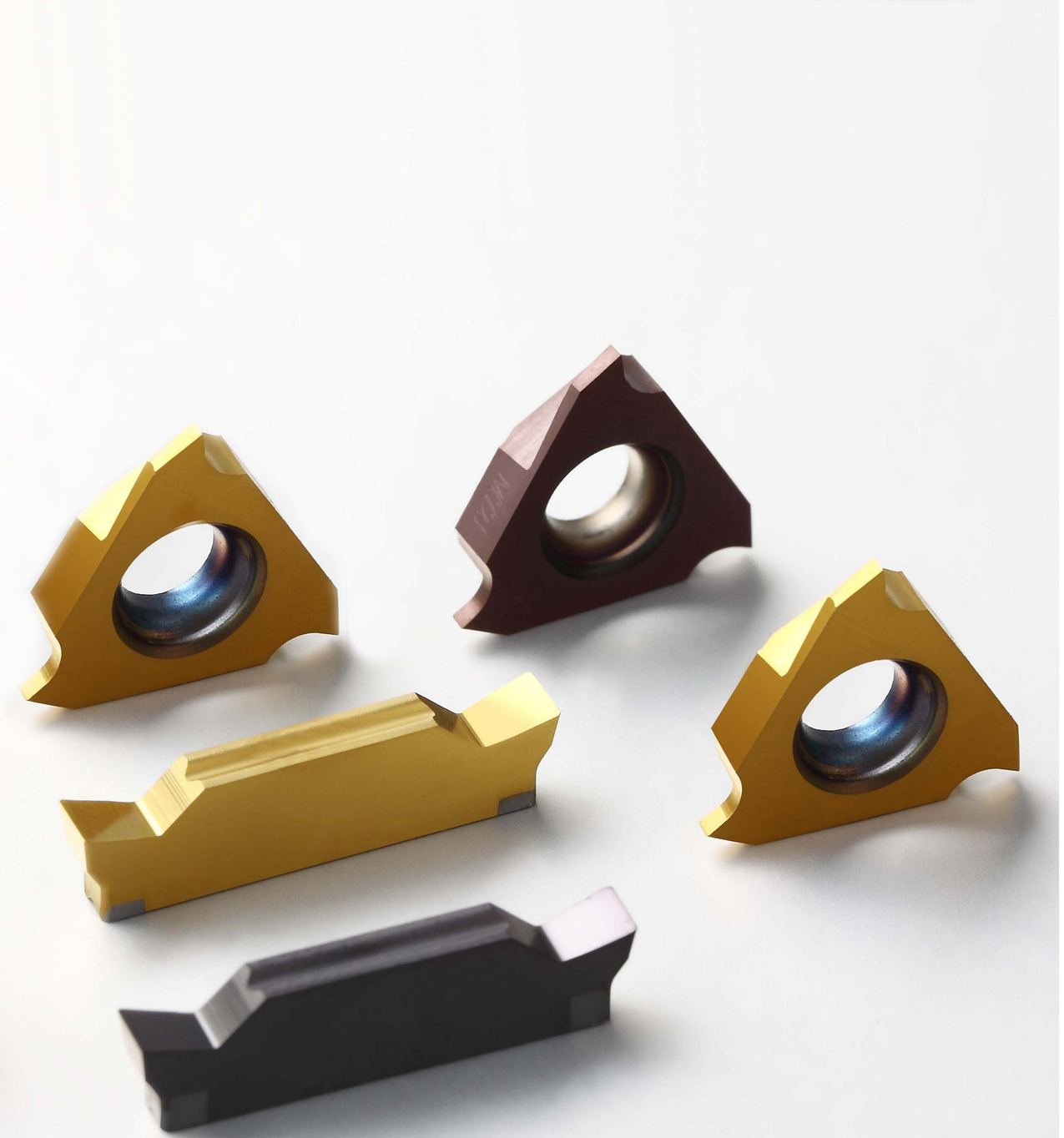




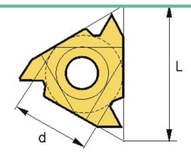
A 螺纹刀片系列 Threading insert

螺纹刀片型号编码说明 Threading insert code system

16		E	R		1.5	ISO			SMX30
1	2	3	4	5	6	7	8	9	10

1 刀片尺寸 Insert size

L08:d=4.762mm
L11:d=6.35mm
L16:d=9.525mm
L22:d=12.7mm
L27:d=415.875mm



2 刀片形状 Insert style

U 型
U type
V 型
V type

3 刀片类型 Type of insert

E：外螺纹刀片
E：External thread
I：内螺纹刀片
I:Internal thread

4 刀片方向 Hand of insert

R：右手刀片
R：Right-hand
L：左手刀片
L：Left-hand

5 断屑槽 Chip breaker

M：压制
M：With chip breaker
Non code：磨制
Non code：Common

6

全牙型 Full profile	
mm	TPI
0.35~6.0	72~3

全牙型 Full profile	
mm	TPI
A 0.5~1.5	48~16
AG 0.5~3.0	48~8
G 1.75~3.0	14~8
N 3.5~5.0	7~5
Q 5.5~6.0	4.5~4

7 螺纹标准 Thread standard

60° 范围牙型螺纹	60° Partial Profile 60°
55° 范围牙型螺纹	55° Partial Profile 55°
ISO 公制螺纹（全牙型）	ISO ISO Metric (Full profile)
UN,UNC,UNF 美制螺纹（全牙型）	UN,UNC,UNF American UN (Full profile)
BSW,BSF,BSP 惠氏螺纹（全牙型）	BSW,BSF,BSP Whitworth (Full profile)
BSPT 英制标准锥管螺纹（全牙型）	BSPT Britsh Standard Pipe Thread (Full profile)
NPT 美制60° 锥管螺纹（全牙型）	NPT National pipe Thread (Full profile)
NPTF 美制干密封直管螺纹（全牙型）	NPTF National pipe Threads-Dryseal (Full profile)
RD 圆齿螺纹DIN405	RD Round DIN405
TR 梯形螺纹DIN103	TR Trapez DIN103
ACME 美式梯形螺纹	ACME American
STACME 美制短牙梯形螺纹	STACME Stub ACME
UNJ 精密圆弧牙顶60° 螺纹	UNJ
ABUT 美制锯齿螺纹	ABUT American Buttress
API 美制石油管圆齿螺纹	API API Round Casing & Tubing

8 API型式 API Size & Taper

380.5 APIV-0..38R
382 APIV-0.038R1:6
383 APIV-0.038R1:4
403 APIV-0.040 1:4
502 APIV-0.050 1:6
503 APIV-0.050 1.4
551 APIV-0.055 1.8

9 齿数 No. of Teeth

For Multi-Tooth Style 2 3 5 6 8

10 等级 Carbide grade

SMX30　SMX35　SH945　SMK01

材料应用 Application grade

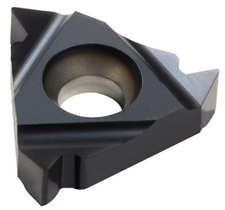
SMX30

TiN PVD涂层，适用于钢和不锈钢的低速切削。
TiN PVD coated, yellow color, For lowing cutting speed, Works well with wide range of steel and stainless steel



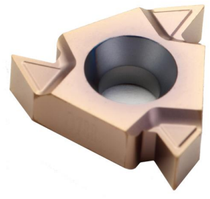
SMX35

TiALN PVD涂层，优良的耐断裂韧性和耐磨型，适用于钢和不锈钢的中高速切削。
TiALN PVD coated, black color, Micrograin grade provides good fracture toughness and excellent wearnesistance, It is good for steel and stainless steel at medium or high cutting speeds.



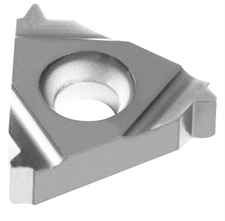
SH945

SiTiNO PVD涂层，多层涂层，古铜色，主要针对不锈钢的中高速切削，带断屑槽。
SiTiNO PVD coating, multi-layer coating, copper color, mainly for medium and high speed cutting of stainless steel, with chip breaker.



SMK01

无钝化，无涂层，适用于铜、铝合金等有色金属切削。
Not passivation, Uncoated grade, It is good for aluminum, copper or other non-ferrous.



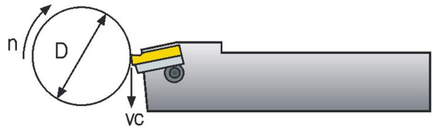
切削速度 Recommended Cutting Speed

材料 Material		Vc (m/min)				
		SMX30	SMX35	SH945	SMK01	
P	Low alloy steel (alloying elements < 5%)	100-140	80-150	120-200		
	Higt alloy steel (alloying elements > 5%), cast steel, and tool steel	40-80	60-130	100-130		
M	Stainless steel	40-90	40-80	60-120		
N	Aluminum alloy				200-300	
	Copper and cooper alloy				150-180	
	Non metallic				100-170	

转速N计算 Calculation of N [RPM]

$$Vc = \frac{\pi XDXN}{1000}$$

$$N = \frac{vcX1000}{\pi XD}$$



N: 每分钟转速 Revolution per minute(min-1)
Vc: 切削速度 Cutting speed(m/min)
D: 被加工直径 Workpiece diameter(mm)

转速N计算 Calculation of N [RPM]

螺距 Pitch	mm	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	5.00	5.50	6.00	8.00			
	TPI	48	32	24	20	16	14	12	10	8	17	6	5.5	4.5	4	3			
进刀次数 No. of passes		4-6	4-7	4-8	5-9	6-10	7-12	7-12	8-14	9-16	10-18	11-18	11-19	12-20	12-20	15-24			

注意 Notes:

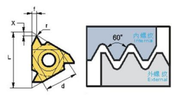
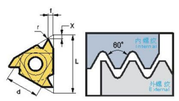
1、中高数值适合大多数情况。 For most stand and applications, the middle of the range is a good starting point.

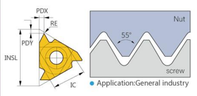
2、越硬的材料可以选择越多的走刀次数。 For most materials, the tougher the material, the higher the number of cutting passes you should select.

3、较多的走刀次数，比较快的切削速度更有利于加工。 As a general rule of thumb, less passes are better that more speed.

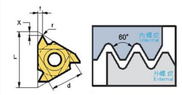
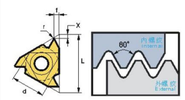
4、每次进给都应确保机床的负荷程度。 Infeed per pass should ensure an even machine load.

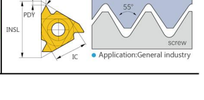
60°范围牙型 Partial Profile

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	螺距 Pitch mm	螺距 Pitch TPI	尺寸 Size d	尺寸 Size L	尺寸 Size x	尺寸 Size f	图片 Picture
外螺纹 External	11ER A60	11EL A60	0.5~1.5	48~16	6.35	11	0.8	0.9	
	16ER A60	16EL A60	0.5~1.5	48~16	9.525	16	0.8	0.9	
	16ER G60	16EL G60	1.75~3.0	14~8	9.525	16	1.2	1.5	
	16ER AG60	16EL AG60	0.5~3.0	48~8	9.525	16	1.2	1.5	
	22ER N60	22EL N60	3.5~5.0	7~5	12.7	22	1.7	2.5	
	27ER Q60	27EL Q60	5.5~6.0	4.5~4	15.875	27	2.3	3.1	
内螺纹 Internal	08IR A60	08IL A60	0.5~1.5	48~16	4.762	08	0.6	0.6	
	11IR A60	11IL A60	0.5~1.5	48~16	6.35	11	0.8	0.9	
	16IR A60	16IL A60	0.5~1.5	48~16	9.525	16	0.8	0.9	
	16IR G60	16IL G60	1.75~3.0	14~8	9.525	16	1.2	1.5	
	16IR AG60	16IL AG60	0.5~3.0	48~8	9.525	16	1.2	1.5	
	22IR N60	22IL N60	3.5~5.0	7~5	12.7	22	1.7	2.5	
	27IR Q60	27IL Q60	5.5~6.0	4.5~4	15.875	27	2.3	3.1	

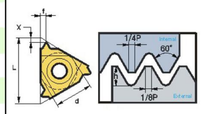
类型 Type	型号 Designation 外螺纹 External	型号 Designation 内螺纹 Internal	螺距 Pitch mm	螺距 Pitch TPI	尺寸 Size IC	尺寸 Size INSL	尺寸 Size PDY	尺寸 Size PDX	图片 Picture
压制断屑槽 With chip breaker	11ERA60 SH945	11IRA60 SH945	0.5~1.5	48~16	6.35	11	0.8	0.9	
	16ERA60 SH945	16IR A60 SH945	0.5~1.5	48~16	9.525	16	0.8	0.9	
	16ERG60 SH945	16IR G60 SH945	1.75~3.0	14~8	9.525	16	1.2	1.5	
	16ERAG60 SH945	16IRAG60 SH945	0.5~3.0	48~8	9.525	16	1.2	1.5	
	22ERN60 SH945	22ERN60 SH945	3.5~5.0	7~5	12.7	22	1.7	2.5	

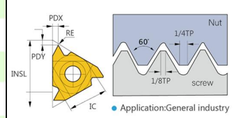
55°范围牙型 Partial Profile

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	螺距 Pitch mm	螺距 Pitch TPI	尺寸 Size d	尺寸 Size L	尺寸 Size x	尺寸 Size f	图片 Picture
外螺纹 External	11ER A55	11EL A55	0.5~1.5	48~16	6.35	11	0.8	0.9	
	16ER A55	16EL A55	0.5~1.5	48~16	9.525	16	0.8	0.9	
	16ER G55	16EL G55	1.75~3.0	14~8	9.525	16	1.2	1.5	
	16ER AG55	16EL AG55	0.5~3.0	48~8	9.525	16	1.2	1.5	
	22ER N55	22EL N55	3.5~5.0	7~5	12.7	22	1.7	2.5	
	27ER Q55	27EL Q55	5.5~6.0	4.5~4	15.875	27	2.0	2.9	
内螺纹 Internal	08IR A55	08IL A55	0.5~1.5	48~16	4.762	08	0.6	0.6	
	11IR A55	11IL A55	0.5~1.5	48~16	6.35	11	0.8	0.9	
	16IR A55	16IL A60	0.5~1.5	48~16	9.525	16	0.8	0.9	
	16IR G55	16IL G60	1.75~3.0	14~8	9.525	16	1.2	1.5	
	16IR AG55	16IL AG55	0.5~3.0	48~8	9.525	16	1.2	1.5	
	22IR N55	22IL N55	3.5~5.0	7~5	12.7	22	1.7	2.5	
	27IR Q55	27IL Q55	5.5~6.0	4.5~4	15.875	27	2.0	2.9	

类型 Type	型号 Designation 外螺纹 External	型号 Designation 内螺纹 Internal	螺距 Pitch mm	螺距 Pitch TPI	尺寸 Size IC	尺寸 Size INSL	尺寸 Size PDY	尺寸 Size PDX	图片 Picture
压制断屑槽 With chip breaker	16ERA55 SH945	16IR A55 SH945	0.5~1.5	48~16	9.525	16	0.8	0.9	
	16ERG55 SH945	16IR G55 SH945	1.75~3.0	14~8	9.525	16	1.2	1.5	
	16ERAG55 SH945	16IRAG55 SH945	0.5~3.0	48~8	9.525	16	1.2	1.5	

ISO公制螺纹 ISO Metric

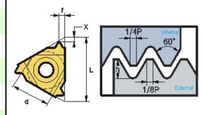
类型 Type	型号 Designation		螺距 Pitch		尺寸 Size				图片 Picture
	右手 Right	左手 Left	mm	TPI	d	L	x	f	
外螺纹 External	11ER0.5ISO	11EL0.5ISO	0.5	0.5	6.35	11	0.6	0.4	
	11ER0.6ISO	11EL0.6ISO	0.6	0.6	6.35	11	0.6	0.6	
	11ER0.7ISO	11EL0.7ISO	0.7	0.7	6.35	11	0.6	0.6	
	11ER0.75ISO	11EL0.75ISO	0.75	0.75	6.35	11	0.6	0.6	
	11ER0.8ISO	11EL0.8ISO	0.8	0.8	6.35	11	0.6	0.6	
	11ER1.0ISO	11EL1.0ISO	1.0	1.0	6.35	11	0.7	0.7	
	11ER1.25ISO	11EL1.25ISO	1.25	1.25	6.35	11	0.8	0.9	
	11ER1.5ISO	11EL1.5ISO	1.5	1.5	6.35	11	0.8	1.0	
	11ER1.75ISO	11EL1.75ISO	1.75	1.75	6.35	11	0.8	1.1	
	16ER0.5ISO	16EL0.5ISO	0.5	0.5	9.525	16	0.6	0.4	
	16ER0.6ISO	16EL0.6ISO	0.6	0.6	9.525	16	0.6	0.6	
	16ER0.7ISO	16EL0.7ISO	0.7	0.7	9.525	16	0.6	0.6	
	16ER0.75ISO	16EL0.75ISO	0.75	0.75	9.525	16	0.6	0.6	
	16ER0.8ISO	16EL0.8ISO	0.8	0.8	9.525	16	0.6	0.6	
	16ER1.0ISO	16EL1.0ISO	1.0	1.0	9.525	16	0.7	0.7	
	16ER1.25ISO	16EL1.25ISO	1.25	1.25	9.525	16	0.8	0.9	
	16ER1.5ISO	16EL1.5ISO	1.5	1.5	9.525	16	0.7	0.7	
	16ER1.75ISO	16EL1.75ISO	1.75	1.75	9.525	16	0.9	1.2	
	16ER2.0ISO	16EL2.0ISO	2.0	2.0	9.525	16	1.0	1.3	
	16ER2.5ISO	16EL2.5ISO	2.5	2.5	9.525	16	1.1	1.5	
	16ER3.0ISO	16EL3.0ISO	3.0	3.0	9.525	16	1.2	1.6	
	16ER3.5ISO	16EL3.5ISO	3.5	3.5	9.525	16	1.6	2.3	
	22ER4.0ISO	22EL4.0ISO	4.0	4.0	12.7	22	1.6	2.3	
	22ER4.5ISO	22EL4.5ISO	4.5	4.5	12.7	22	1.7	2.4	
	22ER5.0ISO	22EL5.0ISO	5.0	5.0	12.7	22	1.7	2.5	
	22ER6.0SO	22EL6.0ISO	6.0	6.0	12.7	22	2.0	2.9	
	27ER5.5ISO	27EL5.5ISO	5.5	5.5	15.875	27	1.9	2.7	
	27ER6.0ISO	27EL6.0ISO	6.0	6.0	15.875	27	2.0	2.9	

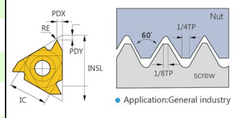
类型 Type	型号 Designation	尺寸 Size					图片 Picture
		IC	TPI	INSL	PDY	PDX	
压制断屑槽 With chip breaker	16ER1.0ISO SH945	9.525	1.0	16	0.7	0.7	
	16ER1.25ISO SH945	9.525	1.25	16	0.8	0.8	
	16ER1.5ISO SH945	9.525	1.5	16	0.8	1.0	
	16ER1.75ISO SH945	9.525	1.75	16	1.0	1.2	
	16ER2.0ISO SH945	9.525	2.0	16	1.0	1.3	
	16ER2.5ISO SH945	9.525	2.5	16	1.2	1.5	
	16ER3.0ISO SH945	9.525	3.0	16	1.2	1.5	

三韩刀具 SANDHOG

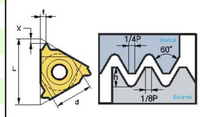
A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

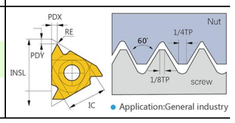
ISO公制螺纹 ISO Metric

类型 Type	型号 Designation		螺距 Pitch		尺寸 Size				图片 Picture
	右手 Right	左手 Left	mm	TPI	d	L	x	f	
内螺纹 Internal	11IR0.5ISO	11IL0.5ISO	0.5	0.5	6.35	11	0.6	0.4	
	11IR0.6ISO	11IL0.6ISO	0.6	0.6	6.35	11	0.6	0.6	
	11IR0.7ISO	11IL0.7ISO	0.7	0.7	6.35	11	0.6	0.6	
	11IR0.75ISO	11IL0.75ISO	0.75	0.75	6.35	11	0.6	0.6	
	11IR0.8ISO	11IL0.8ISO	0.8	0.8	6.35	11	0.6	0.6	
	11IR1.0ISO	11IL1.0ISO	1.0	1.0	6.35	11	0.7	0.7	
	11IR1.25ISO	11IL1.25ISO	1.25	1.25	6.35	11	0.8	0.9	
	11IR1.5ISO	11IL1.5ISO	1.5	1.5	6.35	11	0.8	1.0	
	11IR1.75ISO	11IL1.75ISO	1.75	1.75	6.35	11	0.8	1.1	
	16IR0.5ISO	16IL0.5ISO	0.5	0.5	9.525	16	0.6	0.4	
	16IR0.6ISO	16IL0.6ISO	0.6	0.6	9.525	16	0.6	0.6	
	16IR0.7ISO	16IL0.7ISO	0.7	0.7	9.525	16	0.6	0.6	
	16IR0.75ISO	16IL0.75ISO	0.75	0.75	9.525	16	0.6	0.6	
	16IR0.8ISO	16IL0.8ISO	0.8	0.8	9.525	16	0.6	0.6	
	16IR1.0ISO	16IL1.0ISO	1.0	1.0	9.525	16	0.7	0.7	
	16IR1.25ISO	16IL1.25ISO	1.25	1.25	9.525	16	0.8	0.9	
	16IR1.5ISO	16IL1.5ISO	1.5	1.5	9.525	16	0.7	0.7	
	16IR1.75ISO	16IL1.75ISO	1.75	1.75	9.525	16	0.9	1.2	
	16IR2.0ISO	16IL2.0ISO	2.0	2.0	9.525	16	1.0	1.3	
	16IR2.5ISO	16IL2.5ISO	2.5	2.5	9.525	16	1.1	1.5	
	16IR3.0ISO	16IL3.0ISO	3.0	3.0	9.525	16	1.2	1.6	
	16IR3.5ISO	16IL3.5ISO	3.5	3.5	9.525	16	1.6	2.3	
	22IR4.0ISO	22IL4.0ISO	4.0	4.0	12.7	22	1.6	2.3	
	22IR4.5ISO	22IL4.5ISO	4.5	4.5	12.7	22	1.7	2.4	
	22IR5.0ISO	22IL5.0ISO	5.0	5.0	12.7	22	1.7	2.5	
	22IR6.0SO	22IL6.0ISO	6.0	6.0	12.7	22	2.0	2.9	
	27IR5.5ISO	27IL5.5ISO	5.5	5.5	15.875	27	1.9	2.7	
	27IR6.0ISO	27IL6.0ISO	6.0	6.0	15.875	27	2.0	2.9	

