160-C40Z12-S70-PN09G	160	63	40	12	6.4	4.0	
RFMN160-C40Z20-S70-PN09G	160	63	40	20	6.4	4.3	

适配刀片第A24页
Compatible inserts, page A24

配件 Spare part

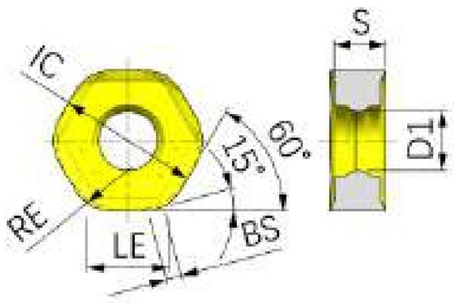
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S70..PN09G	SD4010	TS15W

HN06 45°平面铣削刀具 HN06 45° Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	L1	DCON	Z	APMX		
RFMN25-M16Z3-S45-HN06K	25	33.2	32	16	3	3.2	0.13	HN*0604
RFMN32-M16Z3-S45-HN06K	32	40.2	40	16	3	3.2	0.21	
RFMN32-M16Z4-S45-HN06K	32	40.2	40	16	4	3.2	0.21	



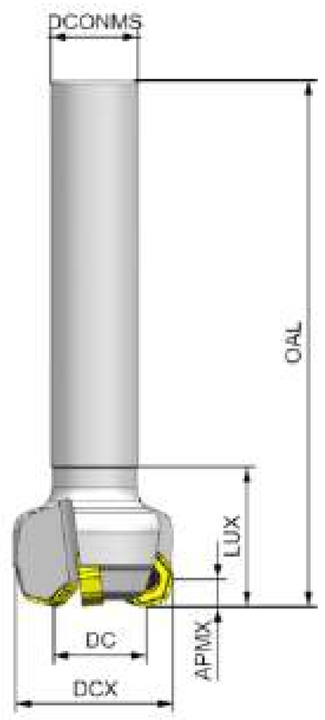
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	BS	S	LE	RE	D1
HNGU0604AN-ML	12.20	1.40	4.41	7.00	1.00	5.00
HNMU060432-MM	12.20	/	4.41	7.00	3.20	5.00

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..HN06K	SD4010	TS15W

可转位铣削刀具 Indexable milling tool

HN06 45°平面铣削刀具 HN06 45° Face milling tools

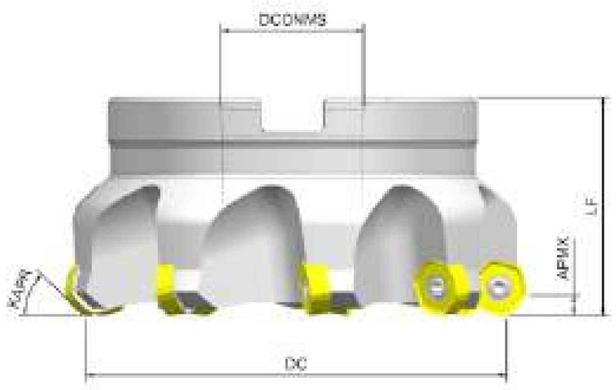


Kr=45°

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
RFMN25-S20Z3L82-S45-HN06K	25	33.2	32	82	20	3	3.2	0.21	HN*0604
RFMN32-S25Z3L97-S45-HN06K	32	40.2	40	97	25	3	3.2	0.40	
RFMN32-S25Z4L97-S45-HN06K	32	40.2	40	97	25	4	3.2	0.40	
RFMN25-S20Z2L120-S45-HN06K	25	33.2	32	120	20	2	3.2	0.28	
RFMN25-S20Z3L120-S45-HN06K	25	33.2	32	120	20	3	3.2	0.28	
RFMN25-S25Z3L200-S45-HN06K	25	33.2	32	200	25	3	3.2	0.71	
RFMN32-S25Z3L130-S45-HN06K	32	40.2	40	130	25	3	3.2	0.50	
RFMN32-S25Z4L130-S45-HN06K	32	40.2	40	130	25	4	3.2	0.50	

适配刀片第A26页
Compatible inserts, page A26

HN06 45°60°平面铣削刀具 HN06 45°60° Face milling tools



型号 Model	尺寸(mm) Dimensions					Kr	重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX			
RFMN40-A22Z4-S45-HN06K	40	40	22	4	3.2	45°	0.25	HN*0604
RFMN40-A22Z5-S45-HN06K	40	40	22	5	3.2	45°	0.25	
RFMN50-A22Z6-S45-HN06K	50	40	22	6	3.2	45°	0.36	
RFMN63-A22Z8-S45-HN06K	63	40	22	8	3.2	45°	0.64	
RFMN80-A27Z10-S45-HN06K	80	50	27	10	3.2	45°	1.19	
RFMN100-B32Z12-S45-HN06K	100	50	32	12	3.2	45°	1.84	
RFMN125-B40Z16-S45-HN06K	125	63	40	16	3.2	45°	3.05	
RFMN40-A22Z4-S60-HN06K	40	40	22	4	4.3	60°	0.21	
RFMN50-A22Z5-S60-HN06K	50	40	22	5	4.3	60°	0.32	
RFMN63-A22Z6-S60-HN06K	63	40	22	6	4.3	60°	0.59	
RFMN80-A27Z8-S60-HN06K	80	50	27	8	4.3	60°	1.15	
RFMN100-B32Z9-S60-HN06K	100	50	32	9	4.3	60°	1.78	
RFMN125-B40Z12-S60-HN06K	125	63	40	12	4.3	60°	2.96	

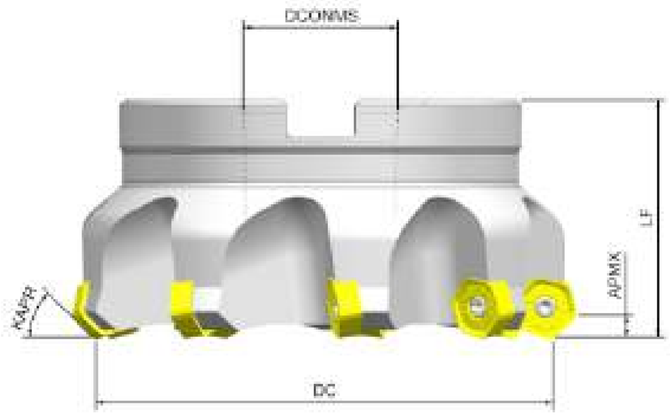
适配刀片第A26页
Compatible inserts, page A26

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..HN06K	SD4010	TS15W
RFM..S60..HN06K	SD4010	TS15W

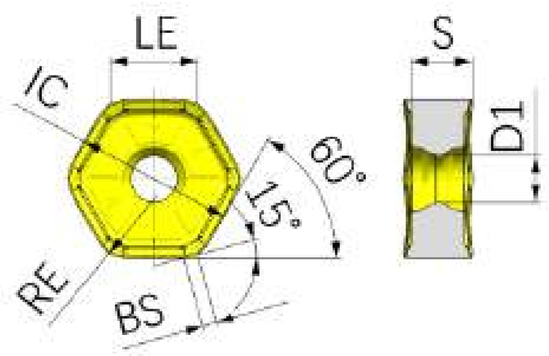
可转位铣削刀具 Indexable milling tool

HN09 45°平面铣削刀具 HN09 45° Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z4-S45-HN09P	50	40	22	4	5.0	0.38	HN*0906
RFMN63-A22Z6-S45-HN09P	63	40	22	6	5.0	0.54	
RFMN80-A27Z6-S45-HN09P	80	50	27	6	5.0	1.06	
RFMN80-A27Z8-S45-HN09P	80	50	27	8	5.0	1.06	
RFMN100-B32Z6-S45-HN09P	100	50	32	6	5.0	1.95	
RFMN100-B32Z8-S45-HN09P	100	50	32	8	5.0	1.99	
RFMN100-B32Z10-S45-HN09P	100	50	32	10	5.0	1.99	
RFMN125-B40Z6-S45-HN09P	125	63	40	6	5.0	3.36	
RFMN125-B40Z8-S45-HN09P	125	63	40	8	5.0	3.66	
RFMN125-B40Z10-S45-HN09P	125	63	40	10	5.0	3.52	
RFMN125-B40Z12-S45-HN09P	125	63	40	12	5.0	3.36	
RFMN160-C40Z8-S45-HN09P	160	63	40	8	5.0	6.24	
RFMN160-C40Z12-S45-HN09P	160	63	40	12	5.0	6.45	

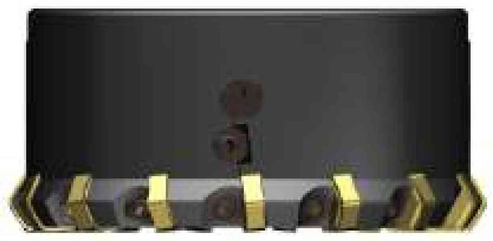


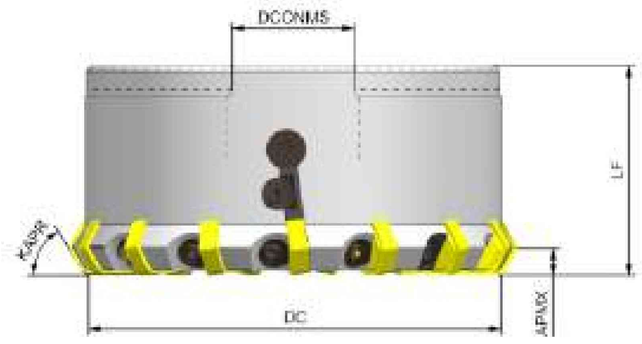
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
HNMX0906AN-M30	16.50	6.35	9.50	1.00	1.00	4.85

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..HN09P	ST4011	TS15W

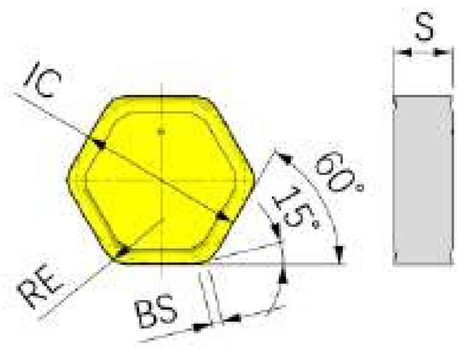
HN09 60°平面铣削刀具 HN09 60° Face milling tools





Kr=60°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN80-A27Z8-S60-HN09E	80	50	27	8	6.0	1.10	HN*0905
RFMN80-A27Z12-S60-HN09E	80	50	27	12	6.0	1.10	
RFMN100-B32Z10-S60-HN09E	100	50	32	10	6.0	2.16	
RFMN100-B32Z16-S60-HN09E	100	50	32	16	6.0	2.16	
RFMN125-B40Z12-S60-HN09E	125	63	40	12	6.0	3.82	
RFMN125-B40Z20-S60-HN09E	125	63	40	20	6.0	3.82	
RFMN160-C40Z16-S60-HN09E	160	63	40	16	6.0	6.59	
RFMN160-C40Z24-S60-HN09E	160	63	40	24	6.0	6.59	
RFMN200-C60Z32-S60-HN09E	200	63	60	32	6.0	10.60	
RFMN250-C60Z40-S60-HN09E	250	63	60	40	6.0	13.81	



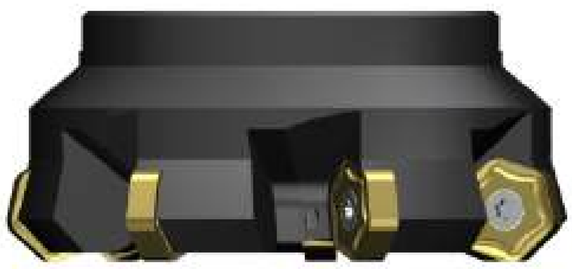
刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	BS	RE
HNHF090520-KL	16.20	5.56	9.00	/	2.00
HNHF090504AN-KL	15.88	5.56	9.00	0.57	0.40

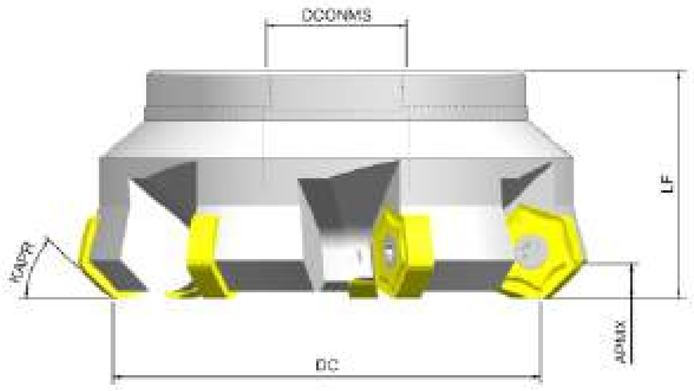
配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S60..HN09E	SG4013-P	TS15W-P

可转位铣削刀具 Indexable milling tool

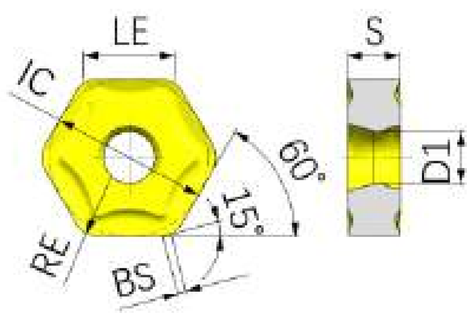
HN10 45°平面铣削刀具 HN10 45° Face milling tools





Kr=45°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63–A22Z5–S45–HN10T	63	50	22	5	6.1	0.8	HN*1006
RFMN63–A22Z6–S45–HN10T	63	50	22	6	6.1	0.9	
RFMN80–A27Z6–S45–HN10T	80	50	27	6	6.1	1.6	
RFMN80–A27Z7–S45–HN10T	80	50	27	7	6.1	1.6	
RFMN100–B32Z7–S45–HN10T	100	63	32	7	6.1	2.7	
RFMN100–B32Z9–S45–HN10T	100	63	32	9	6.1	2.8	
RFMN125–B40Z8–S45–HN10T	125	63	40	8	6.1	3.4	
RFMN125–B40Z10–S45–HN10T	125	63	40	10	6.1	3.4	
RFMN125–B40Z12–S45–HN10T	125	63	40	12	6.1	3.4	
RFMN160–C40Z10–S45–HN10T	160	63	40	10	6.1	4.8	
RFMN160–C40Z12–S45–HN10T	160	63	40	12	6.1	4.8	
RFMN160–C40Z14–S45–HN10T	160	63	40	14	6.1	4.9	
RFMN200–C60Z12–S45–HN10T	200	63	60	12	6.1	6.9	
RFMN200–C60Z14–S45–HN10T	200	63	60	14	6.1	7.0	

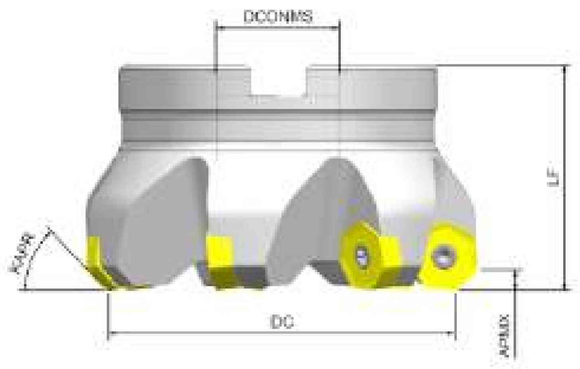


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
HNMX1006N–PM	19.05	6.35	11.00	1.13	1.00	6.30

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..HN10T	SC5012	TS20W

XN07E 45°平面铣削刀具 XN07E 45°Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN40-A16Z3-S45-XN07E	40	50	16	3	4.0	0.32	XN*0705
RFMN50-A22Z4-S45-XN07E	50	60	22	4	4.0	0.32	
RFMN50-A22Z5-S45-XN07E	50	60	22	5	4.0	0.32	
RFMN63-A22Z5-S45-XN07E	63	73	22	5	4.0	0.6	
RFMN63-A22Z6-S45-XN07E	63	73	22	6	4.0	0.6	
RFMN80-A27Z6-S45-XN07E	80	90	27	6	4.0	1.44	
RFMN80-A27Z7-S45-XN07E	80	90	27	7	4.0	1.44	
RFMN100-B32Z7-S45-XN07E	100	110	32	7	4.0	2.71	
RFMN100-B32Z8-S45-XN07E	100	110	32	8	4.0	2.71	
RFMN125-B40Z8-S45-XN07E	125	135	40	8	4.0	3.41	
RFMN125-B40Z10-S45-XN07E	125	135	40	10	4.0	3.41	
RFMN160-C40Z9-S45-XN07E	160	170	40	9	4.0	6.61	
RFMN160-C40Z12-S45-XN07E	160	170	40	12	4.0	6.61	

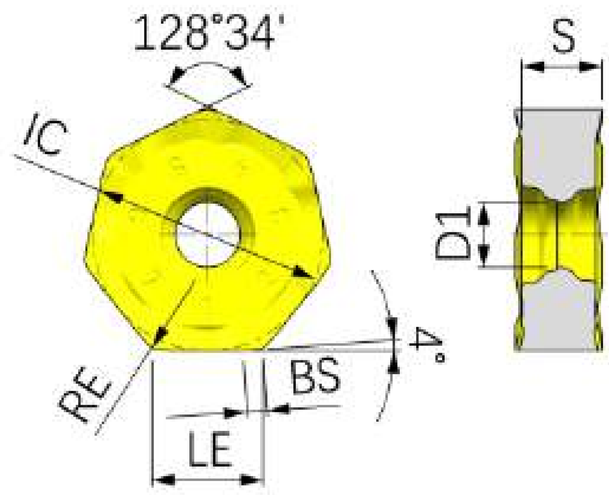
适配刀片第A33页
Compatible inserts, page A33

配件 Spare part

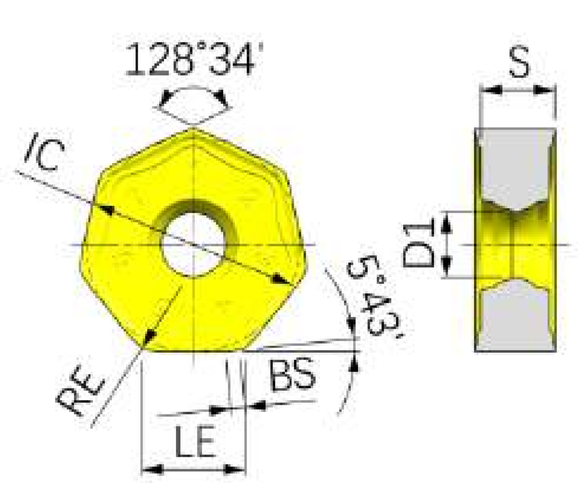
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..XN07E	SG3585-P	TS10W-P

可转位铣削刀具 Indexable milling tool

XN07E 45°平面铣削刀具 XN07E 45°Face milling tools



刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
XNMU070508-MM	14.40	4.98	7.00	/	0.80	4.10
XNMU070508AN-MM	14.40	4.98	7.00	1.25	0.80	4.10

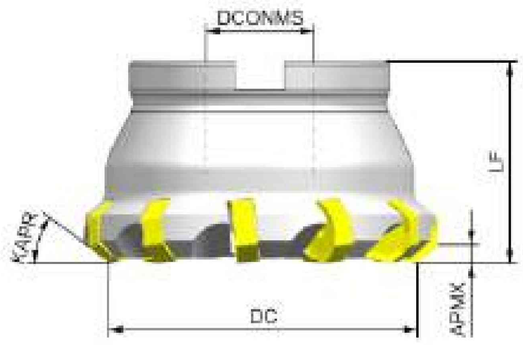


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
XNMU070508-PM	14.40	4.98	7.00	/	0.80	4.10
XNGU070508AN-PM	14.50	5.02	7.00	1.00	0.80	4.10

配件 Spare part

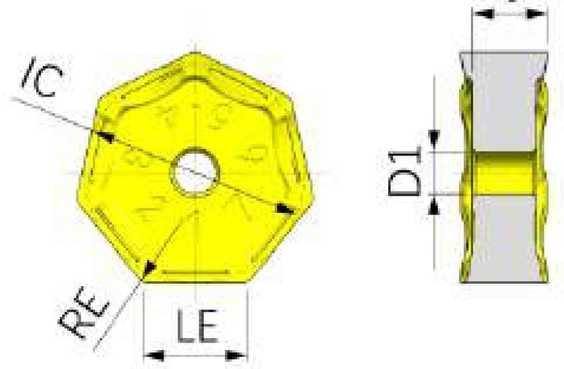
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..XN07E	SG3585-P	TS10W-P

XN07W 45°平面铣削刀具 XN07W 45°Face milling tools



Kr=45°

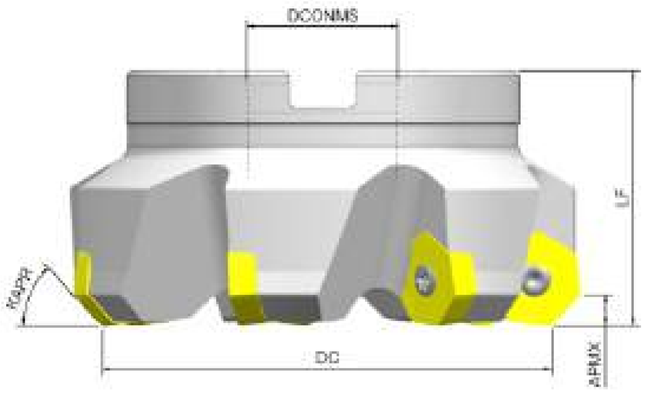
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63-A27Z9-S45-XN07W	63	50	27	9	4.0	0.94	XNHF0705
RFMN80-A27Z11-S45-XN07W	80	50	27	11	4.0	1.48	
RFMN100-B32Z14-S45-XN07W	100	50	32	14	4.0	2.69	
RFMN125-B40Z18-S45-XN07W	125	63	40	18	4.0	4.02	



刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
XNHF070508-KL	14.50	5.00	7.00	0.80	2.80

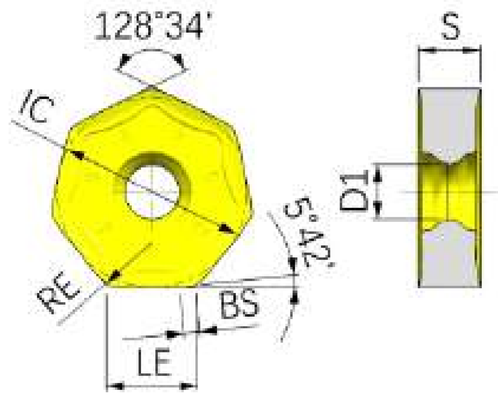
可转位铣削刀具 Indexable milling tool

XN09 45°平面铣削刀具 XN09 45°Face milling tools



Kr=45°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63-A22Z5-S45-XN09W	63	40	22	5	6.0	0.61	XN*09T5
RFMN80-A27Z6-S45-XN09W	80	50	27	6	6.0	1.42	
RFMN100-B32Z7-S45-XN09W	100	50	32	7	6.0	1.88	
RFMN125-B40Z8-S45-XN09W	125	63	40	8	6.0	3.39	
RFMN160-C40Z9-S45-XN09W	160	63	40	9	6.0	6.49	

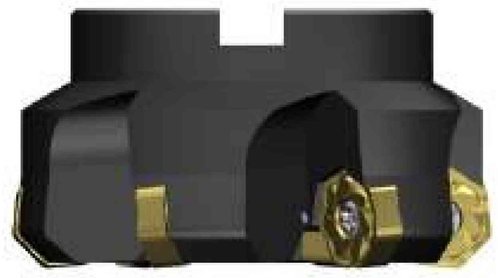


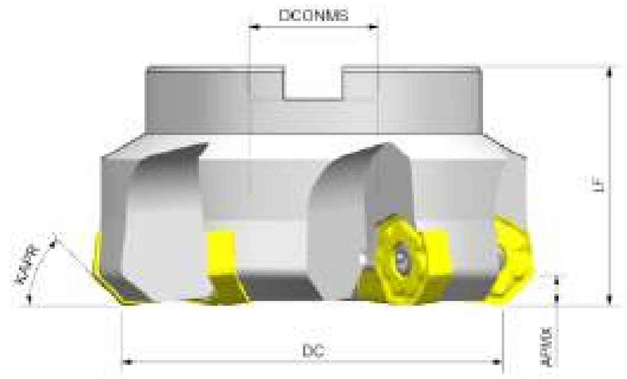
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
XNMU09T505AN-M50	19.05	5.85	9.00	1.60	0.50	5.50
XNMU09T512-KM	19.05	5.875	9.00	/	1.20	5.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..XN09W	SG5012-P	TS20W-P

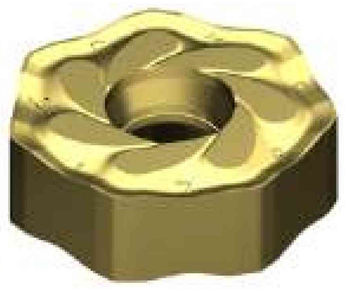
XN09 45°平面铣削刀具 XN09 45°Face milling tools

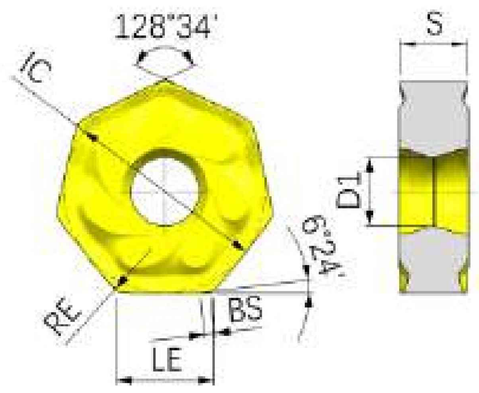




Kr=45°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63-A22Z5-S45-XN09T	63	50	22	5	5.0	0.85	XN*0906
RFMN63-A22Z6-S45-XN09T	63	50	22	6	5.0	0.86	
RFMN80-A27Z6-S45-XN09T	80	50	27	6	5.0	1.44	
RFMN80-A27Z7-S45-XN09T	80	50	27	7	5.0	1.44	
RFMN100-B32Z7-S45-XN09T	100	55	32	7	5.0	2.42	
RFMN100-B32Z9-S45-XN09T	100	55	32	9	5.0	2.46	
RFMN125-B40Z8-S45-XN09T	125	63	40	8	5.0	3.53	
RFMN125-B40Z10-S45-XN09T	125	63	40	10	5.0	3.55	
RFMN125-B40Z12-S45-XN09T	125	63	40	12	5.0	3.36	
RFMN160-C40Z10-S45-XN09T	160	63	40	10	5.0	4.77	
RFMN160-C40Z12-S45-XN09T	160	63	40	12	5.0	4.79	





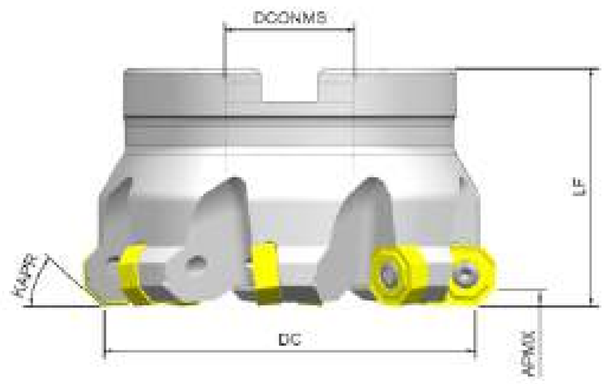
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
XNMU0906N-MM	18.50	6.35	9.00	0.96	0.80	6.30

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S45..XN09T	SG5016	TS20W

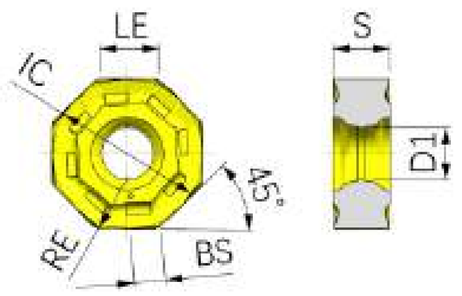
可转位铣削刀具 Indexable milling tool

ON05 42°平面铣削刀具 ON05 42°Face milling tools



Kr=42°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z4-S42-ON05W	50	40	22	4	3.0	0.5	ON*0504
RFMN50-A22Z5-S42-ON05W	50	40	22	5	3.0	0.5	
RFMN50-A22Z6-S42-ON05W	50	40	22	6	3.0	0.5	
RFMN63-A22Z6-S42-ON05W	63	40	22	6	3.0	0.6	
RFMN63-A22Z8-S42-ON05W	63	40	22	8	3.0	0.6	
RFMN80-A27Z9-S42-ON05W	80	50	27	9	3.0	1.1	
RFMN80-A27Z6-S42-ON05W	80	50	27	6	3.0	1.1	
RFMN80-A27Z8-S42-ON05W	80	50	27	8	3.0	1.1	
RFMN100-B32Z7-S42-ON05W	100	50	32	7	3.0	1.8	
RFMN100-B32Z9-S42-ON05W	100	50	32	9	3.0	1.8	
RFMN100-B32Z11-S42-ON05W	100	50	32	11	3.0	1.8	
RFMN125-B40Z7-S42-ON05W	125	63	40	7	3.0	3.0	
RFMN125-B40Z9-S42-ON05W	125	63	40	9	3.0	3.0	
RFMN125-B40Z12-S42-ON05W	125	63	40	12	3.0	3.0	

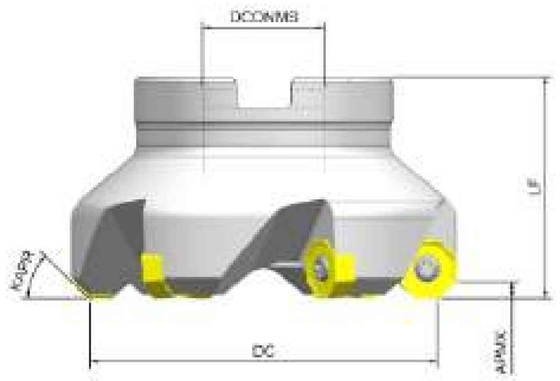


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
ONMU050408-MM	12.70	4.76	5.30	/	0.80	4.50
ONGU050408-MM	12.70	4.76	5.30	/	0.80	4.40
ONHU050404AN-MM	12.70	4.76	5.30	2.66	0.40	4.40

配件 Spare part

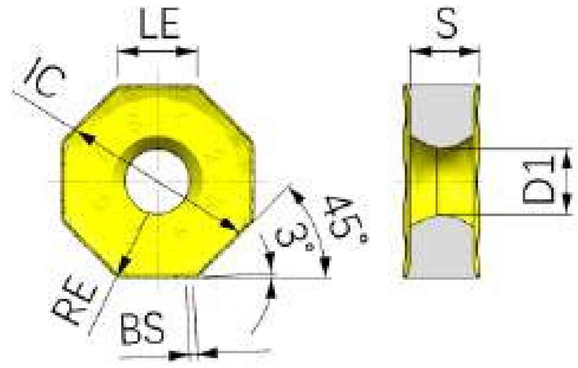
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S42..ON05W	SD4010	TS15W

ON06 44°平面铣削刀具 ON06 44°Face milling tools



Kr=44°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN50-A22Z5-S44-ON06E	50	40	22	5	3.5	0.5	ON*0604
RFMN63-A22Z5-S44-ON06E	63	40	22	5	3.5	0.8	
RFMN80-A27Z6-S44-ON06E	80	50	27	6	3.5	1.2	
RFMN100-B32Z7-S44-ON06E	100	50	32	7	3.5	2.5	
RFMN125-B40Z10-S44-ON06E	125	63	40	10	3.5	3.1	



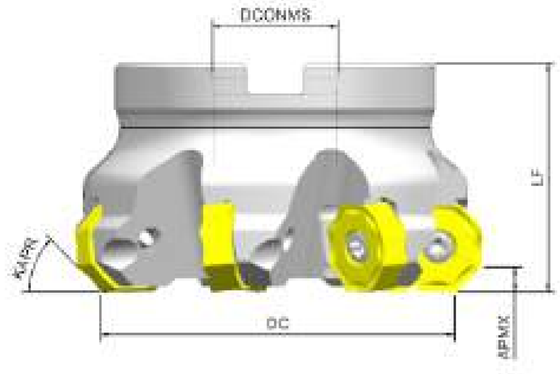
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
ONGU060408-M30	13.20	4.76	5.50	/	0.80	4.50
ONHU060408AN-M30	13.20	4.76	5.50	0.50	0.80	4.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S44..ON06E	SD4010	TS15W

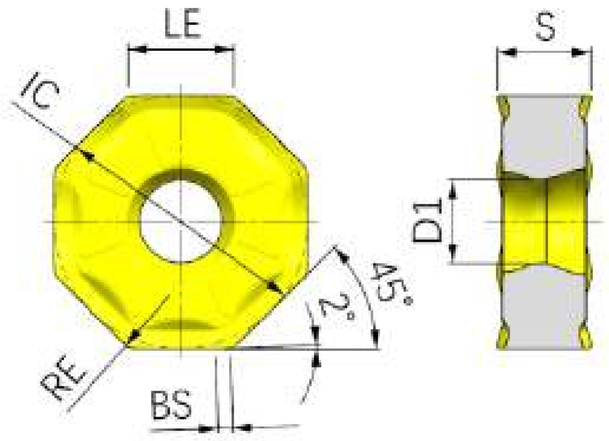
可转位铣削刀具 Indexable milling tool

ON07 43°平面铣削刀具 ON07 43°Face milling tools



Kr=43°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63-A22Z5-S43-ON07B	63	50	22	5	4.0	0.8	ON*0707
RFMN80-A27Z6-S43-ON07B	80	50	27	6	4.0	1.2	
RFMN80-A27Z7-S43-ON07B	80	50	27	7	4.0	1.2	
RFMN100-B32Z7-S43-ON07B	100	60	32	7	4.0	2.5	
RFMN100-B32Z8-S43-ON07B	100	60	32	8	4.0	2.5	
RFMN125-B40Z8-S43-ON07B	125	63	40	8	4.0	3.0	
RFMN125-B40Z10-S43-ON07B	125	63	40	10	4.0	3.1	
RFMN160-C40Z10-S43-ON07B	160	63	40	10	4.0	5.2	
RFMN160-C40Z12-S43-ON07B	160	63	40	12	4.0	5.4	

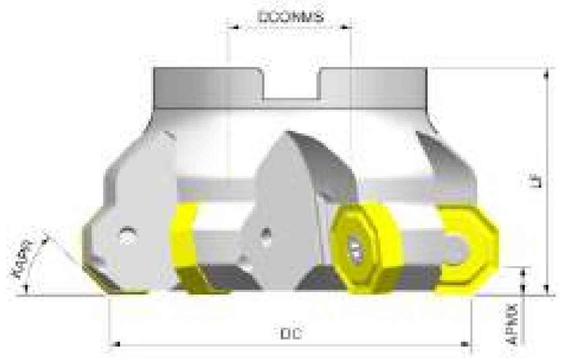


刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
ONMX070708-M30	19.05	6.64	8.00	1.00	0.80	6.30

配件 Spare part

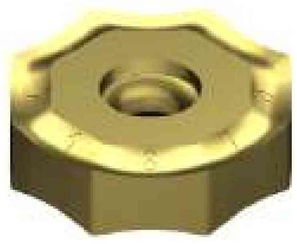
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S43..ON07B	SG5012-P	TS20W-P

ON08 43°平面铣削刀具 ON08 43°Face milling tools

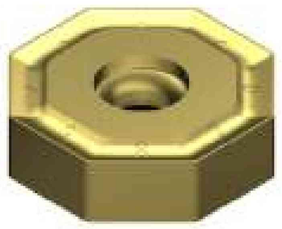


Kr=43°

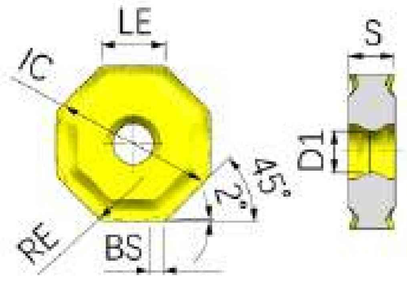
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RFMN63-A22Z5-S43-ON08C	63	40	22	5	5.5	0.46	ON*0806
RFMN80-A27Z6-S43-ON08C	80	50	27	6	5.5	0.95	
RFMN80-A27Z8-S43-ON08C	80	50	27	8	5.5	0.92	
RFMN100-B32Z7-S43-ON08C	100	50	32	7	5.5	1.40	
RFMN100-B32Z10-S43-ON08C	100	50	32	10	5.5	1.39	
RFMN125-B40Z8-S43-ON08C	125	63	40	8	5.5	2.68	
RFMN125-B40Z12-S43-ON08C	125	63	40	12	5.5	2.63	
RFMN160-C40Z10-S43-ON08C	160	63	40	10	5.5	4.10	
RFMN160-C40Z15-S43-ON08C	160	63	40	15	5.5	4.17	



ML



MM



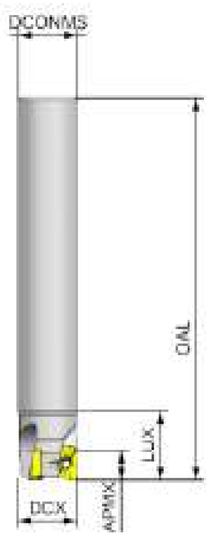
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
ONMU080608AN-ML	20.20	6.00	8.40	1.75	0.80	5.40
ONMU080608-MM	20.20	6.00	8.40	/	0.80	5.40

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RFM..S43..ON08C	SD5012	TS20W

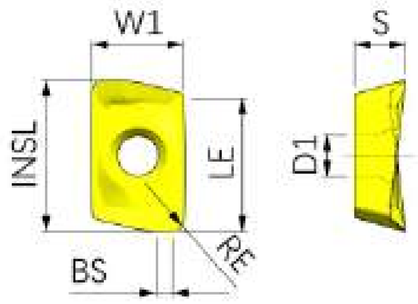
可转位铣削刀具 Indexable milling tool

AD10S 方肩铣削刀具 AD10S Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN16–S25Z2L160–AD10S	16	50	25	160	2	10.0	0.13	AD*10T3
RSMN16–S16Z2L135–AD10S	16	30	16	135	2	10.0	0.18	
RSMN18–S16Z2L160–AD10S	18	60	16	160	2	10.0	0.21	
RSMN20–S20Z3L150–AD10S	20	35	20	150	3	10.0	0.31	
RSMN25–S25Z3L170–AD10S	25	40	25	170	3	10.0	0.53	
RSMN32–S32Z4L195–AD10S	32	40	32	195	4	10.0	1.05	



刀片型号 Insert model	尺寸(mm) Dimensions						
	INSL	S	W1	LE	BS	RE	D1
ADMT10T308R–ML	11.9	3.76	6.88	10.00	1.22	0.80	3.00

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD10S	SG2565–P	TS08W–P

AD10S 方肩铣削刀具 AD10S Square shoulder tools

Kr=90°

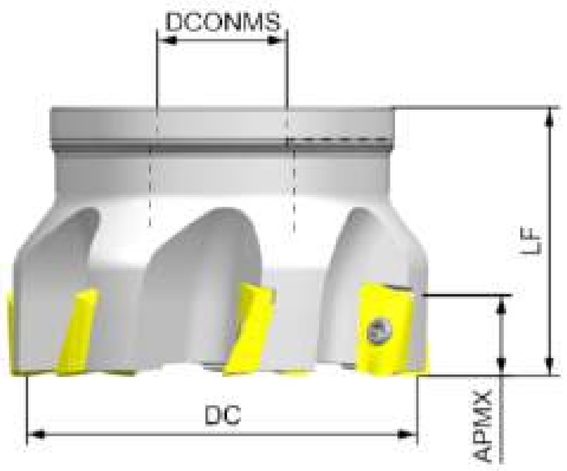
型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN16–N16Z2L78–AD10S	16	24	16	78	2	10.0	0.18	AD*10T3
RSMN18–N18Z2L85–AD10S	18	29	18	85	2	10.0	0.22	
RSMN20–N20Z2L90–AD10S	20	29	20	90	2	10.0	0.28	
RSMN25–N25Z3L101–AD10S	25	34	25	101	3	10.0	0.33	
RSMN25–N25Z4L170–AD10S	25	34	25	170	4	10.0	0.80	
RSMN32–N32Z3L110–AD10S	32	35	32	110	3	10.0	0.54	
RSMN32–N32Z4L110–AD10S	32	35	32	110	4	10.0	0.50	

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD10S	SG2565–P	TS08W–P

可转位铣削刀具 Indexable milling tool

AD10S 方肩铣削刀具 AD10S Square shoulder tools



Kr=90°

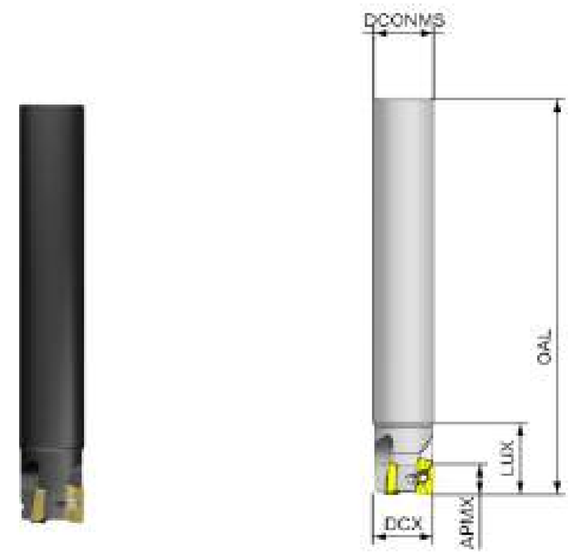
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40-A16Z4-AD10S	40	40	16	4	10.0	0.22	AD*10T3
RSMN40-A16Z6-AD10S	40	40	16	6	10.0	0.18	
RSMN50-A22Z5-AD10S	50	40	22	5	10.0	0.40	
RSMN50-A22Z7-AD10S	50	40	22	7	10.0	0.34	
RSMN63-A27Z5-AD10S	63	40	27	5	10.0	0.55	
RSMN63-A27Z8-AD10S	63	40	27	8	10.0	0.60	
RSMN80-A27Z8-AD10S	80	50	27	8	10.0	0.78	
RSMN80-A27Z10-AD10S	80	50	27	10	10.0	0.85	
RSMN100-B32Z12-AD10S	100	50	32	12	10.0	1.20	

适配刀片第A41页
Compatible inserts, page A41

配件 Spare part

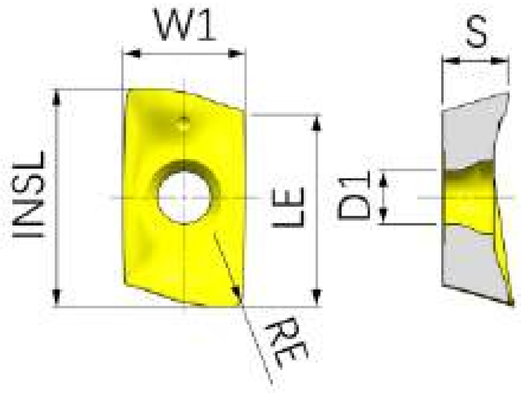
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD10S	SG2565-P	TS08W-P

AD16S 方肩铣削刀具 AD16S Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN25-S25Z2L170-AD16S	25	35	25	170	2	15	0.54	AD*1605
RSMN32-S32Z3L195-AD16S	32	40	32	195	3	15	0.80	



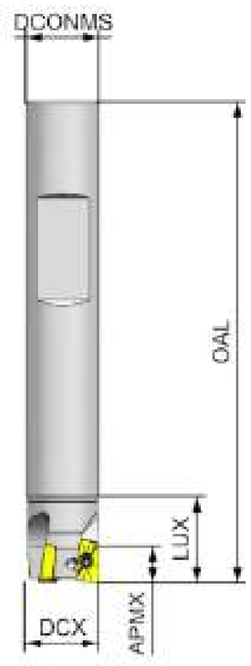
刀片型号 Insert model	尺寸(mm) Dimensions						
	INSL	S	W1	LE	BS	RE	D1
ADMT160508TR-MM	18.26	5.98	10.24	16.00	1.94	0.80	4.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD16S	ST4011	TS15W

可转位铣削刀具 Indexable milling tool

AD16S 方肩铣削刀具 AD16S Square shoulder tools



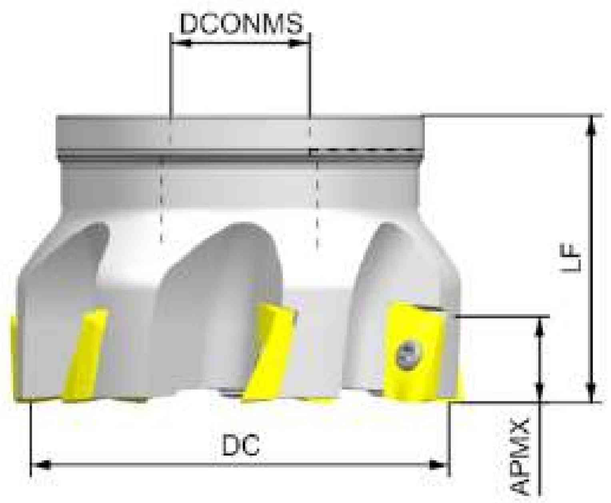
Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN25-N25Z2L100-AD16S	25	38	25	100	2	15	0.33	AD*1605
RSMN32-N32Z3L110-AD16S	32	38	32	110	3	15	0.61	

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD16S	ST4011	TS15W

AD16S 方肩铣削刀具 AD16S Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40-A16Z3-AD16S	40	40	16	3	15	0.22	AD*1605
RSMN40-A16Z4-AD16S	40	40	16	4	15	0.25	
RSMN50-A22Z5-AD16S	50	40	22	5	15	0.33	
RSMN50-A22Z6-AD16S	50	40	22	6	15	0.38	
RSMN63-A27Z6-AD16S	63	40	27	6	15	0.55	
RSMN63-A27Z7-AD16S	63	40	27	7	15	0.60	
RSMN80-A27Z8-AD16S	80	50	27	8	15	0.88	
RSMN80-A27Z9-AD16S	80	50	27	9	15	0.95	
RSMN100-B32Z8-AD16S	100	50	32	8	15	1.40	
RSMN100-B32Z10-AD16S	100	50	32	10	15	1.50	
RSMN125-B40Z10-AD16S	125	63	40	10	15	2.20	
RSMN125-B40Z12-AD16S	125	63	40	12	15	2.30	

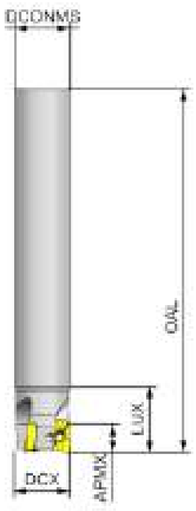
适配刀片第A44页
Compatible inserts, page A44

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD16S	ST4011	TS15W

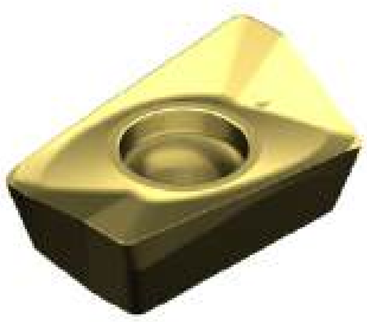
可转位铣削刀具 Indexable milling tool

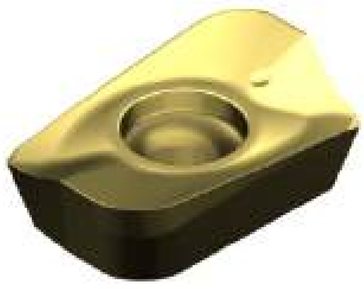
AD18S 方肩铣削刀具 AD18S Square shoulder tools

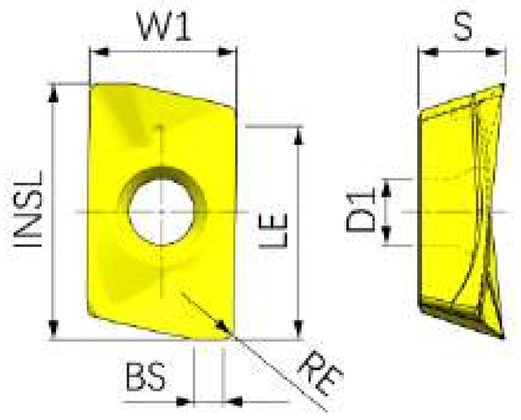


Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN32-S30Z2L210-AD18S	32	150	30	210	2	17.0	1.20	AD*1806
RSMN32-S32Z2L210-AD18S	32	40	32	210	2	17.0	1.40	
RSMN32-S32Z3L210-AD18S	32	40	32	210	3	17.0	1.18	
RSMN40-S32Z3L210-AD18S	40	150	32	210	3	17.0	1.89	
RSMN40-S32Z4L210-AD18S	40	150	32	210	4	17.0	1.98	





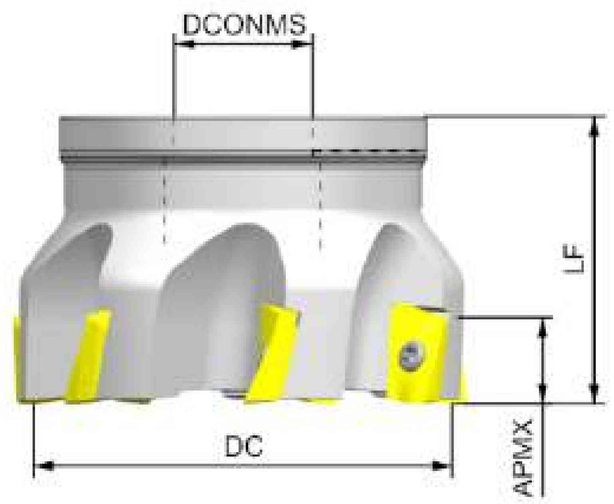


刀片型号 Insert model	尺寸(mm) Dimensions						
	INSL	S	W1	LE	BS	RE	D1
ADMT180608TR-MM	19.29	6.47	11.29	16.00	2.17	0.80	5.00
ADMT180631TR-MM	18.68	6.43	11.26	16.00	2.11	3.10	5.00

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD18S	ST4011	TS15W

AD18S 方肩铣削刀具 AD18S Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40-A16Z4-AD18S	40	40	16	4	17.0	0.22	AD*1806
RSMN50-A22Z4-AD18S	50	40	22	4	17.0	0.32	
RSMN50-A22Z5-AD18S	50	40	22	5	17.0	0.36	
RSMN63-A27Z4-AD18S	63	40	27	4	17.0	0.55	
RSMN63-A27Z5-AD18S	63	40	27	5	17.0	0.60	
RSMN63-A27Z6-AD18S	63	40	27	6	17.0	0.65	
RSMN80-A27Z5-AD18S	80	50	27	5	17.0	0.73	
RSMN80-A27Z6-AD18S	80	50	27	6	17.0	0.78	
RSMN80-A27Z8-AD18S	80	50	27	8	17.0	0.88	
RSMN100-B32Z7-AD18S	100	50	32	7	17.0	1.20	
RSMN100-B32Z9-AD18S	100	50	32	9	17.0	1.30	
RSMN125-B40Z8-AD18S	125	63	40	8	17.0	2.25	
RSMN125-B40Z11-AD18S	125	63	40	11	17.0	2.35	

配件 Spare part

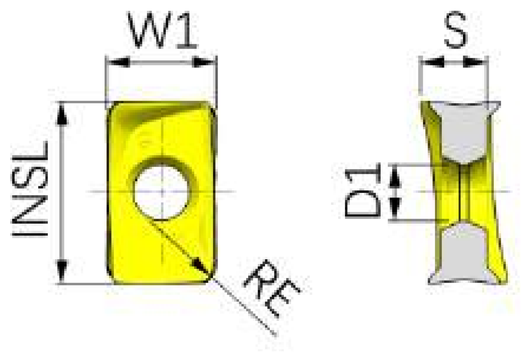
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AD18S	ST4011	TS15W

可转位铣削刀具 Indexable milling tool

AO10R 方肩铣削刀具 A010R Square shoulder tools

Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN16–S12Z2L100–AO10R	16	23	12	100	2	10.0	0.12	AO*1004
RSMN18–S16Z2L100–AO10R	18	25	16	100	2	10.0	0.15	
RSMN20–S16Z2L110–AO10R	20	26	16	110	2	10.0	0.20	
RSMN25–S20Z3L120–AO10R	25	29	20	120	3	10.0	0.34	
RSMN30–S25Z4L130–AO10R	30	32	25	130	4	10.0	0.64	
RSMN32–S16Z4L130–AO10R	32	32	16	130	4	10.0	0.70	

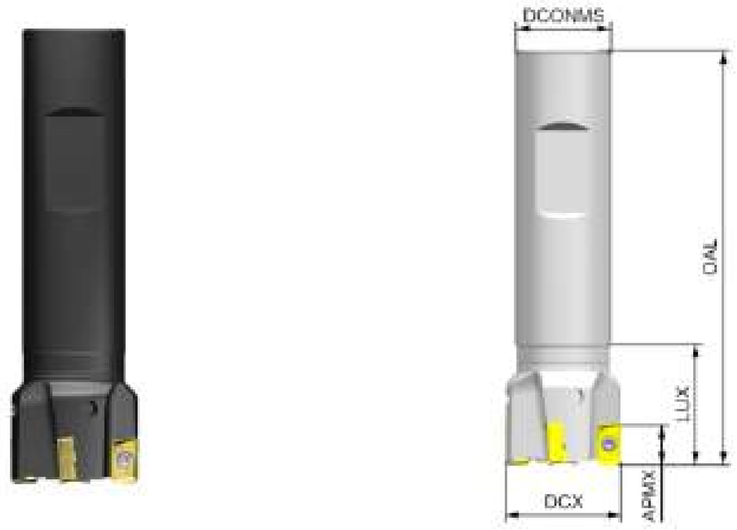


刀片型号 Insert model	尺寸(mm) Dimensions				
	INSL	S	W1	RE	D1
AOMU100408–ML	10.90	4.00	6.60	0.80	3.40
AOMU100416–ML	10.50	4.10	6.50	1.60	3.40
AOMU100420–ML	10.90	3.90	6.60	2.00	3.40

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AO10R	SH3060	TS08W

AO10R 方肩铣削刀具 A010R Square shoulder tools



Kr=90°

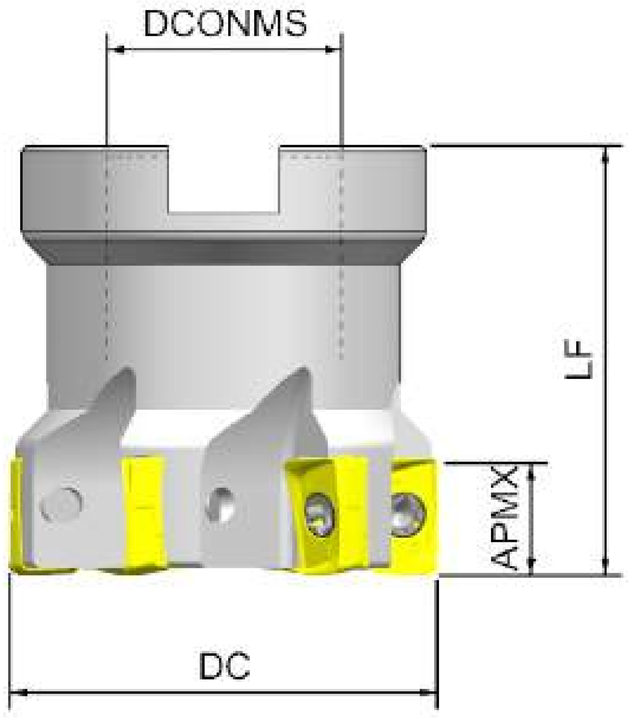
型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN16–N16Z2L75–AO10R	16	25	16	75	2	10.0	0.10	AO*1004
RSMN20–N20Z3L77–AO10R	20	25	20	77	3	10.0	0.20	
RSMN25–N25Z3L90–AO10R	25	32	25	90	3	10.0	0.33	
RSMN32–N32Z4L102–AO10R	32	40	32	102	4	10.0	0.61	

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AO10R	SH3060	TS08W

可转位铣削刀具 Indexable milling tool

AO10R 方肩铣削刀具 A010R Square shoulder tools



Kr=90°

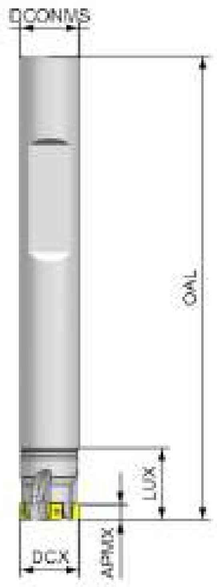
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40–A16Z5–AO10R	40	40	16	5	10.0	0.22	AO*1004
RSMN50–A22Z5–AO10R	50	40	22	5	10.0	0.33	
RSMN63–A22Z6–AO10R	63	40	22	6	10.0	0.50	

适配刀片第A49页
Compatible inserts, page A49

配件 Spare part

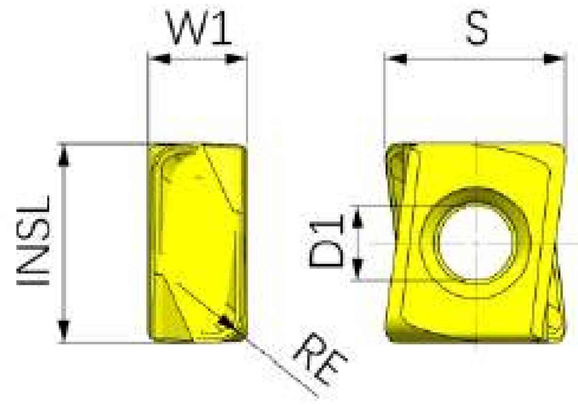
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..AO10R	SH3060	TS08W

LN09W 方肩铣削刀具 LN09W Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN25–N25Z3L100–LN09W	25	43	25	100	3	9.0	0.33	LN*0904
RSMN25–N25Z4L100–LN09W	25	43	25	100	4	9.0	0.35	
RSMN32–N32Z4L110–LN09W	32	49	32	110	4	9.0	0.70	
RSMN32–N32Z5L110–LN09W	32	49	32	110	5	9.0	0.71	
RSMN40–N32Z6L110–LN09W	40	49	32	110	6	9.0	1.07	



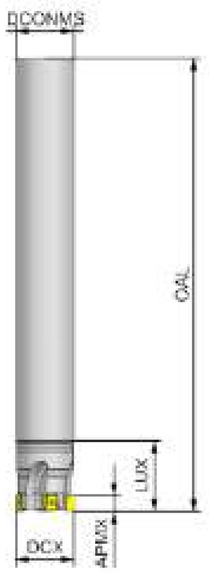
刀片型号 Insert model	尺寸(mm) Dimensions				
	INSL	S	W1	RE	D1
LNHU090408R–M30	9.00	8.26	4.50	0.80	3.40
LNHU090412R–M30	9.00	8.19	4.50	1.20	3.40

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..LN09W	SG3083–P	TS08W–P

可转位铣削刀具 Indexable milling tool

LN09W 方肩铣削刀具 LN09W Square shoulder tools



Kr=90°

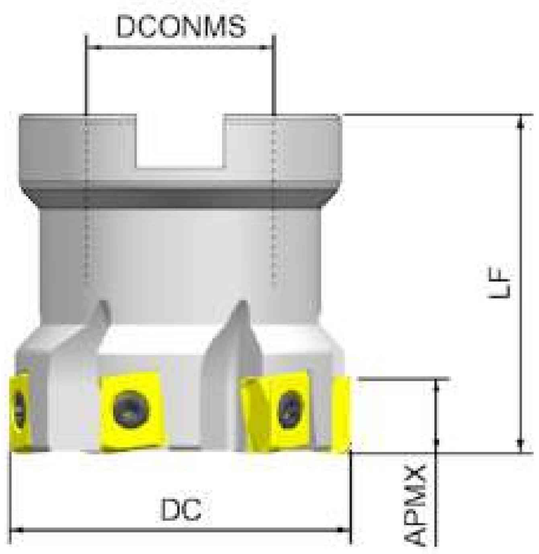
型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN25–S25Z3L200–LN09W	25	38	25	200	3	9.0	0.66	LN*0904
RSMN25–S25Z4L200–LN09W	25	38	25	200	4	9.0	0.70	
RSMN32–S32Z4L250–LN09W	32	39	32	250	4	9.0	1.23	
RSMN32–S32Z5L250–LN09W	32	39	32	250	5	9.0	1.32	

适配刀片第A52页
Compatible inserts, page A52

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..LN09W	SG3083–P	TS08W–P

LN09W 方肩铣削刀具 LN09W Square shoulder tools



Kr=90°

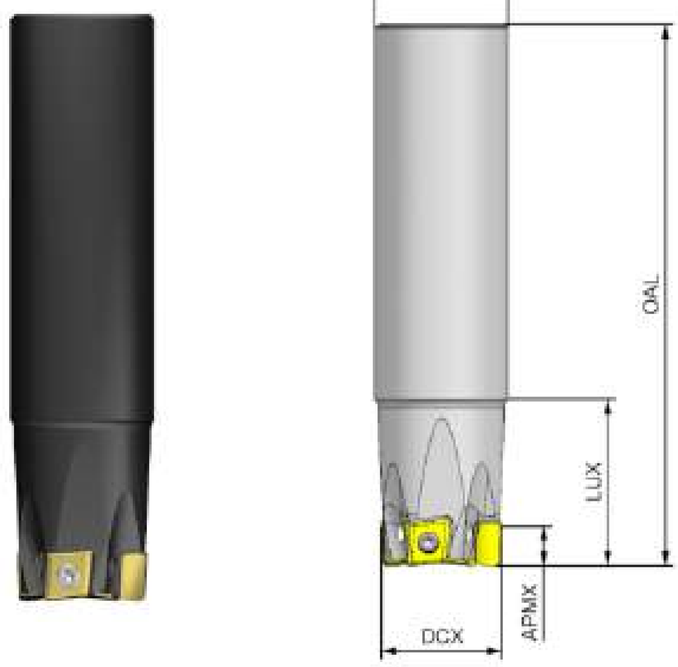
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40–A16Z4–LN09W	40	40	16	4	9	0.22	LN*0904
RSMN40–A16Z6–LN09W	40	40	16	6	9	0.26	
RSMN50–A22Z5–LN09W	50	40	22	5	9	0.30	
RSMN50–A22Z7–LN09W	50	40	22	7	9	0.40	
RSMN63–A22Z7–LN09W	63	40	22	7	9	0.50	
RSMN63–A22Z10–LN09W	63	40	22	10	9	0.50	
RSMN80–A27Z6–LN09W	80	50	27	6	9	0.90	
RSMN100–B32Z7–LN09W	100	50	32	7	9	1.20	
RSMN125–B40Z8–LN09W	125	63	40	8	9	1.60	

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..LN09W	SG3083–P	TS08W–P

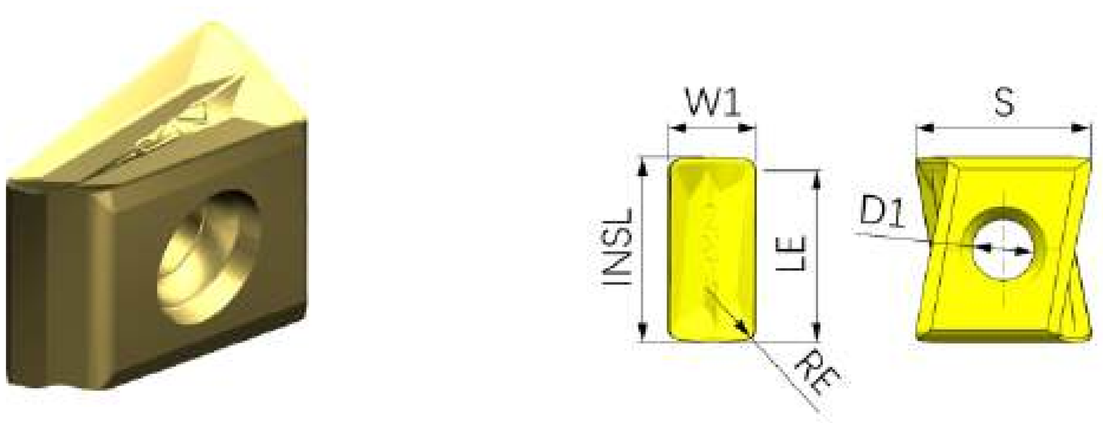
可转位铣削刀具 Indexable milling tool

LN13C 方肩铣削刀具 LN13C Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN32-S32Z3L130-LN13C	32	40	32	130	3	12.5	0.85	LN*1306
RSMN40-S32Z4L130-LN13C	40	44	32	130	4	12.5	0.85	

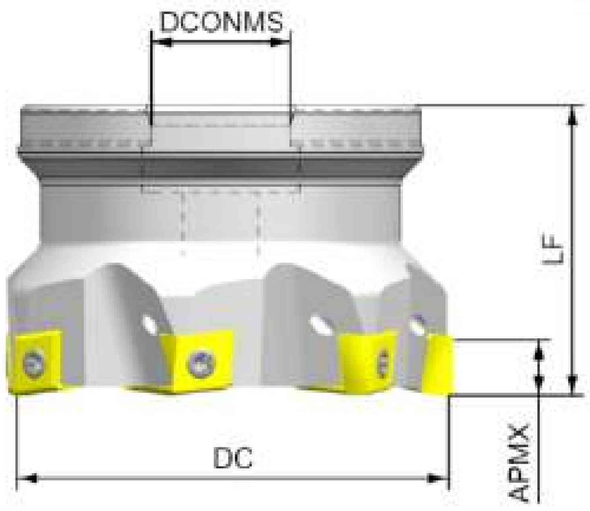


刀片型号 Insert model	尺寸(mm) Dimensions					
	INSL	S	W1	LE	RE	D1
LNHT130604R-M30	13.80	13.15	6.65	12.50	0.40	4.60
LNHT130608R-M30	13.80	13.10	6.65	12.50	0.80	4.60
LNHT130612R-M30	13.80	13.05	6.65	12.50	1.20	4.60

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..LN13C	SD4010	TS15W

LN13C 方肩铣削刀具 LN13C Square shoulder tools



Kr=90°

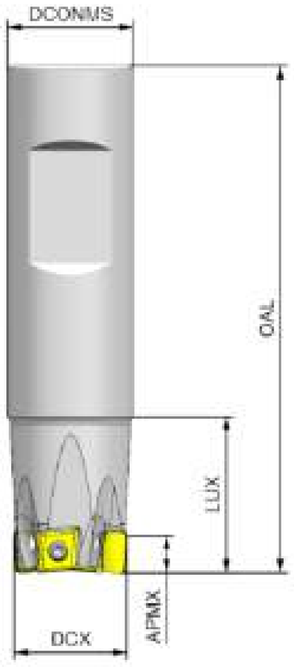
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN50–A22Z4–LN13C	50	40	22	4	12.5	0.31	LN*1306
RSMN50–A22Z5–LN13C	50	40	22	5	12.5	0.36	
RSMN63–A22Z6–LN13C	63	40	22	6	12.5	0.55	
RSMN63–A22Z7–LN13C	63	40	22	7	12.5	0.50	
RSMN80–A27Z7–LN13C	80	50	27	7	12.5	0.81	
RSMN80–A27Z9–LN13C	80	50	27	9	12.5	0.88	
RSMN100–B32Z8–LN13C	100	50	32	8	12.5	1.20	
RSMN100–B32Z12–LN13C	100	50	32	12	12.5	1.10	
RSMN125–B40Z9–LN13C	125	63	40	9	12.5	1.50	
RSMN125–B40Z15–LN13C	125	63	40	15	12.5	1.40	

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..LN13C	SD4010	TS15W

可转位铣削刀具 Indexable milling tool

LN13C 方肩铣削刀具 LN13C Square shoulder tools



Kr=90°

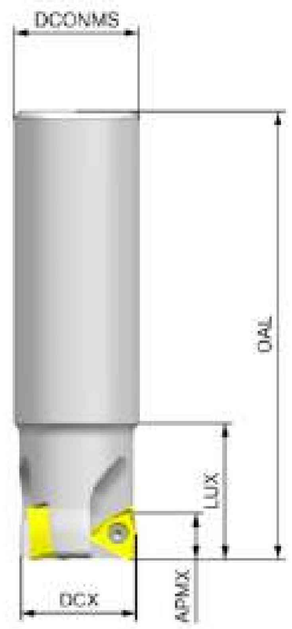
型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN32-N32Z3L110-LN13C	32	40	32	110	3	12.5	0.73	LN*1306
RSMN40-N32Z4L115-LN13C	40	44	32	115	4	12.5	0.85	

适配刀片第55页
Compatible inserts, page A55

配件 Spare part

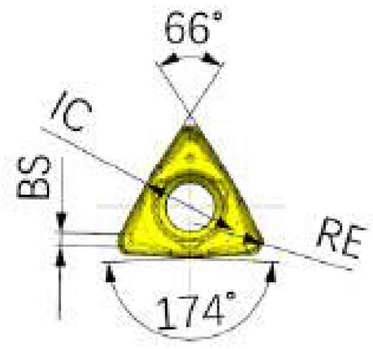
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..LN13C	SD4010	TS15W

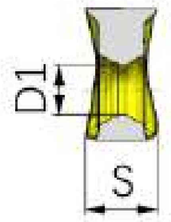
TN07G 方肩铣削刀具 TN07G Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN18–S16Z2L85–TN07G	18	25	16	85	2	6.5	0.12	TN*0703
RSMN20–S20Z2L100–TN07G	20	30	20	100	2	6.5	0.20	
RSMN20–S20Z3L100–TN07G	20	30	20	100	3	6.5	0.19	
RSMN25–S25Z3L115–TN07G	25	35	25	115	3	6.5	0.34	
RSMN25–S25Z4L115–TN07G	25	35	25	115	4	6.5	0.33	
RSMN32–S32Z4L115–TN07G	32	35	32	115	4	6.5	0.61	
RSMN32–S32Z5L115–TN07G	32	35	32	115	5	6.5	0.60	





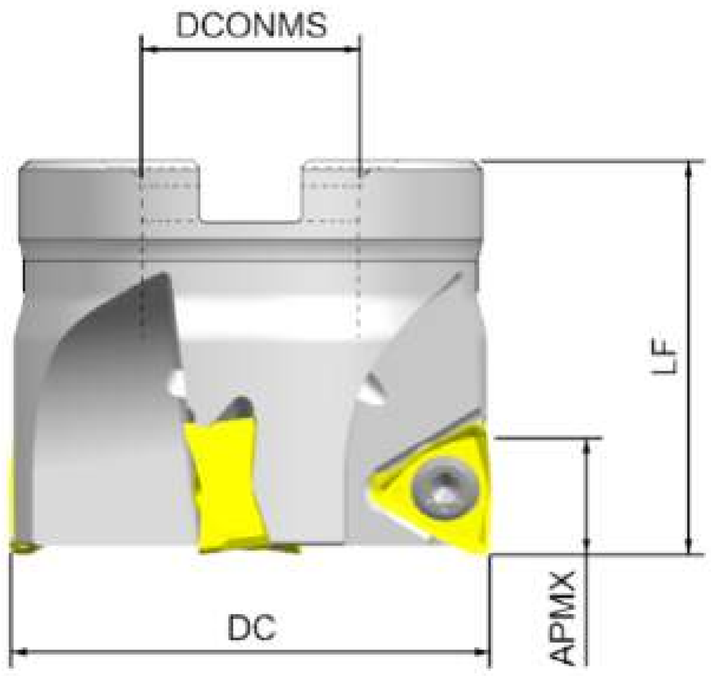
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
TNGU070304ANN–M30	5.7	4.1	6.5	0.75	0.4	2.8
TNGU070308ANN–M30	5.7	4.1	6.5	0.75	0.8	2.8

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..TN07G	SG2252–P	TS07W–P

可转位铣削刀具 Indexable milling tool

TN07G 方肩铣削刀具 TN07G Square shoulder tools



Kr=90°

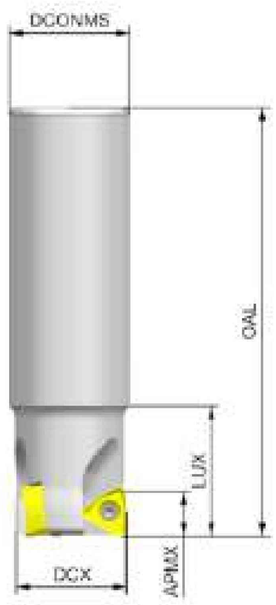
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40–A16Z5–TN07G	40	40	16	5	6.5	0.22	TN*0703
RSMN50–A22Z7–TN07G	50	40	22	7	6.5	0.33	
RSMN63–A22Z9–TN07G	63	40	22	9	6.5	0.55	
RSMN80–A27Z10–TN07G	80	50	27	10	6.5	0.88	

适配刀片第A58页
Compatible inserts, page A58

配件 Spare part

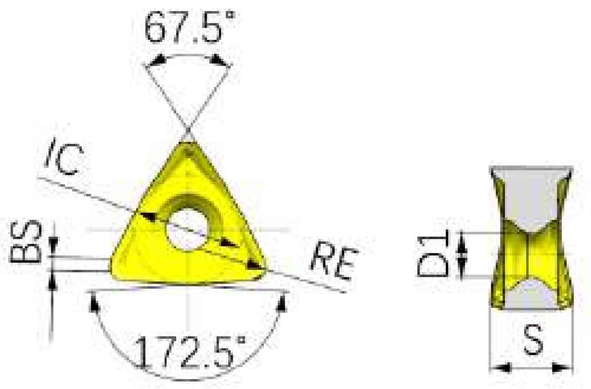
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..TN07G	SG2252–P	TS07W–P

TN12G 方肩铣削刀具 TN12G Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	DCON	OAL	Z	APMX		
RSMN32-S32Z2L115-TN12G	32	35	32	115	2	11.0	0.6	TN*1207
RSMN32-S32Z3L115-TN12G	32	35	32	115	3	11.0	0.61	
RSMN40-S32Z3L115-TN12G	40	35	32	115	3	11.0	1.07	
RSMN40-S32Z4L115-TN12G	40	35	32	115	4	11.0	1.1	



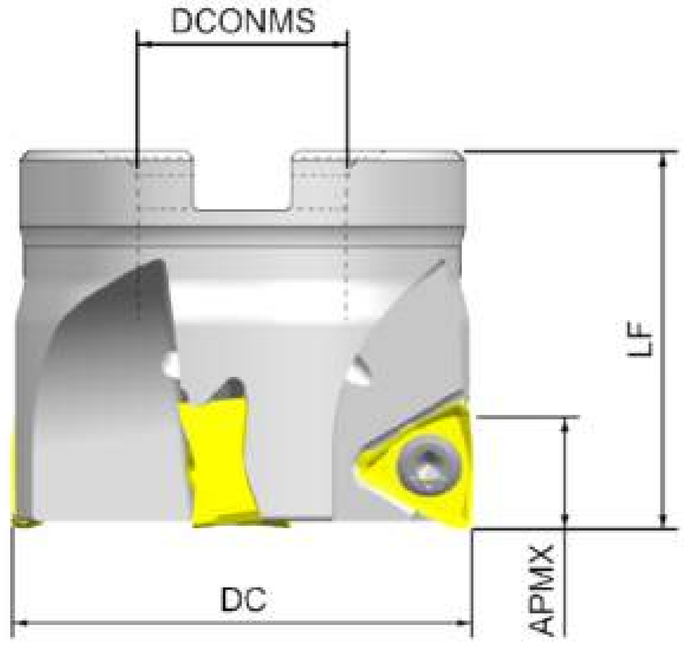
刀片型号 Insert model	尺寸(mm) Dimensions					
	IC	S	LE	BS	RE	D1
TNMU120708ANN-M30	9.55	7.10	12.00	1.10	0.80	3.80

