ANBIT Cemented Carbide

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CUTTING TOOL CATALOGUE

切削刀具综合目录

安比特合金



2024-2025

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公司简介

安比特精密工具（南京）有限公司是一家集硬质合金产品研发, 生产, 销售为一体的民营企业。公司坐落于南京南大校友经济产业园。公司技术力量雄厚，采用先进的生产设备，检测仪器及生产工艺，专业生产硬质合金数控刀片。

公司一贯坚持“以人为本，科技创新，顾客至上，品质卓越”的质量方针，加强内部管理，严格控制产品质量，为客户提供高品质的硬质合金产品和技术服务。

公司拥有一支经验丰富，技术专业的研发，生产团队。从产品研发到生产出成品均严格把关，力求完美。针对不同的工件材质，不同的切削条件均有相应的产品系列。亦可根据客户的特殊需求生产非标刀片。

放眼未来，公司将秉承用户至上，互利互惠的原则，全力满足用户的需求。ANBIT将以优质的产品质量， 极具竞争力的价格体系，专业的技术服务为机械加工行业提供完善的刀具解决方案。



Company Profile

ANBIT Precision Tools (Nanjing) Co.,LTD. is a private enterprise integrating R&D, production and sales of cemented carbide products, situated in Nanjing University Alumni Economic Industrial Park.

Equipped with advanced production equipment, testing instruments and mature manufacturing processes, we specialize in cemented carbide CNC inserts with solid technical strength.

We follow the quality guideline: "People-oriented, innovative technology, customer-first, superior quality". Rigorous internal management and full product quality control enable us to deliver premium cemented carbide products and technical services to clients.

Our experienced professional R&D and production team supervises every stage from R&D to finished goods to achieve top-tier quality. We offer tailored product lines for different workpiece materials and cutting conditions, plus custom non-standard inserts for special client requirements.

Going forward, we adhere to customer priority and mutual benefit to fully meet market demands. Anbit provides all-around cutting tool solutions for machinery processing with high-quality products, competitive pricing and professional technical services.



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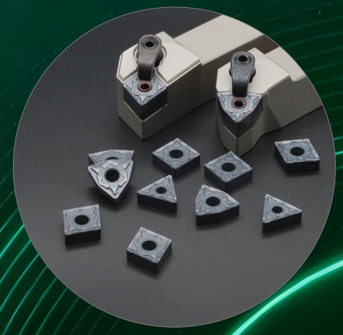
D 技术信息 Technical Specification 075

CUTTING TOOL CATALOGUE

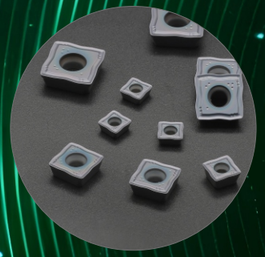




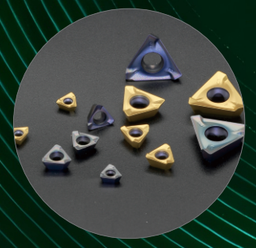






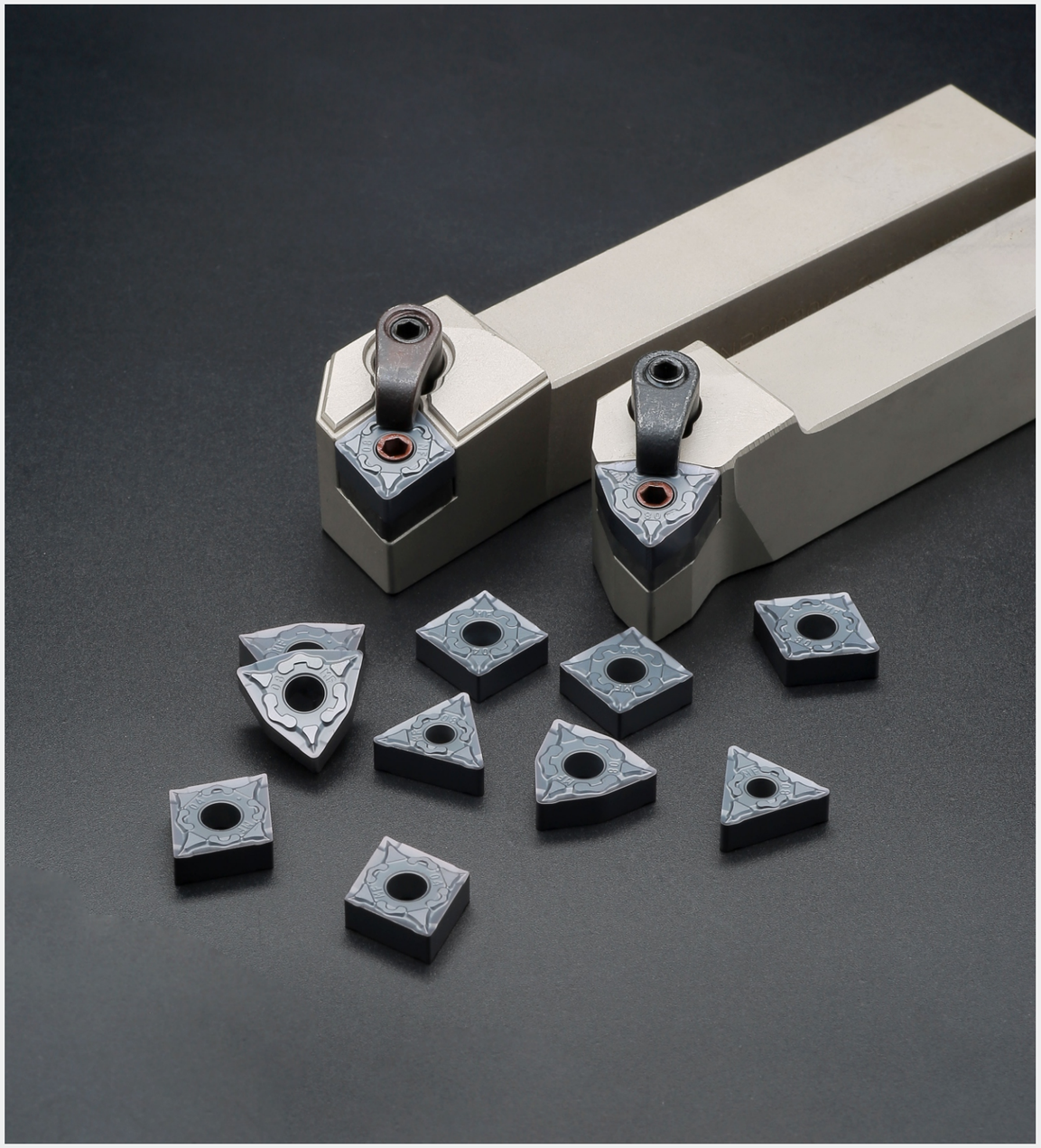






ANBIT Cemented Carbide

Efficient cutting eases your machining work;
Genuine quality & fair pricing spares you shopping around.
高效加工省力，真材价实省心



A
车削刀片
Turning Insert

A

车削刀片
Turning Insert

普通车削刀片命名规则 007
ISO Turning Insert Naming Rules

车削刀片牌号一览表 008
Turning Insert List

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Parting and Grooving Insert

螺纹车刀片 026
Threading Insert

普通车削刀片命名规则
ISO Turning Insert Naming Rules

形状代号 Shape

T	N	M	G	16	04	08	—	KM

A	B	C
		
D	E	H
		
K	L	M
		
O	P	R
		
S	T	T
		
V	W	Z
		其 它

断屑槽及夹固形式代号 Chip Breaker and Hole

T	N	M	G	16	04	08	—	KM

代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile	代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile
B	有(Y)	无(N)		N	无(N)	无（N）	
H	有(Y)	单面(S)		R	无(N)	单面（S）	
C	有(Y)	无(N)		F	无(N)	双面（D）	
J	有(Y)	双面(D)		A	有(Y)	无（N）	
W	有(Y)	无(N)		M	有(Y)	单面（S）	
T	有(Y)	单面(S)		G	有(Y)	双面（D）	
Q	有(Y)	无(N)		X			
U	有(Y)	双面(D)					

后角代号 Clearance Angle

T	N	M	G	16	04	08	—	KM

A	B
	
C	D
	
E	F
	
G	N
	
P	O
	其它后角 Others

精度代号 Tolerance

T	N	M	G	16	04	08	—	KM

代号 Symbol	刀尖高度m 公差（mm） m(mm)	内接圆ΦI.C 公差（mm） d=I.C. (mm)	厚度S 公差（mm） s (mm)	（参考）M级精度详细情况（按形状、大小分）●刀尖高度公差(mm) (reference)M grade tolerance detail(according to shape, size.) Tolerance of insert nose height						
				内接圆 Inscribed Circle	正三角形 Regular Triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round
				6.35	±0.08	±0.08	±0.08	±0.11	±0.16	···
				9.525	±0.08	±0.08	±0.08	±0.11	±0.16	···
				12.7	±0.13	±0.13	±0.13	±0.15	···	···
A	±0.005	±0.025	±0.025	15.875	±0.15	±0.15	±0.15	±0.18	···	···
F	±0.005	±0.013	±0.025	19.05	±0.15	±0.15	±0.15	±0.18	···	···
C	±0.013	±0.025	±0.025	25.4	···	±0.18	···	···	···	···
H	±0.013	±0.013	±0.013	●内接圆ΦI.C公差（mm）●Tolerance of Inscribed Circle						
E	±0.025	±0.025	±0.025	内接圆 Inscribed Circle	正三角形 Regular triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round
G	±0.025	±0.025	±0.13							
J	±0.005	±0.05~±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05	
K	±0.013	±0.05~±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
L	±0.025	±0.05~±0.13	±0.025	12.7	±0.08	±0.08	±0.08	±0.08	···	±0.08
M	±0.08~±0.18	±0.05~±0.13	±0.13	15.875	±0.1	±0.1	±0.10	±0.10	···	±0.1
N	±0.08~±0.18	±0.05~±0.13	±0.025	19.05	±0.1	±0.1	±0.10	±0.10	···	±0.1
U	±0.13~±0.38	±0.08~±0.25	±0.13	25.4	···	···	±0.13	···	···	±0.13

普通车削刀片命名规则
ISO Turning Insert Naming Rules

切削刃长度代号 Cutting Edge Length

T	N	M	G	16	04	08	—	KM

内切圆直径 Inscribed Circle diameter(mm)	刀片外形 Insert Shape							
	C	D	R	S	T	V	W	K
3.97					06			
5			05					
5.56					09			
6			06					
6.35	06	07			11	11		
8			08					
9.525	09	11	09	09	16	16	06	16
10			10					
12			12					
12.7	12	15	12	12	22	22	08	
15.875	16		15	15	27			
16			16	16				
19.05	19		19	19	33			
20			20					
25	25	25	25					
25.4			25	25				
31.75			31					
32			32					

刀片厚度代号 Thickness

T	N	M	G	16	04	08	—	KM

代号 Symbol	刀片厚度 Thickness(mm)
00	0.79
T0	0.99
01	1.59
T1	1.98
02	2.38
T2	2.58
03	3.18
T3	3.97
04	4.76
T4	4.96
05	5.56
T5	5.95
06	6.35
T6	6.75
07	7.94
09	9.52
T9	9.72
11	11.11
12	12.7

厚度指刀片底面与切削刃最高部分之间的高度
The Height Between Insert Bottom And Nose

刀尖圆弧代号 Corner Radius

T	N	M	G	16	04	08	—	KM

代号 Symbol	刀尖圆弧半径（mm） Corner Radius（mm）
00	无圆角
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2
24	2.4
32	3.2
X	其它 Special
刀片直径尺寸mo（公制） Diameter Dimension	圆形刀片 Round Insert