类型 Type	型号 Designation	尺寸 Size					图片 Picture
		IC	TPI	INSL	PDY	PDX	
压制断屑槽 With chip breaker	16IR1.0ISO SH945	9.525	1.0	16	0.7	0.7	
	16IR1.25ISO SH945	9.525	1.25	16	0.8	0.8	
	16IR1.5ISO SH945	9.525	1.5	16	0.8	1.0	
	16IR1.75ISO SH945	9.525	1.75	16	1.0	1.2	
	16IR2.0ISO SH945	9.525	2.0	16	1.0	1.3	
	16IR2.5ISO SH945	9.525	2.5	16	1.2	1.5	
	16IR3.0ISO SH945	9.525	3.0	16	1.2	1.5	

美制螺纹UN American UN

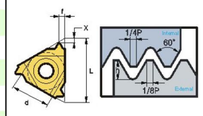
类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	11ER24UN	11EL24UN	24	6.35	11	0.7	0.8	
	11ER20UN	11EL20UN	20	6.35	11	0.8	0.9	
	11ER18UN	11EL18UN	18	6.35	11	0.8	1.0	
	11ER16UN	11EL16UN	16	6.35	11	0.9	1.1	
	11ER14UN	11EL14UN	14	6.35	11	0.9	1.1	
	11ER12UN	11EL12UN	12	6.35	11	0.8	1.1	
	16ER36UN	16EL36UN	36	9.525	16	0.6	0.6	
	16ER32UN	16EL32UN	32	9.525	16	0.6	0.6	
	16ER28UN	16EL28UN	28	9.525	16	0.6	0.7	
	16ER27UN	16EL27UN	27	9.525	16	0.7	0.8	
	16ER24UN	16EL24UN	24	9.525	16	0.7	0.8	
	16ER20UN	16EL20UN	20	9.525	16	0.8	0.9	
	16ER18UN	16EL18UN	18	9.525	16	0.8	1.0	
	16ER16UN	16EL16UN	16	9.525	16	0.9	1.1	
	16ER14UN	16EL14UN	14	9.525	16	1.0	1.2	
	16ER13UN	16EL13UN	13	9.525	16	1.0	1.3	
	16ER12UN	16EL12UN	12	9.525	16	1.1	1.4	
	16ER11UN	16EL11UN	11	9.525	16	1.1	1.5	
	16ER10UN	16EL10UN	10	9.525	16	1.1	1.5	
	16ER9UN	16EL9UN	9	9.525	16	1.2	1.7	
	16ER8UN	16EL8UN	8	9.525	16	1.2	1.6	
	16ER7UN	16EL7UN	7	9.525	16	1.3	1.5	
	22ER6UN	22EL6UN	6	12.7	22	1.6	2.3	
	22ER5UN	22EL5UN	5	12.7	22	1.7	2.5	

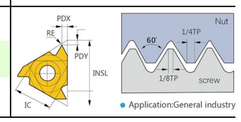
类型 Type	型号 Designation	尺寸 Size IC	TPI	INSL	PDY	PDX	图片 Picture
压制断屑槽 With chip breaker	16ER12UN SH945	9.525	12	16	1.1	1.5	
	16ER16UN SH945	9.525	16	16	0.9	1.1	
	16ER20UN SH945	9.525	20	16	0.8	0.9	

三韩刀具 SANDHOG

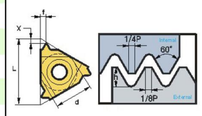
A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

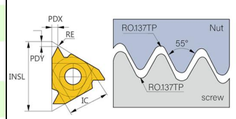
美制螺纹UN American UN

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
内螺纹 Internal	11IR24UN	11IL24UN	24	6.35	11	0.7	0.8	
	11IR20UN	11IL20UN	20	6.35	11	0.8	0.9	
	11IR18UN	11IL18UN	18	6.35	11	0.8	1.0	
	11IR16UN	11IL16UN	16	6.35	11	0.9	1.1	
	11IR14UN	11IL14UN	14	6.35	11	0.9	1.1	
	11IR12UN	11IL12UN	12	6.35	11	0.8	1.1	
	16IR36UN	16IL36UN	36	9.525	16	0.6	0.6	
	16IR32UN	16IL32UN	32	9.525	16	0.6	0.6	
	16IR28UN	16IL28UN	28	9.525	16	0.6	0.7	
	16IR27UN	16IL27UN	27	9.525	16	0.7	0.8	
	16IR24UN	16IL24UN	24	9.525	16	0.7	0.8	
	16IR20UN	16IL20UN	20	9.525	16	0.8	0.9	
	16IR18UN	16IL18UN	18	9.525	16	0.8	1.0	
	16IR16UN	16IL16UN	16	9.525	16	0.9	1.1	
	16IR14UN	16IL14UN	14	9.525	16	1.0	1.2	
	16IR13UN	16IL13UN	13	9.525	16	1.0	1.3	
	16IR12UN	16IL12UN	12	9.525	16	1.1	1.4	
	16IR11UN	16IL11UN	11	9.525	16	1.1	1.5	
	16IR10UN	16IL10UN	10	9.525	16	1.1	1.5	
	16IR9UN	16IL9UN	9	9.525	16	1.2	1.7	
	16IR8UN	16IL8UN	8	9.525	16	1.2	1.6	
	16IR7UN	16IL7UN	7	9.525	16	1.3	1.5	
	22IR6UN	22IL6UN	6	12.7	22	1.6	2.3	
	22IR5UN	22IL5UN	5	12.7	22	1.7	2.5	

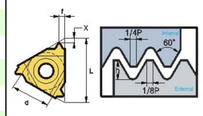
类型 Type	型号 Designation	尺寸 Size IC	TPI	INSL	PDY	PDX	图片 Picture
压制断屑槽 With chip breaker	16ER12UN SH945	9.525	12	16	1.1	1.5	
	16ER16UN SH945	9.525	16	16	0.9	1.1	
	16ER20UN SH945	9.525	20	16	0.8	0.9	

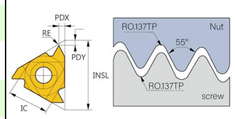
惠氏螺纹 Whitworth BSW,BSF,BSP

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	11ER28W	11EL28W	28	6.35	11	0.6	0.7	
	11ER26W	11EL26W	26	6.35	11	0.7	0.8	
	11ER20W	11EL20W	20	6.35	11	0.8	0.9	
	11ER19W	11EL19W	19	6.35	11	0.8	1.0	
	11ER18W	11EL18W	18	6.35	11	0.8	1.0	
	11ER16W	11EL16W	16	6.35	11	0.9	1.1	
	11ER14W	11EL14W	14	6.35	11	1.0	1.2	
	11ER11W	11EL11W	11	6.35	11	1.0	1.2	
	16ER32W	16EL32W	32	9.525	16	0.6	0.6	
	16ER28W	16EL28W	28	9.525	16	0.6	0.7	
	16ER26W	16EL26W	26	9.525	16	0.7	0.8	
	16ER24W	16EL24W	24	9.525	16	0.7	0.8	
	16ER20W	16EL20W	20	9.525	16	0.8	0.9	
	16ER19W	16EL19W	19	9.525	16	0.8	1.0	
	16ER18W	16EL18W	18	9.525	16	0.8	1.0	
	16ER16W	16EL16W	16	9.525	16	0.9	1.1	
	16ER14W	16EL14W	14	9.525	16	1.0	1.2	
	16ER12W	16EL12W	12	9.525	16	1.1	1.4	
	16ER11W	16EL11W	11	9.525	16	1.1	1.5	
	16ER10W	16EL10W	10	9.525	16	1.1	1.5	
	16ER9W	16EL9W	9	9.525	16	1.2	1.7	
	16ER8W	16EL8W	8	9.525	16	1.2	1.5	
	22ER7W	22EL7W	7	12.7	22	1.6	2.3	
	22ER6W	22EL6W	6	12.7	22	1.7	2.3	
	22ER5W	22EL5W	5	12.7	22	1.7	2.4	
	27ER4.5W	27EL4.5W	4.5	15.875	27	1.8	2.6	
	27ER4W	27EL4W	5	15.875	27	2.0	2.9	

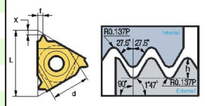
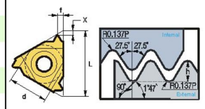
类型 Type	型号 Designation	尺寸 Size IC	TPI	INSL	PDY	PDX	图片 Picture
压制断屑槽 With chip breaker	16ER8W SH945	9.525	8	16	1.2	1.5	
	16ER11W SH945	9.525	11	16	1.2	1.5	
	16ER12W SH945	9.525	12	16	1.2	1.5	
	16ER14W SH945	9.525	14	16	1.0	1.2	
	16ER19W SH945	9.525	19	16	0.8	1.0	

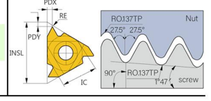
惠氏螺纹 Whitworth BSW,BSF,BSP

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
内螺纹 Internal	11IR28W	11IL28W	28	6.35	11	0.6	0.7	
	11IR26W	11IL26W	26	6.35	11	0.7	0.8	
	11IR20W	11IL20W	20	6.35	11	0.8	0.9	
	11IR19W	11IL19W	19	6.35	11	0.8	1.0	
	11IR18W	11IL18W	18	6.35	11	0.8	1.0	
	11IR16W	11IL16W	16	6.35	11	0.9	1.1	
	11IR14W	11IL14W	14	6.35	11	1.0	1.2	
	11IR11W	11IL11W	11	6.35	11	1.0	1.2	
	16IR32W	16IL32W	32	9.525	16	0.6	0.6	
	16IR28W	16IL28W	28	9.525	16	0.6	0.7	
	16IR26W	16IL26W	26	9.525	16	0.7	0.8	
	16IR24W	16IL24W	24	9.525	16	0.7	0.8	
	16IR20W	16IL20W	20	9.525	16	0.8	0.9	
	16IR19W	16IL19W	19	9.525	16	0.8	1.0	
	16IR18W	16IL18W	18	9.525	16	0.8	1.0	
	16IR16W	16IL16W	16	9.525	16	0.9	1.1	
	16IR14W	16IL14W	14	9.525	16	1.0	1.2	
	16IR12W	16IL12W	12	9.525	16	1.1	1.4	
	16IR11W	16IL11W	11	9.525	16	1.1	1.5	
	16IR10W	16IL10W	10	9.525	16	1.1	1.5	
	16IR9W	16IL9W	9	9.525	16	1.2	1.7	
	16IR8W	16IL8W	8	9.525	16	1.2	1.5	
	22IR7W	22IL7W	7	12.7	22	1.6	2.3	
	22IR6W	22IL6W	6	12.7	22	1.7	2.3	
	22IR5W	22IL5W	5	12.7	22	1.7	2.4	
	27IR4.5W	27IL4.5W	4.5	15.875	27	1.8	2.6	
	27IR4W	27IL4W	5	15.875	27	2.0	2.9	

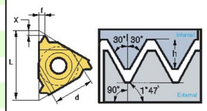
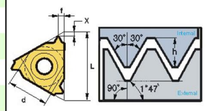
类型 Type	型号 Designation	尺寸 Size IC	TPI	INSL	PDY	PDX	图片 Picture
压制断屑槽 With chip breaker	16ER8W SH945	9.525	8	16	1.2	1.5	
	16ER11W SH945	9.525	11	16	1.2	1.5	
	16ER12W SH945	9.525	12	16	1.2	1.5	
	16ER14W SH945	9.525	14	16	1.0	1.2	
	16ER19W SH945	9.525	19	16	0.8	1.0	

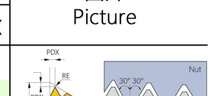
BSPT 英制标准锥管螺纹 Britsh Standard Pipe Thread

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	11ER28BSPT	11EL28BSPT	28	6.35	11	0.6	0.6	
	11ER19BSPT	11EL19BSPT	19	6.35	11	0.8	0.9	
	11ER14BSPT	11EL14BSPT	14	6.35	11	0.9	1.0	
	16ER28BSPT	16EL28BSPT	28	9.525	16	0.6	0.6	
	16ER19BSPT	16EL19BSPT	19	9.525	16	0.8	0.9	
	16ER14BSPT	16EL14BSPT	14	9.525	16	1.0	1.2	
	16ER11BSPT	16EL11BSPT	11	9.525	16	1.1	1.5	
内螺纹 Internal	11IR28BSPT	11IL28BSPT	28	6.35	11	0.6	0.6	
	11IR19BSPT	11IL19BSPT	19	6.35	11	0.8	0.9	
	11IR14BSPT	11IL14BSPT	14	6.35	11	0.9	1.0	
	16IR28BSPT	16IL28BSPT	28	9.525	16	0.6	0.6	
	16IR19BSPT	16IL19BSPT	19	9.525	16	0.8	0.9	
	16IR14BSPT	16IL14BSPT	14	9.525	16	1.0	1.2	
	16IR11BSPT	16IL11BSPT	11	9.525	16	1.1	1.5	

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size IC	INSL	PDY	PDX	图片 Picture
压制断屑槽 With chip breaker	16ER11BSPT SH945	16IR11BSPT SH945	11	9.525	16	1.1	1.5	
	16ER14BSPT SH945	16IR14BSPT SH945	14	9.525	16	1.0	1.2	
	16ER19BSPT SH945	16IR19BSPT SH945	19	9.525	16	0.8	0.9	

NPT 美制60°锥管螺纹 National pipe Thread

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	11ER27NPT	11EL27NPT	27	6.35	11	0.7	0.8	
	11ER18NPT	11EL18NPT	18	6.35	11	0.8	1.0	
	11ER14NPT	11EL14NPT	14	6.35	11	0.8	1.0	
	16ER27NPT	16EL27NPT	27	9.525	16	0.7	0.8	
	16ER18NPT	16EL18NPT	18	9.525	16	0.8	1.0	
	16ER14NPT	16EL14NPT	14	9.525	16	0.9	1.2	
	16ER11.5NPT	16EL11.5NPT	11.5	9.525	16	1.1	1.5	
	16ER8NPT	16EL8NPT	8	9.525	16	1.3	1.8	
内螺纹 Internal	11IR27NPT	11IL27NPT	27	6.35	11	0.7	0.8	
	11IR18NPT	11IL18NPT	18	6.35	11	0.8	1.0	
	11IR14NPT	11IL14NPT	14	6.35	11	0.8	1.0	
	16IR27NPT	16IL27NPT	27	9.525	16	0.7	0.8	
	16IR18NPT	16IL18NPT	18	9.525	16	0.8	1.0	
	16IR14NPT	16IL14NPT	14	9.525	16	0.9	1.2	
	16IR11.5NPT	16IL11.5NPT	11.5	9.525	16	1.1	1.5	
	16IR8NPT	16IL8NPT	8	9.525	16	1.3	1.8	

类型 Type	型号 Designation		TPI	尺寸 Size IC	INSL	PDY	PDX	图片 Picture
压制断屑槽 With chip breaker	16ER11.5NPT SH945	16IR11.5NPT SH945	11	9.525	16	0.9	1.2	
	16ER14NPT SH945	16IR14NPT SH945	14	9.525	16	0.9	1.2	
	16ER18NPT SH945	16IR18NPT SH945	19	9.525	16	0.9	1.0	

STACME 美制短牙梯形螺纹 Stub ACME

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	16ER14STACME	16EL14STACME	14	9.525	16	1.1	1.1	
	16ER12STACME	16EL12STACME	12	9.525	16	1.2	1.2	
	16ER10STACME	16EL10STACME	10	9.525	16	1.2	1.3	
	16ER8STACME	16EL8STACME	8	9.525	16	1.4	1.5	
	16ER6STACME	16EL6STACME	6	9.525	16	1.7	1.8	
	22ER6STACME	22EL6STACME	6	12.7	22	1.7	1.8	
	22ER5STACME	22EL5STACME	5	12.7	22	2.1	2.3	
	22ER4STACME	22EL4STACME	4	12.7	22	2.3	2.4	
内螺纹 Internal	16IR14STACME	16IL14STACME	14	9.525	16	1.1	1.1	
	16IR12STACME	16IL12STACME	12	9.525	16	1.2	1.2	
	16IR10STACME	16IL10STACME	10	9.525	16	1.2	1.3	
	16IR8STACME	16IL8STACME	8	9.525	16	1.4	1.5	
	16IR6STACME	16IL6STACME	6	9.525	16	1.7	1.8	
	22IR6STACME	22IL6STACME	6	12.7	22	1.7	1.8	
	22IR5STACME	22IL5STACME	5	12.7	22	2.1	2.3	
	22IR4STACME	22IL4STACME	4	12.7	22	2.3	2.4	

UNJ 精密圆弧牙顶60°螺纹

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	16ER32UNJ	16EL32UNJ	32	9.525	16	0.6	0.7`	
	16ER28UNJ	16EL28UNJ	28	9.525	16	0.7	0.7	
	16ER24UNJ	16EL24UNJ	24	9.525	16	0.7	0.8	
	16ER20UNJ	16EL20UNJ	20	9.525	16	0.8	0.9	
	16ER18UNJ	16EL18UNJ	18	9.525	16	0.8	1.0	
	16ER16UNJ	16EL16UNJ	16	9.525	16	0.9	1.1	
	16ER14UNJ	16EL14UNJ	14	9.525	16	1.0	1.2	
	16ER12UNJ	16EL12UNJ	12	9.525	16	1.1	1.3	
内螺纹 Internal	16IR32UNJ	16IL32UNJ	32	9.525	16	0.6	0.7`	
	16IR28UNJ	16IL28UNJ	28	9.525	16	0.7	0.7	
	16IR24UNJ	16IL24UNJ	24	9.525	16	0.7	0.8	
	16IR20UNJ	16IL20UNJ	20	9.525	16	0.8	0.9	
	16IR18UNJ	16IL18UNJ	18	9.525	16	0.8	1.0	
	16IR16UNJ	16IL16UNJ	16	9.525	16	0.9	1.1	
	16IR14UNJ	16IL14UNJ	14	9.525	16	1.0	1.2	
	16IR12UNJ	16IL12UNJ	12	9.525	16	1.1	1.3	

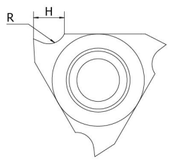
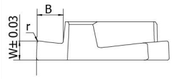
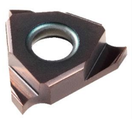
ABUT 美制锯齿螺纹 American Buttress

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	TPI	尺寸 Size d	L	x	f	图片 Picture
外螺纹 External	16ER20ABUT	16EL20ABUT	20	9.525	16	1.0	1.4	
	16ER16ABUT	16EL16ABUT	16	9.525	16	1.3	1.9	
	16ER12ABUT	16EL12ABUT	12	9.525	16	1.4	2.0	
	16ER10ABUT	16EL10ABUT	10	12.7	22	1.5	2.3	
	22ER8ABUT	22EL8ABUT	8	12.7	22	2.0	3.2	
	22ER6ABUT	22EL6ABUT	6	12.7	22	2.2	3.5	
内螺纹 Internal	16IR20ABUT	16IL20ABUT	20	9.525	16	1.0	1.4	
	16IR16ABUT	16IL16ABUT	16	9.525	16	1.3	1.9	
	16IR12ABUT	16IL12ABUT	12	9.525	16	1.4	2.0	
	16IR10ABUT	16IL10ABUT	10	12.7	22	1.5	2.3	
	22IR8ABUT	22IL8ABUT	8	12.7	22	2.0	3.2	
	22IR6ABUT	22IL6ABUT	6	12.7	22	2.2	3.5	

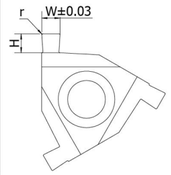
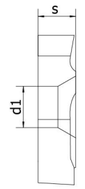
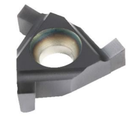
立装车螺纹刀片 Vertical threading inserts

类型 Type	型号 Designation 右手 Right	型号 Designation 左手 Left	螺距 Pitch mm	螺距 Pitch TPI	尺寸 Size d	L	x	图片 Picture
60°	16VER A60	16VEL A60	0.5~1.5	48~16	9.525	16	0.9	
	16VER G60	16VEL G60	1.75~3.0	14~8	9.525	16	1.7	
	16VER AG60	16VEL AG60	0.5~3.0	48~8	9.525	16	1.7	
55°	16VER A55	16VEL A55	0.5~1.5	48~16	9.525	16	0.9	
	16VER G55	16VEL G55	1.75~3.0	14~8	9.525	16	1.7	
	16VER AG55	16VEL AG55	0.5~3.0	48~8	9.525	16	1.7	