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..TN12G	SD3512	TS15W

可转位铣削刀具 Indexable milling tool

TN12G 方肩铣削刀具 TN12G Square shoulder tools



Kr=90°

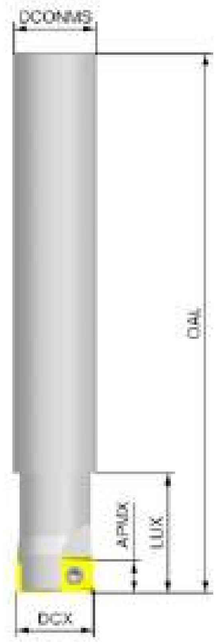
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN50–A22Z4–TN12G	50	40	22	4	11.0	0.33	TN*1207
RSMN50–A22Z5–TN12G	50	40	22	5	11.0	0.31	
RSMN63–A22Z5–TN12G	63	40	22	5	11.0	0.55	
RSMN63–A22Z6–TN12G	63	40	22	6	11.0	0.50	
RSMN80–A27Z6–TN12G	80	50	27	6	11.0	0.88	
RSMN80–A27Z8–TN12G	80	50	27	8	11.0	0.80	
RSMN100–B32Z7–TN12G	100	50	32	7	11.0	1.20	
RSMN100–B32Z10–TN12G	100	50	32	10	11.0	1.10	
RSMN125–B40Z8–TN12G	125	63	40	8	11.0	2.20	
RSMN125–B40Z12–TN12G	125	63	40	12	11.0	2.10	

适配刀片第A60页
Compatible inserts, page A60

配件 Spare part

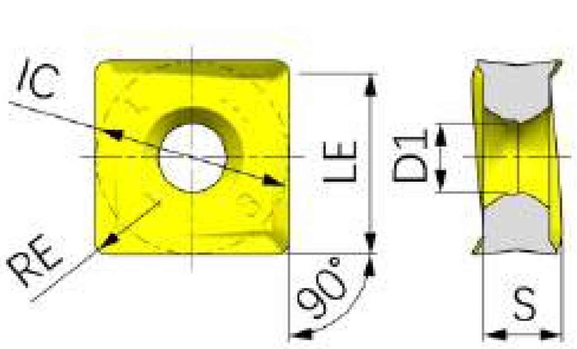
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..TN12G	SD3512	TS15W

SN12L 方肩铣削刀具 SN12L Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DCX	LUX	OAL	DCON	Z	APMX		
RSMN32-S32Z2L102-SN12L	32	40	102	32	2	8.0	1.2	SN*1204
RSMN32-S32Z2L250-SN12L	32	63	250	32	2	8.0	2.2	



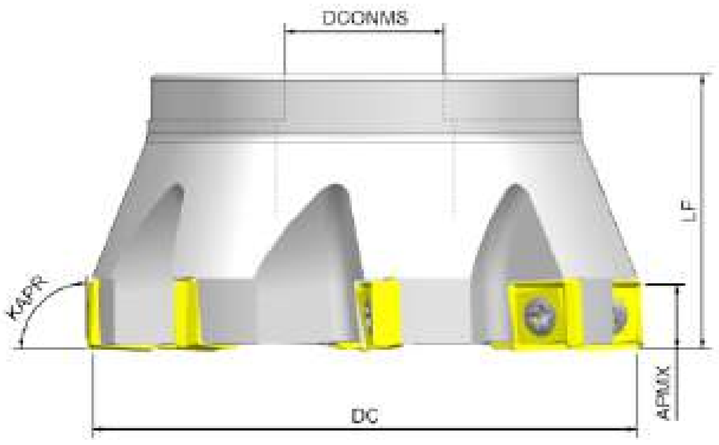
刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
SNHU120408R-MM	12.20	4.94	11.50	0.80	4.40
SNHU1204012R-MM	12.20	4.94	11.50	1.20	4.40
SNHU1204016R-MM	12.20	4.94	11.50	1.60	4.40

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..SN12L	SG3585-P	TS10W-P

可转位铣削刀具 Indexable milling tool

SN12L 方肩铣削刀具 SN12L Square shoulder tools



Kr=90°

型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN40-A16Z3-SN12L	40	40	16	3	8.0	0.22	SN*1204
RSMN40-A16Z4-SN12L	40	40	16	4	8.0	0.22	
RSMN50-A22Z4-SN12L	50	40	22	4	8.0	0.33	
RSMN50-A22Z5-SN12L	50	40	22	5	8.0	0.31	
RSMN63-A22Z5-SN12L	63	40	22	5	8.0	0.55	
RSMN63-A22Z6-SN12L	63	40	22	6	8.0	0.5	
RSMN80-A27Z6-SN12L	80	50	27	6	8.0	0.88	
RSMN80-A27Z8-SN12L	80	50	27	8	8.0	0.85	
RSMN100-B32Z7-SN12L	100	50	32	7	8.0	1.2	
RSMN100-B32Z10-SN12L	100	50	32	10	8.0	1.18	
RSMN125-B40Z8-SN12L	125	63	40	8	8.0	2.2	
RSMN125-B40Z12-SN12L	125	63	40	12	8.0	2.1	
RSMN160-C40Z9-SN12L	160	63	40	9	8.0	3	
RSMN160-C40Z14-SN12L	160	63	40	14	8.0	2.8	

适配刀片第A62页
Compatible inserts, page A62

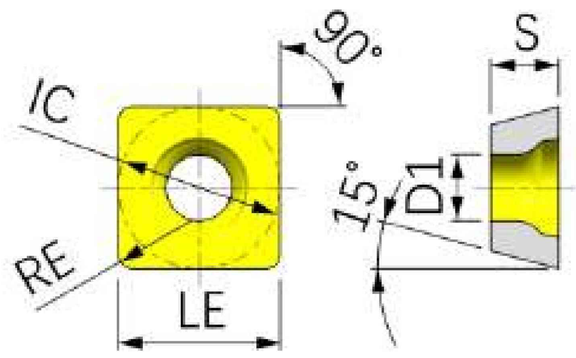
配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..SN12L	SG3585-P	TS10W-P

SD09E 方肩铣削刀具 SD09E Square shoulder tools

Kr=89.5°

型号 Model	尺寸(mm) Dimensions						重量(KG) Weight	适配刀片 Compatible inserts
	DC	OAL	DCON	LUX	Z	APMX		
RSMN25-N25Z2L100-SD09W	25	100	25	43	2	8.4	0.34	SD*09T3
RSMN32-N32Z2L110-SD09W	32	110	32	49	2	8.4	0.61	
RSMN32-N32Z3L110-SD09W	32	110	32	49	3	8.4	0.60	
RSMN40-N40Z3L120-SD09W	40	120	40	49	3	8.4	1.08	
RSMN40-N40Z4L120-SD09W	40	120	40	49	4	8.4	1.07	



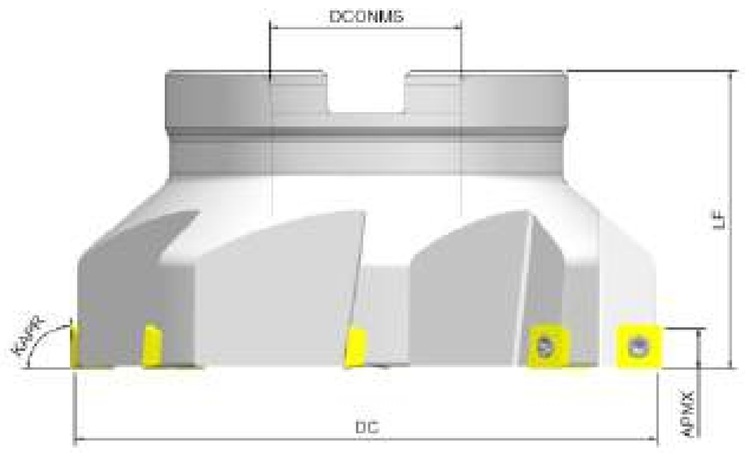
刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
SDMT09T304-MM	9.525	3.97	9.525	0.40	3.80
SDMT09T308-MM	9.525	3.97	9.525	0.80	3.80
SDMT09T312-MM	9.525	3.97	9.525	1.20	3.80
SDMT09T316-MM	9.525	3.97	9.525	1.60	3.80
SDMT09T320-MM	9.525	3.97	9.525	2.00	3.80

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..SD09E	SD3580	TS15W

可转位铣削刀具 Indexable milling tool

SD09E 方肩铣削刀具 SD09E Square shoulder tools



Kr=89.5°

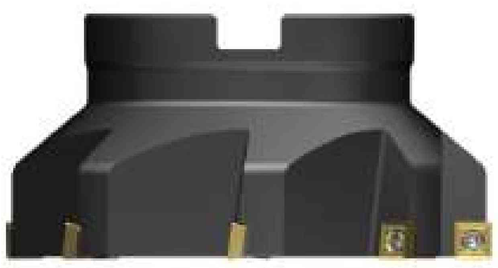
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	接口类型 Interface type	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX			
RSMN40–A16Z4–SD09E	40	40	16	4	8.4	0.22	A	SD*09T3
RSMN40–A16Z5–SD09E	40	40	16	5	8.4	0.22	A	
RSMN50–A22Z4–SD09E	50	40	22	4	8.4	0.33	A	
RSMN50–A22Z6–SD09E	50	40	22	6	8.4	0.35	A	
RSMN63–A22Z5–SD09E	63	40	22	5	8.4	0.55	A	
RSMN80–A27Z6–SD09E	80	50	27	6	8.4	1.30	A	

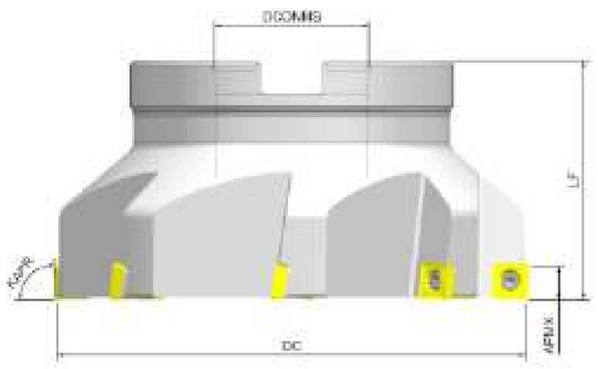
适配刀片第A64页
Compatible inserts, page A64

配件 Spare part

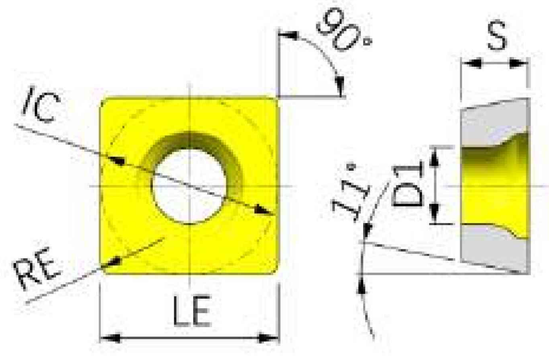
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..SD09E	SD3580	TS15W

SP12W 方肩铣削刀具 SP12W Square shoulder tools





型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RSMN63-A22Z5-SP12W	63	40	22	5	11.0	0.43	SP*1204
RSMN80-A27Z6-SP12W	80	50	27	6	11.0	1.15	
RSMN100-B32Z7-SP12W	100	50	32	7	11.0	1.79	
RSMN125-B40Z8-SP12W	125	63	40	8	11.0	3.57	
RSMN160-C40Z10-SP12W	160	63	40	10	11.0	5.55	
RSMN200-C60Z12-SP12W	200	63	60	12	11.0	9.63	



刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
SPMT120408-M30	12.70	4.76	12.70	0.80	5.50
SPMT120416-M30	12.70	4.76	12.70	1.60	5.50
SPMT120420-M30	12.70	4.76	12.70	2.00	5.50

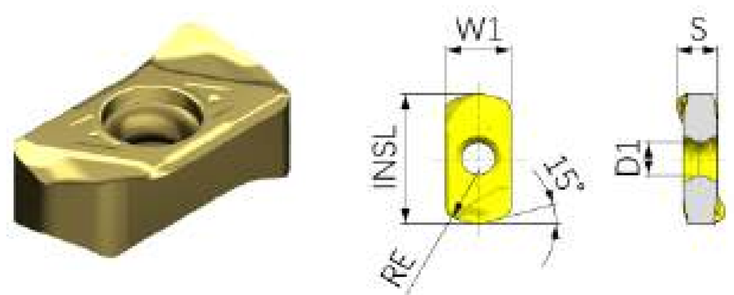
配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RSM..SP12W	SG5016	TS20W

可转位铣削刀具 Indexable milling tool

LN03G 高进给铣削刀具 LN03G High feed milling tools

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN16-S16Z2L100-LN03G	9.6	16	30	100	16	2	1.0	0.2	LN*0303
REMN18-S16Z2L100-LN03G	11.5	18	30	100	16	2	1.0	0.2	
REMN20-S20Z3L130-LN03G	13.5	20	50	130	20	3	1.0	0.3	
REMN20-S20Z4L130-LN03G	13.5	20	50	130	20	4	1.0	0.3	
REMN22-S20Z3L130-LN03G	15.5	22	50	130	20	3	1.0	0.3	
REMN22-S20Z4L130-LN03G	15.5	22	50	130	20	4	1.0	0.3	
REMN25-S25Z4L140-LN03G	18.5	25	60	140	25	4	1.0	0.5	
REMN25-S25Z5L140-LN03G	18.5	25	60	140	25	5	1.0	0.5	
REMN28-S25Z5L140-LN03G	21.5	28	60	140	25	5	1.0	0.5	
REMN30-S32Z5L150-LN03G	23.5	30	70	150	32	5	1.0	0.8	
REMN32-S32Z5L150-LN03G	23.5	32	70	150	32	5	1.0	0.8	
REMN32-S32Z6L150-LN03G	25.5	32	70	150	32	6	1.0	0.8	
REMN35-S32Z6L150-LN03G	28.5	35	115	150	32	6	1.0	0.9	

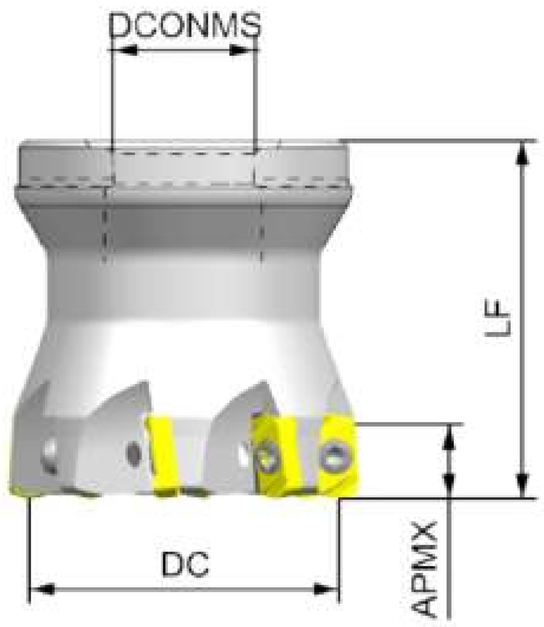


刀片型号 Insert model	尺寸(mm) Dimensions				
	INSL	S	W1	RE	D1
LNMU030312-ML	11.90	3.81	6.00	1.20	3.00
LNMU030312-PM	11.90	3.61	6.00	1.20	3.00

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..LN03G	SG2565-P	TS08W-P

LN03G 高进给铣削刀具 LN03G High feed milling tools



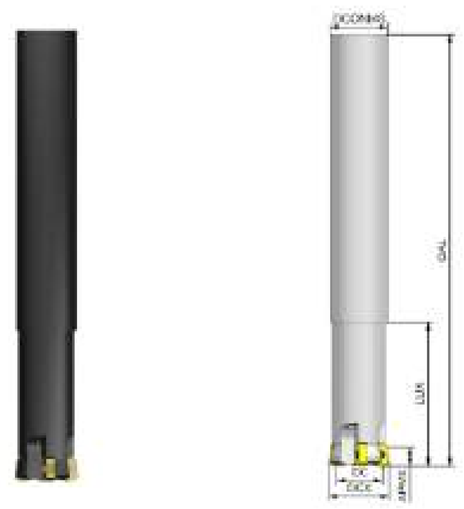
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
REMN40–A16Z5–LN03G	40	40	16	5	1.0	0.2	LN*0303
REMN40–A16Z6–LN03G	40	40	16	6	1.0	0.2	
REMN50–A22Z5–LN03G	50	50	22	5	1.0	0.5	
REMN50–A22Z8–LN03G	50	50	22	8	1.0	0.5	

配件 Spare part

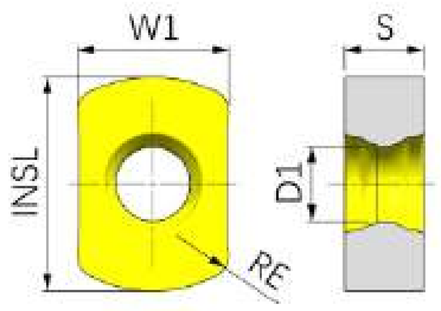
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..LN03G	SG2565–P	TS08W–P

可转位铣削刀具 Indexable milling tool

LN06T 高进给铣削刀具 LN06T High feed milling tools



型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN16-S16Z2L150-LN06T	9.4	16	40	150	16	2	0.7	0.2	LN*0603
REMN18-S16Z2L150-LN06T	11.1	18	25	150	16	2	0.7	0.2	
REMN20-S20Z3L160-LN06T	12.4	20	80	160	20	3	1.0	0.3	
REMN20-S20Z4L130-LN06T	12.4	20	50	130	20	4	1.0	0.3	
REMN25-S25Z4L180-LN06T	17.3	25	60	180	25	4	1.0	0.6	
REMN25-S25Z5L140-LN06T	17.1	25	60	140	25	5	1.0	0.5	
REMN30-S32Z5L150-LN06T	22.3	30	70	150	32	5	1.0	0.8	
REMN32-S32Z5L150-LN06T	24.3	32	70	150	32	5	1.0	0.8	
REMN35-S32Z5L200-LN06T	27.3	35	50	200	32	5	1.0	1.2	
REMN40-S32Z6L150-LN06T	32.2	40	40	150	32	6	1.0	1.0	

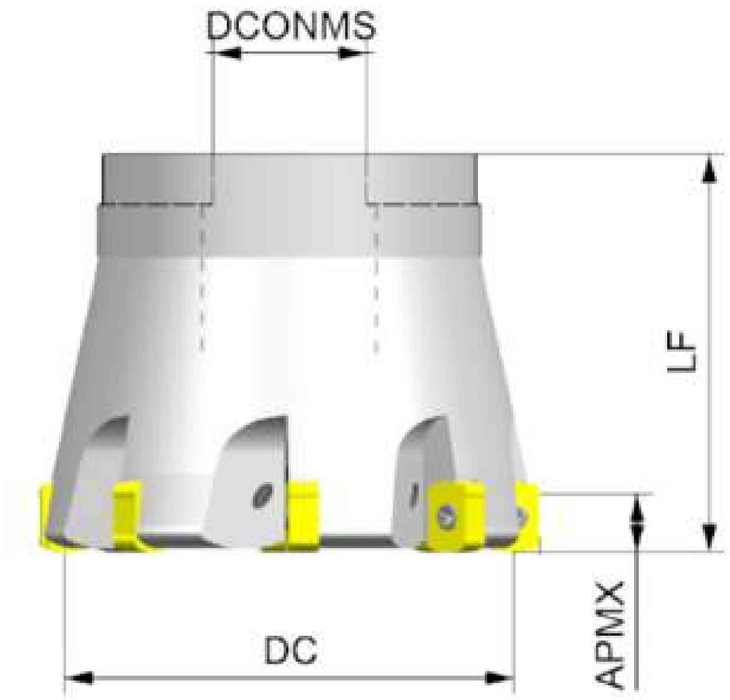


刀片型号 Insert model	尺寸(mm) Dimensions				
	INSL	S	W1	RE	D1
LNMP060310-M30	9.1	3.37	6.50	1.00	3.15

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..LN06T	SG2565-P	TS08W-P

LN06T 高进给铣削刀具 LN06T High feed milling tools



型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
REMN32-A16Z4-LN06T	32	40	16	4	1.0	0.12	LN*0603
REMN32-A16Z5-LN06T	32	40	16	5	1.0	0.12	
REMN40-A16Z6-LN06T	40	40	16	6	1.0	0.23	
REMN40-A22Z6-LN06T	40	40	22	6	1.0	0.23	
REMN50-A22Z6-LN06T	50	50	22	6	1.0	0.4	
REMN50-A22Z8-LN06T	50	50	22	8	1.0	0.4	
REMN50-A22Z7-LN06T	50	63	22	7	1.0	0.7	
REMN50-A22Z9-LN06T	50	63	22	9	1.0	0.7	

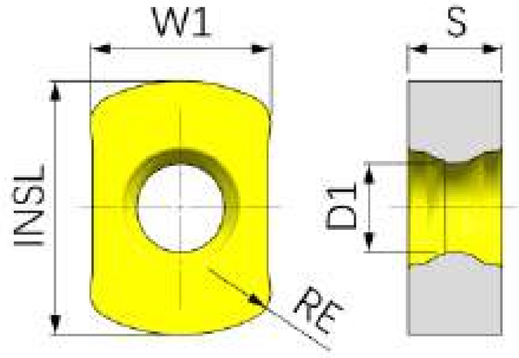
配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..LN06T	SG2565-P	TS08W-P

可转位铣削刀具 Indexable milling tool

LN09T 高进给铣削刀具 LN09T High feed milling tools

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN25-S25Z2L150-LN09T	14.7	25	70	150	25	2	1.5	0.5	LN*0904
REMN25-S25Z3L150-LN09T	14.7	25	70	150	25	3	1.5	0.5	
REMN30-S32Z3L160-LN09T	19.6	30	70	160	32	3	1.5	0.9	
REMN32-S32Z3L160-LN09T	21.6	32	70	160	32	3	1.5	0.9	
REMN32-S32Z4L160-LN09T	21.6	32	70	160	32	4	1.5	0.9	
REMN40-S32Z4L180-LN09T	29.6	40	40	180	32	4	1.5	1.2	
REMN40-S32Z5L180-LN09T	29.6	40	40	180	32	5	1.5	1.2	

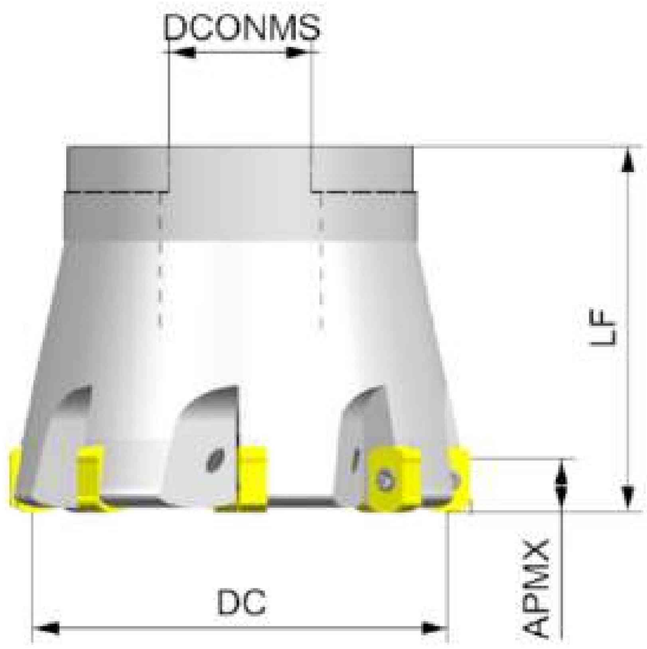


刀片型号 Insert model	尺寸(mm) Dimensions				
	INSL	S	W1	RE	D1
LNMP090412-M30	11.93	4.10	9.13	1.20	4.10

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..LN09T	SG3585-P	TS10W-P

LN09T 高进给铣削刀具 LN09T High feed milling tools



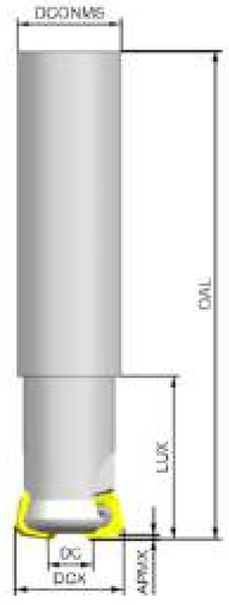
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
REMN32-A16Z4-LN09T	32	40	16	4	1.5	0.12	LN*0904
REMN40-A16Z4-LN09T	40	40	16	4	1.5	0.23	
REMN40-A16Z5-LN09T	40	40	16	5	1.5	0.23	
REMN50-A22Z5-LN09T	50	50	22	5	1.5	0.42	
REMN50-A22Z7-LN09T	50	50	22	7	1.5	0.42	
REMN63-A22Z7-LN09T	63	50	22	7	1.5	0.62	
REMN63-A22Z8-LN09T	63	50	22	8	1.5	0.62	
REMN80-A27Z8-LN09T	80	50	27	8	1.5	1.20	
REMN80-A27Z10-LN09T	80	50	27	10	1.5	1.20	
REMN100-B32Z10-LN09T	100	60	32	10	1.5	2.28	
REMN100-B32Z10-LN09T	100	60	32	10	1.5	2.28	

配件 Spare part

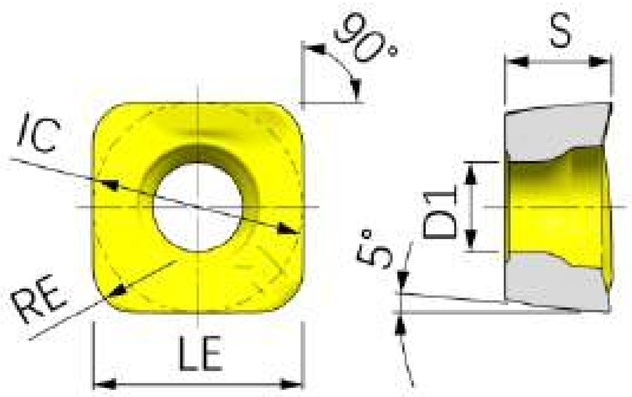
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..LN09T	SG3585-P	TS10W-P

可转位铣削刀具 Indexable milling tool

SO13T 高进给铣削刀具 SO13T High feed milling tools



型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN32-S32Z2L150-SO13T	11.6	32	50	150	32	2	2.0	0.8	SO*1306
REMN35-S32Z2L200-SO13T	14.6	35	30	200	32	2	2.0	1.2	
REMN40-S32Z3L150-SO13T	19.5	40	30	150	32	3	2.0	0.9	

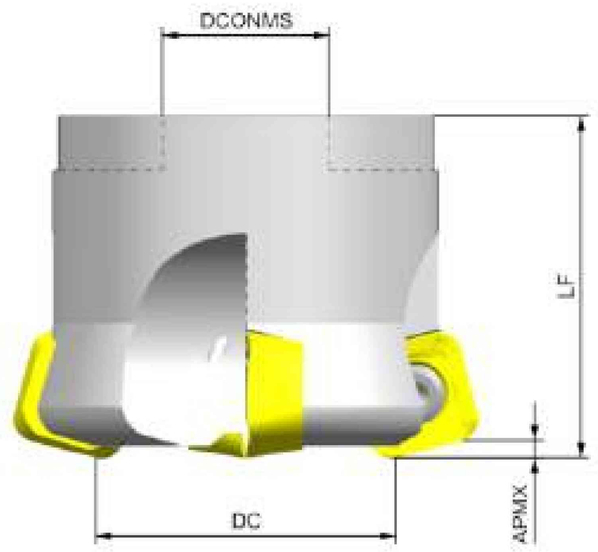


刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
SOMT130625-PM	13.05	6.65	13.05	2.50	5.60

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..SO13T	SG5012-P	TS20W-P

SO13T 高进给铣削刀具 SO13T High feed milling tools



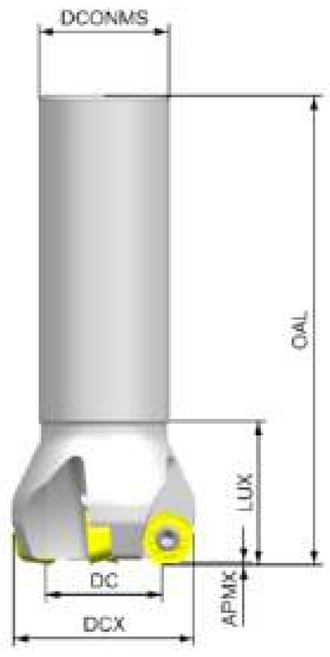
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
REMN50–A22Z3–SO13T	50	40	22	3	2.0	0.3	SO*1306
REMN50–A22Z4–SO13T	50	40	22	4	2.0	0.3	
REMN63–A22Z4–SO13T	63	50	22	4	2.0	0.6	
REMN63–A22Z5–SO13T	63	50	22	5	2.0	0.6	
REMN80–A27Z5–SO13T	80	60	27	5	2.0	1.3	
REMN80–A27Z6–SO13T	80	60	27	6	2.0	1.3	
REMN100–B32Z6–SO13T	100	60	32	6	2.0	1.9	
REMN125–B40Z7–SO13T	125	60	40	7	2.0	2.5	

配件 Spare part

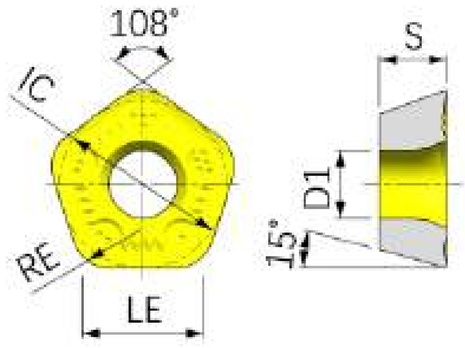
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..SO13T	SG5012–P	TS20W–P

可转位铣削刀具 Indexable milling tool

PD09P 高进给铣削刀具 PD09P High feed milling tools



型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN32-S32Z2L250-PD09P	18.4	32	60	250	32	2	2.0	1.4	PD*0905
REMN40-S32Z3L250-PD09P	25.5	40	60	250	32	3	2.0	1.5	

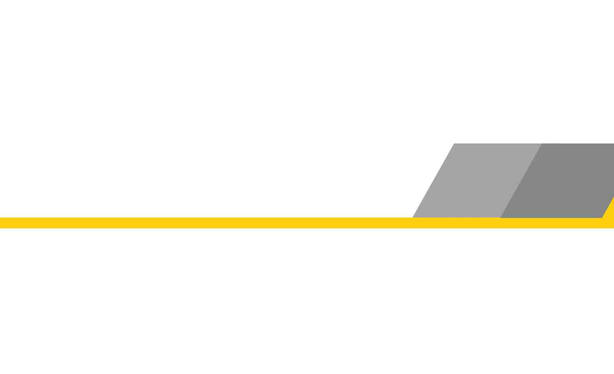


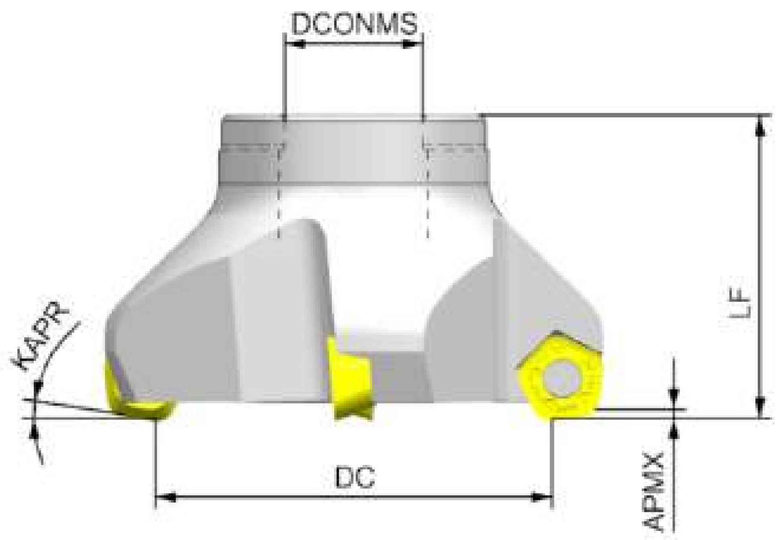
刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
PDMT090530-MM	13.50	5.47	9.80	3.00	5.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..PD09P	SC4511	TS20W

PD09P 高进给铣削刀具 PD09P High feed milling tools





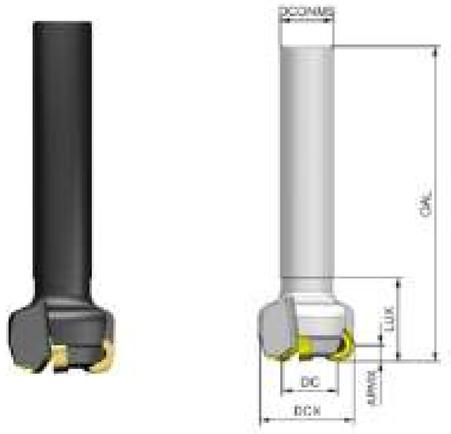
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
REMN50-A22Z4-PD09P	50	40	22	4	2.0	0.4	PD*0905
REMN50-A22Z5-PD09P	50	40	22	5	2.0	0.4	
REMN63-A22Z5-PD09P	63	40	22	5	2.0	0.5	
REMN63-A22Z6-PD09P	63	40	22	6	2.0	0.5	
REMN80-A27Z5-PD09P	80	50	27	5	2.0	1.0	
REMN80-A27Z6-PD09P	80	50	27	6	2.0	1.0	
REMN100-B32Z6-PD09P	100	50	32	6	2.0	1.7	
REMN100-B32Z8-PD09P	100	50	32	8	2.0	1.7	
REMN125-B40Z8-PD09P	125	63	40	8	2.0	3.1	
REMN125-B40Z10-PD09P	125	63	40	10	2.0	3.1	

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..PD09P	SC4511	TS20W

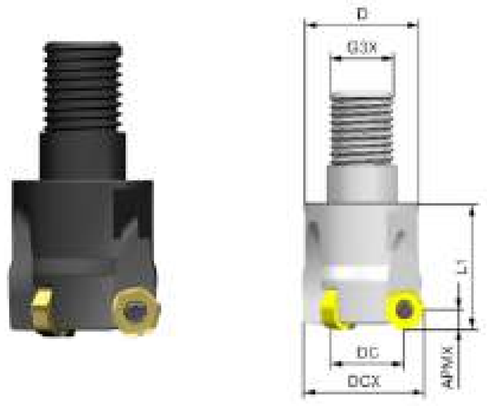
可转位铣削刀具 Indexable milling tool

HN06K 高进给铣削刀具 HN06K High feed milling tools

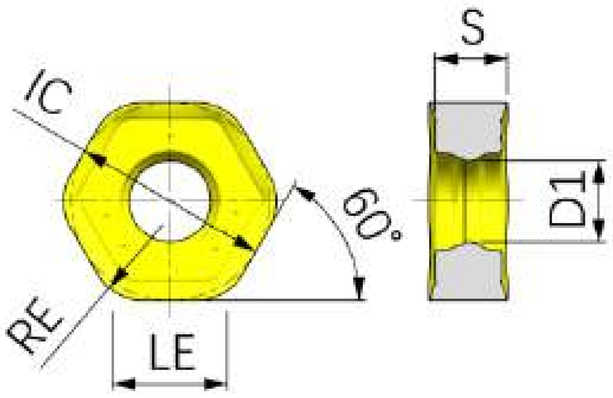


Kr=15°

型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN25-A20Z3L120-HN06K	25	38.2	32	120	20	3	1.6	0.31	HN*060432
REMN32-A25Z3L130-HN06K	32	45.2	40	130	25	3	1.6	0.52	



型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
REMN25-M29Z3L32-HN06K	25	38.2	22	32	29	3	1.6	0.16	HN*060432
REMN32-M29Z4L40-HN06K	32	45.2	22	40	29	4	1.6	0.25	

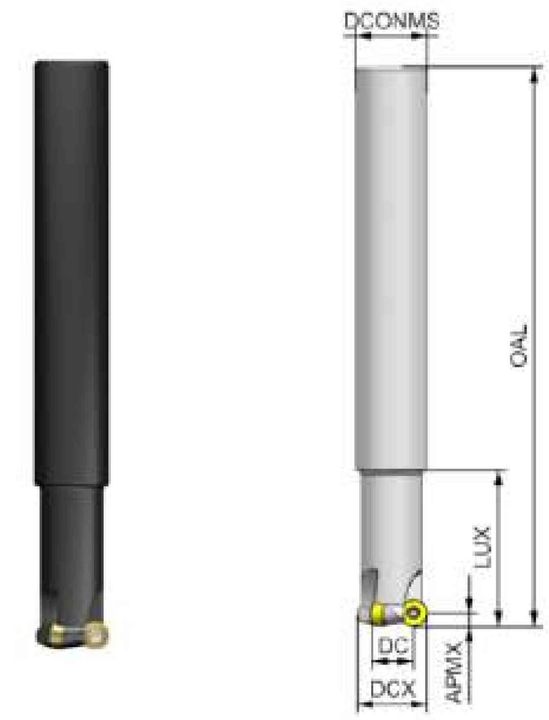


刀片型号 Insert model	尺寸(mm) Dimensions				
	IC	S	LE	RE	D1
HNMU060432-MM	12.00	4.41	7.00	3.20	5.00

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
REM..HN06K	SD4010	TS15W

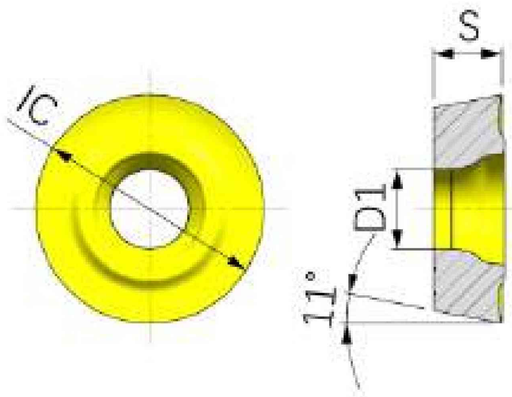
RP12S 高进给铣削刀具 RP12S High feed milling tools



型号 Model	尺寸(mm) Dimensions							重量(KG) Weight	适配刀片 Compatible inserts
	DC	DCX	LUX	OAL	DCON	Z	APMX		
RPMN25-S25Z2L106-RP12S	13	25	21.6	106	25	2	6.0	0.4	RP*1204
RPMN32-S32Z3L120-RP12S	20	32	26.6	120	32	3	6.0	0.7	
RPMN40-S32Z4L135-RP12S	28	40	72.0	135	32	4	6.0	0.8	

MR

M30



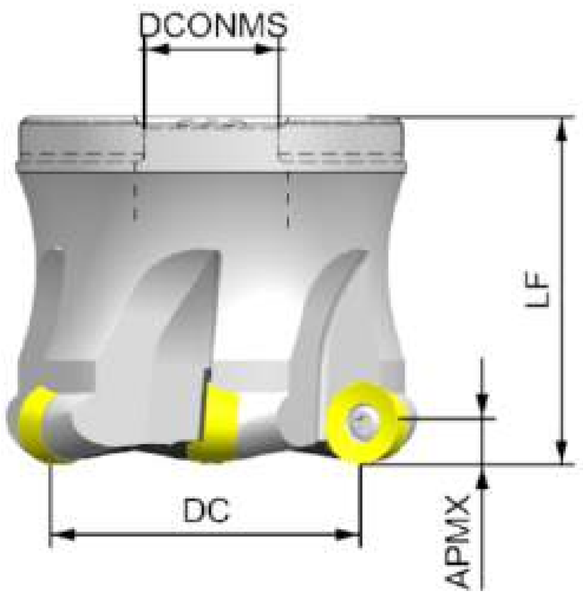
刀片型号 Insert model	尺寸(mm) Dimensions			
	IC	S	RE	D1
RPHW1204M6E-MR	12.00	4.76	6.00	4.50
RPHT1204M6E-M30	12.00	4.76	6.00	4.50
RPHT1204M4E-M30	12.00	4.76	6.00	4.50

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RPM..RP12S	SD4010	TS15W

可转位铣削刀具 Indexable milling tool

RP12S 高进给铣削刀具 RP12S High feed milling tools



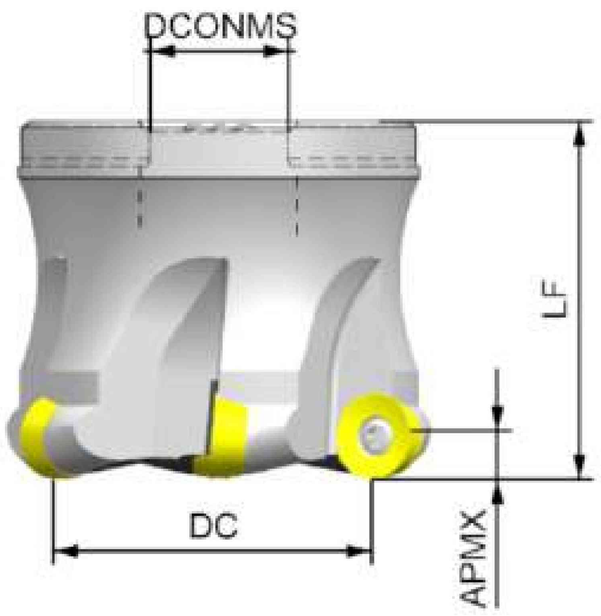
型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RPMN40–A16Z4–RP12S	40	40	16	4	6.0	0.20	RP*1204
RPMN50–A22Z4–RP12S	50	40	22	4	6.0	0.30	
RPMN50–A22Z5–RP12S	50	40	22	5	6.0	0.30	
RPMN63–A22Z6–RP12S	63	40	22	6	6.0	0.40	
RPMN63–A22Z7–RP12S	63	40	22	7	6.0	0.40	
RPMN80–A27Z7–RP12S	80	50	27	7	6.0	1.05	
RPMN80–A27Z8–RP12S	80	50	27	8	6.0	1.05	
RPMN100–B32Z9–RP12S	100	50	32	9	6.0	1.60	
RPMN125–B40Z11–RP12S	125	63	40	11	6.0	3.30	

适配刀片第A78页
Compatible inserts, page A78

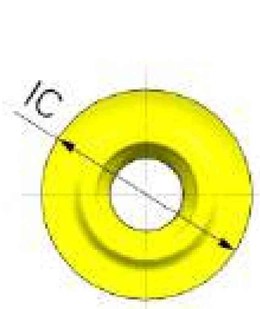
配件 Spare part

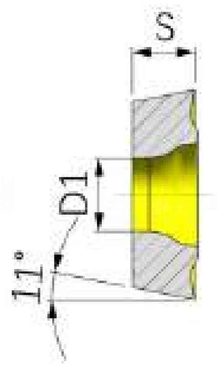
适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RPM..RP12S	SD4010	TS15W

RP16S 高进给铣削刀具 RP16S High feed milling tools



型号 Model	尺寸(mm) Dimensions					重量(KG) Weight	适配刀片 Compatible inserts
	DC	LF	DCON	Z	APMX		
RPMN50-A22Z4-RP16S	50	50	22	4	8.0	0.4	RP*16
RPMN63-A22Z5-RP16S	63	50	22	5	8.0	0.6	
RPMN63-A22Z6-RP16S	63	50	22	6	8.0	0.6	
RPMN80-A27Z5-RP16S	80	50	27	5	8.0	1.1	
RPMN80-A27Z5-RP16S	80	50	27	5	8.0	1.1	
RPMN100-B32Z6-RP16S	100	50	32	6	8.0	1.6	
RPMN100-B32Z8-RP16S	100	50	32	8	8.0	1.6	
RPMN125-B40Z10-RP16S	125	63	40	10	8.0	3.1	





刀片型号 Insert model	尺寸(mm) Dimensions			
	IC	S	RE	D1
RPMT160408-ML	16	4.76	8	5.6
RPKW160508-M50	16	5.65	8	5.6

配件 Spare part

适用刀具 Compatible tools	螺丝 Screw	扳手 Wrench
RPM..RP16S	SG5012-P	TS20W-P

可转位铣削刀具 Indexable milling tool

铣削参数信息 Milling Parameters Information

型号 Model	AP(mm)	Fz(mm/z)	材料组 Material Group							
			P1–P2	P3–P11	P12	M1–M2	M3–M5	K1–K4	K5–K7	S1–S3/S13	S11–S12
ADMT10T308R–ML	4.5	0.08–0.15									
ADMT10T308R–ML	2.5	0.08–0.15									
ADMT10T308R–ML	2.5	0.06–0.1									
ADMT10T308R–ML	3	0.06–0.12									
ADMT160508TR–MM	7	0.15–0.3									
ADMT180608TR–MM	8	0.18–0.3									
ADMT180631TR–MM	8	0.18–0.3									
AOMU100408/16/20–ML	4	0.05–0.25									
AOMU100408/16/20–ML	3	0.06–0.2									
AOMU100408/16/20–ML	3	0.06–0.15									
LNHT1306R–M30	7	0.1–0.25									
LNHT1306R–M30	5.5	0.1–0.2									
LNHT1306R–M30	5	0.08–0.15									
TNGU070304/08ANN–M30	4	0.07–0.2									
TNGU070304/08ANN–M30	4	0.07–0.15									
TNGU070304/08ANN–M30	3	0.07–0.15									
TNGU070304/08ANN–M30	2.5	0.07–0.12									
TNMU120708ANN–M30	6	0.08–0.25									
TNMU120708ANN–M30	4	0.08–0.2									
TNMU120708ANN–M30	3	0.07–0.15									
LNHU090412R–M30	9	0.08–0.15									
LNHU090412R–M30	9	0.06–0.1									
LNHU090412R–M30	9	0.08–0.1									
LNHU090412R–M30	9	0.06–0.75									
SEMT12T3N–PM	4	0.1–0.28									
SNHU120408/12/16SR–MM	6	0.1–0.2									
SNHU120408/12/16SR–MM	4	0.05–0.2									
SNHU120408/12/16SR–MM	6	0.05–0.25									
SNHU120408/12/16SR–MM	3	0.08–0.15									

铣削参数信息 Milling Parameters Information

型号 Model	AP(mm)	Fz(mm/z)	材料组 Material Group							
			P1–P2	P3–P11	P12	M1–M2	M3–M5	K1–K4	K5–K7	S1–S3/S13	S11–S12
SNMX1206ANN–PM	6	0.1–0.35	■	■	■			■	■		
SNMX1206ANN–PM	4	0.12–0.35				■					
SNMX1206ANN–PM	4	0.12–0.25					■				■
SNMX1206ANN–PM	3.5	0.06–0.15								■	
SNMX1206ZNN–PM	7.5	0.08–0.25	■	■	■			■	■		
SNMX1206ZNN–PM	5	0.08–0.25				■					
SNMX1206ZNN–PM	5	0.08–0.18					■				■
SNMX1206ZNN–PM	4.5	0.06–0.15								■	
SNMX1505R–KM	6	0.15–0.39						■			
PNMU090508–MM	6	0.1–0.3	■	■	■			■	■		
PNMU090508–MM	4.5	0.1–0.3				■	■				
PNMU090508–MM	3.5	0.1–0.3									■
PNMU090508–MM	3.5	0.06–0.2								■	
HNMU060432–MM	3	0.14–0.33	■	■	■			■	■		
HNMU060432–MM	3	0.12–0.25				■	■				
HNMU060432–MM	2.5	0.1–0.2								■	■
HNMU060432–MM	4	0.12–0.27	■	■	■			■	■		
HNMU060432–MM	3	0.1–0.2				■	■				
HNMU060432–MM	2.5	0.1–0.16								■	■
HNGU0604AN–ML	3	0.08–0.18	■	■	■			■	■		
HNGU0604AN–ML	2.5	0.07–0.15				■	■				
HNGU0604AN–ML	2	0.05–0.12								■	■
HNGU0604AN–ML	4	0.07–0.15	■	■	■			■	■		
HNGU0604AN–ML	3	0.05–0.12				■	■				
HNGU0604AN–ML	2.5	0.04–0.1								■	■
HNMX0906AN–M30	2.7	0.09–0.2	■	■	■			■	■		
HNMX0906AN–M30	2.7	0.08–0.18				■	■				
HNMX1006N–PM	5	0.1–0.2	■	■	■			■	■		
XNMU070508–PM	4	0.1–0.25	■	■	■			■	■		

可转位铣削刀具 Indexable milling tool

铣削参数信息 Milling Parameters Information

型号 Model	AP(mm)	Fz(mm/z)	材料组 Material Group							
			P1–P2	P3–P11	P12	M1–M2	M3–M5	K1–K4	K5–K7	S1–S3/ S13	S11–S12
XNMU070508–PM	3	0.08–0.15									
XNMU070508–MM	4	0.08–0.2									
XNMU070508–MM	3	0.07–0.18									
XNMU070508–MM	3	0.05–0.15									
XNHF070508–KL	4	0.05–0.2									
XNMU090612–KM	6	0.1–0.3									
XNMU090612–KM	4.5	0.08–0.2									
XNMU090505–M50	4.5	0.1–0.3									
XNMU090505–M50	3	0.08–0.2									
XNMU090505–M50	2.5	0.06–0.15									
XNMU0906N–MM	4	0.13–0.25									
XNMU0906N–MM	3	0.1–0.2									
ONM/GU050408–MM ONHU050404AN–MM	2.5	0.01–0.3									
ONM/GU050408–MM ONHU050404AN–MM	2	0.08–0.25									
ONM/GU050408–MM ONHU050404AN–MM	2	0.08–0.2									
ONM/GU050408–MM ONHU050404AN–MM	1.5	0.05–0.15									
ONGU060408–M30 ONHU060408AN–M30	3	0.01–0.3									
ONGU060408–M30 ONHU060408AN–M30	2.5	0.08–0.025									
ONGU060408–M30 ONHU060408AN–M30	2	0.06–0.02									
ONMX070708–M30	3	0.1–0.2									
ONMX070708–M30	2.5	0.08–0.15									
ONMX070708–M30	2	0.07–0.12									

铣削参数信息 Milling Parameters Information

型号 Model	AP(mm)	Fz(mm/z)	材料组 Material Group							
			P1–P2	P3–P11	P12	M1–M2	M3–M5	K1–K4	K5–K7	S1–S3/S13	S11–S12
ONMU080608–MM	4	0.15–0.35	■	■	■			■	■		
ONMU080608AN–ML	4	0.15–0.4	■	■	■						
ONMU080608AN–ML	3	0.1–0.3				■	■				
ONMU080608AN–ML	2.5	0.1–0.25									■
ONMU080608AN–ML	2.5	0.07–0.2								■	
SDMT09T3–MM	4.5	0.12–0.2	■	■	■			■	■		
SDMT09T3–MM	3.5	0.08–0.12				■	■				
SDMT09T3–MM	3	0.06–0.1								■	■
SDMT09T3–MM	3	0.15–0.2	■	■	■			■	■		
SDMT09T3–MM	2.5	0.08–0.12				■	■				
SDMT09T3–MM	2	0.06–0.1								■	■
SPMT1204–M30	7	0.15–0.2	■	■	■			■	■		
SPMT1204–M30	5.5	0.08–0.12				■	■				
SPMT1204–M30	4	0.06–0.1								■	■
SPMT1204–M30	5	0.15–0.2	■	■	■			■	■		
SPMT1204–M30	4	0.08–0.15				■	■				
SPMT1204–M30	3	0.06–0.1								■	■
ODHT050408AD–MM ODMT050408AD–MM	2.5	0.15–0.35	■	■	■			■	■		
			■	■	■			■	■		
ODHT050408AD–MM ODMT050408AD–MM	2	0.12–0.2				■	■				
						■	■				
ODHT050408AD–MM ODMT050408AD–MM	2	0.1–0.18								■	■
										■	■
LNMU030312–PM	1	0.5–1.5	■	■	■			■	■		
LNMU030312–ML	1	0.3–0.8				■					■
LNMU030312–ML	1	0.15–0.5					■				
LNMU030312–ML	1	0.1–0.3								■	
LNMP060310–M30	1	0.5–2.5	■	■	■			■	■		
LNMP060310–M30	1	0.3–1.5				■	■				■

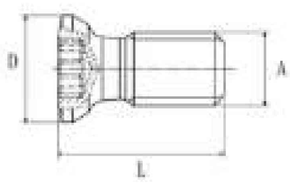
可转位铣削刀具 Indexable milling tool

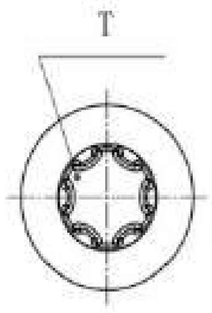
铣削参数信息 Milling parameters information

型号 Model	AP(mm)	Fz(mm/z)	材料组 Material Group							
			P1–P2	P3–P11	P12	M1–M2	M3–M5	K1–K4	K5–K7	S1–S3/S13	S11–S12
LNMP060310–M30	1	0.2–0.8									
LNMP090412–M30	1.5	0.5–3.5									
LNMP090412–M30	1.5	0.3–2.0									
LNMP090412–M30	1.5	0.2–1.0									
SOMT130625–PM	1.5	0.4–2.0									
SOMT130625–PM	1.5	0.2–1.2									
PDMT090530–MM	1.2	0.5–1.0									
PDMT090530–MM	1.2	0.5–0.9									
PDMT090530–MM	1	0.4–0.7									
RPHW1204–MR	2.5	0.15–0.4									
RPHW1204–MR	1.9	0.13–0.25									
RPHW1204–MR	1.4	0.1–0.2									
RPHW1204–MR	1.7	0.12–0.25									
RPHT1204M6E–M30 RPHT1204M4E–M30	2.5	0.2–0.45									
RPHT1204M6E–M30 RPHT1204M4E–M30	1.9	0.15–0.33									
RPHT1204M6E–M30 RPHT1204M4E–M30	1.4	0.1–0.25									
RPKW160508–M50	3.0	0.3–0.6									
RPMT1604–ML	3.0	0.3–0.5									
RPMT1604–ML	2.5	0.25–0.45									
RPMT1604–ML	1.9	0.15–0.35									

螺 钉 Screw

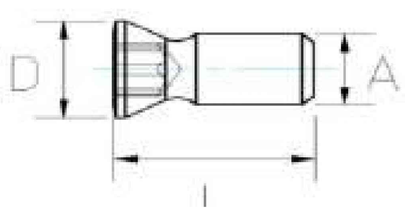
对照表 Comparison Table





SFS施特劳加强星型螺钉 SFS Strauss reinforced star screw				威汉 加强星型匙型手柄扳手(T) Weihan Reinforced Star-Shaped Key-Type Handle Wrench (T)
型号 Model	D	L	A	
SG2049-P	2.55	4.9	M2*0.4	TS06W-P
SG2252-P	3.14	5.2	M2.2*0.45	TS07W-P
SG2565-P	3.46	6.5	M2.5*0.45	TS08W-P
SG3083-P	4.3	8.3	M3*0.5	TS08W-P
SG3085-P	5.3	10.8	M3*0.5	TS08W-P
SX3011-P	5.3	10.8	M3*0.35细牙	TS15W-P
SG3585-P	5.1	8.5	M3.5*0.6	TS10W-P
SG4011-P	5.45	11.0	M4*0.7	TS15W-P
SG4013-P	5.45	13.0	M4*0.7	TS15W-P
SG5012-P	7.0	11.45	M5*0.8	TS20W-P

◆请注意此类型-P螺钉需配对应TS*W-P扳手，其它扳手不适用此款螺钉
Please note that this type of -P screw requires a matching TS*W-P wrench; other wrenches are not suitable for this screw.



其它螺钉 Others screw				适配扳手(T) Wrench adapter (T)	
				威汉星型匙型手柄扳手 Weihan Star-Shaped Key-Type Handle Wrench	其它扳手 other wrench
型号 Model	D	L	A		
SS2005	1.9	5	M2*0.4	TS06W	TQ06
SC2250	3.0	5	M2.2*0.45	TS07W	TQ07
SX2553	3.6	5.3	M2.5*0.35细牙	TS08W	TQ08
SC2560	3.6	6	M2.5*0.45	TS08W	TQ08
SH3060	4.1	6	M3*0.5	TS08W	TQ08
SD3070	3.6	7.0	M3*0.5	TS08W	TQ08
SC3080	4.2	8	M3*0.5	TS10W	TQ10
SD3512	4.7	12	M3.5*0.6	TS15W	TQ15
SC3580	5.0	8	M3.5*0.6		
SD3580	5.0	8	M3.5*0.6		
SX4080	5.6	8	M4*0.5细牙		
SC4090	5.4	9	M4*0.7		
SD4010	5.7	10	M4*0.7		
ST4010	6.0	10	M4*0.7圆头		
ST4011	6.0	11	M4*0.7圆头		
SC4511	6.6	11	M4.5*0.75	TS20W	TQ20
SC5012	7.2	12	M5*0.8		
ST5010	6.27	10.6	M5*0.8圆头		
SD5012	7.0	12	M5*0.8		
SY5012	7.0	12	M5*0.8		
SG5016	7.1	16	M5*0.8		
SS6016	8.35	15.6	M6*1		

◆请注意此类型-P螺钉需配对应TS*W-P扳手，其它扳手不适用此款螺钉
Please note that this type of -P screw requires a matching TS*W-P wrench; other wrenches are not suitable for this screw.

施特劳加强星型螺钉系列

◆该系列螺钉，硬度高，抗冲击力能力强，锁紧能力强，具有更高的使用寿命
This series of screws features high hardness, strong impact resistance, strong locking ability, and a longer service life.

◆该系列螺钉与其它星型螺钉最大的区别在于头部星角加宽结构设计此结构使用特定扳手，
能获得更精确更牢固的贴合，使其扳手扭力比其它扳手高25%，从而使拆装更稳固更轻松
The biggest difference between this series of screws and other star screws lies in the widened star-angle design of the head. This structure, when used with a specific wrench, achieves a more precise and secure fit, resulting in wrench torque 25% higher than other wrenches, thus making assembly and disassembly more secure and easier."

可转位铣削刀具 Indexable milling tool

威汉扳手 Weihan Wrench

旗型和匙型手柄扳手

- 手柄的形状符合人体工程学原理，并提供拇指和食指的支撑区。从此大扭力传输变的十分简单

  The handle is ergonomically shaped and provides support for the thumb and forefinger. This makes transmitting high torque incredibly simple.

- 圆柱形手柄轴便于快速转动螺钉

  The cylindrical handle shaft facilitates quick rotation of the screw.

- 创新型扭力起子包含T6-T20各种尺寸，不会损坏昂贵的紧固螺钉或手柄花纹。如果施加的扭力超过所需扭矩，起子杆可以做出弹性反应

  Innovative torque screwdrivers are available in various sizes from T6 to T20, without damaging expensive fastening screws or handle patterns. If the applied torque exceeds the required torque, the screwdriver handle can spring back.

- 薄型刀杆，可轻松扭动螺杆轴上的覆盖螺钉

  Thin–profile tool holder allows for easy turning of the cover screw on the screw shaft.

扳 手 Wrench

对照表 Comparison Table

威汉–加强星型匙型手柄扳手
Weihan Reinforced Star–Shaped Key–Type Handle Wrench (T)

型号 Matched insert					
TS06W–P	6IP	35	2.0	70	40
TS07W–P	7IP	35	2.5	70	40
TS08W–P	8IP	40	2.5	75	40
TS10W–P	10IP	40	3.0	75	40
TS15W–P	15IP	45	3.5	80	40
TS20W–P	20IP	45	4.0	80	40

◆ 起子杆：铬钒钢，经过热处理，发黑处理
Screwdriver handle: Chrome vanadium steel, heat–treated and blackened

◆ 适用于需用大扭力转动的小型螺钉
Application: Suitable for small screws requiring high torque.

◆ 特别适用于更换铣削头上的可转位式刀片
Especially suitable for replacing indexable inserts on milling heads

◆ 其 它：加强星型扳手的扭力比星型扳手高25%
Other: Reinforced star wrenches offer 25% higher torque than standard star wrenches.

◆ 注 意：加强星型扳手不能用于星型螺钉
Note: Reinforced star wrenches cannot be used with star–shaped screws.

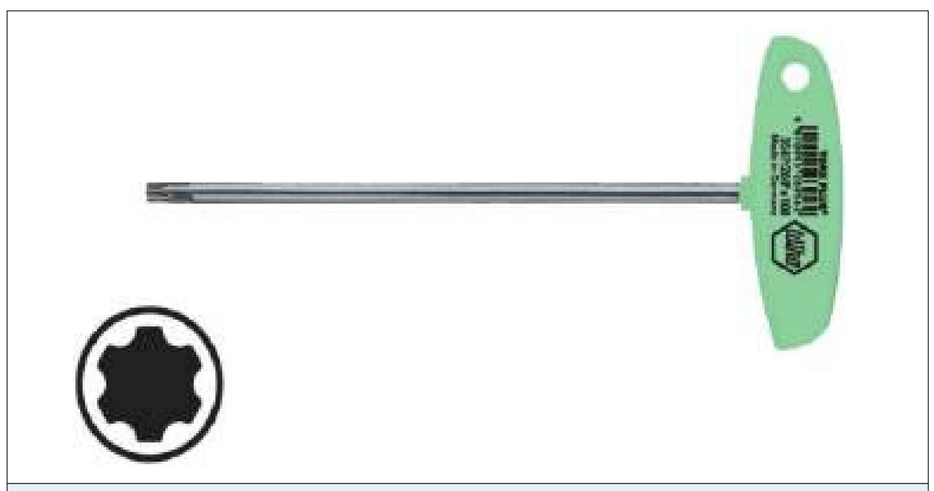
威汉–星型匙型手柄扳手
Weihan Reinforced Star–Shaped Key–Type Handle Wrench (T)

型号 Matched insert					
TS06W	T6	35	2.0	70	40
TS07W	T7	35	2.5	70	40
TS08W	T8	40	2.5	75	40
TS10W	T10	40	3.0	75	40
TS15W	T15	45	3.5	80	40
TS20W	T20	45	4.0	80	40

◆ 起子杆：铬钒钢，经过热处理，发黑处理
Screwdriver handle: Chrome vanadium steel, heat–treated and blackened

◆ 适用于需用大扭力转动的小型螺钉
Application: Suitable for small screws requiring high torque.

◆ 特别适用于更换铣削头上的可转位式刀片
Especially suitable for replacing indexable inserts on milling heads



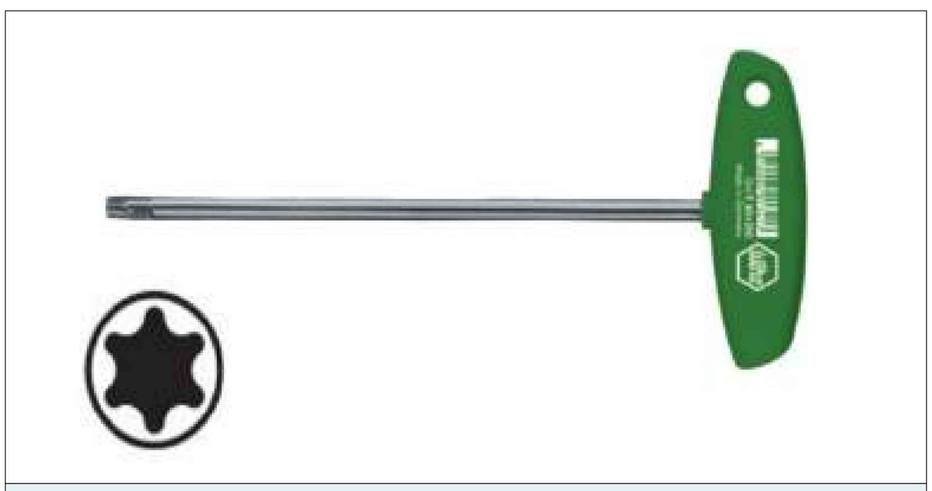
威汉–加强星型T型手柄扳手
Weihan Reinforced Star–Shaped Key–Type Handle Wrench (T)

型号 Matched insert					
TT15W–P	15IP	100	4.0	126	80
TT20W–P	20IP	100	4.0	132	100

◆ 起子杆：铬钒钢，经过热处理，发黑处理
Screwdriver handle: Chrome vanadium steel, heat–treated and blackened

◆ 其 它：加强星型扳手的扭力比星型扳手高25%
Other: Reinforced star wrenches offer 25% higher torque than standard star wrenches.

◆ 注 意：加强星型扳手不能用于星型螺钉
Note: Reinforced star wrenches cannot be used with star–shaped screws.



威汉–加强星型T型手柄扳手
Weihan Reinforced Star–Shaped Key–Type Handle Wrench (T)

型号 Matched insert					
TT15W	T15	100	4.0	126	80
TT20W	T20	100	4.0	132	100

◆ 起子杆：铬钒钢，经过热处理，发黑处理
Screwdriver handle: Chrome vanadium steel, heat–treated and blackened

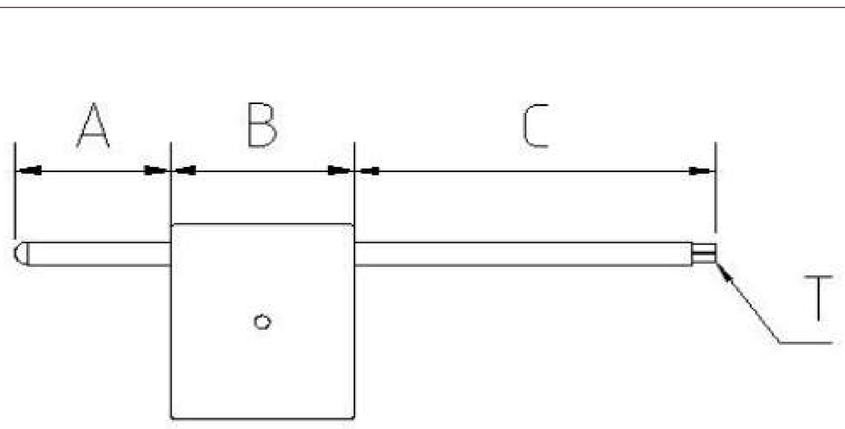
◆ 应 用：用最小的力传递大扭力
Application: To transmit large torque with minimal force.