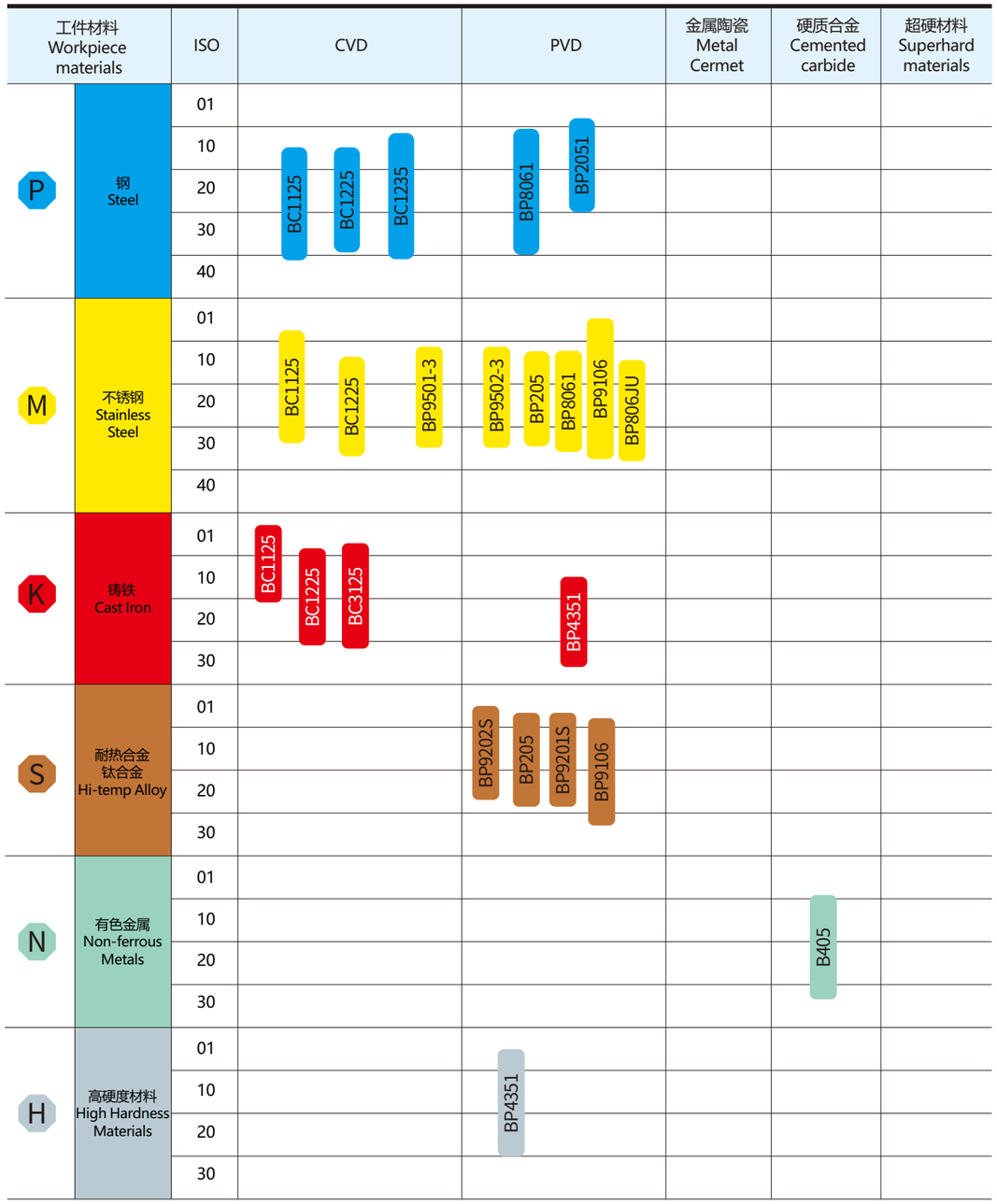
断屑槽型代号 Chip Beaker

T	N	M	G	16	04	08	—	KM

BTM	BMA	R/L-S	BHA	A
MS	MM	BM	BHMP	KM
MF3	MR	无代号		

车削刀片牌号一览表

Turning Insert List



车削刀片牌号介绍

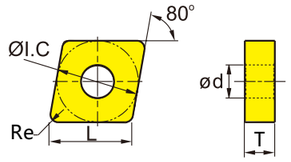
Turning insert Grade Introduction

牌号名称 Grade Name	牌号特点 Grade Features
BC1125	CVD涂层，黄色，通用加工牌号，适用于中高等切削速度的钢、不锈钢的加工，加工软钢比较突出。 CVD coating, yellow color, general purpose machining grade, suitable for machining steel and stainless steel at medium to high cutting speeds, and outstanding for machining soft steel.
BC1225	CVD涂层，黑色，通用加工牌号，适用于低等切削速度下的低碳钢、铸铁、不锈钢加工，耐磨性更好。 CVD coating, black color, universal machining grade, suitable for low carbon steel, cast iron, stainless steel machining at low and equal cutting speeds, with better wear resistance.
BC1235	CVD涂层，黑黄双色，通用加工牌号，适用于各种钢件加工。 CVD coated, black and yellow, universal processing grade, suitable for all kinds of steel processing.
BP8061	PVD涂层，古铜色，不锈钢、钢、高温合金加工，半精加工首选。 PVD coating, bronze color, stainless steel, steel, high temperature alloy processing, semi-finishing preferred.
BC3125	CVD涂层，黑色，铸铁加工通用牌号。 CVD coated, black color, universal grade for machining of cast iron.
BP205	PVD涂层，黑紫色，切槽切断及镗孔加工，不锈钢、高温合金首选，半精及精加工。 CVD coated, black color, universal grade for machining of cast iron.
BP2051	PVD涂层，古铜色，钢件、不锈钢半精及精加工。 PVD coating, bronze color, steel, stainless steel semi-finishing and finishing.
BP9201S	PVD涂层，银白色，高温合金、钛合金半精及精加工。 PVD coating, silver white, high temperature alloys, titanium alloys， semi-finishing and rough machining.
BP9202S	PVD涂层，银白色，高温合金、钛合金半精及粗加工。 PVD coating, silver white, high temperature alloys, titanium alloys， semi-finishing and rough machining.
BP9501-3	PVD涂层，黑色，不锈钢半精及精加工。 PVD coating, black color,stainless steel semi-finish and finish machining.
BP9502-3	PVD涂层，黑色，不锈钢半精及粗加工。 PVD coating, black color,staniless steel semi-finishing and roughing machining.

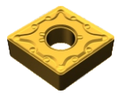
车削刀片(负型)

Turning Insert (Negative)

CN□□



菱形80°有孔

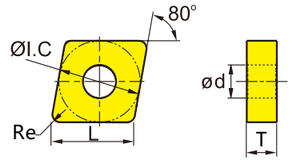
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	CNMG090304-BTM	9.525	3.18	3.81	0.4	●	●							钢 半精加工 Steel semi finishing
	CNMG090308-BTM	9.525	3.18	3.81	0.8	●	●							
	CNMG120404-BTM	12.7	4.76	5.16	0.4	▲	▲	▲						
	CNMG120408-BTM	12.7	4.76	5.16	0.8	▲	▲	▲						
	CNMG120412-BTM	12.7	4.76	5.16	1.2	▲	▲							
	CNMG120416-BTM	12.7	4.76	5.16	1.6	●	●							
	CNMG160608-BTM	15.875	4.76	5.16	0.8	●	●							
	CNMG160612-BTM	15.875	4.76	5.16	1.2	●	●							
	CNMG160616-BTM	15.875	4.76	5.16	1.6	●	●							
	CNMG120404-BMA	12.7	4.76	5.16	0.4	●	▲							钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	CNMG120408-BMA	12.7	4.76	5.16	0.8	●	▲							
	CNMG120412-BMA	12.7	4.76	5.16	1.2	●	●							
	CNMG120404R-S	12.7	4.76	5.16	0.4	●	●							钢件 粗加工 Steel rough finishing
	CNMG120408R-S	12.7	4.76	5.16	0.8	●	●							
	CNMG120412R-S	12.7	4.76	5.16	1.2	●	●							
	CNMG120404L-S	12.7	4.76	5.16	0.4	●	●							
	CNMG120408L-S	12.7	4.76	5.16	0.8	●	●							
	CNMG120412L-S	12.7	4.76	5.16	1.2	●	●							
	CNMG120404-MS	12.7	4.76	5.16	0.4	●				▲				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	CNMG120408-MS	12.7	4.76	5.16	0.8	●				▲				
	CNMG120412-MS	12.7	4.76	5.16	1.2	●				●				
	CNMG120404-MF3	12.7	4.76	5.16	0.4							▲	▲	不锈钢 精加工 Stainless steel finishing
	CNMG120408-MF3	12.7	4.76	5.16	0.8							▲	▲	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

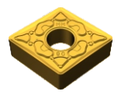
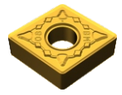
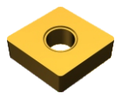
车削刀片(负型)

Turning Insert (Negative)

CN□□



菱形80°有孔

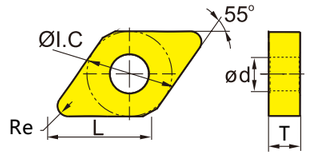
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	CNMG090304-MM	9.525	3.18	3.81	0.4				●	●				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	CNMG090308-MM	9.525	3.18	3.81	0.8				●	●				
	CNMG120404-MM	12.7	4.76	5.16	0.4				●	▲				
	CNMG120408-MM	12.7	4.76	5.16	0.8				●	▲				
	CNMG120412-MM	12.7	4.76	5.16	1.2				●	▲				
	CNMG120416-MM	12.7	4.76	5.16	1.6				●	●				
	CNMG160608-MM	15.875	4.76	5.16	0.8				●	●				
	CNMG160612-MM	15.875	4.76	5.16	1.2				●	●				
	CNMG160616-MM	15.875	4.76	5.16	1.6				●	●				
	CNMG120404-BM	12.7	4.76	5.16	0.4				▲	▲				不锈钢 高温合金 半精加工 Stainless steel High temperature alloy steel semi finishing
	CNMG120408-BM	12.7	4.76	5.16	0.8				▲	▲				
	CNMG120412-BM	12.7	4.76	5.16	1.2				●	●				
	CNMG160608-BM	15.875	4.76	5.16	0.8				●	●				
	CNMG160612-BM	15.875	4.76	5.16	1.2				●	●				
	CNMG160616-BM	15.875	4.76	5.16	1.6				●	●				
	CNMG120404-MR	12.7	4.76	5.16	0.4							▲	▲	不锈钢 粗加工 Stainless steel rough finishing
	CNMG120408-MR	12.7	4.76	5.16	1.2							▲	▲	
	CNMG120408-MR	12.7	4.76	5.16	1.2							▲	▲	
	CNMA120404	12.7	4.76	5.16	0.4						●			铸铁 粗加工 Cast iron rough finishing
	CNMA120408	12.7	4.76	5.16	0.8						●			
	CNMA120412	12.7	4.76	5.16	1.2						●			
	CNMA160608	15.875	4.76	5.16	0.8						●			
	CNMA160612	15.875	4.76	5.16	1.2						●			
	CNMA160616	15.875	4.76	5.16	1.6						●			
	CNMG120404	12.7	4.76	5.16	0.4						●			钢、铸铁 粗加工 Steel Cast iron rough finishing
	CNMG120408	12.7	4.76	5.16	0.8						●			
	CNMG120412	12.7	4.76	5.16	1.2						●			
	CNMG160608	15.875	4.76	5.16	0.8						●			
	CNMG160612	15.875	4.76	5.16	1.2						●			
	CNMG160616	15.875	4.76	5.16	1.6						●			

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

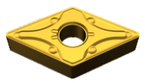
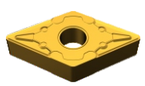
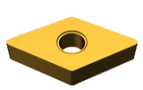
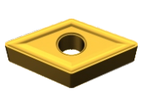
车削刀片(负型)

Turning Insert (Negative)

DN□□



菱形55°有孔

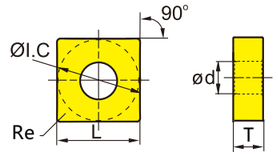
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	DNMG110404-BTM	9.525	4.76	3.81	0.4	●	●							钢 半精加工 Steel semi finishing
	DNMG110408-BTM	9.525	4.76	3.81	0.8	●	●							
	DNMG150404-BTM	12.7	4.76	5.16	0.4	●	▲	●						
	DNMG150408-BTM	12.7	4.76	5.16	0.8	●	▲	●						
	DNMG150412-BTM	12.7	4.76	5.16	1.2	●	●							
	DNMG150604-BTM	12.7	6.35	5.16	0.4	●	▲	●						
	DNMG150608-BTM	12.7	6.35	5.16	0.8	●	▲	●						
	DNMG150612-BTM	12.7	6.35	5.16	1.2	●	●							
	DNMG150404-BMA	12.7	4.76	5.16	0.4	●								钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	DNMG150408-BMA	12.7	4.76	5.16	0.8	●								
	DNMG150412-BMA	12.7	4.76	5.16	1.2	●								
	DNMG150604-BMA	12.7	6.35	5.16	0.4	●								
	DNMG150608-BMA	12.7	6.35	5.16	0.8	●								
	DNMG150612-BMA	12.7	6.35	5.16	1.2	●								
	DNMG150404-MM	12.7	4.76	5.16	0.4				●	●				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	DNMG150408-MM	12.7	4.76	5.16	0.8				●	●				
	DNMG150412-MM	12.7	4.76	5.16	1.2				●	●				
	DNMG150604-MM	12.7	6.35	5.16	0.4				●	●				
	DNMG150608-MM	12.7	6.35	5.16	0.8				●	●				
	DNMG150612-MM	12.7	6.35	5.16	1.2				●	●				
	DNMA150404	12.7	4.76	5.16	0.4						●			铸铁 粗加工 Cast iron rough finishing
	DNMA150408	12.7	4.76	5.16	0.8						●			
	DNMA150412	12.7	4.76	5.16	1.2						●			
	DNMA150604	12.7	6.35	5.16	0.4						●			
	DNMA150608	12.7	6.35	5.16	0.8						●			
	DNMA150612	12.7	6.35	5.16	1.2						●			
	DNMG150404	12.7	4.76	5.16	0.4						●			钢、铸铁 粗加工 Steel Cast iron rough finishing
	DNMG150408	12.7	4.76	5.16	0.8						●			
	DNMG150412	12.7	4.76	5.16	1.2						●			
	DNMG150604	12.7	6.35	5.16	0.4						●			
	DNMG150608	12.7	6.35	5.16	0.8						●			
	DNMG150612	12.7	6.35	5.16	1.2						●			

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(负型)

Turning Insert (Negative)

SN□□



正方形90°有孔

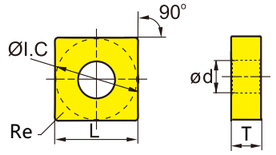
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	SNMG120404-BTM	12.7	4.76	5.16	0.4	●	●							钢 半精加工 Steel semi finishing
	SNMG120408-BTM	12.7	4.76	5.16	0.8	●	●							
	SNMG120412-BTM	12.7	4.76	5.16	1.2	●	●							
	SNMG150612-BTM	15.875	6.35	6.35	1.2	●	●							
	SNMG190612-BTM	15.875	6.35	7.94	1.2	●	●							
	SNMG190616-BTM	19.05	6.35	7.94	1.6	●	●							
	SNMG120404-BMA	12.7	4.76	5.16	0.4	●								钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	SNMG120408-BMA	12.7	4.76	5.16	0.8	●								
	SNMG120412-BMA	12.7	4.76	5.16	1.2	●								
	SNMG150608-BMA	15.875	6.35	6.35	1.2	●								
	SNMG150612-BMA	15.875	6.35	6.35	1.2	●								
	SNMG120404R-S	12.7	4.76	5.16	0.4	●	●							钢件 粗加工 Steel rough finishing
	SNMG120408R-S	12.7	4.76	5.16	0.8	●	●							
	SNMG120412R-S	12.7	4.76	5.16	1.2	●	●							
	SNMG120404L-S	12.7	4.76	5.16	0.4	●	●							
	SNMG120408L-S	12.7	4.76	5.16	0.8	●	●							
	SNMG120412L-S	12.7	4.76	5.16	1.2	●	●							
	SNMG150612L-M	15.875	6.35	6.35	1.2	●								
	SNMG150612R-M	15.875	6.35	6.35	1.2	●								
	SNMG120404-MM	12.7	4.76	5.16	0.4				●	▲				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	SNMG120408-MM	12.7	4.76	5.16	0.8				●	▲				
	SNMG120412-MM	12.7	4.76	5.16	1.2				●	▲				
	SNMG120404-BM	12.7	4.76	5.16	0.4				●	●				不锈钢 高温合金 半精加工 Stainless steel High temperature alloy steel semi finishing
	SNMG120408-BM	12.7	4.76	5.16	0.8				●	●				
	SNMG120412-BM	12.7	4.76	5.16	1.2				●	●				