TGF32切槽刀片 TGF32 Gooving insert

图片 Picture	型号 Designation		尺寸 Size					形状 Shape
			W	B	r	R	H	
(SMX30) 	TGF32R050	TGF32L050	0.50	1.2	0.05	1.80	3.20	
	TGF32R055	TGF32L055	0.55	1.2	0.05	1.80	3.20	
	TGF32R060	TGF32L060	0.60	1.2	0.05	1.80	3.20	
	TGF32R065	TGF32L065	0.65	1.2	0.05	1.80	3.20	
	TGF32R070	TGF32L070	0.70	1.2	0.05	1.80	3.20	
	TGF32R075	TGF32L075	0.75	2.2	0.10	1.80	3.20	
	TGF32R080	TGF32L080	0.80	2.2	0.10	1.80	3.20	
	TGF32R085	TGF32L085	0.85	2.2	0.10	1.80	3.20	
	TGF32R090	TGF32L090	0.90	2.2	0.10	1.80	3.20	
	TGF32R095	TGF32L095	0.95	2.2	0.10	1.80	3.20	
	TGF32R100	TGF32L100	1.00	2.2	0.10	1.80	3.20	
	TGF32R105	TGF32L105	1.05	2.2	0.10	1.80	3.20	
	TGF32R110	TGF32L110	1.10	2.2	0.10	1.80	3.20	
	TGF32R115	TGF32L115	1.15	2.2	0.10	1.80	3.20	
	TGF32R120	TGF32L120	1.20	2.2	0.10	1.80	3.20	
	TGF32R125	TGF32L125	1.25	2.2	0.10	1.80	3.20	
	TGF32R130	TGF32L130	1.30	2.2	0.10	1.80	3.20	
	TGF32R135	TGF32L135	1.35	2.2	0.10	1.80	3.20	
	TGF32R140	TGF32L140	1.40	2.2	0.10	1.80	3.20	
	TGF32R145	TGF32L145	1.45	2.2	0.10	1.80	3.20	
	TGF32R150	TGF32L150	1.50	2.2	0.10	1.80	3.20	
	TGF32R155	TGF32L155	1.55	2.2	0.10	1.80	3.20	
	TGF32R160	TGF32L160	1.60	2.2	0.10	1.80	3.20	
	TGF32R165	TGF32L165	1.65	2.2	0.10	1.80	3.20	
	TGF32R170	TGF32L170	1.70	2.2	0.10	1.80	3.20	
	TGF32R175	TGF32L175	1.75	2.2	0.10	1.80	3.20	
(SMX35)	TGF32R180	TGF32L180	1.80	2.2	0.10	1.80	3.20	
	TGF32R185	TGF32L185	1.85	2.2	0.10	1.80	3.20	
	TGF32R190	TGF32L190	1.90	2.2	0.10	1.80	3.20	
	TGF32R195	TGF32L195	1.95	2.2	0.10	1.80	3.20	
	TGF32R200	TGF32L200	2.00	2.7	0.10	1.80	3.20	
	TGF32R205	TGF32L205	2.05	2.7	0.10	1.80	3.20	
	TGF32R210	TGF32L210	2.10	2.7	0.10	1.80	3.20	
	TGF32R215	TGF32L215	2.15	2.7	0.10	1.80	3.20	
	TGF32R220	TGF32L220	2.20	2.7	0.10	1.80	3.20	
	TGF32R225	TGF32L225	2.25	2.7	0.10	1.80	3.20	
	TGF32R230	TGF32L230	2.30	2.7	0.10	1.80	3.20	
	TGF32R235	TGF32L235	2.35	2.7	0.10	1.80	3.20	
	TGF32R240	TGF32L240	2.40	2.7	0.10	1.80	3.20	
	TGF32R245	TGF32L245	2.45	2.7	0.10	1.80	3.20	
	TGF32R250	TGF32L250	2.50	2.7	0.10	1.80	3.20	
	TGF32R255	TGF32L255	2.55	2.7	0.10	1.80	3.20	
	TGF32R260	TGF32L260	2.60	2.7	0.10	1.80	3.20	
	TGF32R265	TGF32L265	2.65	2.7	0.10	1.80	3.20	
	TGF32R270	TGF32L270	2.70	2.7	0.10	1.80	3.20	
	TGF32R275	TGF32L275	2.75	2.7	0.10	1.80	3.20	
	TGF32R280	TGF32L280	2.80	2.7	0.10	1.80	3.20	
	TGF32R285	TGF32L285	2.85	2.7	0.10	1.80	3.20	
	TGF32R290	TGF32L290	2.00	2.7	0.10	1.80	3.20	
	TGF32R295	TGF32L295	2.05	2.7	0.10	1.80	3.20	
	TGF32R300	TGF32L300	3.00	2.7	0.10	1.80	3.20	

平装切槽刀片 Gooving insert

图片 Picture	型号 Designation	尺寸 Size					形状 Shape
		W	H	r	d1	S	
	16ER1.00-D471-1.30	1.00	1.30	0.1	4.00	3.65	
	16ER1.10-D471-1.30	1.10	1.30	0.1	4.00	3.65	
	16ER1.20-D471-1.30	1.20	1.30	0.1	4.00	3.65	
	16ER1.30-D471-1.60	1.30	1.60	0.1	4.00	3.65	
	16ER1.40-D471-1.60	1.40	1.60	0.1	4.00	3.65	
	16ER1.50-D471-1.60	1.50	1.60	0.1	4.00	3.65	
	16ER1.60-D471-1.85	1.60	1.85	0.1	4.00	3.65	
	16ER1.80-D471-1.85	1.80	1.85	0.1	4.00	3.65	
	16ER1.85-D471-2.00	1.85	2.00	0.1	4.00	3.65	
	16ER2.00-D471-2.00	2.00	2.00	0.1	4.00	3.65	
	16ER2.15-D471-2.15	2.15	2.15	0.1	4.00	3.65	
							
	16IR1.00-D471-1.30	1.00	1.30	0.1	4.00	3.65	
	16IR1.10-D471-1.30	1.10	1.30	0.1	4.00	3.65	
	16IR1.20-D471-1.30	1.20	1.30	0.1	4.00	3.65	
	16IR1.30-D471-1.60	1.30	1.60	0.1	4.00	3.65	
	16IR1.40-D471-1.60	1.40	1.60	0.1	4.00	3.65	
	16IR1.50-D471-1.60	1.50	1.60	0.1	4.00	3.65	
	16IR1.60-D471-1.85	1.60	1.85	0.1	4.00	3.65	
	16IR1.80-D471-1.85	1.80	1.85	0.1	4.00	3.65	
	16IR1.85-D471-2.00	1.85	2.00	0.1	4.00	3.65	
	16IR2.00-D471-2.00	2.00	2.00	0.1	4.00	3.65	
	16IR2.15-D471-2.15	2.15	2.15	0.1	4.00	3.65	

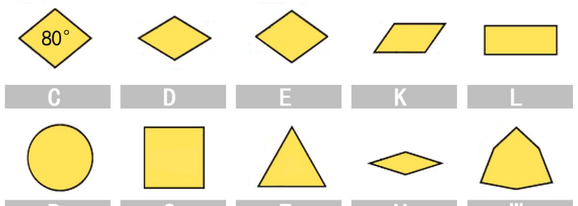
三韩刀具 SANDHOG

C N M G 12 04 08 – TF

C	N	M	G	12	04	08	–	TF
刀片形状 Insert Shape	后角 Relief Angle	公差 Tolerance	断面形状 Cross Section Type	切削刃长度 Cutting Edge Lenght	切削刃高度 Height of Cutting Edge	刀尖半径（刀尖R角） Nose Radius (Nose R)		车削断屑槽 Chip Breaker for Turning

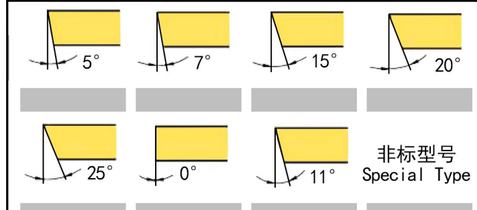
1 刀片形状 Insert Shape

C N M G 12 04 08 – TF



2 后角 Relief Angle

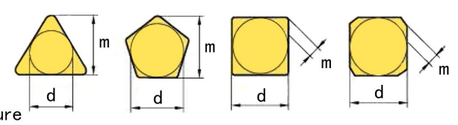
C N M G 12 04 08 – TF



3 公差 Tolerance

C N M G 12 04 08 – TF

d:内切圆 Inscribed
t:厚度 Thickness
m:参考示意 Refer to figure



【mm】

公差 Tolerance	d	m	t
A	±0.025	±0.005	±0.025
C	±0.025	±0.013	±0.025
H	±0.013	±0.013	±0.025
E	±0.025	±0.025	±0.025
G	±0.025	±0.025	±0.13
J	±0.05-±0.15	±0.005	±0.025
K	±0.05-±0.15	±0.013	±0.025
L	±0.05-±0.15	±0.025	±0.025
M	±0.05-±0.15	±0.08-±0.20	±0.13
N	±0.05-±0.15	±0.08-±0.18	±0.025
U	±0.08-±0.25	±0.13-±0.38	±0.13

内切圆C, E, H, M, O, P, R, S, T, W型公差定义（特殊型号除外）
Toleran ce on C, E, H, M, O, P, R, S, T, W Insert Shape (Exceptional case)

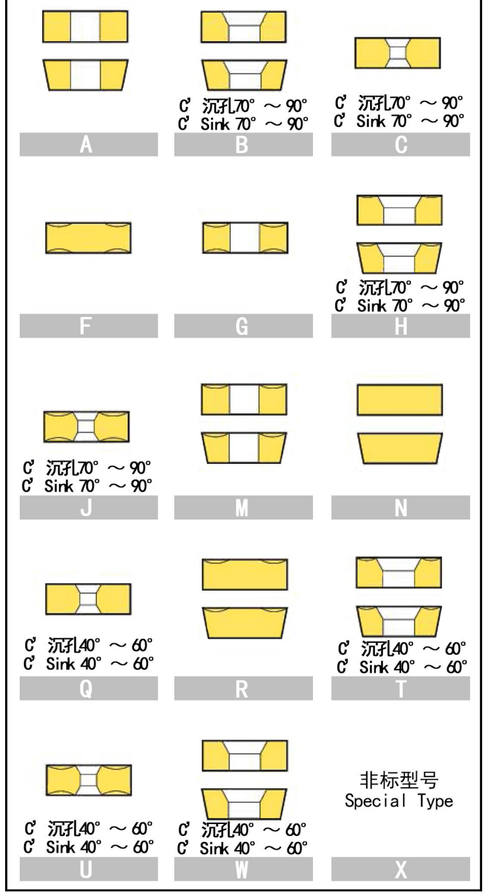
d	内切圆D公差 Toleran ce on D		内切圆M公差 Toleran ce on M	
	J, K, L, M, N	U	M, N	U
6.35	±0.05	±0.08	±0.08	±0.13
9.525	±0.05	±0.08	±0.08	±0.13
12.7	±0.08	±0.13	±0.13	±0.20
15.875	±0.10	±0.18	±0.15	±0.27
19.05	±0.10	±0.18	±0.15	±0.27
25.4	±0.13	±0.25	±0.18	±0.38

内切圆D型公差定义（特殊型号除外）
Toleran ce on D Insert Shape (Exceptional case)

d	内切圆D公差 Toleran ce on D	内切圆M公差 Toleran ce on M
6.35	±0.05	±0.11
9.525	±0.05	±0.11
12.7	±0.08	±0.15
15.875	±0.10	±0.18
19.05	±0.10	±0.18

4 断面形状 Cross Section Type

C N M G 12 04 08 – TF



5 切削刃长度，内切圆直径 Cutting Edge Lenght, Diameter of Inscribed Circle

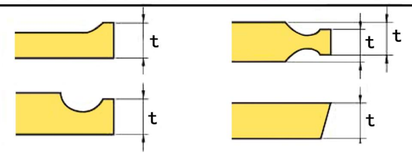
C N M G 12 04 08 – TF

符号 Symbol							英制 Inch	IC
C	D	S	T	R	V	W		
公制 Metric								d (mm)
03	04	03	06	03	–	02	1.2(5)	3.97
04	05	04	08	04	08	S3	1.5(6)	4.76
05	06	05	00	05	09	03	1.8(7)	5.56
–	–	–	–	06	–	–	–	6.00
06	07	06	11	06	11	04	2	6.35
08	09	07	13	07	13	05	2.5	7.94
–	–	–	–	08	–	–	–	8.00
09	11	09	16	09	16	06	3	9.525
–	–	–	–	10	–	–	–	10.00
11	13	11	19	11	19	07	3.5	11.11
–	–	–	–	12	–	–	–	12.00
12	15	12	22	12	22	08	4	12.70
14	17	14	24	14	24	09	4.5	14.29
16	19	15	27	15	27	10	5	15.875
–	–	–	–	16	–	–	–	16.00
17	21	17	30	17	30	11	5.5	17.46
19	23	19	33	19	33	13	6	19.05
–	–	–	–	20	–	–	–	20.00
22	27	22	38	22	38	15	7	22.225
–	–	–	–	25	–	–	–	25.00
25	31	25	44	25	44	17	8	25.40
32	38	31	54	31	54	21	10	31.75
–	–	–	–	32	–	–	–	32.00

（）刀片最小尺寸符号

6 切削刃高度 High of Cutting Edge

C N M G 12 04 08 – TF

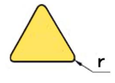


符号 Symbol		切削刃高度 High of Cutting Edge	
公制 Metric	英制 Inch	公制 Metric	英制 Inch
01	1(2)	1.59	1/16
T1	1.2	1.98	5/64
02	1.5(3)	2.38	3/32
T2	1.75	2.78	7/64
03	2	3.18	1/8
T3	2.5	3.97	5/32
04	3	4.76	3/16
05	3.5	5.56	7/32
06	4	6.35	1/4
07	5	7.94	5/16
09	6	9.52	3/8
11	7	11.11	7/16
12	8	12.7	1/2

（ ）刀片最小尺寸符号
( )Symbol for small size insert

7 刀尖半径（刀尖R角） Nose Radius (Nose R)

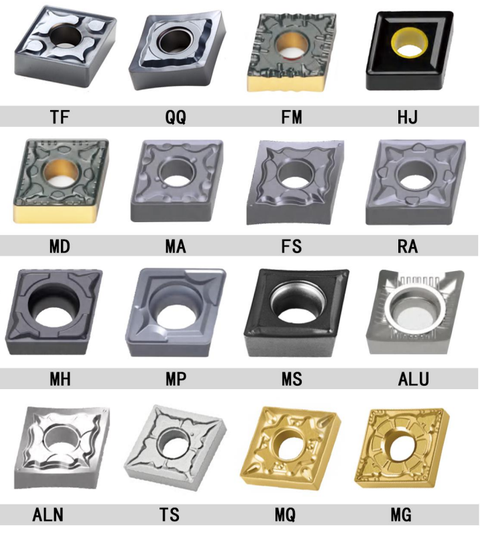
C N M G 12 04 08 – TF



符号 Symbol		刀尖半径 Corner Radius	
公制 Metric	英制 Inch	公制 Metric	英制 Inch
01	0	0.1	0.004
02	0.5	0.2	0.008
04	1	0.4	1/64
08	2	0.8	1/32
12	3	1.2	3/64
16	4	1.6	1/16
20	5	2.0	5/64
24	6	2.4	3/32
28	7	2.8	7/64
32	8	3.2	1/8
00	–	圆形刀片（英制） Round insert (Inch)	
M0	–	圆形刀片（公制） Round insert (Metric)	

8 车削断屑槽 Chip Breaker for Turning

C N M G 12 04 08 – TF



车削刀片材质推荐一览表
List of grades recommendations for turning insert

ISO使用 ISO Application	车削 Turning			切槽切断 Grooving & Parting	
	硬质合金 Carbide alloy		金属陶瓷 Cermet	硬质合金 Carbide alloy	
	CVD	PVD		CVD	PVD
P 钢 Steel	WS2010	WS6080	WS7020		DP9030
	WS2020				
M 不锈钢 Stainless Steel		WS9010			DM9035
		WS9020			
		WS9050			DM9045
		WS9080			
K 铸铁 Cast Iron	WS3010				
S 耐热合金 Heat-resistant alloy		WS4010			
		WS4020			
N 有色金属 Non-ferrous metal		SMU10			SMU10

材质说明
Grades description

P类钢件材质说明
P-Steel material description

类别 Category	牌号 Grade	应用推荐 Application recommendation
P 钢 Steel	WS2010	精加工专用材质; 出色抗热裂纹、抗塑变能力、抗崩刃性; 新型涂层技术，能够承受高温，延长刀具使用寿命，干、湿切削均可以。 Grade for finish turning; Substrate having excellent resistance to thermal crack and plastic deformation, strong resistance to chipping. New coating technology, Can withstand high temperature when machining with or without coolant, long tool life.
	WS2020	半精加工专用材质；超强的耐韧性基体和耐热的MTD涂层相结合，提高耐磨性和稳定性; 新型涂层技术，能够承受高温，延长刀具使用寿命，干、湿切削均可以。 Grade for semi-finishing machining; Substrate having high resistance combined with heat resistance MTD coating, improves stability and wear resistance. New coating technology, can withstand high temperature when machining with or without coolant, long tool life.
	WS6080	中Co高立方相含量硬质合金基体搭配强织构化的TiCN和Al_2O_3涂层，经特殊后处理工艺，具有突出的耐磨性能。钢件材料连续车削加工。 Medium cobalt content, and high cubic content carbide substrate combine with strong texture TiCN and Al_2O_3 coating. After special treatment, it has wonderful abrasion resistance. Suitable for general steel turning.

M类不锈钢件材质说明
M-Stainless steel material description

类别 Category	牌号 Grade	应用推荐 Application recommendation
M 不锈钢 Stainless Steel	WS9050	精加工专用材质，一种AlTiSi基纳米复合涂层，硬度高，抗高温氧化性强，亚微细晶粒材质确保刀片耐磨性，适用于不锈钢、耐热钢的连续精加工。 Grade for finish machining. AlTiSi based nanocomposite coating with high hardness and strong resistance to oxidation at high temperature. Subgrain substrate makes sure the wear resistance of the insert. Suitable for continuous finish machining of stainless steel, heat-resistant steel.
	WS9010	精-半精加工材质，新型PSiX基纳米涂层，硬度高，抗高温氧化性强，摩擦系数小，减小工件与切削刃的黏连，适用于不锈钢连续或轻微断续的精-半精加工。 Grade for finish-semi-finish machining. Newly developed PSiX based nanocomposite coating with high hardness and strong resistance to oxidation at high temperature. Small friction coefficient which reduces the adhesion between the workpiece and the cutting edge. Suitable for continuous cutting or slightly interrupted cutting of stainless steel finish to semi-finish process.
	WS9020	半精-粗加工专用材质；采用AlTiSi基纳米复合涂层，硬度高，抗高温氧化性强；摩擦系数小，减小工件与切削刃的黏连；适用于不锈钢一般加工-断续加工。 Grade for semi-finish to rough machining; AlTiSi based nanocomposite coating with high hardness and strong resistance to oxidation at high temperature. Small friction coefficient which reduces the adhesion between the workpiece and the cutting edge. Suitable for general machining to continuous machining of stainless steel.
	WS9080	全新的硬质合金基体，具有优异的耐磨损性以及抗冲击性能，搭配全新的PVD涂层，具体摩擦系数小，抗氧化温度高，突出的耐磨和通用性等优点。 New material substrate has good anti wear resistance and anti impact resistance. Combines with new PVD coating, It has very small coefficient of friction, high antioxidant temperature. Preferred grade for stainless steel.

S类耐热合金材质说明
S-Heat resistant alloy material description

类别 Category	牌号 Grade	应用推荐 Application recommendation
S 耐热合金 Heat-resistant alloy	WS4010	半精-粗加工专用材质，新型PSiX 基纳米涂层，硬度高，抗高温氧化性强，摩擦系数小，减少工件与切削刃的粘连，适用于钛合金、高温合金、镍基合金等那加工材料半精到粗加工。 Material for finish to semi-finish machining, Newly developed PSiX based nanocomposite coating with high hardness and strong. resistance to oxidation at high temperature. Small friction coefficient which reduces the adhesion between the workpiece and the cutting edge. Suitable for semi-finish to rough machining of titanium alloy, high temperature alloy and nickel based alloy.

K类铸铁材质说明
K-Cast Iron material description

类别 Category	牌号 Grade	应用推荐 Application recommendation
K 铸铁 Cast Iron	WS3010	铸铁加工通用材质，新型涂层技术，能够承受高温，干湿切削加工，延长刀具使用寿命，亚微细晶粒材质确保刀片耐磨性。 Grade for general machining of cast iron. Newly developed coating technology which can withstand high temperature and be machined with or without cooling liquid, thus improving tool life of the insert. Subgrain substrate makes sure the wear resistance of the insert.

N类有色金属材质说明
N-Non-ferrous metal material description

类别 Category	牌号 Grade	应用推荐 Application recommendation
N 有色金属 Non-ferrous metal	SMU10	有色金属车削专用材质, 亚微细晶粒材质确保刀片耐磨性, 特殊槽型设计，降低积屑瘤产品和抗崩刃性适用于有色金属(铝、铜等)连续和间断续加工 Material for non-ferrous metal. Subgrain material makes sure the wear resistance of the insert. Special geometry design reduces built up edge and improves resistance to chipping breakage. Suitable for non-ferrous metal (aluminum, copper and so on).