◆ 其 它：高精度的镀铬起子头
Other: High–precision chrome–plated screwdriver bits

可转位铣削刀具 Indexable milling tool

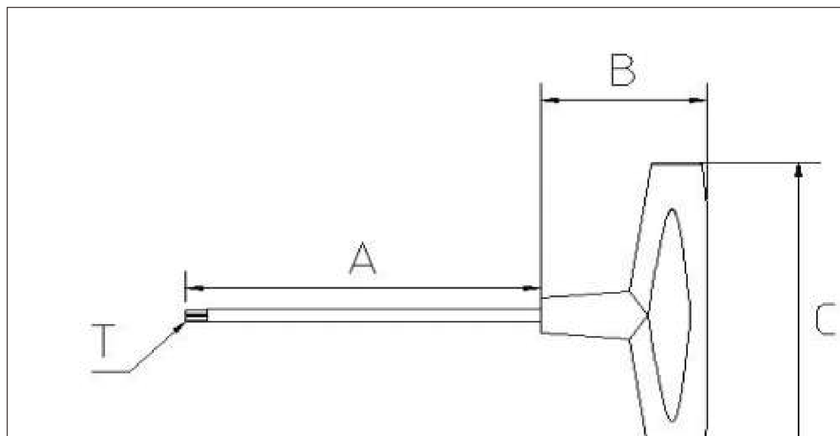
扳 手 Wrench

对照表 Comparison Table



其它旗型手柄星形扳手
Other flag-handled star wrenches

型号 Matched insert	A	B	C	T
TQ06	13	15	34	T6
TQ07	13	15	34	T7
TQ08	13	19	39	T8
TQ10	14	42	42	T10
TQ15	15	45	45	T15
TQ20	15	49	49	T20

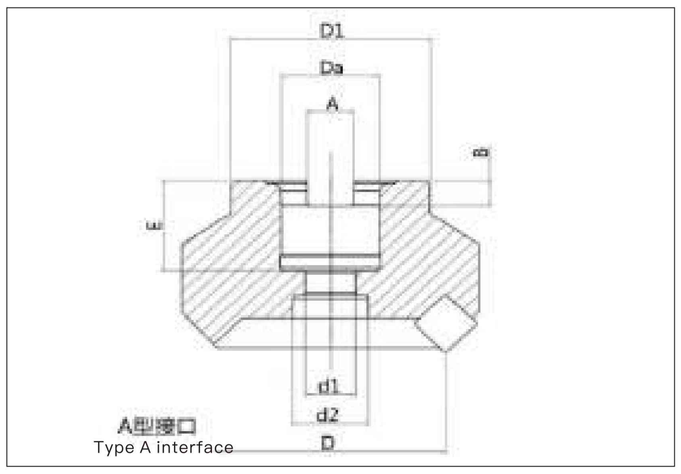


其它旗型T柄星形扳手
Other flag-type T-handle star wrenches

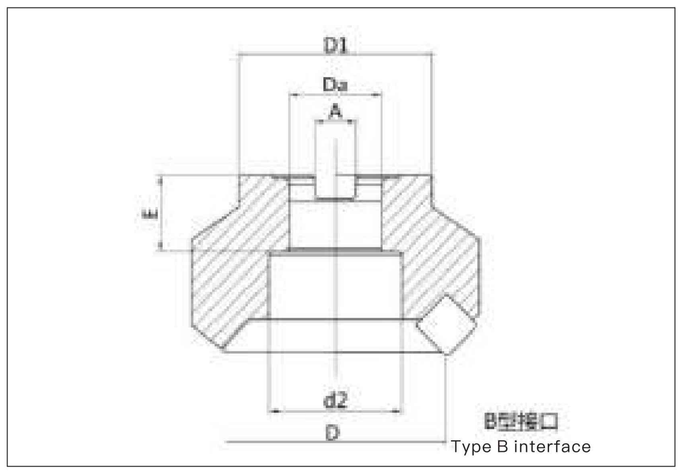
型号 Matched insert	A	B	C	T
Tt15	95	45	80	T15
Tt20	100	45	80	T20

接口类型 Interface type

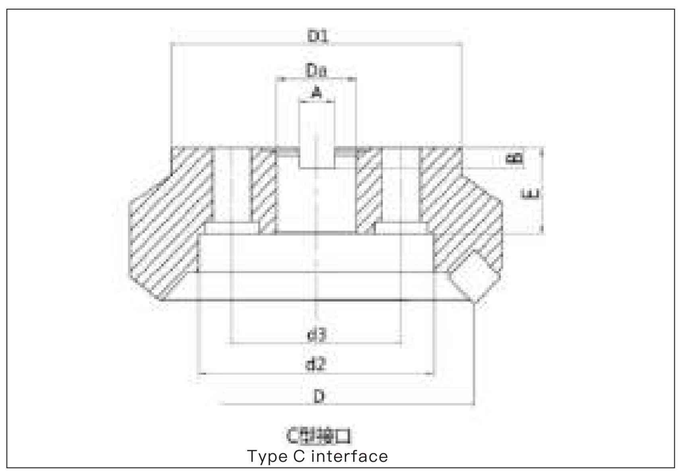
公制刀柄 Metric Tool handle



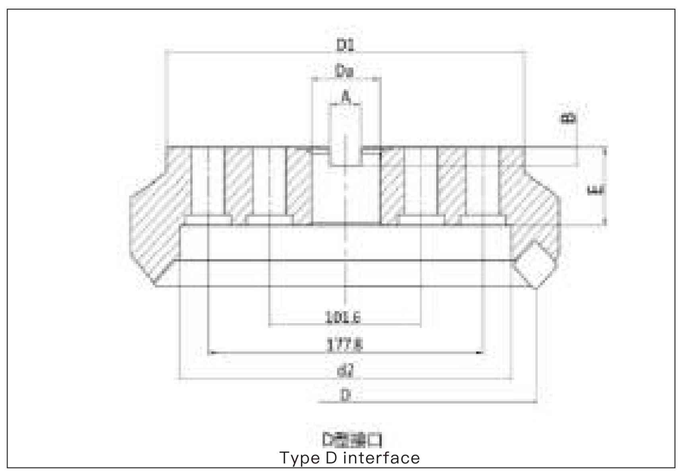
A型接口
Type A interface



B型接口
Type B interface



C型接口
Type C interface



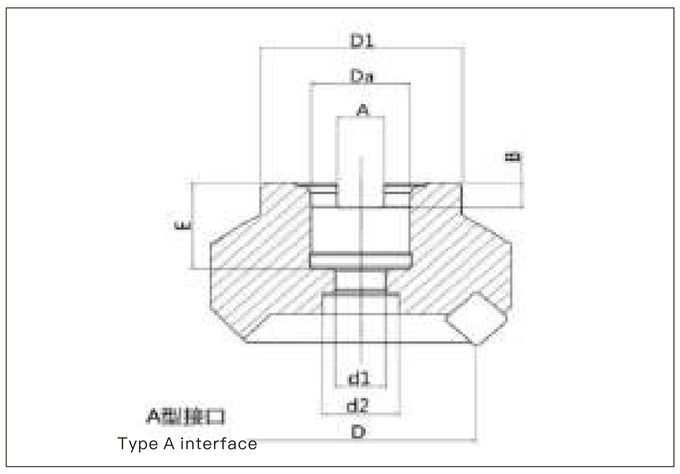
D型接口
Type D interface

尺寸(mm) Dimensions										
D	Da	A	B	E	D1 模具铣 Die milling	D1 普通铣 general milling	d1	d2	d3	接口类型 Interface type
32	16	8.4	5.6	20	30	–	9	13.5	–	
40	16	8.4	5.6	20	35	–	9	13.5	–	A
40	22	10.4	6.3	22	38	–	11	17	–	A
50	22	10.4	6.3	22	40	45	11	17	–	A
63	22	10.4	6.3	22	47	–	11	17	–	A
80	27	12.4	7	28	58	70	13	22	–	A
100	32	14.4	8	26	66	85	18	26	–	A
100	32	14.4	8	26	66	85	–	46	–	B
125	40	16.4	9	32	85	–	22	32	–	A
125	40	16.4	9	32	85	–	–	56	–	B
160	40	16.4	9	32	110	–	–	90	66.7	C
200	60	25.7	14	40	130	–	–	132	101.6	C
250	60	25.7	14	40	160	–	–	150	101.6	C
315	60	25.7	14	40	220	–	–	220	–	D

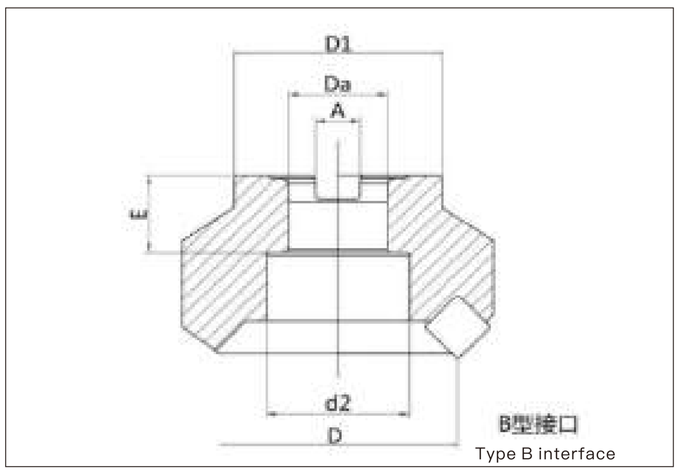
可转位铣削刀具 Indexable milling tool

接口类型 Interface type

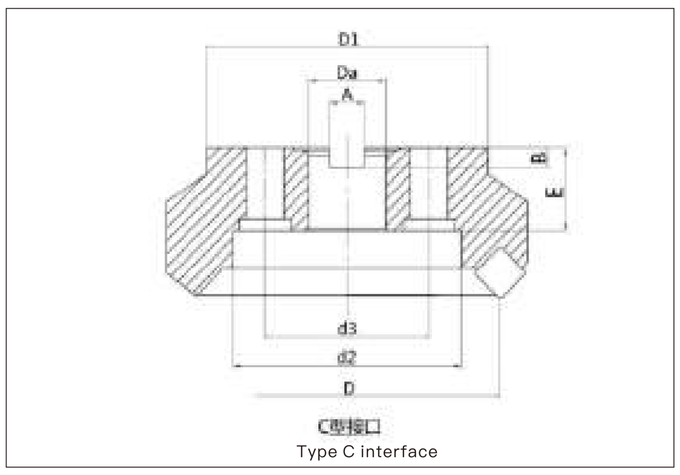
英制铣刀盘 Milling cutter (inch)



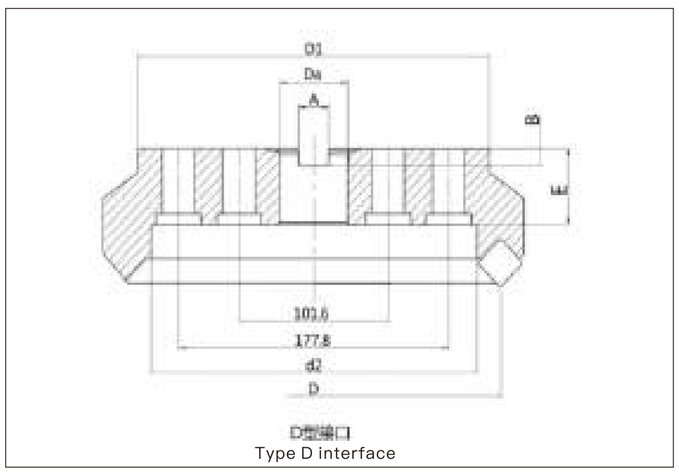
A型接口
Type A interface



B型接口
Type B interface



C型接口
Type C interface



D型接口
Type D interface

尺寸(mm) Dimensions									
D	Da	A	B	E	D1	d1	d2	d3	接口类型 Interface type
32	16	8.4	5.6	20	30	9	13.5	–	
40	16	8.4	5.6	20	35	9	13.5	–	A
40	22	10.4	6.3	22	38	11	17	–	A
50	22	10.4	6.3	22	45	11	17	–	A
63	22	10.4	6.3	22	47	11	17	–	A
80	25.4	9.526	6	26	70	13	22	–	A
100	31.75	12.7	8	32	80	18	26	–	A
100	31.75	12.7	8	32	80	–	46	–	B
125	38.1	15.876	10	38	80	–	56	–	B
160	50.8	19.05	11	38	100	–	72	–	B
200	47.625	25.4	14	38	130	–	132	101.6	C
250	47.625	25.4	14	38	160	–	150	101.6	C
315	47.625	25.4	14	38	220	–	224	–	D

铣削参数计算公式 Milling parameters calculation formulas

主轴转数n (rpm)
Spindle Speed

$$n = \frac{V_c \times 1000}{D_c \times \pi}$$

切削速度V_C (m/min)
Cutting Speed

$$V_C = \frac{D_c \times \pi \times n}{1000}$$

进给速度V_f (mm/min)
Feed Rate

$$V_f = f_n X z X n$$

每齿进给量 f_Z (mm/z)
Feed per tooth fZ (mm/z)

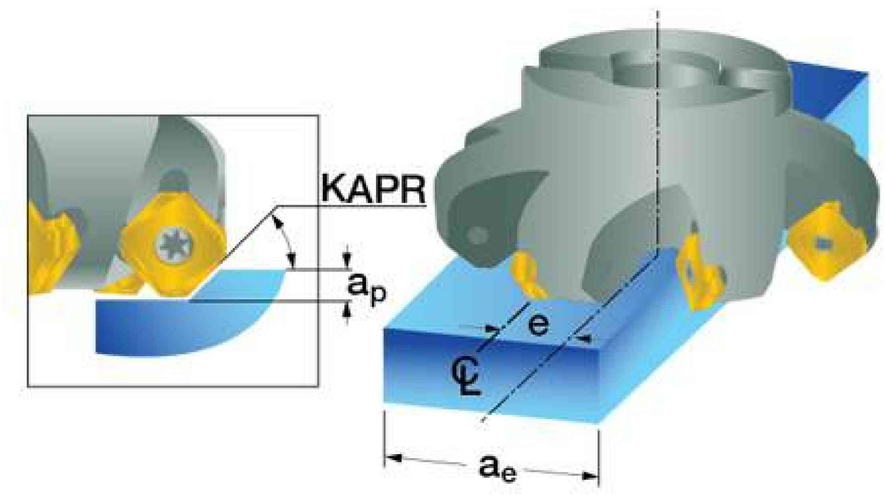
$$f_z = \frac{V_f}{zxn}$$

金属去除率Q (cm3/min)
Metal Removal Rate

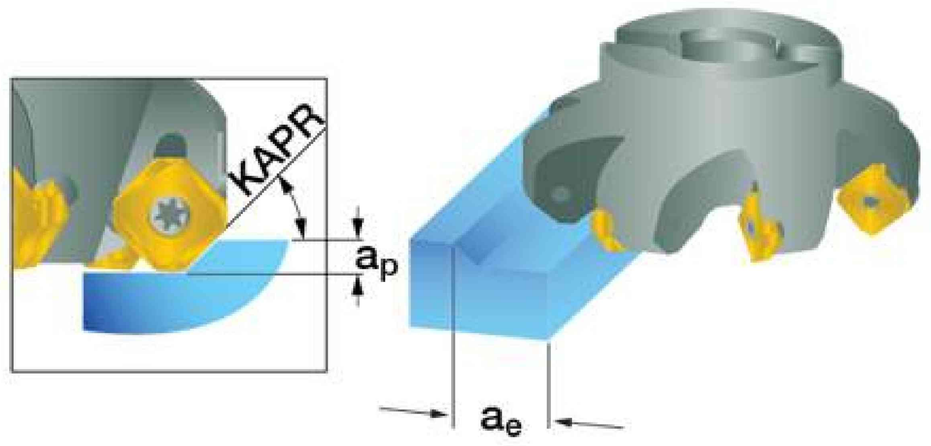
$$Q = \frac{a_p \times a_e \times v_f}{1000}$$

净功率P_C (Kw)
Net Power

$$P_C = \frac{a_p \times a_e \times v_f \times k_c}{60000 \times \eta}$$



面铣削
Face milling



方肩铣削
Square shoulder milling

符号 ymbol	名称/定义 Name/Definition	单位(公制) Unit (Metric)
n	主轴转速 Spindle Speed	rpm
Dc	加工直径 machining diameter	mm
Vc	切削速度 Cutting speed	m/min
V_f	进给速度 Feed speed	mm/min
a_p	切削深度 Cutting depth	mm
a_e	切削宽度 Cutting width	mm
f_z	每齿进给量 Feed rate per tooth	mm/z
Q	金属去除率 Metal removal rate	cm^3/min
P_C	净功率 Net power	kW
KAPR	主偏角 Leading angle	Degree

可转位铣削刀具 Indexable milling tool

铣削刀片失效原因及解决方案 Causes of milling insert failure and solutions

失效形式 Failure Mode		原因 Cause	解决方案 Solutions
后刀面磨损 Flank Wear		◆切削速度高 ◆硬质合金牌号不耐磨 High cutting speed. The carbide grade is not wear–resistant.	◆降低切削速度 ◆选取更耐磨的牌号 ◆对容易产生加工硬化的工件材料，需采用更小的切入角 ◆加工耐热合金材料时，降低切削速度 Reduce cutting speed. Select a more wear–resistant insert grade. For workpiece materials prone to work hardening, use a smaller entry angle When machining heat–resistant alloy materials, reduce cutting speed
月牙洼磨损 Crescent–shaped wear		◆刀片切削区域切削温度过高，压力过大 Insert cutting area cuutting temperature too high, pressure is over.	◆降低切削速度 ◆降低进给 ◆选取硬度更高的刀片牌号 ◆选取更耐磨的刀片牌号 ◆选取前角更大的刀片 ◆降低切削速度或降低进给率以使得切削温度更低 ◆采用更高的冷却液流量及冷却液压力，可考虑高压冷却 Reduce cutting speed Reduce feed rate Select a harder insert grade Select a more wear–resistant insert grade Select an insert with a larger rake angle Reduce cutting speed or feed rate to lower cutting temperature Use higher coolant flow rate and coolant pressure; consider high–pressure cooling.
塑性变形 Plastic deformation		◆切削温度过高 Cutting temperature too high	◆降低切削速度 ◆选取硬度更高的刀具牌号 ◆大幅提高冷却液供应 Reduce cutting speed Select tool grades with higher hardness Significantly increase coolant supply
沟槽磨损 Groove Wear		◆切削速度太高，或刀片牌号耐磨性不能胜任 The cutting speed is too high, or the wear resistance of the insert grade is inadequate.	◆采用更耐磨的刀具牌号 ◆降低切削速度 ◆调整切削深度 ◆采用更强固形状的刀片 ◆对容易产生加工硬化的工件材料，需采用更小的切入角 ◆加工耐热合金材料时，降低切削速度 Use more wear–resistant tool grade Reduce cutting speed Adjust depth of cut Use inserts with a more robust shape For workpiece materials prone to work hardening, use a smaller approach angle Reduce cutting speed when machining heat–resistant alloys
热裂纹 Thermal Crack		◆切削区域表面温度变化太大，断续切削，或冷却液供应产生变化 Excessive surface temperature variation in the cutting zone, intermittent cutting, or changes in coolant supply.	◆降低切削速度 ◆选取韧性更佳的刀具牌号 ◆大幅提高冷却液供应或关闭冷却液 ◆只要可能，尽量避免使用冷却液 Reduce cutting speed Select a tool grade with better toughness Significantly increase coolant supply or turn off coolant Avoid using coolant whenever possible

铣削刀片失效原因及解决方案 Causes of milling insert failure and solutions

失效形式 Failure Mode		原因 Cause	解决方案 Solutions
切削刃破损 Cutting Edge Chipping		◆更换刀片切削刃前，刀片过度磨损 ◆对于该应用而言，刀片牌号及几何形状都太弱了 ◆刀片载荷过大 ◆刀片已形成了积屑瘤 Excessive insert wear before changing cutting edge. Insert grade and geometry are too weak for the application. Excessive load on the insert. Built-up edge (BUE) has formed on the insert.	◆采用带大刀尖圆角半径的刀片，最好是单面刀片 ◆采用防振降噪铣刀 ◆选取韧性更佳的刀具牌号 ◆降低进给 ◆采用防振刀体 Use inserts with large tip radius, preferably single-sided inserts. Use vibration-damping and noise-reducing end mills. Select tool grades with better toughness. Reduce feed rate. Use vibration-damping cutter bodies.
积屑瘤 Built-Up Edge (BUE)		◆切削区域温度过低 ◆ 负型刀片 ◆加工材料粘性高，如低碳钢，不锈钢及铝 Cutting zone temperature too low Negative insert Highly viscous material being machined, such as low-carbon steel, stainless steel, and aluminum	◆提高切削速度 ◆采用具有更大正前角及锋利切削刃的铣刀 ◆大幅提高冷却液供应 ◆采用进行了涂层后处理牌号的刀片 Increased cutting speed Use of end mills with larger positive rake angles and sharper cutting edges Significantly increased coolant supply Use of inserts with post-coating treatments
切削刃崩刃 Cutting Edge Chipping		◆刀片切削刃易碎或刀片上已形成积屑瘤 The cutting edge of the insert is easily broken or a built-up edge has formed on the insert.	◆采用韧性更高牌号制成的刀片 ◆采用具有强固切削刃的刀片 ◆提高切削速度 ◆使用具有防振降噪性能的铣刀 ◆采用防振刀体 Uses inserts made with a higher toughness grade Uses inserts with a strong cutting edge Increases cutting speed Uses end mills with vibration and noise reduction properties Uses a vibration-damping cutter body

可转位铣削刀具 Indexable milling tool

钢件、铁素体和马氏体不锈钢 Steel components, ferritic and martensitic stainless steel

WMG	描述 Description	性能 Performance	代表性材料 Representative materials	kc1.1	mc
P1	易切钢 Free-cutting steels	360<Rm<880	11 SMn30 Rm=385 N/mm²	1500	0.14
P2	低合金铁素体钢,C<0.25% wt 低合金可焊接普通结构钢 Low-alloy ferritic general structural steel; C < 0,25% wt; Low-alloy weldable general structural steel.	320 < Rm < 600	S235JRG2 Rm = 420 N/mm²	1600	0.23
P3	铁素体钢和铁素体/珠光体钢，C<0.25%wt 可焊普通结构钢 Ferritic & Ferritic / pearlitic general structural steels, C < 0.25%wt, weldable general structural steel	430 < Rm < 610	16 MnCr5 Rm = 550 N/mm²	1800	0.14
P4	表面淬硬钢低合金普通结构钢, 0.25%<C<0.67% wt 低合金调质钢 Low-alloy ferritic general structural steel; C < 0,25% wt; Low-alloy weldable general structural steel.	520 < Rm < 1200	C 45E Rm = 660 N/mm²	2000	0.15
P5	结构钢, 0.25%<C<0.67% wt 调质钢 Structural steel, 0.25% < C < 0.67% wt; Quenched and tempered steel.	550 < Rm < 1200	42 CrMo 4 Rm = 700 N/mm²	2020	0.18
P6	低合金整体淬硬钢,C>0.67% wt 低合金弹簧和轴承钢 Low-alloy through-hardening steels, C>0.67% wt low-alloy spring and bearing steel	520 < Rm < 1200	C 100S Rm = 600 N/mm²	2100	0.17
P7	整体淬硬钢,C>0.67% wt 弹簧和轴承钢 Through-hardening steels, C > 0.67% wt; Spring and bearing steel	600 < Rm < 1200	100 Cr6 Rm = 650 N/mm²	2160	0.17
P8	工具钢 高速钢(HSS) Tool steel; High-speed steel (HSS)	600 < Rm < 1200	X 40 CrMoV 51 Rm = 700 N/mm²	2400	0.2
P11	铁素体与马氏体不锈钢 Ferritic & martensitic stainless steels	415 < Rm < 1200	X 20 Cr 13 Rm=675 N/mm²	2000	0.15
P12	马氏体时效和沉淀硬化不锈钢 Maraging and precipitation-hardening stainless steels	500 < Rm < 1200	X5CRmiCuNb 164 Rm=1100 N/mm²	2100	0.17

易切、奥氏体与双相不锈钢 Free-cutting, austenitic and duplex stainless steel

WMG	描述 Description	代表性材料 Representative materials	kc1.1	mc
M1	易切奥氏体不锈钢 Free-cutting austenitic stainless steel	X 10 CrNiS 18 9	1700	0.14
M2	低合金奥氏体不锈钢 Low alloy austenitic stainless steel	X5 CrNi 18 10	1920	0.18
M3	中合金奥氏体不锈钢 Medium alloy austenitic stainless steel	X2 CrNiMo 18 14 3	2070	0.17
M4	高合金奥氏体和双相不锈钢 High-alloy austenitic and duplex stainless steel	X2 CrNiMoN 22 5 3	2230	0.16
M5	难加工高合金奥氏体和双相不锈钢 Difficult high-alloy austenitic and duplex stainless steels	X2 CrNiMoN 25 7 4	2510	0.13

铸 铁 Cast iron

WMG	描述 Description	代表性材料 Representative materials	kc1.1	mc
K1	灰铸铁(GCI) Grey cast iron	EN-GJL-250	930	0.32
K2	蠕墨铸铁(CGI) Compacted graphite irons (CGI)	EN-GJV-400	1000	0.35
K3	可锻铸铁(MCI) Malleable cast iron (MCI)	EN-GJMB-550-4	1050	0.37
K4	球墨铸铁(SGI) Nodular cast irons (SGI)	EN-GJS-500-7	1160	0.37
K5	奥贝球铁(ADI) Austempered ductile irons (ADI)	EN-GJS-1000-5	0	—
K6	奥氏体层铸铁 Austenitic lamellar cast irons	EN-GJLA-XNiCuCr15-6-2	0	—
K7	奥氏体球墨铸铁 Austenitic nodular cast irons	EN-GJSA-XNiMn23-4	0	—

可转位铣削刀具 Indexable milling tool

高温合金和钛合金 High-temperature alloys and titanium alloys

WMG	描述 Description	代表性材料 Representative materials	kc1.1	mc
S1	铁基高温合金 Iron-based superalloys	Discalloy	0	—
S2	钴基高温合金 Cobalt-based superalloys	Stellite 21	0	—
S3	镍基高温合金 Nickel-based superalloys	Inconel 718	2530	0.21
S11	钛合金，低合金，(α) Titanium, low alloyed	Ti	0	—
S12	钛合金，中等合金，(α) Titanium, medium alloyed	TiAl6V4	1500	0.24
S13	钛合金，高合金，(近似于β和β) Titanium, high alloyed (near β and β)	Ti10V2Fe3Al	0	—

有色金属 Non-ferrous metals

WMG	描述 Description	代表性材料 Representative materials	kc1.1	mc
N1	铝合金 Aluminum alloy，Si <9%	AW-7075	0	—
N2	铝合金 Aluminum alloy ,9%< Si<16%	AC-44200　Si = 12%	0	—
N3	铝合金 Aluminum alloy，Si>16%	AlSi17Cu5	0	—
N11	铜合金 Copper alloy	CW614N	740	0.26

淬硬材料 Hardened material

WMG	描述 Description	性能 performance	代表性材料 Representative materials	kc1.1	mc
H3	表面淬硬钢 Case-hardened steels	58<HRC <62	16 MnCr5 60 HRC	2070	0.14
H5	淬火和回火钢 Quenched & Tempered steels	38<HRC<56	42 CrMo4 50 HRC	2320	0.18
H7	调质钢轴承钢 Quenched & Tempered steels, Bearing steels	56<HRC <64	100 Cr6 60 HRC	2480	0.17
H8	工具钢高速钢(HSS) Tools steels & High-Speed Steels (HSS)	38<HRC<64	X 40 CrMoV51 50 HRC	2750	0.2
H11	马氏体不锈钢 Martensitic stainless steels	38< HRC <50	X 20 Cr 13 45 HRC	2300	0.15
H12	马氏体时效和沉淀硬化不锈钢 Maraged and precipitation-hardened stainless steels	1200< Rm<1650	X5 CrNiCuNb 16 4 Rm= 1450 N/mm²	2410	0.17
H21	锰钢 Manganese steel	23<HRC <64	X 120 Mn 12 50 HRC	0	0.17
H31	白口铸铁 White cast iron	50<HRC <64	EN-GJN-HV600(XCr11) 55 HRC	0	—

可转位铣削刀具 Indexable milling tool

其它材料 Other materials

WMG	描述 Description	代表性材料 Representative materials	kc1.1	mc
PM1	低合金粉末金属 Low alloy powder metal	F-0008 Fe-0.7C	0	—
PM2	中等合金粉末金属 Medium alloy powder metal	FLC-4608 Fe2Cu1.8Ni 0.5Mo0.2Mn0.8C	0	—
PM3	高合金粉末金属 排气阀座材料等 High alloy powder metals, Exhaust valve seat materials, etc.	—	0	—
HF1	硬化表面合金 焊接或等离子沉积铁基合金 Hardened surface alloys; Welded or plasma-deposited iron-based alloys	—	0	—
HF2	硬化表面合金 焊接或等离子沉积钴基和镍基合金 Hardened surface alloys; Welded or plasma-deposited cobalt-based and nickel-based alloys	—	0	—
CC1	烧结硬质合金 Sintered cemented carbide	G50	0	—

塑料和复合材料 Plastics and composite materials

WMG	描述 Description	性能 performance	代表性材料 Representative materials	kc1.1	mc
TS1	热固性聚合物 Thermosetting polymers	—	尿素甲醛(UF)	0	—
TS2	热固性碳纤维复合材料 Thermosetting carbon fiber composites	—	T300 T700 T800 HTA-S IMA-Epoxy(M21)..	0	—
TS3	热固性玻璃纤维复合材料 Thermosetting glass fiber composites	—	Epoxy-HX.(42..)/ E glass(7781...)..	0	—
TS4	热固性芳族聚酰胺纤维复合材 Solid aramid fiber composite	—	Kevlar49	0	—
TP1	热塑性聚合物 Thermoplastic polymers	—	聚碳酸酯(PC) Polycarbonate	0	—
TP2	热塑性碳纤维复合材料 Thermoplastic carbon fiber composites	—	PPS/PEEK-T300..	0	—
TP3	热塑性玻璃纤维复合材料 Thermoplastic glass fiber composites	—	PPS/PEEK-E glass or A glass..	0	—
TP4	热塑性芳族聚酰胺纤维复合材料 Thermoplastic aramid fiber composites	—	EN-GJN-HV600(XCr11) 55 HRC	0	—

B

车 削

Turning

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刀 杆 Tool holder B18–60

- CN勾杆刀杆 CN type hook clamp tool holder B18–19P
- DN勾杆刀杆 DN type hook clamp tool holder B20P
- TN勾杆刀杆 TN type hook clamp tool holder B21–23P
- WN勾杆刀杆 WN type hook clamp tool holder B24P
- VN勾杆刀杆 VN type hook clamp tool holder B25P
- CN勾杆刀杆 CN type hook clamp tool holder B26P
- CN上压刀杆 CN type top clamping external turning tool holder B27–29P
- DN上压刀杆 DN type top clamping external turning tool holder B30–31P
- TN上压刀杆 TN type top clamping external Turning tool holder B32–33P
- VN上压刀杆 VN type top clamping external turning tool holder B34P
- WN上压刀杆 WN type top clamping external turning tool holder B35P
- CC螺钉压紧刀杆 CC screw clamping tool holder B36P
- DC螺钉压紧刀杆 DC screw clamping tool holder B37–38P
- TC螺丝压紧刀杆 TC screw–on external turning tool holder B39P
- TC上压刀杆 TC type top clamping external turning tool holder B40–42P
- TC螺钉压紧刀杆 TC screw clamping tool holder B43P
- VB螺钉刀杆 VB screwdriver shaft B44P
- VB螺钉压紧刀杆 VB screw clamping tool holder B45–46P
- CN勾杆内孔车刀杆 CN lever clamp internal turning tool holder B47P
- DN勾杆内孔车刀杆 DN lever clamp internal turning tool holder B48P
- TN勾杆内孔车刀杆 TN lever clamp internal turning tool holder B49P
- WN勾杆内孔车刀杆 WN lever clamp internal turning tool holder B50P
- CN上压内孔车刀杆 CN top clamp internal turning tool holder B51P
- DN上压内孔车刀杆 DN top clamp internal turning tool holder B52P
- TN上压内孔车刀杆 TN top clamp internal turning tool holder B53P
- VN勾杆内孔车刀杆 VN lever clamp internal turning tool holder B54P
- WN上压内孔车刀杆 WN type top clamping internal turning tool holder B55P
- CC螺钉压紧内孔车刀杆 CC type screw–on internal turning tool holder B56P
- DC螺钉压紧内孔背车刀杆 DC type screw–on internal turning tool holder B57P
- TC螺钉压紧内孔车刀杆 TC type screw–on internal turning tool holder B58P
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断屑槽命名 Naming of chip-breaking grooves

P	F	2
类型 Type	应用 Application	切削刃强度 Cutting edge strength

类型 Type

无	负前角刀片 Negative insert
P	正前角刀片 Positive insert
C	补充的 Complementary

应用 Application

F	精加工 Finishing
S	半精加工 Semi-finishing
M	中等加工 Medium machining
R	粗加工 Roughing
H	重载加工 Heavy-duty machining

切削刃强度 Cutting edge strength

1 2 3 4 5 6 7 8 9

低 → 高

Low High

车削 Turning

车削刀片硬质合金牌号 Carbide grade for turning inserts

牌号 Grade Code	ISO	特性及应用 Features&Applications
MK10A PVD涂层 PVD Coating	K05-K15 N05-N15 S05-S15	·铸铁，铝合金和钛合金,有色金属的通用车削 General turning of cast iron, aluminum alloy, titanium alloy and other non-ferrous metals.
MK1017 PVD涂层 PVD Coating	S10-S25 M10-M25	·不锈钢和钛合金的连续高速车削 High-speed continuous turning of stainless steel and titanium alloy.
SH1017 PVD涂层 PVD Coating	S05-S20	·耐热超级合金高速车削 High-speed turning of heat-resistant superalloys.
MP3035 PVD涂层 PVD Coating	M10-M30 S10-S30	·广泛应用于不锈钢和耐热超级合金的车削 Widely used in turning of stainless steel and heat-resistant superalloys.
DP2022 CVD涂层 CVD Coating	P15-P30	·广泛应用于钢件的通用车削 Widely used for general turning of steel parts.
MK1022 CVD涂层 CVD Coating	K10-K25	·灰铸铁和球墨铸铁连续和断续加工 Continuous and interrupted machining of gray cast iron and ductile iron.
MK2022 CVD涂层 CVD Coating	K20-K35	·灰铸铁和球墨铸铁断续加工，尤其球墨铸铁表现优异 Interrupted machining of gray cast iron and ductile iron, especially excellent performance in ductile iron.

切削速度推荐（m/min） Cutting speed recommendations

P1–P2	P3–P11	P12	M1–M2	M3–M5	K1–K4	K5–K7	S1–S3、S13	S11–S12
					110–180	90–140	21–65	50–75
			150–300	90–240			40–90	50–170
							40–90	50–170
			120–270	90–240			30–80	40–160
200–450	140–380	70–130						
					250–400	150–320		
					220–360	120–280		

负型刀片槽型介绍 Negative insert chipbreaker overview

切削领域 Machining field	切削刃强度 Cutting edge strength								
	1	2	3	4	5	6	7	8	9
精加工 Finishing		F2	F3						
半精加工 Semi-Finishing		S2	S3	S4					
中等加工 Medium machining		M2	M3	M4	M5	M6			
粗加工 Roughing			R3	R4	R5	R6			
重载加工 Heavy-duty machining						H6	H7	H8	H9

负型刀片槽型介绍 Negative insert chipbreaker overview

P	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing	F2	F2	
	半精加工 Semi-Finishing	S2	S2/S3	S3
	中等加工 Medium machining	M3/M4	M4	M4/M5
	粗加工 Roughing	R5	R5	R5
	重载加工 Heavy machining	H6	H7	H8/H9

M	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing	F3	F3	
	半精加工 Semi-Finishing	S4	S4	S4
	中等加工 Medium machining	M6	M6	M6
	粗加工 Roughing	R3	R3	R3
	重载加工 Heavy machining	H7	H7	H7

K	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing			
	半精加工 Semi-Finishing			
	中等加工 Medium machining	M5	M5	M5
	粗加工 Roughing	R4	R4/R6	R6
	重载加工 Heavy machining	H7	H7	H7

S	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing			
	半精加工 Semi-Finishing			
	中等加工 Medium machining	M2	M2	M2
	粗加工 Roughing	R3	R3	R3
	重载加工 Heavy machining			

连续 Continuous
平滑切削、预车削表面。
Smooth cutting and pre-turning of the surface.

轻断续 Light Interrupted
不同深度的切削，铸造或锻造表皮，轻微断续切削。
Different depths of cutting, casting or forging of the surface, with slight intermittent cutting.

强断续 Heavy Interrupted
重型断续切削。
Heavy interrupted cutting

车削 Turning

正型刀片槽型介绍 Positive insert chipbreaker overview

切削领域 Machining field	切削刃强度 Cutting edge strength								
	1	2	3	4	5	6	7	8	9
精加工 Finishing		PF2	PF3						
半精加工 Semi-Finishing			PS3	PS4					
中等加工 Medium machining				PM4					
粗加工 Roughing					PR5		PR7		
重载加工 Heavy-duty machining						PH6			

正型刀片槽型介绍 Positive insert chipbreaker overview

P	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing	PF3	PF3	
	半精加工 Semi-Finishing	PS3	PS3	PS3
	中等加工 Medium machining	PM4	PM4	PM4
	粗加工 Roughing	PR7	PR7	PR7
	重载加工 Heavy-duty machining	PH6	PH6	PH6

M	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing	PF3	PF3	
	半精加工 Semi-Finishing	PS3	PS3	PS3
	中等加工 Medium machining	PM4	PM4	PM4
	粗加工 Roughing			
	重载加工 Heavy-duty machining			

K	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing			
	半精加工 Semi-Finishing			
	中等加工 Medium machining	PM4	PM4	PM4
	粗加工 Roughing	PR5	PR5	PR5
	重载加工 Heavy-duty machining			

N	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing			
	半精加工 Semi-Finishing	PS4	PS4	PS4
	中等加工 Medium machining			
	粗加工 Roughing			
	重载加工 Heavy-duty machining			

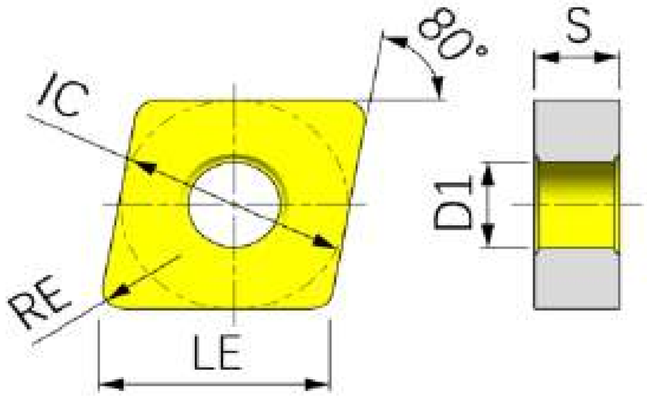
S	切削领域 Machining field	连续 Continuous	轻断续 Light Interrupted	强断续 Heavy Interrupted
	精加工 Finishing	PF2	PF2	
	半精加工 Semi-Finishing			
	中等加工 Medium machining			
	粗加工 Roughing			
	重载加工 Heavy-duty machining			

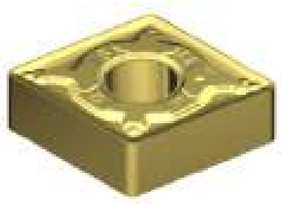
连续 Continuous 平滑切削、预车削表面。
Smooth cutting and pre-turning of the surface.

轻断续 Light Interrupted 不同深度的切削，铸造或锻造表皮，轻微断续切削。
Different depths of cutting, casting or forging of the surface, with slight intermittent cutting.

强断续 Heavy Interrupted 重型断续切削。
Heavy interrupted cutting

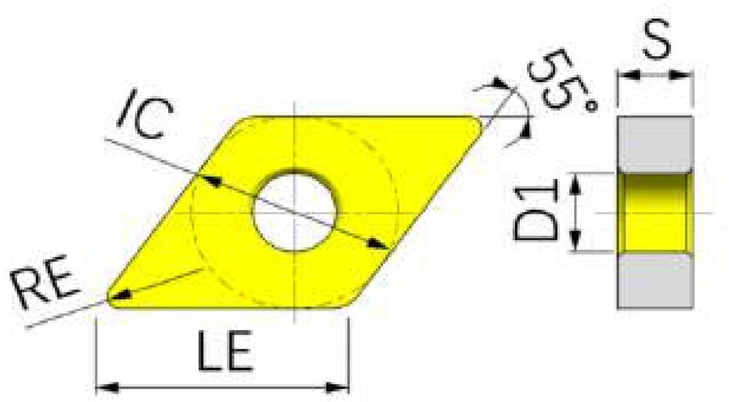
负型刀片 Negative insert CNMG



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
半精加工 Semi-Finishing		CNMG120404-S2	12.9	Φ12.7	4.76	Φ5.16	0.4	○	○	○			○	○
		CNMG120408-S2	12.9	Φ12.7	4.76	Φ5.16	0.8	●	●	○			○	○
		CNMG120412-S2	12.9	Φ12.7	4.76	Φ5.16	1.2	○	○	○			○	○
中等加工 Medium machining		CNMG120404-M4	12.9	Φ12.7	4.76	Φ5.16	0.4	○	○	○			○	
		CNMG120408-M4	12.9	Φ12.7	4.76	Φ5.16	0.8	●	●	○			○	
		CNMG120412-M4	12.9	Φ12.7	4.76	Φ5.16	1.2	●	●	○			○	
		CNMG160608-M4	16.1	Φ15.875	6.35	Φ6.35	0.8	○	○	○			○	
		CNMG160612-M4	16.1	Φ15.875	6.35	Φ6.35	1.2	○	○	○			○	
		CNMG190608-M4	19.3	Φ19.05	6.35	Φ7.94	0.8	○	○	○			○	

● 有库存（In stock）　○ 需确认库存（Confirmation required）

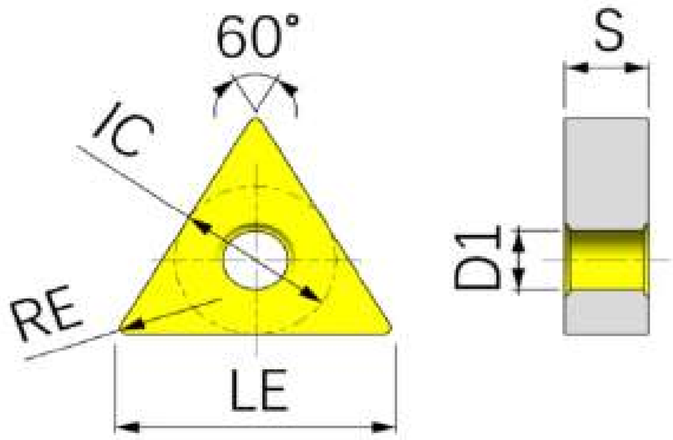
负型刀片 Negative insert DNMG



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
半精加工 Semi-Finishing		DNMG150404-S2	15.5	Φ12.7	4.76	Φ5.16	0.4	●	●	○			○	○
		DNMG150408-S2	15.5	Φ12.7	4.76	Φ5.16	0.8	●	●	○			○	○
		DNMG150412-S2	15.5	Φ12.7	4.76	Φ5.16	1.2	○	○	○			○	○
		DNMG150604-S2	15.5	Φ12.7	6.35	Φ5.16	0.4	○	○	○			○	○
		DNMG150608-S2	15.5	Φ12.7	6.35	Φ5.16	0.8	○	○	○			○	○
		DNMG150612-S2	15.5	Φ12.7	6.35	Φ5.16	1.2	○	○	○			○	○
中等加工 Medium machining		DNMG110404-M4	11.6	Φ9.525	4.76	Φ3.81	0.4	○	○					
		DNMG110408-M4	11.6	Φ9.525	4.76	Φ3.81	0.8	○	○					
		DNMG110412-M4	11.6	Φ9.525	4.76	Φ3.81	1.2	○	○					
		DNMG150404-M4	15.5	Φ12.7	4.76	Φ5.16	0.4	○	○					
		DNMG150408-M4	15.5	Φ12.7	4.76	Φ5.16	0.8	●	●					
		DNMG150412-M4	15.5	Φ12.7	4.76	Φ5.16	1.2	○	○					
		DNMG150604-M4	15.5	Φ12.7	6.35	Φ5.16	0.4	○	○					
		DNMG150608-M4	15.5	Φ12.7	6.35	Φ5.16	0.8	○	○					
		DNMG150612-M4	15.5	Φ12.7	6.35	Φ5.16	1.2	○	○					

● 有库存（In stock） ○ 需确认库存（Confirmation required）

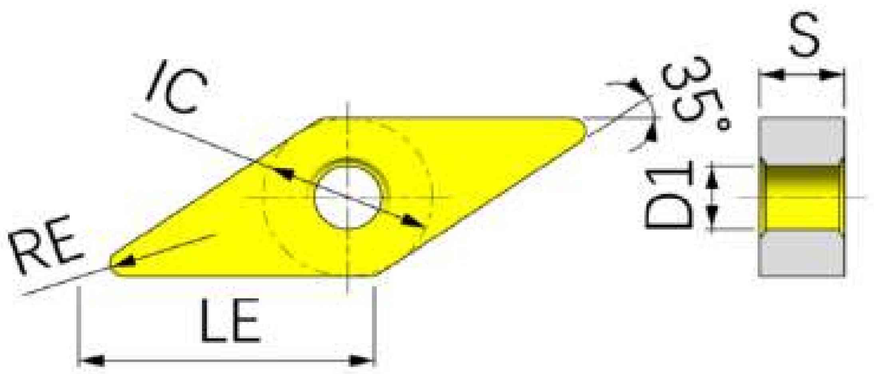
负型刀片 Negative insert TNMG



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
半精加工 Semi-Finishing		TNMG160404-S2	16.5	Φ9.525	4.76	Φ3.81	0.4	●	●	○			○	
		TNMG160408-S2	16.5	Φ9.525	4.76	Φ3.81	0.8	●	●	○			○	
		TNMG160412-S2	16.5	Φ9.525	4.76	Φ3.81	1.2	○	○	○			○	
中等加工 Medium machining		TNMG160404-M4	16.5	Φ9.525	4.76	Φ3.81	0.4	○	○	○			○	
		TNMG160408-M4	16.5	Φ9.525	4.76	Φ3.81	0.8	●	●	○			○	
		TNMG160412-M4	16.5	Φ9.525	4.76	Φ3.81	1.2	○	○	○			○	

● 有库存（In stock） ○ 需确认库存（Confirmation required）

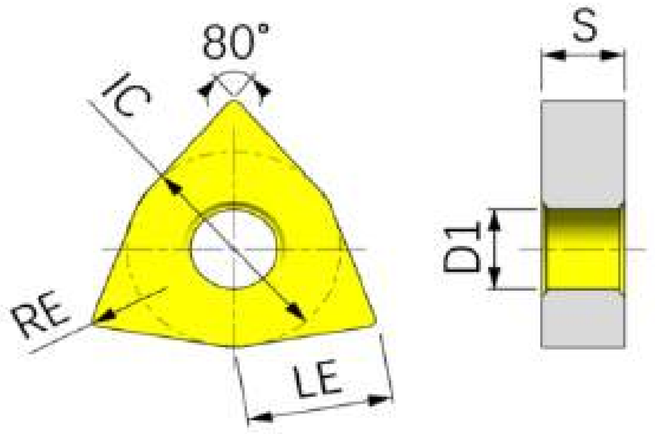
负型刀片 Negative insert VNMG



应用 Application	刀片外形 Shape	型号 Product code	尺寸(MM) Dimensions					牌号 Grade code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
半精加工 Semi-Finishing		VNMG160404-S2	16.6	Φ9.525	4.76	Φ3.81	0.4	●	●	○			○	
		VNMG160408-S2	16.6	Φ9.525	4.76	Φ3.81	0.8	●	●	○			○	
		VNMG160412-S2	16.6	Φ9.525	4.76	Φ3.81	1.2	○	○	○			○	
中等加工 Medium machining		VNMG160404-M4	16.6	Φ9.525	4.76	Φ3.81	0.4	○	○	○			○	
		VNMG160408-M4	16.6	Φ9.525	4.76	Φ3.81	0.8	●	●	○			○	
		VNMG160412-M4	16.6	Φ9.525	4.76	Φ3.81	1.2	○	○	○			○	

● 有库存（In stock） ○ 需确认库存（Confirmation required）

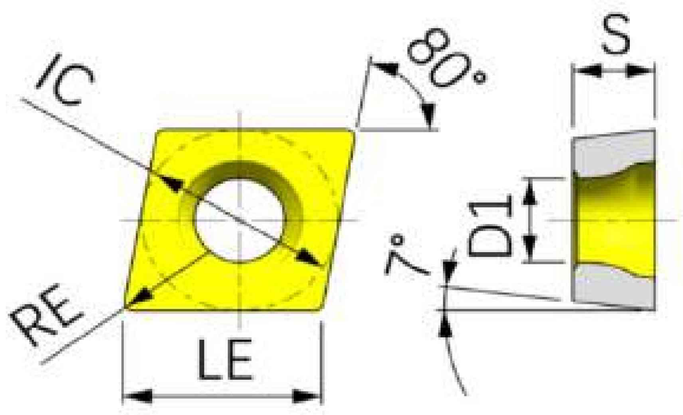
负型刀片 Negative insert WNMG



应用 Application	刀片外形 Shape	型号 Product code	尺寸(MM) Dimensions					牌号 Grade code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
半精加工 Semi-Finishing		WNMG080404-S2	8.7	Φ12.7	4.76	Φ5.16	0.4	●	●	○			○	
		WNMG080408-S2	8.7	Φ12.7	4.76	Φ5.16	0.8	●	●	○			○	
		WNMG080412-S2	8.7	Φ12.7	4.76	Φ5.16	1.2	○	○	○			○	
中等加工 Medium machining		WNMG060408-M4	6.5	Φ9.525	4.76	Φ3.81	0.8	○	○	○				
		WNMG080404-M4	8.7	Φ12.7	4.76	Φ5.16	0.4	○	○	○				
		WNMG080408-M4	8.7	Φ12.7	4.76	Φ5.16	0.8	●	●	○				
		WNMG080412-M4	8.7	Φ12.7	4.76	Φ5.16	1.2	●	●	○				

● 有库存（In stock） ○ 需确认库存（Confirmation required）

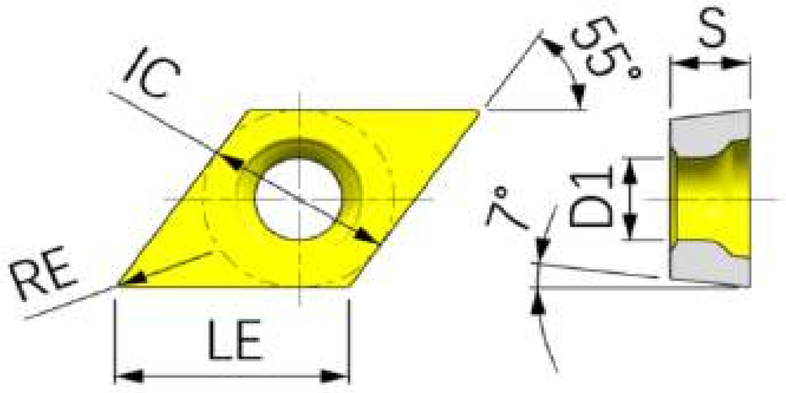
正型刀片 Positive insert CCMT



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
精加工 Finishing		CCMT060202-PF3	6.4	Φ6.35	2.38	Φ2.8	0.2	○	○	○			○	
		CCMT060204-PF3	6.4	Φ6.35	2.38	Φ2.8	0.4	○	○	○			○	
		CCMT060208-PF3	6.4	Φ6.35	2.38	Φ2.8	0.8	○	○	○			○	
		CCMT09T302-PF3	9.7	Φ9.525	3.97	Φ4.4	0.2	○	○	○			○	
		CCMT09T304-PF3	9.7	Φ9.525	3.97	Φ4.4	0.4	●	●	○			○	
		CCMT09T308-PF3	9.7	Φ9.525	3.97	Φ4.4	0.8	○	○	○			○	
中等加工 Medium machining		CCMT060204-PM4	6.4	Φ6.35	2.38	Φ2.8	0.4	○	○					
		CCMT060208-PM4	6.4	Φ6.35	2.38	Φ2.8	0.8	○	○					
		CCMT09T304-PM4	9.7	Φ9.525	3.97	Φ4.4	0.4	○	○					
		CCMT09T308-PM4	9.7	Φ9.525	3.97	Φ4.4	0.8	●	●					
		CCMT120404-PM4	12.9	Φ12.7	4.76	Φ5.5	0.4	○	○					
		CCMT120408-PM4	12.9	Φ12.7	4.76	Φ5.5	0.8	○	○					
		CCMT120412-PM4	12.9	Φ12.7	4.76	Φ5.5	1.2	○	○					

● 有库存（In stock） ○ 需确认库存（Confirmation required）

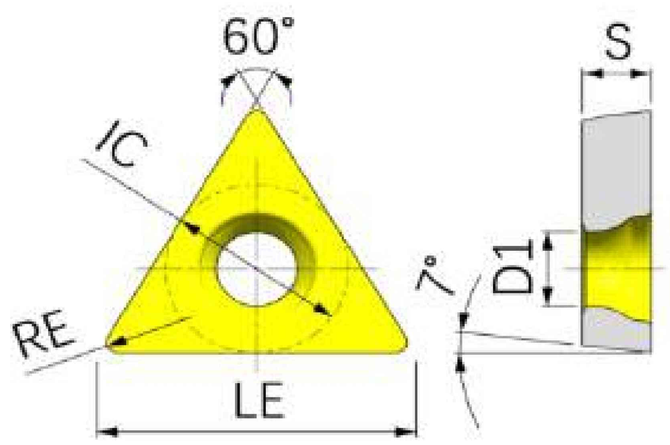
正型刀片 Positive insert DCMT



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
精加工 Finishing		DCMT070202-PF3	7.8	Φ6.35	2.38	Φ2.8	0.2	○	○	○			○	
		DCMT070204-PF3	7.8	Φ6.35	2.38	Φ2.8	0.4	○	○	○			○	
		DCMT11T302-PF3	11.6	Φ9.525	3.97	Φ4.4	0.2	○	○	○			○	
		DCMT11T304-PF3	11.6	Φ9.525	3.97	Φ4.4	0.4	●	●	○			○	
		DCMT11T308-PF3	11.6	Φ9.525	3.97	Φ4.4	0.8	○	○	○			○	
中等加工 Medium machining		DCMT070204-PM4	7.8	Φ6.35	2.38	Φ2.8	0.4	○	○					
		DCMT070208-PM4	7.8	Φ6.35	2.38	Φ2.8	0.8	○	○					
		DCMT11T304-PM4	11.6	Φ9.525	3.97	Φ4.4	0.4	○	○					
		DCMT11T308-PM4	11.6	Φ9.525	3.97	Φ4.4	0.8	●	●					
		DCMT11T312-PM4	11.6	Φ9.525	3.97	Φ4.4	1.2	○	○					

● 有库存（In stock）　○ 需确认库存（Confirmation required）

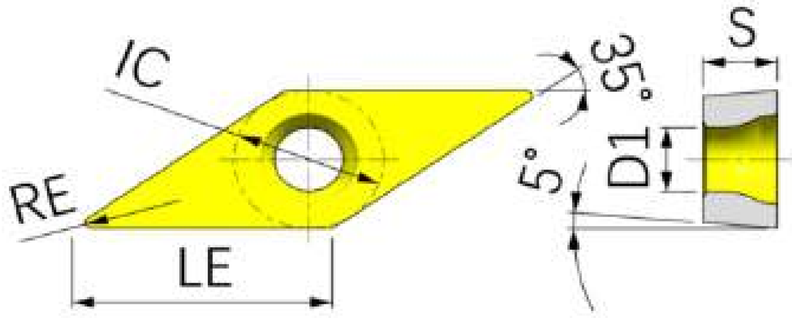
正型刀片 Positive insert TCMT



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
精加工 Finishing		TCMT090204-PF3	9.6	Φ5.56	2.38	Φ2.5	0.4	○	○	○			○	
		TCMT110202-PF3	11.0	Φ6.35	2.38	Φ2.8	0.2	○	○	○			○	
		TCMT110204-PF3	11.0	Φ6.35	2.38	Φ2.8	0.4	●	●	○			○	
		TCMT110208-PF3	11.0	Φ6.35	2.38	Φ2.8	0.8	○	○	○			○	
		TCMT16T304-PF3	16.5	Φ9.525	3.97	Φ4.4	0.4	●	●	○			○	
		TCMT16T308-PF3	16.5	Φ9.525	3.97	Φ4.4	0.8	○	○	○			○	
中等加工 Medium machining		TCMT090204-PM4	9.6	Φ5.56	2.38	Φ2.5	0.4	○	○					
		TCMT090208-PM4	9.6	Φ5.56	2.38	Φ2.5	0.8	○	○					
		TCMT110204-PM4	11.0	Φ6.35	2.38	Φ2.8	0.4	○	○					
		TCMT110208-PM4	11.0	Φ6.35	2.38	Φ2.8	0.8	○	○					
		TCMT16T304-PM4	16.5	Φ9.525	3.97	Φ4.4	0.4	○	○					
		TCMT16T308-PM4	16.5	Φ9.525	3.97	Φ4.4	0.8	●	●					
		TCMT16T312-PM4	16.5	Φ9.525	3.97	Φ4.4	1.2	○	○					

● 有库存（In stock） ○ 需确认库存（Confirmation required）

正型刀片 Positive insert VBMT



应用 Application	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code						
			LE	IC	S	D1	RE	DP2022	MP3035	MK1017	MK1022	MK2022	SH1017	MK10A
精加工 Finishing		VBMT110304-PF3	11.0	Φ6.35	3.18	Φ2.8	0.4	○	○	○			○	
		VBMT110308-PF3	11.0	Φ6.35	3.18	Φ2.8	0.8	○	○	○			○	
		VBMT160402-PF3	16.6	Φ9.525	4.76	Φ4.4	0.2	○	○	○			○	
		VBMT160404-PF3	16.6	Φ9.525	4.76	Φ4.4	0.4	●	●	○			○	
		VBMT160408-PF3	16.6	Φ9.525	4.76	Φ4.4	0.8	○	○	○			○	
中等加工 Medium machining		VBMT160404-PM4	16.6	Φ9.525	4.76	Φ4.4	0.4	○	○	○			○	
		VBMT160408-PM4	16.6	Φ9.525	4.76	Φ4.4	0.8	●	●					
		VBMT160412-PM4	16.6	Φ9.525	4.76	Φ4.4	1.2	○	○					

● 有库存（In stock）　○ 需确认库存（Confirmation required）

车刀杆命名规则 Turning tool holder designation system

外圆车刀杆
External tool holder

			M	W	L	N	R	25	25	M	-	08
			4	5	6	7	8	9	10	3		11

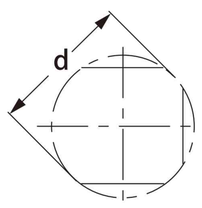
内孔车刀杆
Internal tool holder

S	25	S	M	W	L	N	R				-	08
1	2	3	4	5	6	7	8					11

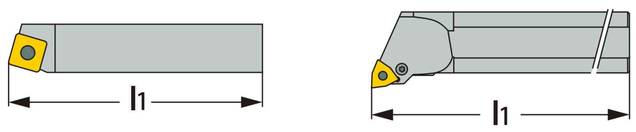
1.内圆车刀杆 Internal Turning tool Shank

S	钢杆无内冷 Steel Shank
A	钢杆有内冷 Coolant Through Steel Shank

2.刀具直径 Bar Diameter

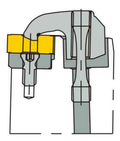
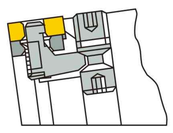


3.刀具长度 Tool Length



A	=	32	H	=	100	Q	=	180
B	=	40	J	=	110	R	=	200
C	=	50	K	=	125	S	=	250
D	=	60	L	=	140	T	=	300
E	=	70	M	=	150	U	=	350
F	=	80	N	=	160	V	=	400
G	=	90	P	=	170	W	=	450
						Y	=	500
						X	=	Special

4.压紧形式 Clamping System

M		P	
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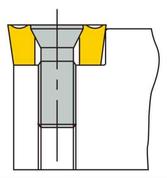
S			
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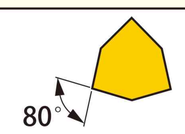
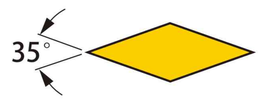
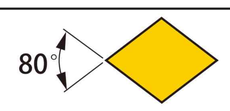
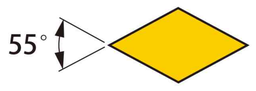
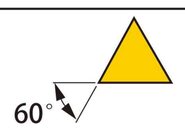
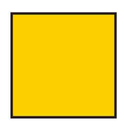
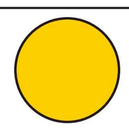
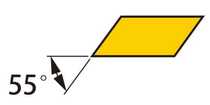
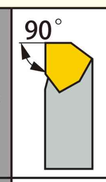
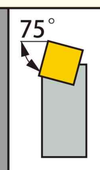
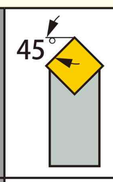
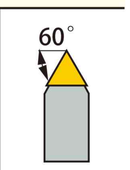
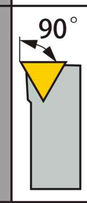
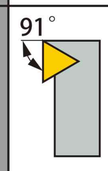
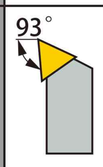
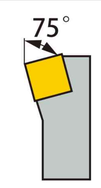
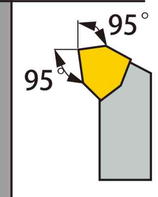
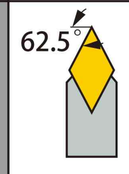
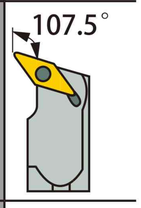
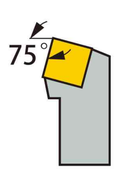
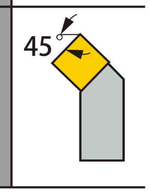
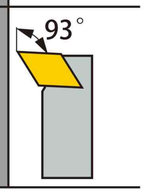
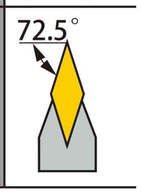
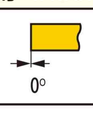
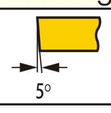
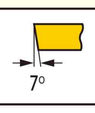
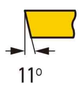
5.刀片形状 Insert Shape

W		V	
C		D	
T		S	
R		K	

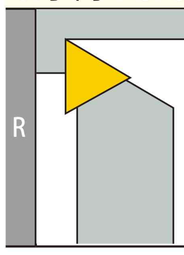
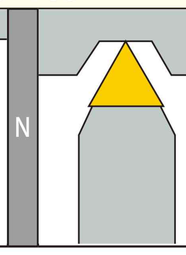
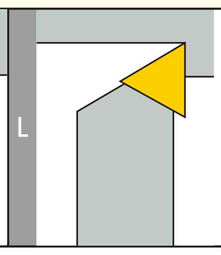
6.主偏角 KAPR

A		B		D		E	
F		G		J		K	
L		N		Q		R	
S		U		V		X	

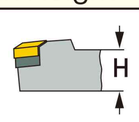
7.后角 Insert Clearance Angle

N		B		C	
P					

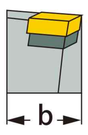
8.手向 Hand of Tool

R	N	L
		

9.刀方高度 Shank Height

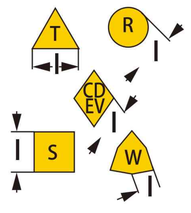


10.刀方宽度 Shank Width

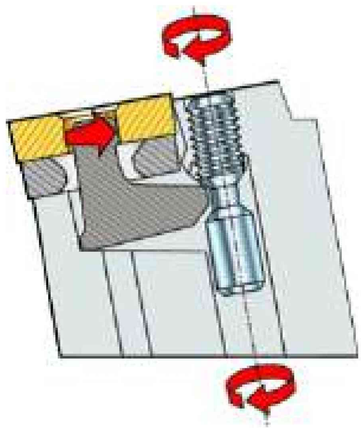


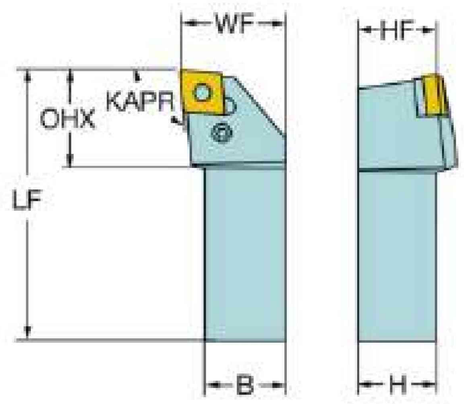
11.刀片尺寸 Insert Size

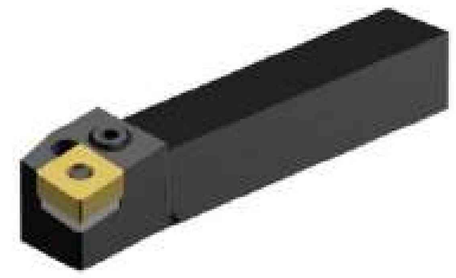
刃长
Cutting edge length



CN勾杆刀杆 CN type hook clamp tool holder

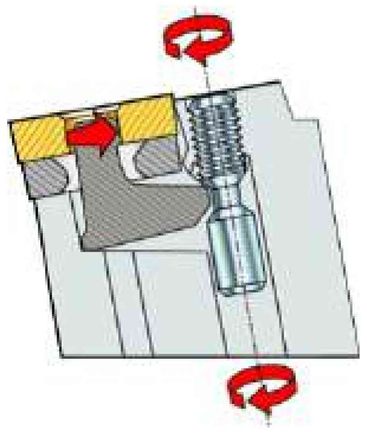


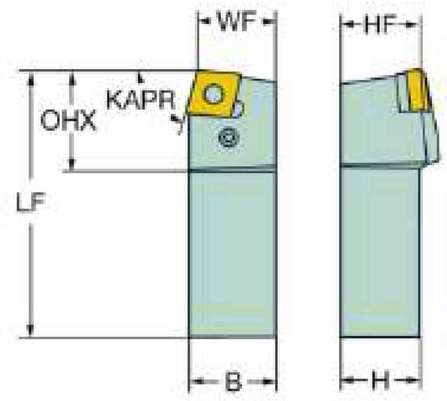


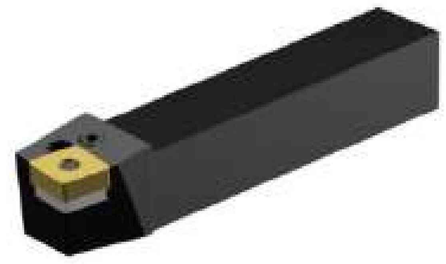


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	09	PCLNR 1616H09	95°	16	16	16x16	100	20	25	16	0
	09	PCLNR 2020K09	95°	20	20	20x20	125	25	27	20	0
	09	PCLNR 2525M09	95°	25	25	25x25	150	32	27	25	0
	12	PCLNR 1616H12	95°	16	16	16x16	100	20	26	16	0
	12	PCLNR 2020K12	95°	20	20	20x20	125	25	29	20	0
	12	PCLNR 2525M12	95°	25	25	25x25	150	32	30	25	0
	12	PCLNR 3225P12	95°	25	32	32x25	170	32	30	32	0
	16	PCLNR 2525M16	95°	25	25	25x25	150	32	33	25	0
	16	PCLNR 3225P16	95°	25	32	32x25	170	32	33	32	0
	16	PCLNR 3232P16	95°	32	32	32x32	170	40	33	32	0
	19	PCLNR 2525M19	95°	25	25	25x25	150	32	38	25	0
	19	PCLNR 3225P19	95°	25	32	32x25	170	32	38	32	0
	19	PCLNR 3232P19	95°	32	32	32x32	170	40	38	32	0
	19	PCLNR 4040S19	95°	40	40	40x40	170	40	38	40	0
左手刀 Left Hand	09	PCLNL 1616H09	95°	16	16	16x16	100	20	25	16	0
	09	PCLNL 2020K09	95°	20	20	20x20	125	25	27	20	0
	09	PCLNL 2525M09	95°	25	25	25x25	150	32	27	25	0
	12	PCLNL 1616H12	95°	16	16	16x16	100	20	26	16	0
	12	PCLNL 2020K12	95°	20	20	20x20	125	25	29	20	0
	12	PCLNL 2525M12	95°	25	25	25x25	150	32	30	25	0
	12	PCLNL 3225P12	95°	25	32	32x25	170	32	30	32	0
	16	PCLNL 2525M16	95°	25	25	25x25	150	32	33	25	0
	16	PCLNL 3225P16	95°	25	32	32x25	170	32	33	32	0
	16	PCLNL 3232P16	95°	32	32	32x32	170	40	33	32	0
	19	PCLNL 2525M19	95°	25	25	25x25	150	32	38	25	0
	19	PCLNL 3232P19	95°	32	32	32x32	170	32	38	32	0
	19	PCLNL 3232P19	95°	32	32	32x32	170	40	38	32	0
	19	PCLNL 4040S19	95°	40	40	40x40	170	40	38	40	0

CN勾杆刀杆 CN type hook clamp tool holder

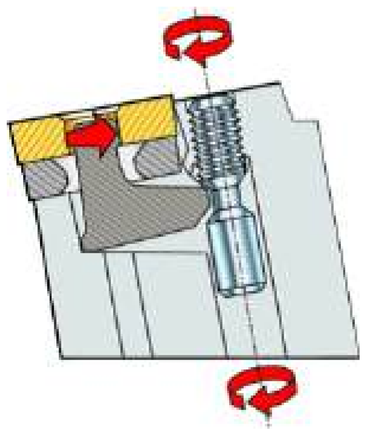


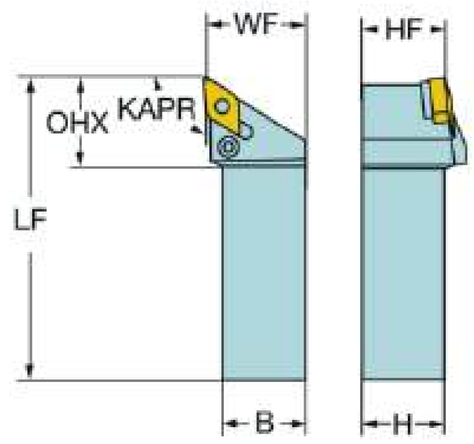




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	12	PCBNR 2525M12	75°	25	25	25x25	150	22	29	25	0
	16	PCBNR 2525M16	75°	25	25	25x25	150	22	32	25	0
	16	PCBNR 3225P16	75°	25	32	32x25	170	22	32	32	0
	16	PCBNR 3232P16	75°	32	32	32x32	170	27	32	32	0
	19	PCBNR 3232P19	75°	32	32	32x32	170	27	38	32	0
	19	PCBNR 4040S19	75°	40	40	40x40	250	35	38	40	0
左手刀 Left Hand	12	PCBNL 2525M12	75°	25	25	25x25	150	22	29	25	0
	16	PCBNL 2525M16	75°	25	25	25x25	150	22	32	25	0
	16	PCBNL 3225P16	75°	25	32	32x25	170	22	32	32	0
	16	PCBNL 3232P16	75°	32	32	32x32	170	27	32	32	0
	19	PCBNL 3232P19	75°	32	32	32x32	170	27	38	32	0
	19	PCBNL 4040S19	75°	40	40	40x40	250	35	38	40	0

DN勾杆刀杆 DN type hook clamp tool holder

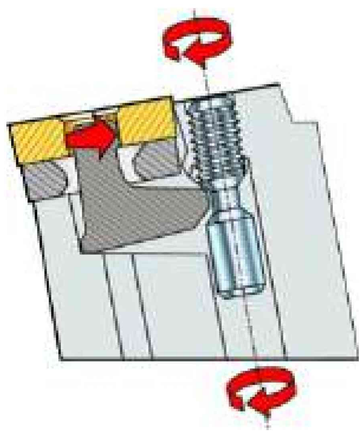


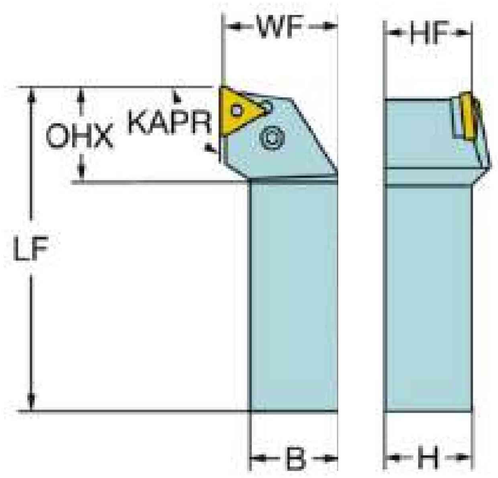


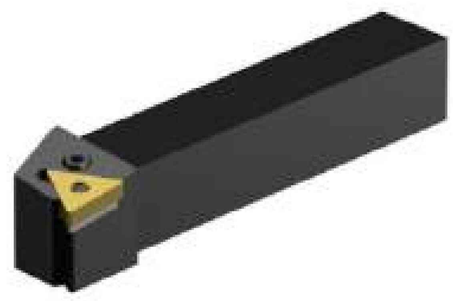
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	11	PDJNR 1616H11	93°	16	16	16x16	100	20	30	16	0
	11	PDJNR 2020K11	93°	20	20	20x20	125	25	30	20	0
	11	PDJNR 2525M11	93°	25	25	25x25	150	32	30	25	0
	11	PDJNR 3225P11	93°	25	32	32x25	170	32	30	32	0
	15	PDJNR 2020K15	93°	20	20	20x20	125	25	35	20	0
	15	PDJNR 2525M15	93°	25	25	25x25	150	32	35	25	0
	15	PDJNR 3225P15	93°	25	32	32x25	170	32	35	32	0
	15	PDJNR 3232P15	93°	32	32	32x32	170	40	35	32	0
左手刀 Left Hand	11	PDJNL 1616H11	93°	16	16	16x16	100	20	30	16	0
	11	PDJNL 2020K11	93°	20	20	20x20	125	25	30	20	0
	11	PDJNL 2525M11	93°	25	25	25x25	150	32	30	25	0
	11	PDJNL 3225P11	93°	25	32	32x25	170	32	30	32	0
	15	PDJNL 2020K15	93°	20	20	20x20	125	25	35	20	0
	15	PDJNL 2525M15	93°	25	25	25x25	150	32	35	25	0
	15	PDJNL 3225P15	93°	25	32	32x25	170	32	35	32	0
	15	PDJNL 3232P15	93°	32	32	32x32	170	40	35	32	0

TN勾杆刀杆

TN type hook clamp tool holder

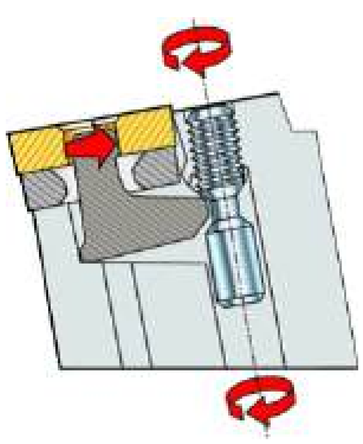


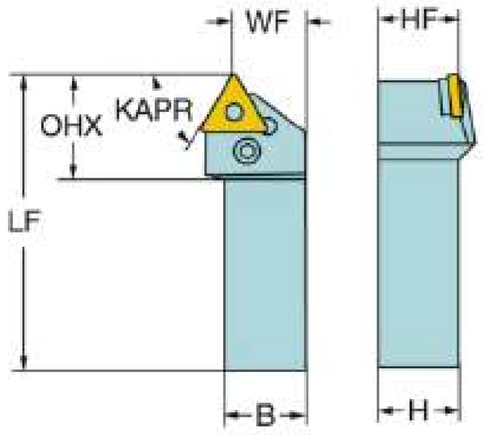


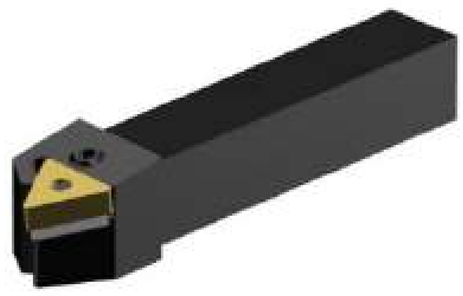


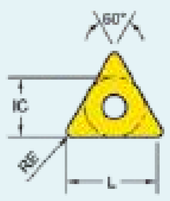
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	PTGNR 1616H16	91°	16	16	16x16	100	20	20	16	0
	16	PTGNR 2020K16	91°	20	20	20x20	125	25	20	20	0
	16	PTGNR 2525M16	91°	25	25	25x25	150	32	26	25	0
	16	PTGNR 3225P16	91°	25	32	25x32	170	32	26	32	0
左手刀 Left Hand	16	PTGNL 1616H16	91°	16	16	16x16	100	20	20	16	0
	16	PTGNL 2020K16	91°	20	20	20x20	125	25	20	20	0
	16	PTGNL 2525M16	91°	25	25	25x25	150	32	26	25	0
	16	PTGNL 3225P16	91°	25	32	25x32	170	32	26	32	0

TN勾杆刀杆 TN type hook clamp tool holder



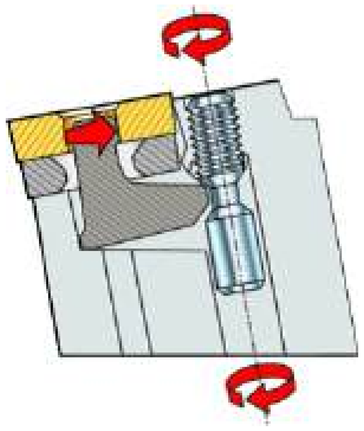


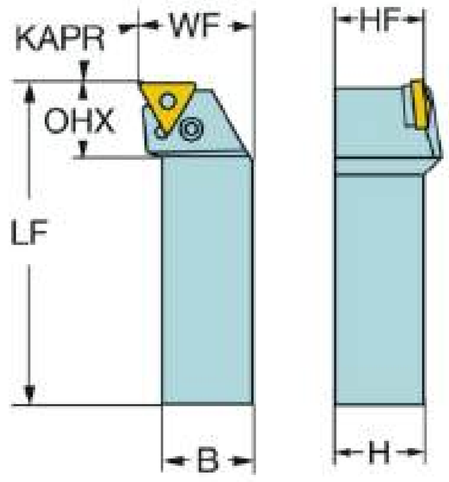


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	PTTNR 1616H16	60°	16	16	16x16	100	13	24	16	0
	16	PTTNR 2020K16	60°	20	20	20x20	125	17	26	20	0
左手刀 Left Hand	16	PTTNL 1616H16	60°	16	16	16x16	100	13	24	16	0
	16	PTTNL 2020K16	60°	20	20	20x20	125	17	26	20	0

TN勾杆刀杆

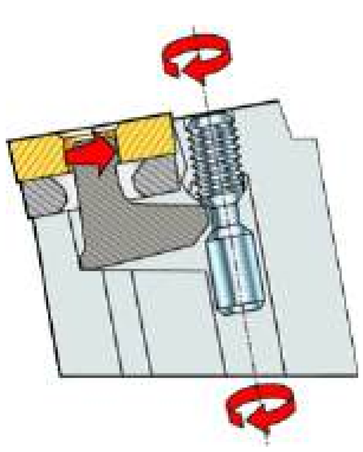
TN type hook clamp tool holder

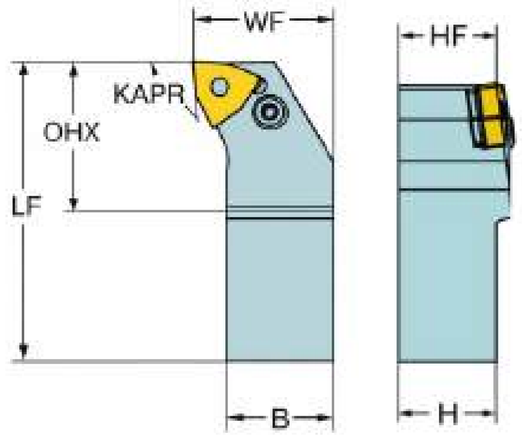


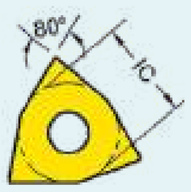


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	PTFNR 1616H16	91°	16	16	16x16	100	20	20	16	0
	16	PTFNR 2020K16	91°	20	20	20x20	125	25	21	20	0
	16	PTFNR 2525M16	91°	25	25	25x25	150	32	21	25	0
左手刀 Left Hand	16	PTFNL 1616H16	91°	16	16	16x16	100	20	20	16	0
	16	PTFNL 2020K16	91°	20	20	20x20	125	25	21	20	0
	16	PTFNL 2525M16	91°	25	25	25x25	150	32	21	25	0

WN勾杆刀杆 WN type hook clamp tool holder

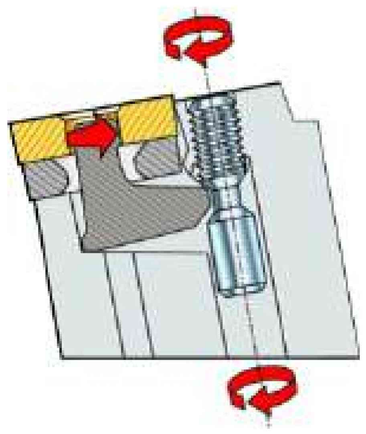


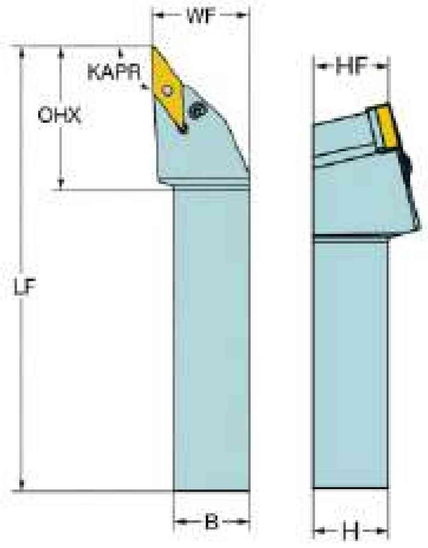


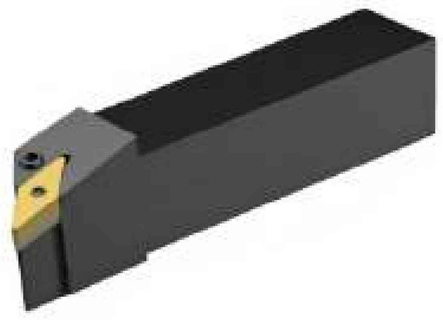
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	08	PWLNR 2020K08	95°	20	20	20x20	125	27	34	20	0
	08	PWLNR 2525M08	95°	25	25	25x25	150	32	35	25	0
	08	PWLNR 3225P08	95°	25	32	32x25	170	32	35	32	0
左手刀 Left Hand	08	PWLNL 2020K08	95°	20	20	20x20	125	27	34	20	0
	08	PWLNL 2525M08	95°	25	25	25x25	150	32	35	25	0
	08	PWLNL 3225P08	95°	25	32	32x25	170	32	35	32	0

VN勾杆刀杆

VN type hook clamp tool holder

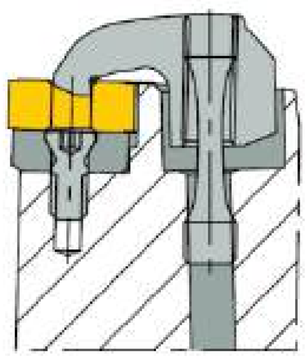


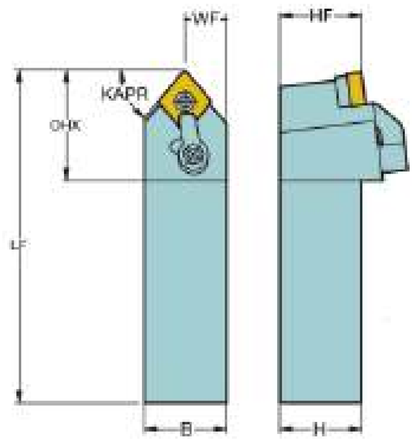




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	PVJNR 1616H16	93°	16	16	16x16	100	20	41	16	0
	16	PVJNR 2020K16	93°	20	20	20x20	125	25	42	20	0
	16	PVJNR 2525M16	93°	25	25	25x25	150	32	45	25	0
	16	PVJNR 3225P16	93°	25	32	25x32	170	32	45	32	0
左手刀 Left Hand	16	PVJNL 1616H16	93°	16	16	16x16	100	20	41	16	0
	16	PVJNL 2020K16	93°	20	20	20x20	125	25	42	20	0
	16	PVJNL 2525M16	93°	25	25	25x25	150	32	45	25	0
	16	PVJNL 3225P16	93°	25	32	25x32	170	32	45	32	0