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(负型)

Turning Insert (Negative)

SN□□



正方形90°有孔

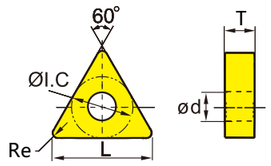
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	SNMG120404-MF3	12.7	4.76	5.16	0.4							▲	▲	不锈钢 精加工 Stainless steel finishing
	SNMG120408-MF3	12.7	4.76	5.16	0.8							▲	▲	
	SNMG120408-MR	12.7	4.76	5.16	0.8							▲	▲	不锈钢 粗加工 Stainless steel rough finishing
	SNMG120412-MR	12.7	4.76	5.16	1.2							▲	▲	
	SNMG120404-BHA	12.7	4.76	5.16	0.4					●		▲		钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	SNMG120408-BHA	12.7	4.76	5.16	0.8					●		●		
	SNMG120412-BHA	12.7	4.76	5.16	1.2					●		●		
	SNMA120404	12.7	4.76	5.16	0.4						●			铸铁 粗加工 Cast iron rough finishing
	SNMA120408	12.7	4.76	5.16	0.8						●			
	SNMA120412	12.7	4.76	5.16	1.2						●			
	SNMG120404	12.7	4.76	5.16	0.4						●			钢、铸铁 粗加工 Steel Cast iron rough finishing
	SNMG120408	12.7	4.76	5.16	0.8						●			
	SNMG120412	12.7	4.76	5.16	1.2						●			

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(负型)

Turning Insert (Negative)

TN□□



三角形60°有孔

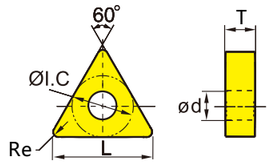
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	TNMG160404-BTM	9.525	4.76	3.81	0.4	▲	▲	▲						钢 半精加工 Steel semi finishing
	TNMG160408-BTM	9.525	4.76	3.81	0.8	▲	▲	▲						
	TNMG160412-BTM	9.525	4.76	3.81	1.2	●	▲							
	TNMG220404-BTM	12.7	4.76	5.16	0.4	●	●							
	TNMG220408-BTM	12.7	4.76	5.16	0.8	●	●							
	TNMG220412-BTM	12.7	4.76	5.16	1.2	●	●							
	TNMG160404-BMA	9.525	4.76	3.81	0.4	▲	▲	●			●			钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	TNMG160408-BMA	9.525	4.76	3.81	0.8	▲	▲	●			●			
	TNMG160412-BMA	9.525	4.76	3.81	1.2	●	●							
	TNMG160404R-S	9.525	4.76	3.81	0.4	▲	▲							钢件 粗加工 Steel rough finishing
	TNMG160408R-S	9.525	4.76	3.81	0.8	▲	▲							
	TNMG160412R-S	9.525	4.76	3.81	1.2	●	●							
	TNMG160404L-S	9.525	4.76	3.81	0.4	▲	▲							
	TNMG160408L-S	9.525	4.76	3.81	0.8	▲	▲							
	TNMG160412L-S	9.525	4.76	3.81	1.2	●	●							
	TNMG160404-MS	9.525	4.76	3.81	0.4					●			▲	钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	TNMG160408-MS	9.525	4.76	3.81	0.8					●			▲	
	TNMG160409-MS	9.525	4.76	3.81	0.9					●			●	
	TNMG160412-MS	9.525	4.76	3.81	1.2					●				
	TNMG160404-MF3	9.525	4.76	3.81	0.4							▲	▲	不锈钢 精加工 Stainless steel finishing
	TNMG160408-MF3	9.525	4.76	3.81	0.8							▲	▲	
	TNMG160404-MM	9.525	4.76	3.81	0.4				●	▲				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	TNMG160408-MM	9.525	4.76	3.81	0.8				●	▲				
	TNMG160412-MM	9.525	4.76	3.81	1.2				●	●				

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(负型)

Turning Insert (Negative)

TN□□



三角形60°有孔

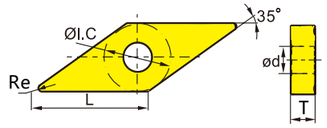
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	TNMG160404-BM	9.525	4.76	3.81	0.4				▲	▲				不锈钢 高温合金 半精加工 Stainless steel High temperature alloy steel semi finishing
	TNMG160408-BM	9.525	4.76	3.81	0.8				▲	▲				
	TNMG160412-BM	9.525	4.76	3.81	1.2				●	●				
	TNMG160404-MR	9.525	4.76	3.81	0.4								▲	不锈钢 粗加工 Stainless steel rough finishing
	TNMG160408-MR	9.525	4.76	3.81	0.8								▲	
	TNMG160412-MR	9.525	4.76	3.81	1.2								▲	
	TNMA160404	9.525	4.76	3.81	0.4						●			铸铁 粗加工 Cast iron rough finishing
	TNMA160408	9.525	4.76	3.81	0.8						●			
	TNMA160412	9.525	4.76	3.81	1.2						●			
	TNMG160404	9.525	4.76	3.81	0.4						●			钢、铸铁 粗加工 Steel Cast iron rough finishing
	TNMG160408	9.525	4.76	3.81	0.8						●			
	TNMG160412	9.525	4.76	3.81	1.2						●			

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

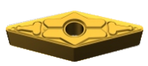
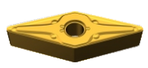
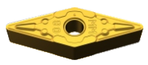
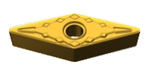
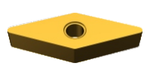
车削刀片(负型)

Turning Insert (Negative)

VN□□



菱形35°有孔

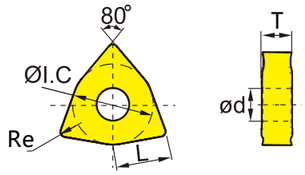
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	VNMG160404-BTM	9.525	4.76	3.81	0.4	▲	▲							钢 半精加工 Steel semi finishing
	VNMG160408-BTM	9.525	4.76	3.81	0.8									
	VNMG160412-BTM	9.525	4.76	3.81	1.2	●	●							
	VNMG160404-BMA	9.525	4.76	3.81	0.4	●								钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	VNMG160408-BMA	9.525	4.76	3.81	0.8	●								
	VNMG160412-BMA	9.525	4.76	3.81	1.2	●								
	VNMG160404-MM	9.525	4.76	3.81	0.4				●	▲				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	VNMG160408-MM	9.525	4.76	3.81	0.8				●	▲				
	VNMG160412-MM	9.525	4.76	3.81	1.2					●				
	VNMG160404-BM	9.525	4.76	3.81	0.4				●					不锈钢 高温合金 半精加工 Stainless steel High temperature alloy steel semi finishing
	VNMG160408-BM	9.525	4.76	3.81	0.8				●					
	VNMG160412-BM	9.525	4.76	3.81	1.2				●					
	VNMA160404	9.525	4.76	3.81	0.4						●			铸铁 粗加工 Cast iron rough finishing
	VNMA160408	9.525	4.76	3.81	0.8						●			
	VNMA160412	9.525	4.76	3.81	1.2						●			

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

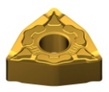
车削刀片(负型)

Turning Insert (Negative)

WN□□



六边形80°有孔

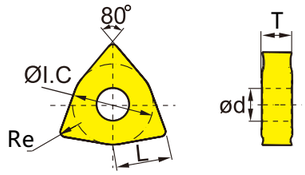
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	WNMG060404-BTM	9.525	4.76	3.81	0.4		●							钢 半精加工 Steel semi finishing
	WNMG060408-BTM	9.525	4.76	3.81	0.8		●							
	WNMG080404-BTM	12.7	4.76	5.16	0.4	▲	▲	▲						
	WNMG080408-BTM	12.7	4.76	5.16	0.8	▲	▲	▲						
	WNMG080412-BTM	12.7	4.76	5.16	1.2	▲	▲	▲						
	WNMG080404-BMA	12.7	4.76	5.16	0.4	▲	▲	▲						钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	WNMG080408-BMA	12.7	4.76	5.16	0.8	▲	▲	▲						
	WNMG080412-BMA	12.7	4.76	5.16	1.2	●	●							
	WNMG080404R-S	12.7	4.76	5.16	0.4	▲	▲	●						钢件 粗加工 Steel rough finishing
	WNMG080408R-S	12.7	4.76	5.16	0.8	▲	▲	●						
	WNMG080412R-S	12.7	4.76	5.16	1.2	●	●							
	WNMG080404L-S	12.7	4.76	5.16	0.4	▲	▲	●						
	WNMG080408L-S	12.7	4.76	5.16	0.8	▲	▲	●						
	WNMG080412L-S	12.7	4.76	5.16	1.2	●	●							
	WNMG080404-MF3	12.7	4.76	5.16	0.4							▲	▲	不锈钢 精加工 Stainless steel finishing
	WNMG080408-MF3	12.7	4.76	5.16	0.8							▲	▲	
	WNMG080412-MF3	12.7	4.76	5.16	1.2							▲	▲	
	WNMG080404-MS	12.7	4.76	5.16	0.4					●			▲	钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	WNMG080408-MS	12.7	4.76	5.16	0.8					●			▲	
	WNMG080409-MS	12.7	4.76	5.16	0.9					●			▲	
	WNMG080412-MS	12.7	4.76	5.16	1.2								●	
	WNMG080404-MM	12.7	4.76	5.16	0.4				●	▲				钢、不锈钢 半精加工 Steel Stainless steel semi finishing
	WNMG080408-MM	12.7	4.76	5.16	0.8				●	▲				
	WNMG080412-MM	12.7	4.76	5.16	1.2				●	▲				

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

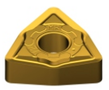
车削刀片(负型)

Turning Insert (Negative)

WN□□



六边形80°有孔

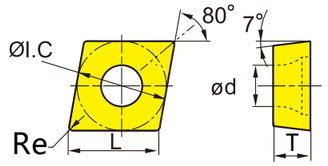
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	WNMG080404-BM	12.7	4.76	5.16	0.4				▲	▲				不锈钢 高温合金 半精加工 Stainless steel High temperature alloy steel semi finishing
	WNMG080408-BM	12.7	4.76	5.16	0.8				▲	▲				
	WNMG080412-BM	12.7	4.76	5.16	1.2				▲	●				
	WNMG080404-MR	12.7	4.76	5.16	0.4							●	▲	不锈钢 粗加工 Stainless steel rough finishing
	WNMG080408-MR	12.7	4.76	5.16	0.8							●	▲	
	WNMG080412-MR	12.7	4.76	5.16	1.2							●	▲	
	WNMA080404	12.7	4.76	5.16	0.4							●		铸铁 粗加工 Cast iron rough finishing
	WNMA080408	12.7	4.76	5.16	0.8							●		
	WNMA080412	12.7	4.76	5.16	1.2							●		
	WNMG080404	12.7	4.76	5.16	0.4							●		钢、铸铁 粗加工 Steel Cast iron rough finishing
	WNMG080408	12.7	4.76	5.16	0.8							●		
	WNMG080412	12.7	4.76	5.16	1.2							●		
	WNMG080404-KM	12.7	4.76	5.16	0.4							●		钢、铸铁 粗加工 Steel Cast iron rough finishing
	WNMG080408-KM	12.7	4.76	5.16	0.8		●					▲		
	WNMG080412-KM	12.7	4.76	5.16	1.2							●		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

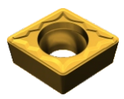
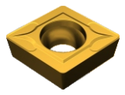
车削刀片(正型)

Turning Insert (Positive)

CC□□



菱形80°有孔

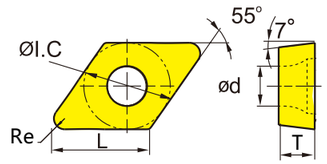
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice							槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	CCMT060204-BHMP	6.35	2.38	2.8	0.4	▲	▲					●		通用加工 General machining
	CCMT060208-BHMP	6.35	2.38	2.8	0.8							●		
	CCMT09T304-BHMP	9.525	3.97	4.4	0.4	●	▲					●		
	CCMT09T308-BHMP	9.525	3.97	4.4	0.8	▲	▲					▲	▲	
	CCMT120404-BHMP	12.7	4.76	5.56	0.4	▲	▲					▲	▲	
	CCMT120408-BHMP	12.7	4.76	5.56	0.8	●						▲		
	CCMT060204-A	6.35	2.38	2.8	0.4							▲	▲	通用加工 General machining
	CCMT060208-A	6.35	2.38	2.8	0.8							▲	▲	
	CCMT09T304-A	9.525	3.97	4.4	0.4							▲	▲	
	CCMT09T308-A	9.525	3.97	4.4	0.8							●	●	
	CCMT120404-A	12.7	4.76	5.56	0.4							●	●	
	CCMT120408-A	12.7	4.76	5.56	0.8							●	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

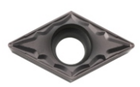
车削刀片(正型)

Turning Insert (Positive)

DC□□



菱形55°有孔

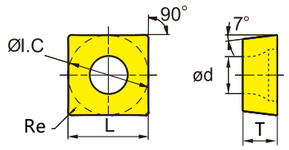
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice							槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	DCMT070204-BHMP	6.35	2.38	2.8	0.4		▲					●		通用加工 General machining
	DCMT070208-BHMP	6.35	2.38	2.8	0.8		●					●		
	DCMT11T304-BHMP	9.525	3.97	4.4	0.4		▲					●		
	DCMT11T308-BHMP	9.525	3.97	4.4	0.8		▲					●		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(正型)

Turning Insert (Positive)

SC□□



正方形90°有孔

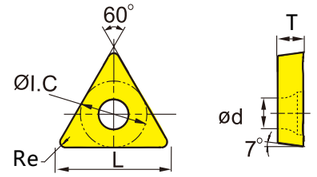
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	SCMT09T304-BHMP	9.525	3.97	4.4	0.4	▲	▲					▲		通用加工 General machining
	SCMT09T308-BHMP	9.525	3.97	4.4	0.8		●					▲		
	SCMT120404-BHMP	12.7	4.76	5.56	0.4	●	●					▲	▲	
	SCMT120408-BHMP	12.7	4.76	5.56	0.8		▲					▲		
	SCMT120412-BHMP	12.7	4.76	5.56	1.2		●							