三韩刀具 SANDHOG

A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

切断切槽刀片槽型特点
Grooving insert chip breaker features

图片 Picture	应用推荐 Application recommendation
 MGGN**-JM	研磨断屑槽，刃口锋利，切屑流畅，加工阻力低，不易产生积屑瘤。 高精密级，可获得较高的槽底光洁度，适用于钢件、不锈钢和有色金属。 Grind the chip breaking groove, with sharp cutting edge, smooth chip cutting, low processing resistance, and less likely to produce chip lumps. High precision grade, can achieve high groove bottom smoothness, suitable for steel parts, stainless steel, and non-ferrous metals.
 MGMN**-T	锋利的刃口设计，适用于不锈钢、难加工材料切槽、车削加工，多级三维断屑槽设计， 具有良好的卷屑、断屑能力。 The sharp cutting edge design is suitable for grooving and turning of stainless steel and difficult-to-machine materials. The multi-level three-dimensional chip breaker design has good chip curling and chip breaking capabilities.
 MGMN**-M	正前角的刃口结构可减小切削力，切削过程轻快、流畅，特别设计的槽型结构在车削加工过程中具有更好的切屑控制性能。可实现切断、切槽和车削等各种加工。 The positive rake angle cutting edge structure can reduce cutting force, making the cutting process light and smooth. The specially designed groove structure has better chip control performance during turning. It can realize various processing such as cutting, grooving and turning.
 MRMN**-M	优化的刃口结构及断屑槽结构，使得刀片兼具低切削抗力及良好的刀尖强度，同时刀片切削处理性能更优异，适用于轴类零件仿形加工及越程槽的加工。 The optimized cutting edge structure and chip breaker structure make the insert have both low cutting resistance and good cutting edge strength. At the same time, the insert has better cutting performance and is suitable for profiling of shaft parts and processing of overrun grooves.

切断切槽刀片槽型特点
Grooving insert chip breaker features

图片 Picture	应用推荐 Application recommendation
 MGMN**-G	通用型槽型，刀片强度高，适用于广泛的加工材料和加工工况，成V字形内凹槽设计，切槽专用断屑槽，可以提高切屑控制，具备良好的断屑功能。 Universal groove type, high blade strength, suitable for a wide range of processing materials and processing conditions, V-shaped inner groove design, special chip breaker groove for grooving, can improve chip control, with good chip breaking function.
 MGMN**-DR	欧美槽型设计，可以横向切削，切削阻力小，排屑快，具备良好的断屑功能，不容易产生积屑瘤，高效加工，有助于提升工件表面光洁度。 The European and American groove design allows for lateral cutting, has low cutting resistance, fast chip removal, good chip breaking function, is not prone to built-up edge, and enables efficient processing, which helps to improve the surface finish of the workpiece.
 TDC**	正前角刀片设计，前刀面的圆弧形断屑槽，切削刃负倒棱和其两侧加强筋的设计，保证了刀片具有足够的切削刃强度，优先用于切断棒料、硬材料和坚韧材料的中、高速进给加工，适用于恶劣的加工条件或断续切削。 Positive rake angle insert with arc geomethry, negative chamfering of cutting edge and reinforcing bars on both sides design insure sufficient cutting edge strength on insert. Priority for bar parting ,hard and tough material processing for medium and high speed feed processing. Suitable for harsh working conditions or intermittent cutting.
 TDJ**	正前角刀片设计，具有锋利切削刃，低切削阻力，优先用于管材切断、软金属材料的低、中速进给加工。 Positive rake angle with sharp cutting edge make low cutting resistance, Preferred for pipe and soft metal materials for low and medium speed feed processing.

三韩刀具 SANDHOG

A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

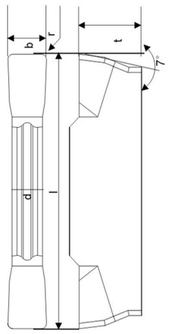
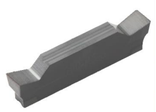
切断切槽刀片槽型特点
Grooving insert chip breaker features

图片 Picture	应用推荐 Application recommendation
 TDXU**	通用型车削和切槽加工，独特断屑槽设计，降低切削阻力，切屑控制良好，用于外圆、内孔及端面加工，适用于钢件和不锈钢等加工。 Preferred for general turning and grooving. Special geometry design to reduce cutting force and good chip control. For external, internal and end face processing. Suitable for steel and stainless steel processing.
 TDT**	车削加工首选，应用于外圆、内孔切槽和车削加工，独特槽型设计，实现低切削阻力和卓越的切削控制，高进给率，适用于钢件、不锈钢和铸铁加工。 Preferred for turning processing, Applied to external, internal grooving and turning processing. Special geometry design to achieve low cutting resistance and excellent chip control. High feed rate, Suitable for steel, stainless steel and cast iron processing.

切断切槽刀片槽型特点
Grooving insert chip breaker features

图片 Picture	应用推荐 Application recommendation
 TDT**-RU	全半径型刀片，适用于钢件、铸铁的仿形加工，高进给率和小切深，独特的槽型设计，可以提高切屑控制，具备良好的断屑功能。 Full radius inserts are suitable for profiling of steel and cast iron, with high feed rates and small cutting depths. The unique groove design can improve chip control and has good chip breaking function.
 SP**	低切削力前角设计，延长刀具使用寿命，特殊的断屑点，切屑排出性能良好，用于切槽和切断，适用于钢、不锈钢和铸铁等加工。 Low cutting force rake angle design, extended tool life, special chip breaking point, good chip discharge performance, used for grooving and parting, suitable for steel, stainless steel and cast iron processing.

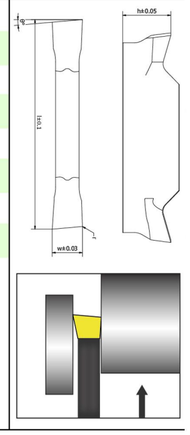
MGGN切槽刀片 Gooving insert

图片 Picture	型号 Designation	尺寸 Size				涂层 Coating		形状 Shape
		b	t	r	l	DP9030	DM9035	
	MGGN150-JM	1.5	3.5	0.15	15.9	●	●	
	MGGN200-JM	2.0	3.5	0.20	15.9	●	●	
	MGGN250-JM	2.5	3.8	0.20	18.3	●	●	
	MGGN300-JM	3.0	3.8	0.40	20.9	●	●	
	MGGN400-JM	4.0	4.8	0.40	20.9	●	●	
	MGGN500-JM	5.0	5.8	0.80	25.8	●	●	
	MGGN600-JM	6.0	5.8	0.80	26.0	●	●	
	MGGN1802-JM	1.8	3.5	0.20	15.9	●	●	
	MGGN1902-JM	1.9	3.5	0.20	15.9	●	●	
	MGGN2002-JM	2.0	3.5	0.20	15.9	●	●	
	MGGN2102-JM	2.1	3.5	0.20	15.9	●	●	
	MGGN2202-JM	2.2	3.5	0.20	15.9	●	●	
	MGGN2302-JM	2.3	3.5	0.20	15.9	●	●	
	MGGN2402-JM	2.4	3.5	0.20	15.9	●	●	
	MGGN2502-JM	2.5	3.5	0.20	15.9	●	●	
	MGGN2602-JM	2.6	3.5	0.20	15.9	●	●	
	MGGN2702-JM	2.7	4.8	0.20	20.9	●	●	
	MGGN2802-JM	2.8	4.8	0.20	20.9	●	●	
	MGGN2902-JM	2.8	4.8	0.20	20.9	●	●	
	MGGN3002-JM	3.0	4.8	0.20	20.9	●	●	
	MGGN3102-JM	3.1	4.8	0.20	20.9	●	●	
	MGGN3202-JM	3.2	4.8	0.20	20.9	●	●	
	MGGN3302-JM	3.3	4.8	0.20	20.9	●	●	
	MGGN3402-JM	3.4	4.8	0.20	20.9	●	●	
	MGGN3502-JM	3.5	4.8	0.20	20.9	●	●	
	MGGN3602-JM	3.6	4.8	0.20	20.9	●	●	
	MGGN3702-JM	3.7	4.8	0.20	20.9	●	●	
	MGGN3802-JM	3.8	4.8	0.20	20.9	●	●	
	MGGN3902-JM	3.9	4.8	0.20	20.9	●	●	
	MGGN4002-JM	4.0	4.8	0.20	20.9	●	●	
	MGGN4102-JM	4.1	4.8	0.20	20.9	●	●	
	MGGN4202-JM	4.2	4.8	0.20	20.9	●	●	
	MGGN4302-JM	4.3	4.8	0.20	20.9	●	●	
	MGGN4402-JM	4.4	4.8	0.20	20.9	●	●	
	MGGN4502-JM	4.5	4.8	0.20	20.9	●	●	
	MGGN4602-JM	4.6	4.8	0.20	20.9	●	●	

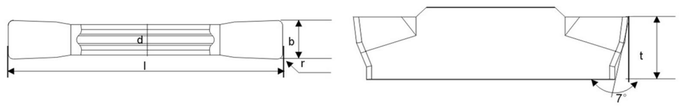
三韩刀具 SANDHOG

A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

MGGN切槽刀片 Gooving insert

图片 Picture	型号 Designation	尺寸 Size					涂层 Coating		形状 Shape
		W	h	r	l	θ	DP9030	DM9035	
	MGGN2002-15R-JM	2.0	3.5	0.2	15.9	15			
	MGGN2002-5R-JM	2.0	3.5	0.2	15.9	5			
	MGGN2002-8R-JM	2.0	3.5	0.2	15.9	8			
	MGGN3002-15R-JM	3.0	4.8	0.2	20.9	15			
	MGGN3002-5R-JM	3.0	4.8	0.2	20.9	5			
	MGGN3002-8R-JM	3.0	4.8	0.2	20.9	8			
	MGGN4002-15R-JM	4.0	4.8	0.2	20.9	15			
	MGGN4002-5R-JM	4.0	4.8	0.2	20.9	5			
	MGGN4002-8R-JM	4.0	4.8	0.2	20.9	8			

切槽刀片 Gooving insert



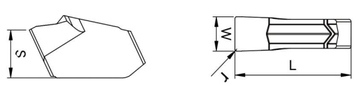
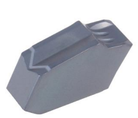
图片 Picture	型号 Designation	尺寸 Size				涂层 Coating		
		b	t	r	l	DP9030	DM9035	SH945
	MGMN150-T	1.5	3.5	0.15	16.0	●	●	●
	MGMN200-T	2.0	3.5	0.20	16.0	●	●	●
	MGMN250-T	2.5	3.85	0.20	18.5	●	●	●
	MGMN300-T	3.0	4.83	0.40	21.0	●	●	●
	MGMN400-T	4.0	4.83	0.40	21.0	●	●	●
	MGMN500-T	5.0	5.82	0.80	26.0	●	●	●
	MGMN600-T	6.0	5.82	0.80	26.0	●	●	●
	MGMN150-M	1.5	3.5	0.15	16.0	●	●	●
	MGMN200-M	2.0	3.5	0.20	16.0	●	●	●
	MGMN250-M	2.5	3.85	0.20	18.5	●	●	●
	MGMN300-M	3.0	4.83	0.40	21.0	●	●	●
	MGMN400-M	4.0	4.83	0.40	21.0	●	●	●
	MGMN500-M	5.0	5.82	0.80	26.0	●	●	●
	MGMN600-M	6.0	5.82	0.80	26.0	●	●	●
	MGMN150-G	1.5	3.5	0.15	16.0	●	●	●
	MGMN200-G	2.0	3.5	0.20	16.0	●	●	●
	MGMN250-G	2.5	3.85	0.20	18.5	●	●	●
	MGMN300-G	3.0	4.83	0.30	21.0	●	●	●
	MGMN400-G	4.0	4.83	0.30	21.0	●	●	●
	MGMN500-G	5.0	5.82	0.50	26.0	●	●	●
	MGMN600-G	6.0	5.82	0.80	26.0	●	●	●
	MRMN200-G	2.0	3.5	1.00	16.0	●	●	●
	MRMN300-G	3.0	4.83	1.50	21.0	●	●	●
	MRMN400-G	4.0	4.83	2.00	21.0	●	●	●
	MRMN500-G	5.0	5.82	2.50	26.0	●	●	●
	MRMN600-G	6.0	5.82	3.00	26.0	●	●	●
	MGMN150-DR	1.5	3.5	0.15	16.0	●	●	●
	MGMN200-DR	2.0	3.5	0.20	16.0	●	●	●
	MGMN250-DR	2.5	3.85	0.20	18.5	●	●	●
	MGMN300-DR	3.0	4.83	0.30	21.0	●	●	●
	MGMN400-DR	4.0	4.83	0.30	21.0	●	●	●
	MGMN500-DR	5.0	5.82	0.50	26.0	●	●	●
	MGMN600-DR	6.0	5.82	0.80	26.0	●	●	●

三韩刀具 SANDHOG

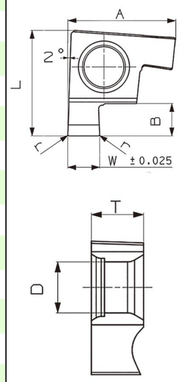
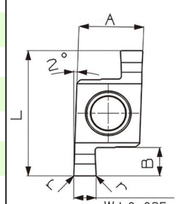
A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

切槽刀片 Gooving insert



图片 Picture	型号 Designation	尺寸 Size				涂层 Coating		
		W	L	r	S	DP9030	DM9035	SH945
	TDC200	2.0	20	0.2	4.00	●	●	●
	TDC300	3.0	20	0.2	4.10	●	●	●
	TDC400	4.0	20	0.3	4.15	●	●	●
	TDC500	5.0	25	0.3	5.05	●	●	●
						●	●	●
	TDJ200	2.0	20	0.2	3.90	●	●	●
	TDJ300	3.0	20	0.2	4.00	●	●	●
	TDJ400	4.0	20	0.3	4.05	●	●	●
	TDJ500	5.0	20	0.3	4.95	●	●	●
						●	●	●
	TDT3E-0.4	3.0	20	0.4	4.00	●	●	●
	TDT4E-0.4	4.0	20	0.4	4.05	●	●	●
						●	●	●
						●	●	●
	TDXU2E-0.3	2.0	20	0.3	3.90	●	●	●
	TDXU3E-0.3	3.0	20	0.3	4.00	●	●	●
	TDXU4E-0.4	4.0	20	0.4	4.05	●	●	●
	TDXU5E-0.4	5.0	25	0.4	4.95	●	●	●
	TDXU5E-0.8	5.0	25	0.8	4.95	●	●	●
	TDXU6E-0.4	6.0	25	0.4	4.95	●	●	●
	TDXU6E-0.8	6.0	25	0.8	4.95	●	●	●
	TDT2E-1.0-RU	2.0	20	1.0	4.00	●	●	●
	TDT3E-1.5-RU	3.0	20	1.5	4.10	●	●	●
	TDT4E-2.0-RU	4.0	20	2.0	4.15	●	●	●
						●	●	●
								
	SP200	2.18	8.90	0.20	X	●	●	
	SP300	3.14	11.00	0.20	X	●	●	
	SP400	4.14	11.00	0.25	X	●	●	
	SP500	5.12	11.04	0.30	X	●	●	
	SP600	6.34	11.05	0.40	X	●	●	

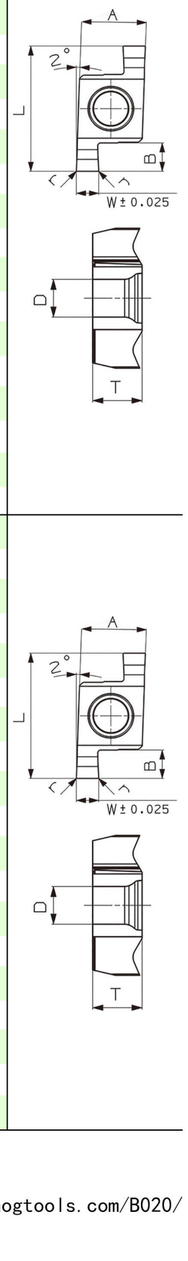
GER切槽刀片 Gooving insert

图片 Picture	型号 Designation	尺寸 Size							Grade	形状 Shape
		A	L	T	D	W	B	r	SH945	
	GER/L050-005A	6.69	6.5	2.58	2.5	0.5	1.2	0.05	●	
	GER/L060-005A	6.69	6.5	2.58	2.5	0.6	1.2	0.05	●	
	GER/L070-005A	6.69	6.5	2.58	2.5	0.7	1.2	0.05	●	
	GER/L080-005A	6.69	6.5	2.58	2.5	0.8	1.2	0.05	●	
	GER/L100-005A	6.69	6.5	2.58	2.5	1.0	1.2	0.05	●	
	GER/L120-005A	6.69	6.5	2.58	2.5	1.2	1.2	0.05	●	
	GER/L125-005A	6.69	6.5	2.58	2.5	1.25	1.2	0.05	●	
	GER/L140-010A	6.69	6.5	2.58	2.5	1.4	1.5	0.1	●	
	GER/L150-010A	6.69	6.5	2.58	2.5	1.5	1.5	0.1	●	
	GER/L180-010A	6.69	6.5	2.58	2.5	1.8	1.5	0.1	●	
	GER/L200-010A	6.69	6.5	2.58	2.5	2.0	1.5	0.1	●	
	GER/L080-005B	8.46	8.2	3.18	2.7	0.8	1.8	0.05	●	
	GER/L100-005B	8.46	8.2	3.18	2.7	1.0	2.2	0.05	●	
	GER/L120-005B	8.46	8.2	3.18	2.7	1.2	2.2	0.05	●	
	GER/L125-005B	8.46	8.2	3.18	2.7	1.25	2.2	0.05	●	
	GER/L130-010B	8.46	8.2	3.18	2.7	1.3	2.2	0.1	●	
	GER/L145-010B	8.46	8.2	3.18	2.7	1.45	2.2	0.1	●	
	GER/L150-010B	8.46	8.2	3.18	2.7	1.5	2.2	0.1	●	
	GER/L180-010B	8.46	8.2	3.18	2.7	1.8	2.2	0.1	●	
	GER/L200-010B	8.46	8.2	3.18	2.7	2.0	2.2	0.1	●	
	GER/L225-010B	8.46	8.2	3.18	2.7	2.25	2.2	0.1	●	
	GER/L250-010B	8.46	8.2	3.18	2.7	2.5	2.2	0.1	●	
	GER/L280-020B	8.46	8.2	3.18	2.7	2.8	2.2	0.2	●	
	GER/L300-020B	8.46	8.2	3.18	2.7	3.0	2.2	0.2	●	
	GER/L100-005C	5.8	11.48	4.05	2.8	1.0	2.5	0.05	●	
	GER/L120-005C	5.8	11.48	4.05	2.8	1.2	2.5	0.05	●	
	GER/L125-005C	5.8	11.48	4.05	2.8	1.25	2.5	0.05	●	
	GER/L140-010C	5.8	11.48	4.05	2.8	1.4	2.5	0.1	●	
	GER/L150-010C	5.8	11.48	4.05	2.8	1.5	2.5	0.1	●	
	GER/L160-010C	5.8	11.48	4.05	2.8	1.6	2.5	0.1	●	
	GER/L170-010C	5.8	11.48	4.05	2.8	1.7	2.5	0.1	●	
	GER/L185-010C	5.8	11.48	4.05	2.8	1.85	2.5	0.1	●	
	GER/L195-010C	5.8	11.48	4.05	2.8	1.95	2.5	0.1	●	
	GER/L200-010C	5.8	11.48	4.05	2.8	2.0	2.5	0.1	●	
	GER/L225-010C	5.8	11.48	4.05	2.8	2.25	2.5	0.1	●	
	GER/L250-010C	5.8	11.48	4.05	2.8	2.5	2.5	0.1	●	
	GER/L280-020C	5.8	11.48	4.05	2.8	2.8	2.5	0.2	●	
	GER/L300-020C	5.8	11.48	4.05	2.8	3.0	2.5	0.2	●	

三韩刀具 SANDHOG

A 外圆车刀杆 Turning tool holder
B 硬质合金刀片 Carbide insert
C 铣削刀具 Milling tool holder
D 钻削刀具 Drilling tool holder
E 硬质合金刀具 Carbide tools

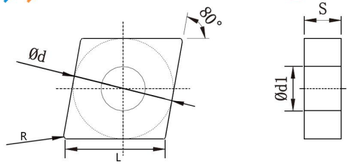
GER切槽刀片 Gooving insert

图片 Picture	型号 Designation	尺寸 Size							Grade	形状 Shape
		A	L	T	D	W	B	r	SH945	
	GER/L100-005D	6.8	16.44	5.05	3.4	1.0	2.5	0.05	●	
	GER/L120-005D	6.8	16.44	5.05	3.4	1.2	2.5	0.05	●	
	GER/L125-005D	6.8	16.44	5.05	3.4	1.25	2.5	0.05	●	
	GER/L140-010D	6.8	16.44	5.05	3.4	1.4	2.5	0.05	●	
	GER/L145-010D	6.8	16.44	5.05	3.4	1.45	2.5	0.1	●	
	GER/L150-010D	6.8	16.44	5.05	3.4	1.5	3.0	0.1	●	
	GER/L170-010D	6.8	16.44	5.05	3.4	1.7	3.0	0.1	●	
	GER/L185-010D	6.8	16.44	5.05	3.4	1.45	3.0	0.1	●	
	GER/L195-010D	6.8	16.44	5.05	3.4	1.95	3.0	0.1	●	
	GER/L200-010D	6.8	16.44	5.05	3.4	2.0	3.6	0.1	●	
	GER/L225-010D	6.8	16.44	5.05	3.4	2.25	3.6	0.1	●	
	GER/L230-020D	6.8	16.44	5.05	3.4	2.3	3.6	0.2	●	
	GER/L250-020D	6.8	16.44	5.05	3.4	2.5	3.6	0.2	●	
	GER/L280-020D	6.8	16.44	5.05	3.4	2.8	4.5	0.2	●	
	GER/L300-020D	6.8	16.44	5.05	3.4	3.0	4.5	0.2	●	
	GER/L320-020D	6.8	16.44	5.05	3.4	3.2	4.5	0.2	●	
	GER/L350-020D	6.8	16.44	5.05	3.4	3.5	4.5	0.2	●	
	GER/L400-020D	6.8	16.44	5.05	3.4	4.0	4.5	0.2	●	
	GER/L100-005E	9.54	21.66	5.55	4.4	1.0	3.0	0.05	●	
	GER/L150-010E	9.54	21.66	5.55	4.4	1.5	3.5	0.1	●	
	GER/L170-010E	9.54	21.66	5.55	4.4	1.7	3.5	0.1	●	
	GER/L185-010E	9.54	21.66	5.55	4.4	1.85	3.5	0.1	●	
	GER/L195-010E	9.54	21.66	5.55	4.4	1.95	3.5	0.1	●	
	GER/L200-010E	9.54	21.66	5.55	4.4	2.0	3.8	0.1	●	
	GER/L225-010E	9.54	21.66	5.55	4.4	2.25	3.8	0.1	●	
	GER/L230-020E	9.54	21.66	5.55	4.4	2.3	3.8	0.2	●	
	GER/L250-020E	9.54	21.66	5.55	4.4	2.5	4.5	0.2	●	
	GER/L275-010E	9.54	21.66	5.55	4.4	2.75	4.5	0.2	●	
	GER/L280-020E	9.54	21.66	5.55	4.4	2.8	4.5	0.2	●	
	GER/L300-020E	9.54	21.66	5.55	4.4	3.0	4.5	0.2	●	
	GER/L330-020E	9.54	21.66	5.55	4.4	3.3	4.5	0.2	●	
	GER/L350-020E	9.54	21.66	5.55	4.4	3.5	5.5	0.2	●	
	GER/L400-020E	9.54	21.66	5.55	4.4	4.0	5.5	0.2	●	
	GER/L430-020E	9.54	21.66	5.55	4.4	4.3	5.5	0.2	●	
	GER/L450-020E	9.54	21.66	5.55	4.4	4.5	6.5	0.2	●	
	GER/L460-020E	9.54	21.66	5.55	4.4	4.6	6.5	0.2	●	
	GER/L500-020E	9.54	21.66	5.55	4.4	5.0	6.5	0.2	●	