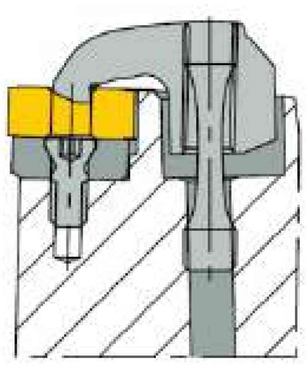
CN勾杆刀杆 CN type hook clamp tool holder

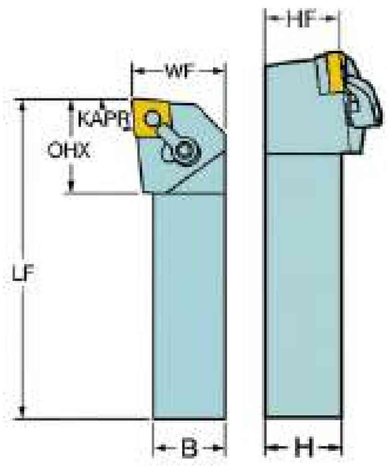




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
中置 Center-mounted	12	MCMNN 2020K12	45°	20	20	20x20	125	10	32	20	0
	12	MCMNN 2525M12	45°	25	25	25x25	150	13	32	25	0
	16	MCMNN 3225P16	45°	25	32	32x25	170	13	38	32	0
	19	MCMNN 4040R19	45°	40	40	40x40	200	20	42	40	0

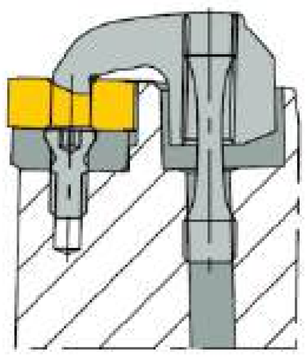
CN上压刀杆 CN type top clamping external turning tool holder

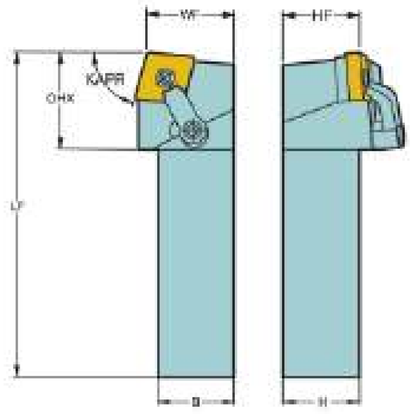




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	09	MCLNR 1616H09	95°	16	16	16x16	100	20	25	16	0
	09	MCLNR 2020K09	95°	20	20	20x20	125	25	27	20	0
	09	MCLNR 2525M09	95°	25	25	25x25	150	32	27	25	0
	12	MCLNR 1616H12	95°	16	16	16x16	100	20	26	16	0
	12	MCLNR 2020K12	95°	20	20	20x20	125	25	29	20	0
	12	MCLNR 2525M12	95°	25	25	25x25	150	32	30	25	0
	12	MCLNR 3225P12	95°	25	32	32x25	170	32	30	32	0
	16	MCLNR 2525M16	95°	25	25	25x25	150	32	33	25	0
	16	MCLNR 3225P16	95°	25	32	25x32	170	32	33	32	0
	16	MCLNR 3232P16	95°	32	32	32x32	170	40	33	32	0
	19	MCLNR 2525M19	95°	25	25	25x25	150	32	38	25	0
	19	MCLNR 3225P19	95°	25	32	25x32	170	32	38	32	0
	19	MCLNR 3232P19	95°	32	32	32x32	170	40	38	32	0
	19	MCLNR 4040S19	95°	40	40	40x40	170	40	38	40	0
左手刀 Left Hand	09	MCLNL1616H09	95°	16	16	16x16	100	20	25	16	0
	09	MCLNL 2020K09	95°	20	20	20x20	125	25	27	20	0
	09	MCLNL 2525M09	95°	25	25	25x25	150	32	27	25	0
	12	MCLNL 1616H12	95°	16	16	16x16	100	20	26	16	0
	12	MCLNL 2020K12	95°	20	20	20x20	125	25	29	20	0
	12	MCLNL 2525M12	95°	25	25	25x25	150	32	30	25	0
	12	MCLNL 3225P12	95°	25	32	32x25	170	32	30	32	0
	16	MCLNL 2525M16	95°	25	25	25x25	150	32	33	25	0
	16	MCLNL 3225P16	95°	25	32	25x32	170	32	33	32	0
	16	MCLNL 3232P16	95°	32	32	32x32	170	40	33	32	0
	19	MCLNL 2525M19	95°	25	25	25x25	150	32	38	25	0
	19	MCLNL 3225P19	95°	25	32	25x32	170	32	38	32	0
	19	MCLNL 3232P19	95°	32	32	32x32	170	40	38	32	0
	19	MCLNL 4040S19	95°	40	40	40x40	170	40	38	40	0

CN上压刀杆 CN type top clamping external turning tool holder

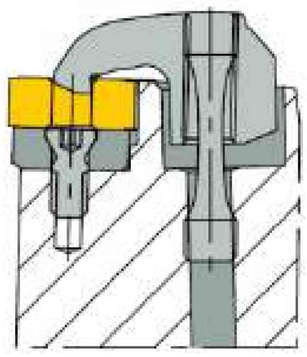


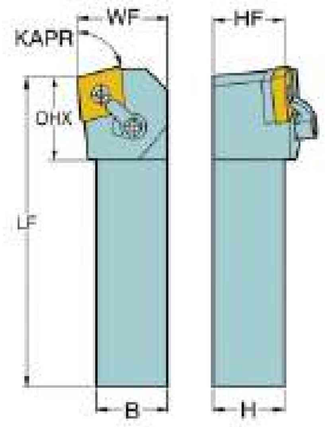


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	12	MCBNR 2525M12	75°	25	25	25x25	150	22	29	25	0
	16	MCBNR 2525M16	75°	25	25	25x25	150	22	32	25	0
	16	MCBNR 3225P16	75°	25	32	32x25	170	22	32	32	0
	16	MCBNR 3232P16	75°	32	32	32x32	170	27	32	32	0
	19	MCBNR 3232P19	75°	32	32	32x32	170	27	38	32	0
	19	MCBNR 4040S19	75°	40	40	40x40	250	35	38	40	0
左手刀 Left Hand	12	MCBNL 2525M12	75°	25	25	25x25	150	22	29	25	0
	16	MCBNL 2525M16	75°	25	25	25x25	150	22	32	25	0
	16	MCBNL 3232P16	75°	32	32	32x32	170	22	32	32	0
	16	MCBNL 3232P16	75°	32	32	32x32	170	27	32	32	0
	19	MCBNL 3232P19	75°	32	32	32x32	170	27	38	32	0
	19	MCBNL 4040S19	75°	40	40	40x40	250	35	38	40	0

CN上压刀杆

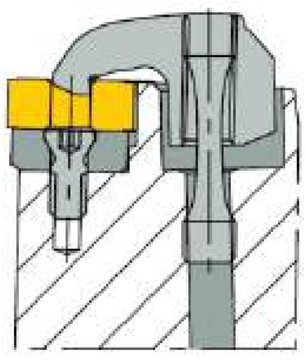
CN type top clamping external turning tool holder

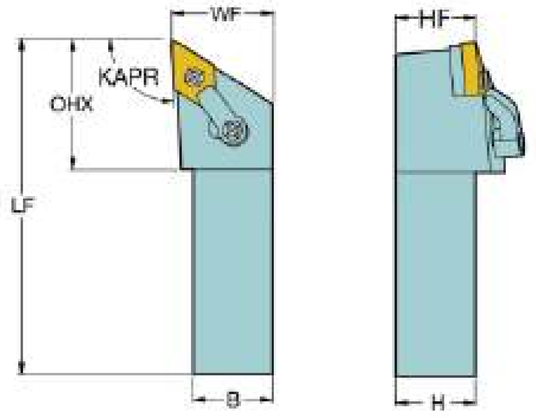




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	12	MCKNR 2525M12	75°	25	25	25x25	150	22	29	25	0
	16	MCKNR 2525M16	75°	25	25	25x25	150	22	32	25	0
	16	MCKNR 3225P16	75°	25	32	25x32	170	22	32	32	0
	16	MCKNR 3232P16	75°	32	32	32x32	170	27	32	32	0
	19	MCKNR 3232P19	75°	32	32	32x32	170	27	38	32	0
	19	MCKNR 4040S19	75°	40	40	40x40	250	35	38	40	0
左手刀 Left Hand	12	MCKNL 2525M12	75°	25	25	25x25	150	22	29	25	0
	16	MCKNL 2525M16	75°	25	25	25x25	150	22	32	25	0
	16	MCKNL 3225P16	75°	25	32	25x32	170	22	32	32	0
	16	MCKNL 3232P16	75°	32	32	32x32	170	27	32	32	0
	19	MCKNL 3232P19	75°	32	32	32x32	170	27	38	32	0
	19	MCKNL 4040S19	75°	40	40	40x40	250	35	38	40	0

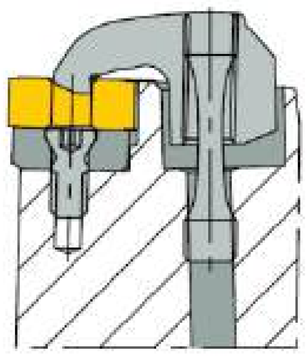
DN上压刀杆 DN type top clamping external turning tool holder

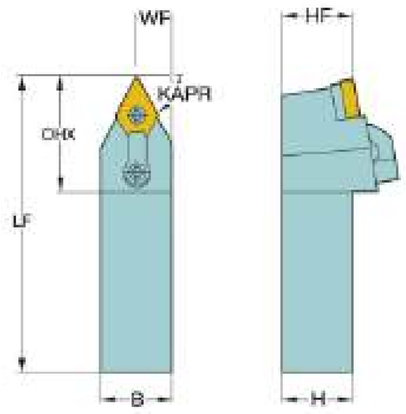




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	11	MDJNR 1616H11	93°	16	16	16x16	100	20	30	16	0
	11	MDJNR 2020K11	93°	20	20	20x20	125	25	30	20	0
	11	MDJNR 2525M11	93°	25	25	25x25	150	32	30	25	0
	11	MDJNR 3225P11	93°	25	32	32x25	170	32	30	32	0
	15	MDJNR 2020K15	93°	20	20	20x20	125	25	35	20	0
	15	MDJNR 2525M15	93°	25	25	25x25	150	32	35	25	0
	15	MDJNR 3225P15	93°	25	32	32x25	170	32	35	32	0
	15	MDJNR 3232P15	93°	32	32	32x32	170	40	35	32	0
左手刀 Left Hand	11	MDJNL 1616H11	93°	16	16	16x16	100	20	30	16	0
	11	MDJNL 2020K11	93°	20	20	20x20	125	25	30	20	0
	11	MDJNL 2525M11	93°	25	25	25x25	150	32	30	25	0
	11	MDJNL 3225P11	93°	25	32	32x25	170	32	30	32	0
	15	MDJNL 2020K15	93°	20	20	20x20	125	25	35	20	0
	15	MDJNL 2525M15	93°	25	25	25x25	150	32	35	25	0
	15	MDJNL 3225P15	93°	25	32	32x25	170	32	35	32	0
	15	MDJNL 3232P15	93°	32	32	32x32	170	40	35	32	0

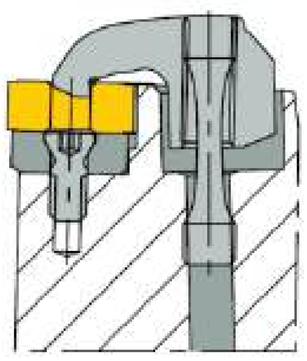
DN上压刀杆 DN type top clamping external turning tool holder

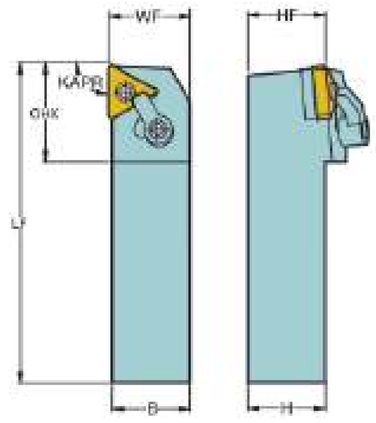




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	15	MDNNR 2525M15	62.5°	25	25	25x25	150	12.5	41	25	0
	15	MDNNR 3225P15	62.5°	25	32	32x25	170	12.5	41	32	0
左手刀 Left Hand	15	MDNNL 2525M15	62.5°	25	25	25x25	150	12.5	41	25	0
	15	MDNNL 3232P15	62.5°	32	32	32x32	170	12.5	41	32	0

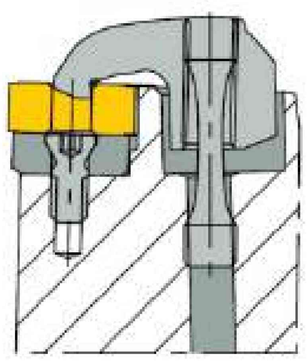
TN上压刀杆 TN type top clamping external turning tool holder

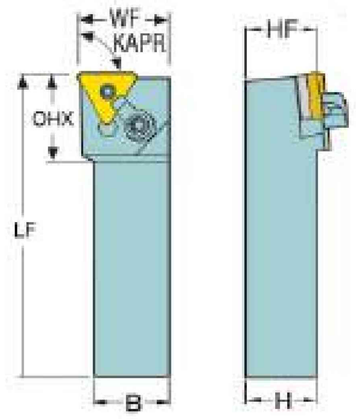


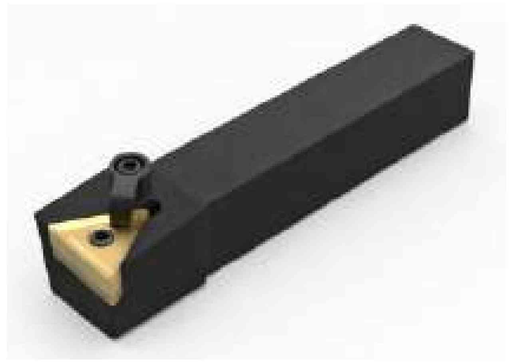


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	MTGNR 1616H16	91°	16	16	16x16	100	20	32	16	0
	16	MTGNR 2020K16	91°	20	20	20x20	125	25	32	20	0
	16	MTGNR 2525M16	91°	25	25	25x25	150	32	32	25	0
	16	MTGNR 3225P16	91°	25	32	25x32	170	32	32	32	0
左手刀 Left Hand	16	MTGNL 1616H16	91°	16	16	16x16	100	20	32	16	0
	16	MTGNL 2020K16	91°	20	20	20x20	125	25	32	20	0
	16	MTGNL 2525M16	91°	25	25	25x25	150	32	32	25	0
	16	MTGNL 3225P16	91°	25	32	25x32	170	32	32	32	0

TN上压刀杆 TN type top clamping external turning tool holder

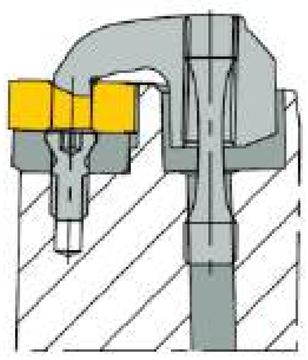


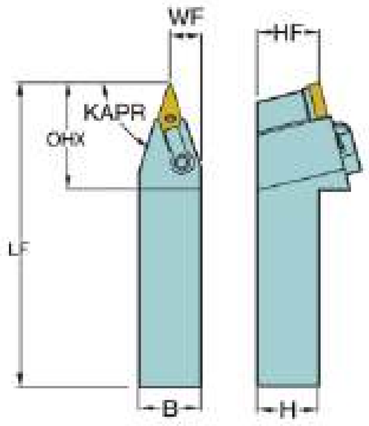




	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	MTGNR 1010H16	91°	10	10	10x10	100	20	20	10	0
	16	MTGNR 1212K16	91°	12	12	12x12	125	25	20	12	0
	16	MTGNR 1616M16	91°	16	16	16x16	150	32	20	16	0
	16	MTGNR 2020P16	91°	20	20	20x20	170	32	20	20	0
左手刀 Left Hand	16	MTGNL 1010H16	91°	10	10	10x10	100	20	20	10	0
	16	MTGNL 1212K16	91°	12	12	12x12	125	25	20	12	0
	16	MTGNL 1616M16	91°	16	16	16x16	150	32	20	16	0
	16	MTGNL 2020P16	91°	20	20	20x20	170	32	20	20	0

VN上压刀杆 VN type top clamping external turning tool holder

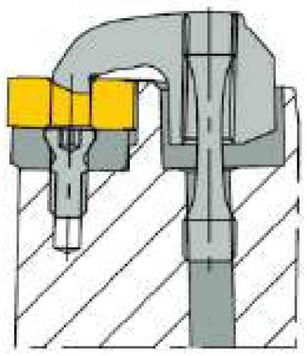


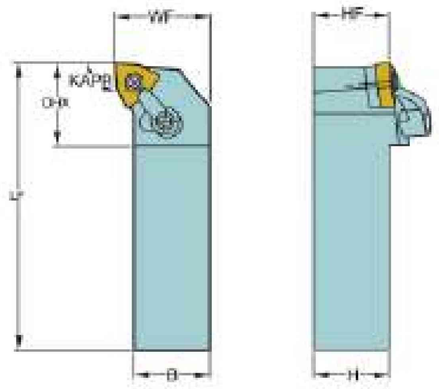


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
中置 Center-mounted	16	MVVNN 2020K16	72.5°	20	20	20x20	125	10	42	20	0
	16	MVVNN 2525M16	72.5°	25	25	25x25	150	12.5	42	25	0
	16	MVVNN 3225P16	72.5°	25	32	25x32	170	12.5	42	32	0

WN上压刀杆

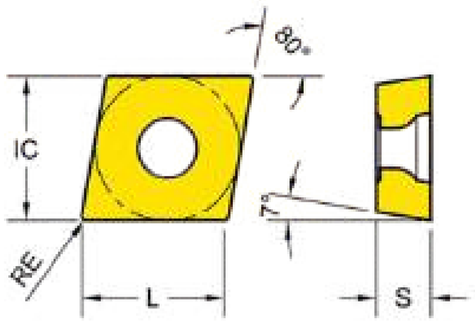
WN type top clamping external turning tool holder

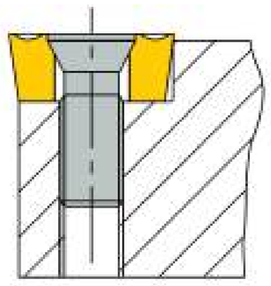


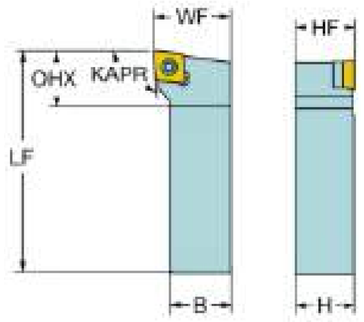


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	06	MWLNR 2020K06	95°	20	20	20x20	125	25	25	20	0
	06	MWLNR 2525M06	95°	25	25	25x25	150	32	25	25	0
	08	MWLNR 3232P08	95°	32	32	32x32	170	40	32	32	0
左手刀 Left Hand	06	MWLNL 2020K06	95°	20	20	20x20	125	25	25	20	0
	06	MWLNL 2525M06	95°	25	25	25x25	150	32	25	25	0
	08	MWLNL 3232P08	95°	32	32	32x32	170	40	32	32	0

CC螺钉压紧刀杆 CC screw clamping tool holder

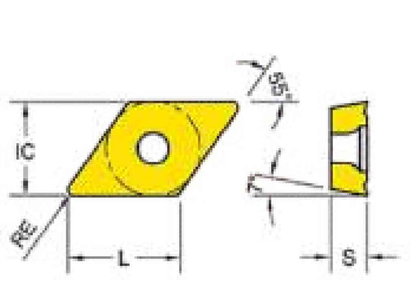


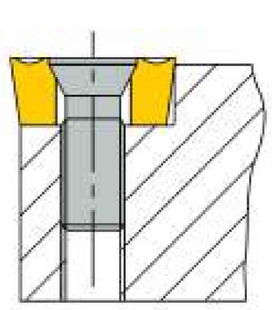


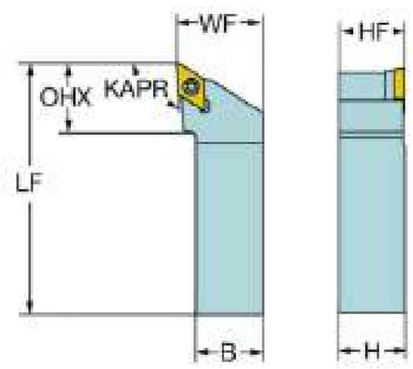


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	06	SCLCR 0808D06	95°	8	8	8x8	60	10	13	8	0
	06	SCLCR 1010E06	95°	10	10	10x10	70	12	13	10	0
	09	SCLCR 1212F09	95°	12	12	12x12	80	16	19	12	0
	09	SCLCR 1616H09	95°	16	16	16x16	100	20	18	16	0
	09	SCLCR 2020K09	95°	20	20	20x20	125	25	18	20	0
	12	SCLCR 2020K12	95°	20	20	20x20	125	25	25	20	0
	12	SCLCR 2525M12	95°	25	25	25x25	150	32	26	25	0
左手刀 Left Hand	06	SCLCL 0808D06	95°	8	8	8x8	60	10	13	8	0
	06	SCLCL 1010E 06	95°	10	10	10x10	70	12	13	10	0
	09	SCLCL 1212F09	95°	12	12	12x12	80	16	19	12	0
	09	SCLCL 1616H09	95°	16	16	16x16	100	20	18	16	0
	09	SCLCL 2020K09	95°	20	20	20x20	125	25	18	20	0
	12	SCLCL 2020K12	95°	20	20	20x20	125	25	25	20	0
	12	SCLCL 2525M12	95°	25	25	25x25	150	32	26	25	0

DC螺钉压紧刀杆 DC screw clamping tool holder

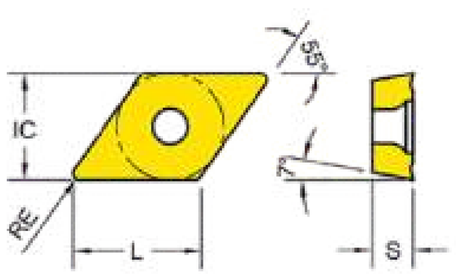


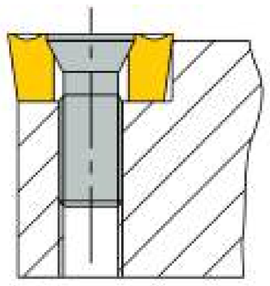


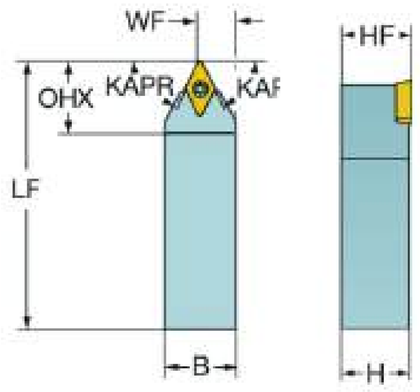


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	07	SDJCR 1010E07	95°	10	10	10x10	70	12	17	10	0
	07	SDJCR 1212F07	95°	12	12	12x12	80	16	19	12	0
	07	SDJCR 1616H07	95°	16	16	16x16	100	20	19	16	0
	07	SDJCR 2020K07	95°	20	20	20x20	125	25	22	20	0
	11	SDJCR 1616H11	95°	16	16	16x16	100	20	24	16	0
	11	SDJCR 2020K11	95°	20	20	20x20	125	26	24	20	0
	11	SDJCR 2525M11	95°	25	25	25x25	150	32	28	25	0
左手刀 Left Hand	07	SDJCL 1010E07	95°	10	10	10x10	70	12	17	10	0
	07	SDJCL 1212F07	95°	12	12	12x12	80	16	19	12	0
	07	SDJCL 1616H07	95°	16	16	16x16	100	20	19	16	0
	07	SDJCL 2020K07	95°	20	20	20x20	125	25	22	20	0
	11	SDJCL 1616H11	95°	16	16	16x16	100	20	24	16	0
	11	SDJCL 2020K11	95°	20	20	20x20	125	26	24	20	0
	11	SDJCL 2525M11	95°	25	25	25x25	150	32	28	25	0

DC螺钉压紧刀杆 DC screw clamping tool holder



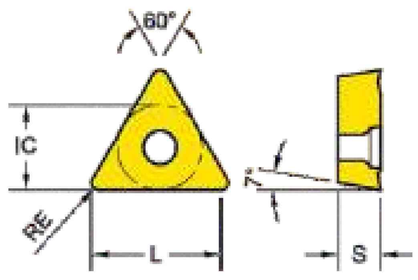


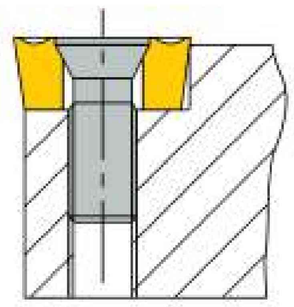


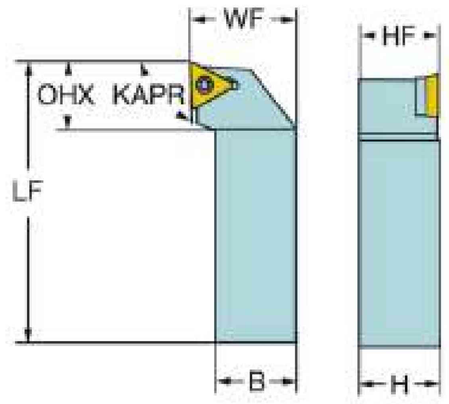
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
中置 Center-mounted	07	SDNCN 1010E07	63°	10	10	10x10	70	5.2	15	10	0
	07	SDNCN 1212F07	63°	12	12	12x12	80	6.2	15	12	0
	11	SDNCN 1616H11	63°	16	16	16x16	100	8.5	25	16	0
	11	SDNCN 2020K11	63°	20	20	20x20	125	10.5	25	20	0
	11	SDNCN 2525M11	63°	25	25	25x25	150	13	25	25	0

TC螺丝压紧刀杆

TC srew-on external turning tool holder

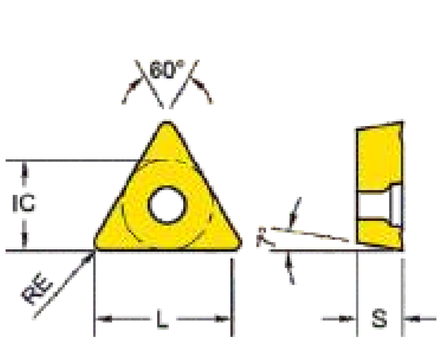


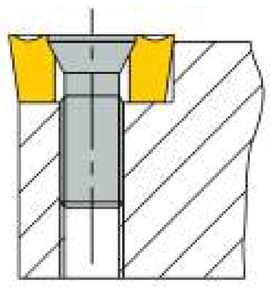


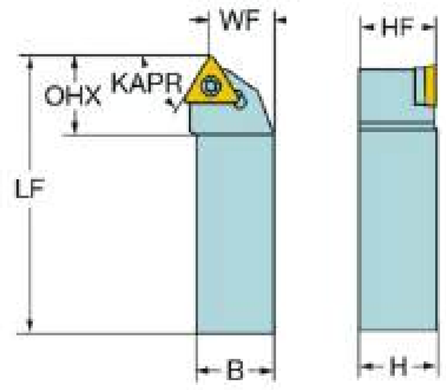


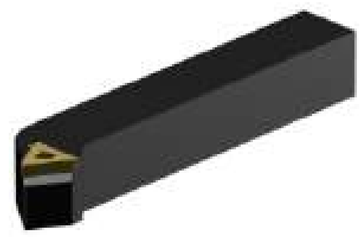
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	09	STGCR 0808D09	91°	8	8	8x8	60	10	20	8	0
	09	STGCR 1010E09	91°	10	10	10x10	70	12	20	10	0
	11	STGCR 1212F11	91°	12	12	12x12	80	16	20	12	0
	11	STGCR 1616H11	91°	16	16	16x16	100	20	20	16	0
	16	STGCR 1616H16	91°	16	16	16x16	100	20	20	16	0
	16	STGCR 2020K16	91°	20	20	20x20	125	25	20	20	0
	16	STGCR 2525M16	91°	25	25	25x25	150	32	20	25	0
左手刀 Left Hand	09	STGCL 0808D09	91°	8	8	8x8	60	10	20	8	0
	09	STGCL 1010E09	91°	10	10	10x10	70	12	20	10	0
	11	STGCL 1212F11	91°	12	12	12x12	80	16	20	12	0
	11	STGCL 1616H11	91°	16	16	16x16	100	20	20	16	0
	16	STGCL 1616H16	91°	16	16	16x16	100	20	20	16	0
	16	STGCL 2020K16	91°	20	20	20x20	125	25	20	20	0
	16	STGCL 2525M16	91°	25	25	25x25	150	32	20	25	0

TC上压刀杆 TC type top clamping external turning tool holder



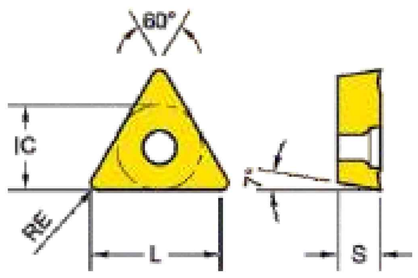


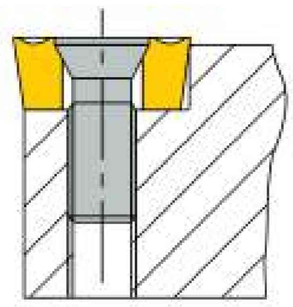


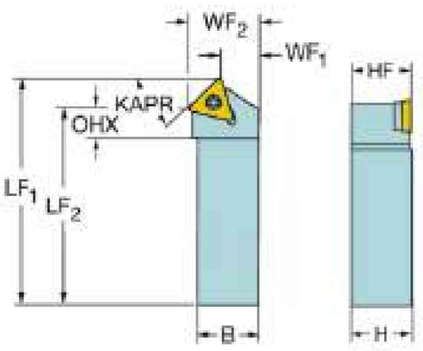


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	11	STTCR 1616H11	60°	16	16	16x16	100	13	20	16	0
	16	STTCR 1616H16	60°	16	16	16x16	100	13	20	16	0
	16	STTCR 2020K16	60°	20	20	20x20	125	17	20	20	0
	16	STTCR 2525M16	60°	25	25	25x25	150	22	20	25	0
左手刀 Left Hand	11	STTCL 1616H11	60°	16	16	16x16	100	13	20	16	0
	16	STTCL 1616H16	60°	16	16	16x16	100	13	20	16	0
	16	STTCL 2020K16	60°	20	20	20x20	125	17	20	20	0
	16	STTCL 2525M16	60°	25	25	25x25	150	22	20	25	0

TC上压刀杆 TC type top clamping external turning tool holder

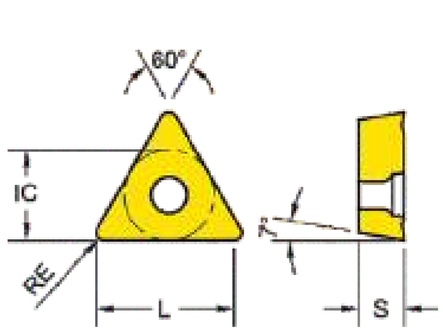


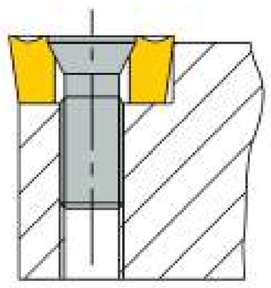


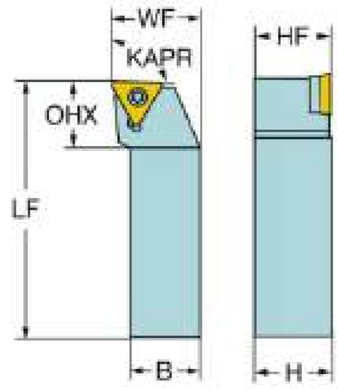


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	9	STDCR 1010E09	45°	10	10	10x10	70	5.3	6.1	10	0
	11	STDCR 1212F11	45°	12	12	12x12	80	6.3	10.4	12	0
	11	STDCR 1616H11	45°	16	16	16x16	100	9.9	10.4	16	0
	16	STDCR 1616H16	45°	16	16	16x16	100	7.2	21.2	16	0
	16	STDCR 2020K16	45°	20	20	20x20	125	12.1	21.2	20	0
	16	STDCR 2525M16	45°	25	25	25x25	150	17.2	21.2	25	0
左手刀 Left Hand	9	STDCL 1010E09	45°	10	10	10x10	70	5.3	6.1	10	0
	11	STDCL 1212F11	45°	12	12	12x12	80	6.3	10.4	12	0
	11	STDCL 1616H11	45°	16	16	16x16	100	9.9	10.4	16	0
	16	STDCL 1616H16	45°	16	16	16x16	100	7.2	21.2	16	0
	16	STDCL 2020K16	45°	20	20	20x20	125	12.1	21.2	20	0
	16	STDCL 2525M16	45°	25	25	25x25	150	17.2	21.2	25	0

TC上压刀杆 TC type top clamping external turning tool holder

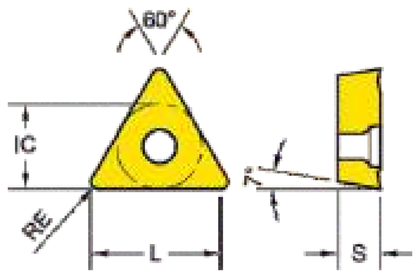


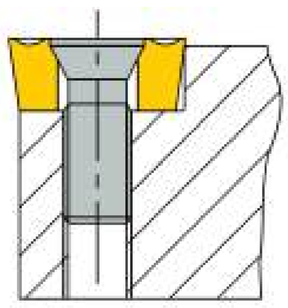


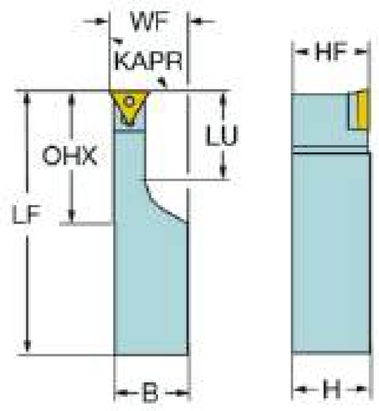


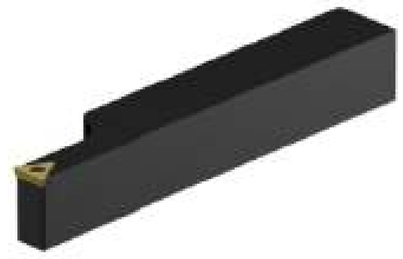
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	9	STFCR 1010E09	91°	10	10	10x10	70	12	14	10	0
	11	STFCR 1212F11	91°	12	12	12x12	80	16	16	12	0
	11	STFCR 1616H11	91°	16	16	16x16	100	20	16	16	0
	16	STFCR 1616H16	91°	16	16	16x16	100	20	22	16	0
	16	STFCR 2020K16	91°	20	20	20x20	125	25	22	20	0
	16	STFCR 2525M16	91°	25	25	25x25	150	32	24	25	0
左手刀 Left Hand	9	STFCL 1010E09	91°	10	10	10x10	70	12	14	10	0
	11	STFCL 1212F11	91°	12	12	12x12	80	16	16	12	0
	11	STFCL 1616H11	91°	16	16	16x16	100	20	16	16	0
	16	STFCL 1616H16	91°	16	16	16x16	100	20	22	16	0
	16	STFCL 2020K16	91°	20	20	20x20	125	25	22	20	0
	16	STFCL 2525M16	91°	25	25	25x25	150	32	24	25	0

TC螺钉压紧刀杆 TC screw clamping tool holder



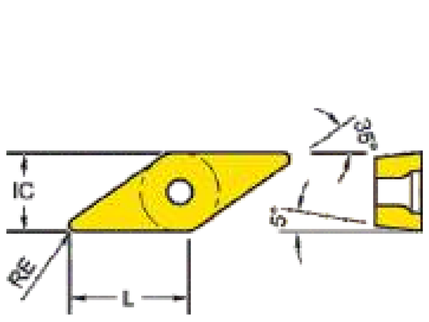


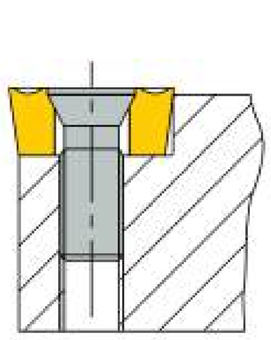


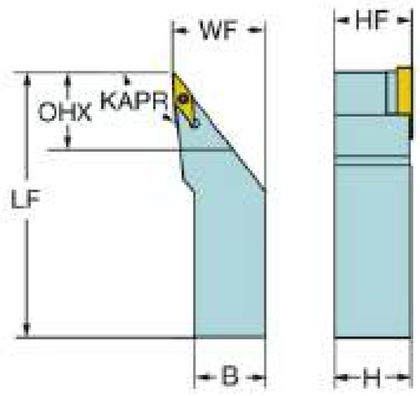


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	11	STFCR 2020K11–A	90°	20	20	20x20	125	20.8	37	20	0
	16	STFCR 2525M16–A	90°	25	25	25x25	150	25.9	47	25	0
左手刀 Left Hand	11	STFCL 2020K11–A	90°	20	20	20x20	125	20.8	37	20	0
	16	STFCL 2525M16–A	90°	25	25	25x25	150	25.9	47	25	0

VB螺钉刀杆 VB screwdriver shaft

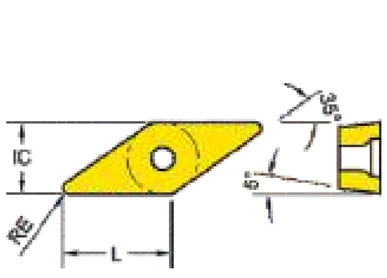


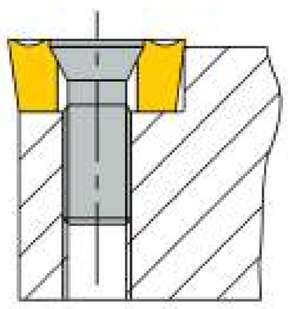


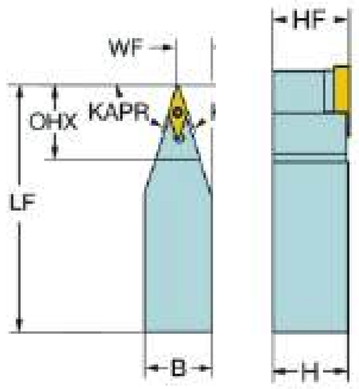


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC_{MS}	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	11	SVJBR 1212F11B	93°	12	12	12x12	80	16	27	12	0
	11	SVJBR 1616H11B	93°	16	16	16x16	100	20	27	16	0
	11	SVJBR 2020K11B	93°	20	20	20x20	125	25	27	20	0
	11	SVJBR 2525M11B	93°	25	25	25x25	150	32	27	25	0
	16	SVJBR 2020K16	93°	20	20	20x20	125	25	31.5	20	0
	16	SVJBR 2525M16	93°	25	25	25x25	150	32	31.5	25	0
	16	SVJBR 3225P16	93°	25	32	32x25	170	32	31.5	32	0
左手刀 Left Hand	11	SVJBL 1212F11B	93°	12	12	12x12	80	16	27	12	0
	11	SVJBL 1616H11B	93°	16	16	16x16	100	20	27	16	0
	11	SVJBL 2020K11B	93°	20	20	20x20	125	25	27	20	0
	11	SVJBL 2525M11B	93°	25	25	25x25	150	32	27	25	0
	16	SVJBL 2020K16	93°	20	20	20x20	125	25	31.5	20	0
	16	SVJBL 3225M16	93°	25	32	32x25	150	32	31.5	32	0
	16	SVJBL 3225P16	93°	25	32	32x25	170	32	31.5	32	0

VB螺钉压紧刀杆 VB screw clamping tool holder

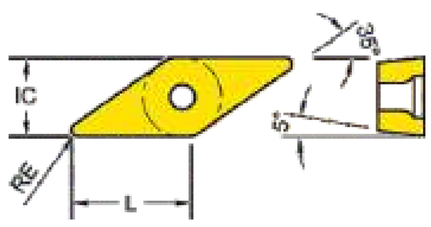


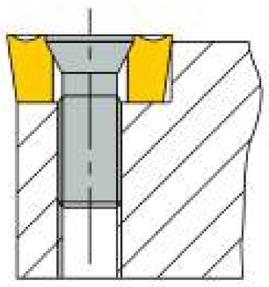


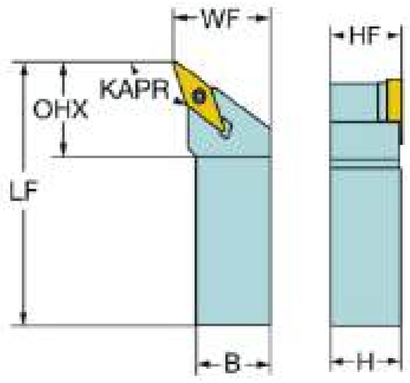


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
中置 Center-mounted	11	SVVBN 1212F11B	72.5°	12	12	12x12	80	6.3	27	12	0
	11	SVVBN 1616H11B	72.5°	16	16	16x16	100	8.3	27	16	0
	11	SVVBN 2020K11B	72.5°	20	20	20x20	125	10.3	27	20	0
	11	SVVBN 2525M11B	72.5°	25	25	25x25	150	12.8	27	25	0
	16	SVVBN 2020K16	72.5°	20	20	20x20	125	10.6	31.5	20	0
	16	SVVBN 2525M16	72.5°	25	25	25x25	150	13.1	31.5	25	0
	16	SVVBN 3225P16	72.5°	25	32	25x32	170	13.1	31.5	32	0

VB螺钉压紧刀杆 VB screw clamping tool holder



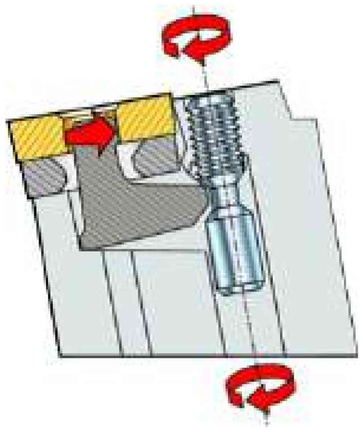


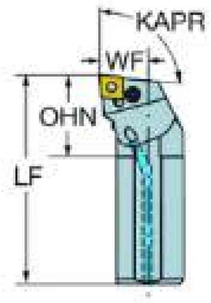


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	B	H	CZC$_{MS}$	LF	WF	OHX	HF	CNSC
右手刀 Right Hand	16	SVHBR 2020K16	107.5°	20	20	20x20	125	25	31.5	20	0
	16	SVHBR 2525M16	107.5°	25	25	25x25	150	32	31.5	25	0
	16	SVHBR 3225P16	107.5°	25	32	32x25	170	32	31.5	32	0
左手刀 Left Hand	16	SVHBL 2020K16	107.5°	20	20	20x20	125	25	31.5	20	0
	16	SVHBL 2525M16	107.5°	25	25	25x25	150	32	31.5	25	0
	16	SVHBL 3225P16	107.5°	25	32	32x25	170	32	31.5	32	0

CN勾杆内孔车刀杆

CN lever clamp internal turning tool holder

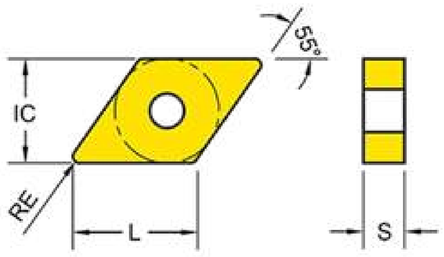


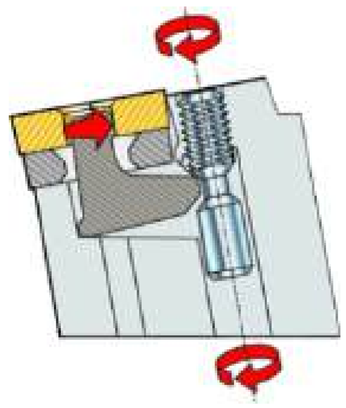


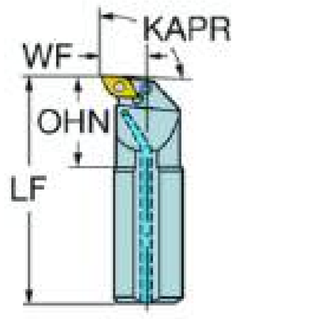
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	12	S25T–PCLNR12	95°	25	300	17	37	23	32	1
	12	S32U–PCLNR12	95°	32	350	22	40	30	40	1
	12	S40V–PCLNR12	95°	40	400	27	56	37	50	1
	16	S50W–PCLNR16	95°	50	450	35	56	47	63	1
	19	S50W–PCLNR19	95°	50	450	35	63	47	63	1
左手刀 Left Hand	12	S25T–PCLNL12	95°	25	300	17	37	23	32	1
	12	S32U–PCLNL12	95°	32	350	22	40	30	40	1
	12	S40V–PCLNL12	95°	40	400	27	56	37	50	1
	16	S50W–PCLNL16	95°	50	450	35	56	47	63	1
	19	S50W–PCLNL19	95°	50	450	35	63	47	63	1

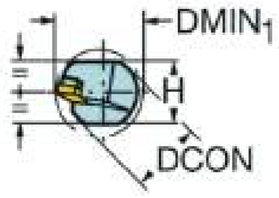
DN勾杆内孔车刀杆

DN lever clamp internal turning tool holder





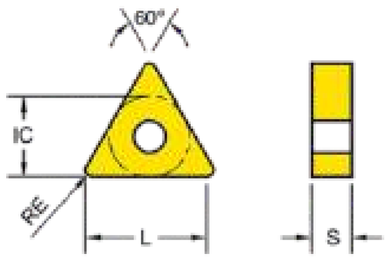


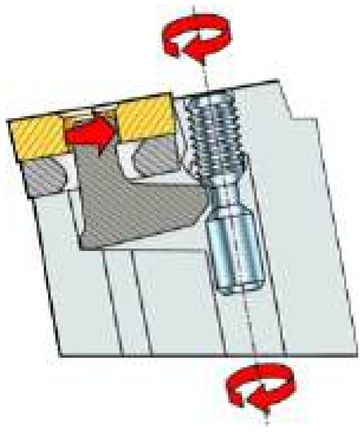


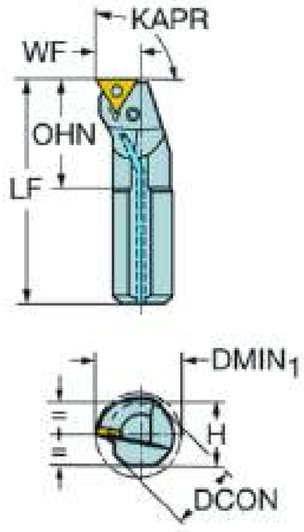
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	11	S25T–PDUNR11	93°	25	300	17	35	23	25	1
	11	S32U–PDUNR11	93°	32	350	22	40	30	32	1
	15	S40V–PDUNR15	93°	40	400	27	56	37	40	1
	15	S50W–PDUNR15	93°	50	450	35	63	47	50	1
左手刀 Left Hand	11	S25T–PDUNL11	93°	25	300	17	35	23	25	1
	11	S32U–PDUNL11	93°	32	350	22	40	30	32	1
	15	S40V–PDUNL15	93°	40	400	27	56	37	40	1
	15	S50W–PDUNL15	93°	50	450	35	63	47	50	1

TN勾杆内孔车刀杆

TN lever clamp internal turning tool holder

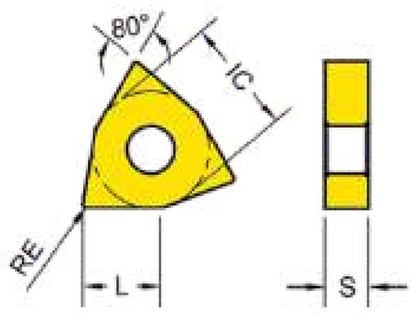


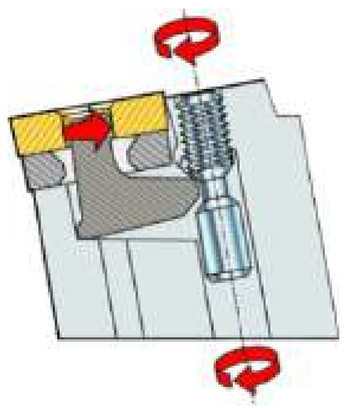


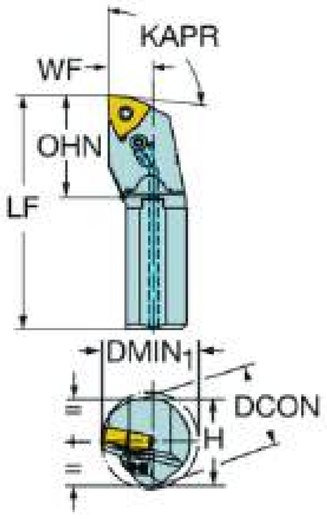


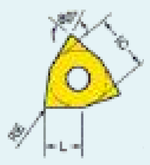
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	11	S16R–PTFNR11	91°	16	200	11	27	15	20	1
	11	S20S–PTFNR11	91°	20	250	13	30	18	25	1
	11	S25T–PTFNR11	91°	25	300	17	34	23	32	1
左手刀 Left Hand	11	S16R–PTFNL11	91°	16	200	11	27	15	20	1
	11	S20S–PTFNL11	91°	20	250	13	30	18	25	1
	11	S25T–PTFNL11	91°	25	300	17	34	23	32	1

WN勾杆内孔车刀杆 WN lever clamp internal turning tool holder



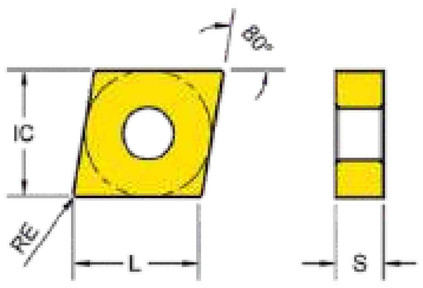


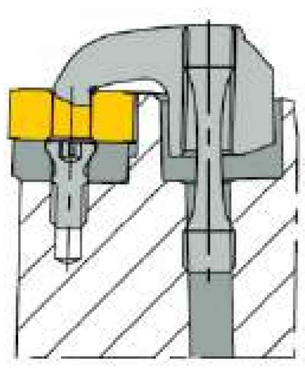


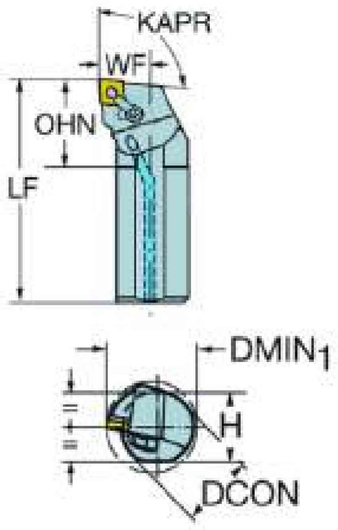
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	06	A20Q–PWLNR06	95°	20	180	13	36	18	25	1
	06	A25R–PWLNR06	95°	25	200	17	40	23	32	1
	06	A32S–PWLNR06	95°	32	250	22	50	29	40	1
	08	A25R–PWLNR08	95°	25	200	17	47	23	32	1
	08	A32S–PWLNR08	95°	32	250	22	50	29	40	1
	08	A40T–PWLNR08	95°	40	300	27	55	36	50	1
左手刀 Left Hand	06	A20Q–PWLNL06	95°	20	180	13	36	18	25	1
	06	A25R–PWLNL06	95°	25	200	17	40	23	32	1
	06	A32S–PWLNL06	95°	32	250	22	50	29	40	1
	08	A25R–PWLNL08	95°	25	200	17	47	23	32	1
	08	A32S–PWLNL08	95°	32	250	22	50	29	40	1
	08	A40T–PWLNL08	95°	40	300	27	55	36	50	1

CN上压内孔车刀杆

CN top clamp internal turning tool holder

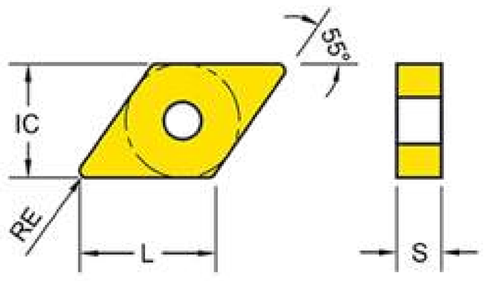


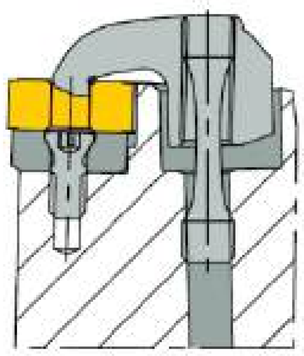


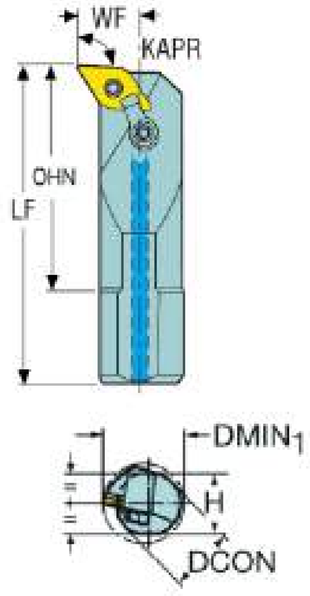


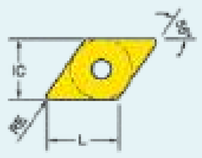
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	12	A25R–MCLNR12	95°	25	200	17	33	23	32	1
	12	A32S–MCLNR12	95°	32	250	22	–	29	40	1
	12	A40T–MCLNR12	95°	40	300	27	–	36	50	1
	12	A50U–MCLNR12	95°	50	350	35	–	47	63	1
	16	A40T–MCLNR16	95°	40	300	27	–	36	50	1
	16	A50U–MCLNR16	95°	50	350	35	–	47	63	1
	19	A50U–MCLNR19	95°	50	350	35	–	47	63	1
左手刀 Left Hand	12	A25R–MCLNL12	95°	25	200	17	33	23	32	1
	12	A32S–MCLNL12	95°	32	250	22	–	29	40	1
	12	A40T–MCLNL12	95°	40	300	27	–	36	50	1
	12	A50U–MCLNL12	95°	50	350	35	–	47	63	1
	16	A40T–MCLNL16	95°	40	300	27	–	36	50	1
	16	A50U–MCLNL16	95°	50	350	35	–	47	63	1
	19	A50U–MCLNL19	95°	50	350	35	–	47	63	1

DN上压内孔车刀杆 DN top clamp internal turning tool holder



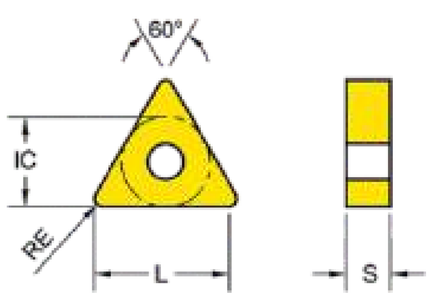


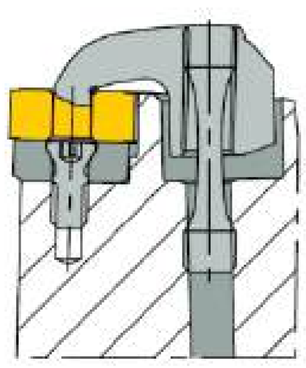


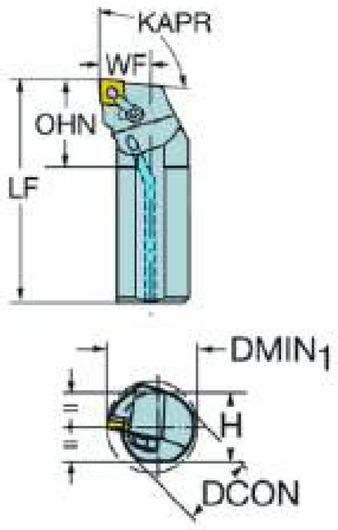
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	11	A25R–MDUNR11	93°	25	200	17	40	23	32	1
	11	A32S–MDUNR11	93°	32	250	22	50	29	40	1
	15	A25R–MDUNR15	93°	25	200	17	–	23	32	1
	15	A32S–MDUNR15	93°	32	250	22	–	29	40	1
	15	A40T–MDUNR15	93°	40	300	27	–	36	50	1
	15	A50U–MDUNR15	93°	50	350	35	–	47	63	1
左手刀 Left Hand	11	A25R–MDUNL11	93°	25	200	17	40	23	32	1
	11	A32S–MDUNL11	93°	32	250	22	50	29	40	1
	15	A25R–MDUNL15	93°	25	200	17	–	23	32	1
	15	A32S–MDUNL15	93°	32	250	22	–	29	40	1
	15	A40T–MDUNL15	93°	40	300	27	–	36	50	1
	15	A50U–MDUNL15	93°	50	350	35	–	47	63	1

TN上压内孔车刀杆

TN top clamp internal turning tool holder

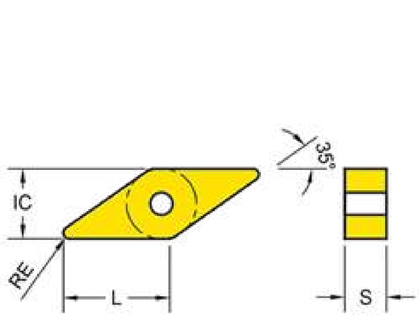


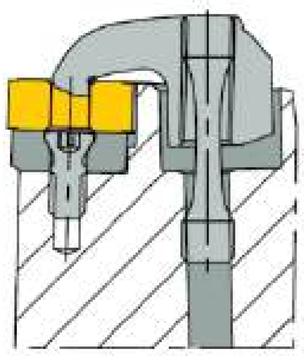


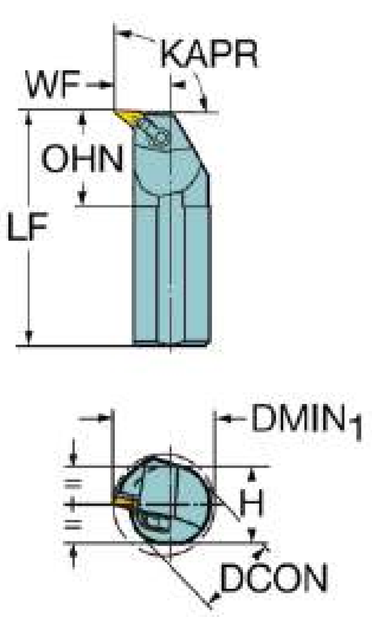


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	16	A25R–MTFNR16	91°	25	200	17	–	23	32	1
	16	A32S–MTFNR16	91°	32	250	22	–	29	40	1
	16	A40T–MTFNR16	91°	40	300	27	–	36	50	1
左手刀 Left Hand	16	A25R–MTFNL16	91°	25	200	17	–	23	32	1
	16	A32S–MTFNL16	91°	32	250	22	–	29	40	1
	16	A40T–MTFNL16	91°	40	300	27	–	36	50	1

VN勾杆内孔车刀杆 VN lever clamp internal turning tool holder



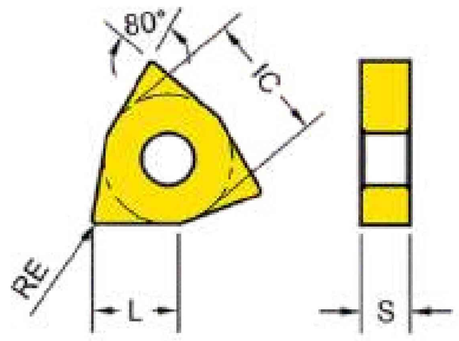


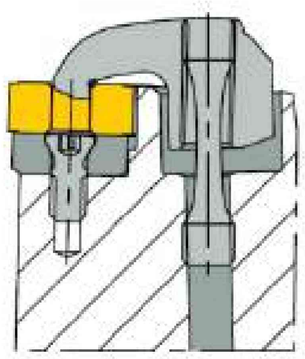


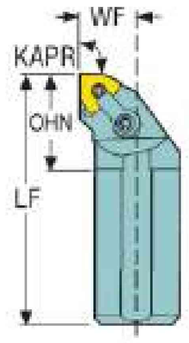
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	16	A25R–MVUNR16	93°	25	200	22	–	23	32	1
	16	A32S–MVUNR16	93°	32	250	22	–	29	40	1
左手刀 Left Hand	16	A25R–MVUNL16	93°	25	200	22	–	23	32	1
	16	A32S–MVUNL16	93°	32	250	22	–	29	40	1

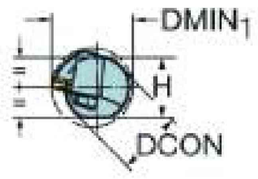
WN上压内孔车刀杆

WN type top clamping internal turning tool holder



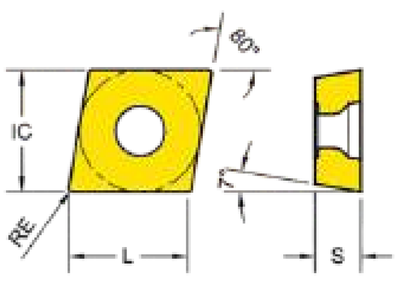


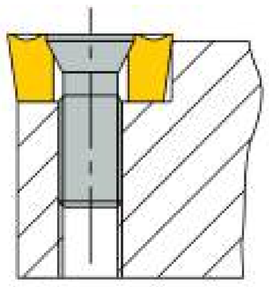


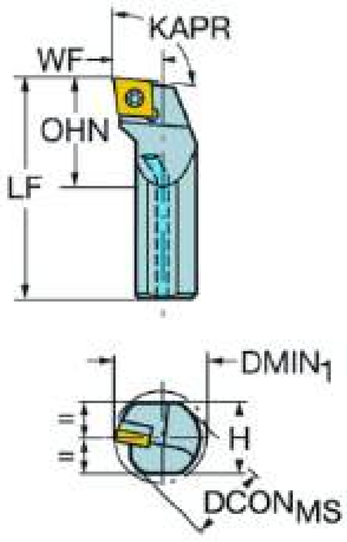


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	06	A25R–MWLNR06	93°	25	200	17	–	23	32	1
	06	A32S–MWLNR06	93°	32	250	22	–	29	40	1
	08	A25R–MWLNR08	93°	25	200	17	40	23	32	1
	08	A32S–MWLNR08	93°	32	250	22	50	29	40	1
	08	A40T–MWLNR08	93°	40	300	27	22	36	50	1
左手刀 Left Hand	06	A25R–MWLNL06	93°	25	200	17	–	23	32	1
	06	A32S–MWLNL06	93°	32	250	22	–	29	40	1
	08	A25R–MWLNL08	93°	25	200	17	40	23	32	1
	08	A32S–MWLNL08	93°	32	250	22	50	29	40	1
	08	A40T–MWLNL08	93°	40	300	27	22	36	50	1

CC螺钉压紧内孔车刀杆 CC type screw-on internal turning tool holder



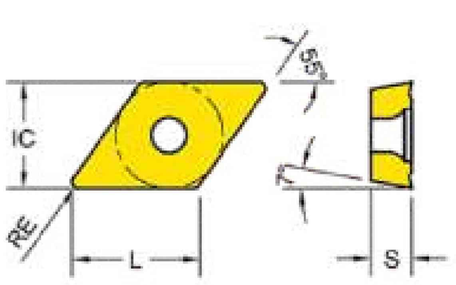


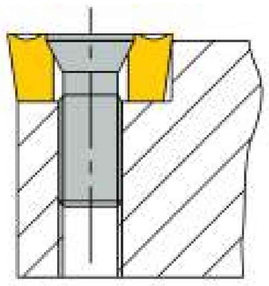


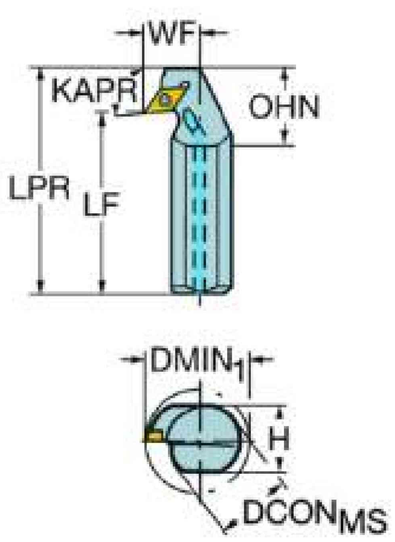
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	06	S08K–SCLCR06	95°	8	125	5	18	7	10	0
	06	S10M–SCLCR06	95°	10	150	6	20	9	12	0
	06	S12M–SCLCR06	95°	12	150	9	24	11	16	0
	06	S16R–SCLCR06	95°	16	200	11	32	15	20	0
	09	S16R–SCLCR09	95°	16	200	11	32	15	20	0
	09	S20S–SCLCR09	95°	20	250	31	30	18	25	0
	09	S25T–SCLCR09	95°	25	300	17	45	23	32	0
	12	S25T–SCLCR12	95°	25	300	17	45	23	32	0
	12	S32U–SCLCR12	95°	32	350	22	50	30	40	0
	12	S40V–SCLCR12	95°	40	400	27	60	37	50	0
左手刀 Left Hand	06	S08K–SCLCL06	95°	8	125	5	18	7	10	0
	06	S10M–SCLCL06	95°	10	150	6	20	9	12	0
	06	S12M–SCLCL06	95°	12	150	9	24	11	16	0
	06	S16R–SCLCL 06	95°	16	200	11	32	15	20	0
	09	S16R–SCLCL 09	95°	16	200	11	32	15	20	0
	09	S20S–SCLCL09	95°	20	250	31	30	18	25	0
	09	S25T–SCLCL09	95°	25	300	17	45	23	32	0
	12	S25T–SCLCL12	95°	25	300	17	45	23	32	0
	12	S32U–SCLCL12	95°	32	350	22	50	30	40	0
	12	S40V–SCLCL12	95°	40	400	27	60	37	50	0

DC螺钉压紧内孔背车刀杆

DC type screw-on internal turning tool holder

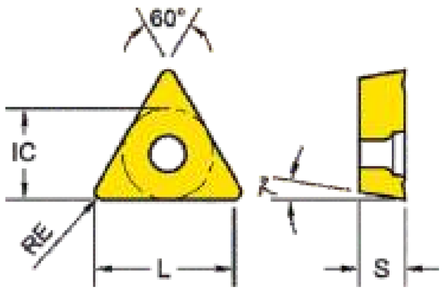


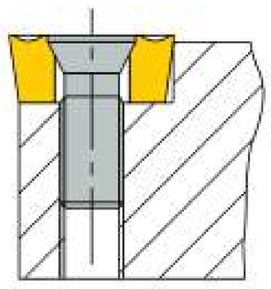


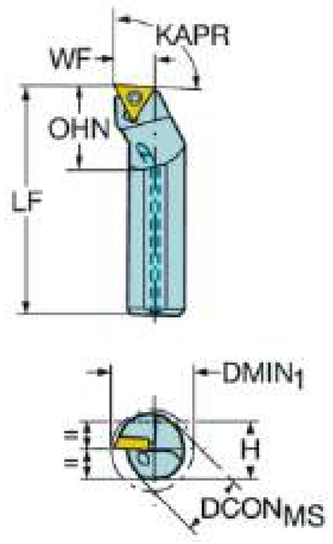


	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions								
			KAPR	DCON	LF	WF	OHN	H	LPR	DMIN1	CNSC
右手刀 Right Hand	07	S16R-SDXUCR07	93°	16	200	13	16	9	212	22	0
	07	S20S-SDXUCR07	93°	20	250	15	20	11	262	27	0
	07	S25T-SDXUCR07	93°	25	300	18	25	15	312	33	0
	11	S32U-SDXUCR11	93°	32	350	22	32	18	366	40	0
左手刀 Left Hand	07	S16R-SDXUCL07	93°	16	200	13	16	9	212	22	0
	07	S20S-SDXUCL07	93°	20	250	15	20	11	262	27	0
	07	S25T-SDXUCL07	93°	25	300	18	25	15	312	33	0
	11	S32U-SDXUCL11	93°	32	350	22	32	18	366	40	0

TC螺钉压紧内孔车刀杆 TC type screw-on internal turning tool holder



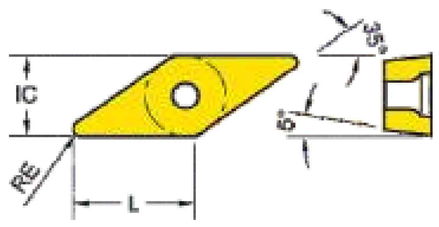


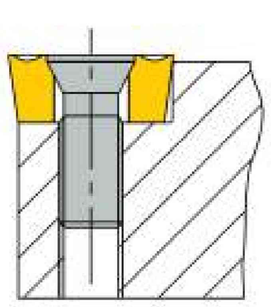


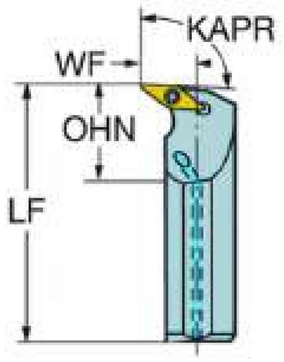
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	09	S10K–STFCR09	91°	10	125	7	22.5	9	13	0
	09	S12M–STFCR09	91°	12	150	9	28	11	16	0
	11	S12M–STFCR11	91°	12	150	9	30	11	16	0
	11	S16R–STFCR11	91°	16	200	11	35	15	20	0
	11	S20S–STFCR11	91°	20	250	13	29. 7	18	25	0
	16	S25T–STFCR16	91°	25	300	17	36. 8	23	32	0
	16	S32U–STFCR16	91°	32	350	22	43. 2	30	40	0
	16	S40V–STFCR16	91°	40	400	27	60	37	50	0
	11	A12M–STFCR11	91°	12	150	9	30	11	16	0
	11	A16R–STFCR11	91°	16	200	11	35	15	20	0
	11	A20S–STFCR11	91°	20	250	13	29. 7	18	25	0
左手刀 Left Hand	09	S10K–STFCL09	91°	10	125	7	22.5	9	13	0
	09	S12M–STFCL09	91°	12	150	9	28	11	16	0
	11	S12M–STFCL11	91°	12	150	9	30	11	16	0
	11	S16R–STFCL11	91°	16	200	11	35	15	20	0
	11	S20S–STFCL11	91°	20	250	13	29. 7	18	25	0
	16	S25T–STFCL 16	91°	25	300	17	36. 8	23	32	0
	16	S32U–STFCL16	91°	32	350	22	43. 2	30	40	0
	16	S40V–STFCL16	91°	40	400	27	60	37	50	0
	11	A12M–STFCL11	91°	12	150	9	30	11	16	1
	11	A16R–STFCL11	91°	16	200	11	35	15	20	1
	11	A20S–STFCL11	91°	20	250	13	29. 7	18	25	1

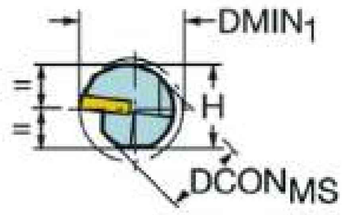
VB螺钉压紧刀杆

VB screw clamping tool holder



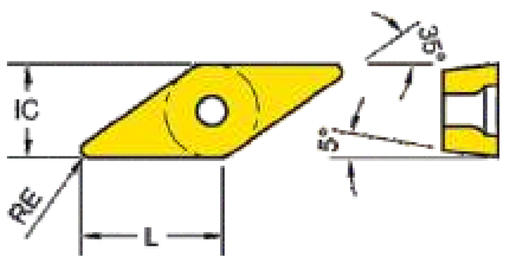


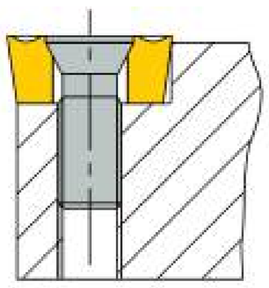


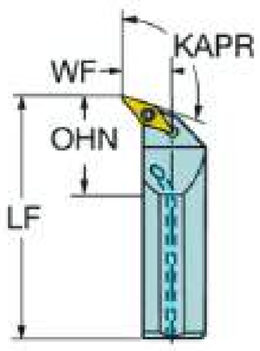


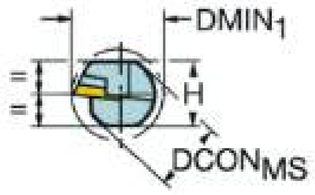
	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	11	S16R–SVUBR11	93°	16	200	13	27	15	16	0
	11	S20S–SVUBR11	93°	20	250	15	30	18	20	0
	11	S25T–SVUBR11	93°	25	300	18	35	23	25	0
	16	S25T–SVUBR16	93°	25	300	18	40	23	25	0
	16	S32U–SVUBR16	93°	32	350	22	49	30	32	0
	16	S40V–SVUBR16	93°	40	400	27	56.5	37	40	0
	11	A16R–SVUBR11	93°	16	200	13	–	15	16	1
	11	A20S–SVUBR11	93°	20	250	15	–	18	20	1
	11	A25T–SVUBR11	93°	25	300	18	–	23	25	1
左手刀 Left Hand	11	S16R–SVUBL11	93°	16	200	13	27	15	16	0
	11	S20S–SVUBL11	93°	20	250	15	30	18	20	0
	11	S25T–SVUBL11	93°	25	300	18	35	23	25	0
	16	S25T–SVUBL16	93°	25	300	18	40	23	25	0
	16	S32U–SVUBL16	93°	32	350	22	49	30	32	0
	16	S40V–SVUBL16	93°	40	400	27	56.5	37	40	0
	11	A16R–SVUBL11	93°	16	200	13	–	15	16	1
	11	A20S–SVUBL11	93°	20	250	15	–	18	20	1
	11	A25T–SVUBL11	93°	25	300	18	–	23	25	1

VB螺钉压紧刀杆 VB screw clamping tool holder









	刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions							
			KAPR	DCON	LF	WF	OHN	H	DMIN1	CNSC
右手刀 Right Hand	11	S16R–SVQBR11	107.5°	16	200	13	32.4	15	22	0
	11	S20S–SVQBR11	107.5°	20	250	15	33.4	18	27	0
	11	S25T–SVQBR11	107.5°	25	300	18	39.4	23	33	0
	16	S25T–SVQBR16	107.5°	25	300	18	40	23	33	0
	16	S32U–SVQBR16	107.5°	32	350	22	43.6	30	40	0
	16	S40V–SVQBR16	107.5°	40	400	27	64	37	50	0
	11	A16R–SVQBR11	107.5°	16	200	13	–	15	22	1
	11	A20S–SVQBR11	107.5°	20	250	15	–	18	27	1
	11	A25T–SVQBR11	107.5°	25	300	18	–	23	33	1
左手刀 Left Hand	11	S16R–SVQBL11	107.5°	16	200	13	32.4	15	22	0
	11	S20S–SVQBL11	107.5°	20	250	15	33.4	18	27	0
	11	S25T–SVQBL11	107.5°	25	300	18	39.4	23	33	0
	16	S25T–SVQBL16	107.5°	25	300	18	40	23	33	0
	16	S32U–SVQBL16	107.5°	32	350	22	43.6	30	40	0
	16	S40V–SVQBL16	107.5°	40	400	27	64	37	50	0
	11	A16R–SVQBL11	107.5°	16	200	13	–	15	22	1
	11	A20S–SVQBL11	107.5°	20	250	15	–	18	27	1
	11	A25T–SVQBL11	107.5°	25	300	18	–	23	33	1

车削刀片失效原因及解决方案 Turning insert failure causes and solutions

失效形式 Failure Mode		原因 Cause	解决方案 Solutions
后刀面磨损 Flank Wear		◆切削速度高 ◆硬质合金牌号不耐磨 High cutting speed. The carbide grade is not wear–resistant.	◆降低切削速度 ◆选取更耐磨的牌号 ◆对容易产生加工硬化的工件材料，需采用更小的切入角 ◆加工耐热合金材料时，降低切削速度 ◆提高冷却液压力并检查冷却射流方向 Reduce cutting speed. Select a more wear–resistant insert grade. For workpiece materials prone to work hardening, use a smaller entry angle When machining heat–resistant alloy materials, reduce cutting speed Increase coolant pressure and check the coolant jet direction
月牙洼磨损 Crater Wearear		◆刀片切削区域切削温度过高，压力过大 Excessive cutting temperature and pressure in the insert cutting zone.	◆降低切削速度 ◆降低进给率 ◆选取更耐磨的刀片牌号 ◆选取前角更大的刀片 ◆提高冷却液压力并检查冷却射流方向 Reduce cutting speed. Reduce feed rate. Select a more wear–resistant insert grade. Select an insert with a larger rake angle. Increase coolant pressure and check the coolant jet direction.
塑性变形 Plastic Deformation		◆过热和高切削力导致切削刃变形 Overheating and high cutting forces cause cutting edge deformation.	◆选取更耐磨的刀片牌号 ◆降低进给率 ◆降低切削速度 ◆减小切削深度 ◆提高冷却液压力 Select a more wear–resistant insert grade. Reduce feed rate. Reduce cutting speed. Reduce depth of cut. Increase coolant pressure.
沟槽磨损 Groove Wear		◆高硬度工件材料表面对刀片切深处造成破坏 The surface of high–hardness workpiece material causes damage to the insert at the depth of cut.	◆调整切削深度 ◆采用主偏角较小的刀具 ◆选用刀尖圆角半径更小的刀片 ◆提高冷却液压力 ◆选取更耐磨的刀片牌号 ◆对容易产生加工硬化的工件材料，需采用更小的切入角 ◆加工耐热合金材料时，降低切削速度 Adjust depth of cut. Use a tool with a smaller lead angle. Select an insert with a smaller corner radius. Increase coolant pressure. Select a more wear–resistant insert grade. For workpiece materials prone to work hardening, use a smaller entry angle. When machining heat–resistant alloy materials, reduce cutting speed.
热裂纹 Thermal Crack		◆切削区域表面温度变化太大，断续切削，或冷却液供应产生变化 Excessive temperature fluctuations at the cutting zone, interrupted cutting, and/or variations in coolant supply.	◆降低切削速度 ◆降低进给率 ◆断续切削时停止供应冷却液 ◆采用更强固的刀片 ◆选取韧性更高的刀片牌号 ◆只要可能，尽量避免使用冷却液 Reduce cutting speed. Reduce feed rate. Stop coolant supply during interrupted cutting. Use a sturdier insert. Select an insert grade with higher toughness. Avoid using coolant whenever possible.