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(正型)

Turning Insert (Positive)

TC□□



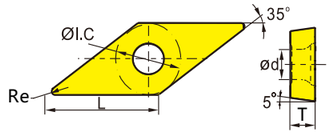
三角形60°有孔

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								槽型说明 Range
		ØI.C	T	Φd	Re	BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	
	TCMT090204-BHMP	5.56	2.38	2.5	0.4							●		通用加工 General machining
	TCMT090208-BHMP	5.56	2.38	2.5	0.8							●		
	TCMT110204-BHMP	6.35	2.38	2.8	0.4							▲	●	
	TCMT110208-BHMP	6.35	2.38	2.8	0.8							●		
	TCMT16T304-BHMP	9.525	3.97	4.4	0.4							●	▲	
	TCMT16T308-BHMP	9.525	3.97	4.4	0.8							●		

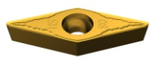
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

车削刀片(正型)
Turning Insert (Positive)

VB□□



菱形35°有孔

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) ØI.C	T	Φd	Re	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP9106	BP8061	BC3125	BP9201S	BP9502-3	槽型说明 Range
	VBMT160404-BHMP	9.525	4.76	4.4	0.4		▲							通用加工 General machining
	VBMT160408-BHMP	9.525	4.76	4.4	0.8		▲							
	VBMT160412-BHMP	9.525	4.76	4.4	1.2		●							
	VBGT160404-HS	9.525	4.76	4.4	0.4		▲		▲					不锈钢 高温合金 半精加工 Stainless steel High temperature alloy steel semi finishing
	VBGT160408-HS	9.525	4.76	4.4	0.8		▲		▲					
							▲		▲					

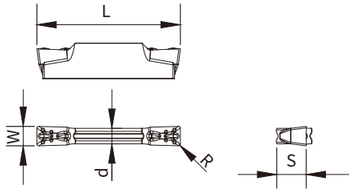
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



A
切断切槽刀片
Parting and Grooving Insert

切断切槽车削
Parting and Grooving Insert

MG□□



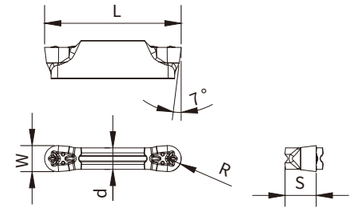
精密切槽切断刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) b	r	l	d	t	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP8061	BP9106	BP205	BP2051	槽型说明 Range
	MGMN200-M	2	0.2	16	1.6	3.5								
	MGMN250-M	2.5	0.2	18.5	2	3.85	▲					▲	▲	
	MGMN300-M	3	0.4	21	2.35	4.8	▲					▲	▲	通用加工 General machining
	MGMN400-M	4	0.4	21	3.3	4.8	▲					▲	▲	
	MGMN500-M	5	0.8	26	4.1	5.8								
	MGMN600-M	6	0.8	26	5	5.8								
	MGMN150-G	1.5	0.15	16	1.2	3.5	●							
	MGMN200-G	2	0.2	16	1.6	3.5	▲					●		
	MGMN250-G	2.5	0.2	18.5	2	3.85	▲					●	●	
	MGMN300-G	3	0.3	21	2.35	4.8	●							通用加工 General machining
	MGMN400-G	4	0.3	21	3.3	4.8	●							
	MGMN400-02-R	4	0.2	21	3.3	4.8	▲							
	MGMN300-T	3	0.4	21	2.35	4.8	▲							

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

切断切槽车削
Parting and Grooving Insert

MR□□



精密防形切槽刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm) b	r	l	d	t	可选牌号 Grade for Choice BC1125	BC1225	BC1235	BP8061	BP9106	BP205	BP2051	槽型说明 Range
	MRMN200-M	2	1	16	1.5	3.5	▲					●	●	
	MRMN300-M	3	1.5	21	2.35	4.8	▲					●	●	
	MRMN400-M	4	2	21	3.3	4.8	▲					●	●	通用加工 General machining
	MRMN500-M	5	2.5	26	4.1	5.8	●					●	●	
	MRMN600-M	6	3	26	5	5.8	●							

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



A
螺纹车刀片
Threading Insert

A

螺纹车刀片
Threading Insert

60° 范围牙型 031
Partial profile 60°

55° 范围牙型 032
Partial profile 55°

ISO公制 033
ISO Metric

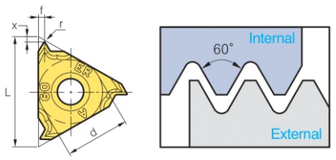
锥管螺纹 034
NPT

惠氏螺纹 035
Whitworth

英制螺纹 036
BSPT

螺纹车刀片
Threading Insert

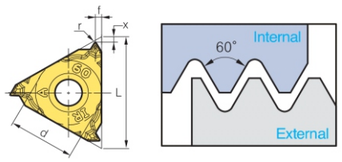
60°范围牙型(Partial profile 60°)



外螺纹 External

型号 Type	螺距 (mm) (TPI)	尺寸 Dimension (mm) d	L	hmin	X	f	可选牌号 Grade for Choice BP9410D	BP9410-3	加工类型 Processing Type
16ER-A60	0.5-1.5 48-16	9.525	16	0.05	0.8	0.9	▲	●	外螺纹 External
16ER-G60	1.75-3.0 14-8	9.525	16	0.27	1.2	1.7	▲	●	
16ER-AG60	0.5-3.0 48-8	9.525	16	0.08	1.2	1.7	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



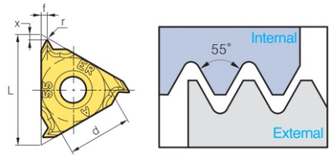
内螺纹 Internal

型号 Type	螺距 (mm) (TPI)	尺寸 Dimension (mm) d	L	hmin	X	f	可选牌号 Grade for Choice BP9410D	BP9410-3	加工类型 Processing Type
16IR-A60	0.5-1.5 48-16	9.525	16	0.08	0.8	0.9	▲	●	内螺纹 Internal
16IR-G60	1.75-3.0 14-8	9.525	16	0.12	1.2	1.7	▲	●	
16IR-AG60	0.5-3.0 48-8	9.525	16	0.08	1.2	1.7	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

螺纹车刀片
Threading Insert

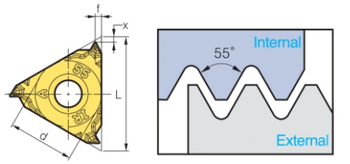
55°范围牙型(Partial profile 55°)



外螺纹 External

型号 Type	螺距 (mm) (TPI)	尺寸 Dimension (mm) d	L	hmin	X	f	可选牌号 Grade for Choice BP9410D	BP9410-3	加工类型 Processing Type
16ER-A55	0.5-1.5 48-16	9.525	16	0.08	0.8	0.9	▲	●	外螺纹 External
16ER-G55	1.75-3.0 14-8	9.525	16	0.21	1.2	1.7	▲	●	
16ER-AG55	0.5-3.0 48-8	9.525	16	0.07	1.2	1.7	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



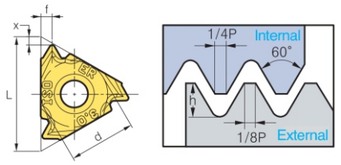
内螺纹 Internal

型号 Type	螺距 (mm) (TPI)	尺寸 Dimension (mm) d	L	hmin	X	f	可选牌号 Grade for Choice BP9410D	BP9410-3	加工类型 Processing Type
16IR-A55	0.5-1.5 48-16	9.525	16	0.05	0.8	0.9	▲	●	内螺纹 Internal
16IR-G55	1.75-3.0 14-8	9.525	16	0.21	1.2	1.7	▲	●	
16IR-AG55	0.5-3.0 48-8	9.525	16	0.07	1.2	1.7	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

螺纹车刀片
Threading Insert

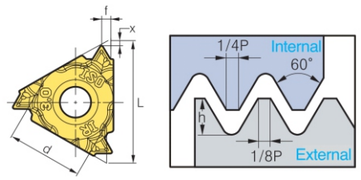
ISO公制(ISO Metric)



外螺纹 External

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16ER100ISO	1	9.525	16	0.61	0.7	0.7	▲	●	外螺纹 External
16ER150ISO	1.5	9.525	16	0.93	0.8	1	▲	●	
16ER200ISO	2	9.525	16	1.25	1	1.3	▲	●	
16ER300ISO	3	9.525	16	1.87	1.2	1.6	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



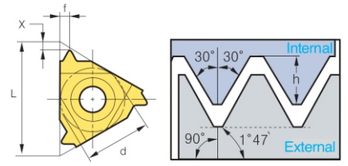
内螺纹 Internal

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16IR100ISO	1	9.525	16	0.58	0.6	0.7	▲	●	内螺纹 Internal
16IR150ISO	1.5	9.525	16	0.85	0.8	1	▲	●	
16IR200ISO	2	9.525	16	1.12	1	1.3	▲	●	
16IR300ISO	3	9.525	16	1.69	1.1	1.5	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

螺纹车刀片
Threading Insert

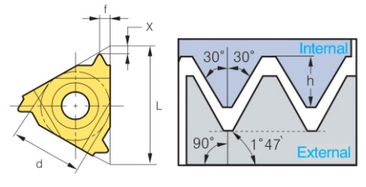
锥管螺纹 （NPT）



外螺纹 External

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16ER-11.5NPT	11.5	9.525	16	1.64	1.1	1.5	▲	●	外螺纹 External
16ER-14NPT	14	9.525	16	1.33	0.8	1	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



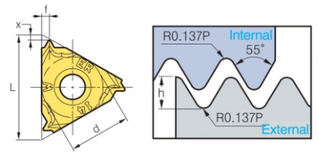
内螺纹 Internal

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16IR-11.5NPT	11.5	9.525	16	1.64	1.1	1.5	▲	●	内螺纹 Internal
16IR-14NPT	14	9.525	16	1.33	0.8	1	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

螺纹车刀片
Threading Insert

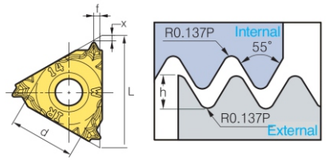
惠氏螺纹(Whitworth)



外螺纹 External

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16ER-11W	11	9.525	16	1.48	1.1	1.5	▲	●	外螺纹 External
16ER-14W	14	9.525	16	1.16	1	1.2	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



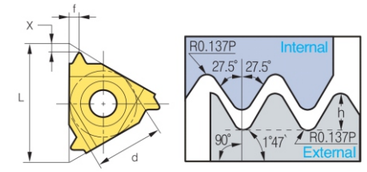
内螺纹 Internal

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16IR-11W	11	9.525	16	1.48	1.1	1.5	▲	●	内螺纹 Internal
16IR-14W	14	9.525	16	1.16	1	1.2	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

螺纹车刀片
Threading Insert

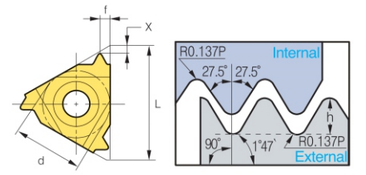
英制螺纹 （BSPT）



外螺纹 External

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16ER-11BSPT	11	9.525	16	1.48	1.1	1.5	▲	●	外螺纹 External
16ER-14BSPT	14	9.525	16	1.16	0.9	1	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



内螺纹 Internal

型号 Type	螺距 TPI	尺寸 Dimension（mm）					可选牌号 Grade for Choice		加工类型 Processing Type
		d	L	hmin	X	f	BP9410D	BP9410-3	
16IR-11BSPT	11	9.525	16	1.48	1.1	1.5	▲	●	内螺纹 Internal
16IR-14BSPT	14	9.525	16	1.16	0.9	1	▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



B

常规铣削刀片

Carbide Milling Insert

B

常规铣削刀片

Carbide Milling Insert

铣削刀片命名规则 039
Milling Insert Naming Rule

铣削刀片牌号一览表 041
Milling Insert Grades List

铣削刀片牌号介绍 042
Milling Insert Grade Introduction

方肩铣削刀片 043
Square Shoulder Milling Insert

可转位铣削刀片 047
Indexable Milling Blade

玉米铣刀片 055
Helical Milling Insert

平面铣削刀片 056
Plane Milling Insert

快进给铣削刀片 059
Fast Forward To Milling Insert

精铣球头刀 064
Precision milling ball end cutter

铣削刀片命名规则
Milling Insert Naming Rule

形状代号 Shape

A P M T 11 35 PD E R — GM

A	B	C
		
D	E	H
		
K	L	M
		
O	P	R
		
S	T	T
		
V	W	Z
		其 它

断屑槽及夹固形式代号 Chip Breaker and Hole

A P M T 11 35 PD E R — GM

代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile	代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile
B	有(Y)	无(N)		N	无(N)	无（N）	
H	有(Y)	单面(S)		R	无(N)	单面（S）	
C	有(Y)	无(N)		F	无(N)	双面（D）	
J	有(Y)	双面(D)		A	有(Y)	无（N）	
W	有(Y)	无(N)		M	有(Y)	单面（S）	
T	有(Y)	单面(S)		G	有(Y)	双面（D）	
Q	有(Y)	无(N)		X			
U	有(Y)	双面(D)					