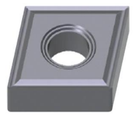
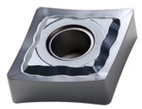
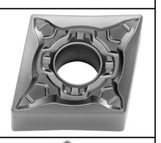
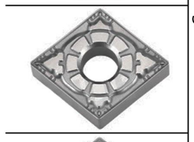
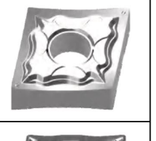




80° Turning insert (Negative) CN□□

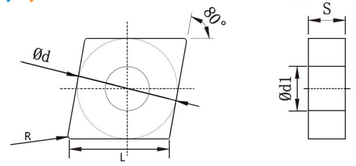


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

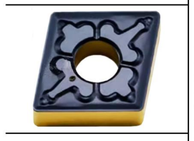
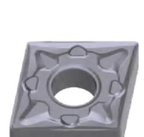
刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS4010	WS4020	WS4050	WS4080	WS6010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	CNMG120404-HM	12.9	12.7	4.76	5.16	0.4						▲						
		CNMG120408-HM	12.9	12.7	4.76	5.16	0.8						▲						
		CNMG120404-QQ	12.9	12.7	4.76	5.16	0.4			●					▲				
		CNMG120408-QQ	12.9	12.7	4.76	5.16	0.8			●					▲				
		CNMG090304-FM	9.7	9.525	3.18	3.81	0.4	▲	●										
		CNMG090308-FM	9.7	9.525	3.18	3.81	0.8	▲	●										
		CNMG120404-FM	12.9	12.7	4.76	5.16	0.4	▲	●										
		CNMG120408-FM	12.9	12.7	4.76	5.16	0.8	▲	●										
		CNMG120412-FM	12.9	12.7	4.76	5.16	1.2	▲	●										
		CNMG120404-MF	12.9	12.7	4.76	5.16	0.4								▲				
		CNMG120408-MF	12.9	12.7	4.76	5.16	0.8								▲				
		CNMG120404-SF	12.9	12.7	4.76	5.16	0.4								▲				
		CNMG120408-SF	12.9	12.7	4.76	5.16	0.8								▲				
		CNMG120404-MG	12.9	12.7	4.76	5.16	0.4			●	▲								
		CNMG120408-MG	12.9	12.7	4.76	5.16	0.8			●	▲								
		CNMG120404-MQ	12.9	12.7	4.76	5.16	0.4			●	▲								
		CNMG120408-MQ	12.9	12.7	4.76	5.16	0.8			●	▲								
		CNMG120402-ALN	12.9	12.7	4.76	5.16	0.2												▲
		CNMG120404-ALN	12.9	12.7	4.76	5.16	0.4												▲
		CNMG120408-ALN	12.9	12.7	4.76	5.16	0.8												▲
		CNMG120412-ALN	12.9	12.7	4.76	5.16	1.2												▲
		CNMG120404-ALM	12.9	12.7	4.76	5.16	0.4												▲
		CNMG120408-ALM	12.9	12.7	4.76	5.16	0.8												▲

三韩刀具 SANDHOG

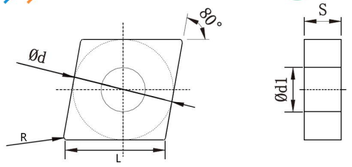
80° Turning insert (Negative) CN□□



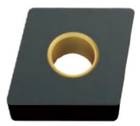
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS4010	WS4020	WS4050	WS4080	WS6010	K WS3010	S WS4010	N SWU10
	半精加工 Semi Finishing	CNMG090304-MD	9.7	9.525	3.18	3.81	0.4	●	▲										
		CNMG090308-MD	9.7	9.525	3.18	3.81	0.8	●	▲										
		CNMG120404-MD	12.9	12.7	4.76	5.16	0.4	●	▲										
		CNMG120408-MD	12.9	12.7	4.76	5.16	0.8	●	▲										
		CNMG120412-MD	12.9	12.7	4.76	5.16	1.2	●	▲										
		CNMG160612-MD	16.1	15.875	6.35	6.35	1.2	●	▲										
		CNMG160616-MD	16.1	15.875	6.35	6.35	1.6	●	▲										
		CNMG190608-MD	19.3	19.05	6.35	7.94	0.8	●	▲										
		CNMG190612-MD	19.3	19.05	6.35	7.94	1.2	●	▲										
		CNMG190616-MD	19.3	19.05	6.35	7.94	1.6	●	▲										
		CNMG120404-MA	12.9	12.7	4.76	5.16	0.4					●	▲						
		CNMG120408-MA	12.9	12.7	4.76	5.16	0.8					●	▲						
		CNMG120404-HJ	12.9	12.7	4.76	5.16	0.4											▲	
		CNMG120408-HJ	12.9	12.7	4.76	5.16	0.8											▲	
		CNMG160612-HJ	16.1	15.875	6.35	6.35	1.2											▲	
		CNMG160616-HJ	16.1	15.875	6.35	6.35	1.6											▲	
		CNMG120404-PM	12.9	12.7	4.76	5.16	0.4	●	▲										
		CNMG120408-PM	12.9	12.7	4.76	5.16	0.8	●	▲										
		CNMG120412-PM	12.9	12.7	4.76	5.16	0.8	●	▲										
		CNMG190612-PM	19.3	19.05	6.35	7.94	1.2	●	▲										
		CNMG120404-RA	12.9	12.7	4.76	5.16	0.4												▲
		CNMG120408-RA	12.9	12.7	4.76	5.16	0.8												▲
		CNMG120412-RA	12.9	12.7	4.76	5.16	1.2												▲
		CNMG160608-RA	16.1	15.875	6.35	6.35	0.8												▲
		CNMG190608-RA	19.3	19.05	6.35	7.94	0.8												▲
		CNMG190612-RA	19.3	19.05	6.35	7.94	1.2												▲
		CNMG090308-FP	9.7	9.525	3.18	3.81	0.8							●				▲	
		CNMG120408-FP	12.9	12.7	4.76	5.16	0.8							●				▲	
		CNMG120412-FP	12.9	12.7	4.76	5.16	1.2							●				▲	
		CNMG160612-FP	16.1	15.875	6.35	6.35	1.2							●				▲	
		CNMG120404-TF	12.9	12.7	4.76	5.16	0.4											▲	
		CNMG120408-TF	12.9	12.7	4.76	5.16	0.8											▲	

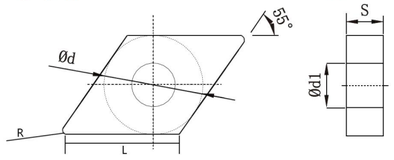
80° Turning insert (Negative) CN□□



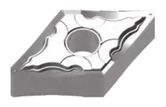
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P					M					K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS6080	WS7020		WS4010	WS4020	WS4050	WS4080	WS6010	WS3010	WS4010	SWU10
	粗加工 Roughing	CNMG120408-HN	12.9	12.7	4.76	5.16	0.8	●	▲											
		CNMG120412-HN	12.9	12.7	4.76	5.16	1.2	●	▲											
		CNMG160608-HN	16.1	15.875	6.35	6.35	0.8	●	▲											
		CNMG160612-HN	16.1	15.875	6.35	6.35	1.2	●	▲											
		CNMG190612-HN	19.3	19.05	6.35	7.94	1.2	●	▲											
		CNMG190616-HN	19.3	19.05	6.35	7.94	1.6	●	▲											
		CNMA120404-NC	12.9	12.7	4.76	5.16	0.4											▲		
		CNMA120408-NC	12.9	12.7	4.76	5.16	0.8											▲		
		CNMA120412-NC	12.9	12.7	4.76	5.16	1.2											▲		
		CNMA160608-NC	16.1	15.875	6.35	6.35	0.8											▲		
		CNMA160612-NC	16.1	15.875	6.35	6.35	1.2											▲		
		CNMA160616-NC	16.1	15.875	6.35	6.35	1.6											▲		
		CNMA190608-NC	19.3	19.05	6.35	7.94	0.8											▲		
		CNMA190612-NC	19.3	19.05	6.35	7.94	1.2											▲		
		CNMA190616-NC	19.3	19.05	6.35	7.94	1.6											▲		
		CNMG120404R-SV	12.9	12.7	4.76	5.16	0.4	▲	●											
		CNMG120404L-SV	12.9	12.7	4.76	5.16	0.4	▲	●											
		CNMG120408R-SV	12.9	12.7	4.76	5.16	0.8	▲	●											
		CNMG120408L-SV	12.9	12.7	4.76	5.16	0.8	▲	●											
		CNMG120404-DL	12.9	12.7	4.76	5.16	0.4	▲	●											
		CNMG120408-DL	12.9	12.7	4.76	5.16	0.8	▲	●											
		CNMG120412-DL	12.9	12.7	4.76	5.16	1.2	▲	●											

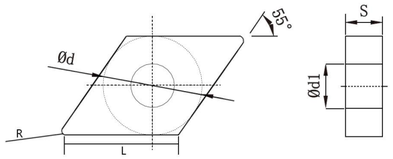
55° Turning insert (Negative) DN□□



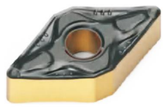
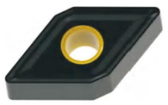
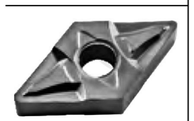
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P					M					K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS6080	WS7020		WS4010	WS4020	WS4050	WS4080	WS6010	WS3010	WS4010	SWU10
	精加工 Finishing	DNMG110404-FM	11.6	9.525	4.76	3.81	0.4	▲	●											
		DNMG110408-FM	11.6	9.525	4.76	3.81	0.8	▲	●											
		DNMG150404-FM	15.5	12.7	4.76	5.16	0.4	▲	●											
		DNMG150408-FM	15.5	12.7	4.76	5.16	0.8	▲	●											
		DNMG150412-FM	15.5	12.7	4.76	5.16	1.2	▲	●											
		DNMG150604-FM	15.5	12.7	6.35	5.16	0.4	▲	●											
		DNMG150608-FM	15.5	12.7	6.35	5.16	0.8	▲	●											
		DNMG150612-FM	15.5	12.7	6.35	5.16	1.2	▲	●											
		DNMG110404-PF	11.6	9.525	4.76	3.81	0.4			▲						●				
		DNMG110408-PF	11.6	9.525	4.76	3.81	0.8			▲						●				
		DNMG150404-PF	15.5	12.7	4.76	5.16	0.4			▲						●				
		DNMG150408-PF	15.5	12.7	4.76	5.16	0.8			▲						●				
		DNMG150604-PF	15.5	12.7	6.35	5.16	0.4			▲						●				
		DNMG150608-PF	15.5	12.7	6.35	5.16	0.8			▲						●				
		DNMG150404-FS	15.5	12.7	4.76	5.16	0.4										▲			
		DNMG150408-FS	15.5	12.7	4.76	5.16	0.8										▲			
		DNMG150604-FS	15.5	12.7	6.35	5.16	0.4										▲			
		DNMG150608-FS	15.5	12.7	6.35	5.16	0.8										▲			
		DNMG150402-ALN	15.5	12.7	4.76	5.16	0.2													▲
		DNMG150404-ALN	15.5	12.7	4.76	5.16	0.4													▲
		DNMG150408-ALN	15.5	12.7	4.76	5.16	0.8													▲
		DNMG150602-ALN	15.5	12.7	6.35	5.16	0.2													▲
		DNMG150604-ALN	15.5	12.7	6.35	5.16	0.4													▲
		DNMG150608-ALN	15.5	12.7	6.35	5.16	0.8													▲
		DNMG110404-MG	11.6	9.525	4.76	3.81	0.4									●	▲			
		DNMG110408-MG	11.6	9.525	4.76	3.81	0.8									●	▲			
		DNMG150404R-VF	15.5	12.7	4.76	5.16	0.4									●	▲			
		DNMG150404-CQ	15.5	12.7	4.76	5.16	0.4									●	▲			
		DNMG150408-CQ	15.5	12.7	4.76	5.16	0.8									●	▲			

55° Turning insert (Negative) DN□□

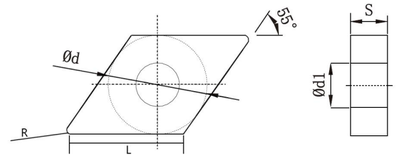


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

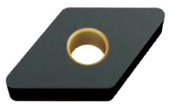
刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS3020	WS5050	WS5080	WS6010	K WS3010	S WS4010	N SWU10
	半精加工 Semi Finishing	DNMG110404-MD	11.6	9.525	4.76	3.81	0.4	▲	●										
		DNMG110408-MD	11.6	9.525	4.76	3.81	0.8	▲	●										
		DNMG150404-MD	15.5	12.7	4.76	5.16	0.4	▲	●										
		DNMG150408-MD	15.5	12.7	4.76	5.16	0.8	▲	●										
		DNMG150412-MD	15.5	12.7	4.76	5.16	1.2	▲	●										
		DNMG150604-MD	15.5	12.7	6.35	5.16	0.4	▲	●										
		DNMG150608-MD	15.5	12.7	6.35	5.16	0.8	▲	●										
		DNMG150612-MD	15.5	12.7	6.35	5.16	1.2	▲	●										
		DNMG150404-MA	15.5	12.7	4.76	5.16	0.4					●	▲						
		DNMG150408-MA	15.5	12.7	4.76	5.16	0.8					●	▲						
		DNMG150604-MA	15.5	12.7	6.35	5.16	0.4					●	▲						
		DNMG150608-MA	15.5	12.7	6.35	5.16	0.8					●	▲						
		DNMG150404-HJ	15.5	12.7	4.76	5.16	0.4										▲		
		DNMG150408-HJ	15.5	12.7	4.76	5.16	0.8										▲		
		DNMG150412-HJ	15.5	12.7	4.76	5.16	1.2										▲		
		DNMG150604-HJ	15.5	12.7	6.35	5.16	0.4										▲		
		DNMG150608-HJ	15.5	12.7	6.35	5.16	0.8										▲		
		DNMG150612-HJ	15.5	12.7	6.35	5.16	1.2										▲		
		DNMG110408-RA	11.6	9.525	4.76	3.81	0.8											▲	
		DNMG150408-RA	15.5	12.7	4.76	5.16	0.8											▲	
		DNMG150608-RA	15.5	12.7	6.35	5.16	0.8											▲	
		DNMG150404-TF	15.5	12.7	4.76	5.16	0.4									▲			
		DNMG150408-TF	15.5	12.7	4.76	5.16	0.8									▲			
		DNMG150604-TF	15.5	12.7	6.35	5.16	0.4									▲			
		DNMG150608-TF	15.5	12.7	6.35	5.16	0.8									▲			
		DNMG110408-FP	11.6	9.525	4.76	3.81	0.8										▲		
		DNMG150408-FP	15.5	12.7	4.76	5.16	0.8										▲		
		DNMG150608-FP	15.5	12.7	6.35	5.16	0.8										▲		
		DNMG150404-PM	15.5	12.7	4.76	5.16	0.4	▲	●										
		DNMG150408-PM	15.5	12.7	4.76	5.16	0.8	▲	●										
		DNMG150412-PM	15.5	12.7	4.76	5.16	1.2	▲	●										
		DNMG150604-PM	15.5	12.7	6.35	5.16	0.4	▲	●										
		DNMG150608-PM	15.5	12.7	6.35	5.16	0.8	▲	●										
		DNMG150612-PM	15.5	12.7	6.35	5.16	1.2	▲	●										

三韩刀具 SANDHOG

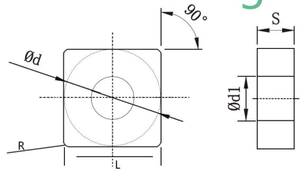
55° Turning insert (Negative) DN□□



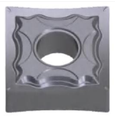
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS3020	WS5050	WS5080	WS6010	K WS3010	S WS4010	N SWU10
	粗加工 Roughing	DNMG150408-HN	15.5	12.7	4.76	5.16	0.8	●	▲										
		DNMG150412-HN	15.5	12.7	4.76	5.16	1.2	●	▲										
		DNMG150608-HN	15.5	12.7	6.35	5.16	0.8	●	▲										
		DNMG150612-HN	15.5	12.7	6.35	5.16	1.2	●	▲										
		DNMA150404-NC	15.5	12.7	4.76	5.16	0.4										▲		
		DNMA150408-NC	15.5	12.7	4.76	5.16	0.8										▲		
		DNMA150412-NC	15.5	12.7	4.76	5.16	1.2										▲		
		DNMA150604-NC	15.5	12.7	6.35	5.16	0.4										▲		
		DNMA150608-NC	15.5	12.7	6.35	5.16	0.8										▲		
		DNMA150612-NC	15.5	12.7	6.35	5.16	1.2										▲		
		DNMG110408	11.6	9.525	4.76	3.81	0.8				●				▲				
		DNMG150404	15.5	12.7	4.76	5.16	0.4				●				▲				
		DNMG150408	15.5	12.7	4.76	5.16	0.8				●				▲				
		DNMG150412	15.5	12.7	4.76	5.16	0.8				●				▲				
		DNMG150608	15.5	12.7	6.35	5.16	0.8				●				▲				
		DNMG150612	15.5	12.7	6.35	5.16	1.2				●				▲				

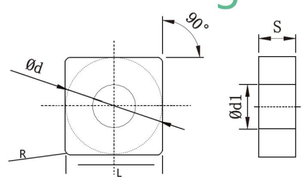
90° Turning insert (Negative) SN□□



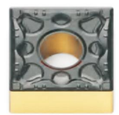
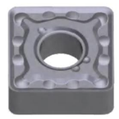
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WSM010	WSM020	WSM030	WSM040	WSM010	WSM020	WSM050	WSM080	WSM010	WSM010	WSM040	SNMG10
	精加工 Finishing	SNMG120404-FM	12.7	12.7	4.76	5.16	0.4	▲	●										
		SNMG120408-FM	12.7	12.7	4.76	5.16	0.8	▲	●										
		SNMG120412-FM	12.7	12.7	4.76	5.16	0.8	▲	●										
		SNMG120404-HM	12.7	12.7	4.76	5.16	0.4					▲							
		SNMG120408-HM	12.7	12.7	4.76	5.16	0.8					▲							
		SNMG120404-PF	12.7	12.7	4.76	5.16	0.4			▲					●				
		SNMG120408-PF	12.7	12.7	4.76	5.16	0.8			▲					●				
		SNMG120404-MF	12.7	12.7	4.76	5.16	0.4									▲			
		SNMG120404-FS	12.7	12.7	4.76	5.16	0.4								▲				
		SNMG120408-FS	12.7	12.7	4.76	5.16	0.8								▲				
		SNMG120412-FS	12.7	12.7	4.76	5.16	1.2								▲				
		SNMG120404-MQ	12.7	12.7	4.76	5.16	0.4			▲									
		SNMG120408-MQ	12.7	12.7	4.76	5.16	0.8			▲									
		SNMG120404-ALN	12.7	12.7	4.76	5.16	0.4												▲
		SNMG120408-ALN	12.7	12.7	4.76	5.16	0.8												▲
		SNMG120412-ALN	12.7	12.7	4.76	5.16	1.2												▲

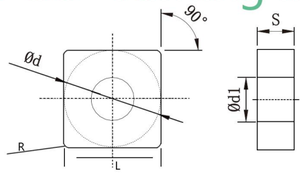
90° Turning insert (Negative) SN□□



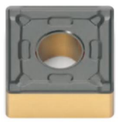
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WSM010	WSM020	WSM080	WSM020	WSM010	WSM020	WSM050	WSM080	WSM010	WSM010	WSM040	SNMG10
	半精加工 Semi Finishing	SNMG120404-MD	12.7	12.7	4.76	5.16	0.4	●	▲										
		SNMG120408-MD	12.7	12.7	4.76	5.16	0.8	●	▲										
		SNMG120412-MD	12.7	12.7	4.76	5.16	1.2	●	▲										
		SNMG150608-MD	15.875	15.875	6.35	6.35	0.8	●	▲										
		SNMG150612-MD	15.875	15.875	6.35	6.35	1.2	●	▲										
		SNMG190608-MD	19.05	19.05	6.35	7.94	0.8	●	▲										
		SNMG190612-MD	19.05	19.05	6.35	7.94	1.2	●	▲										
		SNMG190616-MD	19.05	19.05	6.35	7.94	1.6	●	▲										
		SNMG120404-MA	12.7	12.7	4.76	5.16	0.4					●	▲						
		SNMG120408-MA	12.7	12.7	4.76	5.16	0.8					●	▲						
		SNMG120408-HJ	12.7	12.7	4.76	5.16	0.8										▲		
		SNMG120412-HJ	12.7	12.7	4.76	5.16	1.2										▲		
		SNMG120408-RA	12.7	12.7	4.76	5.16	0.8											▲	
		SNMG120412-RA	12.7	12.7	4.76	5.16	1.2											▲	
		SNMG150612-RA	15.875	15.875	6.35	6.35	1.2											▲	
		SNMG190612-RA	19.05	19.05	6.35	7.94	1.2											▲	
		SNMG190616-RA	19.05	19.05	6.35	7.94	1.6											▲	
		SNMG120404-PM	12.9	12.7	4.76	5.16	0.4	●	▲										
		SNMG120408-PM	12.9	12.7	4.76	5.16	0.8	●	▲										
		SNMG120412-PM	12.9	12.7	4.76	5.16	1.2	●	▲										
		SNMG190612-PM	19.05	19.05	6.35	7.94	1.2	●	▲										
		SNMG120404-TF	12.9	12.7	4.76	5.16	0.4											▲	
		SNMG120408-TF	12.9	12.7	4.76	5.16	0.8											▲	