车削刀片失效原因及解决方案 Turning insert failure causes and solutions

失效形式 Failure Mode		原因 Cause	解决方案 Solutions
切削刃破损 Cutting Edge Chipping		◆更换刀片切削刃前，刀片过度磨损 ◆对于该应用而言，刀片牌号及几何形状都太弱了 ◆刀片载荷过大 ◆刀片已形成了积屑瘤 Excessive insert wear before changing cutting edge. Insert grade and geometry are too weak for the application. Excessive load on the insert. Built–up edge (BUE) has formed on the insert.	◆降低切削速度 ◆选取更强固切削刃的刀片 ◆如发生振动，检查刀具稳定性 ◆降低进给率 ◆断续切削时停止供应冷却液 ◆选取刀尖圆角半径更大的刀片 ◆降低进给和切削深度 ◆选取更强壮或更厚实的刀片及韧性更高的刀片牌号 Reduce cutting speed. Select an insert with a sturdier cutting edge. If vibration occurs, check tool stability. Reduce feed rate. Stop coolant supply during interrupted cutting. Select an insert with a larger corner radius. Reduce feed and depth of cut. Select a stronger or thicker insert and an insert grade with higher toughness.
积屑瘤 Built–Up Edge (BUE)		◆切削区域温度过低 ◆负型刀片 ◆加工材料粘性高，如低碳钢，不锈钢及铝 Cutting zone temperature too low. Negative rake insert. Workpiece material with high adhesion,such as low–carbon steel, stainless steel, and aluminum.	◆提高切削速度 ◆选取切削刃更锋利的刀片 ◆采用表面经处理更光滑的刀片 ◆加大冷却液供应 Increase cutting speed. Select an insert with a sharper cutting edge. Use an insert with a smoother surface finish. Increase coolant supply.
切削刃崩刃 Cutting Edge Chipping		◆刀片切削刃易碎或刀片上已形成积屑瘤 Brittle cutting edge or built–up edge(BUE) formed on the insert.	◆选取韧性更佳的刀片牌号 ◆降低进给率 ◆选取带有强固切削刃的卷屑槽刀片 ◆降低切削速度 ◆降低初始进给率 ◆提高夹持刚性 Select an insert grade with higher toughness. Reduce feed rate. Select a chipbreaker insert with a sturdy cutting edge. Reduce cutting speed. Reduce initial feed rate. Increase clamping rigidity.
切削刃剥落 Cutting Edge Flaking		◆切屑卷折造成刀片破损 Chip curling causes insert breakage.	◆试用更强固形状的刀片，不一样的断屑槽 ◆变更进给率和切削速度 ry a sturdier insert geometry and a different chipbreaker. Adjust feed rate and cutting speed.

车削参数计算公式 Turning parameter calculation formulas

主轴转数n (rpm)
Spindle Speed

$$n = \frac{V_c \times 1000}{D \times \pi}$$

切削速度V_c (m/min)
Cutting Speed

$$V_C = \frac{D \times \pi \times n}{1000}$$

进给速度V_f (mm/min)
Feed Rate

$$V_f = f_n X n$$

金属去除率Q (cm3/min)
Metal Removal Rate

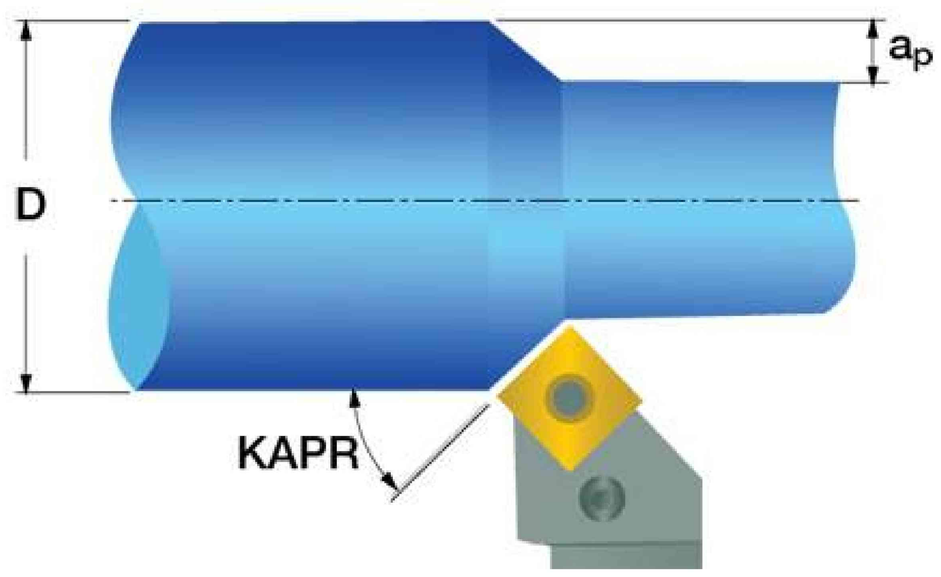
$$Q = V_c \times a_p \times f_n$$

净功率P_C (kW)
Net Power

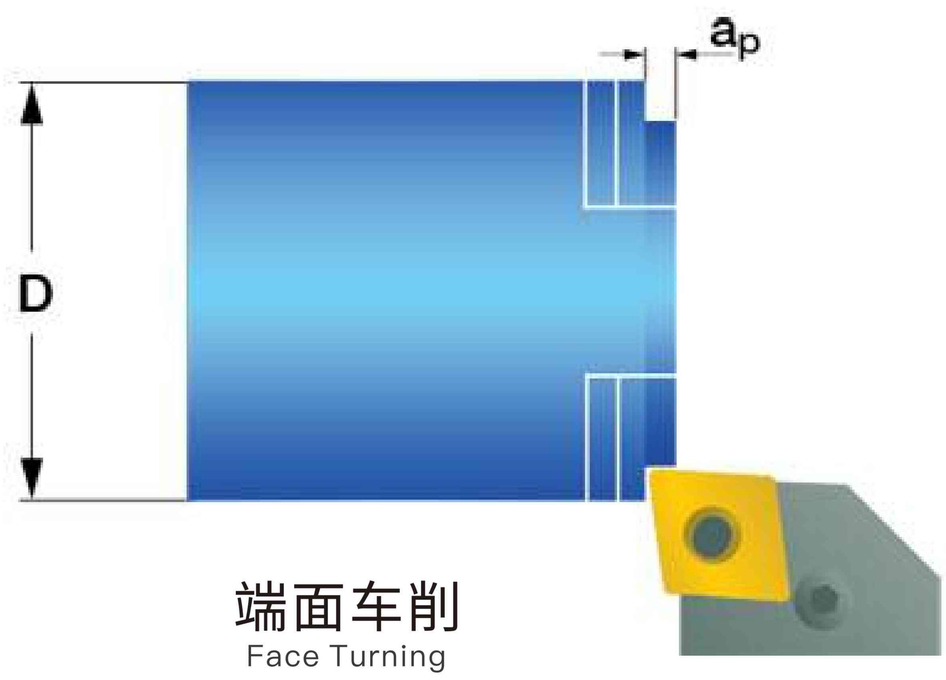
$$P_C = \frac{V_c \times a_p \times f_n \times K_c}{60000 \times \eta}$$

切削时间 T_C (min)
Cutting Time

$$T_C = \frac{l_m}{f_n X n}$$



轴向车削
Axial Turningipping



端面车削
Face Turning

符号 ymbol	名称/定义 Name/Definition	单位(公制) Unit (Metric)
n	主轴转速 Spindle Speed	rpm
D	工件直径 Workpiece Diameter	mm
V_C	切削速度 Cutting Speed	m/min
V_f	进给速度 Feed Rate	mm/min
a_p	切削深度 Depth of Cut	mm
f_n	切削进给 Cutting Feed	mm/r
Q	金属去除率 Metal Removal Rate	cm3/min
P_C	净功率 Net Power	kW
T_C	切削时间 Cutting Time	min
l_m	加工长度 Machining Length	mm
KAPR	主偏角 Lead Angle	度

C

槽刀
Grooving

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  G chipbreaker
- 车削/仿形 C08P
  Turning/Profiling
- 外圆槽刀杆 C09P
  External grooving tool holder
- 内圆槽刀杆 C10P
  Internal grooving tool holder
- 推荐切削速度 C11P
  Recommended cutting speed

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CV Series

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  GF chipbreaker
- GM槽型 C13P
  GF chipbreaker
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  TM Chipbreaker/TF Chipbreaker
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  External grooving tool holder
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  Internal grooving tool holder
- 端面槽刀杆 C17P
  Face grooving tool holder
- GF仿形 C18P
  GF Profiling
- 仿形/退槽刀杆 C19P
  Profiling/ Retracting Grooving Tool holder
- 推荐切削速度 C20P
  Recommended cutting speed
- CM槽型 C21P
  CM chipbreaker
- CF槽型 C22P
  CF chipbreaker
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  Recommended cutting speed

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  TN concept–defined tool
- TN概念定义的刀片 C30P
  TN concept–defined tool
- 切槽刀杆 C31P
  Grooving tool holder
- 推荐切削速度 C32P
  Recommended cutting speed

槽刀

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  EP Concept Definition
- EP概念定义 C34P
  EP Concept Definition
- 切槽刀杆 C35P
  Grooving tool holder
- CV概念定义 C36P
  CV Concept Definition
- CV概念定义 C37P
  CV Concept Definition
- CV概念定义 C38P
  CV Concept Definition
- CV概念定义 C39P
  CV Concept Definition
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  Grooving tool holder

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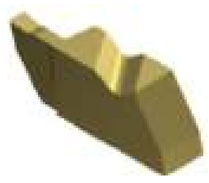
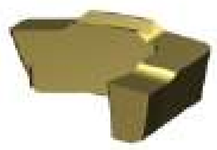
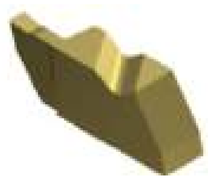
刀具选型一览表 Tool selection overview

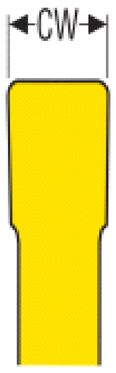
系列 Series	刀片 Insert		CW	CDX	页码 Page
ET系列 ET Series			3~7	12~17	7–11
CV系列 CV Series			2~5	19.2~24.4	12~23
PV系列 PV Series			2~6	20~24	24~28
TN系列 TN Series			1.34~2	4.8~6	29~32
特殊应用 Special Applications			1.5~3	4~5	33~34
			1.5~4	4~6.5	36~39
			1.34~2	4.8~6	29~32

槽刀 Grooving

槽刀片命名规则 Grooving insert naming convention

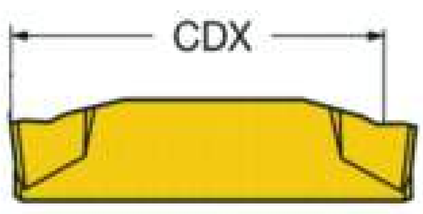
W4	T17	R0.4	CV	N	4	D2	GF
①	②	③	④	⑤	⑥	⑦	⑧

① 切削宽度 Cutting width



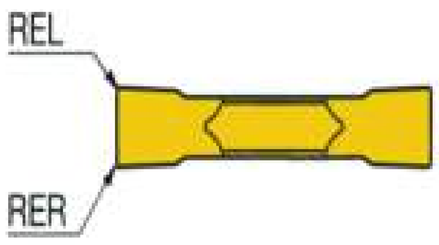
W2	W3	W4	W5	W6	W7	W8
2mm	3mm	4mm	5mm	6mm	7mm	8mm

② 切削深度 Cutting depth



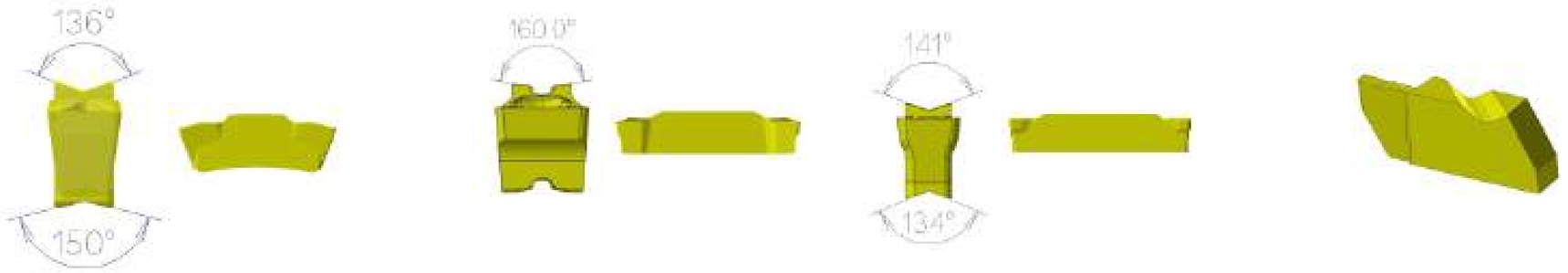
T2	T3	T4	T5	T17	T18
2mm	3mm	4mm	5mm	17mm	18mm

③ 刀尖圆弧 Corner radius



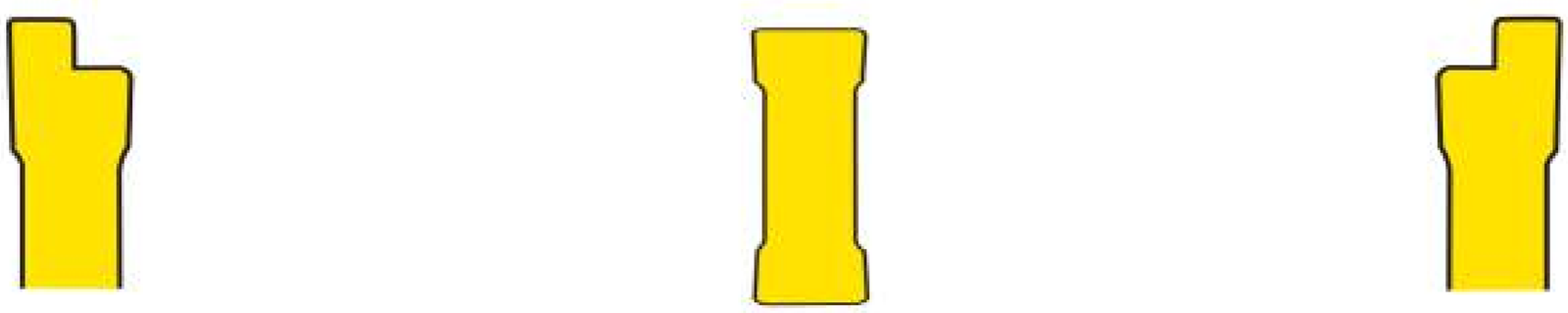
R0.2	R0.4	R0.8	R1	R2	R2.5
0.2mm	0.4mm	0.8mm	1mm	2mm	2.5mm

④ 定位结构 Locating Structure



ET　CV　PV　TN

⑤ 切削方向 Cutting direction



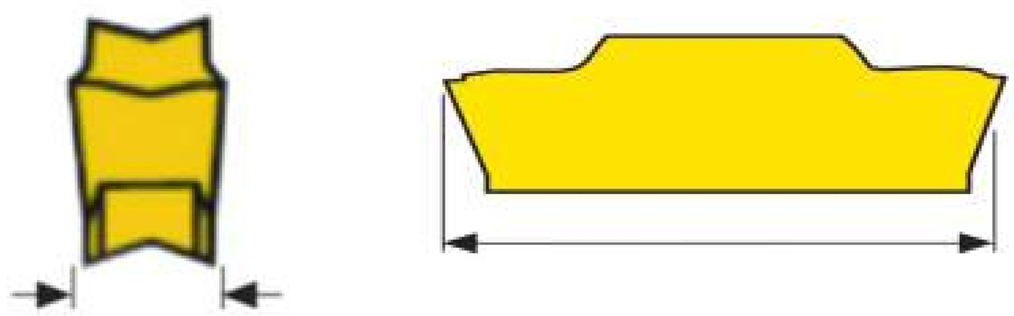
R:右手刀
Right hand

N:中置刀
Neutral

L:左手刀
Left hand

⑥ 刀座规格 Seat size

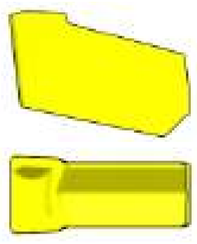
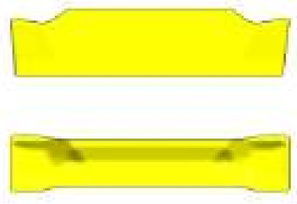
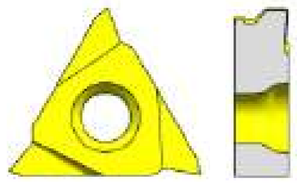
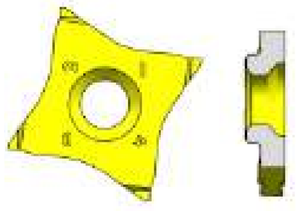
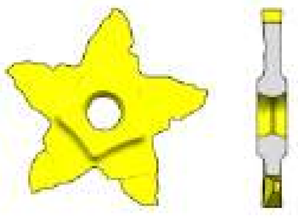
代号 Code	宽度 Width
2	2mm
3	3mm
4	4mm
5	5mm
6	6mm



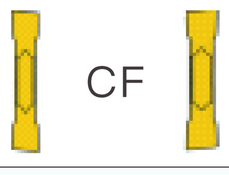
槽刀 Grooving

槽刀片命名规则 Grooving insert naming convention

⑦ 切削刃数 Number of cutting edges

D1	D2	D3	D4	D5
				

⑧ 槽型概述 Chipbreaker overview

应用 Application	切断 Cut-Off	切槽 Grooving	车削 Turning	仿形 Profiling	平板/前角 Flat Top /Rake Angle
切削工况 Cutting conditions					
精加工 Finishing	CF	GF	TF	RO	RN –A5 –A7 –A9
半精加工 Semi–finishing	CM	GM /G	TM/G	RM	
粗加工 Roughing		GR /G	G		TN
简单非标 Simple Non–standard	 CF				
	CM	TN （0°前角） Rake angle		TN （0°前角） Rake angle	
		RN –A5 （正前角） –A7 Positive rake angle –A9		RN –A5 （正前角） –A7 Positive rake angle –A9	

槽刀杆命名规则 Grooving insert naming convention

S	32	32	P	ET	2	L	20	A	***~***
①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩

① 刀杆类型 Toolholder type

应用 Application	刀杆形式 Tool Holder Type	
外冷 External cooling	S:钢制实心刀杆 Solid steel tool holder	C:硬质合金减震刀杆 Solid carbide anti-vibration
内冷 Internal cooling	A:带冷却液通道钢制刀杆 Steel tool holder with coolant channel channel	E:带冷却液通道硬质合金刀杆 Solid carbide tool holder with coolant

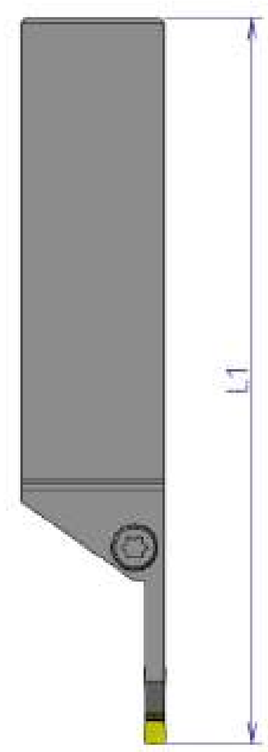
② 刀杆柄部高度/直径 Shank height / diameter

③ 刀杆柄部宽度 Shank Width

应用 Application	柄部高度 Shank height	柄部宽度 Shank width	柄部直径 Shank diameter
接口尺寸 Interface size	16	16	16
	20	20	20
	25	25	25
	32	32	32
	40	40	40

槽刀杆命名规则 Grooving insert naming convention

④ 刀杆长度(最长mm) Tool holder length(max mm)

应用 Application	L1	ISO	L1	ISO
	32	A	150	M
	40	B	160	N
	50	C	170	P
	60	D	180	Q
	70	E	200	R
	80	F	250	S
	90	G	300	T
	100	H	350	U
	110	J	400	V
	120	K	450	W
	130	L	500	Y
			Special lenght	X

⑤ 刀片定位座匹配 Insert seat compatibility

应用 Application	ET	EP	CV	CU	PV	TN	NX
							非标定制 Custom/Non standard

⑥ 刀片槽宽 Insert groove width

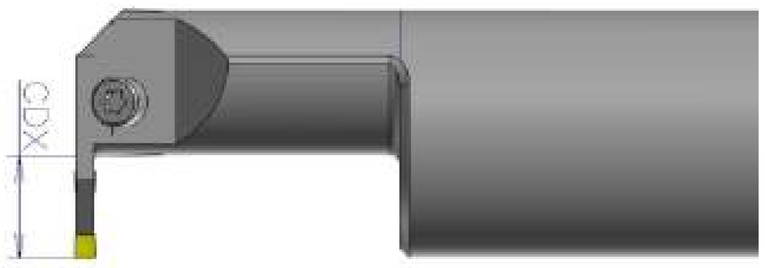
应用 Application	2mm	3mm	4mm	5mm	6mm	7mm	8mm

槽刀杆命名规则 Grooving insert naming convention

⑦ 切削方向 Cutting direction

应用 Application			
方向 Direction	R： 右手刀 Right Hand	N：中置刀 Neutral	L：左手刀 Left Hand

⑧ 最大切深CDX Maximum cutting depth



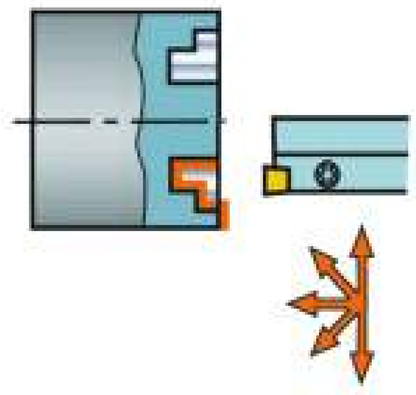
⑨ 刀杆主偏角 Tool holder entering angle

应用 Application	0°	45°	90°	定制 Customize
	A	B	C	V

⑩ 端面切槽最小直径/最大直径 Face grooving minimum /maximum diameter

DAXIN(轴向最小内径):65(例)
DAXIN (Minimum Axial Inner Diameter): 65 (example)

DAXX(轴向最大外径):130(例)
DAXX (Maximum Axial Outer Diameter): 130 (example)

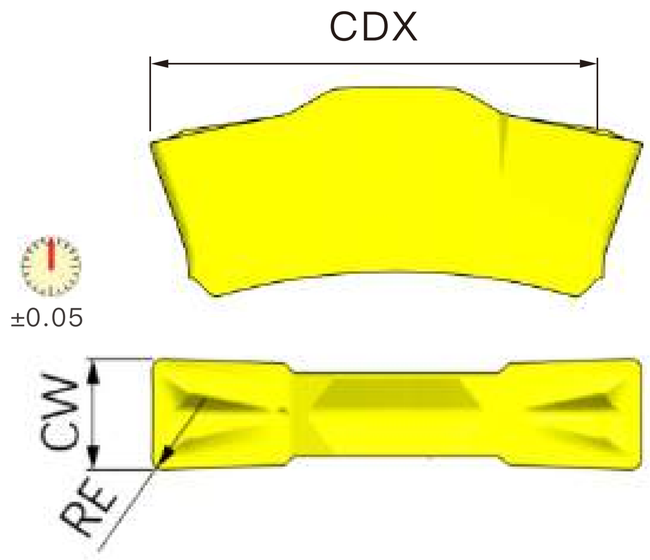


槽刀 Grooving

切槽/车槽 Grooving

G槽型—经济型双头刀片，用于在低速-中速进给下的外圆及内孔的切槽及仿形加工。

G Chipbreaker — Economical double-edged insert for external and internal grooving and profiling at low to medium feed rates.

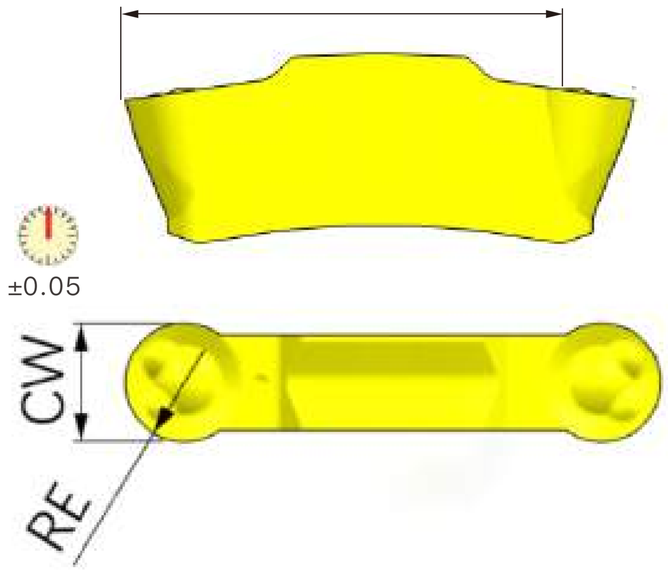


	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W3T12R0.2ETN3D2-G	3	0.2	12	ET3	●	○	○	○
	W3T12R0.4ETN3D2-G	3	0.4	12	ET3	●	○	○	○
	W3T10R1ETN3D2-G	3	1.0	10	ET3	○	○	○	○
	W4T15R0.4ETN4D2-G	4	0.4	15	ET4	●	○	●	○
	W5T15R0.8ETN5D2-G	5	0.8	15	ET4	●	○	●	○
	W6T18R0.8ETN6D2	6	0.8	18	ET6	○	○	○	○
	W7T18R0.4ETN7D2	7	0.4	18	ET6	○	○	○	○

● 有库存（In stock）　○ 需确认库存（Confirmation required）

车削/仿形 Turning/profiling



	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

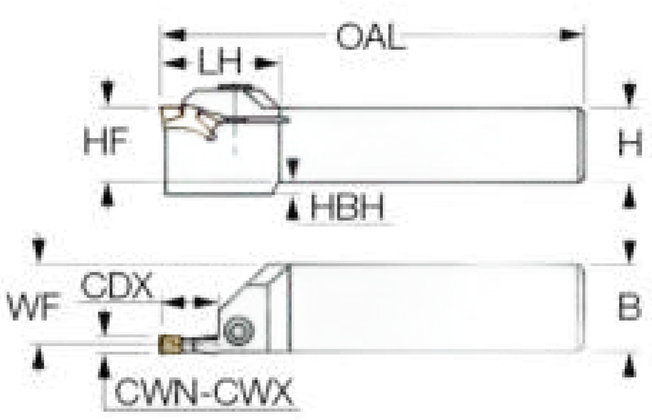
槽刀

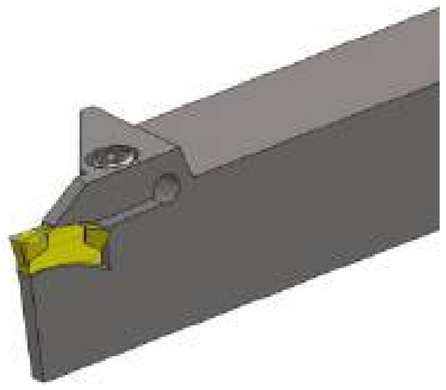
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W3T10R1.5ETN3D2-G	3	1.5	10	ET3	●	○	○	○
	W4T15R2ETN4D2-G	4	2.0	15	ET4	●	○	●	○
	W5T15R2.5ETN4D2-G	5	2.5	15	ET4	●	○	●	○
	W6T18R3ETN6D2	6	3.0	18	ET6	○	○	○	○

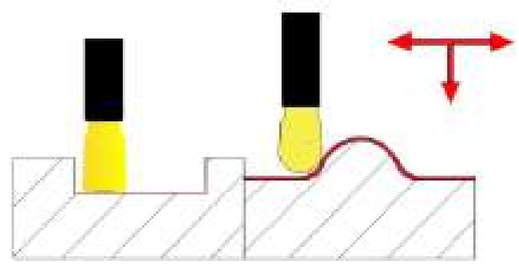
● 有库存（In stock） ○ 需确认库存（Confirmation required）

槽刀 Grooving

外圆槽刀杆 External grooving tool holder

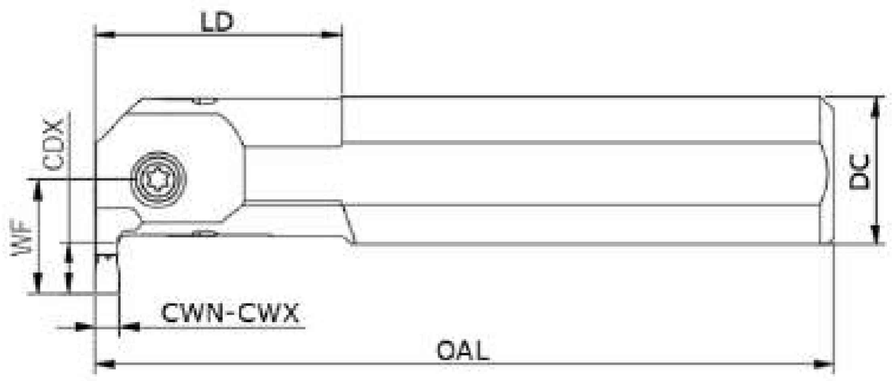


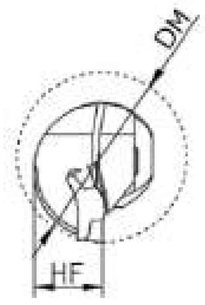


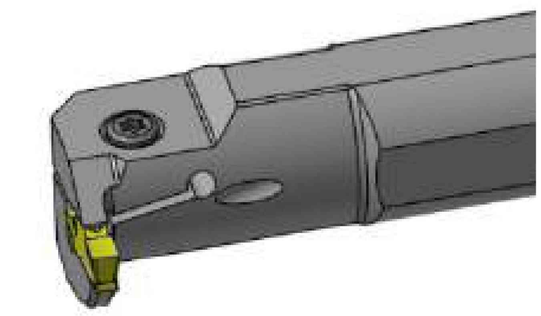


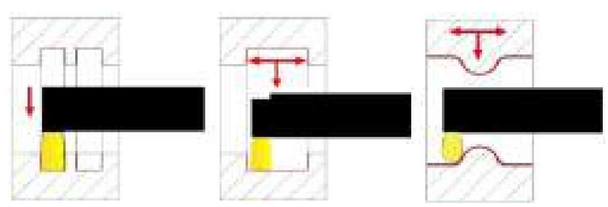
刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
ET3	S2020M–ET3L7.5A	3	7.5	20	20	150	20	20	30.5	L
	S2020M–ET3R7.5A	3	7.5	20	20	150	20	20	30.5	R
	S2525M–ET3L9A	3	9.0	25	25	150	25	25	30.5	L
	S2525M–ET3R9A	3	9.0	25	25	150	25	25	30.5	R
	S2525M–ET3L12A	3	12	25	25	150	25	25	30.5	L
	S2525M–ET3R12A	3	12	25	25	150	25	25	30.5	R
ET4	S2020M–ET4L9A	4	9.0	20	20	150	20	20	30.5	L
	S2020M–ET4R9A	4	9.0	20	20	150	20	20	30.5	R
	S2525M–ET4L12A	4	12	25	25	150	25	25	32	L
	S2525M–ET4R12A	4	12	25	25	150	25	25	32	R
	S2525M–ET4L15A	4	15	25	25	150	25	25	40	L
	S2525M–ET4R15A	4	15	25	25	150	25	25	40	R
	S2525M–ET4L18A	5	18	25	25	150	25	25	37	L
	S2525M–ET4R18A	5	18	25	25	150	25	25	37	R
	S3232M–ET4L20A	5	20	32	32	150	32	32	45	L
	S3232M–ET4R20A	5	20	32	32	150	32	32	45	R

内圆槽刀杆 Internal grooving tool holder









刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	DC	DM	OAL	HF	WF	LD	方向 Direction
ET3	S16M–ET3L5.5C	3	5.5	16	20.5	150	7.5	12	25	L
	S16M–ET3R5.5C	3	5.5	16	20.5	150	7.5	12	25	R
	S20Q–ET3L5.5C	3	5.5	20	25	180	9.5	14.2	32	L
	S20Q–ET3R5.5C	3	5.5	20	25	180	9.5	14.2	32	R
	S25R–ET3L8C	3	8.0	25	32	200	11.5	18.8	40	L
	S25R–ET3R8C	3	8.0	25	32	200	11.5	18.8	40	R
ET4	S25R–ET4L8.5C	4	8.5	25	32	200	11.5	19.5	40	L
	S25R–ET4R8.5C	4	8.5	25	32	200	11.5	19.5	40	R
	S32R–ET4L11C	4	11	32	42	200	14.5	25.5	50	L
	S32R–ET4R11C	4	11	32	42	200	14.5	25.5	50	R
	S32S–ET4L15C	5	15	32	55	250	14.5	29	50	L
	S32S–ET4R15C	5	15	32	55	250	14.5	29	50	R
	S40T–ET4L17C	5	15	40	55	300	18	35	60	L
	S40T–ET4R17C	5	15	40	55	300	18	35	60	R

槽刀 Grooving

推荐切削速度(m/min) Recommended cutting speed

材料分组 Material Group		MP3017	MP3082	MK2017	MK2082
P	1	110~230	130~270	130~270	
	2	90~210	110~230	110~230	
	3	70~170	90~190	90~190	
M	1	110~190	120~210	120~210	
	2	75~130	85~150	85~150	
	3	60~120	75~130	75~130	
K	1	140~200	170~245		
	2	100~160	120~195		
	3	100~140	120~170		
S	1	8~40	15~55	15~55	15~55
	2	8~30	15~60	15~60	15~60
	3	15~40	15~70	15~70	15~70
	4	8~50	15~70	15~70	15~70

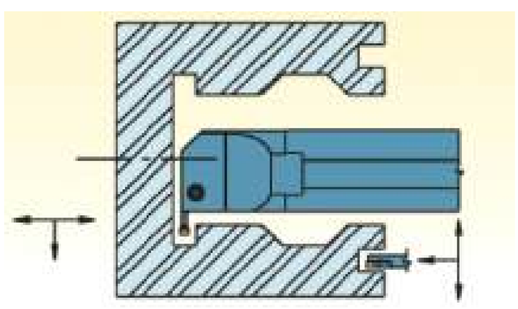
推荐进给(mm/r) Recommended feed rate

刀座号 Seat Code	刀尖圆角(mm) Corner Radius	进给中值 Medium Feed Rate	进给范围 Feed Range
3	0.2	0.08	0.05~0.125
	0.4	0.11	0.05~0.15
	1.0	0.13	0.05~0.17
4	0.4	0.12	0.075~0.18
5	0.8	0.16	0.08~0.275
6	0.8	0.18	0.125~0.3
7	0.4	0.17	0.1~0.3

上述参数适用于P、K类材质，加工M、S类材质乘以系数

The above parameters apply to material groups P and K. When machining material groups M and S, multiply by a factor.

材料分组 Material Group	进给率系数 Feed Rate Factor
M	0.8
S	0.5



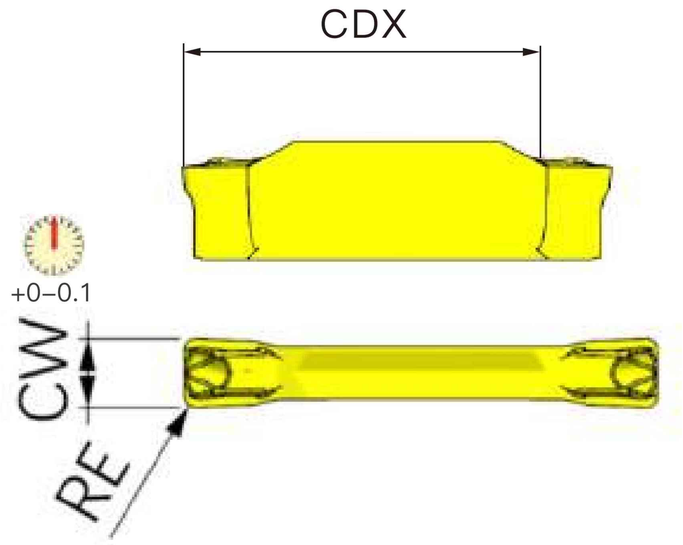
内孔切槽中，进给率降低20%

For internal grooving, reduce the feed rate by 20%.

车削/切槽 Turning/grooving

GF槽型—精磨型、低进给、高精度切槽专用槽型，主打低切削力、优秀表面质量与稳定排屑。

GF groove type–precision ground, low feed, high accuracy groove specific geometry.
Designed to deliver low cutting force, excellent surface finish, and consistent chip evacuation.



	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

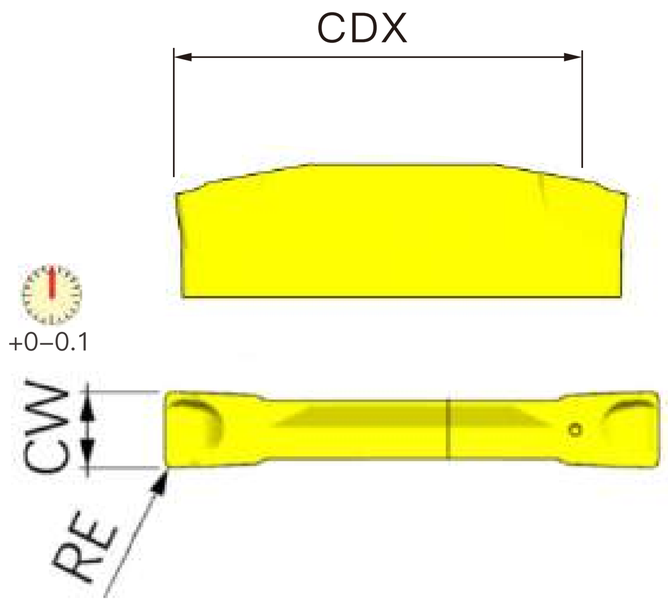
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W2T19.2R0.2CVN2D2–GF	2	0.2	19.2	CV2	○	○	●	○
	W2T19.2R0.4CVN2D2–GF	2	0.4	19.2	CV2	○	○	●	○
	W3T19.2R0.2CVN3D2–GF	3	0.2	19.2	CV3	○	○	●	○
	W3T19.2R0.4CVN3D2–GF	3	0.4	19.2	CV3	○	○	●	○
	W4T24.4R0.4CVN4D2–GF	4	0.4	24.4	CV4	○	○	●	○
	W5T24.4R0.4CVN4D2–GF	5	0.4	24.4	CV5	○	○	●	○

● 有库存（In stock）　○ 需确认库存（Confirmation required）

槽刀 Grooving

车削/切槽 Turning/grooving

GM槽型—通用型，中等偏重载切槽，切断，适用连续切削为主，中等进给，排屑稳定。
GM groove type — universal geometry, medium to heavy duty grooving and cut off.
Designed mainly for continuous cutting, medium feed, and stable chip evacuation.



	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W2T19.2R0.2CVN2D2-GM	2	0.2	19.2	CV2	○	○	●	○
	W3T18.2R0.3CVN3D2-GM	3	0.3	18.2	CV3	○	○	●	○
	W3T18.2R0.4CVN3D2-GM	3	0.4	18.2	CV3	○	○	●	○
	W4T24.4R0.3CVN4D2-GM	4	0.3	24.4	CV4	○	○	●	○

● 有库存（In stock）　○ 需确认库存（Confirmation required）

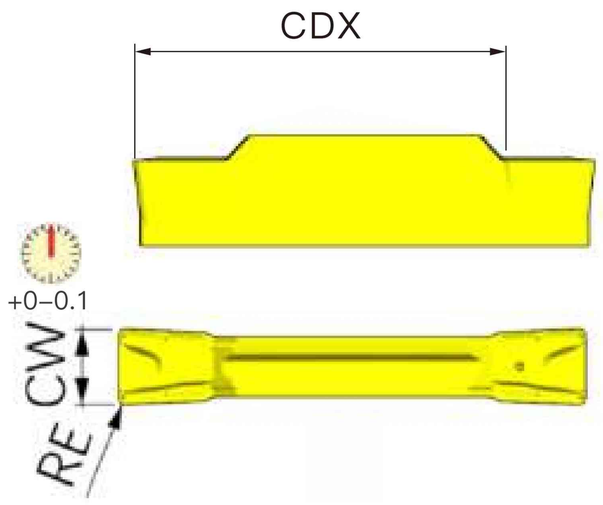
车削/切槽 Turning/grooving

TM槽型—半精/轻粗通用槽型，宽参数窗口，中等进给，抗振性好，

TF槽型—最通用切槽/插车槽型，低进给，稳定断屑，带修光刃。

TM groove type — semi-finishing / light roughing universal groove type. Wide parameter window , Medium feed, good vibration resistance.

TF groove type — most universal grooving / plunge turning groove type. Low feed, Stable chip control, with wiper edge.



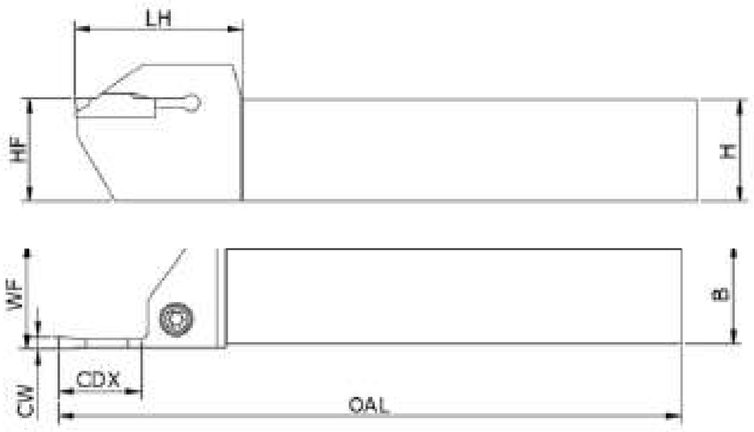
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

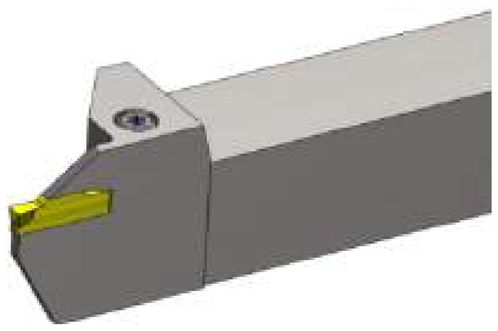
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W4T24.4R0.4CVN4D2-TM	4	0.4	24.4	CV4	○	○	●	○
	W4T24.4R0.4CVN4D2-TF	4	0.4	24.4	CV4	○	○	●	○

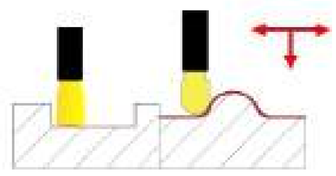
● 有库存（In stock）　○ 需确认库存（Confirmation required）

槽刀 Grooving

外圆槽刀杆 External grooving tool holder

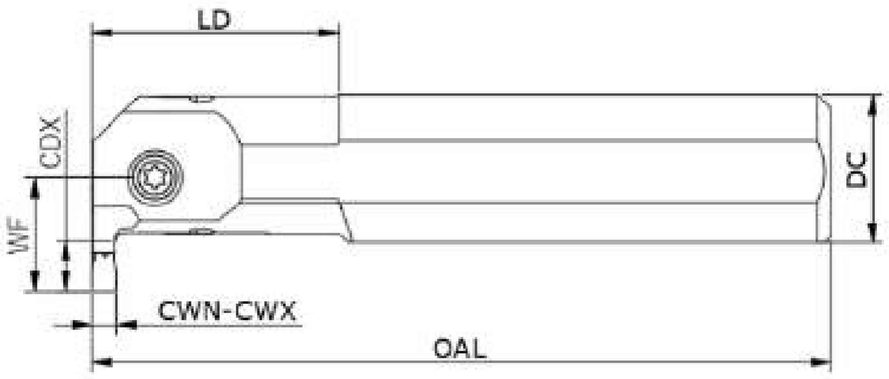


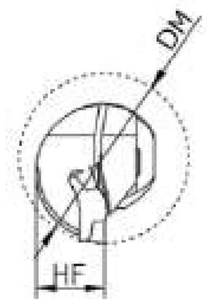


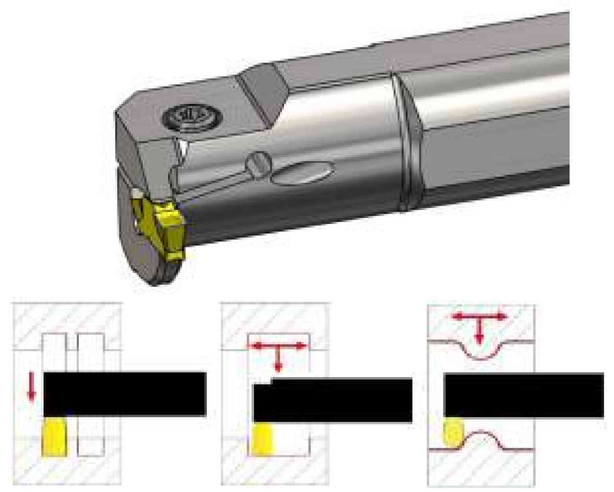


刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
CV2	S2020M–CV2L8A	2	8	20	20	150	20	20	25	L
	S2020M–CV2R8A	2	8	20	20	150	20	20	25	R
	S2525M–CV2L8A	2	8	25	25	150	25	25	25	L
	S2525M–CV2R8A	2	8	25	25	150	25	25	25	R
	S2525M–CV2L13A	2	13	25	25	150	25	25	33	L
	S2525M–CV2R13A	2	13	25	25	150	25	25	33	R
CV3	S2020M–CV3L10A	3	10	20	20	150	20	20	33	L
	S2020M–CV3R10A	3	10	20	20	150	20	20	33	R
	S2525M–CV3L10A	3	10	25	25	150	25	25	33	L
	S2525M–CV3R10A	3	10	25	25	150	25	25	33	R
	S2525M–CV3L15A	3	15	25	25	150	25	25	33	L
	S2525M–CV3R15A	3	15	25	25	150	25	25	33	R
	S2525M–CV3L18A	3	18	25	25	150	25	25	33	L
	S2525M–CV3R18A	3	18	25	25	150	25	25	33	R
CV4	S2525M–CV4L13A	4	13	25	25	150	25	25	40	L
	S2525M–CV4R13A	4	13	25	25	150	25	25	40	R
	S2525M–CV4L20A	4	20	25	25	150	25	25	40	L
	S2525M–CV4R20A	4	20	25	25	150	25	25	40	R
	S3232Q–CV4L13A	4	13	32	32	180	32	32	55	L
	S3232Q–CV4R13A	4	13	32	32	180	32	32	55	R
	S3232Q–CV4L20A	4	20	32	32	180	32	32	55	L
	S3232Q–CV4R20A	4	20	32	32	180	32	32	55	R
CV5	S3232R–CV5L15A	5	15	32	32	200	32	32	55	L
	S3232R–CV5R15A	5	15	32	32	200	32	32	55	R
	S3232R–CV5L22A	5	22	32	32	200	32	32	65	L
	S3232R–CV5R22A	5	22	32	32	200	32	32	65	R

内圆槽刀杆 Internal grooving tool holder



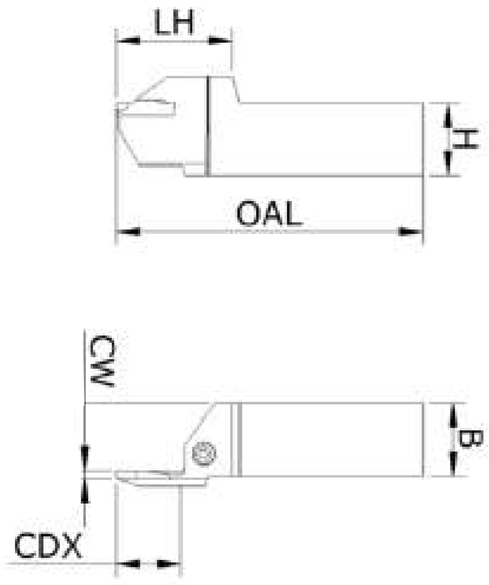


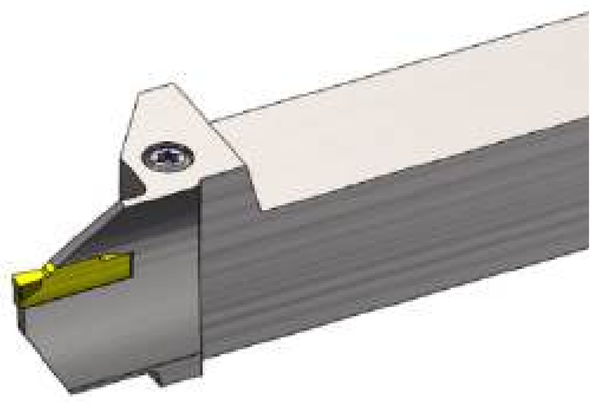


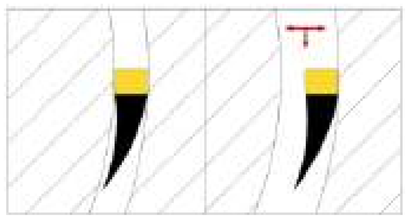
刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	DC	DM	OAL	HF	WF	LD	方向 Direction
CV2	S16M–CV2L5.5C	2	5.5	16	16	150	7.5	12	25	L
	S16M–CV2R5.5C	2	5.5	16	16	150	7.5	12	25	R
	S20Q–CV2L7C	2	7.0	20	20	180	9.0	15	32	L
	S20Q–CV2R7C	2	7.0	20	20	180	9.0	15	32	R
CV3	S16M–CV3L5.5C	3	5.5	16	16	150	7.5	12	25	L
	S16M–CV3R5.5C	3	5.5	16	16	150	7.5	12	25	R
	S20Q–CV3L7C	3	7.0	20	20	180	9.0	15	32	L
	S20Q–CV3R7C	3	7.0	20	20	180	9.0	15	32	R
	S25Q–CV3L9C	3	9.0	25	25	180	12.0	18	32	L
	S25Q–CV3R9C	3	9.0	25	25	180	12.0	18	32	R
CV4	S20Q–CV4L7C	4	7.0	20	20	180	12.0	15	40	L
	S20Q–CV4R7C	4	7.0	20	20	180	12.0	25	40	R
	S25R–CV4L9C	4	9.0	25	25	200	14.5	18	40	L
	S25R–CV4R9C	4	9.0	25	25	200	14.5	18	40	R
	S32R–CV4L12C	4	12	32	32	200	18.0	22	40	L
	S32R–CV4R12C	4	12	32	32	200	18.0	22	40	R

槽刀 Grooving

端面槽刀杆 Face grooving tool holder





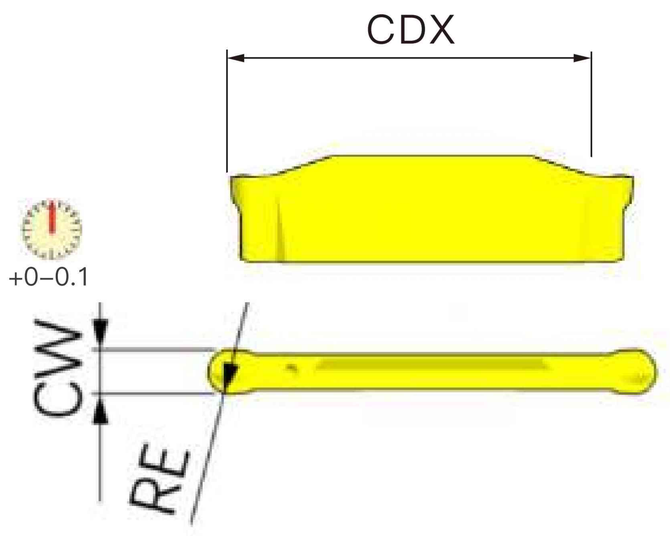


刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	DAXN	DAXX	OAL	H	B	LH	方向 Direction
CV2	S2020M–CV2L12A034044	2	12	34	44	150	20	20	25	L
	S2020M–CV2R12A034044	2	12	34	44	150	20	20	25	R
	S2525M–CV2L14A042060	2	14	42	60	150	25	25	25	L
	S2525M–CV2R14A042060	2	14	42	60	150	25	25	25	R
CV3	S2020M–CV3L14A038062	3	14	38	62	150	20	20	25	L
	S2020M–CV3R14A038062	3	14	38	62	150	20	20	25	R
	S2525M–CV3L16A052076	3	16	52	76	150	25	25	25	L
	S2525M–CV3R16A052076	3	16	52	76	150	25	25	25	R
	S2525M–CV3L18A076120	3	18	76	120	150	25	25	25	L
	S2525M–CV3R18A076120	3	18	76	120	150	25	25	25	R
CV4	S2525M–CV4L16A040072	4	16	40	72	150	25	25	25	L
	S2525M–CV4R16A040072	4	16	40	72	150	25	25	25	R
	S2525M–CV4L18A076120	4	18	76	120	150	25	25	25	L
	S2525M–CV4R18A076120	4	18	76	120	150	25	25	25	R
	S2525M–CV4L20A132230	4	20	132	230	150	25	25	25	L
	S2525M–CV4R20A132230	4	20	132	230	150	25	25	25	R

车削/切槽 Turning/grooving

GF槽型—精磨型、低进给、高精度切槽专用槽型，主打低切削力、优秀表面质量与稳定排屑。

GF groove type–precision ground, low feed, high accuracy groove specific geometry.
Designed to deliver low cutting force, excellent surface finish, and consistent chip evacuation.



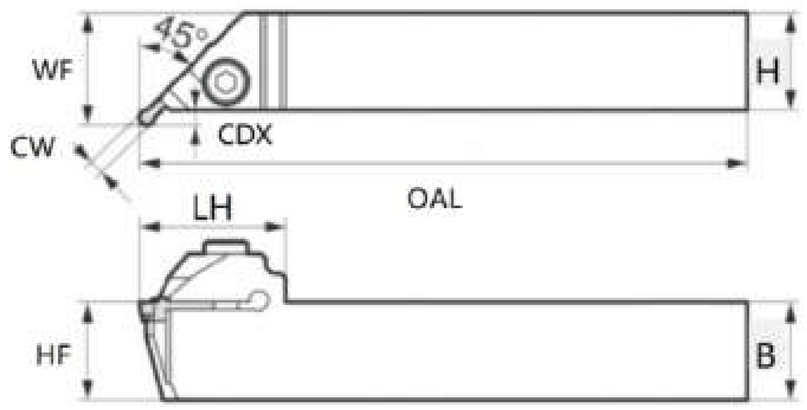
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

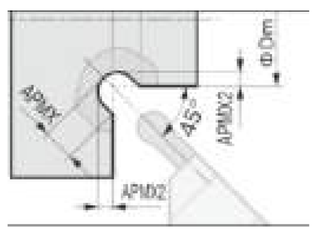
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W2T19.2R1CVN2D2–GF	2	1.0	19.2	CV2	○	○	●	○
	W3T18.7R1.5CVN3D2–GF	3	1.5	18.7	CV3	○	○	●	○
	W4T23.3R2CVN4D2–GF	4	2.0	23.3	CV4	○	○	●	○

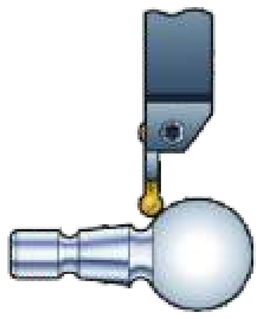
● 有库存（In stock）　○ 需确认库存（Confirmation required）

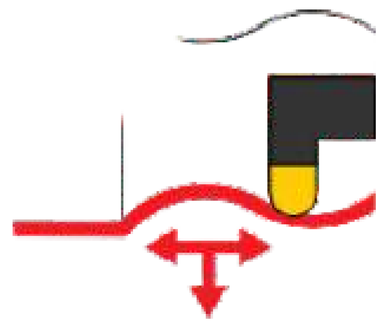
槽刀 Grooving

仿形/退槽刀杆 Profiling/ retracting grooving toolholder









刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
CV2	S2020M–CV2L8B	2	8	20	20	150	20	26	20	L
	S2020M–CV2R8B	2	8	20	20	150	20	26	20	R
CV3	S2525M–CV3L8B	3	8	25	25	150	25	31	25	L
	S2525M–CV3R8B	3	8	25	25	150	25	31	25	R
CV4	S2525M–CV4L12B	4	12	25	25	150	25	36	25	L
	S2525M–CV4R12B	4	12	25	25	150	25	36	25	R

推荐切削速度(m/min) Recommended cutting speed

材料分组 Material Group		MP3017	MP3082	MK2017	MK2082
P	1	110~230	90~180	130~270	115~255
	2	90~210	75~180	110~230	95~215
	3	70~170	60~135	90~190	80~170
M	1	110~190	90~150	120~210	120~160
	2	75~130	60~110	85~150	80~130
	3	60~120	45~95	75~130	70~110
K	1	140~200	100~145	170~245	120~180
	2	100~160	70~120	120~195	90~150
	3	100~140	60~110	120~170	50~85
S	1	8~40		15~55	
	2	8~30		15~60	
	3	15~40		15~70	
	4	8~50		15~70	

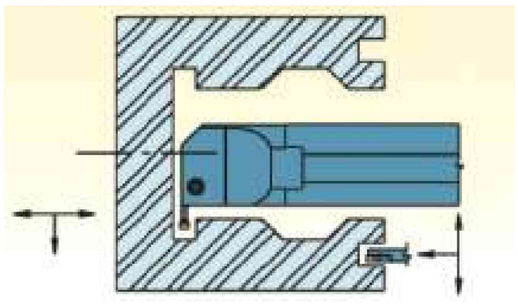
不同槽型推荐进给（mm/r） Recommended Feed Rate

槽型 Groove Type	刀宽 Insert Width	进给中值 Medium Feed Rate	进给范围 Feed Range
CF	3	0.07	0.05~0.125
	4	0.08	0.05~0.15
CM	2	0.07	0.05~0.17
GF	2	0.06	0.075~0.18
	3	0.075	0.08~0.275
	4	0.08	0.125~0.3
GM	2	0.07	0.1~0.3
	3	0.08	
	4	0.13	
TF	4	0.13	
TM	4	0.14	

上述参数适用于P、K类材质，加工M、S类材质乘以系数

The above parameters apply to material groups P and K. When machining material groups M and S, multiply by a factor.

材料分组 Material Group	进给率系数 Feed Rate Factor
M	0.8
S	0.5



内孔切槽中，进给率降低20%

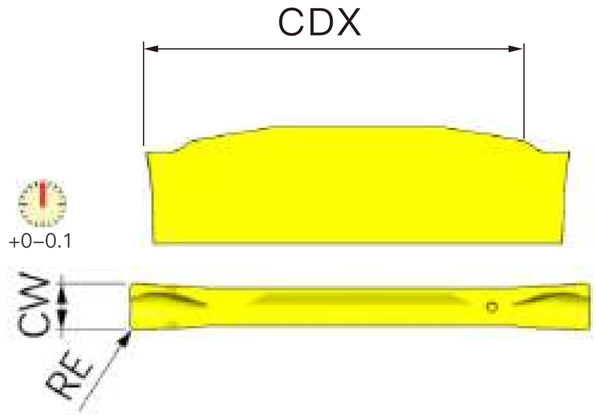
For internal grooving, reduce the feed rate by 20%.

槽刀 Grooving

切断/切槽 Cut Off/Grooving

CM槽型—良好工况下切断及轻型断续切削的首选，适合高效率和通用性强的切削应用场景。

CM Chipbreaker — Preferred for cut-off and light interrupted cutting under good conditions, suitable for high-efficiency and versatile machining applications.



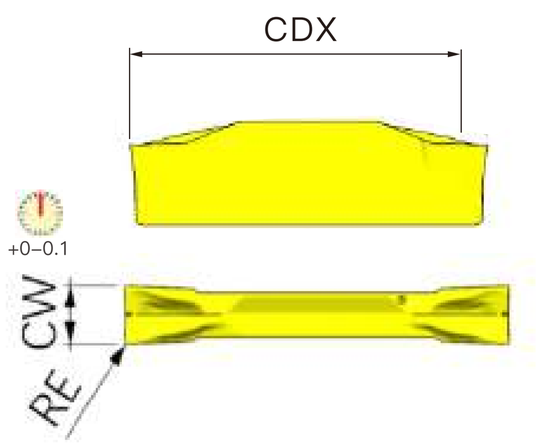
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W2T19.2R0.2CVN2D2-CM	2	0.2	19.2	CV2	○	○	●	○
	W2T19.2R0.4CVN2D2-CM	2	0.4	19.2	CV2	○	○	●	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

CF槽型—切断精加工，它的断屑槽型设计能够有效的控制切屑的形状和尺寸，能有效避免切屑缠绕。

CF Chipbreaker — Cut-off finishing. The chipbreaker design effectively controls chip shape and size, preventing chip entanglement.

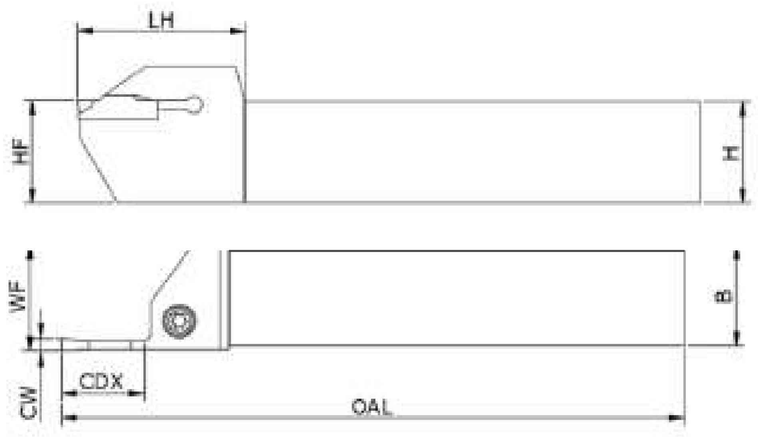


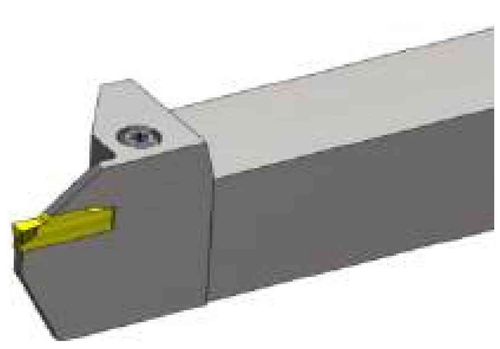
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

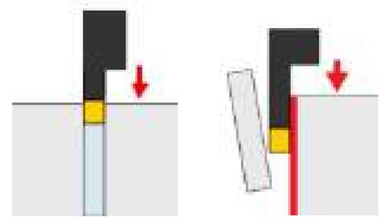
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W3T19.2R0.1CVN3D2-CF	3	0.1	19.2	CV3	○	○	●	○
	W4T24.4R0.1CVN4D2-CF	4	0.1	24.4	CV4	○	○	●	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

切断/切槽刀杆 Cut-off/grooving toolholder







刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
CV2	S2525M–CV2L13A	2	13	25	25	150	25	25	33	L
	S2525M–CV2R13A	2	13	25	25	150	25	25	33	R
CV3	S2525M–CV3L15A	3	15	25	25	150	25	25	33	L
	S2525M–CV3R15A	3	15	25	25	150	25	25	33	R
	S2525M–CV3L18A	3	18	25	25	150	25	25	33	L
	S2525M–CV3R18A	3	18	25	25	150	25	25	33	R
CV4	S2525M–CV4L13A	4	13	25	25	150	25	25	40	L
	S2525M–CV4R13A	4	13	25	25	150	25	25	40	R
	S2525M–CV4L20A	4	20	25	25	150	25	25	40	L
	S2525M–CV4R20A	4	20	25	25	150	25	25	40	R
	S3232Q–CV4L20A	4	20	32	32	180	32	32	55	L
	S3232Q–CV4R20A	4	20	32	32	180	32	32	55	R

槽刀 Grooving

推荐切削速度(m/min) Recommended cutting speed

材料分组 Material Group		MP3017	MP3082	MK2017	MK2082
P	1	110~230	90~180	130~270	115~255
	2	90~210	75~180	110~230	95~215
	3	70~170	60~135	90~190	80~170
M	1	110~190	90~150	120~210	120~160
	2	75~130	60~110	85~150	80~130
	3	60~120	45~95	75~130	70~110
K	1	140~200	100~145	170~245	120~180
	2	100~160	70~120	120~195	90~150
	3	100~140	60~110	120~170	50~85
S	1	8~40		15~55	
	2	8~30		15~60	
	3	15~40		15~70	
	4	8~50		15~70	

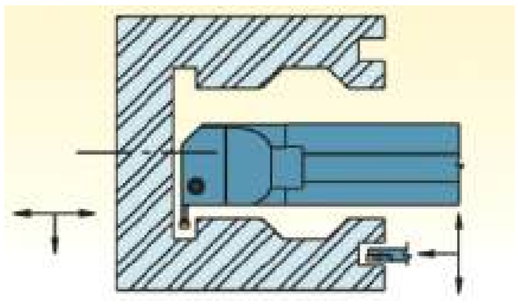
不同槽型推荐进给（mm/r） Recommended Feed Rate

槽型 Groove Type	刀宽 Insert Width	进给中值 Medium Feed Rate	进给范围 Feed Range
CF	3	0.07	0.04~0.15
	4	0.08	0.05~0.17
CM	2	0.07	0.05~0.14
GF	2	0.06	0.025~0.08
	3	0.075	0.03~0.12
	4	0.08	0.04~0.13
GM	2	0.07	0.025~0.09
	3	0.08	0.05~0.15
	4	0.13	0.05~0.16
TF	4	0.13	0.075~0.25
TM	4	0.14	0.075~0.15

上述参数适用于P、K类材质，加工M、S类材质乘以系数

The above parameters apply to material groups P and K. When machining material groups M and S, multiply by a factor.

材料分组 Material Group	进给率系数 Feed Rate Factor
M	0.8
S	0.5



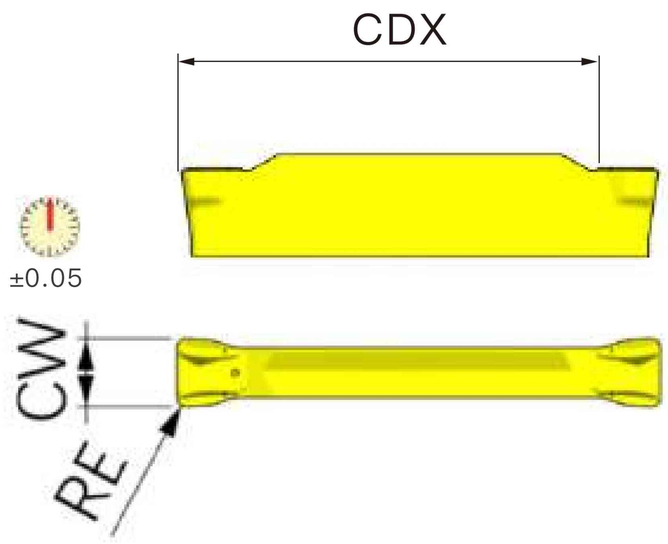
内孔切槽中，进给率降低20%

For internal grooving, reduce the feed rate by 20%.

车槽/切槽 Turning/grooving

TM槽型—半精/轻粗通用槽型，中等进给，抗振性好。

TM Chipbreaker — Universal chipbreaker for semi-finishing and light roughing, medium feed rate, good vibration resistance.



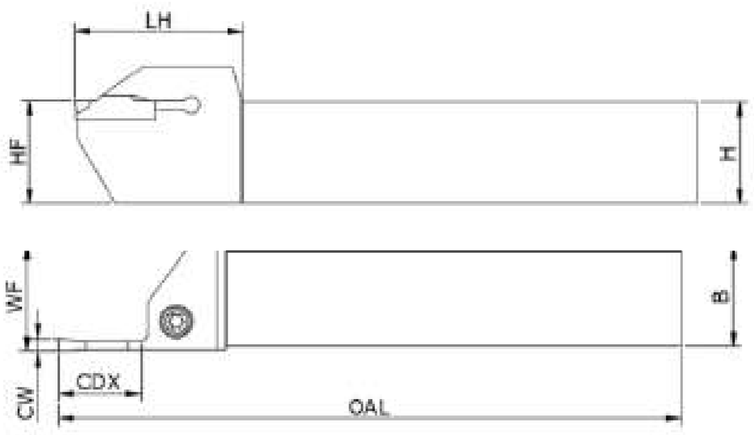
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

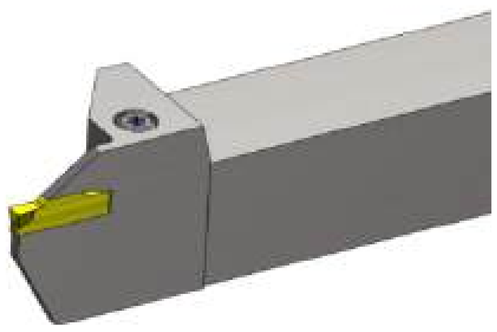
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W2T20R0.2PVN2D2-TM	2	0.2	20	PV2	○	○	○	○
	W2T20R0.4PVN2D2-TM	2	0.4	20	PV2	○	○	○	○
	W3T20R0.2PVN3D2-TM	3	0.2	20	PV3	○	○	○	○
	W3T20R0.4PVN3D2-TM	3	0.4	20	PV3	●	○	●	○
	W4T24R0.4PVN4D2-TM	4	0.4	24	PV4	●	○	○	○
	W4T24R0.8PVN4D2-TM	4	0.8	24	PV4	●	○	○	○
	W5T24R0.4PVN5D2-TM	5	0.4	24	PV5	○	○	○	○
	W5T24R0.8PVN5D2-TM	5	0.8	24	PV5	○	○	○	○
	W6T24R0.4PVN6D2-TM	6	0.4	24	PV6	○	○	●	○
	W6T24R0.8PVN6D2-TM	6	0.8	24	PV6	○	○	○	○

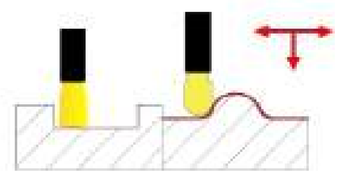
● 有库存（In stock）　○ 需确认库存（Confirmation required）

槽刀 Grooving

外圆槽刀杆 External grooving tool holder





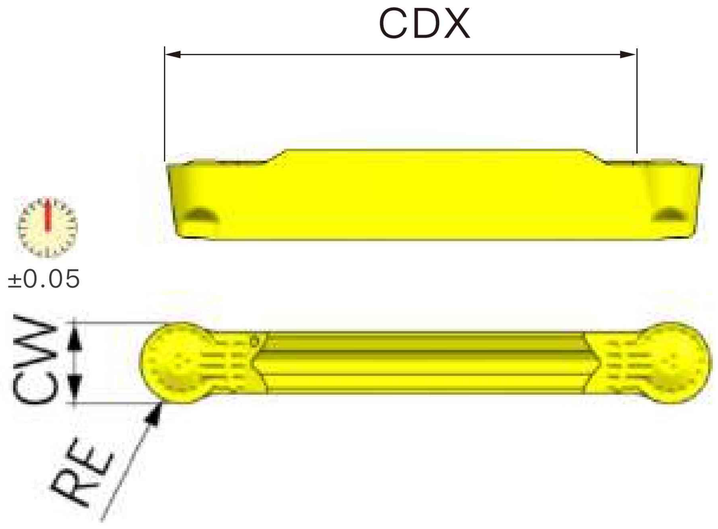


槽刀

刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
PV2	S2020M–PV2L8A	2	8	20	20	150	20	20	25	L
	S2020M–PV2R8A	2	8	20	20	150	20	20	25	R
	S2525M–PV2L8A	2	8	25	25	150	25	25	25	L
	S2525M–PV2R8A	2	8	25	25	150	25	25	25	R
	S2525M–PV2L13A	2	13	25	25	150	25	25	33	L
	S2525M–PV2R13A	2	13	25	25	150	25	25	33	R
PV3	S2020M–PV3L10A	3	10	20	20	150	20	20	33	L
	S2020M–PV3R10A	3	10	20	20	150	20	20	33	R
	S2525M–PV3L10A	3	10	25	25	150	25	25	33	L
	S2525M–PV3R10A	3	10	25	25	150	25	25	33	R
	S2525M–PV3L15A	3	15	25	25	150	25	25	33	L
	S2525M–PV3R15A	3	15	25	25	150	25	25	33	R
	S2525M–PV3L18A	3	18	25	25	150	25	25	33	L
	S2525M–PV3R18A	3	18	25	25	150	25	25	33	R
PV4	S2525M–PV4L13A	4	13	25	25	150	25	25	40	L
	S2525M–PV4R13A	4	13	25	25	150	25	25	40	R
	S2525M–PV4L20A	4	20	25	25	150	25	25	40	L
	S2525M–PV4R20A	4	20	25	25	150	25	25	40	R
	S3232Q–PV4L15A	4	15	32	32	180	32	32	55	L
	S3232Q–PV4R15A	4	15	32	32	180	32	32	55	R
	S3232Q–PV4L20A	4	20	32	32	180	32	32	55	L
	S3232Q–PV4R20A	4	20	32	32	180	32	32	55	R
PV5	S3232Q–PV5L20A	5	20	32	32	180	32	32	55	L
	S3232Q–PV5R20A	5	20	32	32	180	32	32	55	R
	S3232R–PV5L24A	5	24	32	32	200	32	32	65	L
	S3232R–PV5R24A	5	24	32	32	200	32	32	65	R
PV6	S3232Q–PV6L20A	6	20	32	32	180	32	32	55	L
	S3232Q–PV6R20A	6	20	32	32	180	32	32	55	R
	S3232R–PV6L24A	6	24	32	32	200	32	32	65	L
	S3232R–PV6R24A	6	24	32	32	200	32	32	65	R

车槽/切槽 Turning/grooving

TM槽型—半精/轻粗通用槽型，中等进给,抗振性好，外圆及内孔的切槽及仿形加工。
Semi-finishing / light roughing universal groove type. Medium feed, good vibration resistance.