后角代号 Clearance Angle

A P M T 11 35 PD E R — GM

A	B
	
C	D
	
E	F
	
G	N
	
P	O
	其它后角 Others

精度代号 Tolerance

A P M T 11 35 PD E R — GM

代号 Symbol	刀尖高度m 公差（mm） m(mm)	内接圆ΦI.C 公差（mm） d=I.C. (mm)	厚度S 公差（mm） s (mm)	（参考）M级精度详细情况（按形状、大小分）●刀尖高度公差(mm) (reference)M grade tolerance detail(according to shape, size.) Tolerance of insert nose height						
				内接圆 Inscribed Circle	正三角形 Regular Triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round
				6.35	±0.08	±0.08	±0.08	±0.11	±0.16	···
				9.525	±0.08	±0.08	±0.08	±0.11	±0.16	···
				12.7	±0.13	±0.13	±0.13	±0.15	···	···
A	±0.005	±0.025	±0.025	15.875	±0.15	±0.15	±0.15	±0.18	···	···
F	±0.005	±0.013	±0.025	19.05	±0.15	±0.15	±0.15	±0.18	···	···
C	±0.013	±0.025	±0.025	25.4	···	±0.18	···	···	···	···
H	±0.013	±0.013	±0.013	●内接圆ΦI.C公差（mm）●Tolerance of Inscribed Circle						
E	±0.025	±0.025	±0.025	内接圆 Inscribed Circle	正三角形 Regular triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round
G	±0.025	±0.025	±0.13							
J	±0.005	±0.05~±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05	
K	±0.013	±0.05~±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
L	±0.025	±0.05~±0.13	±0.025	12.7	±0.08	±0.08	±0.08	±0.08	···	±0.08
M	±0.08~±0.18	±0.05~±0.13	±0.13	15.875	±0.1	±0.1	±0.10	±0.10	···	±0.1
N	±0.08~±0.18	±0.05~±0.13	±0.025	19.05	±0.1	±0.1	±0.10	±0.10	···	±0.1
U	±0.13~±0.38	±0.08~±0.25	±0.13	25.4	···	···	±0.13	···	···	±0.13

A 车削刀片 Turning Insert
B 铣削刀片 Milling Insert
C 钻削刀片 Drilling Insert
D 技术概述 Technical Specification

铣削刀片命名规则
Milling Insert Naming Rule

切削刃长度代号 Cutting Edge Length

A P M T 11 35 PD E R — GM

内切圆直径 Inscribed Circle diameter(mm)	刀片外形 Insert Shape							
	C	D	R	S	T	V	W	K
3.97					06			
5			05					
5.56					09			
6			06					
6.35	06	07			11	11		
8			08					
9.525	09	11	09	09	16	16	06	16
10			10					
12			12					
12.7	12	15	12	12	22	22	08	
15.875	16		15	15	27			
16			16	16				
19.05	19		19	19	33			
20			20					
25	25	25	25					
25.4			25	25				
31.75			31					
32			32					

刀片厚度代号 Thickness

A P M T 11 35 PD E R — GM

代号 Symbol	刀片厚度 Thickness(mm)
00	0.79
T0	0.99
01	1.59
T1	1.98
02	2.38
T2	2.58
03	3.18
T3	3.97
04	4.76
T4	4.96
05	5.56
T5	5.95
06	6.35
T6	6.75
07	7.94
09	9.52
T9	9.72
11	11.11
12	12.7

厚度指刀片底面与切削刃最高部分之间的高度
The Height Between Insert Bottom And Nose

修光刃代号 Wiper Land and Clearance Angle

A P M T 11 35 PD E R — GM

	Kr°		αn°
A	45°	A	3°
D	60°	B	5°
E	75°	C	7°
F	85°	D	15°
P	90°	E	20°
Z	其它	F	25°
		G	30°
		N	0°
		P	11°
		Z	其它

切削刃倒棱代号 Cutting Egde Preparation(mm)

A P M T 11 35 PD E R — GM

F						K
E		0 5°	0 0.1			P
		1 10°	1 0.15			
T		2 15°	2 0.2			W
		3 20°	3 0.25			
		4 25°	4 0.3			
S		5 30°	5 0.35			不标
			6 0.4			
			7 0.45			

切削方向代号 Cutting Direction

A P M T 11 35 PD E R — GM

R	右 Right
L	左 Left
N	双向 Neutral

断屑槽型代号 Chip Breaker Code

A P M T 11 35 PD E R — GM

GM	BH2	BM2	XR
M	R	CN	MT

铣削刀片牌号一览表

Milling Insert Grades List

工件材料 Workpiece materials		ISO	CVD	PVD	硬质合金 Cemented carbide	超硬材料 Superhard materials
P	钢 Steel	01				
		10	BC4225	BP9502-4, BP9508-4, BP9108, BP5352C, BP9102, BP8801, BP9208H		
		20				
		30				
		40				
M	不锈钢 Stainless Steel	01				
		10	BC2125	BP5353E, BP5302E, BP9102D, BP9108D		
		20				
		30				
		40				
K	铸铁 Cast Iron	01				
		10	BC4225	BP9105, BP9508, BP5352C		
		20				
		30				
S	耐热合金 钛合金 Hi-temp Alloy	01				
		10		BP9108, BP9201S		
		20				
		30				
N	有色金属 Non-ferrous Metals	01				
		10			B405	
		20				
		30				
H	高硬度材料 High Hardness Materials	01				
		10		BP6501		
		20				
		30				

铣削刀片牌号介绍

Milling Insert Grade Introduction

牌号名称 Model name	牌号特点 Model Features
BP9508-4	黑紫色，通用性最好，适合加工P/M/K/S类材质，HRC45°以下。 Black purple color, best versatility, suitable for machining P/M/K/S type materials, HRC45°degrees.
BP9502-4	黑紫色，适合加工P/M/K/S类材质，HRC50°以下，偏精加工。 Black purple color, suitable for machining P/M/K/S materials, HRC50°degrees, partial finishing.
BP9108	古铜色，适合加工钢、不锈钢、钛合金等材质，HRC50°以下，锰钢、弹簧钢等材质的加工表现突出. Bronze color, suitable for processing steel, stainless steel, titanium alloy and other materials, HRC50° degrees, manganese steel, spring steel and other materials processing performance is outstanding.
BP9102	古铜色，适合加工钢、不锈钢、钛合金等材质，HRC52°以下，偏精加工. Bronze color, suitable for machining steel, stainless steel, titanium alloy, etc., HRC52°and less, partial finishing.
BP9108D	耐磨性超高的通用型涂层，加工硬度HRC55度以下，调质淬火钢、不锈钢、球墨铸铁、低碳钢。 Wear-resistant general-purpose coating, processing hardness up to HRC55°degrees, tempered hardened steel, stainless steel, ductile iron, mild steel.
BP9102D	耐磨性超高的通用型涂层，加工硬度HRC58度以下，调质淬火钢、不锈钢、球墨铸铁、低碳钢。 Wear-resistant general-purpose coating, processing hardness up to HRC58 degrees, tempered hardened steel, stainless steel, ductile iron, mild steel.
BP5352C	七彩色，适合加工钢、不锈钢、铸铁等材质，HRC42°以下，45#钢、A3等软钢加工表现突出。 Seven colors, suitable for processing steel, stainless steel, cast iron and other materials, HRC42 °degrees, 45 # steel, A3 and other soft steel processing outstanding performance.
BP5302C	七彩，适合加工钢、不锈钢、铸铁等材质，偏精加工。 Seven colors, suitable for processing steel, stainless steel, cast iron and other materials, partial finishing.
BP8801	黑灰色，通用加工，适合加工钢、不锈钢、铸铁等材质，HRC45°以下。 Black and gray, universal machining, suitable for machining steel, stainless steel, cast iron, etc., up to HRC45°.

铣削刀片牌号介绍
Milling Insert Grade Introduction

牌号名称 Model name	牌号特点 Model Features
BP9208H	黄色，适合钢件、铸铁加工。 Yellow color, suitable for steel and cast iron processing.
BP5302E	古铜色，适合加工钢、不锈钢等钻削加工。 Bronze color, suitable for processing steel, stainless steel and other drilling processing.
BP9101P	黑紫色，钻销类专用材质，通用性广，干湿加工均可，钻销首选材质，尤其在曲轴油孔等深孔加工上表现突出。 Black purple, special material for drilling pins, wide versatility, both dry and wet processing is acceptable, preferred material for drilling pins, especially in deep hole machining such as crankshaft oil holes.
BP9105	古铜色，铸铁加工首选牌号，也可加工钛合金。 Bronze color, preferred grade for cast iron processing, can also process titanium alloys.
BP9102	古铜色，适合加工钢、不锈钢、钛合金等材质，HRC52°以下，偏精加工。 Bronze color, suitable for machining steel, stainless steel, titanium alloy, etc., HRC52°and less, partial finishing.
BP6501	黑彩色，淬硬钢、模具钢、高合金钢的高硬加工与通用加工首选，加工硬度HRC65°以下，也可加工不锈钢和高温合金。 Black color, preferred for high hardness machining and general machining of quenched and hardened steel, mold steel, and high alloy steel. The machining hardness is below HRC65 °, and stainless steel and high-temperature alloys can also be machined.
BP9208S	白金色，最新M类、S类、N类材料的高性能加工材质，涂层致密性极高，表面光滑。针对M/S类切削性能极好。 Platinum color, high performance machining material for the latest M, S and N materials, with extremely dense coating and smooth surface. Excellent cutting performance for M/S materials.
BP9201S	白金色，最新M类、S类、N类材料的高性能加工材质，针对M/S类切削性能极好，偏精加工。 Platinum color, the latest high-performance machining material for M, S and N materials, excellent cutting performance for M/S, partial finish machining.

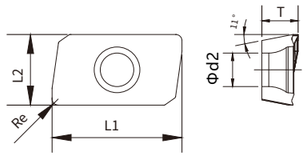


B

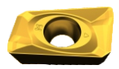
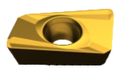
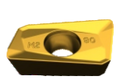
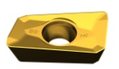
方肩铣削刀片
Square Shoulder Milling Insert

方肩铣削刀片
Square Shoulder Milling insert

AP□□



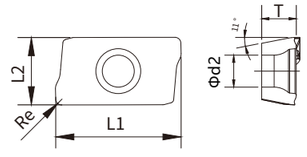
方肩铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice							
		L1	L2	T	Φd2	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	APMT1135PDER-GM	11.25	6.20	3.50	2.80	0.8	●	●	●	●	●	●	▲	●	▲
	APMT160404-GM	17.06	9.28	4.76	4.4	0.4	●	●	●	●	●	●	●	●	●
	APMT1604PDER-GM	17.06	9.28	4.76	4.4	0.8	●	●	●	●	●	●	▲	●	▲
	APMT1135PDER-BH2	11.25	6.20	3.50	2.80	0.8	▲	●	▲	●		▲	●	▲	●
	APMT1604PDER-BH2	17.25	9.25	4.76	4.40	0.8	▲	●	▲	●		▲	●	▲	●
	APMT1135PDER-BM2	11.25	6.20	3.50	2.80	0.8	▲	●	▲	●	●	▲	●		
	APMT1604PDER-BM2	17.25	9.25	4.76	4.40	0.8	▲	●	▲	●	●	▲	●		
	APMT1135PDER-KZ	11.10	6.20	3.50	2.80	0.8	▲	▲	●	●	●	▲	●		
	APMT1604PDER-KZ	17.30	9.33	4.76	4.50	0.8	▲	▲	●	●	●	▲	●		
	APMT1135PDER-ZZ	11.25	6.20	3.50	2.80	0.8	▲	●	▲	●	●	▲	●		
	APMT160408PDER-ZZ	17.25	9.25	4.76	4.40	0.8	▲	●	▲	●	●	▲	●		

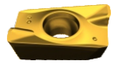
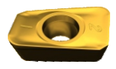
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

方肩铣削刀片
Square Shoulder Milling insert

AP□□



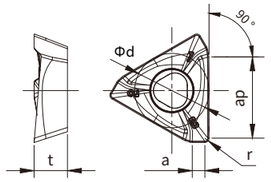
方肩铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice							
		L1	L2	T	Φd2	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	APMT1135PDER-MO2	11.3	6.2	3.45	2.8	0.8	▲	●	▲	●	▲	▲	●		
	APMT1604PDER-MO2	17.3	9.3	5.25	4.4	0.8	▲	●	▲	●	▲	▲	●		
	APMT1135PDER-54	11.3	6.2	3.45	2.8	0.8	▲	●	▲	●	●	▲	●		
	APMT1604PDER-54	17.3	9.3	5.25	4.4	0.8	▲		▲		●	▲	●		
	APMT1135PDER-G23	11.1	6.20	3.50	2.80	0.8	▲	●	▲	●	●	▲	●		
	APMT1604PDER-G23	17.3	9.33	4.76	4.50	0.8	▲		▲		●	▲	●		
	APMT1135PDER-BO	11.3	6.2	3.45	2.8	0.8	▲	●	▲	●	▲	▲	●		
	APMT1604PDER-BO	17.3	9.3	5.25	4.4	0.8	▲	●	▲	●	▲	▲	●		
	APMT1135PDER-R1.6	11.34	6.2	3.45	2.8	1.6	●	●	▲	●		●	●		
	APMT1135RHF	11.3	6.15	3.74	2.8	4.8	●	●	●	●		●	●		
	APMT1604PDER-R2	17.14	9.46	4.95	4.4	2	●	●	▲	●		●	●		
	APMT1604PDER-HR30	16.95	9.33	4.76	4.4	3	●	●	▲	●		●	●		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

可转位铣削刀片
Indexable Milling Blade

3PKT□□

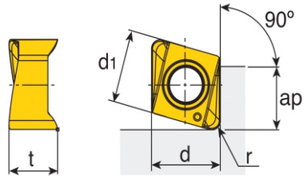


单面三刃方肩铣刀

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		d	t	ap	a	r	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	3PKT060304R-M	5.3	2.8	4.7	1.0	0.4	▲	●	▲			▲	●	▲	●
	3PKT100408R-M	6.9	4.0	7.0	1.2	0.8	▲	●	▲			▲	●	▲	●
	3PKT150508R-M	10.7	5.0	11.0	1.8	0.8	▲	●	▲			▲	●	▲	●
	3PKT190608R-M	13.5	6.0	15.0	2.0	0.8	▲	●	▲			▲	●	▲	●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

4NKT□□



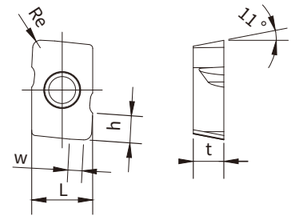
单面三刃方肩铣刀

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		d	d1	t	ap	r	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	4NKT040208R-ML	4.5	4.5	3.1	3.5	0.8	▲		▲		●	▲	▲		
	4NKT060308R-ML	6.6	6.6	4.6	5.5	0.8	▲		▲		●	▲	▲		
	4NKT090408R-ML	9.0	9.0	6.0	7.5	0.8	▲		▲		●	▲	▲		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