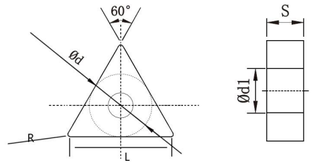
90° Turning insert (Negative) SN□□



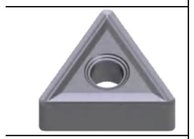
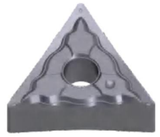
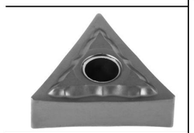
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS5080	WS7020	M WS5010	WS5020	WS5050	WS5080	WS6010	K WS3010	S WS4010	N SWU10
	粗加工 Roughing	SNMG120408-HN	12.7	12.7	4.76	5.16	0.8	●	▲										
		SNMG120412-HN	12.7	12.7	4.76	5.16	1.2	●	▲										
		SNMG150612-HN	15.875	15.875	6.35	6.35	1.2	●	▲										
		SNMG190612-HN	19.05	19.05	6.35	7.94	1.2	●	▲										
		SNMG190616-HN	19.05	19.05	6.35	7.94	1.6	●	▲										
		SNMA120408-NC	12.7	12.7	4.76	5.16	0.8										▲		
		SNMA120412-NC	12.7	12.7	4.76	5.16	1.2										▲		
		SNMA150612-NC	15.875	15.875	6.35	6.35	1.2										▲		
		SNMA190608-NC	19.05	19.05	6.35	7.94	0.8										▲		
		SNMA190612-NC	19.05	19.05	6.35	7.94	1.2										▲		
		SNMA190616-NC	19.05	19.05	6.35	7.94	1.6										▲		
		SNMG120404R-SV	12.7	12.7	4.76	5.16	0.4	●	▲										
		SNMG120404L-SV	12.7	12.7	4.76	5.16	0.4	●	▲										
		SNMG120408R-SV	12.7	12.7	4.76	5.16	0.8	●	▲										
		SNMG120408L-SV	12.7	12.7	4.76	5.16	0.8	●	▲										

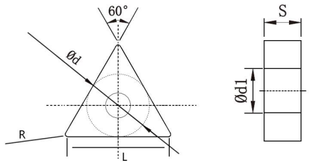
60° Turning insert (Negative) TN□□



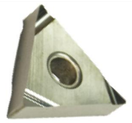
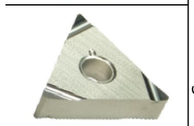
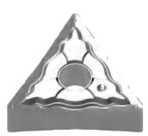
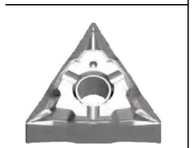
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS5080	WS7020	M WS5010	WS5020	WS5050	WS5080	WS6010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	TNMG160404-FM	16.5	9.525	4.76	3.81	0.4	●	▲										
		TNMG160408-FM	16.5	9.525	4.76	3.81	0.8	●	▲										
		TNMG160412-FM	16.5	9.525	4.76	3.81	1.2	●	▲										
		TNMG220404-FM	22.0	12.7	4.76	5.16	0.4	●	▲										
		TNMG220408-FM	22.0	12.7	4.76	5.16	0.8	●	▲										
								●	▲										
		TNMG160404-HM	16.5	9.525	4.76	3.81	0.4						▲						
		TNMG160408-HM	16.5	9.525	4.76	3.81	0.8						▲						
		TNMG160402-FS	16.5	9.525	4.76	3.81	0.2							▲					
		TNMG160404-FS	16.5	9.525	4.76	3.81	0.4							▲					
		TNMG160408-FS	16.5	9.525	4.76	3.81	0.8							▲					
		TNMG160412-FS	16.5	9.525	4.76	3.81	1.2							▲					
		TNMG220408-FS	22.0	12.7	4.76	5.16	0.8							▲					
		TNMG160404-QQ	16.5	9.525	4.76	3.81	0.4								▲				
		TNMG160408-QQ	16.5	9.525	4.76	3.81	0.8								▲				
		TNMG160404-PF	16.5	9.525	4.76	3.81	0.4								▲				
		TNMG160408-PF	16.5	9.525	4.76	3.81	0.8								▲				
		TNMG160404-MF	16.5	9.525	4.76	3.81	0.4									▲			
		TNMG160408-MF	16.5	9.525	4.76	3.81	0.8									▲			
		TNMG160404-SF	16.5	9.525	4.76	3.81	0.4										▲		
		TNMG160404R-VF	16.5	9.525	4.76	3.81	0.4											▲	
		TNMG160404L-VF	16.5	9.525	4.76	3.81	0.4											▲	
		TNMG160408R-VF	16.5	9.525	4.76	3.81	0.8											▲	
		TNMG160408L-VF	16.5	9.525	4.76	3.81	0.8											▲	

60° Turning insert (Negative) TN□□

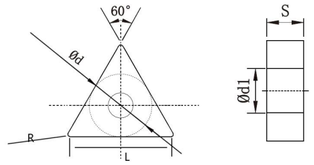


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

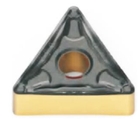
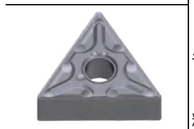
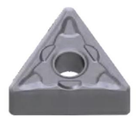
刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS5080	WS7020	M WS5010	WS5020	WS5050	WS5080	WS6010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	TNMG160404-MG	16.5	9.525	4.76	3.81	0.4				▲								
		TNMG160408-MG	16.5	9.525	4.76	3.81	0.8				▲								
		TNMG160404-MQ	16.5	9.525	4.76	3.81	0.4				▲								
		TNMG160408-MQ	16.5	9.525	4.76	3.81	0.8				▲								
		TNGG160402R-C	16.5	9.525	4.76	3.81	0.2				▲								
		TNGG160402L-C	16.5	9.525	4.76	3.81	0.2				▲								
		TNGG160404R-C	16.5	9.525	4.76	3.81	0.4				▲								
		TNGG160404L-C	16.5	9.525	4.76	3.81	0.4				▲								
		TNGG160402R-S	16.5	9.525	4.76	3.81	0.2				▲								
		TNGG160402L-S	16.5	9.525	4.76	3.81	0.2				▲								
		TNGG160404R-S	16.5	9.525	4.76	3.81	0.4				▲								
		TNGG160404L-S	16.5	9.525	4.76	3.81	0.4				▲								
		TNGG160402R-F	16.5	9.525	4.76	3.81	0.2				▲								
		TNGG160402L-F	16.5	9.525	4.76	3.81	0.2				▲								
		TNGG160404R-F	16.5	9.525	4.76	3.81	0.4				▲								
		TNGG160404L-F	16.5	9.525	4.76	3.81	0.4				▲								
		TNMG160402-ALN	16.5	9.525	4.76	3.18	0.2												▲
		TNMG160404-ALN	16.5	9.525	4.76	3.18	0.4												▲
		TNMG160408-ALN	16.5	9.525	4.76	3.18	0.8												▲
		TNMG160412-ALN	16.5	9.525	4.76	3.18	1.2												▲
		TNMG220408-ALN	22.0	12.7	4.76	5.16	0.8												▲
		TNMG160402-ALM	16.5	9.525	4.76	3.18	0.2												▲
		TNMG160404-ALM	16.5	9.525	4.76	3.18	0.4												▲
		TNMG160408-ALM	16.5	9.525	4.76	3.18	0.8												▲

三韩刀具 SANDHOG

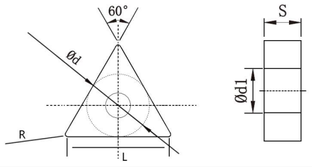
60° Turning insert (Negative) TN□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS5080	WS7020	M WS5010	WS5020	WS5050	WS5080	WS6010	K WS3010	S WS4010	N SWU10
	半精加工 Semi Finishing	TNMG160404-MD	16.5	9.525	4.76	3.81	0.4	●	▲										
		TNMG160408-MD	16.5	9.525	4.76	3.81	0.8	●	▲										
		TNMG160412-MD	16.5	9.525	4.76	3.81	1.2	●	▲										
		TNMG220404-MD	22.0	12.7	4.76	5.16	0.4	●	▲										
		TNMG220408-MD	22.0	12.7	4.76	5.16	0.8	●	▲										
		TNMG220412-MD	22.0	12.7	4.76	5.16	1.2	●	▲										
		TNMG160404-MA	16.5	9.525	4.76	3.81	0.4					●	▲						
		TNMG160408-MA	16.5	9.525	4.76	3.81	0.8					●	▲						
		TNMG160404-HJ	16.5	9.525	4.76	3.81	0.4										▲		
		TNMG160408-HJ	16.5	9.525	4.76	3.81	0.8										▲		
		TNMG160412-HJ	16.5	9.525	4.76	3.81	1.2										▲		
		TNMG160408-RA	16.5	9.525	4.76	3.81	0.8											▲	▲
		TNMG220408-RA	22.0	12.7	4.76	5.16	0.8											▲	▲
		TNMG160404-TF	16.5	9.525	4.76	3.81	0.4									▲			
		TNMG160408-TF	16.5	9.525	4.76	3.81	0.8									▲			
		TNMG160404-PM	16.5	9.525	4.76	3.81	0.4	▲	●										
		TNMG160408-PM	16.5	9.525	4.76	3.81	0.8	▲	●										
		TNMG160404-FP	16.5	9.525	4.76	3.81	0.4			●							▲		
		TNMG160408-FP	16.5	9.525	4.76	3.81	0.8			●							▲		
		TNMG160412-FP	16.5	9.525	4.76	3.81	1.2			●							▲		

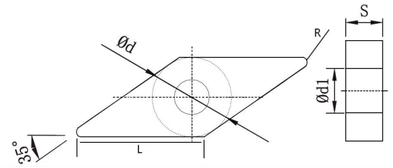
60° Turning insert (Negative) TN□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS3020	WS5050	WS5080	WS6010	K WS4010	S WS4010	N SWU10
	粗加工 Roughing	TNMG160404-HN	16.5	9.525	4.76	3.81	0.4	●	▲										
		TNMG160408-HN	16.5	9.525	4.76	3.81	0.8	●	▲										
		TNMG220408-HN	22.0	12.7	4.76	5.16	0.8	●	▲										
		TNMA160404-NC	16.5	9.525	4.76	3.81	0.4										▲		
		TNMA160408-NC	16.5	9.525	4.76	3.81	0.8										▲		
		TNMA160412-NC	16.5	9.525	4.76	3.81	1.2										▲		
		TNMA220404-NC	22.0	12.7	4.76	5.16	0.4										▲		
		TNMA220408-NC	22.0	12.7	4.76	5.16	0.8										▲		
		TNMA220412-NC	22.0	12.7	4.76	5.16	1.2										▲		
		TNMG160404-DL	16.5	9.525	4.76	3.81	0.4	▲	●										
		TNMG160408-DL	16.5	9.525	4.76	3.81	0.8	▲	●										
		TNMG160412-DL	16.5	9.525	4.76	3.81	1.2	▲	●										
		TNMG160404R-SV	16.5	9.525	4.76	3.81	0.4	▲	●										
		TNMG160404L-SV	16.5	9.525	4.76	3.81	0.4	▲	●										
		TNMG160408R-SV	16.5	9.525	4.76	3.81	0.8	▲	●										
		TNMG160408L-SV	16.5	9.525	4.76	3.81	0.8	▲	●										

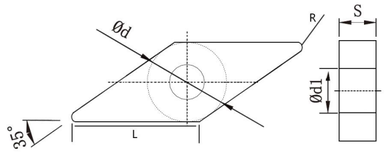
35° Turning insert (Negative) VN□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS3020	WS5050	WS5080	WS6010	K WS4010	S WS4010	N SWU10
	精加工 Finishing	VNMG160404-FM	16.6	9.525	4.76	3.81	0.4	▲	●										
		VNMG160408-FM	16.6	9.525	4.76	3.81	0.8	▲	●										
								▲	●										
		VNMG160404-HM	16.6	9.525	4.76	3.81	0.4						▲						
		VNMG160408-HM	16.6	9.525	4.76	3.81	0.8						▲						
		VNMG160402-FS	16.6	9.525	4.76	3.81	0.2							▲					
		VNMG160404-FS	16.6	9.525	4.76	3.81	0.4							▲					
		VNMG160408-FS	16.6	9.525	4.76	3.81	0.8							▲					
		VNMG160402-ALN	16.6	9.525	4.76	3.81	0.2												▲
		VNMG160404-ALN	16.6	9.525	4.76	3.81	0.4												▲
		VNMG160408-ALN	16.6	9.525	4.76	3.81	0.8												▲
		VNMG160404-PF	16.6	9.525	4.76	3.81	0.4				▲				●				
		VNMG160408-PF	16.6	9.525	4.76	3.81	0.8				▲				●				
		VNMG160404-SF	16.6	9.525	4.76	3.81	0.4								▲				
		VNMG160404-MQ	16.6	9.525	4.76	3.81	0.4				▲								
		VNMG160408-MQ	16.6	9.525	4.76	3.81	0.8				▲								
		VNMG160404-MG	16.6	9.525	4.76	3.81	0.4				▲								
		VNMG160402R-H	16.6	9.525	4.76	3.81	0.2				▲								
		VNMG160402L-H	16.6	9.525	4.76	3.81	0.2				▲								
		VNMG160404R-H	16.6	9.525	4.76	3.81	0.4				▲								
		VNMG160404L-H	16.6	9.525	4.76	3.81	0.4				▲								

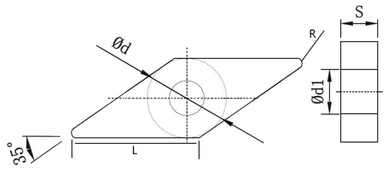
35° Turning insert (Negative) VN□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS6080	WS7020	M WS5010	WS5020	WS5050	WS5080	WS6010	K WS4010	S WS4010	N SWU10
	半精加工 Semi Finishing	VNMG160404-MD	16.6	9.525	4.76	3.81	0.4	●	▲										
		VNMG160408-MD	16.6	9.525	4.76	3.81	0.8	●	▲										
		VNMG160412-MD	16.6	9.525	4.76	3.81	1.2	●	▲										
		VNMG160404-MA	16.6	9.525	4.76	3.81	0.4					●	▲						
		VNMG160408-MA	16.6	9.525	4.76	3.81	0.8					●	▲						
		VNMG160412-MA	16.6	9.525	4.76	3.81	1.2					●	▲						
		VNMG160408-HJ	16.6	9.525	4.76	3.81	0.8										▲		
		VNMG160404-RA	16.6	9.525	4.76	3.81	0.4											▲	
		VNMG160408-RA	16.6	9.525	4.76	3.81	0.8											▲	
		VNMG160404-PM	16.6	9.525	4.76	3.81	0.4	▲	●										
		VNMG160408-PM	16.6	9.525	4.76	3.81	0.8	▲	●										
		VNMG160412-PM	16.6	9.525	4.76	3.81	1.2	▲	●										
		VNMG160404-TF	16.6	9.525	4.76	3.81	0.4										▲		
		VNMG160408-TF	16.6	9.525	4.76	3.81	0.8										▲		
		VNMG160404-FP	16.6	9.525	4.76	3.81	0.4											▲	
		VNMG160408-FP	16.6	9.525	4.76	3.81	0.8											▲	

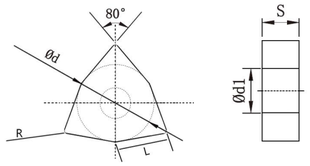
35° Turning insert (Negative) VN□□



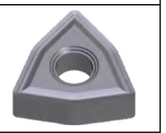
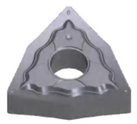
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS6080	WS7020	M WS5010	WS5020	WS5050	WS5080	WS6010	K WS4010	S WS4010	N SWU10
	粗加工 Roughing	VNMG160404-DL	16.6	9.525	4.76	3.81	0.4	▲	●										
		VNMG160408-DL	16.6	9.525	4.76	3.81	0.8	▲	●										
		VNMG160412-DL	16.6	9.525	4.76	3.81	1.2	▲	●										

80° Turning insert (Negative) WN□□

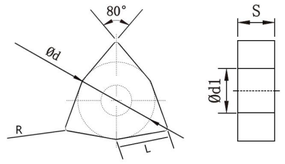


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

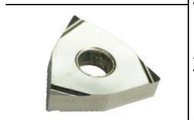
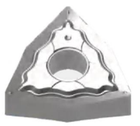
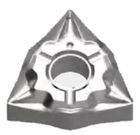
刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS4080	WS7020	WS5010	WS5020	WS5050	WS5080	WS6010	WS4010	WS4010	SWU10
	精加工 Finishing	WNMG060404-FM	6.5	9.525	4.76	3.81	0.4	▲	●									
		WNMG060408-FM	6.5	9.525	4.76	3.81	0.8	▲	●									
		WNMG080404-FM	8.7	12.7	4.76	3.81	0.4	▲	●									
		WNMG080408-FM	8.7	12.7	4.76	3.81	0.8	▲	●									
		WNMG080412-FM	8.7	12.7	4.76	3.81	1.2	▲	●									
		WNMG080404-HM	8.7	12.7	4.76	3.81	0.4					●	▲					
		WNMG080408-HM	8.7	12.7	4.76	3.81	0.8					●	▲					
		WNMG060404-FS	6.5	9.525	4.76	3.81	0.4							▲				
		WNMG060408-FS	6.5	9.525	4.76	3.81	0.8							▲				
		WNMG080404-FS	8.7	12.7	4.76	3.81	0.4							▲				
		WNMG080408-FS	8.7	12.7	4.76	3.81	0.8							▲				
		WNMG080412-FS	8.7	12.7	4.76	3.81	1.2							▲				
	H Finishing	WNMG060404-PF	6.5	9.525	4.76	3.81	0.4			▲					●			
		WNMG060408-PF	6.5	9.525	4.76	3.81	0.8			▲					●			
		WNMG080404-PF	8.7	12.7	4.76	3.81	0.4			▲					●			
		WNMG080408-PF	8.7	12.7	4.76	3.81	0.8			▲					●			
		WNMG060408-MF	6.5	9.525	4.76	3.81	0.8									▲		
		WNMG080404-MF	8.7	12.7	4.76	3.81	0.4									▲		
		WNMG080408-MF	8.7	12.7	4.76	3.81	0.8									▲		
		WNMG060404-SF	6.5	9.525	4.76	3.81	0.4									▲		
		WNMG080404-SF	8.7	12.7	4.76	3.81	0.4									▲		
		WNMG080408-SF	8.7	12.7	4.76	3.81	0.8									▲		
		WNMG080404-MG	8.7	12.7	4.76	3.81	0.4				▲							
		WNMG080404-MQ	8.7	12.7	4.76	3.81	0.4				▲							
		WNMG080408-MQ	8.7	12.7	4.76	3.81	0.8				▲							

三韩刀具 SANDHOG

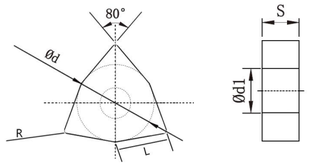
80° Turning insert (Negative) WN□□



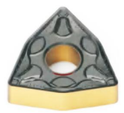
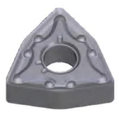
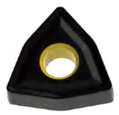
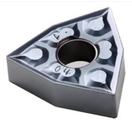
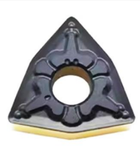
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS4080	WS7020	WS5010	WS5020	WS5050	WS5080	WS6010	WS4010	WS4010	SWU10
	精加工 Finishing	WNGG080402R-C	8.7	12.7	4.76	3.81	0.2				▲								
		WNGG080402L-C	8.7	12.7	4.76	3.81	0.2				▲								
		WNGG080404R-C	8.7	12.7	4.76	3.81	0.4				▲								
		WNGG080404L-C	8.7	12.7	4.76	3.81	0.4				▲								
		WNGG080402R-F	8.7	12.7	4.76	3.81	0.2				▲								
		WNGG080402L-F	8.7	12.7	4.76	3.81	0.2				▲								
		WNGG080404R-F	8.7	12.7	4.76	3.81	0.4				▲								
		WNGG080404L-F	8.7	12.7	4.76	3.81	0.4				▲								
		WNMG060404-ALN	6.5	9.525	4.76	3.81	0.4												▲
		WNMG060408-ALN	6.5	9.525	4.76	3.81	0.8												▲
		WNMG080404-ALN	8.7	12.7	4.76	3.81	0.4												▲
		WNMG080408-ALN	8.7	12.7	4.76	3.81	0.8												▲
		WNMG080412-ALN	8.7	12.7	4.76	3.81	1.2												▲
		WNMG080404-ALM	8.7	12.7	4.76	3.81	0.4												▲
		WNMG080408-ALM	8.7	12.7	4.76	3.81	0.8												▲