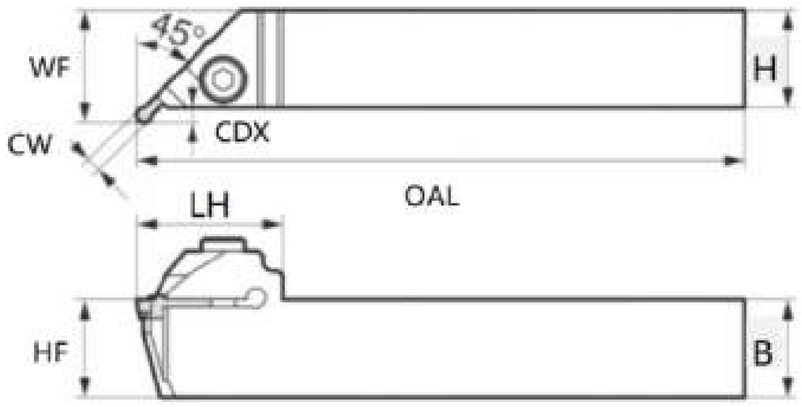
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

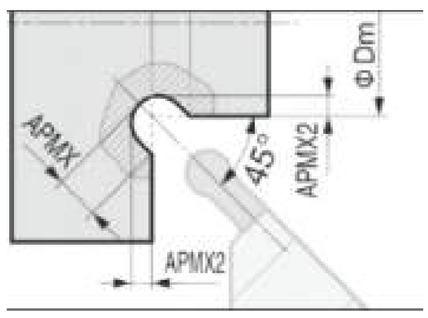
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W2T20R1PVN2D2-TM	2	1.0	20	PV2	○	○	○	○
	W3T20R1.5PVN3D2-TM	3	1.5	20	PV3	○	○	○	○
	W4T26R2PVN4D2-TM	4	2.0	26	PV4	○	○	●	○
	W5T26R2.5PVN5D2-TM	5	2.5	26	PV5	○	○	○	○
	W6T26R3PVN6D2-TM	6	3.0	26	PV6	○	○	○	○

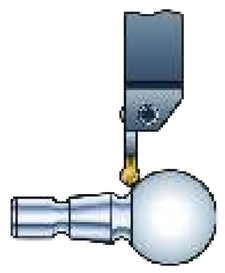
● 有库存（In stock） ○ 需确认库存（Confirmation required）

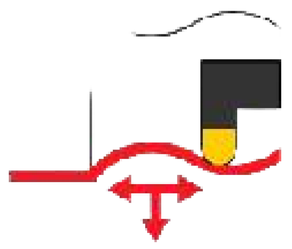
槽刀 Grooving

仿形/退槽刀刀杆 Profiling/Relief grooving









槽刀

刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
PV2	S2020M-PV2L12B	2	12	20	20	150	20	26	20	L
	S2020M-PV2R12B	2	12	20	20	150	20	26	20	R
PV3	S2525M-PV3L16B	3	16	25	25	150	25	31	25	L
	S2525M-PV3R16B	3	16	25	25	150	25	31	25	R
PV4	S2525M-PV4L20B	4	20	25	25	150	25	36	25	L
	S2525M-PV4R20B	4	20	25	25	150	25	36	25	R
PV5	S2525M-PV5L24B	5	24	25	25	150	25	36	25	L
	S2525M-PV5R24B	5	24	25	25	150	25	36	25	R
PV6	S2525M-PV6L24B	6	24	25	25	150	25	36	25	L
	S2525M-PV6R24B	6	24	25	25	150	25	36	25	R

推荐切削速度(m/min) Recommended cutting speed

材料分组 Material Group		MP3017	MP3082	MK2017	MK2082
P	1	110~230	90~180	130~270	115~255
	2	90~210	75~180	110~230	95~215
	3	70~170	60~135	90~190	80~170
M	1	110~190	90~150	120~210	120~160
	2	75~130	60~110	85~150	80~130
	3	60~120	45~95	75~130	70~110
K	1	140~200	100~145	170~245	120~180
	2	100~160	70~120	120~195	90~150
	3	100~140	60~110	120~170	50~85
S	1	8~40		15~55	
	2	8~30		15~60	
	3	15~40		15~70	
	4	8~50		15~70	

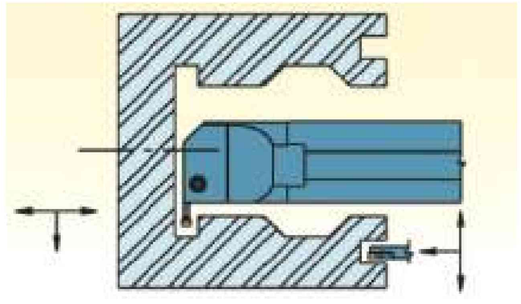
推荐进给(mm/r) Recommended feed rate

刀座号 Seat Code	刀尖圆角(mm) Corner Radius	进给中值 Medium Feed Rate	进给范围 Feed Range
3	0.2	0.08	0.05~0.125
	0.4	0.11	0.05~0.15
	1.0	0.13	0.05~0.17
4	0.4	0.12	0.075~0.18
5	0.8	0.16	0.08~0.275
6	0.8	0.18	0.125~0.3
7	0.4	0.17	0.1~0.3

上述参数适用于P、K类材质，加工M、S类材质乘以系数

The above parameters apply to material groups P and K. When machining material groups M and S, multiply by a factor.

材料分组 Material Group	进给率系数 Feed Rate Factor
M	0.8
S	0.5



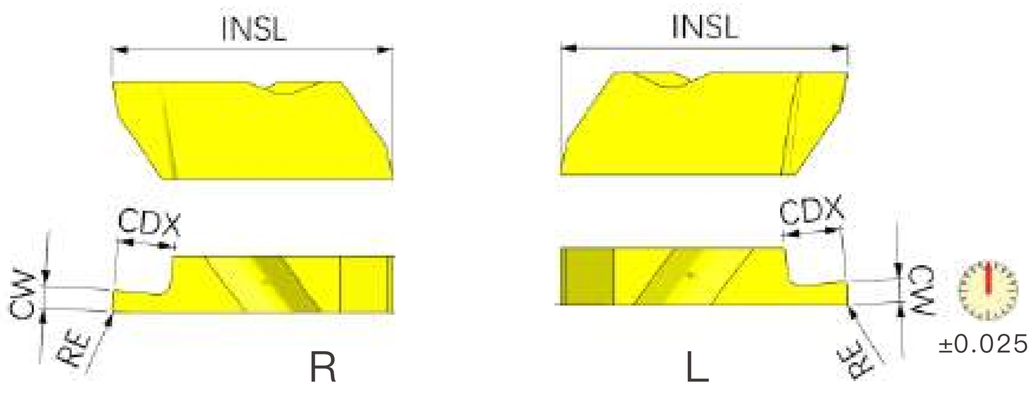
内孔切槽中，进给率降低20%

For internal grooving, reduce the feed rate by 20%.

概念定义的刀片 Concept defined insert

TN–可根据客户需求定制尺寸。

TN–Dimensions can be customized according to customer requirements.



	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

槽刀

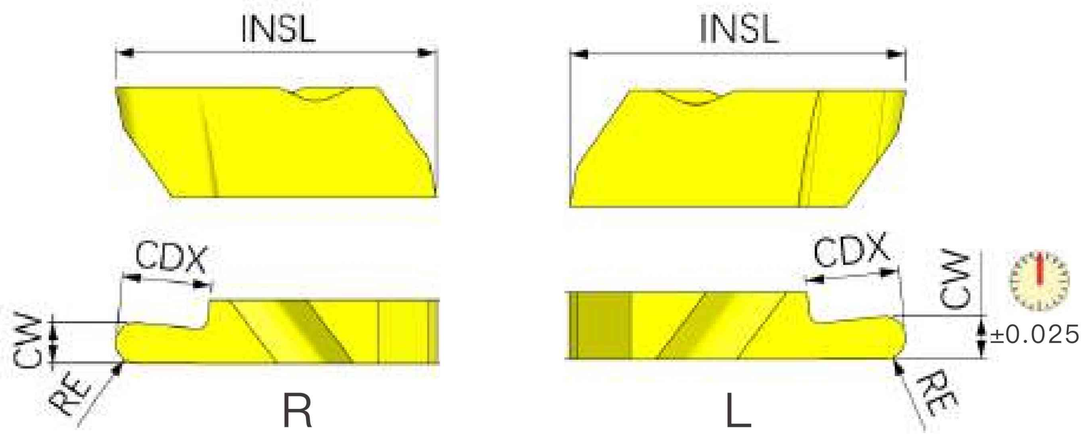
刀片外形 shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	R/L	MP3082	MP3017	MK2017	MK2082
	W1.34T4.8R0.1TNL2D1–A5	1.34	0.1	4.8	TN2	L	○	○	●	○
	W1.75T6.5R0.1TNL2D1–A5	1.75	0.1	6.5	TN2	L	○	○	●	○
	W1.75T6R0.2TNL2D1–A5	1.75	0.2	6.0	TN2	L	○	○	●	○
	W1.34T4.8R0.1TNR2D1–A5	1.34	0.1	4.8	TN2	R	○	○	●	○
	W1.75T6.5R0.1TNR2D1–A5	1.75	0.1	6.5	TN2	R	○	○	●	○
	W1.75T6R0.2TNR2D1–A5	1.75	0.2	6.0	TN2	R	○	○	●	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

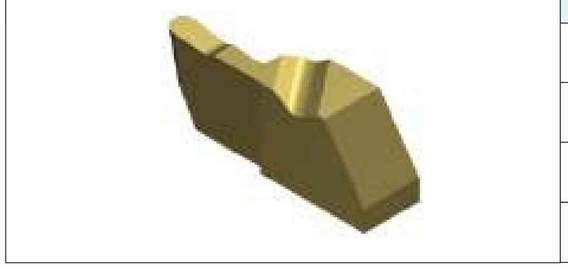
概念定义的刀片 Concept defined insert

TN–可根据客户需求定制尺寸。

TN–Dimensions can be customized according to customer requirements.

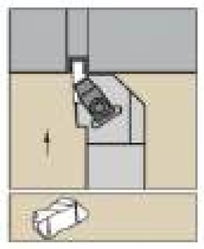


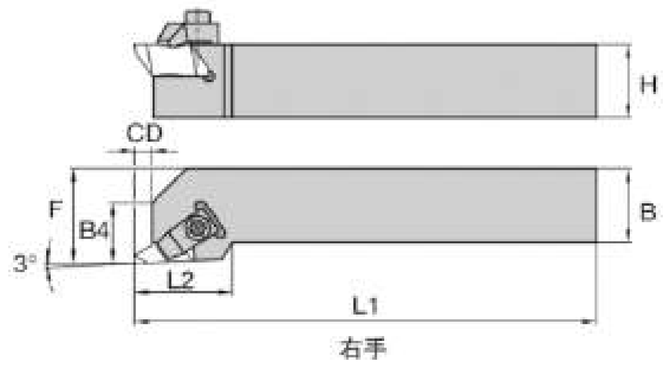
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions				牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	MP3017	MP3082	MK2017	MK2082
	W1.5T5R0.75TNL2D1–A5	1.5	0.75	5.0	TN2	○	○	●	○
	W2T7.5R1TNL2D1–A5	2.0	1.00	7.5	TN2	○	○	●	○
	W1.5T5R0.75TNR2D1–A5	1.5	0.75	5.0	TN2	○	○	●	○
	W2T7.5R1TNR2D1–A5	2.0	1.00	7.5	TN2	○	○	●	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

切槽刀杆 Grooving toolholder





Right hand

刀座号 Seat Code	型号 Product Code	R/L	B4	F	H	B	L1
TN2	S2020K–TN2R5A	R	9	25	20	20	120
	S2020K–TN2L5A	L	9	25	20	20	120
	S2525M–TN2R7.5A	R	9	32	25	25	150
	S2525M–TN2L7.5A	L	9	32	25	25	150

推荐切削速度(m/min) Recommended cutting speed

材料分组 Material Group	MP3017	MP3082	Mk2017	MK2082
P	70~170	60~135	90~190	
M	60~120	45~95	75~130	
S	8~30		15~60	15~60

进给参数推荐

受刀片刚性限制，进给范围很窄仅在0.02~0.05mm/r左微调

Feed parameter recommendations

Limited by insert rigidity, with a narrow feed range adjustable only between0.02and0.05mm/r.

零件材料分组 Workpiece material grouping

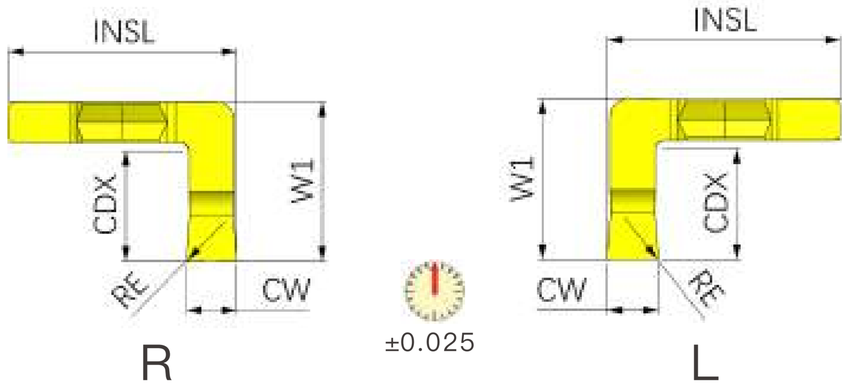
材料分组 Material Group	名称 Name	组成 Composition	抗拉强度 RM（MPa） Tensile Strength	硬度(HRC) Hardness	典型材料 Typical Materials
P1	低碳钢，长屑材料 Low-carbon steel, long-chipping materials	C＜25%	＜530	＜25	15#,20#
P2	中、高碳钢，合金钢 Medium/high-carbon steel, alloy steel	C＞25%	600~900	28~32	40Cr，45#，42CrMo
P3	铁素体、马氏体、PH不锈钢 Ferritic, martensitic, PH stainless steel		600~1350	35~38	15-5PH
M1	奥氏体不锈钢 Austenitic stainless steel		＜600	＜20	304,309
M2	高强度奥氏体和铸造不锈钢 High-strength austenitic and cast stainless steel		600~800	＜25	1.4837
M3	双相不锈钢 Duplex stainless steel		＜800	＜30	316,323
K1	灰铁 Gray cast iron		125~500	＜32	HT250
K2	球铁，蠕墨铸铁 Ductile iron, compacted graphite iron (CGI)		＜600	＜28	GT500
K3	高强度可延展铸铁 High-strength malleable cast iron		＞600	＜43	D7003
S1	铁基耐热合金 Iron-based heat-resistant alloys		500~1200	25~48	ASTM A-297, A-351, A-567, A-608
S2	钴基耐热合金 Cobalt-based heat-resistant alloys		1000~1450	25~48	Haynes 188, J-1570
S3	镍基耐热合金 Nickel-based heat-resistant alloys		600~1700	＜48	INCONEL 600 ， 700
S4	钛基耐热合金 Titanium-based heat-resistant alloys		900~1600	33~48	Ti 5Al-2.5Sn, Ti6Al-4V

槽刀 Grooving

概念定义的刀片 Concept defined insert

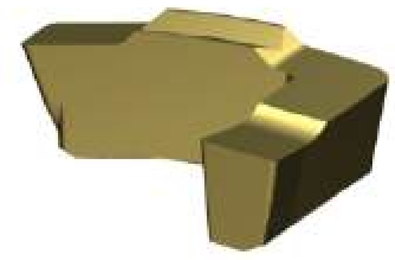
EP—可根据客户需求定制尺寸。

EP–Dimensions can be customized according to customer requirements.



	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

槽刀

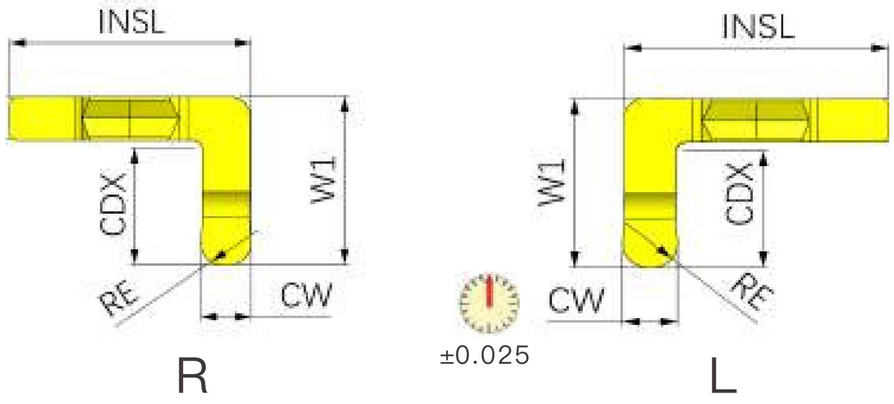
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	R/L	MP3017	MP3082	MK2017	MK2082
	W1.5T4L10R0.2EPR03–A5	1.5	0.2	4	EP3	R	○	○	●	○
	W2T5L10R0.2EPR03–A5	2.0	0.2	5	EP3	R	○	○	●	○
	W3T5L10R0.2EPR03–A5	3.0	0.2	5	EP3	R	○	○	●	○
	W1.5T4L10R0.2EPL03–A5	1.5	0.2	4	EP3	L	○	○	●	○
	W2T5L10R0.2EPL03–A5	2.0	0.2	5	EP3	L	○	○	●	○
	W3T5L10R0.2EPL03–A5	3.0	0.2	5	EP3	L	○	○	○	○

● 有库存（In stock）　○ 需确认库存（Confirmation required）

概念定义的刀片 Concept defined insert

EP—可根据客户需求定制尺寸。

EP–Dimensions can be customized according to customer requirements.

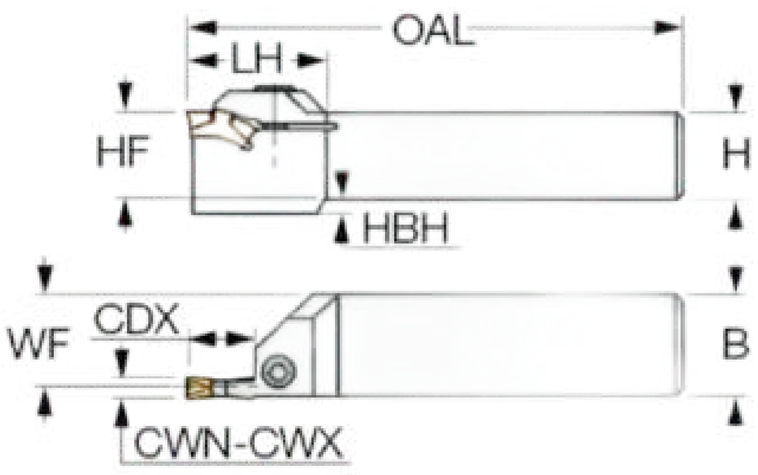


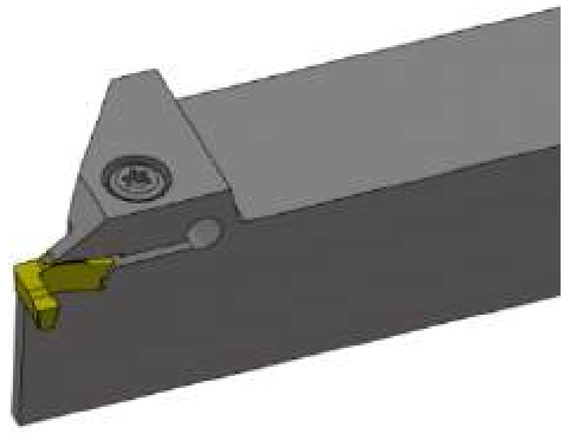
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

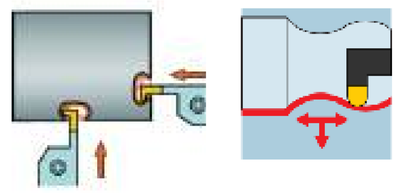
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		W	RE	CDX	刀座号 Seat Code	R/L	MP3017	MP3082	MK2017	MK2082
	W1.5T4L10R0.75EPR03-A5	1.5	0.75	4	EP3	R	○	○	●	○
	W2T5L10R1EPR03-A5	2.0	1.00	5	EP3	R	○	○	●	○
	W3T5L10R1.5EPR03-A5	3.0	1.50	5	EP3	R	○	○	●	○
	W1.5T4L10R0.75EPL03-A5	1.5	0.75	4	EP3	L	○	○	●	○
	W2T5L10R1EPL03-A5	2.0	1.00	5	EP3	L	○	○	●	○
	W3T5L10R1.5EPL03-A5	3.0	1.50	5	EP3	L	○	○	○	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

切槽刀杆 Grooving tool holder





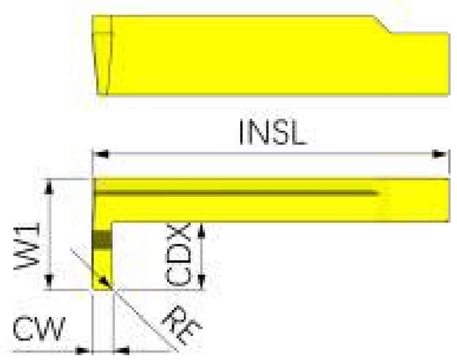


刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
EP3	S2020M-EP3L7.5A	3	7.5	20	20	150	20	20	30.5	L
	S2020M-EP3R7.5A	3	7.5	20	20	150	20	20	30.5	R
	S2525M-EP3L9A	3	9.0	25	25	150	25	25	30.5	L
	S2525M-EP3R9A	3	9.0	25	25	150	25	25	30.5	R
	S2525M-EP3L12A	3	12	25	25	150	25	25	30.5	L
	S2525M-EP3R12A	3	12	25	25	150	25	25	30.5	R

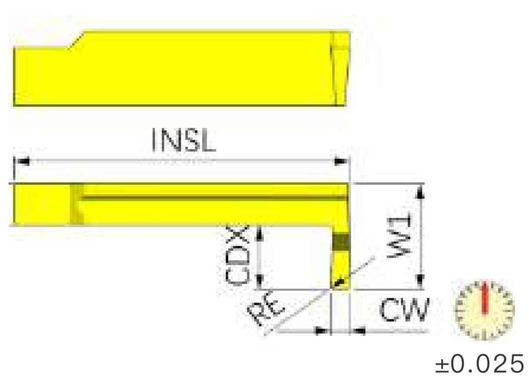
概念定义的刀片 Concept defined insert

CV–可根据客户需求定制尺寸。

CV–Dimensions can be customized according to customer requirements.



R



L

	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

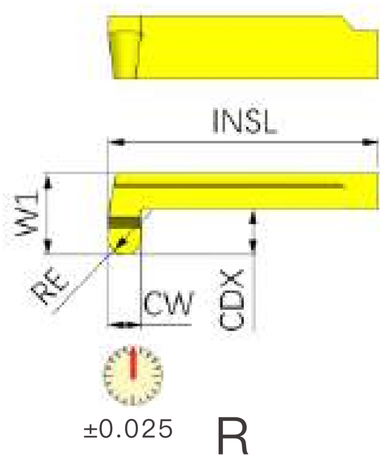
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	R/L	MP3017	MP3082	MK2017	MK2082
	W1.5T4L10R0.2CVR04–A5	1.5	0.2	4	CV4	R	○	○	●	○
	W2T5L10R0.2CVR04–A5	2.0	0.2	5	CV4	R	○	○	●	○
	W3T5L10R0.2CVR04–A5	3.0	0.2	5	CV4	R	○	○	○	○
	W1.5T4L10R0.2CVL04–A5	1.5	0.2	4	CV4	L	○	○	●	○
	W2T5L10R0.2CVL04–A5	2.0	0.2	5	CV4	L	○	○	●	○
	W3T5L10R0.2CVL04–A5	3.0	0.2	5	CV4	L	○	○	○	○

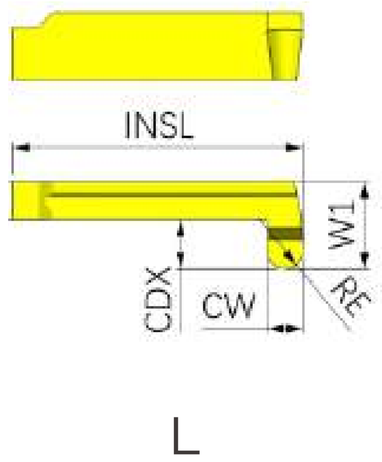
● 有库存（In stock） ○ 需确认库存（Confirmation required）

概念定义的刀片 Concept defined insert

CV–可根据客户需求定制尺寸。

CV–Dimensions can be customized according to customer requirements.





	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

槽刀

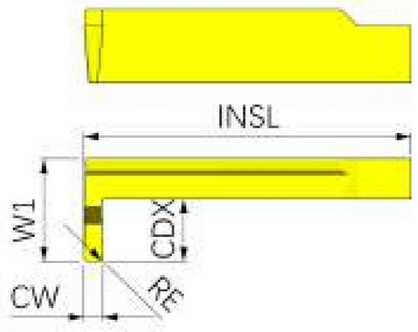
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	R/L	MP3017	MP3082	MK2017	MK2082
	W1.5T4L10R0.75CVR04–A5	1.5	0.75	4	CV4	R	○	○	●	○
	W2T5L10R1CVR04–A5	2.0	1.00	5	CV4	R	○	○	●	○
	W3T5L10R1.5CVR04–A5	3.0	1.50	5	CV4	R	○	○	●	○
	W1.5T4L10R0.75CVL04–A5	1.5	0.75	4	CV4	L	○	○	●	○
	W2T5L10R1CVL04–A5	2.0	1.00	5	CV4	L	○	○	●	○
	W3T5L10R1.5CVL04–A5	3.0	1.50	5	CV4	L	○	○	●	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

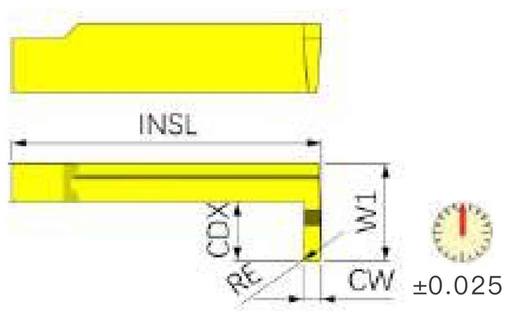
概念定义的刀片 Concept defined insert

CV–可根据客户需求定制尺寸。

CV–Dimensions can be customized according to customer requirements.



R



L

	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

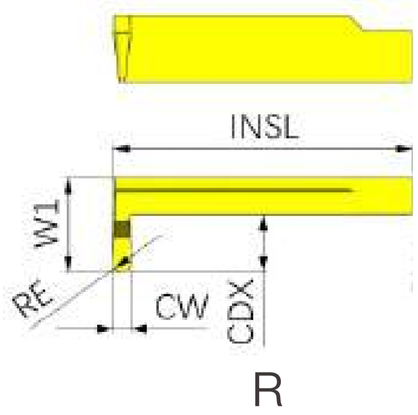
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	R/L	MP3017	MP3082	MK2017	MK2082
	W2T5.5L10R0.2CVR07-A5	2	0.2	5.5	CV7	R	○	○	●	○
	W3T6L10R0.2CVR07-A5	3	0.2	6.0	CV7	R	○	○	○	○
	W4T6.5L10R0.2CVR07-A5	4	0.2	6.5	CV7	R	○	○	○	○
	W2T5.5L10R0.2CVL07-A5	2	0.2	5.5	CV7	L	○	○	○	○
	W3T6L10R0.2CVL07-A5	3	0.2	6.0	CV7	L	○	○	○	○
	W4T6.5L10R0.2CVL07-A5	4	0.2	6.5	CV7	L	○	○	○	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

概念定义的刀片 Concept defined insert

CV–可根据客户需求定制尺寸。

CV–Dimensions can be customized according to customer requirements.



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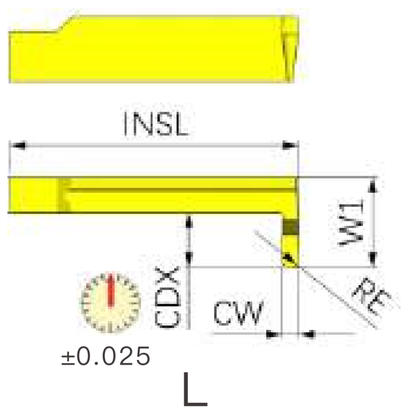


L

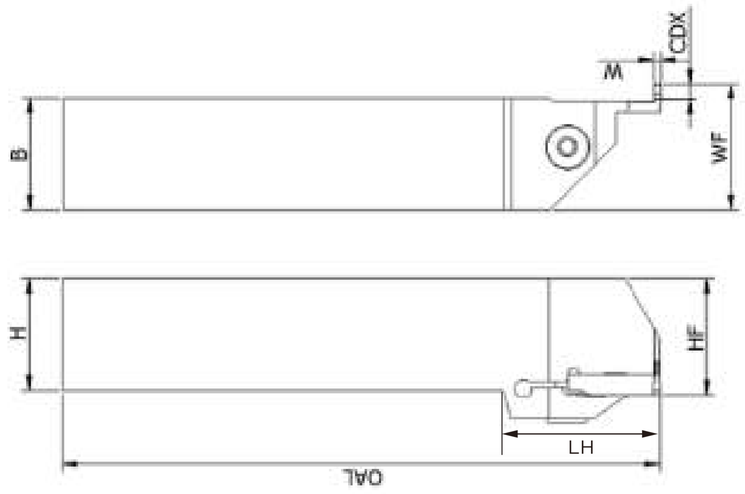
	MP3017	MP3082	MK2017	MK2082
P	●	●	○	○
M	●	○	●	○
K	○	●	○	●
N				
S	●	○	●	○

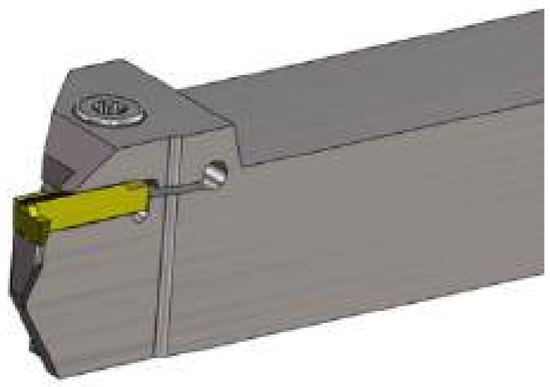
槽刀

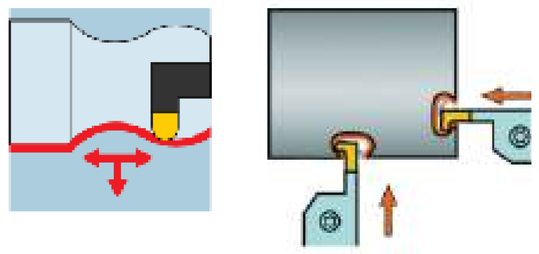
刀片外形 Shape	型号 Product Code	尺寸(mm) Dimensions					牌号 Grade Code			
		CW	RE	CDX	刀座号 Seat Code	R/L	MP3017	MP3082	MK2017	MK2082
	W2T5.5L10R1CVR07-A5	2	1.0	5.5	CV7	R	○	○	●	○
	W3T6L10R1.5CVR07-A5	3	1.5	6.0	CV7	R	○	○	○	○
	W4T6.5L10R2CVR07-A5	4	2.0	6.5	CV7	R	○	○	○	○
	W2T5.5L10R1CVL07-A5	2	1.0	5.5	CV7	L	○	○	●	○
	W3T6L10R1.5CVL07-A5	3	1.5	6.0	CV7	L	○	○	○	○
	W4T6.5L10R2CVL07-A5	4	2.0	6.5	CV7	L	○	○	○	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

切槽刀杆 Grooving tool holder



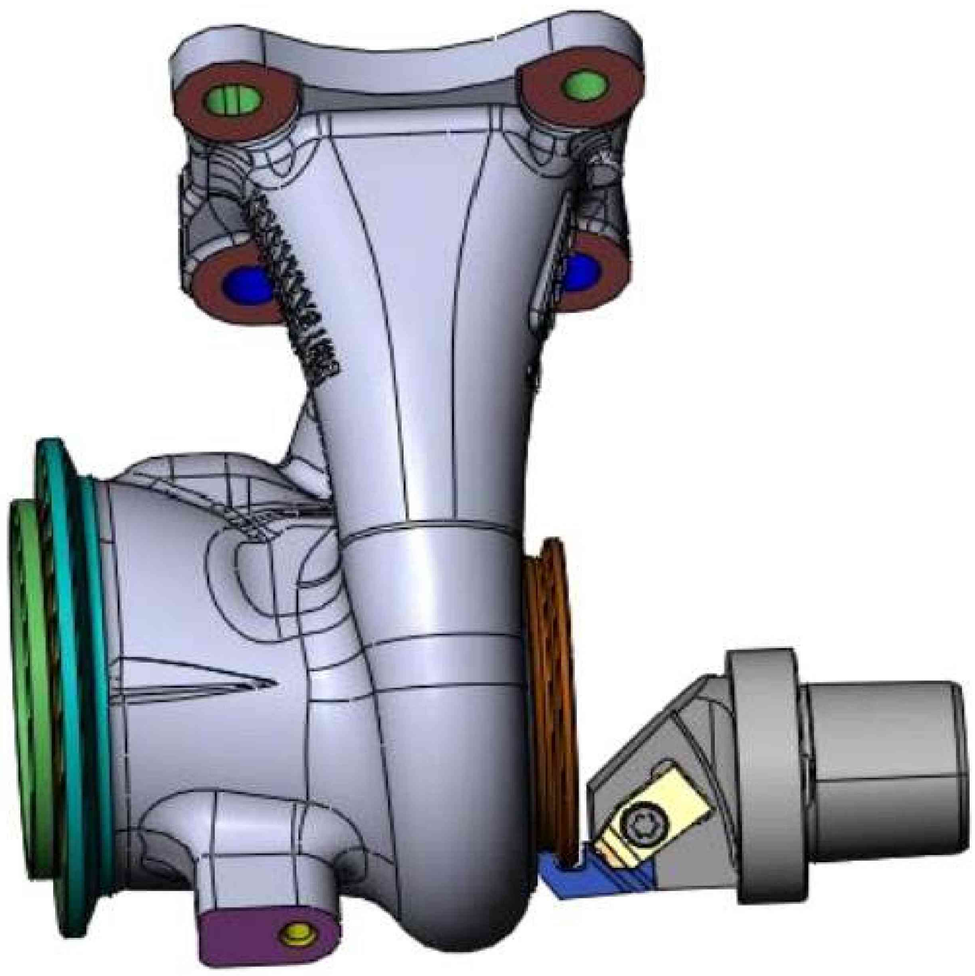


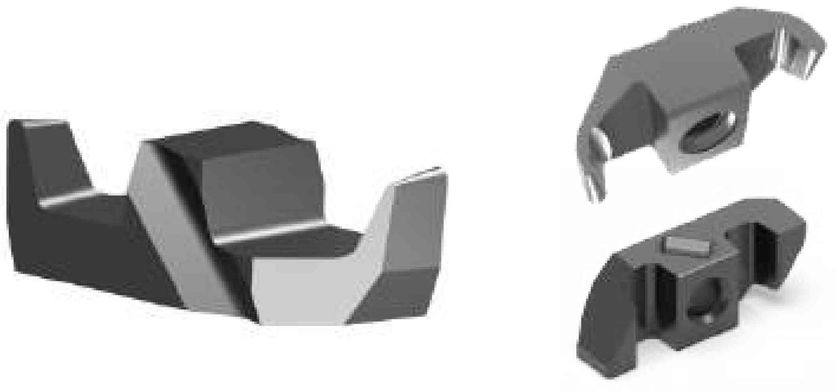


刀座号 Seat Code	型号 Product Code	尺寸(mm) Dimensions								
		CW	CDX	H	B	OAL	HF	WF	LH	方向 Direction
CV4	S2525M–CV4L13A	2	13	25	25	150	25	25	40	L
	S2525M–CV4R13A	3	13	25	25	150	25	25	40	R
	S2525M–CV4L20A	4	20	25	25	150	25	25	40	L
	S2525M–CV4R20A	4	20	25	25	150	25	25	40	R
CV7	S3232Q–CV7L13A	2	13	32	32	180	32	32	55	L
	S3232Q–CV7R13A	3	13	32	32	180	32	32	55	R
	S3232Q–CV7L20A	4	20	32	32	180	32	32	55	L
	S3232Q–CV7R20A	4	20	32	32	180	32	32	55	R

内燃机涡轮增压器两端定制槽刀片

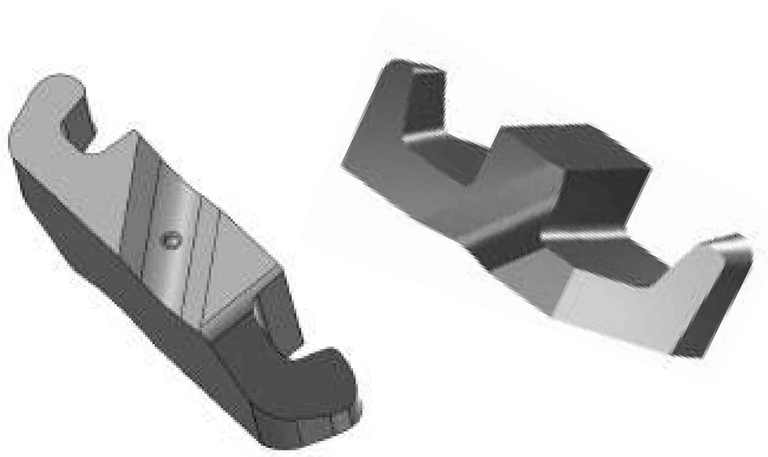
Custom groove inserts for both ends of an internal combustion engine turbocharger





■ 适合加工径向切深较大的V形槽

Suitable for machining V grooves with large radial depth of cut



■ 适合加工径向切深较小的V形槽

Suitable for machining V grooves with small radial depth of cut

*涡轮壳体V带槽的完整解决方案，有多种尺寸刀片可供选择。

*刀片为半非标品，可以实现快速交货。

*可以根据零件几何形状对刀片和刀杆几何形状做特殊设计，实现最佳切削性能。

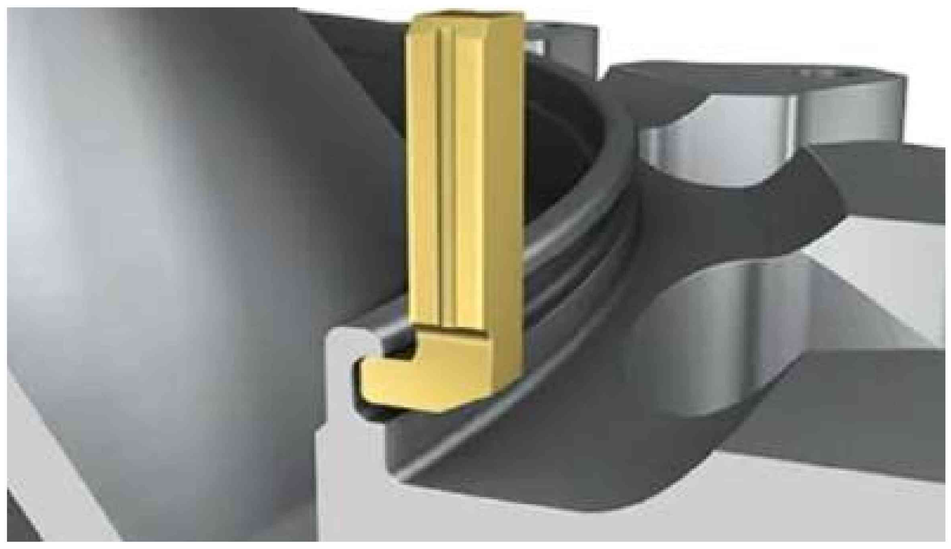
* We offer a complete solution for V-groove machining on turbine housings, with a wide selection of insert sizes available.

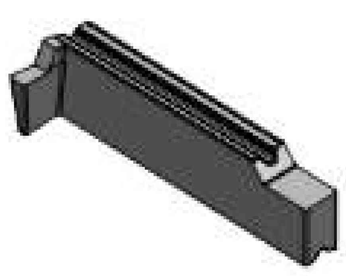
* The inserts are semi-custom, enabling fast delivery.

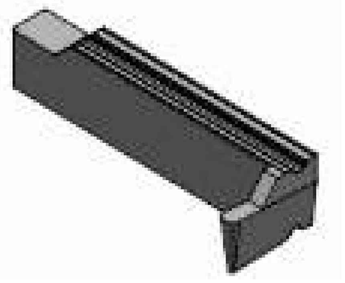
* Special designs for both inserts and tool holders can be developed based on the part geometry to achieve optimal cutting performance.

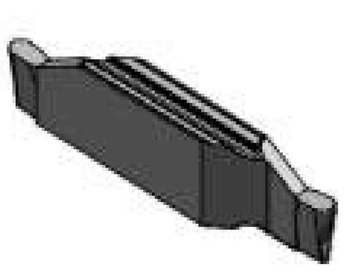
航空发动机定制槽刀片

Special shaped groove inserts for aero engines









*弯头刀片是专为复杂零件加工中一般刀具难以接近的凹槽和凹窝而开发设计的。

*这些刀片提供的最佳的可达性与匹配的PVD材质相结合,特别适合航空燃气轮机机匣、盘和轴等零件上某些部位的加工。

* Angled inserts are developed and designed for grooves and recesses in complex parts that are typically difficult to access with standard tools.
* The optimal accessibility offered by these inserts, combined with a matched PVD grade, makes them particularly suitable for machining certain features on aero gas turbine casings, discs, shafts, and similar components.

槽刀 Grooving

槽刀片失效原因及解决方案 Turning insert failure causes and solutions

失效形式 Failure Mode		原因 Cause	解决方案 Solutions
后刀面磨损 Flank Wear		◆切削速度高 ◆硬质合金牌号不耐磨 High cutting speed. The carbide grade is not wear–resistant.	◆降低切削速度 ◆采用耐磨性更佳的牌号 ◆提高冷却液压力 ◆调整刀片中心高度 Reduce cutting speed Select a more wear–resistant grade Increase coolant pressure Adjust insert center height
月牙洼磨损 Crater Wearear		◆刀片切削区域切削温度过高，压力过大 Excessive cutting temperature and pressure in the insert cutting zone.	◆降低切削速度 ◆降低进给率 ◆采用耐磨性更佳的牌号 ◆提高冷却液压力 ◆采用带大正前角的刀片 Reduce cutting speed Reduce feed rate Select a more wear–resistant grade Increase coolant pressure Use an insert with a large positive rake angle
塑性变形 Plastic Deformation		◆切削温度过高 Cutting temperature too high	◆降低切削速度 ◆降低进给率 ◆采用耐磨性更佳的牌号 ◆提高冷却液压力 Reduce cutting speed Reduce feed rate Select a more wear–resistant grade Increase coolant pressure
沟槽磨损 Groove Wear		◆切削速度过高，或刀片牌号不耐磨 Cutting speed too high, or insert grade is not wear–resistant.	◆降低切削速度 ◆降低进给率 ◆采用耐磨性更佳的牌号 ◆调整切削深度 ◆提高冷却液压力 Reduce cutting speed Reduce feed rate Select a more wear–resistant grade Adjust depth of cut Increase coolant pressure

槽刀片失效原因及解决方案 Turning insert failure causes and solutions

失效形式 Failure Mode		原因 Cause	解决方案 Solutions
热裂纹 Flank Wear		◆切削区域表面温度变化太大，断续切削，或冷却液供应产生变化 Excessive temperature fluctuations at the cutting zone, interrupted cutting, and/or variations in coolant supply.	◆降低切削速度 ◆降低进给率 ◆采用韧性更佳的牌号 ◆采用更强固的切削刃 ◆断续切削时停止供应冷却液 Reduce cutting speed Reduce feed rate Select a grade with higher toughness Use a sturdier cutting edge Stop coolant supply during interrupted cutting
切削刃破损 Cutting Edge Chipping		◆更换刀片切削刃前，刀片过度磨损 ◆对于该应用而言，刀片牌号及几何形状都太弱了 ◆刀片载荷过大 ◆刀片已形成了积屑瘤 Excessive insert wear before changing cutting edge Insert grade and geometry are too weak for the application Excessive load on the insert Built-up edge (BUE) has formed on the insert	◆降低切削速度 ◆降低进给率 ◆采用耐磨性更佳的牌号 ◆提高冷却液压力 ◆采用带大正前角的刀片 Reduce cutting speed Reduce feed rate Select a more wear-resistant grade Increase coolant pressure Use an insert with a large positive rake angle
积屑瘤 Built-up Edge (BUE)		◆切削区域温度太低 ◆负型刀片 ◆加工材料粘性高，如低碳钢，不锈钢及铝 Cutting zone temperature too low Negative rake insert Workpiece material with high adhesion, such as low-carbon steel, stainless steel, and aluminum	◆提高切削速度 ◆采用带锋利切削刃的可转位刀片 ◆提高冷却液压力 Increase cutting speed Use an indexable insert with a sharp cutting edge Increase coolant pressure

D

钻 削

Drilling

01

模块化钻削产品

Modular drilling products

D01

钻刃命名 Drill tip code rules

E

伊特纳
Eternal

SE

精密刃
SOPHISTICATED EDGE

M

模 块
MODULAR

1250

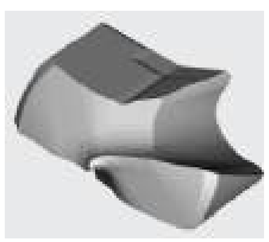
直 径
DIAMETER

SE3

SE3
通用型刃口
GENERAL PURPOSE EDGE

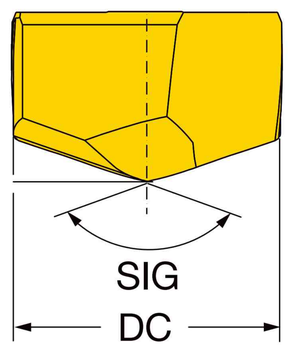
SE6
钢与铸铁专用钻尖
STEEL AND CAST IRON DRILL BLADE

钻刃槽型介绍 Drill edge chipbreaker overview

应用 Application	刀片外形 Insert Type	型号 Product Code		前角形状 Rake Profile	进给 Feed rate (F) mm 0.1 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.55 0.60 0.65 0.70 0.75 0.80
通用加工 General Drilling		SE3	○ ○ ● ○ ○ ○		F= 0.09–0.69
铸铁加工 Cast Iron Drilling		SE6	○ ○ ● ○ ○ ○		F= 0.09–0.42

● 推荐使用（Recommended for） ○ 建议使用（Suggested for）

钻 刃 Drilling insert SSEM...E3

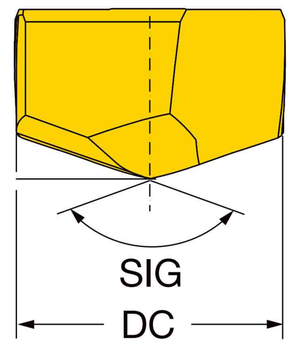


应用 Application	钻刃外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions		牌号 Grade Code		
			SIG	DC	S3012	S3012	S3012
通用加工 General Drilling	C	ESEM1250SE3	140°	12.50	●	●	●
	C	ESEM1260SE3	140°	12.60	●	●	●
	C	ESEM1280SE3	140°	12.80	●	●	●
	C	ESEM1300SE3	140°	13.00	●	●	●
	C	ESEM1320SE3	140°	13.20	●	●	●
	C	ESEM1350SE3	140°	13.50	●	●	●
	B	ESEM1360SE3	140°	13.60	●	●	●
	B	ESEM1370SE3	140°	13.70	●	●	●
	B	ESEM1380SE3	140°	13.80	●	●	●
	B	ESEM1400SE3	140°	14.00	●	●	●
	B	ESEM1410SE3	140°	14.10	●	●	●
	B	ESEM1420SE3	140°	14.20	●	●	●
	B	ESEM1440SE3	140°	14.40	●	●	●
	B	ESEM1450SE3	140°	14.50	●	●	●
	A	ESEM1460SE3	140°	14.60	●	●	●
	A	ESEM1480SE3	140°	14.80	●	●	●
	A	ESEM1500SE3	140°	15.00	●	●	●
	A	ESEM1530SE3	140°	15.30	●	●	●
	A	ESEM1550SE3	140°	15.50	●	●	●
	A	ESEM1560SE3	140°	15.60	●	●	●
	A	ESEM1570SE3	140°	15.70	●	●	●
	A	ESEM1580SE3	140°	15.80	●	●	●
	1	ESEM1600SE3	140°	16.00	●	●	●
	1	ESEM1620SE3	140°	16.20	●	●	●
	1	ESEM1650SE3	140°	16.50	●	●	●
	1	ESEM1700SE3	140°	17.00	●	●	●
	1	ESEM1750SE3	140°	17.50	●	●	●
	1	ESEM1800SE3	140°	18.00	●	●	●
	2	ESEM1850SE3	140°	18.50	●	●	●
	2	ESEM1900SE3	140°	19.00	●	●	●
	2	ESEM1950SE3	140°	19.50	●	●	●
	3	ESEM2000SE3	140°	20.00	●	●	●
	3	ESEM2050SE3	140°	20.50	●	●	●
	3	ESEM2100SE3	140°	21.00	●	●	●
	3	ESEM2150SE3	140°	21.50	●	●	●
	3	ESEM2200SE3	140°	22.00	●	●	●

应用 Application	钻刃外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions		牌号 Grade Code		
			SIG	DC	S3012	S3012	S3012
通用加工 General Drilling	4	ESEM2250SE3	140°	22.50	●	●	●
	4	ESEM2300SE3	140°	23.00	●	●	●
	4	ESEM2350SE3	140°	23.50	●	●	●
	4	ESEM2400SE3	140°	24.00	●	●	●
	5	ESEM2450SE3	140°	24.50	●	●	●
	5	ESEM2500SE3	140°	25.00	●	●	●
	5	ESEM2550SE3	140°	25.50	●	●	●
	5	ESEM2600SE3	140°	26.00	●	●	●
	6	ESEM2650SE3	140°	26.50	●	●	●
	6	ESEM2700SE3	140°	27.00	●	●	●
	6	ESEM2750SE3	140°	27.50	●	●	●
	6	ESEM2800SE3	140°	28.00	●	●	●
	7	ESEM2850SE3	140°	28.50	●	●	●
	7	ESEM2900SE3	140°	29.00	●	●	●
	7	ESEM2950SE3	140°	29.50	●	●	●
	7	ESEM3000SE3	140°	30.00	●	●	●
	8	ESEM3050SE3	140°	30.50	●	●	●
	8	ESEM3100SE3	140°	31.00	●	●	●
	8	ESEM3150SE3	140°	31.50	●	●	●
	8	ESEM3200SE3	140°	32.00	●	●	●
	9	ESEM3250SE3	140°	32.50	●	●	●
	9	ESEM3300SE3	140°	33.00	●	●	●
	9	ESEM3350SE3	140°	33.50	●	●	●
	9	ESEM3400SE3	140°	34.00	●	●	●
	9	ESEM3450SE3	140°	34.50	●	●	●
	9	ESEM3500SE3	140°	35.00	●	●	●
	9	ESEM3550SE3	140°	35.50	●	●	●
	9	ESEM3600SE3	140°	36.00	●	●	●
	10	ESEM3650SE3	140°	36.50	●	●	●
	10	ESEM3700SE3	140°	37.00	●	●	●
	10	ESEM3750SE3	140°	37.50	●	●	●
	10	ESEM3800SE3	140°	38.00	●	●	●
	10	ESEM3850SE3	140°	38.50	●	●	●
	10	ESEM3900SE3	140°	39.00	●	●	●
	10	ESEM3950SE3	140°	39.50	●	●	●
	10	ESEM4000SE3	140°	40.00	●	●	●

● 有库存（In stock） ○ 需确认库存（Confirmation required）

钻 刃 Drilling insert SSEM...E6



应用 Application	钻刃外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions		牌号 Grade Code	
			SIG	DC	S3018	S3018
通用加工 General Drilling	C	ESEM1250SE6	140°	12.50	○	○
	C	ESEM1260SE6	140°	12.60	○	○
	C	ESEM1280SE6	140°	12.80	○	○
	C	ESEM1300SE6	140°	13.00	○	○
	C	ESEM1320SE6	140°	13.20	○	○
	C	ESEM1350SE6	140°	13.50	○	○
	B	ESEM1360SE6	140°	13.60	○	○
	B	ESEM1370SE6	140°	13.70	○	○
	B	ESEM1380SE6	140°	13.80	○	○
	B	ESEM1400SE6	140°	14.00	○	○
	B	ESEM1410SE6	140°	14.10	○	○
	B	ESEM1420SE6	140°	14.20	○	○
	B	ESEM1440SE6	140°	14.40	○	○
	B	ESEM1450SE6	140°	14.50	○	○
	A	ESEM1460SE6	140°	14.60	○	○
	A	ESEM1480SE6	140°	14.80	○	○
	A	ESEM1500SE6	140°	15.00	○	○
	A	ESEM1530SE6	140°	15.30	○	○
	A	ESEM1550SE6	140°	15.50	○	○
	A	ESEM1560SE6	140°	15.60	○	○
	A	ESEM1570SE6	140°	15.70	○	○
	A	ESEM1580SE6	140°	15.80	○	○
	1	ESEM1600SE6	140°	16.00	○	○
	1	ESEM1620SE6	140°	16.20	○	○
	1	ESEM1650SE6	140°	16.50	○	○
	1	ESEM1700SE6	140°	17.00	○	○
	1	ESEM1750SE6	140°	17.50	○	○
	1	ESEM1800SE6	140°	18.00	○	○
	2	ESEM1850SE6	140°	18.50	○	○
	2	ESEM1900SE6	140°	19.00	○	○
	2	ESEM1950SE6	140°	19.50	○	○
	3	ESEM2000SE6	140°	20.00	○	○
	3	ESEM2050SE6	140°	20.50	○	○
	3	ESEM2100SE6	140°	21.00	○	○
	3	ESEM2150SE6	140°	21.50	○	○
	3	ESEM2200SE6	140°	22.00	○	○

应用 Application	钻刃外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions		牌号 Grade Code	
			SIG	DC	S3018	S3018
通用加工 General Drilling	4	ESEM2250SE6	140°	22.50	○	○
	4	ESEM2300SE6	140°	23.00	○	○
	4	ESEM2350SE6	140°	23.50	○	○
	4	ESEM2400SE6	140°	24.00	○	○
	5	ESEM2450SE6	140°	24.50	○	○
	5	ESEM2500SE6	140°	25.00	○	○
	5	ESEM2550SE6	140°	25.50	○	○
	5	ESEM2600SE6	140°	26.00	○	○
	6	ESEM2650SE6	140°	26.50	○	○
	6	ESEM2700SE6	140°	27.00	○	○
	6	ESEM2750SE6	140°	27.50	○	○
	6	ESEM2800SE6	140°	28.00	○	○
	7	ESEM2850SE6	140°	28.50	○	○
	7	ESEM2900SE6	140°	29.00	○	○
	7	ESEM2950SE6	140°	29.50	○	○
	7	ESEM3000SE6	140°	30.00	○	○
	8	ESEM3050SE6	140°	30.50	○	○
	8	ESEM3100SE6	140°	31.00	○	○
	8	ESEM3150SE6	140°	31.50	○	○
	8	ESEM3200SE6	140°	32.00	○	○
	9	ESEM3250SE6	140°	32.50	○	○
	9	ESEM3300SE6	140°	33.00	○	○
	9	ESEM3350SE6	140°	33.50	○	○
	9	ESEM3400SE6	140°	34.00	○	○
	9	ESEM3450SE6	140°	34.50	○	○
	9	ESEM3500SE6	140°	35.00	○	○
	9	ESEM3550SE6	140°	35.50	○	○
	9	ESEM3600SE6	140°	36.00	○	○
	10	ESEM3650SE6	140°	36.50	○	○
	10	ESEM3700SE6	140°	37.00	○	○
	10	ESEM3750SE6	140°	37.50	○	○
	10	ESEM3800SE6	140°	38.00	○	○
	10	ESEM3850SE6	140°	38.50	○	○
	10	ESEM3900SE6	140°	39.00	○	○
	10	ESEM3950SE6	140°	39.50	○	○
	10	ESEM4000SE6	140°	40.00	○	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

钻刃切削速度建议(公制值) Drill cutting edge cutting speed recommendations

务必使用切削液。
Have to use with cutting fluid.

材料分类 Material Group		硬度 Hardness	涂层牌号 Grade	切削速度 Cutting speed — m/min
				45 65 95 110 140 180 220 300 350 400
ISO P	**钢材/Steel**			
P0/P1	低碳钢/Low-Carbon (<0,3% C)	≤130 HB	S3012 S3018	
P2	中碳与高碳钢/Medium- and High-Carbon Steels (>0,3% C)	150—325 HB	S3012 S3018	
P3	合金钢与工具钢 Alloy Steels and Tool Steels	≤330 HB ≤35 HRC	S3012 S3018	
P4	合金钢与工具钢 Alloy Steels and Tool Steels	340—450 HB 36—48 HRC	S3012 S3018	
P5	铁素体、马氏体和沉淀硬化不锈钢 Ferritic, Martensitic, and PH Stainless Steels	≤330 HB ≤35 HRC	S3012 S3018	
P6	铁素体、马氏体和沉淀硬化不锈钢 Ferritic, Martensitic, and PH Stainless Steels	340—450 HB 36—48 HRC	S3012 S3018	
				20 30 45 65 95 110 140 180 220 300
ISO M	**不锈钢/Stainless Steel**			
M1	奥氏体不锈钢 Austenitic Stainless Steel	≤180 HB	S3012	
M2	奥氏体不锈钢 Austenitic Stainless Steel	180—220 HB	S3012	
M3	双相不锈钢 Duplex Stainless Steel	220—260 HB	S3012	
				75 105 140 170 200 300 400 500 600 700
ISO K	**铸铁/Cast Iron**			
K1	灰口铸铁和低强度球墨铸铁 Grey cast iron	120-290 HB	S3012 S3018	
K2	低、中强度CGI和球墨铸铁 Cast iron with nodular cast iron	130-260 HB	S3012 S3018	
K3	高强度球墨铸铁和奥贝球墨铸铁 Malleable cast iron	180-350 HB	S3012 S3018	
				15 45 75 105 140 170 200 230 260 290
ISO S	**耐热合金/Heat resistant material**			
S1	铁基耐热合金 Iron-Based, Heat-Resistant Alloys	135—320 HB ≤34 HRC	S3012	
S2	钴基耐热合金 Cobalt-Based, Heat-Resistant Alloys	150—425 HB ≤45 HRC	S3012	
S3	镍基耐热合金 Nickel-Based, Heat-Resistant Alloys	140—475 HB ≤48 HRC	S3012	
S4	钛与钛合金 Titanium and Titanium Alloys	110—450 HB ≤48 HRC	S3012	

钻杆命名 Drilling tool holder code rules

SE

精密刃
SOPHISTICATED EDGE

M

模块
MODULAR

1250

直径
DIAMETER

R3

R3
三倍直径
3 TIMES THE DIAMETER

R5
五倍直径
5 TIMES THE DIAMETER

R7
七倍直径
7 TIMES THE DIAMETER

R10
十倍直径
10 TIMES THE DIAMETER

WN16

DIN1835-E
哨型平柄
WHISTLE NOTCH SHANK

WN16
直径16的哨型柄
WHISTLE NOTCH SHANK D16

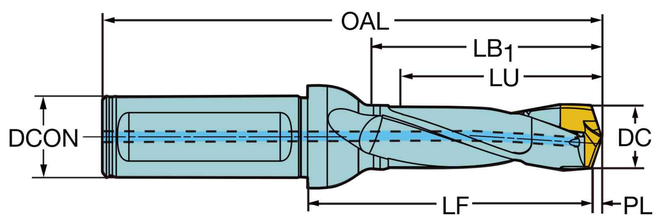
M

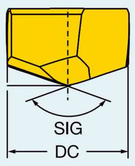
M
公制的
METRIC

ESEM精密模块钻 三倍直径 Eternal sophisticated edge modular drill 3x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply

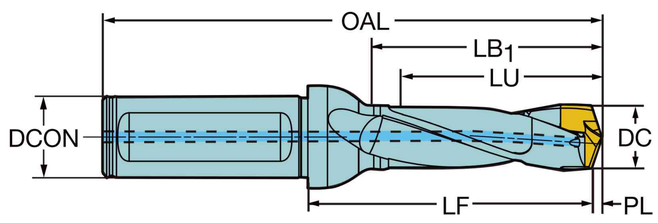


刀片外形 Insert Type 	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM1250	ESEM125R3WN16M	12.50	42	16	-	111	59	1.90	C	10bar	0.138
ESEM1300	ESEM130R3WN16M	13.00	42	16	-	111	59	2.00	C	10bar	0.143
ESEM1350	ESEM135R3WN16M	13.50	42	16	-	111	59	2.10	C	10bar	0.147
ESEM1351	ESEM136R3WN16M	13.51	42	16	-	111	59	2.10	B	10bar	0.148
ESEM1400	ESEM140R3WN16M	14.00	42	16	-	111	59	2.20	B	10bar	0.152
ESEM1450	ESEM145R3WN20M	14.50	48	20	-	122	68	2.20	B	10bar	0.220
ESEM1451	ESEM146R3WN20M	14.51	48	20	-	122	68	2.20	A	10bar	0.220
ESEM1500	ESEM150R3WN20M	15.00	48	20	-	122	68	2.30	A	10bar	0.226
ESEM1550	ESEM155R3WN20M	15.50	48	20	-	122	68	2.40	A	10bar	0.232
ESEM1600	ESEM160R3WN20M	16.00	48	20	-	122	67	2.50	1	10bar	0.240
ESEM1650	ESEM165R3WN20M	16.50	48	20	-	130	75	2.50	1	10bar	0.260
ESEM1700	ESEM170R3WN20M	17.00	54	20	-	130	75	2.60	1	10bar	0.268
ESEM1750	ESEM175R3WN20M	17.50	54	20	-	130	75	2.70	1	10bar	0.275
ESEM1800	ESEM180R3WN20M	18.00	54	20	-	130	75	2.80	1	10bar	0.284
ESEM1801	ESEM181R3WN25M	18.01	54	25	-	130	83	2.80	2	10bar	0.345
ESEM1850	ESEM185R3WN25M	18.50	60	25	-	144	83	2.80	2	10bar	0.408
ESEM1900	ESEM190R3WN25M	19.00	60	25	-	144	83	2.90	2	10bar	0.417
ESEM1950	ESEM195R3WN25M	19.50	60	25	-	144	83	3.00	2	10bar	0.427
ESEM2000	ESEM200R3WN25M	20.00	60	25	-	153	92	3.10	3	10bar	0.459
ESEM2050	ESEM205R3WN25M	20.50	66	25	-	153	92	3.20	3	10bar	0.470
ESEM2100	ESEM210R3WN25M	21.00	66	25	-	153	92	3.20	3	10bar	0.482
ESEM2150	ESEM215R3WN25M	21.50	66	25	-	153	92	3.30	3	10bar	0.494
ESEM2200	ESEM220R3WN25M	22.00	66	25	-	153	92	3.40	3	10bar	0.506
ESEM2201	ESEM221R3WN25M	22.01	72	25	-	153	92	3.40	4	10bar	0.507
ESEM2250	ESEM225R3WN25M	22.50	72	25	-	161	100	3.50	4	10bar	0.544
ESEM2300	ESEM230R3WN25M	23.00	72	25	-	161	100	3.50	4	10bar	0.558
ESEM2350	ESEM235R3WN25M	23.50	72	25	-	161	100	3.60	4	10bar	0.572
ESEM2400	ESEM240R3WN25M	24.00	72	25	-	161	100	3.70	4	10bar	0.586
ESEM2401	ESEM241R3WN32M	24.01	72	32	-	161	161	3.70	5	10bar	0.569

ESEM精密模块钻 三倍直径 Eternal sophisticated edge modular drill 3x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply



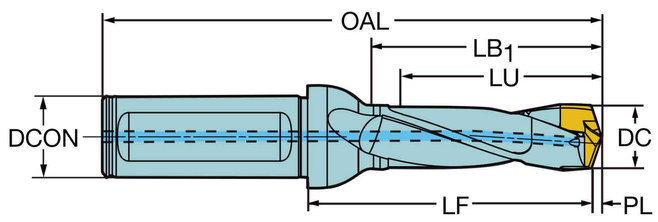
刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM2450	ESEM245R3WN32M	24.50	78	32	-	174	109	3.80	5	10bar	0.809
ESEM2500	ESEM250R3WN32M	25.00	78	32	-	174	109	3.80	5	10bar	0.825
ESEM2550	ESEM255R3WN32M	25.50	78	32	-	174	109	3.90	5	10bar	0.842
ESEM2600	ESEM260R3WN32M	26.00	78	32	-	174	109	4.00	5	10bar	0.859
ESEM2601	ESEM261R5WN32M	26.01	84	32	-	174	109	4.00	6	10bar	0.859
ESEM2650	ESEM265R3WN32M	26.50	84	32	-	182	117	4.10	6	10bar	0.911
ESEM2700	ESEM270R3WN32M	27.00	84	32	-	182	117	4.20	6	10bar	0.930
ESEM2750	ESEM275R3WN32M	27.50	84	32	-	182	117	4.20	6	10bar	0.950
ESEM2800	ESEM280R3WN32M	28.00	84	32	-	182	117	4.30	6	10bar	0.970
ESEM2801	ESEM281R3WN32M	28.01	90	32	-	182	117	4.30	7	10bar	0.970
ESEM2850	ESEM285R3WN32M	28.50	90	32	-	190	125	4.40	7	10bar	1.030
ESEM2900	ESEM290R3WN32M	29.00	90	32	-	190	125	4.50	7	10bar	1.052
ESEM2950	ESEM295R3WN32M	29.50	90	32	-	190	125	4.50	7	10bar	1.074
ESEM3000	ESEM300R3WN32M	30.00	90	32	-	190	125	4.60	7	10bar	1.097
ESEM3001	ESEM301R3WN32M	30.01	90	32	-	190	125	4.60	8	10bar	1.097
ESEM3050	ESEM305R3WN32M	30.50	96	32	-	200	135	4.70	8	10bar	1.177
ESEM3100	ESEM310R3WN32M	31.00	96	32	-	200	135	4.80	8	10bar	1.203
ESEM3150	ESEM315R3WN32M	31.50	96	32	-	200	135	4.80	8	10bar	1.228
ESEM3200	ESEM320R3WN32M	32.00	96	32	-	200	135	4.90	8	10bar	1.255
ESEM3201	ESEM321R3WD50M	32.01	99	50	159	220	148	4.90	9	10bar	2.032
ESEM3300	ESEM330R3WD50M	33.00	99	50	159	227	148	5.10	9	10bar	2.197
ESEM3400	ESEM340R3WD50M	34.00	102	50	157	225	146	5.20	9	10bar	2.244
ESEM3500	ESEM350R3WD50M	35.00	105	50	167	235	156	5.40	9	10bar	2.381
ESEM3600	ESEM360R3WD50M	36.00	108	50	165	233	154	5.50	9	10bar	2.433
ESEM3601	ESEM361R3WD50M	36.01	111	50	176	237	165	5.50	10	10bar	2.413
ESEM3700	ESEM370R3WD50M	37.00	111	50	176	244	165	5.70	10	10bar	2.594
ESEM3800	ESEM380R3WD50M	38.00	114	50	174	242	163	5.80	10	10bar	2.652
ESEM3900	ESEM390R3WD50M	39.00	117	50	184	252	173	6.00	10	10bar	2.822
ESEM4000	ESEM400R3WD50M	40.00	120	50	182	250	171	6.20	10	10bar	2.886

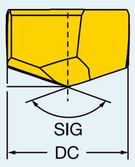
ESEM精密模块钻 五倍直径

Eternal sophisticated edge modular drill 5x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply

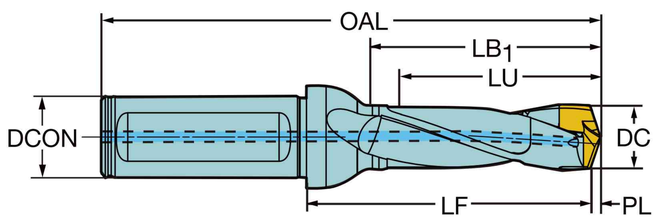


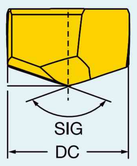
刀片外形 Insert Type 	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM1250	ESEM125R5WN16M	12.50	70	16	-	139	87	1.90	C	10bar	0.165
ESEM1300	ESEM130R5WN16M	13.00	70	16	-	139	87	2.00	C	10bar	0.172
ESEM1350	ESEM135R5WN16M	13.50	70	16	-	139	87	2.10	C	10bar	0.179
ESEM1351	ESEM136R5WN16M	13.51	70	16	-	139	87	2.10	B	10bar	0.179
ESEM1400	ESEM140R5WN16M	14.00	70	16	-	139	87	2.20	B	10bar	0.186
ESEM1450	ESEM145R5WN20M	14.50	80	20	-	154	100	2.20	B	10bar	0.261
ESEM1451	ESEM146R5WN20M	14.51	80	20	-	154	100	2.20	A	10bar	0.261
ESEM1500	ESEM150R5WN20M	15.00	80	20	-	154	100	2.30	A	10bar	0.270
ESEM1550	ESEM155R5WN20M	15.50	80	20	-	154	100	2.40	A	10bar	0.280
ESEM1600	ESEM160R5WN20M	16.00	80	20	-	154	99	2.50	1	10bar	0.290
ESEM1650	ESEM165R5WN20M	16.50	90	20	-	166	111	2.50	1	10bar	0.320
ESEM1700	ESEM170R5WN20M	17.00	90	20	-	166	111	2.60	1	10bar	0.331
ESEM1750	ESEM175R5WN20M	17.50	90	20	-	166	111	2.70	1	10bar	0.343
ESEM1800	ESEM180R5WN20M	18.00	90	20	-	166	111	2.80	1	10bar	0.355
ESEM1801	ESEM181R5WN25M	18.01	100	25	-	184	123	2.80	2	10bar	0.478
ESEM1850	ESEM185R5WN25M	18.50	100	25	-	184	123	2.80	2	10bar	0.491
ESEM1900	ESEM190R5WN25M	19.00	100	25	-	184	123	2.90	2	10bar	0.506
ESEM1950	ESEM195R5WN25M	19.50	100	25	-	184	123	3.00	2	10bar	0.520
ESEM2000	ESEM200R5WN25M	20.00	100	25	-	197	136	3.10	3	10bar	0.567
ESEM2050	ESEM205R5WN25M	20.50	110	25	-	197	136	3.20	3	10bar	0.584
ESEM2100	ESEM210R5WN25M	21.00	110	25	-	197	136	3.20	3	10bar	0.601
ESEM2150	ESEM215R5WN25M	21.50	110	25	-	197	136	3.30	3	10bar	0.619
ESEM2200	ESEM220R5WN25M	22.00	110	25	-	197	136	3.40	3	10bar	0.637
ESEM2201	ESEM221R5WN25M	22.01	120	25	-	209	148	3.40	4	10bar	0.673
ESEM2250	ESEM225R5WN25M	22.50	120	25	-	209	148	3.50	4	10bar	0.693
ESEM2300	ESEM230R5WN25M	23.00	120	25	-	209	148	3.50	4	10bar	0.713
ESEM2350	ESEM235R5WN25M	23.50	120	25	-	209	148	3.60	4	10bar	0.734
ESEM2400	ESEM240R5WN25M	24.00	120	25	-	209	148	3.70	4	10bar	0.756
ESEM2401	ESEM241R5WN25M	24.01	130	25	-	226	161	3.70	5	10bar	0.976

ESEM精密模块钻 五倍直径 Eternal sophisticated edge modular drill 5x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply



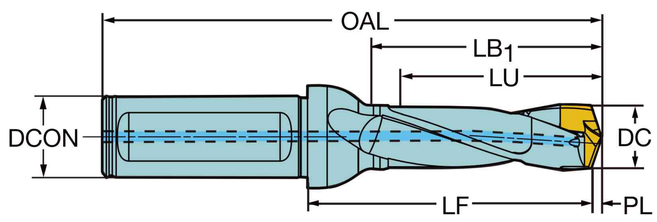
刀片外形 Insert Type 	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM2450	ESEM245R5WN32M	24.50	130	32	-	226	161	3.80	5	10bar	1.000
ESEM2500	ESEM250R5WN32M	25.00	130	32	-	226	161	3.80	5	10bar	1.024
ESEM2550	ESEM255R5WN32M	25.50	130	32	-	226	161	3.90	5	10bar	1.049
ESEM2600	ESEM260R5WN32M	26.00	130	32	-	226	161	4.00	5	10bar	1.074
ESEM2601	ESEM261R5WN32M	26.01	140	32	-	238	173	4.00	6	10bar	1.125
ESEM2650	ESEM265R5WN32M	26.50	140	32	-	238	173	4.10	6	10bar	1.152
ESEM2700	ESEM270R5WN32M	27.00	140	32	-	238	173	4.20	6	10bar	1.180
ESEM2750	ESEM275R5WN32M	27.50	140	32	-	238	173	4.20	6	10bar	1.209
ESEM2800	ESEM280R5WN32M	28.00	140	32	-	238	173	4.30	6	10bar	1.239
ESEM2801	ESEM281R5WN32M	28.01	150	32	-	250	185	4.30	7	10bar	1.297
ESEM2850	ESEM285R5WN32M	28.50	150	32	-	250	185	4.40	7	10bar	1.328
ESEM2900	ESEM290R5WN32M	29.00	150	32	-	250	185	4.50	7	10bar	1.361
ESEM2950	ESEM295R5WN32M	29.50	150	32	-	250	185	4.50	7	10bar	1.394
ESEM3000	ESEM300R5WN32M	30.00	150	32	-	250	185	4.60	7	10bar	1.428
ESEM3001	ESEM301R5WN32M	30.01	160	32	-	264	199	4.60	8	10bar	1.506
ESEM3050	ESEM305R5WN32M	30.50	160	32	-	264	199	4.70	8	10bar	1.542
ESEM3100	ESEM310R5WN32M	31.00	160	32	-	264	199	4.80	8	10bar	1.579
ESEM3150	ESEM315R5WN32M	31.50	160	32	-	264	199	4.80	8	10bar	1.617
ESEM3200	ESEM320R5WN32M	32.00	160	32	-	264	199	4.90	8	10bar	1.656
ESEM3201	ESEM321R5WD50M	32.01	165	50	225	293	214	4.90	9	10bar	2.553
ESEM3300	ESEM330R5WD50M	33.00	165	50	225	293	214	5.10	9	10bar	2.638
ESEM3400	ESEM340R5WD50M	34.00	170	50	225	293	214	5.20	9	10bar	2.725
ESEM3500	ESEM350R5WD50M	35.00	175	50	237	305	226	5.40	9	10bar	2.906
ESEM3600	ESEM360R5WD50M	36.00	180	50	237	305	226	5.50	9	10bar	3.004
ESEM3601	ESEM361R5WD50M	36.01	185	50	250	318	239	5.50	10	10bar	3.108
ESEM3700	ESEM370R5WD50M	37.00	185	50	250	318	239	5.70	10	10bar	3.214
ESEM3800	ESEM380R5WD50M	38.00	190	50	250	318	239	5.80	10	10bar	3.324
ESEM3900	ESEM390R5WD50M	39.00	195	50	262	330	251	6.00	10	10bar	3.549
ESEM4000	ESEM400R5WD50M	40.00	200	50	262	330	251	6.20	10	10bar	3.670

ESEM精密模块钻 七倍直径

Eternal sophisticated edge modular drill 7x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply

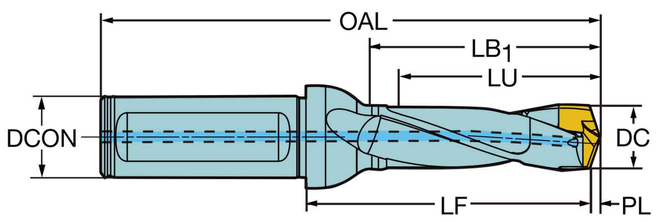


刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM1250	ESEM125R7WN16M	12.50	98	16	-	167	115	1.9	C	10bar	0.192
ESEM1300	ESEM130R7WN16M	13.00	98	16	-	167	115	2	C	10bar	0.201
ESEM1350	ESEM135R7WN16M	13.50	98	16	-	167	115	2.1	C	10bar	0.210
ESEM1351	ESEM136R7WN16M	13.51	98	16	-	167	115	2.1	B	10bar	0.210
ESEM1400	ESEM140R7WN16M	14.00	98	16	-	167	115	2.2	B	10bar	0.220
ESEM1450	ESEM145R7WN20M	14.50	112	20	-	186	132	2.2	B	10bar	0.302
ESEM1451	ESEM146R7WN20M	14.51	112	20	-	186	132	2.2	A	10bar	0.303
ESEM1500	ESEM150R7WN20M	15.00	112	20	-	186	132	2.3	A	10bar	0.314
ESEM1550	ESEM155R7WN20M	15.50	112	20	-	186	132	2.4	A	10bar	0.327
ESEM1600	ESEM160R7WN20M	16.00	112	20	-	186	131	2.5	1	10bar	0.340
ESEM1650	ESEM165R7WN20M	16.50	126	20	-	202	147	2.5	1	10bar	0.380
ESEM1700	ESEM170R7WN20M	17.00	126	20	-	202	147	2.6	1	10bar	0.395
ESEM1750	ESEM175R7WN20M	17.50	126	20	-	202	147	2.7	1	10bar	0.411
ESEM1800	ESEM180R7WN20M	18.00	126	20	-	202	147	2.8	1	10bar	0.427
ESEM1850	ESEM185R7WN25M	18.50	140	25	-	224	163	2.8	2	10bar	0.575
ESEM1900	ESEM190R7WN25M	19.00	140	25	-	224	163	2.9	2	10bar	0.594
ESEM1950	ESEM195R7WN25M	19.50	140	25	-	224	163	3	2	10bar	0.613
ESEM2000	ESEM200R7WN25M	20.00	140	25	-	241	179	3.1	3	10bar	0.676
ESEM2050	ESEM205R7WN25M	20.50	154	25	-	241	180	3.2	3	10bar	0.697
ESEM2100	ESEM210R7WN25M	21.00	154	25	-	241	180	3.2	3	10bar	0.720
ESEM2150	ESEM215R7WN25M	21.50	154	25	-	241	180	3.3	3	10bar	0.743

ESEM精密模块钻 七倍直径 Eternal sophisticated edge modular drill 7x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply



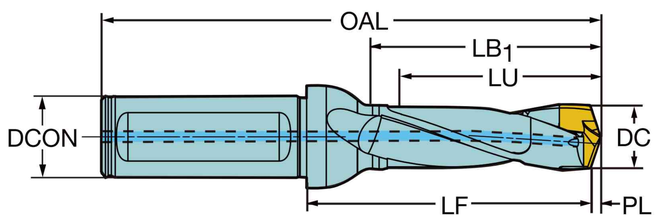
刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM2200	ESEM220R7WN25M	22.00	154	25	-	241	180	3.4	3	10bar	0.767
ESEM2250	ESEM225R7WN25M	22.50	168	25	-	257	196	3.5	4	10bar	0.841
ESEM2300	ESEM230R7WN25M	23.00	168	25	-	257	196	3.5	4	10bar	0.869
ESEM2350	ESEM235R7WN25M	23.50	168	25	-	257	196	3.6	4	10bar	0.897
ESEM2400	ESEM240R7WN25M	24.00	168	25	-	257	196	3.7	4	10bar	0.925
ESEM2450	ESEM245R7WN32M	24.50	182	32	-	278	213	3.8	5	10bar	1.191
ESEM2500	ESEM250R7WN32M	25.00	182	32	-	278	213	3.8	5	10bar	1.223
ESEM2550	ESEM255R7WN32M	25.50	182	32	-	278	213	3.9	5	10bar	1.256
ESEM2600	ESEM260R7WN32M	26.00	182	32	-	278	213	4	5	10bar	1.290
ESEM2650	ESEM265R7WN32M	26.50	196	32	-	294	229	4.1	6	10bar	1.393
ESEM2700	ESEM270R7WN32M	27.00	196	32	-	294	229	4.2	6	10bar	1.430
ESEM2750	ESEM275R7WN32M	27.50	196	32	-	294	229	4.2	6	10bar	1.469
ESEM2800	ESEM280R7WN32M	28.00	196	32	-	294	229	4.3	6	10bar	1.508
ESEM2850	ESEM285R7WN32M	28.50	210	32	-	310	245	4.4	7	10bar	1.627
ESEM2900	ESEM290R7WN32M	29.00	210	32	-	310	245	4.5	7	10bar	1.670
ESEM2950	ESEM295R7WN32M	29.50	210	32	-	310	245	4.5	7	10bar	1.714
ESEM3000	ESEM300R7WN32M	30.00	210	32	-	310	245	4.6	7	10bar	1.759
ESEM3050	ESEM305R7WN32M	30.50	224	32	-	328	263	4.7	8	10bar	1.907
ESEM3100	ESEM310R7WN32M	31.00	224	32	-	328	263	4.8	8	10bar	1.956
ESEM3150	ESEM315R7WN32M	31.50	224	32	-	328	263	4.8	8	10bar	2.006
ESEM3200	ESEM320R7WN32M	32.00	224	32	-	328	263	4.9	8	10bar	2.058

ESEM精密模块钻 十倍直径

Eternal sophisticated edge modular drill 10x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply

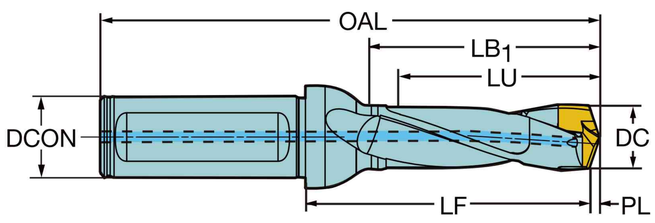


刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM1250	ESEM125R10WN16M	12.50	125	16	-	195	143	1.9	C	10bar	0.218
ESEM1300	ESEM130R10WN16M	13.00	130	16	-	200	148	2	C	10bar	0.235
ESEM1350	ESEM135R10WN16M	13.50	135	16	-	205	153	2.1	C	10bar	0.252
ESEM1351	ESEM136R10WN16M	13.51	135	16	-	205	153	2.1	B	10bar	0.253
ESEM1400	ESEM140R10WN16M	14.00	140	16	-	210	158	2.2	B	10bar	0.271
ESEM1450	ESEM145R10WN20M	14.50	145	20	-	220	166	2.2	B	10bar	0.346
ESEM1451	ESEM146R10WN20M	14.51	145	20	-	220	166	2.2	A	10bar	0.346
ESEM1500	ESEM150R10WN20M	15.00	150	20	-	225	171	2.3	A	10bar	0.368
ESEM1550	ESEM155R10WN20M	15.50	155	20	-	230	176	2.4	A	10bar	0.391
ESEM1600	ESEM160R10WN20M	16.00	160	20	-	234	179	2.5	1	10bar	0.415
ESEM1650	ESEM165R10WN20M	16.50	165	20	-	241	186	2.5	1	10bar	0.445
ESEM1700	ESEM170R10WN20M	17.00	170	20	-	246	191	2.6	1	10bar	0.473
ESEM1750	ESEM175R10WN20M	17.50	175	20	-	251	196	2.7	1	10bar	0.502
ESEM1800	ESEM180R10WN20M	18.00	180	20	-	256	201	2.8	1	10bar	0.534
ESEM1801	ESEM181R10WN20M	18.01	185	20	-	269	208	2.8	2	10bar	0.647
ESEM1850	ESEM185R10WN25M	18.50	185	25	-	269	208	2.8	2	10bar	0.670
ESEM1900	ESEM190R10WN25M	19.00	190	25	-	274	213	2.9	2	10bar	0.705
ESEM1950	ESEM195R10WN25M	19.50	195	25	-	279	218	3	2	10bar	0.741
ESEM2000	ESEM200R10WN25M	20.00	200	25	-	297	236	3.1	3	10bar	0.812
ESEM2050	ESEM205R10WN25M	20.50	205	25	-	297	236	3.2	3	10bar	0.841
ESEM2100	ESEM210R10WN25M	21.00	210	25	-	297	236	3.2	3	10bar	0.871
ESEM2150	ESEM215R10WN25M	21.50	215	25	-	307	246	3.3	3	10bar	0.930
ESEM2200	ESEM220R10WN25M	22.00	220	25	-	307	246	3.4	3	10bar	0.963

ESEM精密模块钻 十倍直径 Eternal sophisticated edge modular drill 10x

削平柄
带中心内冷

Cylindrical shank with flat
Internal coolant supply

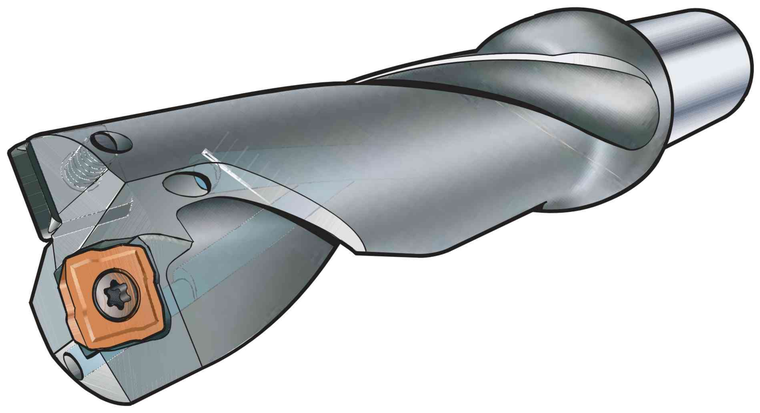


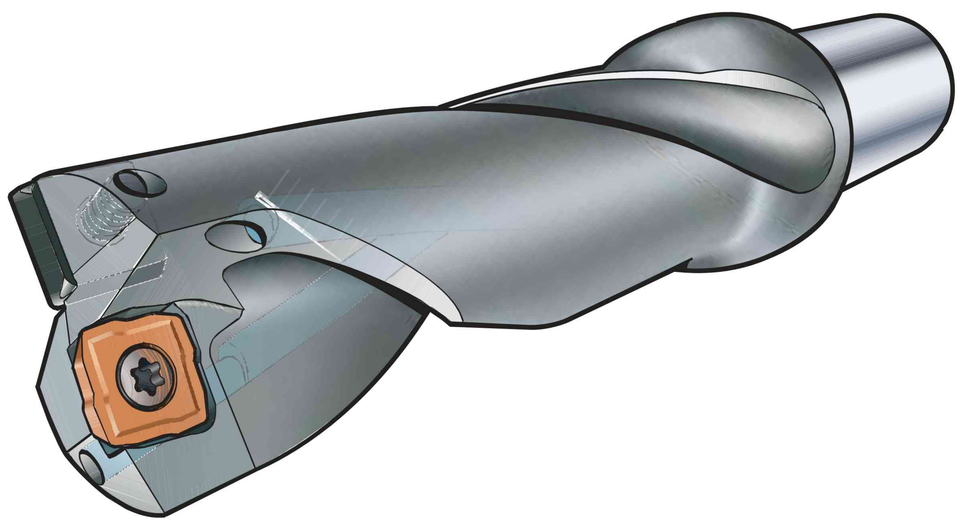
刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions									
		DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
ESEM2201	ESEM221R10WN25M	22.10	225	25	-	319	258	3.5	4	10bar	1.006
ESEM2250	ESEM225R10WN25M	22.50	225	25	-	319	258	3.5	4	10bar	1.034
ESEM2300	ESEM230R10WN25M	23.00	230	25	-	319	258	3.5	4	10bar	1.070
ESEM2350	ESEM235R10WN25M	23.50	235	25	-	329	268	3.6	4	10bar	1.140
ESEM2400	ESEM240R10WN25M	24.00	240	25	-	329	268	3.7	4	10bar	1.179
ESEM2401	ESEM241R10WN25M	24.01	245	25	-	346	281	3.7	5	10bar	1.400
ESEM2450	ESEM245R10WN32M	24.50	245	32	-	346	281	3.8	5	10bar	1.441
ESEM2500	ESEM250R10WN32M	25.00	250	32	-	346	281	3.8	5	10bar	1.484
ESEM2550	ESEM255R10WN32M	25.50	255	32	-	356	291	3.9	5	10bar	1.567
ESEM2600	ESEM260R10WN32M	26.00	260	32	-	356	291	4	5	10bar	1.613
ESEM2610	ESEM261R10WN32M	26.01	265	32	-	363	298	4	5	10bar	1.643
ESEM2650	ESEM265R10WN32M	26.50	265	32	-	363	298	4.1	6	10bar	1.690
ESEM2700	ESEM270R10WN32M	27.00	270	32	-	368	303	4.2	6	10bar	1.761
ESEM2750	ESEM275R10WN32M	27.50	275	32	-	378	313	4.2	6	10bar	1.858
ESEM2800	ESEM280R10WN32M	28.00	280	32	-	378	313	4.3	6	10bar	1.911
ESEM2801	ESEM281R10WN32M	28.01	285	32	-	390	325	4.3	7	10bar	1.970
ESEM2850	ESEM285R10WN32M	28.50	285	32	-	390	325	4.4	7	10bar	2.025
ESEM2900	ESEM290R10WN32M	29.00	290	32	-	390	325	4.5	7	10bar	2.082
ESEM2950	ESEM295R10WN32M	29.50	295	32	-	400	335	4.5	7	10bar	2.194
ESEM3000	ESEM300R10WN32M	30.00	300	32	-	400	335	4.6	7	10bar	2.255
ESEM3001	ESEM301R10WN32M	30.01	305	32	-	414	349	4.7	8	10bar	2.333
ESEM3100	ESEM310R10WN32M	31.00	310	32	-	414	349	4.8	8	10bar	2.462
ESEM3200	ESEM320R10WN32M	32.00	320	32	-	424	359	4.9	8	10bar	2.660

02

万能钻产品

Universal drill products





断屑槽命名 Chip breaker code

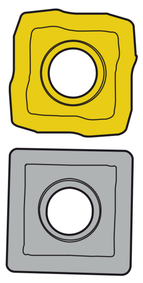
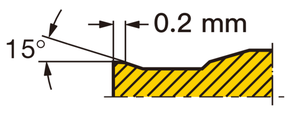
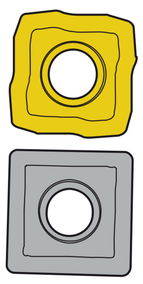
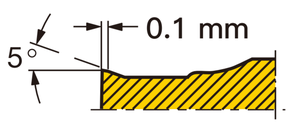
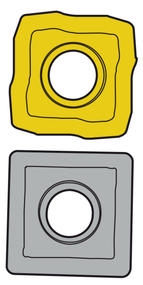
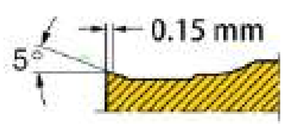
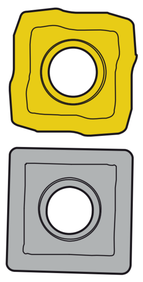
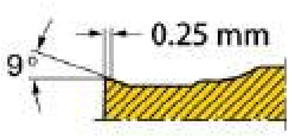
P	L	M
类 型 TYPE	应 用 APPLICATION	切削刃强度 CUTTING EDGE STRENGTH
P 周边刃口 Peripheral insert	L 轻 载 Light	M 中等 Medium
C 中心刃口 Central insert	G 通 用 General	T 高 速 High speed
		R 粗加工 Roughing

切削刃强度 Cutting edge strength

	切削刃强度 CUTTING EDGE STRENGTH								
	1	2	3	4	5	6	7	8	9
中等加工 Medium machining		LM	GM						
高速加工 High speed machining			GT						
粗加工 Roughing machining				GR					

钻削 Drilling

钻削槽型介绍 Drilling chipbreaker overview

应用 Application	刀片外形 Insert Type	型号 Product Code	前角形状 Rake Profile	进给 Feed rate (F) mm 0.04 0.05 0.06 0.10 0.12 0.14 0.16 0.18 0.20 0.26
轻切削中进给 Light cut·medium feed		LM		F= 0.04–0.20
通用中进给 General·medium feed		GM		F= 0.04–0.20
通用高进给 General·High Feed		GT		F= 0.06–0.26
通用粗加工 General·Roughing		GR		F= 0.04–0.25

万能钻切削速度建议(公制值)

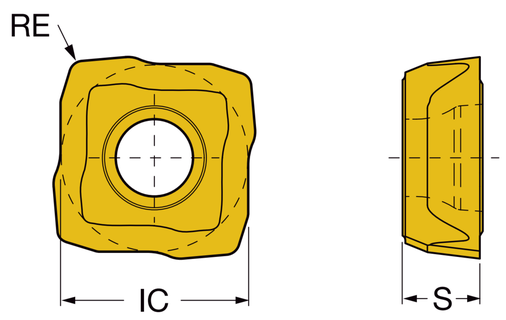
Universal drill cutting speed recommendations

建议适用于使用切削液的情况。

The recommendations are valid for use with cutting fluid.

材料分类 Material Group		硬度 Hardness	涂层牌号 Grade	切削速度 Cutting speed — m/min
ISO P	钢材/Steel			60 80 100 135 180 225 275 320 360 410
P0/P1	低碳钢/Low-Carbon (<0,3% C)	≤130 HB	MP3015 MP3017	
P2	中碳与高碳钢/Medium- and High-Carbon Steels (>0,3% C)	150—325 HB	MP3015 MP3017	
P3	合金钢与工具钢 Alloy Steels and Tool Steels	≤330 HB ≤35 HRC	MP3015 MP3017	
P4	合金钢与工具钢 Alloy Steels and Tool Steels	340—450 HB 36—48 HRC	MP3015 MP3017	
P5	铁素体、马氏体和沉淀硬化不锈钢 Ferritic, Martensitic, and PH Stainless Steels	≤330 HB ≤35 HRC	MP3015 MP3017	
P6	铁素体、马氏体和沉淀硬化不锈钢 Ferritic, Martensitic, and PH Stainless Steels	340—450 HB 36—48 HRC	MP3015 MP3017	
ISO M	不锈钢/Stainless Steel			40 50 60 80 100 135 180 225 275 320
M1	奥氏体不锈钢 Austenitic Stainless Steel	≤180 HB	MP3017 MP3017	
M2	奥氏体不锈钢 Austenitic Stainless Steel	180—220 HB	MP3017 MP3017	
M3	双相不锈钢 Duplex Stainless Steel	220—260 HB	MP3017 SM3517	
ISO S	耐热合金/Heat resistant material			15 45 75 105 140 170 200 230 260 290
S1	铁基耐热合金 Iron-Based, Heat-Resistant Alloys	135—320 HB ≤34 HRC	SM3517 SM3522	
S2	钴基耐热合金 Cobalt-Based, Heat-Resistant Alloys	150—425 HB ≤45 HRC	SM3517 SM3522	
S3	镍基耐热合金 Nickel-Based, Heat-Resistant Alloys	140—475 HB ≤48 HRC	SM3517 SM3522	
S4	钛与钛合金 Titanium and Titanium Alloys	110—450 HB ≤48 HRC	SM3517 SM3522	

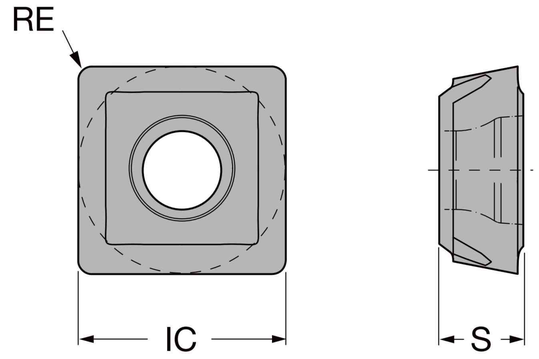
中心刀片 Central insert SCM...–C...M



应用 Application	刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions			牌号 Grade Code			
			S	RE	IC	MP3015	MP3017	SM3517	SM3522
中等进给 Medium feed	03C	SCMT030305–CGM	2.60	0.50	5.70	●	○	○	○
	04C	SCMT040305–CGM	2.80	0.50	6.80	●	○	○	○
	04C	SCMT040305–CLM	2.80	0.50	6.80	●	○	○	○
	05C	SCMT050305–CGM	3.00	0.50	8.40	●	○	○	○
	05C	SCMT050305–CLM	3.00	0.50	8.40	●	○	○	○
	06C	SCMT060406–CGM	3.50	0.60	10.20	●	○	○	○
	06C	SCMT060406–CLM	3.50	0.60	10.20	●	○	○	○
	07C	SCMT070406–CLM	4.00	0.60	12.40	●	○	○	○
	08C	SCMT080508–CLM	4.50	0.80	14.90	●	○	○	○
	09C	SCMT090608–CLM	5.50	0.80	17.90	●	○	○	○
高进给 High feed	06C	SCMT060406–CGR	3.50	0.60	10.20	●	○	○	○

● 有库存（In stock） ○ 需确认库存（Confirmation required）

周刃刀片 Peripheral insert SPM...–P...M

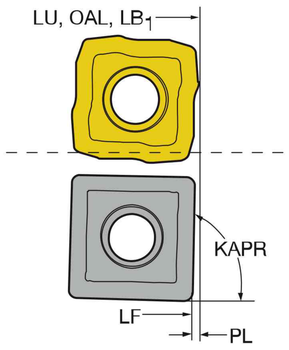


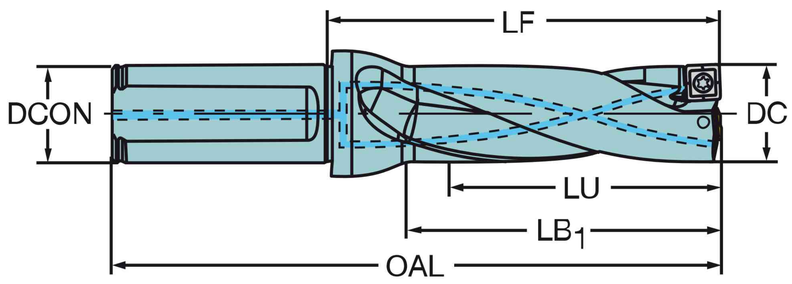
应用 Application	刀片外形 Insert Type	型号 Product Code	尺寸(mm) Dimensions			牌号 Grade Code			
			S	RE	IC	MP3015	MP3017	SM3517	SM3522
中等进给 Medium feed	03P	SPMT0303W05–PGM	2.60	0.50	6.00	●	○	○	○
	04P	SPMT0403W05–PGM	2.80	0.50	7.40	●	○	○	○
	04P	SPMT0403W07–PLM	2.80	0.70	7.40	●	○	○	○
	05P	SPMT0503W05–PGM	3.00	0.50	8.90	●	○	○	○
	06P	SPMT0604W08–PGM	3.50	0.80	10.70	●	○	○	○
	06P	SPMT0604W08–PLM	3.50	0.80	10.70	●	○	○	○
	07P	SPMT0704W10–PLM	4.00	1.00	12.70	●	○	○	○
	08P	SPMT0805W10–PLM	4.50	1.00	15.50	●	○	○	○
	09P	SPMT0906W10–PLM	5.50	1.00	18.60	●	○	○	○
高进给 High feed	03P	SPMT0303W06–PGT	2.60	0.60	6.00	●	○	○	○
	06P	SPMT0604W10–PGR	3.50	1.00	10.70	●	○	○	○
	07P	SPMT0704W12–PGR	4.00	1.20	12.70	●	○	○	○

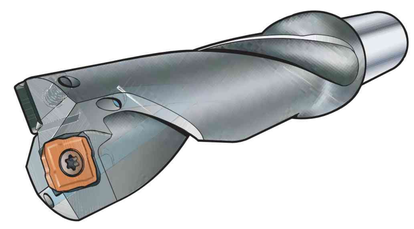
● 有库存（In stock） ○ 需确认库存（Confirmation required）

RXMC88万能钻 RXMC88 universal drill

ISO 9766削平柄, 带中心内冷
Cylindrical shank with flat according to ISO 9766， Internal coolant supply







刀片外形 Insert Type		型号 Product Code	尺寸(mm) Dimensions									
			DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
03C	03P	RXMC165.C20Z2L118_S88	16.50	50	20	67.63	118	53.00	0.36	88°	10bar	0.235
03C	03P	RXMC170.C20Z2L103_S88	17.00	34	20	52.63	103	38.00	0.36	88°	10bar	0.225
03C	03P	RXMC170.C20Z2L119_S88	17.00	51	20	68.63	119	54.00	0.36	88°	10bar	0.232
03C	03P	RXMC175.C25Z2L111_S88	17.50	35	25	54.62	111	39.00	0.37	88°	10bar	0.347
03C	03P	RXMC175.C25Z2L128_S88	17.50	53	25	71.62	128	56.00	0.37	88°	10bar	0.362
03C	03P	RXMC180.C25Z2L112_S88	18.00	36	25	55.62	112	40.00	0.37	88°	10bar	0.352
03C	03P	RXMC180.C25Z2L129_S88	18.00	54	25	72.62	129	57.00	0.37	88°	10bar	0.363
03C	03P	RXMC185.C25Z2L113_S88	18.50	37	25	56.62	113	41.00	0.37	88°	10bar	0.354
03C	03P	RXMC185.C25Z2L131_S88	18.50	56	25	74.62	131	59.00	0.37	88°	10bar	0.369
03C	03P	RXMC190.C25Z2L114_S88	19.00	38	25	57.61	114	42.00	0.38	88°	10bar	0.359
03C	03P	RXMC190.C25Z2L132_S88	19.00	57	25	75.61	132	60.00	0.38	88°	10bar	0.375
03C	03P	RXMC195.C25Z2L116_S88	19.50	39	25	59.61	116	43.00	0.38	88°	10bar	0.371
03C	03P	RXMC195.C25Z2L135_S88	19.50	59	25	78.61	135	62.00	0.38	88°	10bar	0.387
04C	04P	RXMC200.C25Z2L117_S88	20.00	40	25	60.56	117	44.00	0.43	88°	10bar	0.367
04C	04P	RXMC200.C25Z2L137_S88	20.00	60	25	80.56	137	64.00	0.43	88°	10bar	0.340
04C	04P	RXMC205.C25Z2L138_S88	20.50	62	25	81.56	138	65.00	0.43	88°	10bar	0.392
04C	04P	RXMC209.C25Z2L140_S88	20.90	63	25	83.56	140	66.00	0.43	88°	10bar	0.412
04C	04P	RXMC210.C25Z2L120_S88	21.00	42	25	63.56	120	46.00	0.43	88°	10bar	0.382
04C	04P	RXMC210.C25Z2L140_S88	21.00	63	25	83.56	140	66.00	0.43	88°	10bar	0.396
04C	04P	RXMC215.C25Z2L142_S88	21.50	65	25	85.55	142	68.00	0.44	88°	10bar	0.404
04C	04P	RXMC220.C25Z2L122_S88	22.00	44	25	65.55	122	48.00	0.44	88°	10bar	0.367
04C	04P	RXMC220.C25Z2L143_S88	22.00	66	25	86.55	143	69.00	0.44	88°	10bar	0.423
04C	04P	RXMC225.C25Z2L146_S88	22.50	68	25	89.54	146	71.00	0.45	88°	10bar	0.432
04C	04P	RXMC230.C25Z2L125_S88	23.00	46	25	68.54	125	50.00	0.45	88°	10bar	0.403
04C	04P	RXMC230.C25Z2L147_S88	23.00	69	25	90.54	147	72.00	0.45	88°	10bar	0.448
04C	04P	RXMC235.C25Z2L149_S88	23.50	71	25	92.54	149	74.00	0.45	88°	10bar	0.443
04C	04P	RXMC239.C25Z2L151_S88	23.90	72	25	94.53	151	76.00	0.46	88°	10bar	0.465

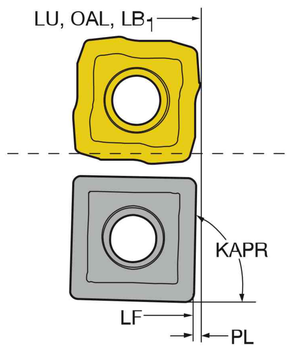
RXMC88万能钻 RXMC88 universal drill

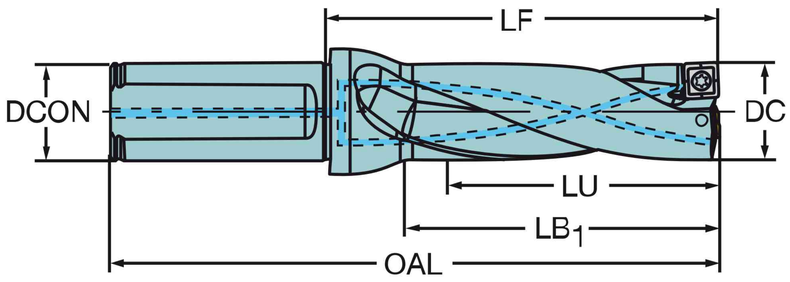
刀片外形 Insert Type		型号 Product Code	尺寸(mm) Dimensions									
			DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
05C	05P	RXMC240.C25Z2L127_S88	24.00	48	25	70.49	127	52.00	0.50	88°	10bar	0.340
05C	05P	RXMC240.C25Z2L151_S88	24.00	72	25	94.49	151	76.00	0.50	88°	10bar	0.400
05C	05P	RXMC245.C25Z2L153_S88	24.50	74	25	96.49	153	77.00	0.50	88°	10bar	0.480
05C	05P	RXMC250.C25Z2L130_S88	25.00	50	25	73.48	130	54.00	0.51	88°	10bar	0.400
05C	05P	RXMC250.C25Z2L155_S88	25.00	75	25	98.48	155	79.00	0.51	88°	10bar	0.460
05C	05P	RXMC255.C32Z2L156_S88	25.50	77	32	99.48	156	80.00	0.51	88°	10bar	0.501
05C	05P	RXMC260.C32Z2L137_S88	26.00	52	32	76.47	137	56.00	0.52	88°	10bar	0.650
05C	05P	RXMC260.C32Z2L162_S88	26.00	78	32	101.47	162	81.00	0.52	88°	10bar	0.700
05C	05P	RXMC264.C32Z2L164_S88	26.40	79	32	103.47	164	83.00	0.52	88°	10bar	0.707
05C	05P	RXMC265.C32Z2L164_S88	26.50	80	32	103.47	164	83.00	0.52	88°	10bar	0.717
05C	05P	RXMC270.C32Z2L139_S88	27.00	54	32	78.46	139	58.00	0.53	88°	10bar	0.669
05C	05P	RXMC270.C32Z2L165_S88	27.00	81	32	104.46	165	84.00	0.53	88°	10bar	0.724
05C	05P	RXMC275.C32Z2L168_S88	27.50	83	32	107.46	168	86.00	0.53	88°	10bar	0.761
05C	05P	RXMC280.C32Z2L142_S88	28.00	56	32	81.46	142	60.00	0.53	88°	10bar	0.693
05C	05P	RXMC280.C32Z2L169_S88	28.00	84	32	108.46	169	87.00	0.53	88°	10bar	0.755
05C	05P	RXMC285.C32Z2L171_S88	28.50	86	32	110.45	171	89.00	0.54	88°	10bar	0.770
05C	05P	RXMC290.C32Z2L144_S88	29.00	58	32	83.45	144	62.00	0.54	88°	10bar	0.710
05C	05P	RXMC290.C32Z2L172_S88	29.00	87	32	111.45	172	90.00	0.54	88°	10bar	0.784
05C	05P	RXMC294.C32Z2L175_S88	29.40	88	32	114.44	175	92.00	0.55	88°	10bar	0.845
05C	05P	RXMC295.C32Z2L175_S88	29.50	89	32	114.44	175	92.00	0.55	88°	10bar	0.809
06C	06P	RXMC300.C32Z2L147_S88	30.00	60	32	86.41	147	64.00	0.58	88°	10bar	0.699
06C	06P	RXMC300.C32Z2L177_S88	30.00	90	32	116.41	177	94.00	0.58	88°	10bar	0.790
06C	06P	RXMC305.C32Z2L178_S88	30.50	92	32	117.40	178	95.00	0.59	88°	10bar	0.800
06C	06P	RXMC310.C40Z2L160_S88	31.00	62	40	89.40	160	66.00	0.59	88°	10bar	1.136
06C	06P	RXMC310.C40Z2L191_S88	31.00	93	40	120.40	191	97.00	0.59	88°	10bar	1.210
06C	06P	RXMC315.C40Z2L192_S88	31.50	95	40	121.39	192	98.00	0.60	88°	10bar	1.230
06C	06P	RXMC320.C40Z2L162_S88	32.00	64	40	91.39	162	68.00	0.60	88°	10bar	1.156
06C	06P	RXMC320.C40Z2L194_S88	32.00	96	40	123.39	194	100.00	0.60	88°	10bar	1.252
06C	06P	RXMC325.C40Z2L196_S88	32.50	98	40	125.39	196	101.00	0.60	88°	10bar	1.278
06C	06P	RXMC330.C40Z2L165_S88	33.00	66	40	94.38	165	70.00	0.61	88°	10bar	1.200
06C	06P	RXMC330.C40Z2L198_S88	33.00	99	40	127.38	198	103.00	0.61	88°	10bar	1.303
06C	06P	RXMC335.C40Z2L200_S88	33.50	101	40	129.38	200	105.00	0.61	88°	10bar	1.317
06C	06P	RXMC340.C40Z2L168_S88	34.00	68	40	97.37	168	73.00	0.62	88°	10bar	1.227
06C	06P	RXMC340.C40Z2L201_S88	34.00	102	40	130.37	201	106.00	0.62	88°	10bar	1.340
06C	06P	RXMC345.C40Z2L204_S88	34.50	104	40	133.37	204	108.00	0.62	88°	10bar	1.380
06C	06P	RXMC350.C40Z2L171_S88	35.00	70	40	100.37	171	75.00	0.62	88°	10bar	1.270
06C	06P	RXMC350.C40Z2L205_S88	35.00	105	40	134.37	205	109.00	0.62	88°	10bar	1.400
06C	06P	RXMC355.C40Z2L207_S88	35.50	107	40	136.36	207	111.00	0.63	88°	10bar	1.415

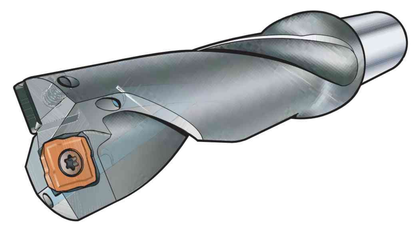
RXMC88万能钻 RXMC88 Universal drill

ISO 9766削平柄, 带中心内冷

Cylindrical shank with flat according to ISO 9766， Internal coolant supply







刀片外形 Insert Type		型号 Product Code	尺寸(mm) Dimensions									
			DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
07C	07P	RXMC360.C40Z2L174_S88	36.00	72	40	103.32	174	77.00	0.67	88°	10bar	1.280
07C	07P	RXMC360.C40Z2L209_S88	36.00	108	40	138.32	209	112.00	0.67	88°	10bar	1.397
07C	07P	RXMC370.C40Z2L175_S88	37.00	74	40	104.31	175	78.00	0.68	88°	10bar	1.300
07C	07P	RXMC370.C40Z2L212_S88	37.00	111	40	141.31	212	115.00	0.68	88°	10bar	1.446
07C	07P	RXMC380.C40Z2L178_S88	38.00	76	40	107.31	178	80.00	0.68	88°	10bar	1.349
07C	07P	RXMC380.C40Z2L216_S88	38.00	114	40	145.31	216	118.00	0.68	88°	10bar	1.480
07C	07P	RXMC390.C40Z2L180_S88	39.00	78	40	109.30	180	82.00	0.69	88°	10bar	1.366
07C	07P	RXMC390.C40Z2L219_S88	39.00	117	40	148.30	219	121.00	0.69	88°	10bar	1.535
07C	07P	RXMC400.C40Z2L183_S88	40.00	80	40	112.29	183	84.00	0.70	88°	10bar	1.413
07C	07P	RXMC400.C40Z2L223_S88	40.00	120	40	152.29	223	124.00	0.70	88°	10bar	1.603
07C	07P	RXMC410.C40Z2L187_S88	41.00	82	40	116.28	187	87.00	0.71	88°	10bar	1.480
07C	07P	RXMC410.C40Z2L227_S88	41.00	123	40	156.28	227	127.00	0.71	88°	10bar	1.690
07C	07P	RXMC420.C40Z2L189_S88	42.00	84	40	118.27	189	89.00	0.72	88°	10bar	1.505
07C	07P	RXMC420.C40Z2L230_S88	42.00	126	40	159.27	230	130.00	0.72	88°	10bar	1.740
07C	07P	RXMC430.C40Z2L192_S88	43.00	86	40	121.26	192	91.00	0.73	88°	10bar	1.510
07C	07P	RXMC430.C40Z2L234_S88	43.00	129	40	163.26	234	133.00	0.73	88°	10bar	1.730
08C	08P	RXMC440.C40Z2L194_S88	44.00	88	40	123.23	194	93.00	0.76	88°	10bar	1.510
08C	08P	RXMC440.C40Z2L237_S88	44.00	132	40	166.23	237	136.00	0.76	88°	10bar	1.720
08C	08P	RXMC450.C40Z2L197_S88	45.00	90	40	126.22	197	95.00	0.77	88°	10bar	1.560
08C	08P	RXMC450.C40Z2L242_S88	45.00	135	40	171.22	242	140.00	0.77	88°	10bar	1.800
08C	08P	RXMC460.C40Z2L200_S88	46.00	92	40	129.22	200	97.00	0.78	88°	10bar	1.610
08C	08P	RXMC460.C40Z2L246_S88	46.00	138	40	175.22	246	143.00	0.78	88°	10bar	1.881
08C	08P	RXMC470.C40Z2L202_S88	47.00	94	40	131.21	202	99.00	0.78	88°	10bar	1.800
08C	08P	RXMC470.C40Z2L249_S88	47.00	141	40	178.21	249	146.00	0.78	88°	10bar	2.140

RXMC88万能钻 RXMC88 Universal drill

刀片外形 Insert Type		型号 Product Code	尺寸(mm) Dimensions									
			DC	LU	DCON	LF	OAL	Lb1	PL	KAPR	CP	KG
08C	08P	RXMC480.C40Z2L205_S88	48.00	96	40	134.20	205	101.00	0.79	88°	10bar	1.925
08C	08P	RXMC480.C40Z2L253_S88	48.00	144	40	182.20	253	149.00	0.79	88°	10bar	2.235
08C	08P	RXMC490.C40Z2L207_S88	49.00	98	40	136.19	207	103.00	0.80	88°	10bar	1.970
08C	08P	RXMC490.C40Z2L256_S88	49.00	147	40	185.19	256	152.00	0.80	88°	10bar	2.275
08C	08P	RXMC500.C40Z2L210_S88	50.00	100	40	139.18	210	105.00	0.81	88°	10bar	2.031
08C	08P	RXMC500.C40Z2L260_S88	50.00	150	40	189.18	260	155.00	0.81	88°	10bar	2.430
08C	08P	RXMC510.C40Z2L214_S88	51.00	102	40	143.18	214	108.00	0.82	88°	10bar	2.110
08C	08P	RXMC510.C40Z2L264_S88	51.00	153	40	193.18	264	158.00	0.82	88°	10bar	2.480
08C	08P	RXMC520.C40Z2L216_S88	52.00	104	40	145.17	216	110.00	0.82	88°	10bar	2.180
08C	08P	RXMC520.C40Z2L267_S88	52.00	156	40	196.17	267	161.00	0.82	88°	10bar	2.595
09C	09P	RXMC530.C40Z2L219_S88	53.00	106	40	148.12	219	112.00	0.87	88°	10bar	2.310
09C	09P	RXMC530.C40Z2L271_S88	53.00	159	40	200.12	271	164.00	0.87	88°	10bar	2.600
09C	09P	RXMC540.C40Z2L221_S88	54.00	108	40	150.11	221	114.00	0.88	88°	10bar	2.380
09C	09P	RXMC540.C40Z2L274_S88	54.00	162	40	203.11	274	167.00	0.88	88°	10bar	2.710
09C	09P	RXMC550.C40Z2L224_S88	55.00	110	40	153.10	224	116.00	0.89	88°	10bar	2.349
09C	09P	RXMC550.C40Z2L279_S88	55.00	165	40	208.10	279	171.00	0.89	88°	10bar	2.850
09C	09P	RXMC560.C40Z2L227_S88	56.00	112	40	156.10	227	118.00	0.89	88°	10bar	2.451
09C	09P	RXMC560.C40Z2L283_S88	56.00	168	40	212.10	283	174.00	0.89	88°	10bar	2.977
09C	09P	RXMC570.C40Z2L229_S88	57.00	114	40	158.09	229	120.00	0.90	88°	10bar	2.530
09C	09P	RXMC570.C40Z2L286_S88	57.00	171	40	215.09	286	177.00	0.90	88°	10bar	3.120
09C	09P	RXMC580.C40Z2L232_S88	58.00	116	40	161.08	232	122.00	0.91	88°	10bar	2.650
09C	09P	RXMC580.C40Z2L290_S88	58.00	174	40	219.08	290	180.00	0.91	88°	10bar	3.593
09C	09P	RXMC590.C40Z2L234_S88	59.00	118	40	163.07	234	124.00	0.92	88°	10bar	2.703
09C	09P	RXMC590.C40Z2L293_S88	59.00	177	40	222.07	293	183.00	0.92	88°	10bar	3.346
09C	09P	RXMC600.C40Z2L237_S88	60.00	120	40	166.06	237	126.00	0.93	88°	10bar	2.820
09C	09P	RXMC600.C40Z2L297_S88	60.00	180	40	226.06	297	186.00	0.93	88°	10bar	3.570
09C	09P	RXMC610.C40Z2L241_S88	61.00	122	40	170.06	241	129.00	0.93	88°	10bar	3.032
09C	09P	RXMC610.C40Z2L302_S88	61.00	183	40	231.06	302	190.00	0.93	88°	10bar	4.039
09C	09P	RXMC620.C40Z2L243_S88	62.00	124	40	172.05	243	131.00	0.94	88°	10bar	3.020
09C	09P	RXMC620.C40Z2L305_S88	62.00	186	40	234.05	305	193.00	0.94	88°	10bar	4.115
09C	09P	RXMC630.C40Z2L246_S88	63.00	126	40	175.04	246	133.00	0.95	88°	10bar	3.173
09C	09P	RXMC630.C40Z2L309_S88	63.00	189	40	238.04	309	196.00	0.95	88°	10bar	4.300

E

陶瓷刀具

Ceramics inserts

陶瓷刀具 Ceramics inserts

材料分类与核心原理

氧化铝基陶瓷 (Al_2O_3)

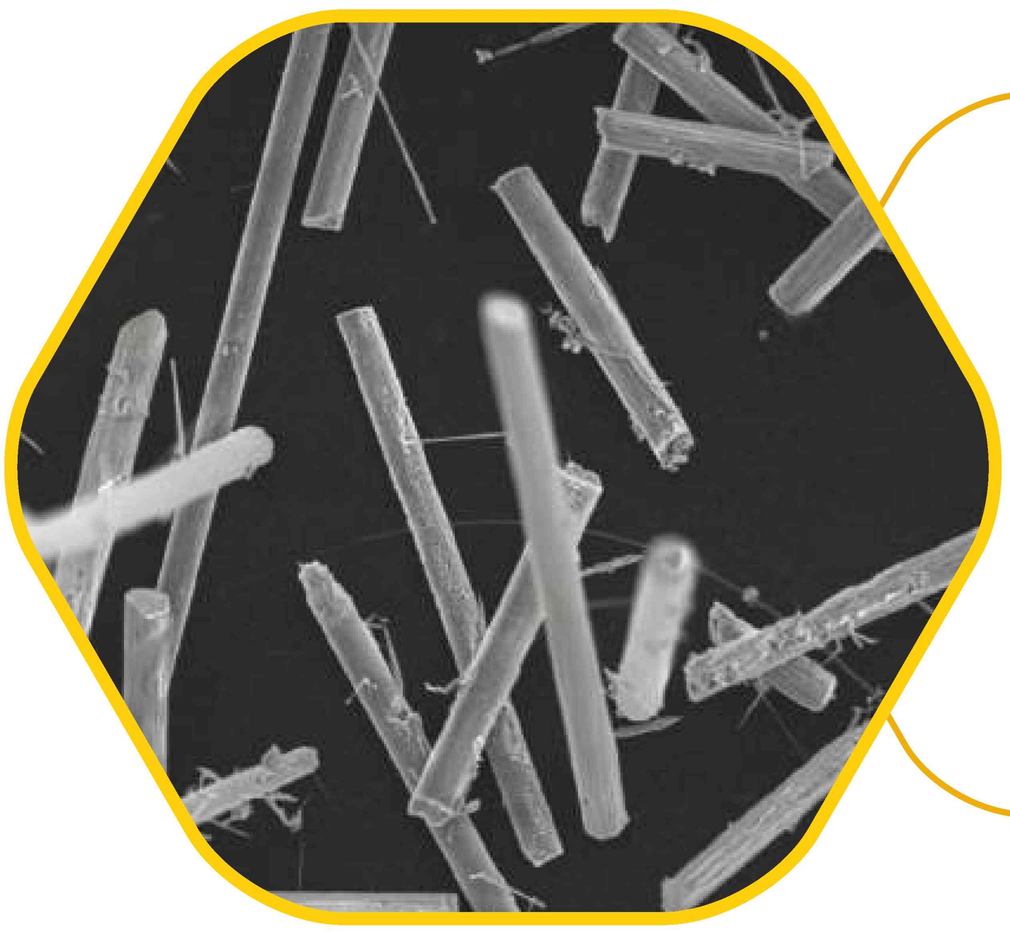
- **成分与结构:** α–Al_2O_3 作为主要晶相，添加 TiC (20—30%) 和 ZrO_2 (5—10 %)以提升韧性。
- **原理:** 刚玉晶体结构（六方密堆积）提供 HV 1800—2000 的维氏硬度；TiC 颗粒提供弥散强化，而 ZrO_2 发生马氏体相变，实现 600—800 MPa的抗弯强度。
- **特性:** 优异的化学稳定性和耐磨性，但抗热震性差 (ΔT < 400°C) 且脆性高。适用于铸铁和淬硬钢的连续或半连续加工，可实现高加工精度和表面质量。

赛隆陶瓷 (SiAlON)

- **成分与结构:** β–Si_3N_4 六方晶系为主相；添加 Al_2O_3 以促进液相烧结。形成可调节 α/β 相比的固溶体以平衡硬度和韧性，形成致密多相陶瓷。
- **原理:** α相贡献更高硬度(HV1900—2100)，β相增强韧性(8—10 MPa·$m^{1/2}$)；SiO_2—Al_2O_3 在高温下形成氧化膜，降低摩擦系数。高共价键含量(70 %) 提供卓越抗热震性(ΔT > 800°C)。
- **特性:** 综合性能最优，抗氧化性超过 1200°C，抗蠕变性好且摩擦系数低特别适用于高温合金（如 Inconel 718, GH4169）、钛合金和耐热钢等难加工材料的断续切削高速加工。

碳化硅晶须增强陶瓷 ($SiCw/Al_2O_3$)

- **成分与结构:** Al_2O_3 基体中嵌入 20—30% SiC 晶须（长径比 50:1），硬度仅次于金刚石。
- **原理:** 晶须诱导的载荷分布机制实现硬韧协同优化，断裂韧性提升至8—10MPa·$m^{1/2}$；高导热系数 (80—100 W/(m·K)) 减少切削热积聚。
- **特性:** 优异的抗崩损性兼具耐磨性和强度。主要用于镍基高温合金（如 Inconel 718）、钛合金和高强度铸铁等难加工材料的粗加工和半精加工尤其适用于金属去除率超 500 cm^3/min 的高效加工。



Material Classification and Core Principles

Alumina–Based Ceramics (Al_2O_3)

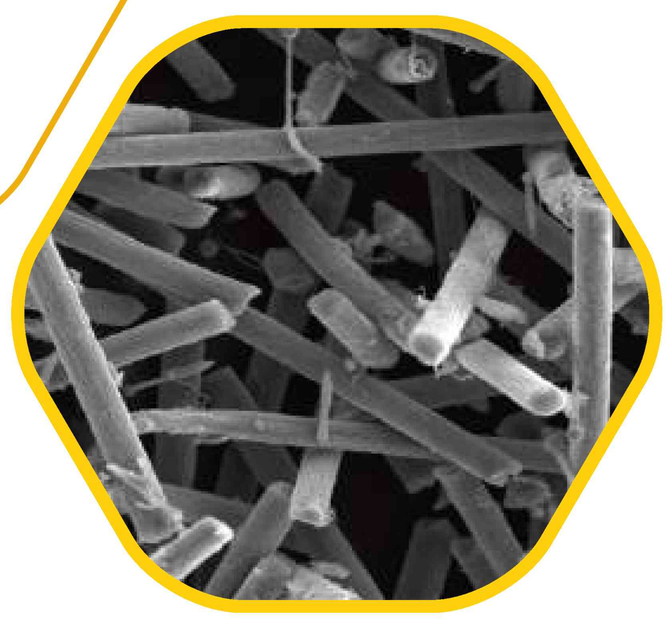
- Composition & Structure: α–Al_2O_3 as the main crystalline phase, with additions of TiC (20—30%) and ZrO_2 (5—10%) to improve toughness.
- Principle: Corundum crystal structure (hexagonal close–packed) provides a Vickershardness of HV 1800—2000; TiC particles provide dispersion strengthening while ZrO_2 undergoes martensitic phase transformation, achieving flexural strength of 600—800 Mpa.
- Characteristics: Excellent chemical stability and wear resistance, but poor thermal shock resistance (ΔT < 400°C) and high brittleness. Suitable for continuous or semi–continuous machining of cast iron and hardened steel, enabling high machining accuracy and surface quality.

Sialon Ceramics (SiAlON)

- Composition & Structure: β–Si_3N_4 hexagonal crystal system as the primary phase; $Al_2O_3$is added to promote liquid phase sintering. It forms a solid solution with a tunable α/βphase ratio to balance hardness and toughness, resulting in a dense multiphase ceramic.
- Principle: The α–phase contributes to higher hardness (HV 1900—2100), while the β–phase enhances toughness (8—10 MPa·$m^{1/2}$); SiO_2—Al_2O_3 forms an oxide film at elevated temperatures, reducing the coefficient of friction. The high covalent bond content (70%) provides excellent thermal shock resistance (ΔT > 800°C).
- Characteristics: Optimal overall performance with oxidation resistance exceeding 1200 °C, good creep resistance, and low friction coefficient. It is particularly suitable for interrupted cutting operations, enabling high–speed of difficult–to–machine materials such as high–temperature alloys (e.g., Inconel 718, GH4169), titanium alloys, and heat–resistant steels.

Silicon Carbide Whisker–Reinforced Ceramics ($SiCw/Al_2O_3$)

- Composition & Structure: Al_2O_3 matrix embedded with 20—30% SiC whiskers (aspect ratio of 50:1), enabling hardness second only to diamond.
- Principle: The whisker–induced load distribution mechanism enables synergistic optimization of hardness and toughness, improving fracture toughness to 8—10 Mpa·$m^{1/2}$; high thermal conductivity (80—100 W/(m·K)) reduces cutting heat accumulation.
- Characteristics: Excellent chipping resistance with combined wear resistance and strength. Primarily used for rough and semi–finishing operations of difficult–to–machine materials such as nickel –based superalloys (e.g., Inconel 718), titanium alloys, and high–strength cast iron, especially for high –efficiency machining with metal removal rates exceeding 500 cm^3/min.



陶瓷刀具 Ceramics inserts

应用领域 Application area

碳化硅(SiC)晶须增强陶瓷刀片提供世界级硬度和断裂韧性。

添加碳化硅(SiC)使切削刀具达到仅次于金刚石的硬度水平，通过晶须的长程力分布机制，该创新在保持卓越断裂韧性的同时实现硬度和韧性的协同优化。刀具基体材料和牌号的选择是规划成功金属切削操作的关键因素。

在诱发金属塑性化的高切削力和热载荷下，陶瓷基体保持结构完整性。

晶须增强切削刀具提供优异的断裂韧性和耐磨性，使其成为加工多样化工件材料的理想选择，包括镍基高温合金、钴基合金、高硬度钢、灰铸铁、球墨铸铁和轧机轧辊。

silicon carbide (SiC) whisker–reinforced ceramic inserts provide world–classhardness and fracture toughness.

The addition of silicon carbide (SiC) enables cutting tools to achieve a hardness level secondonly to diamond,Through the long–range force distribution mechanism of whiskers, thisinnovation achieves a synergistic optimization of hardness and toughness while maintainingexceptional fracture toughness. The selection of tool substrate materials and grades is acritical factor in planning a successful metal–cutting operation.

Under high cutting forces and thermal loads that induce metallic plasticization, sceramic substrates retain structural integrity.

Whisker–reinforced cutting tools deliver superior fracture toughness and wear resistance,making them ideal for machining diverse workpiece materials, including nickel–basedsuperalloys, cobalt–based alloys, high–hardness steels, gray cast iron, nodular cast iron, androlling mill rolls.

应用领域/Application Area

航空航天工业/Aerospace Industry :

加工航空发动机用镍基高温合金部件(例如Inconel718)，包括轴、涡轮盘燃烧室机匣以及整体叶盘(叶片集成式盘)

Machining nickel–based superalloy components (e.g., Inconel 718) for aero–engines, including shafts, turbine disk, combustor casings and blisks (blade–integrated disks) .

能源领域/Energy Sector :

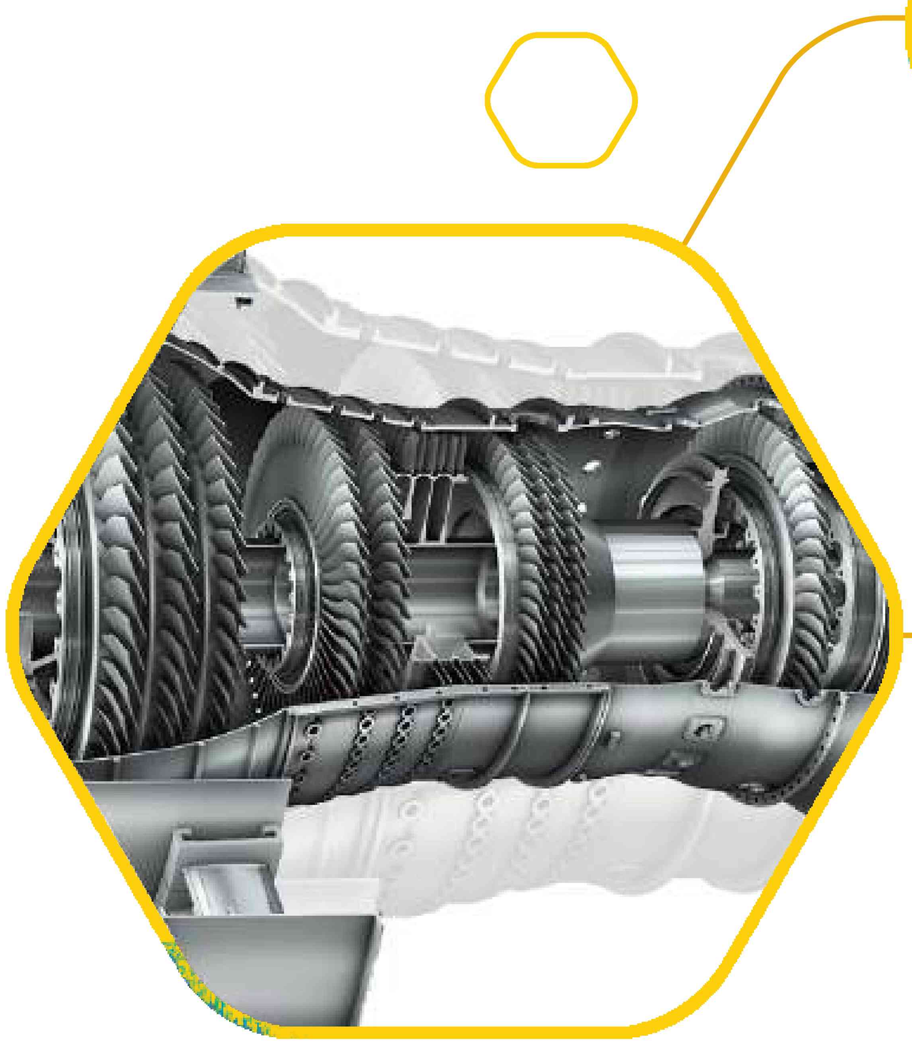
涡轮叶片加工，转子盘车削，冷却孔和气膜冷却孔钻削，密封环槽加工，合金油气管道，核电部件加工

Turbine blade machining, Rotor disc turning, Cooling hole & film cooling hole drilling, Sealingring groove processing, Alloy oil/gas pipelines, Nuclear power components machining

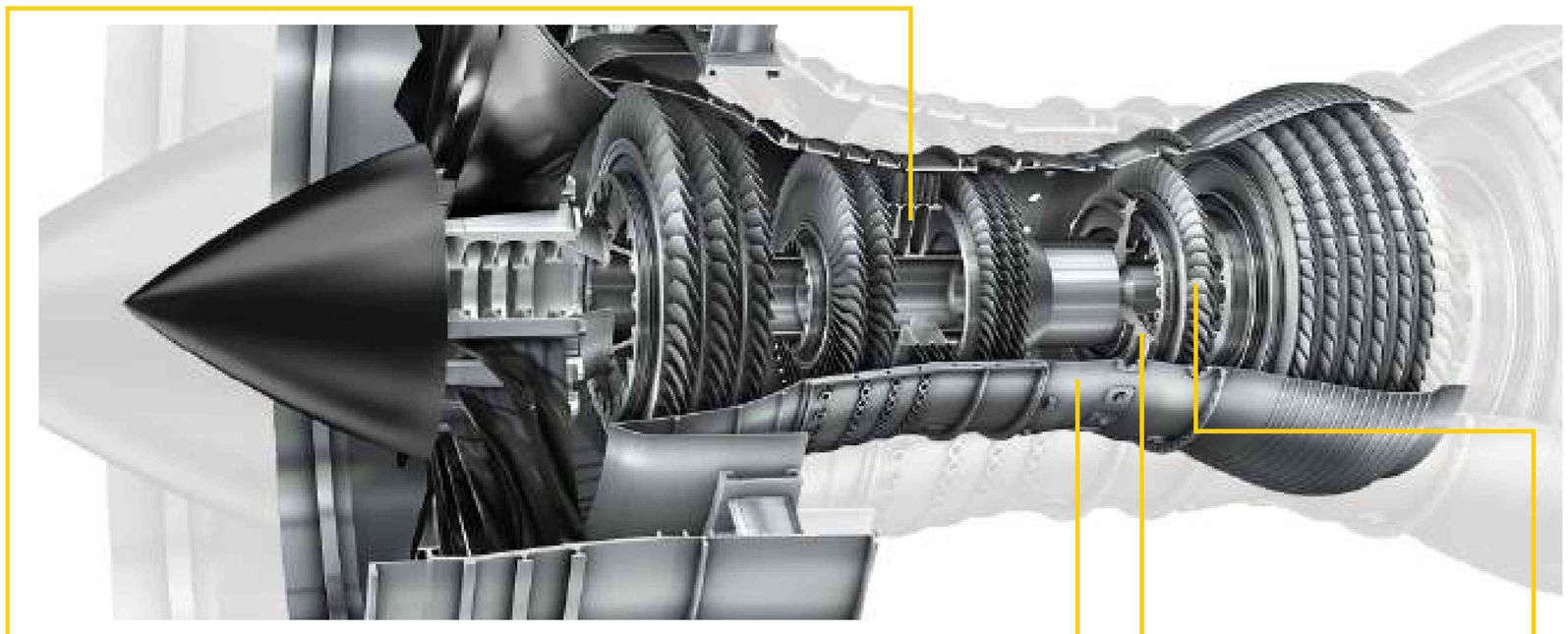
轧钢工业/Steel Rolling Sector :

高铬铸铁轧辊的粗加工/精加工，碳化钨轧辊的轧槽加工和修复，高速钢轧辊的轧槽加工操作。

Roughing/finishing of high–chromium cast iron rolls, Grooving and refurbishment of tungsten carbide rolls, Fluting operations on high –speed steel rolls.



航空航天工业 Aerospace industry



盘轴/Rotor Disk Shaft

燃烧室机匣/Combustor Casing

涡轮盘/Turbine Disk

叶盘/叶片/ Bladed Disk/Bladed

航空用切削刀具/Cutting Tools for Aerospace

航空航天工业/Aerospace Industry：

我们的晶须/SIALON增强陶瓷切削刀具专为粗加工和半精加工应用中的重型材料去除而设计。

它们为耐热超合金的高速加工提供完美解决方案 – Inconel, Waspaloy, Haynes, Monel, Rene, Incoloy A-286, Nimonic, Udimet等。

KS25/KS35牌号提供全面先进的高速切削刀具解决方案，用于：

Our whisker/SIALON reinforced ceramic cutting tools are designed for heavy material removal in roughing and semi–finishing applications.

They offer the perfect solution for high–speed machining of Heat Resistant Super Alloys— Inconel,Waspaloy, Haynes, Monel, Rene, Incoloy A–286, Nimonic, Udimet, etc.

The KS25/KS35 Grade offers a comprehensive and advanced range of high–speed cutting tool solutions for:

- 速度能力提升（比硬质合金刀具提高十倍以上）实现更高产量和更短周期时间
  Increased speed capability (more than ten times compared to carbide cutting tools) for higher throughput and shorter cycle times
- 韧性和抗断裂性增强以提高进给率能力
  Increased toughness and fracture resistance for higher feed rate capability
- 增加多样性和锋利刃口处理/Increased variety and sharper edge preparatio
- 高效切削/Efficient cutting
- 刀具寿命更长/Longer tool life
- 连续切削条件下性能更佳/Superior performance in continuous cutting conditions
- 适用湿式与干式加工/Capable of both wet and dry machining

随着航空航天工业对轻量化材料的需求增长，可制造专用于难切削材料加工的新牌号与刀具。凭借更高的切削速度和进给率，在以下应用中提供稳定加工效果与更长刀具寿命：

As demand for lightweight materials in the aerospace industry increases, can manufacture new grades and tooling that specialize in machining hard–to–cut materials.
With higher speed and feed rates, cutting tools deliver consistent results and longer tool life in applications for:

- 粗车（外圆/内孔）/Rough turning (O.D. & I.D.)
- 半精加工（外圆/内孔）/Semi finishing (O.D. & I.D.)
- 铣削/Milling
- 开槽/Grooving

航空发动机高温合金零件加工
High-Temperature Alloy Component Machining for Aero-Engines

应用案例/Application Cases:

- 涡轮盘枞树槽加工：晶须增韧陶瓷刀片用于铣削镍基高温合金（例如Inconel 718 切削速度达500 m/min），刀具寿命相比硬质合金提升8~10倍。
  Turbine Disk Fir–Tree Slot Machining: Whisker–reinforced ceramic insert used for milling nickel –based superalloys (e.g., Inconel 718), cutting speed reaching 500 m/min, tool life increased by 8—10 times compared to cemented carbide.
- 燃烧室机匣台阶特征粗铣：用于粗铣加工的SiAlON陶瓷刀片可提供延长2~3倍的刀具寿命与单件循环时间减少60%，并具有卓越的热稳定性。
  Rough Milling of Combustor Casing Step Features: SiAlON ceramic inserts for rough milling applications deliver 2–3X extended tool life and 60% reduced cycle time per part,with superior thermal stability.

核心优势/Core Advantages:

- 降本增效：晶须增韧陶瓷刀片在极端工况下提供卓越的稳定性，并具备优异的抗崩刃性。
  Cost reduction and efficiency enhancement: Whisker–reinforced ceramic inserts deliver exceptional stability under extreme operating conditions with superior edge chipping resistance.
- 耐高温性：1200°C下硬度保持率＞85%,有效抑制高温合金加工硬化层引发的崩刃。
  High–Temperature Resistance: Hardness retention rate >85% at 1200°C, effectively suppressing edge chipping induced by work hardening layers in superalloys.

应用案例/Application Cases:

- 叶盘粗开槽：在整体叶盘（IBR）粗开槽加工中，SiAlON陶瓷刀片可实现350~400 m/min的切削速度，材料去除率达500 cm^3/min。
  Rough Slotting of Bladed disk: During rough slotting of integrally bladed disks (IBR), Sialon ceramic insertachieve cutting speeds of 350—400 m/min with material removalrates reaching 500 cm^3/min.

核心优势/Core Advantages:

- 耐高温稳定性与化学惰性：SiAlON陶瓷刀片在1300°C切削温度下保持90%以上的强度保持率，加工Inconel 738LC材质叶盘时呈现零扩散磨损。
  High–Temperature Stability and Chemical Inertness: Sialon ceramic insert maintain over 90% strength retention at 1300°C cutting temperature, exhibiting zero diffusional wear when machining Inconel 738LC bladed disks.

陶瓷刀具 Ceramics inserts

能源领域 Energy sector

风电行业/Wind power industry

1.大型轴承套圈加工(硬化钢，60~65 HRC)/Machining of Large Bearing Rings (Hardened Steel, HRC60–65) :

- 刀片选型：氧化铝基陶瓷（TiC/ZrO_2增强）或氮化硅基陶瓷（赛隆陶瓷）。
  Insert Selection: Alumina–based Ceramics (TiC/ZrO_2 Reinforced) or Silicon Nitride–based Ceramics.
- **应用案例/Application Cases:**
- 使用赛隆陶瓷刀片车削直径超2m的风电主轴轴承套圈，实现切削速度350 m/min、进给量0.3 mm/r，金属去除率达硬质合金刀具的3倍。
  Turning of wind turbine spindle bearing rings with diameters exceeding 2m, using SiAlON ceramic inserts. Achieved cutting speeds up to 350 m/min, feed rate of 0.3 mm/r, and metal removal rates triple that of cemented carbide tools.
- 表面粗糙度控制在Ra0.8 μm以下，取消后续磨削工序，加工时间减少40%。
  Surface roughness controlled below Ra0.8 μm, eliminating the need for subsequent grinding operations and reducing processing time by 40%.
- **核心优势/Core Advantages**
- 高耐磨性有效抵抗硬化钢中的硬质相磨损，刀具寿命延长至硬质合金的5倍；
  High wear resistance effectively combats carbide wear in hardened steels; tool life extended up to 5times that of cemented carbide;
- 耐高温性（＞1200℃）抑制切削热导致的材料软化变形，确保轴承尺寸稳定性。
  High temperature resistance (>1200℃) suppresses material softening and deformation caused by cutting heat, ensuring dimensional stability of the bearings.

2. 叶片连接螺栓(高强度合金钢，抗拉强度＞1000 MPa)/Blade Connection Bolts (High–strength Alloy Steel, Tensile Strength > 1000 MPa) :

- 刀片选型：碳化硅晶须增强陶瓷（SiCw/Al_2O_3）。
  Insert Selection: Silicon Carbide Whisker–reinforced Ceramics (SiCw/Al_2O_3).
- **应用案例/Application Cases:**
- 采用SiCw/Al_2O_3刀片车削M36螺栓螺纹，在冲击载荷下持续断续切削，金属去除率超500 cm^3/min，刀具寿命较硬质合金提升8倍。
  Turning of M36 bolt threads using SiCw/Al_2O_3 inserts; sustained intermittent cutting under impact loads, achieving a metal removal rate exceeding 500 cm^3/min. Tool life improved by 8 times compared to cemented carbide.
- **核心优势/Core Advantages:**
- 高断裂韧性（KIC = 8~10 MPa·$m^{1/2}$） 抵抗螺栓毛坯余量不均引发的冲击载荷；
  High fracture toughness (KIC = 8—10 Mpa·$m^{1/2}$) enables resistance to impact loads caused by uneven stock allowance on bolt blanks;
- 导热系数＞80 W/(m·K) 快速导散切削热，避免螺纹表面烧伤并保障表面完整性。
  Thermal conductivity exceeding 80 W/(m·K) rapidly dissipates cutting heat, preventingthread surface burn and ensuring surface integrity.

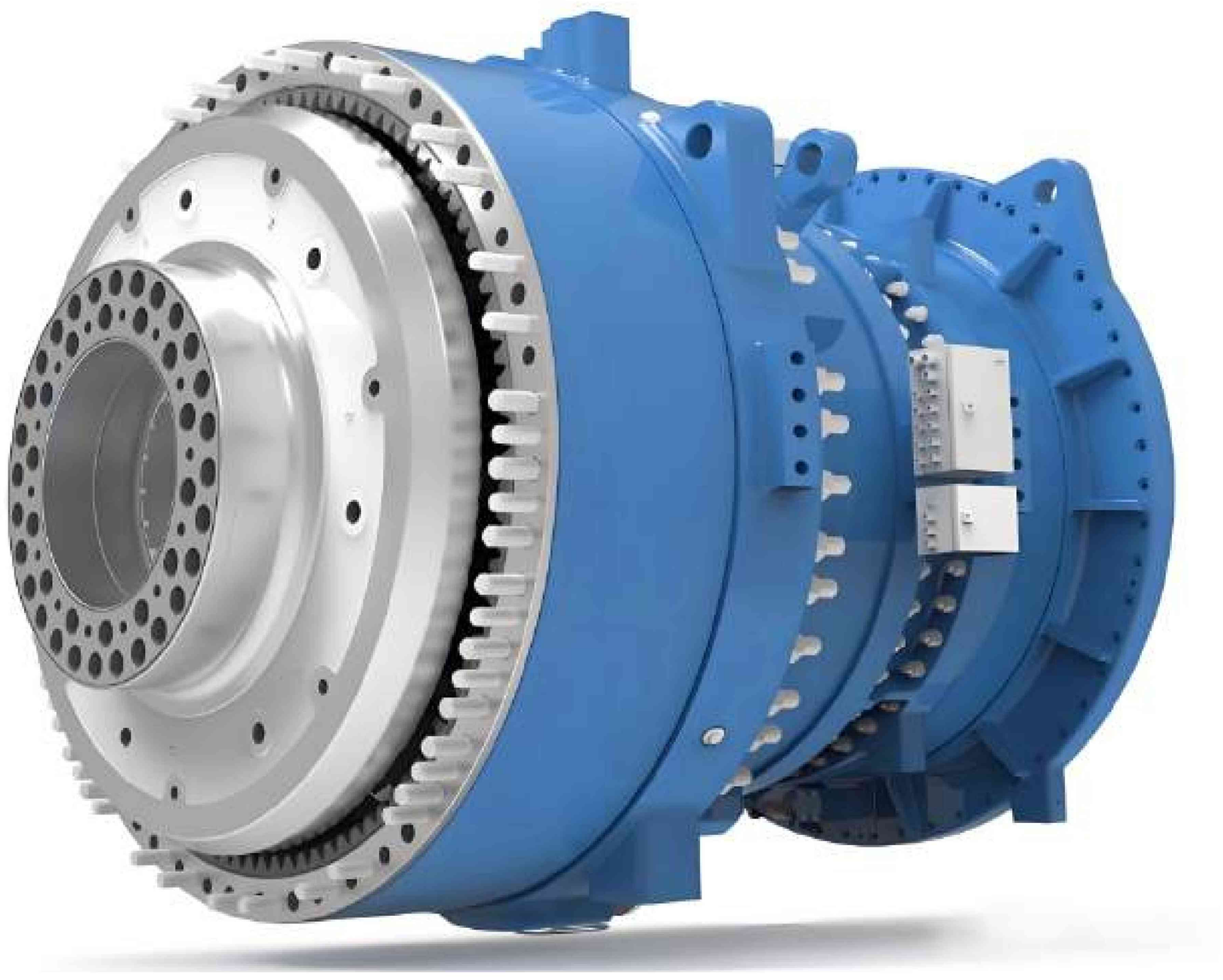
核电领域/Nuclear Energy Sector

1.反应堆阀门密封面加工(钴基合金堆焊层，55HRC以上)/Reactor Valve Sealing Surface (Cobalt–based alloy hardfacing layer, HRC55+):

- 刀片选型：晶须增强氧化铝陶瓷或α/β复相赛隆陶瓷。
  Insert Selection: Whisker–reinforced alumina ceramic or α/β composite Sialon.
- **应用案例/Application Cases：**
- 采用SiCw/Al_2O_3刀具车削阀门密封面，切削速度150 m/min，单刃口可加工50件,替代原电火花工艺使成本降低60%。
  Turning of valve sealing surface using SiCw/Al_2O_3 tool, cutting speed 150m/min, 50 pieces can be processed with single edge grinding, replacing the original EDM process, cost reduced by 60%.
- **核心优势/Core Advantages:**
- 化学惰性避免钴基合金加工中的扩散磨损；
  Chemical inertness avoids diffusion wear in cobalt–based alloy machining
- 硬度＞2000HV高效切削硬化层，表面完整性优于磨削工艺。
  Hardness >2000HV efficiently cuts hardened layers, surface integrity superior to grinding.