可转位铣削刀片
Indexable Milling Blade

MP□□

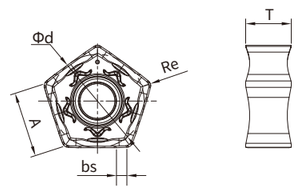


方肩铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		L	W	T	h	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	MPHW060304ZEL	6.35	-	3.18	3	0.4	●	▲	●			●	●		
	MPHW060308ZEL	6.35	-	3.18	3	0.8	●	▲	●			●	●		
	MPHW060304ZEL-0.5	6.35	0.5	3.18	3	0.4	●	▲	●			●	●		
	MPHW060308ZEL-1.5	6.35	1.5	3.18	3	0.8	●	▲	●			●	●		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

PN□□



平面铣削刀片

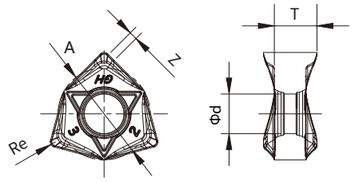
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		A	T	Φd	bs	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	PNMU0905GNEN-MJ	8.90	6.00	12.20	1.40	0.8	●					●	●		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

可转位铣削刀片

Indexable Milling Blade

WN□□

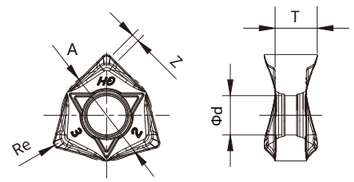


双面六刃方肩铣刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice								
		A	T	Φd	Z	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	WNMU040304EN-R	6.75	3.18	3.18	0.60	0.4	●					●	▲		●
	WNMU060408EN-PM	10.14	4.36	4.20	0.00	0.8	●					●	▲		●
	WNMU080608EN-R	14.02	6.65	6.20	1.30	0.8	●					●	▲		●
	WNMU080608EN-GH	14.02	6.65	6.20	1.30	0.8	●					●	▲		●
	WNEU080608EN-GH	14.02	6.65	6.20	1.30	0.8	●					●	▲		●
	WNEU080608EN-GL	14.02	6.65	6.20	1.30	0.8	●					●	▲		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

WN□□



双面六刃方肩铣刀片

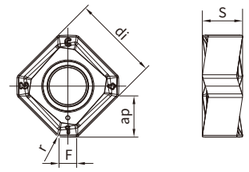
产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice								
		A	T	Φd	Z	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	WNMU040308-SG	6.65	3.50	3.05	0.40	0.8	●					●	▲		●
	WNEU080608-M8	12.50	6.45	4.64	1.40	0.8	●					●	▲		●
	WNEU080608-M9	12.50	6.45	4.64	1.40	0.8	●					●	▲		●
	WNEU080608-M13	12.50	6.45	4.64	1.30	0.8	●					●	▲		●
	WNEU080608-M15	12.50	6.45	4.64	1.40	0.8	●					●	▲		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

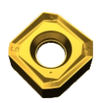
可转位铣削刀片

Indexable Milling Blade

SN□□

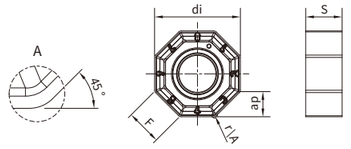


双面通用平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice								
		di	ap	S	F	r	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	SNMU1305ANR-MT	13.0	6.0	6.5	3.0	0.8	●					●	▲		●
	SNMU1206ANEN-GM	12.7	5.7	6.4	2.2	0.8									

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

ON□□



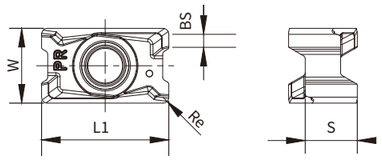
双面16刃平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice								
		di	ap	S	F	r	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	ONMU050505-MT	13.00	3.50	5.20	5.00	0.5	●					●	▲		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

可转位铣削刀片
Indexable Milling Blade

LN□□

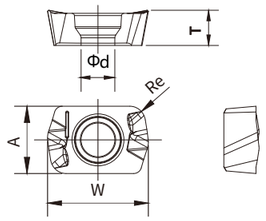


负型90° 方肩铣刀片

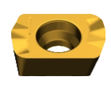
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		L1	S	W	BS	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	LNGU110408-PR	12.16	4.83	6.60	1.00	0.8	▲					●	▲		●
	LNGU15T608-PR	17.01	6.96	10.00	1.80	0.8	▲					●	●		●

▲为主推荐牌号 Recommeded grade(Always stock available) ●按订单生产可选牌号Maker-to-order

LP□□



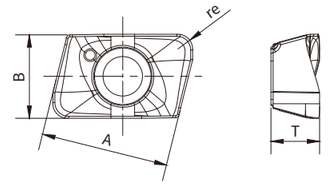
极小径快进给铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		A	T	Φd	W	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	LPGT010210ER-GM	4.19	2.19	2.10	6.26	1	●					●	▲	●	●
	LPGT010210ER-GM	4.19	2.19	2.10	6.26	1	●					●	▲	●	●

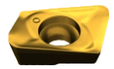
▲为主推荐牌号 Recommeded grade(Always stock available) ●按订单生产可选牌号Maker-to-order

可转位铣削刀片
Indexable Milling Blade

JD□□

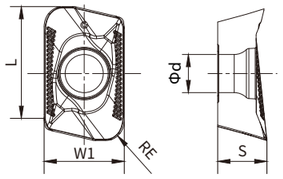


极小径方肩铣削刀片

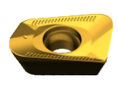
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		A	B	Re	T	Φd	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	JDMT070204R	6.40	4.30	0.40	2.45	2.15	▲					●	▲		●
	JDMT070208R	6.40	4.30	0.80	2.45	2.15	▲					●	▲		●

▲为主推荐牌号 Recommeded grade(Always stock available) ●按订单生产可选牌号Maker-to-order

AO□□



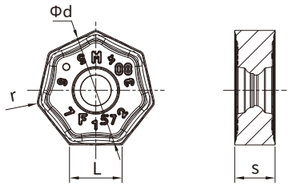
方肩铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		W1	L	S	Φd	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	AOMX120408TR-M8	8.20	11.60	5.07	3.85	0.8	●					●	▲		●
	AOMX120420TR-M8	8.20	11.60	5.07	3.85	2	●					●	▲		●

▲为主推荐牌号 Recommeded grade(Always stock available) ●按订单生产可选牌号Maker-to-order

可转位铣削刀片
Indexable Milling Blade

XN□□

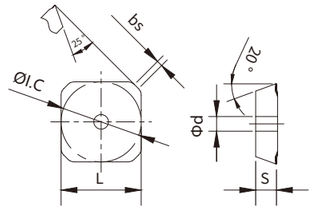


双面七边形铣削刀片

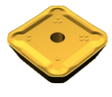
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		d	l	s	r	b	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	XNMU070508-F57	14.50	6.98	4.60	0.80	-	●					●	▲		●
	XNMU090612-F57	19.05	9.18	5.88	1.20	-	●					●	●		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

SE□□



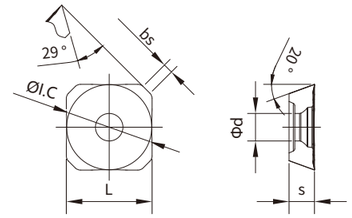
单面45° 平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		L	ØI.C	S	Φd	bs	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	SEER1203-AFS-D2	12.580	12.580	3.44	2.3	2		▲		▲			▲	●	●
	SEER1203-AFS-G2	12.580	12.580	3.44	2.3	2		▲		▲			▲	●	●
	SEER1504-AFS-D3	15.875	15.875	4.88	3.2	2.2		▲		▲			▲	●	●
	SEER1203-AFS-GD2	15.875	15.875	4.88	3.2	2.2		▲		▲			▲	●	●
	SEKR1203AFTN-YM	12.580	12.580	3.44	2.3	2		▲		▲			▲	▲	●

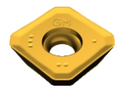
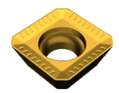
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

可转位铣削刀片
Indexable Milling Blade

SE□□

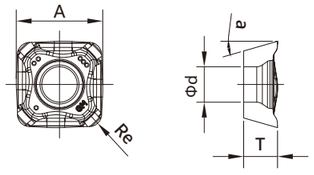


单面45° 平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		L	ØI.C	S	Φd	bs	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	SEMT13T3AGSN-GM	13.40	13.40	3.97	4.30	2.45	▲		▲			▲	●		●
	SEMT13T3AGSN-JM	13.40	13.40	3.97	4.30	2.45	▲					▲			
	SEKT1204AFTN	12.70	12.70	4.76	5.16	2	▲		▲			▲	●		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

SO□□



平面铣削刀片

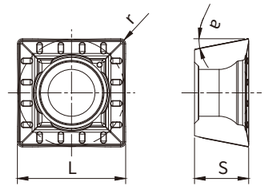
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		A	T	Φd	Re	α	BP5352C	BP5302C	BP5353E	BP5302E	BP9102	BP9108	BP9508-4	BP4351C	
	SOMT100420ER-GM	10.30	4.58	4.60	2.0	16	●		●			●	▲		
	SOMT140520ER-GM	14.14	5.56	5.80	2.0	16	●		●			●	▲		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

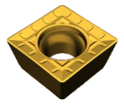
玉米铣刀片

Helical Milling Insert

SP□□

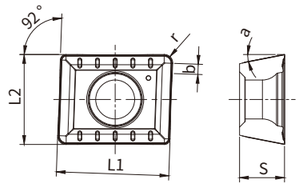


单面四刃铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）				可选牌号 Grade for Choice								
		L	S	α	r	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	SPMT120408-D51	12.70	4.76	11.00	0.8	▲			●		▲	▲		
	SPMT120606-D51	12.70	6.35	11.00	0.6	▲			●		▲	▲		

▲为主推荐牌号 Recommeded grade(Always stock available) ●按订单生产可选牌号Maker-to-order

LP□□



单面二刃铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice								
		L2	L	α	r	b	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	LPMT150412R-D51	12.70	15.88	11.00	1.2	1.6	●			●		▲	▲		
	LPMT150612R-D51	12.70	15.88	11.00	1.2	-	●			●		▲	▲		

▲为主推荐牌号 Recommeded grade(Always stock available) ●按订单生产可选牌号Maker-to-order



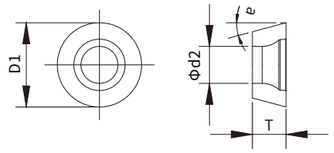
B

平面铣削刀片

Plane Milling Insert

平面铣削刀片
Plane Milling Insert

RP□□



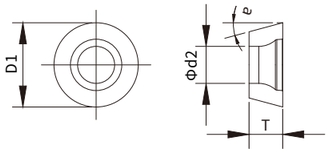
平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								
		D1	T	Φd2	α	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	RPGW1003MOE-CN	10.00	3.18	4.40	11	●		●	●		●	●	●	▲
	RDGT10T3MOTN-CN	10.00	3.97	4.40	15	●		●	●		●	●	●	▲
	RDGT1204MOTN-CN	12.00	4.76	4.40	15	●		●	●		●	●	●	▲
	RDGT1604MOTN-CN	16	4.76	5.5	15	●		●	●		●	●	●	▲
	RDMT0802MOTN	8	2.58	3.4	15	▲		▲			▲	●		
	RDMT10T3MOTN	10.00	3.97	4.40	15	▲		▲			▲	●		
	RDMT1204MOTN	12.00	4.76	4.40	15	▲		▲			▲	●		
	RDMT1604MOTN	16	4.76	5.5	15	▲		▲			▲	●		
	RPMT08T2MOE-JS	8	2.58	3.4	11	▲		▲			▲	●		
	RPMT10T3MOE-JS	10.00	3.97	4.40	11	▲		▲			▲	●		
	RPMT1204MOE-JS	12.00	4.76	4.40	11	▲		▲			▲	●		
	RPMW1003MO-TT	10.00	3.18	4.40	11	▲		▲			▲	●	▲	
	RPMT1204MOE-TT	12.00	4.76	4.40	11	▲		▲			▲	●		
	RPMW1003MO-NTT	10.00	3.18	4.40	11	▲		▲			●	●		
	RDMT1204MO-NTT	12.00	4.76	4.40	15	▲		▲			●	●		
	RDMT1604MO-NTT	16	4.76	5.5	15	▲		▲			▲	●		
	RDMT1204MOE-ND57	12.00	4.76	4.40	15	▲		▲			●	●		
	RDMT1204MOE-D57	12.00	4.76	4.40	15	▲		▲			●	●		
	RDMT1605MOE-D57	16	4.76	5.5	15	▲		▲			▲	●		
	RPMW08T2MOE-P	8	2.78	3.4	11	▲		▲			▲	●		
	RPMW1003MOE-P	10.00	3.18	4.40	11	▲		▲			▲	●		
	RPMW10T3MOE-P	10.00	3.97	4.40	11	▲		▲			▲	▲		
	RDMW10T3MOE-P	10.00	3.97	4.40	15	▲		▲			▲	▲		
	RDMW1204MOE-P	12.00	4.76	4.40	15	▲		▲			▲	●		
	RDMW1604MOE-P	16	4.76	5.5	15	▲		▲			▲	●		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

平面铣削刀片
Plane Milling Insert

RP□□

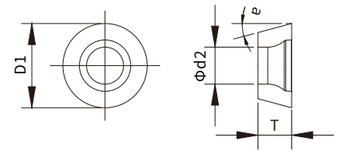


平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								
		D1	T	Φd2	α	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	RPMT08T2MO-BO	8	2.78	3.4	11	▲		▲			▲	●		
	RPMW1003MOT-BO	10.00	3.18	4.40	11	▲		▲			▲	●		
	RPMT10T3MO-BO	10.00	3.97	4.40	11	▲		▲			▲	▲		
	RPMT1204MO-BO	12.00	4.76	4.40	11	▲		●			●	●		
	RDMW1204MOT-BO	12.00	4.76	4.40	15	▲		▲			▲	●		
	RPMT1204MOE-CO	12.00	4.76	4.40	11	▲		●			●	●		

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

RC□□



平面铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice								
		D1	T	Φd2	α	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105	BP4351C
	RCKT10T3MO-XM	10	3.97	4.4	7	●		●			▲	▲		●
	RCKT1204MO-XM	12.00	4.76	4.40	7	●		●			●	●		●
	RCKT1606MO	16	6.35	5.5	7	●		●			●	●		●
	RCKT2006MO-XM	20	6.35	5.5	7	●		●			●	●		●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