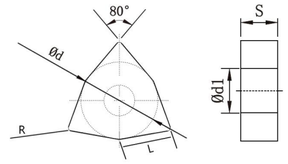
80° Turning insert (Negative) WN□□



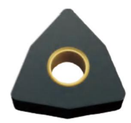
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS3020	WS4050	WS4080	WS6010	K WS3010	WS4010	S WS4010	N SWU10
	半精加工 Semi Finishing	WNMG060404-MD	6.5	9.525	4.76	3.81	0.4	●	▲											
		WNMG060408-MD	6.5	9.525	4.76	3.81	0.8	●	▲											
		WNMG080404-MD	8.7	12.7	4.76	3.81	0.4	●	▲											
		WNMG080408-MD	8.7	12.7	4.76	3.81	0.8	●	▲											
		WNMG080412-MD	8.7	12.7	4.76	3.81	1.2	●	▲											
		WNMG080404-MA	8.7	12.7	4.76	3.81	0.4					●	▲							
		WNMG080408-MA	8.7	12.7	4.76	3.81	0.8					●	▲							
		WNMG080412-MA	8.7	12.7	4.76	3.81	1.2					●	▲							
		WNMG080404-HJ	8.7	12.7	4.76	3.81	0.4										▲			
		WNMG080408-HJ	8.7	12.7	4.76	3.81	0.8										▲			
		WNMG080412-HJ	8.7	12.7	4.76	3.81	1.2										▲			
		WNMG080404-RA	8.7	12.7	4.76	3.81	0.4											▲		
		WNMG080408-RA	8.7	12.7	4.76	3.81	0.8											▲		
		WNMG080412-RA	8.7	12.7	4.76	3.81	1.2											▲		
		WNMG060408-FP	6.5	9.525	4.76	3.81	0.8			●							▲			
		WNMG080404-FP	8.7	12.7	4.76	3.81	0.4			●							▲			
		WNMG080408-FP	8.7	12.7	4.76	3.81	0.8			●							▲			
		WNMG080404-TF	8.7	12.7	4.76	3.81	0.4									▲				
		WNMG080408-TF	8.7	12.7	4.76	3.81	0.8									▲				
		WNMG080404-PM	8.7	12.7	4.76	3.81	0.4	▲	●											
		WNMG080408-PM	8.7	12.7	4.76	3.81	0.8	▲	●											
		WNMG080412-PM	8.7	12.7	4.76	3.81	1.2	▲	●											

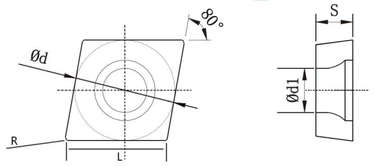
80° Turning insert (Negative) WN□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS3020	WS4050	WS4080	WS6010	K WS3010	WS4010	S WS4010	N SWU10
	粗加工 Roughing	WNMG080408-HN	8.7	12.7	4.76	3.81	0.8	●	▲											
		WNMG080412-HN	8.7	12.7	4.76	3.81	1.2	●	▲											
		WNMG080416-HN	8.7	12.7	4.76	3.81	1.6	●	▲											
		WNMA060408-NC	6.5	9.525	4.76	3.81	0.8										▲			
		WNMA060412-NC	6.5	9.525	4.76	3.81	1.2										▲			
		WNMA080404-NC	8.7	12.7	4.76	3.81	0.4										▲			
		WNMA080408-NC	8.7	12.7	4.76	3.81	0.8										▲			
		WNMA080412-NC	8.7	12.7	4.76	3.81	1.2										▲			
		WNMA080416-NC	8.7	12.7	4.76	3.81	1.6										▲			
		WNMG080404R-SV	8.7	12.7	4.76	3.81	0.4	▲	●											
		WNMG080404L-SV	8.7	12.7	4.76	3.81	0.4	▲	●											
		WNMG080408R-SV	8.7	12.7	4.76	3.81	0.8	▲	●											
		WNMG080408L-SV	8.7	12.7	4.76	3.81	0.8	▲	●											
		WNMG080404-DL	8.7	12.7	4.76	3.81	0.4	▲	●											
		WNMG080408-DL	8.7	12.7	4.76	3.81	0.8	▲	●											
		WNMG080412-DL	8.7	12.7	4.76	3.81	1.2	▲	●											

80° Turning insert (Positive) CC□□

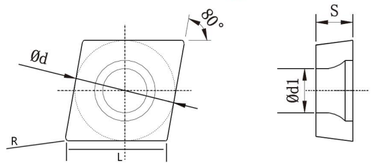


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

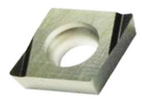
刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS4080	WS7020	WS5010	WS5020	WS5050	WS5080	WS6010	WS3010	WS4010	SWU10
	精加工 Finishing	CCMT060202-FM	6.4	6.35	2.38	2.8	0.2	▲	●									
		CCMT060204-FM	6.4	6.35	2.38	2.8	0.4	▲	●									
		CCMT060208-FM	6.4	6.35	2.38	2.8	0.8	▲	●									
		CCMT09T302-FM	9.7	9.525	3.97	4.4	0.2	▲	●									
		CCMT09T304-FM	9.7	9.525	3.97	4.4	0.4	▲	●									
		CCMT09T308-FM	9.7	9.525	3.97	4.4	0.8	▲	●									
		CCMT120404-FM	12.9	12.7	4.76	5.5	0.4	▲	●									
		CCMT120408-FM	12.9	12.7	4.76	5.5	0.8	▲	●									
		CCGT060202-FW	6.4	6.35	2.38	2.8	0.2							▲				
		CCGT060204-FW	6.4	6.35	2.38	2.8	0.4							▲				
		CCGT09T302-FW	9.7	9.525	3.97	4.4	0.2							▲				
		CCGT09T304-FW	9.7	9.525	3.97	4.4	0.4							▲				
		CCGT09T308-FW	9.7	9.525	3.97	4.4	0.8							▲				
		CCMT060204-MS	6.4	6.35	2.38	2.8	0.4								▲			
		CCMT060208-MS	6.4	6.35	2.38	2.8	0.8								▲			
		CCMT09T304-MS	9.7	9.525	3.97	4.4	0.4								▲			
		CCMT09T308-MS	9.7	9.525	3.97	4.4	0.8								▲			
		CCMT060202-SF	6.4	6.35	2.38	2.8	0.2			●						▲		
		CCMT060204-SF	6.4	6.35	2.38	2.8	0.4			●						▲		
		CCMT060208-SF	6.4	6.35	2.38	2.8	0.8			●						▲		
		CCMT09T302-SF	9.7	9.525	3.97	4.4	0.2			●						▲		
		CCMT09T304-SF	9.7	9.525	3.97	4.4	0.4			●						▲		
		CCMT09T308-SF	9.7	9.525	3.97	4.4	0.8			●						▲		
		CCMT120404-SF	12.9	12.7	4.76	5.5	0.4			●						▲		
		CCMT060204-MG	6.4	6.35	2.38	2.8	0.4				▲							
		CCMT09T304-MG	9.7	9.525	3.97	4.4	0.4				▲							

三韩刀具 SANDHOG

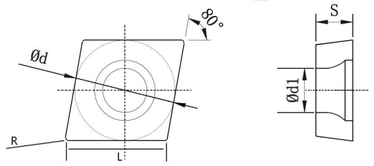
80° Turning insert (Positive) CC□□



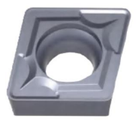
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS4080	WS7020	WS5010	WS5020	WS5050	WS5080	WS6010	WS3010	WS4010	SWU10
 刃口钝化处理 Cutting edge passivation treatment	精加工 Finishing	CCGT060202R-F	6.4	6.35	2.38	2.8	0.2				▲							
		CCGT060202L-F	6.4	6.35	2.38	2.8	0.2				▲							
		CCGT060204R-F	6.4	6.35	2.38	2.8	0.4				▲							
		CCGT060204L-F	6.4	6.35	2.38	2.8	0.4				▲							
		CCGT09T302R-F	9.7	9.525	3.97	4.4	0.2				▲							
		CCGT09T302L-F	9.7	9.525	3.97	4.4	0.2				▲							
		CCGT09T304R-F	9.7	9.525	3.97	4.4	0.4				▲							
		CCGT09T304L-F	9.7	9.525	3.97	4.4	0.4				▲							
 锋利刃口 sharp cutting edge		CCGT060202R-S	6.4	6.35	2.38	2.8	0.2				▲							
		CCGT060202L-S	6.4	6.35	2.38	2.8	0.2				▲							
		CCGT060204R-S	6.4	6.35	2.38	2.8	0.4				▲							
		CCGT060204L-S	6.4	6.35	2.38	2.8	0.4				▲							
		CCGT09T302R-S	9.7	9.525	3.97	4.4	0.2				▲							
		CCGT09T302L-S	9.7	9.525	3.97	4.4	0.2				▲							
		CCGT09T304R-S	9.7	9.525	3.97	4.4	0.4				▲							
		CCGT09T304L-S	9.7	9.525	3.97	4.4	0.4				▲							
		CCGT060202-ALU	6.4	6.35	2.38	2.8	0.2											▲
		CCGT060204-ALU	6.4	6.35	2.38	2.8	0.4											▲
		CCGT060208-ALU	6.4	6.35	2.38	2.8	0.8											▲
		CCGT09T302-ALU	9.7	9.525	3.97	4.4	0.2											▲
		CCGT09T304-ALU	9.7	9.525	3.97	4.4	0.4											▲
		CCGT09T308-ALU	9.7	9.525	3.97	4.4	0.8											▲
		CCGT120404-ALU	12.9	12.7	4.76	5.5	0.4											▲
		CCGT120408-ALU	12.9	12.7	4.76	5.5	0.8											▲
		CCGT060202-ALM	6.4	6.35	2.38	2.8	0.2											▲
		CCGT060204-ALM	6.4	6.35	2.38	2.8	0.4											▲
		CCGT060208-ALM	6.4	6.35	2.38	2.8	0.8											▲
		CCGT09T302-ALM	9.7	9.525	3.97	4.4	0.2											▲
		CCGT09T304-ALM	9.7	9.525	3.97	4.4	0.4											▲
		CCGT09T308-ALM	9.7	9.525	3.97	4.4	0.8											▲

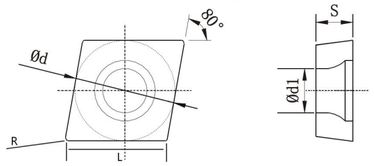
80° Turning insert (Positive) CC□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS5010	WS5020	WS6080	WS7020	M WS5010	WS5020	WS6050	WS6080	WS6010	K WS5010	S WS4010	N SWU10
	半精加工 Semi Finishing	CCMT060204-MD	6.4	6.35	2.38	2.8	0.4	●	▲										
		CCMT060208-MD	6.4	6.35	2.38	2.8	0.8	●	▲										
		CCMT09T304-MD	9.7	9.525	3.97	4.4	0.4	●	▲										
		CCMT09T308-MD	9.7	9.525	3.97	4.4	0.8	●	▲										
		CCMT120404-MD	12.9	12.7	4.76	5.5	0.4	●	▲										
		CCMT120408-MD	12.9	12.7	4.76	5.5	0.8	●	▲										
		CCMT120412-MD	12.9	12.7	4.76	5.5	1.2	●	▲										
		CCMT060202-MP	6.4	6.35	2.38	2.8	0.2			●			▲		▲				
		CCMT060204-MP	6.4	6.35	2.38	2.8	0.4			●			▲		▲				
		CCMT060208-MP	6.4	6.35	2.38	2.8	0.8			●			▲		▲				
		CCMT09T304-MP	9.7	9.525	3.97	4.4	0.4			●			▲		▲				
		CCMT09T308-MP	9.7	9.525	3.97	4.4	0.8			●			▲		▲				
		CCMT120404-MP	12.9	12.7	4.76	5.5	0.4			●			▲		▲				
		CCMT120408-MP	12.9	12.7	4.76	5.5	0.8			●			▲		▲				
		CCMT060204-TM	6.4	6.35	2.38	2.8	0.4			●						▲			
		CCMT060208-TM	6.4	6.35	2.38	2.8	0.8			●						▲			
		CCMT09T304-TM	9.7	9.525	3.97	4.4	0.4			●						▲			
		CCMT09T308-TM	9.7	9.525	3.97	4.4	0.8			●						▲			
		CCMT120404-TM	12.9	12.7	4.76	5.5	0.4			●						▲			
		CCMT120408-TM	12.9	12.7	4.76	5.5	0.8			●						▲			

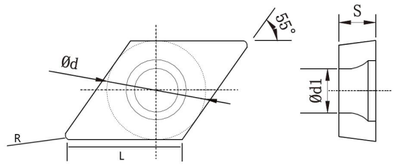
80° Turning insert (Positive) CC□□



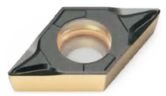
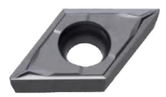
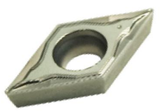
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS5010	WS5020	WS6080	WS7020	M WS5010	WS5020	WS6050	WS6080	WS6010	K WS5010	S WS4010	N SWU10
	粗加工 Roughing	CCMT09T308-MP	9.7	9.525	3.97	4.4	0.8	●	▲										
		CCMT120408-MP	12.9	12.7	4.76	5.5	0.8	●	▲										

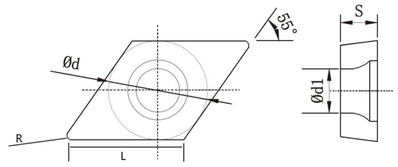
55° Turning insert (Positive) DC□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS5020	WS5050	WS5080	WS9080	K WS3010	S WS4010	N SWU10
	精加工 Finishing	DCMT070202-FM	7.8	6.35	2.38	2.8	0.2	▲	●										
		DCMT070204-FM	7.8	6.35	2.38	2.8	0.4	▲	●										
		DCMT11T302-FM	11.6	9.525	3.97	4.4	0.2	▲	●										
		DCMT11T304-FM	11.6	9.525	3.97	4.4	0.4	▲	●										
		DCMT11T308-FM	11.6	9.525	3.97	4.4	0.8	▲	●										
		DCGT070202-FW	7.8	6.35	2.38	2.8	0.2							▲					
		DCGT070204-FW	7.8	6.35	2.38	2.8	0.4							▲					
		DCGT11T302-FW	11.6	9.525	3.97	4.4	0.2							▲					
		DCGT11T304-FW	11.6	9.525	3.97	4.4	0.4							▲					
		DCGT11T308-FW	11.6	9.525	3.97	4.4	0.8							▲					
		DCMT070204-SF	7.8	6.35	2.38	2.8	0.4									▲			
		DCMT11T304-SF	11.6	9.525	3.97	4.4	0.4									▲			
		DCMT070204-MS	7.8	6.35	2.38	2.8	0.4									▲			
		DCMT11T304-MS	11.6	9.525	3.97	4.4	0.4									▲			
		DCMT11T308-MS	11.6	9.525	3.97	4.4	0.8									▲			
		DCMT070204-MG	7.8	6.35	2.38	2.8	0.4				▲								
		DCMT11T304-MG	11.6	9.525	3.97	4.4	0.4				▲								
		DCMT070204-MQ	7.8	6.35	2.38	2.8	0.4				▲								
		DCMT11T304-MQ	11.6	9.525	3.97	4.4	0.4				▲								
		DCMT11T308-MQ	11.6	9.525	3.97	4.4	0.8				▲								

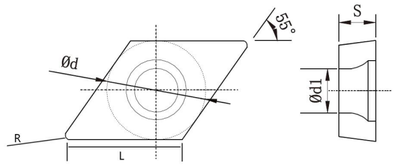
55° Turning insert (Positive) DC□□



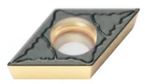
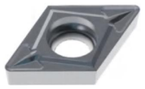
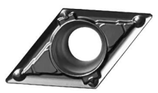
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS3010	WS5020	WS5050	WS5080	WS9080	K WS3010	S WS4010	N SWU10
 刃口钝化处理 Cutting edge passivation treatment	精加工 Finishing	DCMT11T302R-F	11.6	9.525	3.97	4.4	0.2				▲								
		DCMT11T302L-F	11.6	9.525	3.97	4.4	0.2				▲								
		DCMT11T304R-F	11.6	9.525	3.97	4.4	0.4				▲								
		DCMT11T304L-F	11.6	9.525	3.97	4.4	0.4				▲								
		DCGT070202-ALU	7.8	6.35	2.38	2.8	0.2												▲
		DCGT070204-ALU	7.8	6.35	2.38	2.8	0.4												▲
		DCGT070208-ALU	7.8	6.35	2.38	2.8	0.8												▲
		DCGT11T302-ALU	11.6	9.525	3.97	4.4	0.2												▲
		DCGT11T304-ALU	11.6	9.525	3.97	4.4	0.4												▲
		DCGT11T308-ALU	11.6	9.525	3.97	4.4	0.8												▲
		DCGT070202-ALM	7.8	6.35	2.38	2.8	0.2												▲
		DCGT070204-ALM	7.8	6.35	2.38	2.8	0.4												▲
		DCGT11T302-ALM	11.6	9.525	3.97	4.4	0.2												▲
		DCGT11T304-ALM	11.6	9.525	3.97	4.4	0.4												▲
		DCGT11T308-ALM	11.6	9.525	3.97	4.4	0.8												▲

55° Turning insert (Positive) DC□□

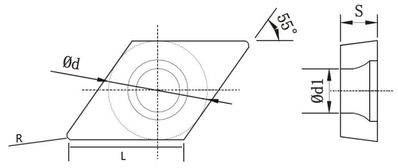


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

			L	Φd	S	Φd1	R	P WS2010	P WS2020	P WS4080	P WS7020	M WS1010	M WS2020	M WS4050	M WS4080	K WS1010	S WS4010	N SWU10
	半精加工 Semi Finishing	DCMT070204-MD	7.8	6.35	2.38	2.8	0.4	▲	●									
		DCMT070208-MD	7.8	6.35	2.38	2.8	0.8	▲	●									
		DCMT11T302-MD	11.6	9.525	3.97	4.4	0.2	▲	●									
		DCMT11T304-MD	11.6	9.525	3.97	4.4	0.4	▲	●									
		DCMT11T308-MD	11.6	9.525	3.97	4.4	0.8	▲	●									
		DCMT070204-MP	7.8	6.35	2.38	2.8	0.4			●			▲		▲			
		DCMT070208-MP	7.8	6.35	2.38	2.8	0.8			●			▲		▲			
		DCMT11T304-MP	11.6	9.525	3.97	4.4	0.4			●			▲		▲			
		DCMT11T308-MP	11.6	9.525	3.97	4.4	0.8			●			▲		▲			
		DCMT070204-TM	7.8	6.35	2.38	2.8	0.4									▲		
		DCMT070208-TM	7.8	6.35	2.38	2.8	0.8									▲		
		DCMT11T304-TM	11.6	9.525	3.97	4.4	0.4									▲		
		DCMT11T308-TM	11.6	9.525	3.97	4.4	0.8									▲		
		DCMT070202-MV	7.8	6.35	2.38	2.8	0.2			●						▲		
		DCMT070204-MV	7.8	6.35	2.38	2.8	0.4			●						▲		
		DCMT070208-MV	7.8	6.35	2.38	2.8	0.8			●						▲		
		DCMT11T304-MV	11.6	9.525	3.97	4.4	0.4			●						▲		
		DCMT11T308-MV	11.6	9.525	3.97	4.4	0.8											

三韩刀具 SANDHOG

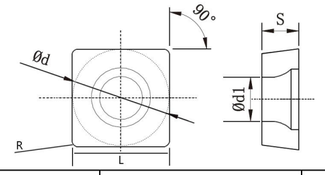
55° Turning insert (Positive) DC□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

			L	Φd	S	Φd1	R	P WS2010	P WS2020	P WS4080	P WS7020	M WS1010	M WS2020	M WS4050	M WS4080	K WS1010	S WS4010	N SWU10
	粗加工 Roughing	DCMT11T308-HN	11.6	9.525	3.97	4.4	0.4	●	▲									
								●	▲									

90° Turning insert (Positive) SC□□

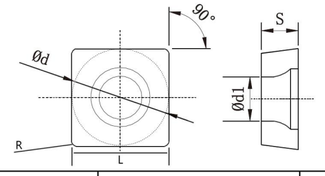


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS9010	WS9020	WS9050	WS9080	WS9010	K WS3010	S WS4010	N SWU10
	精加工	SCMT09T304-FM	9.525	9.525	3.97	4.4	0.4	▲											
		SCMT09T308-FM	9.525	9.525	3.97	4.4	0.8	▲											
		SCMT120404-FM	12.7	12.7	4.76	5.5	0.4	▲											
		SCMT120408-FM	12.7	12.7	4.76	5.5	0.8	▲											
		SCMT09T304-MH	9.525	9.525	3.97	4.4	0.4					▲							
		SCMT09T308-MH	9.525	9.525	3.97	4.4	0.8					▲							
		SCMT120404-MH	12.7	12.7	4.76	5.5	0.4					▲							
		SCMT120408-MH	12.7	12.7	4.76	5.5	0.8					▲							
		SCMT09T304-MG	9.525	9.525	3.97	4.4	0.4				▲								
	Finishing	SCGT09T302-ALU	9.525	9.525	3.97	4.4	0.2												▲
		SCGT09T304-ALU	9.525	9.525	3.97	4.4	0.4												▲
		SCGT09T308-ALU	9.525	9.525	3.97	4.4	0.8												▲
		SCGT120402-ALU	12.7	12.7	4.76	5.5	0.2												▲
		SCGT120404-ALU	12.7	12.7	4.76	5.5	0.4												▲
		SCGT120408-ALU	12.7	12.7	4.76	5.5	0.8												▲