2. 乏燃料储罐内衬加工(高锰钢，显著加工硬化特性)/Spent Fuel Storage Tank Liner (High–manganese steel, significant work hardening) :

- 刀片选型：β-赛隆陶瓷（Si_6-z$AlzOzN_8$-z固溶体）。
  Insert Selection: β–Sialon ceramic (Si_6–zAlzOzN8–z solid solution)
- **应用案例/Application Cases：**
- 储罐内孔镗削中，赛隆刀片在硬度HB500工况下实现250 m/min切削速度，干式加工避免放射性污染。
  Boring of tank inner hole, Sialon insert at hardness HB500 cutting speed 250m/min, dry machining, avoiding radioactive contamination.
- **核心优势/Core Advantages:**
- 抑制加工硬化能力：切削力波动降低40%，抑制表面硬化层形成；
  Work hardening suppression ability: Cutting force fluctuation reduced by 40%, inhibiting surface hardened layer formation;
- 辐射稳定性：不含钴元素，避免中子活化污染。
  Radiation stability: No cobalt element, avoiding neutron activation contamination



轧钢工业 Steel rolling industry

轧钢工业专用切削刀具/Cutting Tools for the Steel Rolling Industry

刀片质量与机械设备及工件同等重要/
The quality of inserts is as important as the machinery and workpiece

专为保护您的工件免受极端高温和力量造成的损坏并确保更长刀具寿命而设计，轧钢厂刀片为轧机牌坊铣削和轧辊辊颈平面铣削提供了理想选择。

轧钢厂专用几何构型用于在最苛刻的粗车条件下切除重型材料。刀片适用于：

Designed to protect your workpiece from damage caused by extreme heat and force and ensuring longertool life, steel mill inserts offer an optimal choice for milling fracking blocks and for milling flats on mill roll necks.

Steel mill geometries are used to remove heavy material in the most demanding rough turning conditions.Inserts are available for:

- 球墨铸铁轧辊/Nodular iron mill rolls
- 淬硬钢轧辊/Hardened steel mill rolls
- 延性铸铁轧辊/Ductile iron mill rolls
- 轧辊不锈钢堆焊层/修复作业/Stainless steel weld overlays / repair work on mill rolls
- 支撑辊/Back up rolls

作为金属陶瓷和硬质合金刀片的高性能替代品，轧钢厂刀片在以下方面提供卓越的成本效益：

As a high-performance alternative to cermet and carbide inserts, steel mill inserts deliver superior cost efficiency in:

- 高速硬铣削/High speed hard milling
- 轧辊辊颈低碳钢的高速铣削/High speed milling of mild steels commonly used for mill roll necks
- 轧机牌坊制造中广泛使用的低碳钢的高速铣削
  High speed milling of mild steels widely used in fracking block manufacturing
- 用于减少硬铣削毛刺的正前角几何构型/Positive geometries for burr reduction in hard milling
- 因高速和高进给率提高的生产率/Increased productivity due to high speed and feed rates
- 粗车 (30HRC以上)/Rough turning (30 HRC +)
- 铣削 (30HRC以上)/Milling (30 HRC +)
- 适用于广泛管径的管材铣削扒皮工具，轧辊车削（包含工作辊和支撑辊）
  Tube milling scarfing tools for a wide range of pipe diameters, mill roll turning (both work rolls and back up rolls)

轧辊修复与成型/Roll Repair and Forming

应用案例/Application Cases:

- 高铬铸铁轧辊车削：晶须增韧陶瓷（$SiCw/Al_2O_3$）应用于高铬合金轧辊粗加工，材料去除率超过500 cm^3/min，使其成为重型加工操作的理想选择。
  High Chromium Cast Iron Roll Turning: Whisker-Toughened Ceramic ($SiCw/Al_2O_3$) is applied for the rough machining of high chromium alloy rolls, achieving a material removal rate exceeding 500 cm^3/min making it ideal for heavy-duty machining operations.
- 冷硬铸铁轧辊修复：含30%碳化钛的氧化铝基陶瓷刀片，实现“以车代磨”理念。单次循环加工效率提高四倍，设备停机时间减少70%。
  Cold Hard Cast Iron Roll Repair: Alumina-based ceramic inserts containing 30% TiC, enabling the concept of ”turning instead of grinding.” The single-cycle machining efficiency is increased by fourfold,equipment downtime is reduced by 70%.

核心优势/Core Advantages:

- 抗冲击性：碳化硅晶须/氧化铝陶瓷的断裂韧性达到10 $MPa·m^{1/2}$，使材料能够承受加工过程中铸造毛坯余量的变化。
  Impact Resistance: The fracture toughness of $SiCw/Al_2O_3$ ceramic reaches 10 $MPa·m^{1/2}$, allowing the material to withstand the variations in casting blank allowances during machining.
- 超高硬度：硬度范围为HV HV 1800-2000，耐磨性是硬质合金的5-8倍。单刀片可修复3-5根轧辊，显著提高刀具寿命和成本效益。
  Ultra-High Hardness: With a hardness range of HV 1800—2000, 5—8 times greater wear resistance compared to cemented carbide. A single insert can be used to repair 3—5 rolls, significantly improving tool life and cost efficiency.

轧机部件高效加工/Efficient Machining of Rolling Mill Components

应用案例/Application Cases:

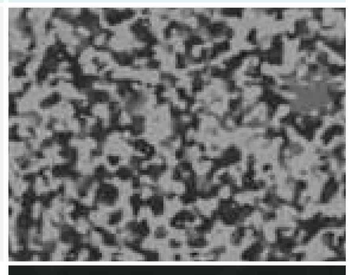
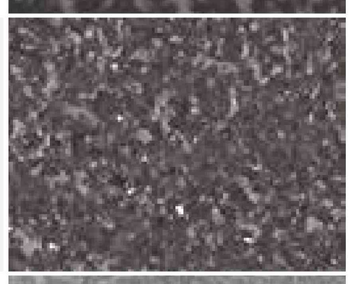
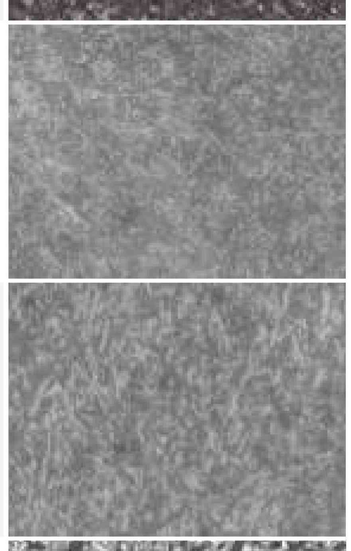
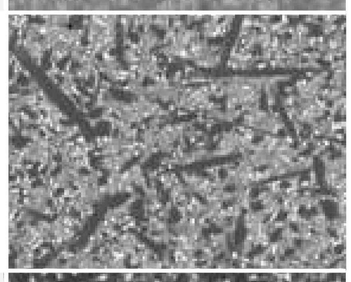
- 轴承钢轧机主轴：赛隆陶瓷（α/β-赛隆)用于精车操作，实现250 m/min的线切割速度，表面粗糙度Ra ⩽ 0.4 μm，实现免磨削加工并显著缩短周期时间。
  Bearing Steel Rolling Mill Spindle: Sialon ceramic (α/β-SiAlON) is utilized for finish turning operations, achieving a linear cutting speed of 250 m/min . Surface Ra ⩽ 0.4 μm, enabling grinding-freeprocessing and significantly reducing cycle time.
- 球墨铸铁轧机机架：以1500 m/min的切削速度进行加工，刀具寿命可达传统硬质合金刀具的6倍。
  Ductile Cast Iron Rolling Mill Frame: Machining is performed at a cutting speed of 1500 m/min, with tool life extending up to six times that of conventional cemented carbide tools.

核心优势/Core Advantages:

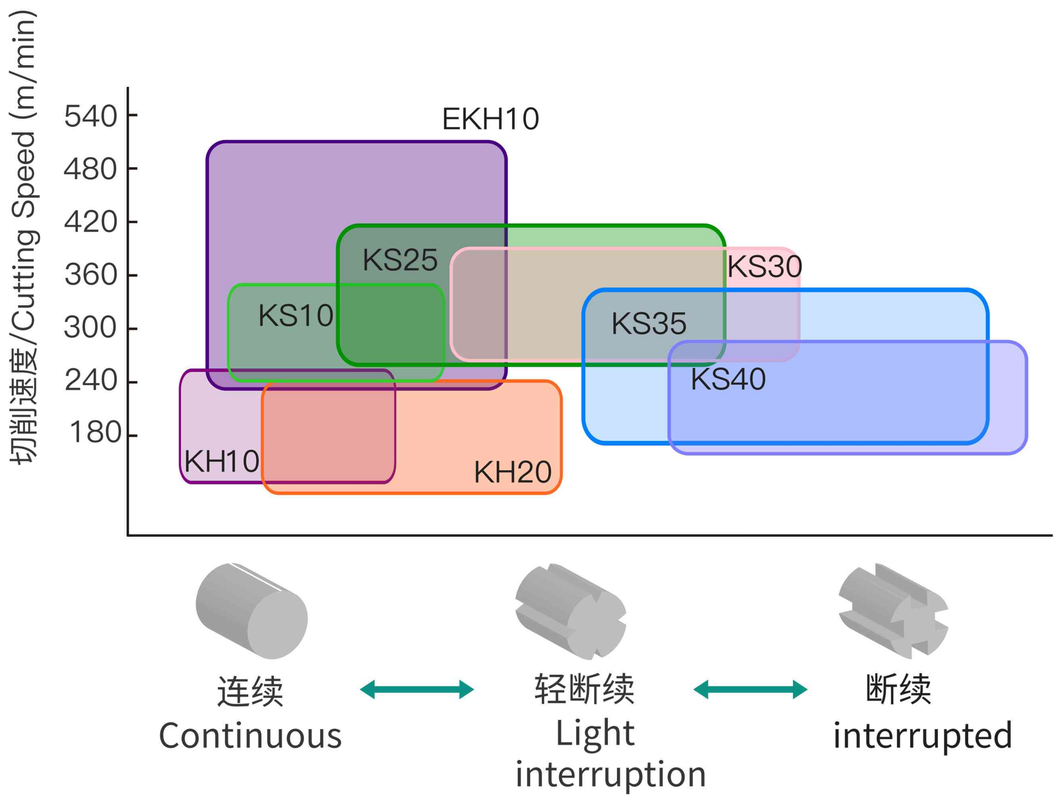
- 抗热震性：耐温差ΔT > 800°C，适用于轧钢作业典型的高温环境加工。
  Thermal Shock Resistance: ΔT > 800°C, suitable for Machining in the high-temperature environments typical of steel rolling operations.
- 化学稳定性：防止与铸铁中存在的石墨发生反应，显著减少沟槽磨损，从而延长刀具寿命并提高表面光洁度质量。
  Chemical Stability: preventing reactions with graphite present in cast iron and significantly reducing groove wear, which enhances tool longevity and surface finish quality.

陶瓷刀具 Ceramics inserts

牌号信息 Grade information

牌号/Grade	成分 Composition	ISO	特点及应用 Characteristics and Application	微观结构 Microstructure
EKH10	复合陶瓷 Composite Ceramics	K10,H10	与晶须陶瓷相比，刀具寿命显著延长；加工效率最高可达两倍；优异的表面光洁度。 采用粉末冶金制造的高温合金亦可加工 Compared with whisker ceramics, tool life is significantly extended; machining efficiency reaches up to twice; Superb surface finish. Heat-resistant alloys made by powder metallurgy can also be machined.	
KH10	Al_2O_3+TiCN	K10,H10	适用于淬硬钢及其他硬质材料的高速连续至轻度断续切削，以及铸铁精加工。 For high-speed continuous up to light interrupted cutting of hardened steels and other hard materials and finishing of cast iron.	
KH20	Al_2O_3+(TiC+Metal)	K20,H20	适用于淬硬钢、铸铁及其他硬质材料的连续至轻度断续切削，韧性较优，适于半精加工。 Continuous and light interrupted cutting of hardened steel, cast iron, and other hard materials, with better toughness, suited for semi-finishing machining.	
KS10	Whisker	K10,S10	专注于立铣精加工的高温合金、高硬度钢及铸铁精加工。 Finishing of high-temperature alloys, high-hardness steels, and cast iron with focus on end milling finishing.	
KS25	Whisker	K25,S25	镍基/钴基合金、铸铁及高硬度钢在连续或轻度断续切削条件下的高速加工。 High-speed machining of nickel-based/cobalt-based alloys, cast iron, and high-hardness steels in continuous or light interrupted cutting.	
KS30	SiALON	K30,S30	具有优异的耐磨性和韧性。被广泛应用于高温合金的粗铣和半精铣。 Possesses excellent wear resistance and toughness. Is widely applied to rough milling and semi-finishing milling of high-temperature alloys.	
KS35	SiALON	K35,S35	与晶须陶瓷相比，具有卓越的抗崩刃性。因此实现高进给、大切深加工，达成效率提升。在Inconel 氧化皮去除加工中表现卓越。亦适用于立铣加工。 Compared with whisker ceramics, possesses superior flaw resistance. Therefore, enables high-feed and high-depth-of-cut machining, achieving efficiency improvement. Demonstrates outstanding performance in scale removal machining of Inconel. Also suitable for end milling.	
KS40	SiALON	K40,S40	最适用于高温合金与铸铁材料氧化皮去除加工及断续切削的材料。 The material most suitable for scale removal machining and interrupted cutting of high-temperature alloys and cast iron materials.	

牌号信息 Grade information



牌号 Grade	去黑皮粗加工 Descaling roughing	粗加工 Roughing	半精加工 Semi-finishing	精加工 Finishing
EKH10				
KH10				
KH20				
KS10				
KS25				
KS30				
KS35				
KS40				

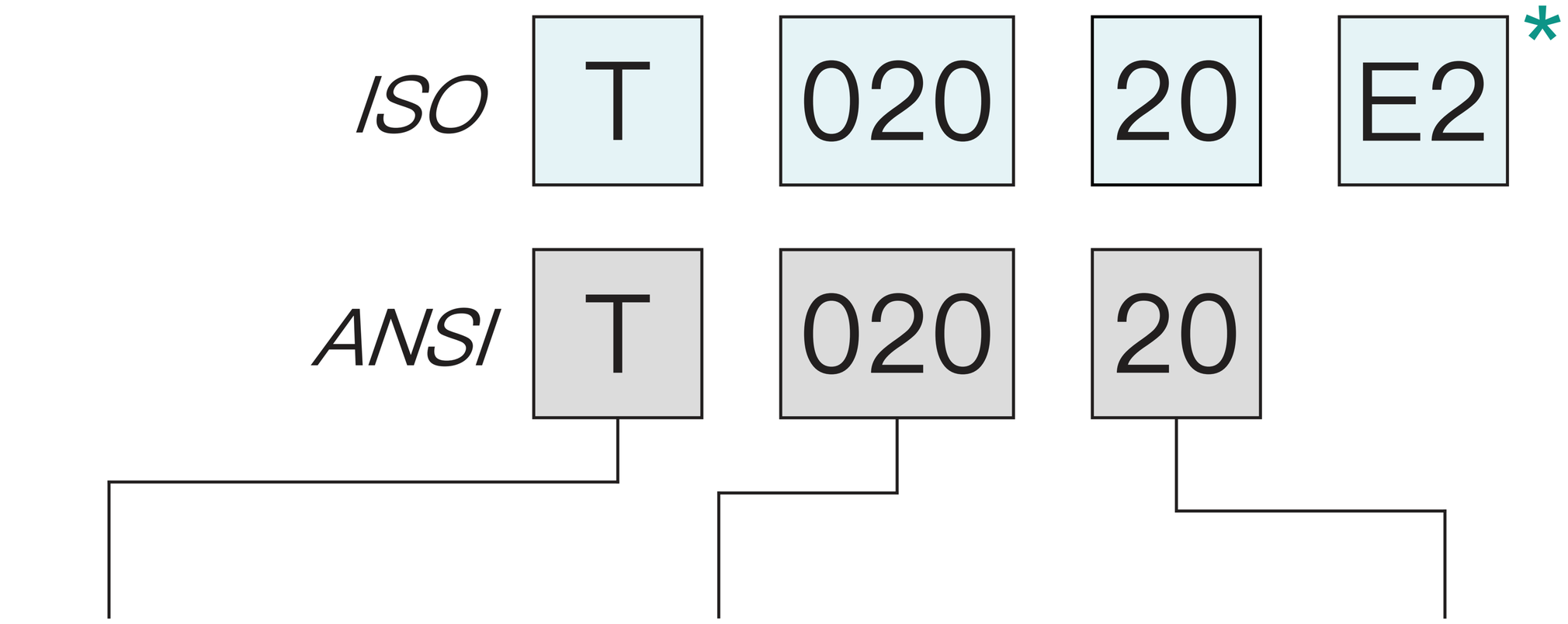
牌号对比图/Grade Comparison Chart

成分 Composition	伊特纳 Eternal	山特维克 SANDVIK	NTK	肯纳金属 KENNAMETAL	特固克 TaeguTec	优尼恩 Union	赛琅泰克 CeramTec	京瓷 KYOCERA	Greenleaf
Composite Ceramics	EKH10		JX1						
Al_2O_3+TiCN	KH10	CC6050	HC4/ZC4 HC7/ZC7	KY4400	AB20 AB30	ST300 ST500 ST900		KT66	
Al_2O_3+ TiC+Metal	KH20	CC650	HC2 HC6	KY1615C2		ST100 SD200		A66N	GEM7
Whisker	KS10 KS25	CC670 CC675	WA1 WA5	KY4300	TC430	SW400 SW800	RST330		WG300 WG600 WG700
SiALON	KS30 KS35 KS40	CC6060 CC6065	SX3 SX9 SX5	KYS25 KYS30/40 KY1540 KYK10	AS500	SN800 SN950 SN1000	LST320 LST370 LSM800	KS6030 KS6040	XSYTIN-1

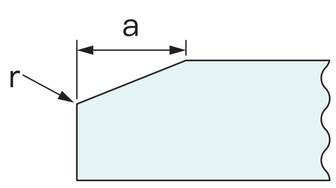
新产品研发持续进行中，产品牌号将不断扩展。获取最新动态请联系授权代理商或销售代表。
New product development is ongoing, and our product grade will be continuously expanded. For the latest updates, please contact our authorized agents or sales representatives.

陶瓷刀具 Ceramics inserts

陶瓷刀具刃口处理 Ceramic inserts edge-preparation



刃口处理 Edge Pre	ANSI	ISO	应用 Application
锋利切削刃 Sharp Cutting Edge	F	F	铝 Aluminium
钝化 Honed	E	E	轻载 Light
倒棱 Chamfered	T	T	轻/中/重载 Light/Medium /Heavy
钝化+倒棱 Honed and Chamfered	T with E2 at end (.002" hone)	S (0.04mm hone)	轻/中/重载 Light/Medium /Heavy
	T with E2 at end (.001" hone)	Z (0.02mm hone)	轻/中/重载 Light/Medium /Heavy
2段倒棱 Double Chamfered	P	P	轻/重载 Light/Heavy
2段倒棱+钝化 Double Chamfered and Honed	HD	HD	轻/重载 Light/Heavy



代码 Code	描述 Description		a 公制/英制	r 公制/英制
	ANSI	ISO		
E	01	002	–	.02/.001"
	02	004	–	.04/.002"
T	02	005	.05/.002"	–
	04	010	.10/.004"	–
	06	015	.15/.006"	–
	08	020	.20/.008"	–
S	04	010	.10/.004"	.04/.002"
	08	020	.20/.008"	.04/.002"
Z	04	010	.10/.004"	.02/.001"
	08	020	.20/.008"	.02/.001"

描述 Description	b
10	10°
15	15°
20	20°
25	25°
30	30°

*刃口钝化/Edge Honed

E0：0.01mm
E1：0.02mm
E2：0.04mm

注：产品供应情况因地区而异。规格如有变更恕不另行通知。
Note: Product availability varies by region. Specifications subject to change without notice.

CDH

IOS/ANSI	IC	T	H
CDH 22/CDH 22	12.7/1/2”	6.35/1/4”	3.175/1/8”
CDH 33/CDH 33	19.05/3/4”	9.525/3/8”	6.35/1/4”
CDH 42/CDH 42	25.4/1”	12.7/1/2”	6.76/.266”
CDH 515/CDH 515	31.7/5/4”	9.525/3/8”	9.93/.391”

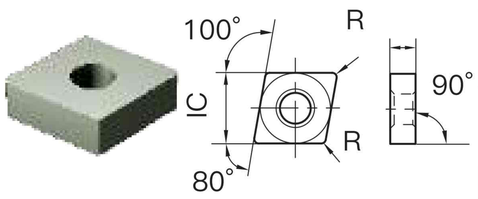
◯ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　⛭ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron						◔	
S	耐热合金 Heat-Resistant Alloy							
H	淬硬钢 Hardened Steel			◯				

ISO	ANSI	H Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
CDH 22 HD00710	CDH 22 HD02810	3.175/.125”			▲			▲	
CDH 33 HD01510E2	CDH 33 HD06010E2	6.35/.250”			▲			▲	
CDH 42 HD02015E1	CDH 42 HD08015E1	6.76/.266”			▲			▲	
CDH 515 HD01810	CDH 515 HD07110	9.93/.391”			▲			▲	

CNGA

IOS/ANSI	IC	T
CNGA 1204/CNGA 43	12.7/1/2”	4.76/3/16”
CNGA 1606/CNGA 54	15.875/5/8”	6.35/1/4”
CNGA 1906/CNGA 64	19.05/3/4”	6.35/1/4”



◯ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　⛭ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔				
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
CNGA 120404 T01020	CNGA 431 T0420	0.4/.016”		▲	▲	▲		▲	
CNGA 120408 T01020	CNGA 432 T0420	0.8/.031”		▲	▲	▲		▲	
CNGA 120408 T02020	CNGA 432 T0820			▲	▲	▲		▲	
CNGA 120408 T02025	CNGA 432 T0825			▲	▲	▲		▲	
CNGA 120408 Z02020	CNGA 432 T0820E1			▲	▲	▲		▲	
CNGA 120412 T01020	CNGA 433 T0420	1.2/.047”		▲	▲	▲		▲	
CNGA 120412 T02020	CNGA 433 T0820			▲	▲	▲		▲	
CNGA 120412 T02025	CNGA 433 T0825			▲	▲	▲		▲	
CNGA 120412 Z02020	CNGA 433 T0820E1			▲	▲	▲		▲	
CNGA 120416 T01020	CNGA 434 T0420	1.6/.063”		▲	▲	▲		▲	
CNGA 120416 T02020	CNGA 434 T0820			▲	▲	▲		▲	
CNGA 120416 T02025	CNGA 434 T0825			▲	▲	▲		▲	
CNGA 160612 T01020	CNGA 543 T0420	1.2/.047”		▲	▲	▲		▲	
CNGA 160612 Z02025	CNGA 543 T0825E1			▲	▲	▲		▲	
CNGA 160616 T01020	CNGA 544 T0420	1.6/.063”		▲	▲	▲		▲	
CNGA 190612 T01020	CNGA 643 T0420	1.2/.047”		▲	▲	▲		▲	
CNGA 190612 T02020	CNGA 643 T0820			▲	▲	▲		▲	
CNGA 190612 Z02025	CNGA 643 T0825E1			▲	▲	▲		▲	
CNGA 190616 T02020	CNGA 644 T0820	1.6/.063”		▲	▲	▲		▲	

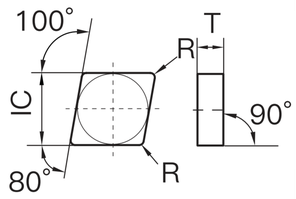
▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

陶瓷刀具 Ceramics inserts

CNGN

IOS/ANSI	IC	T
CNGN 1204/CNGN 43	12.7/1/2”	4.76/3/16”
CNGN 1207/CNGN 45	12.7/1/2”	7.94 /5/16r
CNGN 1906/CNGN 64	19.05/3/4”	6.35 /1/4r



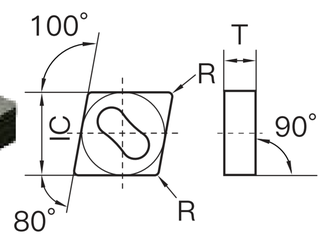
○ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　✣ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron			○	◔			◔	
S	耐热合金 Heat-Resistant Alloy					○		◔	
H	淬硬钢 Hardened Steel								

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
CNGN 120404 T01020	CNGN 431 T0420	0.4/.016”		●	●	▲		▲	
CNGN 120408 T01020	CNGN 432 T0420	0.8/.031”		●	●	▲		▲	
CNGN 120408 T02020	CNGN 432 T0820			●	●	▲		▲	
CNGN 120408 T02025	CNGN 432 T0825			●	●	▲		▲	
CNGN 120408 S02020	CNGN 433 T0820E2			●	●	▲		▲	
CNGN 120412 T01020	CNGN 433 T0420	1.2/.047”		●	●	▲		▲	
CNGN 120412 T02020	CNGN 433 T0820			●	●	▲		▲	
CNGN 120412 T02025	CNGN 433 T0825			●	●	▲		▲	
CNGN 120412 S02020	CNGN 433 T0820E2			●	●	▲		▲	
CNGN 120416 T01020	CNGN 434 T0420	1.6/.063”		●	●	▲		▲	
CNGN 120416 T02020	CNGN 434 T0820			●	●	▲		▲	
CNGN 120416 T02025	CNGN 434 T0825			●	●	▲		▲	
CNGN 120416 S02020	CNGN 443 T0820E2			●	●	▲		▲	
CNGN 120708 T02020	CNGN 452 T0820	0.8/.031”		●	●	▲		▲	
CNGN 120712 T02020	CNGN 453 T0820	1.2/.047”		●	●	▲		▲	
CNGN 120716 T02020	CNGN 454 T0820	1.6/.063”		●	●	▲		▲	
CNGN 190612 T02020	CNGN 643 T0820	1.2/.047”		●	●	▲		▲	
CNGN 190616 T01020	CNGN 644 T0420	1.6/.063”		●	●	▲		▲	
CNGN 190716 T02020	CNGN 654 T0820			●	●	▲		▲	

CNGX

IOS/ANSI	IC	T
CNGX 1204/CNGX 43	12.7/1/2”	4.76/3/16
CNGX 1204/CNGX 43	12.7/1/2”	7.94/5/16



○ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　✣ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron							◔	
S	耐热合金 Heat-Resistant Alloy							◔	
H	淬硬钢 Hardened Steel								

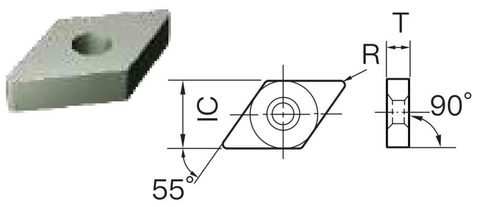
ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
CNGX 120408 S02020	CNGX 432 T0820E2	0.8/.031r						●	
CNGX 120412 S02020	CNGX 433 T0820E2	1.2/.047”						●	
CNGX 120416 S02020	CNGX 434 T0820E2	1.6/.063”						●	
CNGX 120708 T02025	CNGX 452 T0825	0.8/.031”						●	
CNGX 120712 T02025	CNGX 453 T0825	1.2/.047”						●	
CNGX 120716 T02025	CNGX 454 T0825	1.6/.063”						●	

▲ 主推牌号/Main recommended grade　● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

DNGA

IOS/ANSI	IC	T
DNGA 1504/DNGA 43	12.7/1/2”	4.76/3/16”



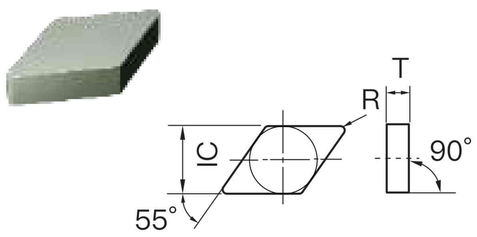
◯ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　⛯ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
DNGA 150404 T01020	DNGA 431 T0420	0.4/.016”		▲	▲	●		●	
DNGA 150408 T01020	DNGA 432 T0420	0.8/.031”		▲	▲	●		●	
DNGA 150408 T02025	DNGA 432 T0825			▲	▲	●		●	
DNGA 150408 S01025	DNGA 432 T0425E2			▲	▲	●		●	
DNGA 150412 T01020	DNGA 433 T0420	1.2/.047”		▲	▲	●		●	
DNGA 150412 T02025	DNGA 433 T0825			▲	▲	●		●	
DNGA 150412 S01025	DNGA 433 T0425E2			▲	▲	●		●	
DNGA 150416 T01020	DNGA 434 T0420	1.6/.063”		▲	▲	●		●	
DNGA 150416 T02025	DNGA 434 T0825			▲	▲	●		●	
DNGA 150416 S02025	DNGA 434 T0825E2			▲	▲	●		●	

DNGN

IOS/ANSI	IC	T
DNGN 1504/DNGN 43	12.7/1/2”	4.76/3/16”



◯ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　⛯ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
DNGN 150408 T01020	DNGN 432 T0420	0.8/.031”		▲	▲	●		●	
DNGN 150408 T02025	DNGN 432 T0825			▲	▲	●		●	
DNGN 150408 S02020	DNGN 432 T0820E2			▲	▲	●		●	
DNGN 150412 T01020	DNGN 433 T0420	1.2/.047”		▲	▲	●		●	
DNGN 150412 T02025	DNGN 433 T0825			▲	▲	●		●	
DNGN 150412 S02020	DNGN 433 T0820E2			▲	▲	●		●	
DNGN 150416 T01020	DNGN 434 T0420	1.6/.063”		▲	▲	●		●	
DNGN 150416 T02025	DNGN 434 T0825			▲	▲	●		●	
DNGN 150416 S02020	DNGN 434 T0820E2			▲	▲	●		●	

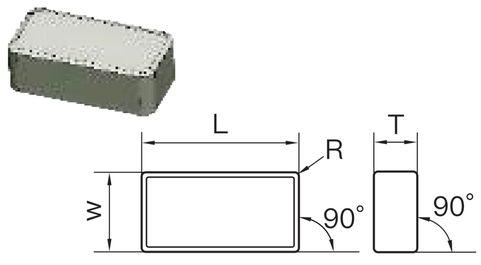
▲ 主推牌号/Main recommended grade　● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

陶瓷刀具 Ceramics inserts

LNJ

IOS/ANSI	W	L	T
LNJ6688/LNJ6688	19.05/3/4″	38.1/3/2″	12.7/1/2″



○ 稳定工况/Stable Machining Conditions　○ 间断工况/Intermittent Machining Conditions　○ 恶劣间断工况/Severe Intermittent Conditions

K 铸铁 Cast Iron				○	○			
S 耐热合金 Heat-Resistant Alloy								
H 淬硬钢 Hardened Steel								

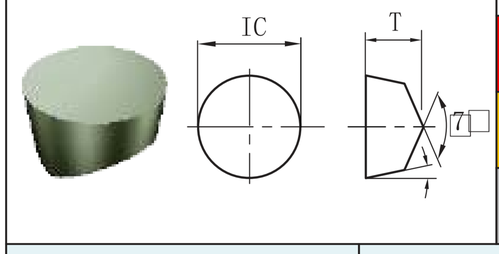
ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
LNJ 6688 HD1515E1	LNJ 6688 HD06015E1	3.8/1/8″			●	●			
LNJ 6688 HD2015E2	LNJ 6688 HD08015E2				●	●			

RCGX

IOS/ANSI	IC	θ
RCGX 0604/RCGX 23	6.35/1/4”	120°
RCGX 0606/RCGX 24	6.35/1/4”	120°
RCGX 0907/RCGX 35	9.525/3/8”	120°
RCGX 1207/RCGX 45	12.7/1/2”	120°

IOS/ANSI	IC	θ
RCGX 102/RCGX 102	6.35/1/4”	120°
RCGX 103/RCGX 103	9.525/3/8”	120°
RCGX 104/RCGX 104	12.7/1/2”	120°
RCGX 105/RCGX 105	15.87/5/8”	120°

IOS/ANSI	IC	θ
RCGX 106/RCGX 106	19.05/3/4”	120°
RCGX 108/RCGX 108	25.4/1”	140°



○ 稳定工况/Stable Machining Conditions　○ 间断工况/Intermittent Machining Conditions　○ 恶劣间断工况/Severe Intermittent Conditions

K 铸铁 Cast Iron		○	○				○	
S 耐热合金 Heat-Resistant Alloy	○			○		○	○	
H 淬硬钢 Hardened Steel								

ISO	ANSI	T Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
RCGX 060400 T01020	RCGX 23 T0420	4.76/3/16″	●	▲	▲	▲		▲	▲
RCGX 060400 Z01020	RCGX 23 T0420E1			▲	▲	▲		▲	
RCGX 060600 T01020	RCGX 24 T0220	6.35/1/4″	●	▲	▲	▲		▲	
RCGX 060600 Z02020	RCGX 24 T0820E1			▲	▲	▲		▲	
RCGX 090700 T01020	RCGX 35 T0420		●	▲	▲	▲		▲	
RCGX 090700 Z01020	RCGX 35 T0420E1			▲	▲	▲		▲	
RCGX 090700 T02020	RCGX 35 T0820			▲	▲	▲		▲	
RCGX 090700 Z02020	RCGX 35 T0820E1			▲	▲	▲		▲	
RCGX 090700 T02025	RCGX 35 T0825			▲	▲	▲		▲	
RCGX 090700 Z02025	RCGX 35 T0825E1	7.94/5/16″		▲	▲	▲		▲	
RCGX 120700 T01020	RCGX 45 T0420		●	▲	▲	▲		▲	
RCGX 120700 Z01020	RCGX 45 T0420E1			▲	▲	▲		▲	
RCGX 120700 T02020	RCGX 45 T0820			▲	▲	▲		▲	
RCGX 120700 Z02020	RCGX 45 T0820E1			▲	▲	▲		▲	
RCGX 120700 T02025	RCGX 45 T0825			▲	▲	▲		▲	
RCGX 120700 Z02025	RCGX 45 T0825E1			▲	▲	▲		▲	
RCGX 102 HD1215E1	RCGX 102 HD04815E1	7.85/0.309″		▲	▲	▲		▲	
RCGX 103 HD1215E1	RCGX 103 HD04815E1			▲	▲	▲		▲	
RCGX 104 HD1515E1	RCGX 104 HD06015E1	7.92/0.312″		▲	▲	▲		▲	
RCGX 105 HD2015E1	RCGX 105 HD08015E1	9.86/0.388″		▲	▲	▲		▲	
RCGX 106 HD2015E1	RCGX 106 HD08015E1			▲	▲	▲		▲	
RCGX 108 HD1515E1	RCGX 108 HD06015E1	11.71/0.461″		▲	▲	▲		▲	

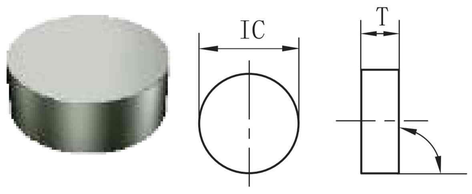
▲ 主推牌号/Main recommended grade　● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

RNGN

IOS/ANSI	IC	T
RNGN 0903/RNGN 32	9.525/3/8”	3.18 /1/8”
RNGN 0904/RNGN 33	9.525/3/8 ”	4.76/3/16”
RNGN 1204/RNGN 43	12.7/1/2”	4.76/3/16”
RNGN 1207/RNGN 45	12.7/ 1/2”	7.94/5/16”

IOS/ANSI	IC	T
RNGN 1507/RNGN 55	15.875/5/8”	7.94 /5/16”
RNGN 1907/RNGN65	19.05/3/4”	7.94 /5/16”
RNGN 2507/RNGN 85	25.4 /1”	7.94 /5/16”
RNGN 2509/RNGN 86	25.4/1”	9.525/3/8”



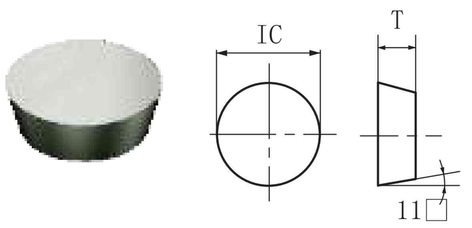
◯ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy	◯			◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	/	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
RNGN 090300 T01020	RNGN 32 T0420	/	●	▲	▲	▲		▲	
RNGN 090400 T01020	RNGN 33 T0420		●	▲	▲	▲		▲	
RNGN 120400 T01020	RNGN 43 T0420		●	▲	▲	▲		▲	
RNGN 120400 T02025	RNGN 43 T0825		●	▲	▲	▲		▲	
RNGN 120700 T01020	RNGN 45 T0420		●	▲	▲	▲		▲	
RNGN 120700 Z02020	RNGN 45 T0820E1			▲	▲	▲		▲	
RNGN 150700 T01020	RNGN 55 T0420			▲	▲	▲		▲	
RNGN 190700 T01020	RNGN 65 T0420			▲	▲	▲		▲	
RNGN 250700 T01020	RNGN 85 T0420			▲	▲	▲		▲	
RNGN 250900 T01020	RNGN 86 T0420			▲	▲	▲		▲	

RPGN

IOS/ANSI	IC	T
RPGN 0602/RPGN 215	6.35/1/4”	2.38/3/32”
RPGN 0603/RPGN 22	6.35/1/4”	3.18/1/8”
RPGN 0903/RPGN 32	9.525/3/8”	3.18/1/8”
RPGN 1204/RPGN 43	12.7/1/2”	4.76/3/16”



◯ 稳定工况/Stable Machining Conditions　◔ 间断工况/Intermittent Machining Conditions　✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy	◯			◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	/	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
RPGN 060200 T01020	RPGN 215 T0420	/	●	▲	▲	▲		▲	
RPGN 060200 T02020	RPGN 215 T0820		●	▲	▲	▲		▲	
RPGN 060300 T01020	RPGN 22 T0420		●	▲	▲	▲		▲	
RPGN 060300 T02020	RPGN 22 T0820		●	▲	▲	▲		▲	
RPGN 090300 T01020	RPGN 32 T0420		●	▲	▲	▲		▲	
RPGN 090300 T02020	RPGN 32 T0820		●	▲	▲	▲		▲	
RPGN 120400 T01020	RPGN 43 T0420		●	▲	▲	▲		▲	
RPGN 120400 T02020	RPGN 43 T0820		●	▲	▲	▲		▲	

▲ 主推牌号/Main recommended grade　● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

陶瓷刀具 Ceramics inserts

RPGX

IOS/ANSI	IC	θ
RPGX 0604/RPGX 23	6.35 /1/4″	120°
RPGX 0907/RPGX 35	9.525 /3/8″	120°
RPGX 1207/RPGX 45	12.7 /1/2″	120°

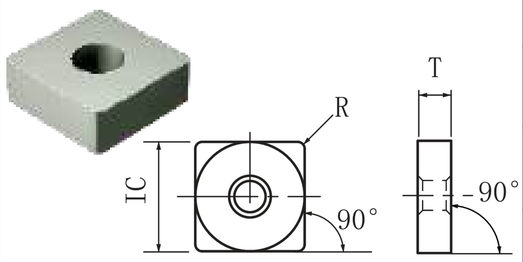
○ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✲ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		○	◔			◔	
S	耐热合金 Heat-Resistant Alloy	○			○		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	T Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
RPGX 060400 T01020	RPGX 23 T0420	4.76/3/16″	●	▲	▲	▲		▲	
RPGX 060400 Z01020	RPGX 23 T0420E1		●	▲	▲	▲		▲	
RPGX 090700 T01020	RPGX 35 T0420	7.94/.31″	●	▲	▲	▲		▲	
RPGX 090700 T02020	RPGX 35 T0820		●	▲	▲	▲		▲	
RPGX 090700 Z02020	RPGX 35 T0820E1		●	▲	▲	▲		▲	
RPGX 120700 T01020	RPGX 45 T0420		●	▲	▲	▲		▲	
RPGX 120700 T02020	RPGX 45 T0820		●	▲	▲	▲		▲	

SNGA

IOS/ANSI	IC	T
SNGA 1204/SNGA 43	12.7 /1/2″	4.96 /3/16″
SNGA 1506/SNGA 54	15.875/5/8″	6.35 /1/4″
SNGA 1906/SNGA 64	19.05 /3/4″	6.35 /1/4″



○ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✲ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		○	◔			◔	
S	耐热合金 Heat-Resistant Alloy				○		◔	
H	淬硬钢 Hardened Steel							

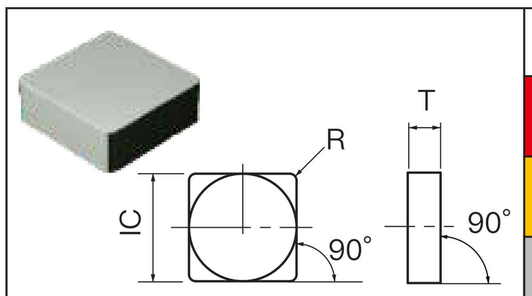
IOS	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
SNGA 120408 T01020	SNGA 432 T0420	0.8 /.031″		▲	▲	▲		▲	
SNGA 120408 T02020	SNGA 432 T0820			▲	▲	▲		▲	
SNGA 120416 T01020	SNGA 434 T0420	1.6 /.063″		▲	▲	▲		▲	
SNGA 120416 T02025	SNGA 434 T0825			▲	▲	▲		▲	
SNGA 150612 T01020	SNGA 543 T0420	1.2 /.047″		▲	▲	▲		▲	
SNGA 150612 T02025	SNGA 543 T0825			▲	▲	▲		▲	
SNGA 150616 T01020	SNGA 544 T0420	1.6 /.063″		▲	▲	▲		▲	
SNGA 150616 T02020	SNGA 544 T0820			▲	▲	▲		▲	
SNGA 190616 T02025	SNGA 644 T0825			▲	▲	▲		▲	

▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

SNGN

IOS/ANSI	IC	T
SNGN 1204/SNGN 43	12.7 /1/2″	4.76/3/16″
SNGN 1207/SNGN 45	12.7 /1/2″	7.94/5/16″
SNGN 1506/SNGN 54	15.875/5/8″	6.35/1/4″
SNGN 1906/SNGN 64	19.05 /3/4″	6.35/1/4″



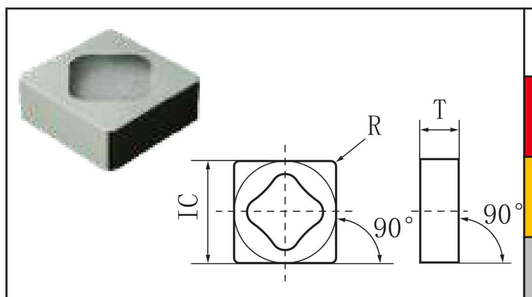
◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ⛭ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
SNGN 120408 T01020	SNGN 432 T0420	0.8 /.031″		▲	▲	▲		▲	
SNGN 120408 T02020	SNGN 432 T0820			▲	▲	▲		▲	
SNGN 120408 T02025	SNGN 432 T0825			▲	▲	▲		▲	
SNGN 120408 S02020	SNGN 432 T0820E2			▲	▲	▲		▲	
SNGN 120412 T01020	SNGN 433 T0420	1.2/.047″		▲	▲	▲		▲	
SNGN 120412 T02020	SNGN 433 T0820			▲	▲	▲		▲	
SNGN 120412 T02025	SNGN 433 T0825			▲	▲	▲		▲	
SNGN 120412 S02020	SNGN 433 T0820E2			▲	▲	▲		▲	
SNGN 120416 T01020	SNGN 434 T0420	1.6/.063″		▲	▲	▲		▲	
SNGN 120416 T02020	SNGN 434 T0820			▲	▲	▲		▲	
SNGN 120416 T02025	SNGN 434 T0825			▲	▲	▲		▲	
SNGN 120416 S02020	SNGN 434 T0820E2			▲	▲	▲		▲	
SNGN 120708 T01020	SNGN 452 T0420	0.8 /.031″		▲	▲	▲		▲	
SNGN 120712 T01020	SNGN 453 T0420	1.2/.047″		▲	▲	▲		▲	
SNGN 120716 T01020	SNGN 454 T0420	1.6/.063″		▲	▲	▲		▲	
SNGN 190612 T01020	SNGN 643 T0420	1.2/.047″		▲	▲	▲		▲	
SNGN 190616 T01020	SNGN 644 T0420	1.6/.063″		▲	▲	▲		▲	

SNGX

IOS/ANSI	IC	T
SNGX 1204/SNGX 43	12.7/1/2″	4.76/3/16″
SNGX 1207/SNGX 45	12.7/1/2″	7.94/5/16″



◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ⛭ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron						◔	
S	耐热合金 Heat-Resistant Alloy						◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
SNGX 120408 S02020	SNGX 432 T0820E2	0.8 /.031″						●	
SNGX 120412 S02020	SNGX 433 T0820E2	1.2 /.047″						●	
SNGX 120416 S02020	SNGX 434 T0820E2	1.6 /.063 ″						●	
SNGX 120708 T02025	SNGX 452 T0825	0.8 /.031″						●	
SNGX 120712 T02025	SNGX 453 T0825	1.2 /.047″						●	
SNGX 120716 T02025	SNGX 454 T0825	1.6 /.063″						●	

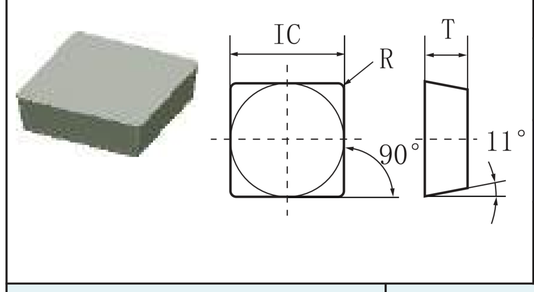
▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

陶瓷刀具 Ceramics inserts

SPGN

IOS/ANSI	IC	T
SPGN 0903/SPGN32	9.525 /3/8″	3.18/1/8″
SPGN 1204/SPGN 43	12.7 /1/2″	4.76 /3/16″
SPGN 1904/SPGN 63	19.05/3/4″	4.76 /3/16″



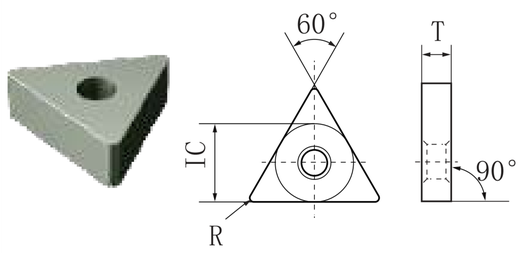
◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯				◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel		◯					

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
SPGN 090308 T01020	SPGN 322 T0420	0.8 /.031 ″		●		●		●	
SPGN 120408 T01020	SPGN 432 T0420			●		●		●	
SPGN 120412 T01020	SPGN 433 T0420	1.2 /.047 ″		●		●		●	
SPGN 120416 T01020	SPGN 434 T0420	1.6 /.063 ″		●		●		●	
SPGN 190412 T01020	SPGN 633 T0420	1.2 /.047 ″				●		●	
SPGN 190416 T01020	SPGN 634 T0420	1.6 /.063 ″				●		●	

TNGA

IOS/ANSI	IC	T
TNGA 1604/TNGA 33	9.525 /3/8″	4.76 /3/16″
TNGA 2204/TNGA 43	12.7/1/2″	4.76 /3/16″



◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

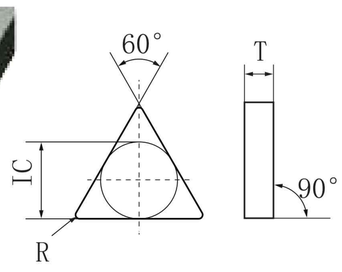
ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
TNGA 160408 T01020	TNGA 332 T0420	0.8 /.031″		▲	▲	●		●	
TNGA 220408 T01020	TNGA 432 T0420			▲	▲	●		●	
TNGA 220408 T02025	TNGA 432 T0825			▲	▲	●		●	

▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

TNGN

IOS/ANSI	IC	T
TNGN 16A04/TNGN 33	9.525 / 3/8″	4.76 /3/16″
TNGN 2204/TNGN 43	12.7 / 1/2″	4.76 /3/16″
TNGN 2207/TNGN 45	12.7 / 1/2″	7.94 /5/16″



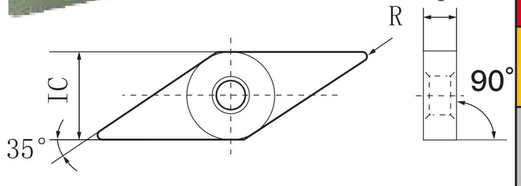
◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
TNGN 160408 T01020	TNGN 332 T0420	0.8 /.031″		▲	▲	●		●	
TNGN 220408 T01020	TNGN 432 T0420			▲	▲	●		●	
TNGN 220408 S02025	TNGN 432 T0825E2			▲	▲	●		●	
TNGN 220412 T01020	TNGN 433 T0420	1.2 /.047″		▲	▲	●		●	
TNGN 220412 S02025	TNGN 433 T0825E2			▲	▲	●		●	
TNGN 220416 T01020	TNGN 434 T0420	1.6 /.063″		▲	▲	●		●	
TNGN 220416 S02025	TNGN 434 T0825E2			▲	▲	●		●	
TNGN 220712 T01020	TNGN 453 T0420	1.2 /.047″		▲	▲	●		●	
TNGN 220716 T01020	TNGN 454 T0420	1.6 /.063″		▲	▲	●		●	

VNGN

IOS/ANSI	IC	T
VNGA 1604/VNGA 33	9.525/ 3/8″	4.76/3/16″
VNGA 2204/VNGA 43	12.7/ 1/2″	4.76/3/16″



◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔	
S	耐热合金 Heat-Resistant Alloy				◯		◔	
H	淬硬钢 Hardened Steel							

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
VNGA 160404 T01020	VNGA 331 T0420	0.4 /.016″		▲	▲	●		●	
VNGA 160408 T01020	VNGA 332 T0420	0.8 /.031″		▲	▲	●		●	
VNGA 160412 T01020	VNGA 333 T0420	1.2 /.047″		▲	▲	●		●	
VNGA 220408 T01020	VNGA 432 T0420	0.8 /.031″		▲	▲	●		●	
VNGA 220412 T01020	VNGA 433 T0420	1.2 /.047″		▲	▲	●		●	

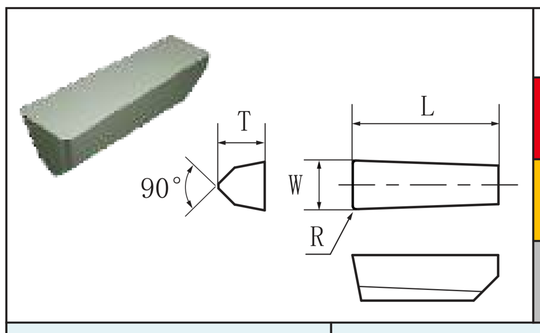
▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

陶瓷刀具 Ceramics inserts

VGW

IOS/ANSI	T	L
VGW 41/VGW 41	4.75/.187″	12.7/.500″
VGW 62/VGW 62	6.35/.250″	19.05/.750″
VGW 83/VGW 83	8.56/.337″	25.4/1.00″



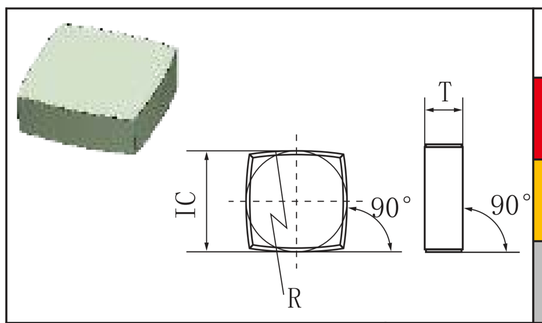
◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron								
S	耐热合金 Heat-Resistant Alloy	◯			◯		◔		
H	淬硬钢 Hardened Steel								

ISO	ANSI	R Metric/Inch	W Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
VGW 4125-1 E004	VGW 4125-1 E02	0.4/0.16″	3.18/.125″	●			▲		●	
VGW 4125-1 T00520	VGW 4125-1 T0220			●			▲		●	
VGW 4125-2 E004	VGW 4125-2 E02	0.8/.031″		●			▲		●	
VGW 4156-1 E004	VGW 4156-1 E02	0.4/.016″	3.96/.156″	●			▲		●	
VGW 4156-1 T00520	VGW 4156-1 T0220			●			▲		●	
VGW 4156-2 E004	VGW 4156-2 E02	0.8/.031″		●			▲		●	
VGW 4187-1 E004	VGW 4187-1 E02	0.4/.016″	4.75/.187″	●			▲		●	
VGW 4187-1 T00520	VGW 4187-1 T0220			●			▲		●	
VGW 4187-2 E004	VGW 4187-2 E02	0.8/.031″		●			▲		●	
VGW 6218-1 E004	VGW 6218-1 E02	0.4/.016″	5.54/.218″	●			▲		●	
VGW 6218-1 T00520	VGW 6218-1 T0220			●			▲		●	
VGW 6218-2 E004	VGW 6218-2 E02	0.8/.031″		●			▲		●	
VGW 6250-1 E004	VGW 6250-1 E02	0.4/.016″	6.35/.250″	●			▲		●	
VGW 6250-1 T00520	VGW 6250-1 T0220			●			▲		●	
VGW 6250-1 Z01020	VGW 6250-1 T0420E1			●			▲		●	
VGW 6250-2 E004	VGW 6250-2 E02	0.8/.031″		●			▲		●	
VGW 6250-3 E004	VGW 6250-3 E02	1.2/.047″		●			▲		●	
VGW 6281-4 E004	VGW 6281-4 E02	1.6/.063″	7.14/.281″	●			▲		●	
VGW 6281-4 T00520	VGW 6281-4 T0220			●			▲		●	
VGW 8312-2 E004	VGW 8312-2 E02	0.8/.031″	7.92/.312″	●			▲		●	
VGW 8312-2 T00520	VGW 8312-2 T0220			●			▲		●	
VGW 8312-4 E004	VGW 8312-4 E02	1.6/.063″		●			▲		●	
VGW 8312-4 T00520	VGW 8312-4 T0220			●			▲		●	
VGW 8375-2 E004	VGW 8375-2 E02	0.8/.031″	9.525/.375″	●			▲		●	
VGW 8375-2 T00520	VGW 8375-2 T0220			●			▲		●	
VGW 8375-4 E004	VGW 8375-4 E02	1.6/.063″		●			▲		●	
VGW 8375-4 T00520	VGW 8375-4 T0220			●			▲		●	

ZT

IOS/ANSI	IC	T
ZT-1130/ZT-1130	38.1/3/2″	12.7/1/2″



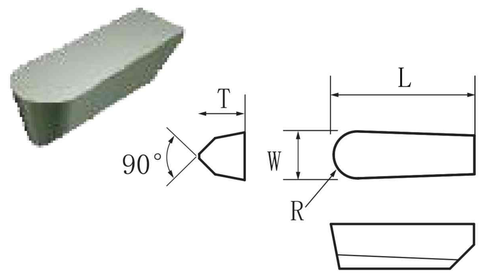
◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron				◔			◔	
S	耐热合金 Heat-Resistant Alloy								
H	淬硬钢 Hardened Steel								

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
ZT1130	ZT-1130	114.3/4.5"				▲		●	

VGW...R

IOS/ANSI	T	L
VGW 41/VGW 41	4.75/.187″	12.7/.500″
VGW 62/VGW 62	6.35/.250″	19.05/.750″
VGW 83/VGW 83	8.56/.337″	25.4 /1.00″



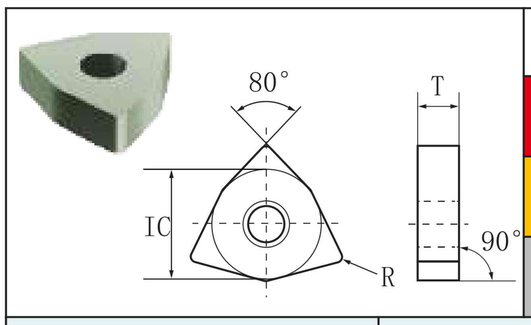
◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron								
S	耐热合金 Heat-Resistant Alloy	◯			◯		◔		
H	淬硬钢 Hardened Steel								

ISO	ANSI	R Metric/Inch	W Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
VGW 4125-R E004	VGW 4125-R E02	1.59/0.63″	3.18/.125″	●			▲		●	
VGW 4125-R T00520	VGW 4125-R T0220			●			▲		●	
VGW 4156-R E004	VGW 4156-R E02	1.98/.078″	3.96/.156″	●			▲		●	
VGW 4156-R T00520	VGW 4156-R T0220			●			▲		●	
VGW 4156-R Z02020	VGW 4156-R T0820E1			●			▲		●	
VGW 4187-R E004	VGW 4187-R E02	2.38/.094″	4.75/.187″	●			▲		●	
VGW 4187-R T00520	VGW 4187-R T0220			●			▲		●	
VGW 6218-R E004	VGW 6218-R E02	2.77/.109″	5.54/.218″	●			▲		●	
VGW 6218-R T00520	VGW 6218-R T0220			●			▲		●	
VGW 6250-R E004	VGW 6250-R E02	3.18/.125″	6.35/.250″	●			▲		●	
VGW 6250-R T00520	VGW 6250-R T0220			●			▲		●	
VGW 6281-R E004	VGW 6281-R E02	3.58/.141″	7.14/.281″	●			▲		●	
VGW 6281-R T00520	VGW 6281-R T0220			●			▲		●	
VGW 8312-R E004	VGW 8312-R E02	3.96/.156″	7.92/.312″	●			▲		●	
VGW 8312-R T00520	VGW 8312-R T0220			●			▲		●	
VGW 8375-R E004	VGW 8375-R E02	4.76/.188″	9.525/.375″	●			▲		●	
VGW 8375-R T00520	VGW 8375-R T0220			●			▲		●	

WNGA

IOS/ANSI	IC	T
WNGA 0604/WNGA 33	9.525/3/8″	4.76/3/16″
WNGA 0804/WNGA 43	12.7/1/2″	4.76/3/16″



◯ 稳定工况/Stable Machining Conditions ◔ 间断工况/Intermittent Machining Conditions ✠ 恶劣间断工况/Severe Intermittent Conditions

K	铸铁 Cast Iron		◯	◔			◔		
S	耐热合金 Heat-Resistant Alloy						◔		
H	淬硬钢 Hardened Steel								

ISO	ANSI	R Metric/Inch	EKH10	KH10	KH20	KS25	KS30	KS35	KS40
WNGA 060408 T01020	WNGA 332 T0420	0.8 /.031″		▲	▲			▲	
WNGA 060412 T01020	WNGA 333 T0420	1.2/.047″		▲	▲			▲	
WNGA 080404 T01020	WNGA 431 T0420	0.4 /.016″		▲	▲			▲	
WNGA 080408 T01020	WNGA 432 T0420	0.8 /.031″		▲	▲			▲	
WNGA 080412 T01020	WNGA 433 T0220	1.2/.047″		▲	▲			▲	
WNGA 080416 T00520	WNGA 434 T0420	1.6/0.63″		▲	▲			▲	

▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

陶瓷刀具 Ceramics inserts

陶瓷立铣刀的特点及应用实例

通柄型 Straight Shank

最合适的排屑槽形状 Optimum flute geometry

实现顺畅排屑

Enables smooth chip evacuation

负前角刃型 Negative cutter form

提高刃尖刚性

Increases cutting edge rigidity

可通过切断使用部进行再研磨

Can be reincarnated by cutting away the used portion

可再研磨

Regrindable

缩颈型 Reduced Neck Shank

适用于三维立体加工 Suitable for 3D machining

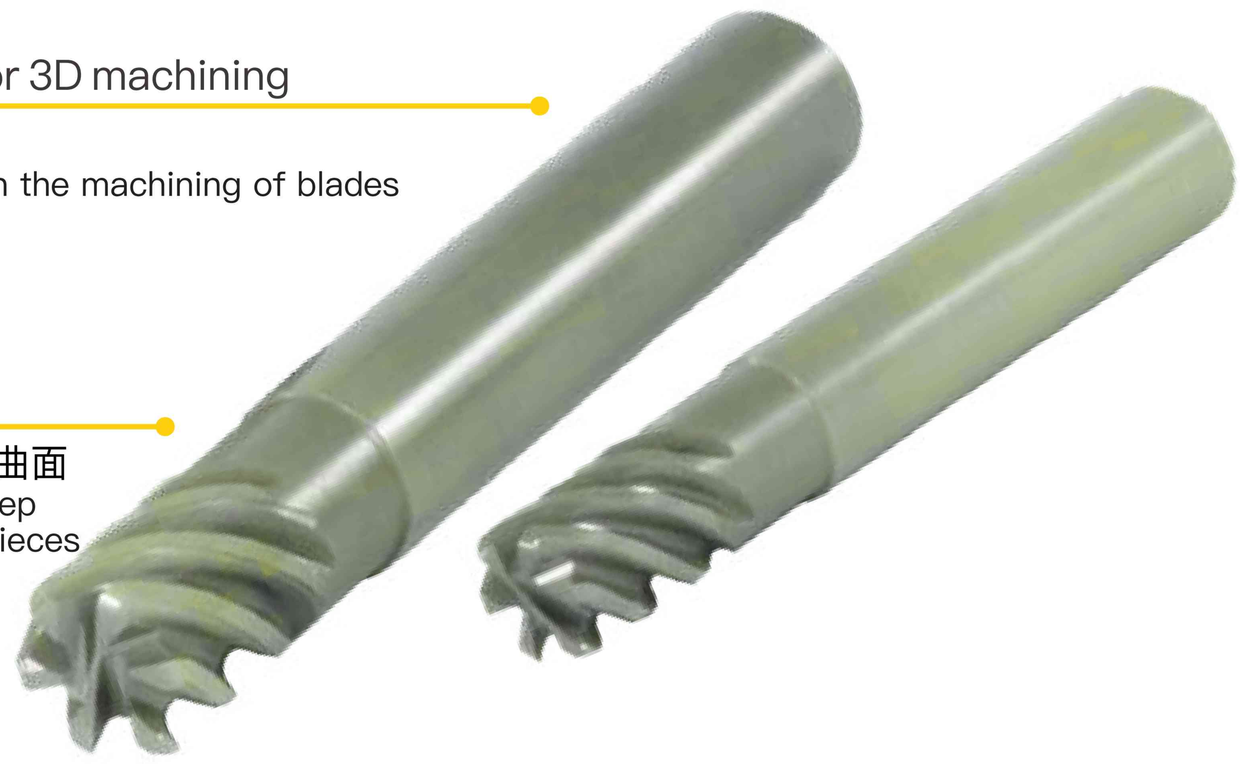
不仅擅长平面铣削，还精于叶片加工

Not only excels in flat surface milling, but also in the machining of blades

可达性 Accessibility

避开干涉区域，触及工件狭窄、深腔、复杂的曲面

Avoid interference zones and access narrow, deep cavities, and complex curved surfaces on workpieces



选型多样 Variety of lineup

根据加工需要选择4刃或6刃

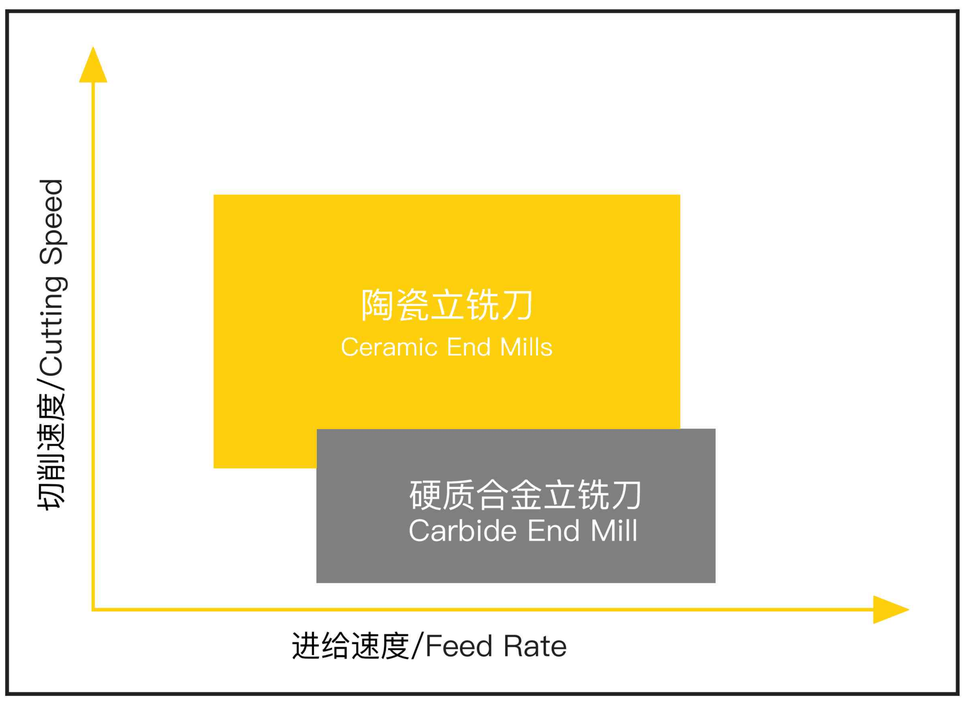
Select 4– or 6–flute specification based on your application needs

产品特点 Product features

整体式陶瓷立铣刀采用氧化铝（Al_2O_3）作为基体材料，添加碳化硅（SiC)晶须，通过桥联、裂纹偏转等机制提升韧性。并搭载独特切削刃几何设计。断裂韧性提高30%–50%，使客户可在保持与整体硬质合金立铣刀相近切削负载的条件下，实现比传统整体陶瓷立铣刀更高的铣削速度，从而显著提升生产效率。

Solid ceramic end mills use alumina (Al_2O_3) as the matrix material, with silicon carbide (SiC) whiskers added to improve toughness through mechanisms such as bridging and crack deflection. Combined with a unique cutting edge geometry, fracture toughness is increased by 30%—50%. This allows customers to achieve higher milling speeds than conventional solid ceramic end mills while maintaining cutting loads similar to those of solid carbide end mills, thereby significantly improving productivity.

特点/Featutes



- 能够高负载加工铣槽、型腔和仿形
  Capable of high–cutting–load operations in slot milling, die cavity milling, and contour profiling.
- 应用范围广泛，适用于绝大多数加工中心。
  With versatile applicability, it is compatible with most of machining centers.
- 加工性能高，加工速度范围广，进给可提高一倍!
  Superior machining efficiency, wildely range of cutting speed, achieving feed rates increased by 100%!

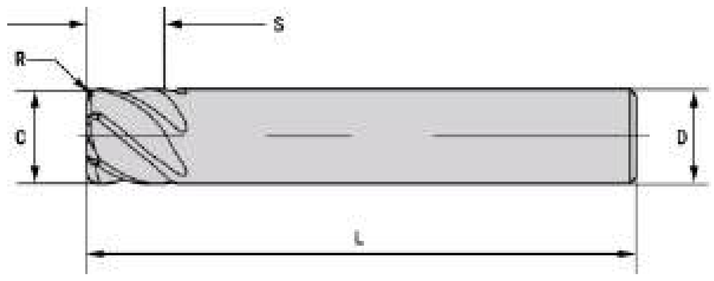
加工材料/machining materials

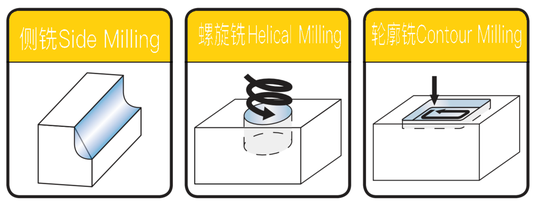
经认证适合加工各种不同的材料：
Certified for machining various materials

- 高温合金/High–temperature alloy
- 高硬钢/High hardness steel
- 球墨铸铁 /Nodular cast iron
- 蠕墨铸铁/Vermicular graphite cast iron
- 沉淀不锈钢/Precipitation–Hardened Stainless Steel
- 3D打印新型高温合金
  3D Printed New High–Temperature Alloy

陶瓷刀具 Ceramics inserts

通柄型 Straight shank





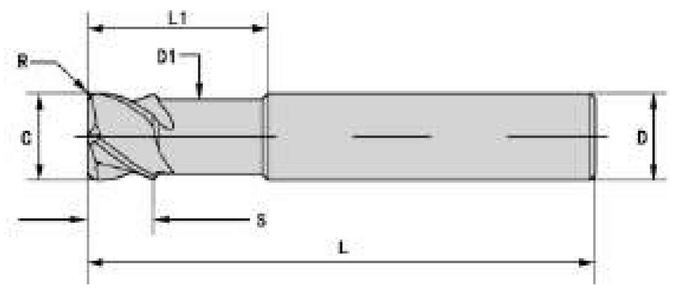
◯ 稳定工况/Stable Machining Conditions			⏲ 间断工况/Intermittent Machining Conditions	⛭ 恶劣间断工况/Severe Intermittent Conditions
K	铸铁 Cast Iron		◯	⏲
S	耐热合金 Heat-Resistant Alloy		◯	⏲
H	淬硬钢 Hardened Steel			

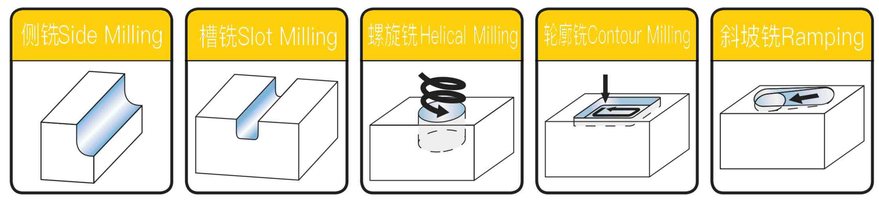
Metric/Inch 型号TYPE	D 柄径 Shank Diameter	R 刀尖圆弧 Corner Radius	C 刃径 Cutting Edge Diameter	S 刃长(最大切深) Effective Cutting Length (Max Axial Depth)	L 总长 Overall Length	Z 刃数 Number of Flutes	KS10	KS35
D0400Z4R050S04E	4.0 /.157″	0.50/.0197″	4.0 /.157″	3.0/.118″	50.0 /1.968″	4	●	▲
D0600Z4R075S06E	6.0 /.236″	0.75/.0295″	6.0 /.236″	4.5/.177 ″	50.0 /1.968″		●	▲
D0800Z4R100S08E	8.0 /.315″	1.00/.0394″	8.0 /.315″	6.0 /.236 ″	60.0 /2.362″		●	▲
D1000Z4R125L10E	10.0/.394″	1.25/.0492″	10.0/.394 ″	7.5 /.295 ″	65.0 /2.559″		●	▲
D1200Z4R150L12E	12.0/.472″	1.50/.0590″	12.0/.472″	9.0 /.354 ″	70.0 /2.756″		●	▲
D1600Z4R175L16E	16.0/.630″	1.75/.0689″	16.0/.630 ″	12.0 /.472 ″	75.0 /2.952″		●	▲
D2000Z6R200L20E	20.0/.787″	1.75/.0689″	20.0 /.787″	15.0 /.590 ″	80.0 /3.149″		●	▲
D4000Z6R050S04E	4.0 /.157″	0.50/ .0197″	4.0 /.157″	3.0/.118″	50.0 /1.968″	6	●	▲
D6000Z6R075S06E	6.0 /.236″	0.75/.0295″	6.0 /.236″	4.5/.177″	50.0 /1.968″		●	▲
D8000Z6R100S08E	8.0 /.315″	1.00/.0394″	8.0 /.315″	6.0 /.236 ″	60.0 /2.362″		●	▲
D1000Z6R125L10E	10.0/.394″	1.25/.0492″	10.0/.394 ″	7.5 /.295 ″	65.0 /2.559″		●	▲
D1200Z6R150L12E	12.0/.472″	1.50/.0590″	12.0/.472″	9.0 /.354 ″	70.0 /2.756″		●	▲
D1600Z6R175L16E	16.0/.630″	1.75/.0689″	16.0/.630 ″	12.0 /.472 ″	75.0 /2.952″		●	▲
D2000Z6R200L20E	20.0/.787″	1.75/.0689″	20.0 /.787″	15.0 /.590 ″	80.0 /3.149″		●	▲

▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

缩颈型 Reduced neck shank





◯ 稳定工况/Stable Machining Conditions	◔ 间断工况/Intermittent Machining Conditions	✲ 恶劣间断工况/Severe Intermittent Conditions		
K	铸铁 Cast Iron		◯	◔
S	耐热合金 Heat-Resistant Alloy		◯	◔
H	淬硬钢 Hardened Steel			

Metric/Inch 型号TYPE	D 柄径 Shank Diameter	R 刀尖圆弧 Corner Radius	C 刃径 Cutting Edge Diameter	S 刃长(最大切深) Effective Cutting Length (Max Axial Depth)	D1 缩颈 Reduced Neck	L1 有效长度 Useful Length	L 总长 Overall Length	Z 刃数 Number of Flutes	KS10	KS35
D0400Z4R050S04E	4.0 /.157″	0.50 /.0197″	4.0 /.157″	3.0 /.118″	3.80 /.015″	6.0 /.236″	50.0 /1.968″	4	●	▲
D0600Z4R075S06E	6.0 /.236″	0.75 /.0295″	6.0 /.236″	4.5 /.177″	5.80 /.228″	9.0 /.354″	50.0 /1.968″		●	▲
D0800Z4R100S08E	8.0 /.315″	1.00 /.0394″	8.0 /.315″	6.0 /.236″	7.70 /.303″	12.0 /.472″	60.0 /2.362″		●	▲
D1000Z4R125L10E	10.0 /.394″	1.25 /.0492″	10.0 /.394″	7.5 /.295″	9.60 /.378″	15.0 /.590″	65.0 /2.559″		●	▲
D1200Z4R150L12E	12.0 /.472″	1.50 /.0590″	12.0 /.472″	9.0 /.354″	11.50 /.453″	18.0 /.708″	70.0 /2.756″		●	▲
D1600Z4R175L16E	16.0 /.630″	1.75 /.0689″	16.0 /.630″	12.0 /.472″	15.40 /.606″	24.0 /.945″	75.0 /2.952″		●	▲
D2000Z4R200L20E	20.0 /.787″	1.75 /.0689″	20.0 /.787″	15.0 /.590″	15.40 /.606″	30.0 /1.181″	80.0 /3.149″		●	▲
D0400Z6R050S04E	4.0 /.157″	0.50 /.0197″	4.0 /.157″	3.0 /.118″	3.80 /.015″	6.0 /.236″	50.0 /1.968″	6	●	▲
D0600Z6R075S06E	6.0 /.236″	0.75 /.0295″	6.0 /.236″	4.5 /.177″	5.80 /.228″	9.0 /.354″	50.0 /1.968″		●	▲
D0800Z6R100S08E	8.0 /.315″	1.00 /.0394″	8.0 /.315″	6.0 /.236″	7.70 /.303″	12.0 /.472″	60.0 /2.362″		●	▲
D1000Z6R125L10E	10.0 /.394″	1.25 /.0492″	10.0 /.394″	7.5 /.295″	9.60 /.378″	15.0 /.590″	65.0 /2.559″		●	▲
D1200Z6R150L12E	12.0 /.472″	1.50 /.0590″	12.0 /.472″	9.0 /.354″	11.50 /.453″	18.0 /.708″	70.0 /2.756″		●	▲
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D2000Z6R200L20E	20.0 /.787″	1.75 /.0689″	20.0 /.787″	15.0 /.590″	15.40 /.606″	30.0 /1.181″	80.0 /3.149″		●	▲

▲ 主推牌号/Main recommended grade ● 可定制可选牌号/Optional grade available for build-to-order

注：未列于表的刃口处理方案可定制生产。/Note: Edge preparation not listed in the table can be customized for production.

广州威拓精密工具有限公司

Guangzhou Victor Precision Tools Co., Ltd.

广州市番禺区东环街番禺大道北555号天安总部中心1号楼1401室

ADD:Room 1401, Building 1,Tianan Headquarters Center, No.555 Panyu Avenue North,Donghuan Subdistrict, Panyu District,Guangzhou,Guangdong

http://gzvictor.com.cn/