B

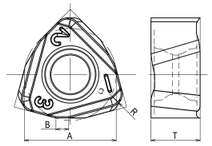
快进给铣削刀片

Fast Feed Milling Inserts

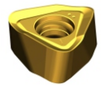
快进给铣削刀片

Fast Feed Milling Inserts

WN□□

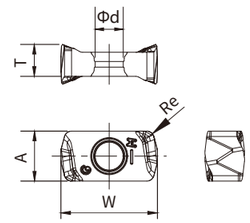


快进给铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice							
		A	T	B	R	Φd	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105
	WNMU070620ZER-PM	10.60	6.35	1.94	2.00	4.6	●				▲	●	▲	
	WNMU090720ZER-PM	14.00	7.66	1.94	2.00	5.5	●				▲	●	▲	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

LN□□/LO□□



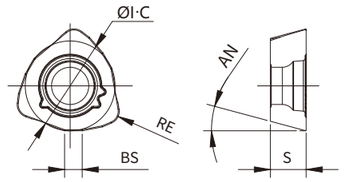
双面四刃快进给铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)					可选牌号 Grade for Choice							
		A	T	Φd	W	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP5302E
	LNMU0303ZER-MJ	6.00	3.75	2.85	11.90	1.2	●					▲	▲	●
	LNMU0303ZER-ML	6.00	3.75	2.85	11.90	1.2	●					▲	▲	●
	LNMU0202ZER-MM	4.00	2.70	2.10	6.10	0.9	●					▲	▲	●
	LOGU030310ER-GM	6.20	3.96	3.45	11.9	1.0	●					▲	▲	●

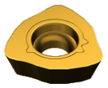
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

快进给铣削刀片
Fast Feed Milling Inserts

JD□□

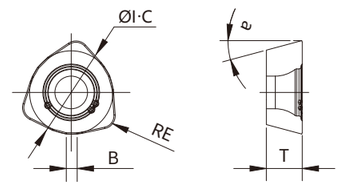


单面三刃快进给铣削刀片

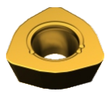
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		ØI·C	S	BS	Re	AN	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP5302E
	JDMW09T320SR-FT	9.53	3.97	1.80	2.00	15	●		●	▲		▲	●	●
	JDMW120420SR-FT	12.00	4.76	2.50	2.00	15	●		●	▲		▲	●	●
	JDMW140520SR-FT	14.00	5.56	2.80	2.00	15	●		●	▲		▲	●	●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

WD□□



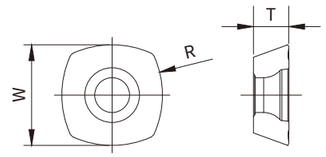
单面三刃快进给铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）				可选牌号 Grade for Choice							
		S	BS	Re	AN	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105
	WDMW06T320ZTR	10.00	3.97	1.20	2.00	●		●	▲		▲	●	
	WDMW080520ZTR	13.00	5.50	1.50	2.00	●		●	▲		▲	●	
	WDMW10X620ZTR	16.00	6.00	2.00	2.00	●		●	▲		▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

快进给铣削刀片
Fast Feed Milling Inserts

SD□□

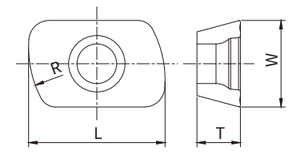


单面四刃快进给铣削刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		R	T	W	Φd	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105
	SDMT120512-GH	15.00	5.56	12.7	4.40	1.2	▲		●			▲	●	
	SDMT150512-GH	15.00	5.56	15.875	5.50	1.2	▲		●			▲	●	

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

EP□□



单面二刃快进给铣削刀片

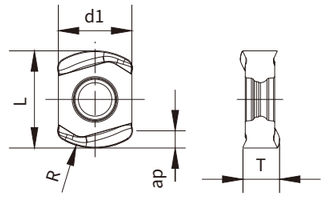
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		R	T	W	Φd	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9105
	EPMT0603TN	8	10.00	3.18	6.35	2.8	●					▲	▲	●
	EPNW0603TN-8	8	10.00	3.18	6.35	2.8	●					▲	▲	●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

快进给铣削刀片

Fast Feed Milling Inserts

BL□□



双面四刃快进给铣削刀片

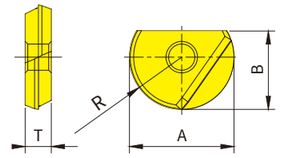
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		R	L	T	d1	AP	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP5302E
	BLMP0603R-M	6	9.00	3.73	6.40	1	●					▲	▲	●
	BLMP0904R-MM	8	11.90	4.80	9.18	1.5	●					▲	▲	●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

精铣球头刀

Precision Milling Ball End Cutter

BN□□/DH□□



仿型铣削加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）				可选牌号 Grade for Choice							
		R	A	B	T	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP5302E
	BNM160-M	8.0	16.0	12.0	4.0	●	●		●	●	▲	▲	●
	BNM200-M	10.0	20.0	15.0	5.0	●	●		●	●	▲	▲	●
	BNM250-M	12.5	25.0	18.5	6.0	●	●		●	●	▲	▲	●
	DHB160-F	8.0	16.0	12.0	3.0		●		●	●	●	●	▲
	DHB200-F	10.0	20.0	15.0	3.0		●		●	●	●	●	▲
	DHB250-F	12.5	25.0	18.5	4.0		●		●	●	●	●	▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



C

钻削刀片

Drilling Insert

C

钻削刀片

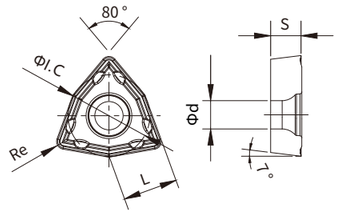
Drilling Insert

浅孔钻刀片 067
Shallow Hole Drilling Insert

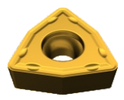
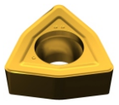
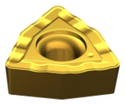
深孔钻刀片 070
Deep Hole Drilling Inserts

浅孔钻刀片
Shallow Hole Drilling Insert

WC□□



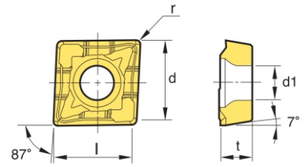
单面三刃孔加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice							
		ØI.C	S	Φd	Re	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9806
	WCMX030208FN	5.56	2.38	2.80	0.8		▲		●	●	●	●	▲
	WCMX030208FN	5.56	2.38	2.80	0.8		▲		●	●	●	●	▲
	WCMX040208FN	6.35	2.38	2.80	0.8		▲		●	●	●	●	▲
	WCMT050308FN	7.94	3.18	3.40	0.8		▲		●	●	●	●	▲
	WCMT06T308FN	9.53	3.97	3.80	0.8		▲		●	●	●	●	▲
	WCMT080412FN	12.70	4.76	4.40	1.2		▲		●	●	●	●	▲
	WCMT030208EN-TG	5.56	2.38	2.80	0.8		▲		●	●	●	●	▲
	WCMT040208EN-TG	6.35	2.38	2.80	0.8		▲		●	●	●	●	▲
	WCMT050308EN-TG	7.94	3.18	3.40	0.8		▲		●	●	●	●	▲
	WCMT06T308EN-TG	9.53	3.97	3.80	0.8		▲		●	●	●	●	▲
	WCMT080412FN-TG	12.70	4.76	4.40	1.2		▲		●	●	●	●	▲
	WCMT030208R-PG	5.56	2.38	2.80	0.8		▲		●	●	●	●	▲
	WCMT040208R-PG	6.35	2.38	3.10	0.8		▲		●	●	●	●	▲
	WCMT050308R-PG	7.94	3.18	3.20	0.8		▲		●	●	●	●	▲
	WCMT06T308R-PG	9.53	3.97	3.70	0.8		▲		●	●	●	●	▲
	WCMT080412R-PG	12.70	4.76	4.30	1.2		▲		●	●	●	●	▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

浅孔钻刀片
Shallow Hole Drilling Insert

QC□□

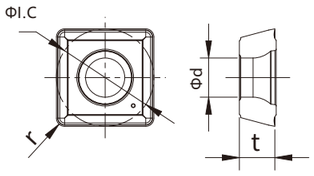


单面二刃孔加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice							
		d	t	r	d1	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9101P	BP5302E
	QCMT050204-DM	5.40	2.10	0.40	2.3	●	▲			▲			▲
	QCMT060204-DM	6.40	2.38	0.40	2.5	●	▲			▲			▲
	QCMT070304-DM	7.40	3.18	0.40	2.8	●	▲			▲			▲
	QCMT080304-DM	8.40	3.18	0.40	3.4	●	▲			▲			▲
	QCMT10T308-DM	10.40	3.97	0.40	4	●	▲			▲			▲
	QCMT130408-DM	13.50	4.76	0.80	5.5	●	▲			▲			▲
	QCMT170508-DM	17.50	5.56	0.80	5.5	●	▲			▲			▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

SP□□



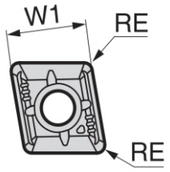
单面四刃孔加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)				可选牌号 Grade for Choice							
		ØI.C	t	r	Φd	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9108	BP9101P	BP5302E
	SPMT030104-HD	3.5	1.4	0.34	1.9		▲		●	●	●	●	▲
	SPMT040204-HD	4.65	2.2	0.34	2.4		▲		●	●	●	●	▲
	SPMG050204-DG	5.00	2.38	0.40	2.25		▲		●	●	●	●	▲
	SPMG060204-DG	6.00	2.38	0.40	2.61		▲		●	●	●	●	▲
	SPMG07T308-DG	7.94	3.97	0.80	2.85		▲		●	●	●	●	▲
	SPMG090408-DG	9.80	4.30	0.80	4.05		▲		●	●	●	●	▲
	SPMG110408-DG	11.50	4.80	0.80	4.45		▲		●	●	●	●	▲
	SPMG140512-DG	14.30	5.20	1.20	5.75		▲		●	●	●	●	▲

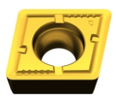
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

浅孔钻刀片
Shallow Hole Drilling Insert

WP□□

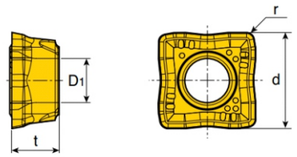


单面二刃孔加工刀片

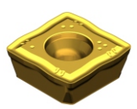
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）				可选牌号 Grade for Choice							
		W1	T	RE	d1	BP5352C	BP5302C	BP5353E	BP9502-4	BP9101P	BP9108	BP8806	BP9806P
	WPXT042004-G	4.20	2.00	0.40	1.8		▲			▲			●
	WPXT052504-G	5.00	2.50	0.40	2.3		▲			▲			●
	WPXT063006-G	6.00	3.00	0.60	2.4		▲			▲			●
	WPXT073506-G	7.50	3.50	0.60	2.8		▲			▲			●
	WPXT094008-G	9.60	4.00	0.80	4		▲			▲			●
	WPXT125012-G	12.40	5.00	1.20	4.4		▲			▲			●
	WPXT156012-G	15.20	6.00	1.20	5.5		▲			▲			●
	WPXT186012-G	18.00	6.00	1.20	5.5		▲			▲			●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

SO□□



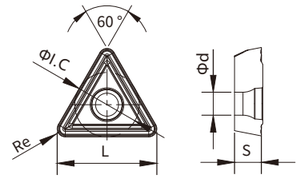
单面四刃孔加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）				可选牌号 Grade for Choice							
		d	t	r	D1	BP5352C	BP5302C	BP5353E	BP9502-4	BP9102	BP9101P	BP9508-4	BP5302E
	SOMT050204	5.00	2.38	0.40	2.25		▲		●	●	▲		▲
	SOMT060204	5.70	2.38	0.40	2.6		▲		●	●	▲		▲
	SOMT070306	6.80	2.80	0.60	2.6		▲		●	●	▲		▲
	SOMT08T306	7.90	3.97	0.60	2.85		▲		●	●	▲		▲
	SOMT09T308	9.20	3.97	0.80	3.8		▲		●	●	▲		▲
	SOMT11T308	11.00	3.97	0.80	3.8		▲		●	●	▲		▲
	SOMT130408	12.80	4.40	0.80	4.4		▲		●	●	▲		▲
	SOMT150510	15.00	4.80	1.00	5.4		▲		●	●	▲		▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

深孔钻刀片
Deep Hole Drilling Inserts

TP□□

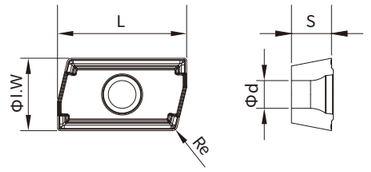


单面三刃孔加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		ØI.C	L	S	Φd	Re	BP5352C	BP9202	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9101P
	TPMT16T312-PM	9.53	16.50	3.97	3.4	1.2		▲						▲
	TPMT16T312-22	9.53	16.50	3.97	3.4	1.2		▲						▲
	TPMT16T312-23	9.53	16.50	3.97	3.4	1.2		▲						▲
	TPMT220612-PM	12.70	22.00	6.35	4.4	1.2		▲						▲
	TPMT220612-22	12.70	22.00	6.35	4.4	1.2		▲						▲
	TPMT220612-23	12.70	22.00	6.35	4.4	1.2		▲						▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

LP□□



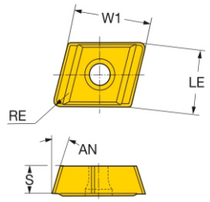
单面二刃孔加工刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		ØI.W	L	S	Φd	Re	BP5352C	BP9202	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9101P
	LPMT13T308-PM	10.00	14.70	3.97	3.4	0.8		▲						▲
	LPMT13T308-22	10.00	14.70	3.97	3.4	0.8		▲						▲
	LPMT13T308-23	10.00	14.70	3.97	3.4	0.8		▲						▲
	LPMT180608-PM	11.50	14.70	3.97	4.4	0.8		▲						▲
	LPMT180608-22	11.50	14.70	3.97	4.4	0.8		▲						▲
	LPMT180608-23	11.50	14.70	3.97	4.4	0.8		▲						▲