三韩刀具 SANDHOG

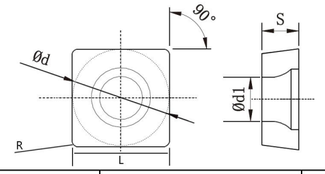
90° Turning insert (Positive) SC□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS4080	WS7020	M WS9010	WS9020	WS9050	WS9080	WS9010	K WS3010	S WS4010	N SWU10
	半精加工	SCMT09T304-MD	9.525	9.525	3.97	4.4	0.4	●	▲										
		SCMT09T308-MD	9.525	9.525	3.97	4.4	0.8	●	▲										
		SCMT120404-MD	12.7	12.7	4.76	5.5	0.4												
		SCMT120408-MD	12.7	12.7	4.76	5.5	0.8												
	Semi Finishing	SCMT09T304-TM	9.525	9.525	3.97	4.4	0.4									▲			
		SCMT09T308-TM	9.525	9.525	3.97	4.4	0.8									▲			
		SCMT120404-TM	12.7	12.7	4.76	5.5	0.4									▲			
		SCMT120408-TM	12.7	12.7	4.76	5.5	0.8									▲			
		SCMT120412-TM	12.7	12.7	4.76	5.5	1.2									▲			
		SCMT09T304-MP	9.525	9.525	3.97	4.4	0.4		●							▲			
		SCMT09T308-MP	9.525	9.525	3.97	4.4	0.8		●							▲			
		SCMT120404-MP	12.7	12.7	4.76	5.5	0.4		●							▲			
		SCMT120408-MP	12.7	12.7	4.76	5.5	0.8		●							▲			

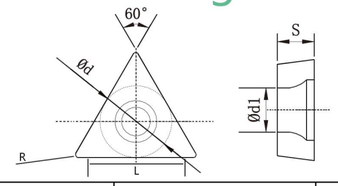
90° Turning insert (Positive) SC□□



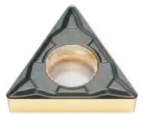
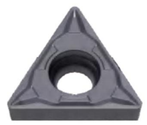
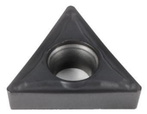
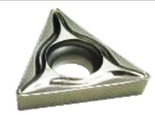
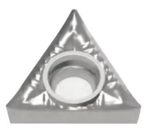
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P					M					K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS6080	WS7020		WS6010	WS6020	WS6050	WS6080	WS6510	WS3010	WS4010	SWU10
	粗加工 Roughing	SCMT09T308-HN	9.525	9.525	3.97	4.4	0.8	●	▲											
		SCMT120408-HN	12.7	12.7	4.76	5.5	0.8	●	▲											
		SCMT120412-HN	12.7	12.7	4.76	5.5	1.2	●	▲											

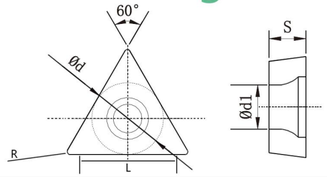
60° Turning insert (Positive) TC□□



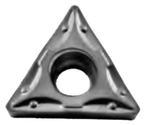
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P					M					K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS6080	WS7020		WS6010	WS6020	WS6050	WS6080	WS6510	WS3010	WS4010	SWU10
	精加工 Finishing	TCMT090204-FM	9.6	5.56	2.38	2.5	0.4	▲	●											
		TCMT110204-FM	11	6.35	2.38	2.8	0.4	▲	●											
		TCMT110208-FM	11	6.35	2.38	2.8	0.8	▲	●											
		TCMT16T304-FM	16.5	9.525	3.97	4.4	0.4	▲	●											
		TCMT16T308-FM	16.5	9.525	3.97	4.4	0.8	▲	●											
		TCMT090204-MH	9.6	5.56	2.38	2.5	0.4						▲							
		TCMT110204-MH	11	6.35	2.38	2.8	0.4						▲							
		TCMT110208-MH	11	6.35	2.38	2.8	0.8						▲							
		TCMT16T304-MH	16.5	9.525	3.97	4.4	0.4						▲							
		TCMT16T308-MH	16.5	9.525	3.97	4.4	0.8						▲							
		TCMT110204-MS	11	6.35	2.38	2.8	0.4									▲				
		TCMT16T304-MS	16.5	9.525	3.97	4.4	0.4									▲				
		TCMT110204-MG	11	6.35	2.38	2.8	0.4				▲									
		TCGT110202R-W	11	6.35	2.38	2.8	0.2				▲									
		TCGT110202L-W	11	6.35	2.38	2.8	0.2				▲									
		TCGT110204R-W	11	6.35	2.38	2.8	0.4				▲									
		TCGT110204L-W	11	6.35	2.38	2.8	0.4				▲									
		TCGT090202-ALU	9.6	5.56	2.38	2.5	0.2													▲
		TCGT090204-ALU	9.6	5.56	2.38	2.5	0.4													▲
		TCGT090208-ALU	9.6	5.56	2.38	2.5	0.8													▲
		TCGT110202-ALU	11	6.35	2.38	2.8	0.2													▲
		TCGT110204-ALU	11	6.35	2.38	2.8	0.4													▲
		TCGT110208-ALU	11	6.35	2.38	2.8	0.8													▲
		TCGT16T302-ALU	16.5	9.525	3.97	4.4	0.2													▲
		TCGT16T304-ALU	16.5	9.525	3.97	4.4	0.4													▲
		TCGT16T308-ALU	16.5	9.525	3.97	4.4	0.8													▲

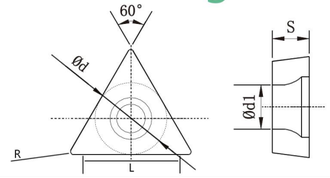
60° Turning insert (Positive) TC□□



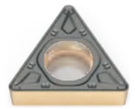
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WSM010	WSM020	WSM080	WSM070	WSM010	WSM020	WSM050	WSM080	WSM010	WSM010	WSM010	SWM10
	半精加工 Semi Finishing	TCMT090204-MD	9.6	5.56	2.38	2.5	0.4	●	▲									
		TCMT090208-MD	9.6	5.56	2.38	2.5	0.8	●	▲									
		TCMT110204-MD	11	6.35	2.38	2.8	0.4	●	▲									
		TCMT110208-MD	11	6.35	2.38	2.8	0.8	●	▲									
		TCMT16T304-MD	16.5	9.525	3.97	4.4	0.4	●	▲									
		TCMT16T308-MD	16.5	9.525	3.97	4.4	0.8	●	▲									
		TCMT090204-MP	9.6	5.56	2.38	2.5	0.4			●			▲		▲			
		TCMT090208-MP	9.6	5.56	2.38	2.5	0.8			●			▲		▲			
		TCMT110204-MP	11	6.35	2.38	2.8	0.4			●			▲		▲			
		TCMT110208-MP	11	6.35	2.38	2.8	0.8			●			▲		▲			
		TCMT16T304-MP	16.5	9.525	3.97	4.4	0.4			●			▲		▲			
		TCMT16T308-MP	16.5	9.525	3.97	4.4	0.8			●			▲		▲			
		TCMT090204-TM	9.6	5.56	2.38	2.5	0.4			●						▲		
		TCMT090208-TM	9.6	5.56	2.38	2.5	0.8			●						▲		
		TCMT110204-TM	11	6.35	2.38	2.8	0.4			●						▲		
		TCMT110208-TM	11	6.35	2.38	2.8	0.8			●						▲		
		TCMT16T304-TM	16.5	9.525	3.97	4.4	0.4			●						▲		
		TCMT16T308-TM	16.5	9.525	3.97	4.4	0.8			●						▲		
		TCMT16T312-TM	16.5	9.525	3.97	4.4	1.2			●						▲		

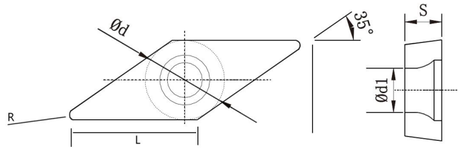
60° Turning insert (Positive) TC□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WSM010	WSM020	WSM080	WSM070	WSM010	WSM020	WSM050	WSM080	WSM010	WSM010	WSM010	SWM10
	粗加工 Roughing	TCMT16T308-HN	16.5	9.525	3.97	4.4	0.8	●	▲									

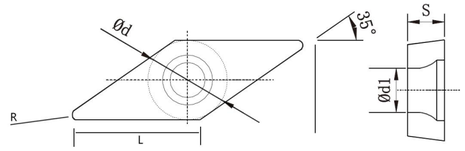
35° Turning insert (Positive) VB□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS6080	WS7520	M WS6010	WS6020	WS6050	WS6080	WS6010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	VBMT110302-FM	11	6.35	3.18	2.8	0.2	▲	●										
		VBMT110304-FM	11	6.35	3.18	2.8	0.4	▲	●										
		VBMT110308-FM	11	6.35	3.18	2.8	0.8	▲	●										
		VBMT160404-FM	16.5	9.525	4.76	4.4	0.4	▲	●										
		VBMT160408-FM	16.5	9.525	4.76	4.4	0.8	▲	●										
		VBGT110302-FW	11	6.35	3.18	2.8	0.2							▲					
		VBGT110304-FW	11	6.35	3.18	2.8	0.4							▲					
		VBGT110308-FW	11	6.35	3.18	2.8	0.8							▲					
		VBGT160404-FW	16.5	9.525	4.76	4.4	0.4							▲					
		VBGT160408-FW	16.5	9.525	4.76	4.4	0.8							▲					
		VBMT110304-MQ	11	6.35	3.18	2.8	0.4				▲								
		VBMT160404-MQ	16.5	9.525	4.76	4.4	0.4				▲								
		VBMT160408-MQ	16.5	9.525	4.76	4.4	0.8				▲								
		VBMT160404-MG	16.5	9.525	4.76	4.4	0.4				▲								
		VBMT160408-MG	16.5	9.525	4.76	4.4	0.8				▲								
		VBGT110302R-F	11	6.35	3.18	2.8	0.2				▲								
		VBGT110302L-F	11	6.35	3.18	2.8	0.2				▲								
		VBGT110304R-F	11	6.35	3.18	2.8	0.4				▲								
		VBGT110304L-F	11	6.35	3.18	2.8	0.4				▲								
		VBGT160402R-F	16.5	9.525	4.76	4.4	0.2				▲								
		VBGT160402L-F	16.5	9.525	4.76	4.4	0.2				▲								
		VBGT160404R-F	16.5	9.525	4.76	4.4	0.4				▲								
		VBGT160404L-F	16.5	9.525	4.76	4.4	0.4				▲								
		VBGT110302R-Y	11	6.35	3.18	2.8	0.2				▲								
		VBGT110302L-Y	11	6.35	3.18	2.8	0.2				▲								
		VBGT110304R-Y	11	6.35	3.18	2.8	0.4				▲								
		VBGT110304L-Y	11	6.35	3.18	2.8	0.4				▲								
		VBGT160402R-Y	16.5	9.525	4.76	4.4	0.2				▲								
		VBGT160402L-Y	16.5	9.525	4.76	4.4	0.2				▲								
		VBGT160404R-Y	16.5	9.525	4.76	4.4	0.4				▲								
		VBGT160404L-Y	16.5	9.525	4.76	4.4	0.4				▲								

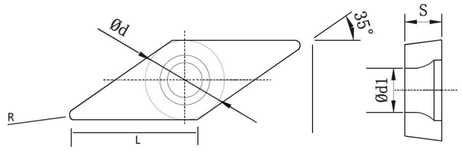
35° Turning insert (Positive) VB□□



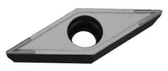
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS6080	WS7520	M WS6010	WS6020	WS6050	WS6080	WS6010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	VBGT110302-ALU	11	6.35	3.18	2.8	0.2												▲
		VBGT110304-ALU	11	6.35	3.18	2.8	0.4												▲
		VBGT110308-ALU	11	6.35	3.18	2.8	0.8												▲
		VBGT160402-ALU	16.5	9.525	4.76	4.4	0.2												▲
		VBGT160404-ALU	16.5	9.525	4.76	4.4	0.4												▲
		VBGT160408-ALU	16.5	9.525	4.76	4.4	0.8												▲
		VBGT110302-ALM	11	6.35	3.18	2.8	0.2												▲
		VBGT110304-ALM	11	6.35	3.18	2.8	0.4												▲
		VBGT110308-ALM	11	6.35	3.18	2.8	0.8												▲
		VBGT160402-ALM	16.5	9.525	4.76	4.4	0.2												▲
		VBGT160404-ALM	16.5	9.525	4.76	4.4	0.4												▲
		VBGT160408-ALM	16.5	9.525	4.76	4.4	0.8												▲

35° Turning insert (Positive) VB□□

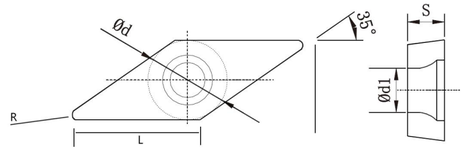


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WSM010	WSM020	WSM080	WSM720	WSM010	WSM020	WSM050	WSM080	WSM010	WSM010	WSM410	SNMG10
	半精加工 Semi Finishing	VBMT110304-MD	11	6.35	3.18	2.8	0.4	●	▲									
		VBMT110308-MD	11	6.35	3.18	2.8	0.8	●	▲									
		VBMT160404-MD	16.5	9.525	4.76	4.4	0.4	●	▲									
		VBMT160408-MD	16.5	9.525	4.76	4.4	0.8	●	▲									
		VBMT110304-TM	11	6.35	3.18	2.8	0.4			●					▲			
		VBMT110308-TM	11	6.35	3.18	2.8	0.8			●					▲			
		VBMT160404-TM	16.5	9.525	4.76	4.4	0.4			●					▲			
		VBMT160408-TM	16.5	9.525	4.76	4.4	0.8			●					▲			
		VBMT160412-TM	16.5	9.525	4.76	4.4	1.2			●					▲			
		VBMT110304-MP	11	6.35	3.18	2.8	0.4			●					▲			
		VBMT110308-MP	11	6.35	3.18	2.8	0.8			●					▲			
		VBMT160404-MP	16.5	9.525	4.76	4.4	0.4			●					▲			
		VBMT160408-MP	16.5	9.525	4.76	4.4	0.8			●					▲			

三韩刀具 SANDHOG

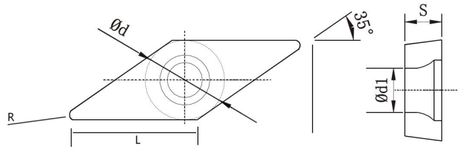
35° Turning insert (Positive) VB□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WSM010	WSM020	WSM080	WSM720	WSM010	WSM020	WSM050	WSM080	WSM010	WSM010	WSM410	SNMG10
	粗加工 Roughing	VBMT160404-HN	16.5	9.525	4.76	4.4	0.4	●	▲									
		VBMT160408-HN	16.5	9.525	4.76	4.4	0.8	●	▲									
		VBMT160412-HN	16.5	9.525	4.76	4.4	1.2	●	▲									

35° Turning insert (Positive) VC□□

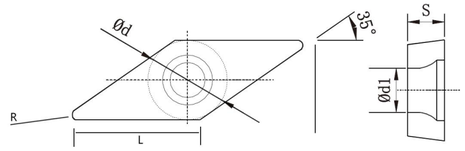


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS6080	WS7020	M WS9010	WS9020	WS9050	WS9080	WS9010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	VCMT110302-FM	11	6.35	3.18	2.8	0.2	▲	●										
		VCMT110304-FM	11	6.35	3.18	2.8	0.4	▲	●										
		VCMT110308-FM	11	6.35	3.18	2.8	0.8	▲	●										
		VCMT160404-FM	16.5	9.525	4.76	4.4	0.4	▲	●										
		VCMT160408-FM	16.5	9.525	4.76	4.4	0.8	▲	●										
		VCMT110302-FW	11	6.35	3.18	2.8	0.2							▲					
		VCMT110304-FW	11	6.35	3.18	2.8	0.4							▲					
		VCMT110308-FW	11	6.35	3.18	2.8	0.8							▲					
		VCMT160404-FW	16.5	9.525	4.76	4.4	0.4							▲					
		VCMT160408-FW	16.5	9.525	4.76	4.4	0.8							▲					
		VCMT110304-MQ	11	6.35	3.18	2.8	0.4				▲								
		VCMT160404-MQ	16.5	9.525	4.76	4.4	0.4				▲								
		VCMT160408-MQ	16.5	9.525	4.76	4.4	0.8				▲								
		VCMT160404-MG	16.5	9.525	4.76	4.4	0.4				▲								
		VCMT160408-MG	16.5	9.525	4.76	4.4	0.8				▲								
		VCGT110302R-F	11	6.35	3.18	2.8	0.2				▲								
		VCGT110302L-F	11	6.35	3.18	2.8	0.2				▲								
		VCGT110304R-F	11	6.35	3.18	2.8	0.4				▲								
		VCGT110304L-F	11	6.35	3.18	2.8	0.4				▲								
		VCGT160402R-F	16.5	9.525	4.76	4.4	0.2				▲								
		VCGT160402L-F	16.5	9.525	4.76	4.4	0.2				▲								
		VCGT160404R-F	16.5	9.525	4.76	4.4	0.4				▲								
		VCGT160404L-F	16.5	9.525	4.76	4.4	0.4				▲								
		VCGT110302R-Y	11	6.35	3.18	2.8	0.2				▲								
		VCGT110302L-Y	11	6.35	3.18	2.8	0.2				▲								
		VCGT110304R-Y	11	6.35	3.18	2.8	0.4				▲								
		VCGT110304L-Y	11	6.35	3.18	2.8	0.4				▲								
		VCGT160402R-Y	16.5	9.525	4.76	4.4	0.2				▲								
		VCGT160402L-Y	16.5	9.525	4.76	4.4	0.2				▲								
		VCGT160404R-Y	16.5	9.525	4.76	4.4	0.4				▲								
		VCGT160404L-Y	16.5	9.525	4.76	4.4	0.4				▲								

三韩刀具 SANDHOG

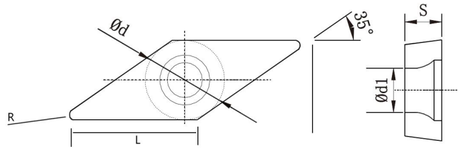
35° Turning insert (Positive) VC□□



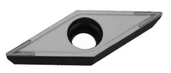
▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size L	Φd	S	Φd1	R	P WS2010	WS2020	WS6080	WS7020	M WS9010	WS9020	WS9050	WS9080	WS9010	K WS3010	S WS4010	N SWU10
	精加工 Finishing	VCGT110302-ALU	11	6.35	3.18	2.8	0.2												▲
		VCGT110304-ALU	11	6.35	3.18	2.8	0.4												▲
		VCGT110308-ALU	11	6.35	3.18	2.8	0.8												▲
		VCGT160402-ALU	16.5	9.525	4.76	4.4	0.2												▲
		VCGT160404-ALU	16.5	9.525	4.76	4.4	0.4												▲
		VCGT160408-ALU	16.5	9.525	4.76	4.4	0.8												▲
		VCGT110302-ALM	11	6.35	3.18	2.8	0.2												▲
		VCGT110304-ALM	11	6.35	3.18	2.8	0.4												▲
		VCGT110308-ALM	11	6.35	3.18	2.8	0.8												▲
		VCGT160402-ALM	16.5	9.525	4.76	4.4	0.2												▲
		VCGT160404-ALM	16.5	9.525	4.76	4.4	0.4												▲
		VCGT160408-ALM	16.5	9.525	4.76	4.4	0.8												▲

35° Turning insert (Positive) VC□□

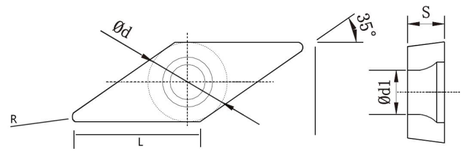


▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS6080	WS7020	WS5010	WS5020	WS5050	WS8080	WS6010	WS3010	WS4010	SWU10
	半精加工 Semi Finishing	VCMT110304-MD	11	6.35	3.18	2.8	0.4	●	▲									
		VCMT110308-MD	11	6.35	3.18	2.8	0.8	●	▲									
		VCMT160404-MD	16.5	9.525	4.76	4.4	0.4	●	▲									
		VCMT160408-MD	16.5	9.525	4.76	4.4	0.8	●	▲									
		VCMT110304-TM	11	6.35	3.18	2.8	0.4			●						▲		
		VCMT110308-TM	11	6.35	3.18	2.8	0.8			●						▲		
		VCMT160404-TM	16.5	9.525	4.76	4.4	0.4			●						▲		
		VCMT160408-TM	16.5	9.525	4.76	4.4	0.8			●						▲		
		VCMT160412-TM	16.5	9.525	4.76	4.4	1.2			●						▲		
		VCMT110304-MP	11	6.35	3.18	2.8	0.4			●			▲		▲			
		VCMT110308-MP	11	6.35	3.18	2.8	0.8			●			▲		▲			
		VCMT160404-MP	16.5	9.525	4.76	4.4	0.4			●			▲		▲			
		VCMT160408-MP	16.5	9.525	4.76	4.4	0.8			●			▲		▲			

三韩刀具 SANDHOG

35° Turning insert (Positive) VC□□



▲ 为第一推荐牌号 Recommended grade
● 为第二推荐牌号 Optional grade

刀片形状 Insert Shape		型号 Designation	尺寸 Size					P				M				K	S	N
			L	Φd	S	Φd1	R	WS2010	WS2020	WS6080	WS7020	WS5010	WS5020	WS5050	WS8080	WS6010	WS3010	WS4010	SWU10
	粗加工 Roughing	VCMT160404-HN	16.5	9.525	4.76	4.4	0.4	●	▲									
		VCMT160408-HN	16.5	9.525	4.76	4.4	0.8	●	▲									
		VCMT160412-HN	16.5	9.525	4.76	4.4	1.2	●	▲									