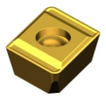
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

深孔钻刀片
Deep Hole Drilling Inserts

EP□□

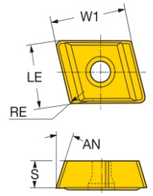


中心刀片

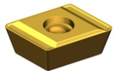
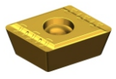
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		W1	LE	S	Φd	Re	BP5352C	BP9202	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9101P
	EPMT050308-MC	8.00	5.56	3.17	2.5	0.8		▲						▲
	EPMT06T308-MC	9.87	6.35	3.97	2.8	0.8		▲						▲
	EPMT08T308-MC	9.87	7.94	3.97	2.8	0.8		▲						▲
	EPMT10T308-MC	9.87	9.53	3.97	2.8	0.8		▲						▲
	EPMT12T308-MC	9.87	12.70	3.97	2.8	0.8		▲						▲
	EPMT050308-CL	8.00	5.56	3.17	2.5	0.8		▲						▲
	EPMT06T308-CL	9.87	6.35	3.97	2.8	0.8		▲						▲
	EPMT08T308-CL	9.87	7.94	3.97	2.8	0.8		▲						▲
	EPMT10T308-CL	9.87	9.53	3.97	2.8	0.8		▲						▲
	EPMT12T308-CL	9.87	12.70	3.97	2.8	0.8		▲						▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

EP□□



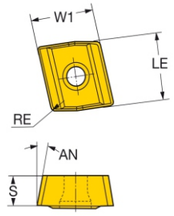
中间刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		W1	LE	S	Φd	Re	BP5352C	BP9202	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9101P
	EPMT050308-MM	8.00	5.56	3.17	2.5	0.8		▲						▲
	EPMT06T308-MM	9.87	6.35	3.97	2.8	0.8		▲						▲
	EPMT08T308-MM	9.87	7.94	3.97	2.8	0.8		▲						▲
	EPMT12T308-MM	9.87	12.70	3.97	2.8	0.8		▲						▲
								▲						▲
	EPMT050308-ML	8.00	5.56	3.17	2.5	0.8		▲						▲
	EPMT06T308-ML	9.87	6.35	3.97	2.8	0.8		▲						▲
	EPMT08T308-ML	9.87	7.94	3.97	2.8	0.8		▲						▲
	EPMT12T308-ML	9.87	12.70	3.97	2.8	0.8		▲						▲
								▲						▲

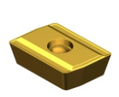
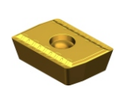
▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

深孔钻刀片
Deep Hole Drilling Inserts

LP□□

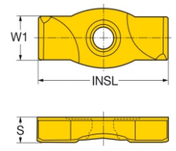


中心刀片

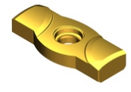
产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		W1	LE	S	Φd	Re	BP5352C	BP9202	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	BP9101P
	LPMT060308-HP	8.00	6.42	3.17	2.5	0.8		▲						▲
	LPMT08T308-HP	9.00	8.42	3.97	2.8	0.8		▲						▲
	LPMT09T308-HP	9.00	9.63	3.97	2.8	0.8		▲						▲
	LPMT11T308-HP	9.00	12.70	3.97	2.8	0.8		▲						▲
	LPMT060308-PL	8.00	6.42	3.17	2.5	0.8		▲						▲
	LPMT08T308-PL	9.00	8.42	3.97	2.8	0.8		▲						▲
	LPMT09T308-PL	9.00	9.63	3.97	2.8	0.8		▲						▲
	LPMT11T308-PL	9.00	12.70	3.97	2.8	0.8		▲						▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

DX□□



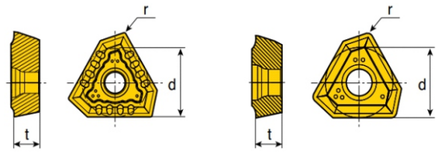
导向块

产品 Inserts Shape	型号 Type	尺寸 Dimension（mm）					可选牌号 Grade for Choice							
		W1	INSL	S	Φd	R	BP5352C	BC1125	BP5353E	BP9502-4	BP9102	BP9108	BP9508-4	Bc1225
	DXK06A	6.00	18.00	3.00	2.8	11		▲						▲
	DXK07A	7.00	20.00	3.50	3.6	13.5		▲						▲
	DXK08A	8.00	25.00	4.50	4.0	15.5		▲						▲
	DXK10A	10.00	30.00	4.50	4.2	21		▲						▲
	DXK12A	12.00	35.00	5.50	4.2	24		▲						▲

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

深孔钻刀片
Deep Hole Drilling Inserts

TP□□



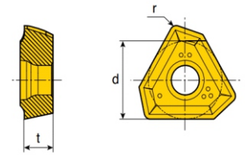
深孔钻刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)			可选牌号 Grade for Choice				
		d	t	r	BP5806C	BP9806P	BP9101P	BP5401C	BP9201
	TPMX0902-DRB	7.50	2.40	0.80	●	▲	▲	●	●
	TPMX0902-DRG	7.50	2.40	0.80	●	▲	▲	●	●
	TPMX1403-DRB	8.45	3.50	0.80	●	▲	▲	●	●
	TPMX1403-DRG	8.45	3.50	0.80	●	▲	▲	●	●
	TPMX1704-DRB	10.30	4.00	0.80	●	▲	▲	●	●
	TPMX1704-DRG	10.30	4.00	0.80	●	▲	▲	●	●
	TPMX2204-DRB	12.25	4.40	1.00	●	▲	▲	●	●
	TPMX2204-DRG	12.25	4.40	1.00	●	▲	▲	●	●
	TPMX240504-DRB	14.20	5.50	0.40	●	▲	▲	●	●
	TPMX240512-DRB	14.20	5.50	1.20	●	▲	▲	●	●
	TPMX2405-DRG	14.20	5.50	1.20	●	▲	▲	●	●
	TPMX2807-DRB	17.00	7.50	0.80	●	▲	▲	●	●
	TPMX2807-DRG	17.00	7.50	1.60	●	▲	▲	●	●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order

深孔钻刀片
Deep Hole Drilling Inserts

TP□□



深孔钻刀片

产品 Inserts Shape	型号 Type	尺寸 Dimension (mm)			可选牌号 Grade for Choice				
		d	t	r	BP5806C	BP9806P	BP9101P	BP5401C	BP9201
	TPMX1403-DLB	8.45	3.50	0.80	●	▲	▲	●	●
	TPMX1403-DLG	8.45	3.50	0.80	●	▲	▲	●	●
	TPMX1704-DLB	10.30	4.00	0.80	●	▲	▲	●	●
	TPMX1704-DLG	10.30	4.00	0.80	●	▲	▲	●	●
	TPMX2405-DLB	14.20	5.50	1.20	●	▲	▲	●	●
	TPMX2405-DLG	14.20	5.50	1.20	●	▲	▲	●	●

▲为主推荐牌号 Mainly recommended brand（In stock） ●按订单生产可选牌号Make to order



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技术信息

Techincal Information

技术信息

Techincal Information

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车削刀片推荐切削用量

Recommended Cutting Parameters For Turning Insert

ISO	P类 IOS P		
加工材料 Materials	碳素钢 Carbon steel	合金钢 Alloy steel	调质钢 Hardened and tempered steel
硬度 Hardness	HB120–180	HB180–240	HB240–350

ISO	M类 IOS M	
加工材料 Materials	奥氏体 Austenite	马氏体 Martensite
硬度 Hardness	HB120–200	HB330

ISO	K类 IOS K	
加工材料 Materials	灰口铸铁 Grey cast Iron	球墨铸铁 Nodular cast Iron
硬度 Hardness	HB150–220	HB140–220

ISO	N类 IOS N
加工材料 Materials	铝合金 Aluminium alloy
硬度 Hardness	HB60

车削刀片推荐切削用量

Recommended Cutting Parameters For Turning Insert

牌号 Grade	BC1125	BC1225	BC1235	BP8061
速度 Vc(m/min)	450–200	430–180	480–260	300-180
	320–140	300–130	340–150	240-150
	200–80	190–70	220–80	200-70

牌号 Grade	BC1125	BC1225	BP8061	BP9106
速度 Vc(m/min)	200–100	190–90	210–110	220–100
	200–140	210–130	220–140	260–170

牌号 Grade	BC1125	BC1225	BC3125	
速度 Vc(m/min)	280–160	400–190	380–200	
	280–140	300–150	220–110	

牌号 Grade	B405			
速度 Vc(m/min)	900–400			

车削加工常见问题及解决方案

Common Problems And Solutions For Turning

常见问题 \ 原因 \ 解决办法			刀具材料		切削条件				刀具形状							机床装夹		
			硬度更高的材料	韧性更好的材料	切削速度	进给	切深	切削液	改变刀片槽型	前角	刀尖圆弧半径	主偏角	切削刃强度	提高刀片精度	提高刀柄刚性	工件刀柄装夹	刀柄悬伸	动力、机床间隙
刀尖磨损过大	加工中精度超标	后刀面磨损增大	◎								↑							
		切削条件不适合			↓	↑												
表面精度恶化	表面质量差	刀具磨损增大、刀刃不够锋利	◎		↓			◎		↑	↑		↓	◎				
		切削刃缺损		◎		↓	↓		◎		↑		↑			◎	◎	◎
		切削刃几何形状不合适							◎		↑		↓	◎				
		切削条件不适合			↑	↓	↓	◎										
		振动、发颤		◎	↑↓	↓	↓	◎	◎	↑	↓	↑	↓		◎	◎	◎	◎
		积屑瘤			↑	↑		◎	◎	↑			↓	◎				
发热	切削热的影响	切削条件不适合			↓	↓	↓											
		切削刃几何形状不适合	◎						◎	↑			↓					
尺寸精度差	加工中尺寸波动	刀片精度不适合												◎				
		工件、刀具位置偏移							◎	↑	↓	↑			◎	◎	◎	◎
刀具切削刃损伤	后刀面前刀面磨损增大	后刀面磨损	◎		↓				◎	↑	↑		↓					
		前刀面磨损	◎		↓	↓	↓		◎	↑		↓						
	微崩	振动、冲击		◎		↓	↓		◎			↓	↑		◎	◎	◎	◎
	积屑瘤	工件硬度与刀具切削条件不适合			↑	↑		◎	◎	↑			↓	◎				
	热龟裂	工件材料的硬度与刀具材料和切削条件不适应			↓	↓	↓	◎	◎	↑			↓					
	切削刃刀尖部分变形	在断续切削大进给时发生	◎		↑	↓	↓	◎	◎	↑	↑	↓	↓					
	刀具寿命	材料、切削条件不适合		◎		↓	↓		◎		↑	↓	↑		◎	◎	◎	◎
切屑控制	长切屑缠绕	切削条件不适合			↓	↑	↑	◎										
		刀刃几何形状不合适							◎		↓	↑						
	切削太短、导致飞溅	切削条件不适合				↓	↓	◎										
		刀刃几何形状不合适							◎		↑	↓						
毛刺、塌边	钢、铝产生毛刺	切削条件不适合			↑	↓		◎										
		刀具磨损、几何形状不合适	◎						◎	↑	↓	↑	↓					
	铸铁，塌边	切削条件不适合			↓	↑		◎										
		刀具磨损、几何形状不合适	◎						◎	◎	↓	↓	↓					
	软钢、毛边	切削条件不适合				↓	↓											
		刀具磨损、几何形状不合适	◎						◎	↑	↑		↑		◎	◎	◎	◎

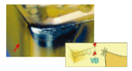
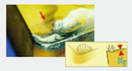
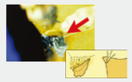
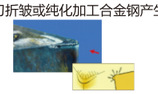
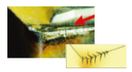
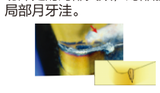
车削加工常见问题及解决方案

Common Problems And Solutions For Turning

FAQ \ Reason \ Solutions			Insert Grade		Cutting Conditions				Insert Shape							Setting/Machine		
			Harder Grade	Tougher Grade	Vc	Fn	Ap	Coolant	Chip Breaker Review	Rake Angle	Corner Radius	Setting Angle	Edge Strength	Change to Higher Tolerance	Toolholder Rigidity	Workpiece/Tool Installation	Overhang Length	Power,Rigidity
Too Much Wear On Nose	Accuracy Out Tolerance	Wear Increase at Flank Wear	◎								↑							
		Unsuitable Cutting Conditions			↓	↑												
Surface Accuracy Deterioration	POOr Roughness Of Surface	Tool wearness Increasing, Cutting Edge not Sharp	◎		↓			◎		↑	↑		↓	◎				
		Cutting Edge Chipping		◎		↓	↓		◎		↑		↑			◎	◎	◎
		Unsuitable Geometry							◎		↑		↓	◎				
		Unsuitable Cutting Conditions			↑	↓	↓	◎										
		Vibration,Chattering		◎	↑↓	↓	↓	◎	◎	↑	↓	↑	↓		◎	◎	◎	◎
		Built-up Edge			↑	↑		◎	◎	↑			↓	◎				
Heat	Cutting Heat Factors	Unsuitable Cutting Conditions			↓	↓	↓											
		Unsuitable Geometry	◎						◎	↑			↓					
Deterioration of Accuracy	Variation of Dimension	Unsuitable Insert Accuracy												◎				
		Position Offset of Workpiece and Tool							◎	↑	↓	↑			◎	◎	◎	◎
Edge Damage	Wear Increase at Relief Face	Flank Wear	◎		↓				◎	↑	↑		↓					
		Rake Face Wear	◎		↓	↓	↓		◎	↑		↓						
	Chipping	Vibration,Shock		◎		↓	↓		◎			↓	↑		◎	◎	◎	◎
	Built-up Egde	Unsuitable Workpiece Hardness and Cutting Conditions			↑	↑		◎	◎	↑			↓	◎				
	Comp Cracks	Unsuited Tool's Material and Cutting Condition to Workpiece Material			↓	↓	↓	◎	◎	↑			↓					
	Edge Nose Deformation	Interrupted Cutting	◎		↑	↓	↓	◎	◎	↑	↑	↓	↓					
	Tool Life	Unsuited Material and Cutting Condition		◎		↓	↓		◎		↑	↓	↑		◎	◎	◎	◎
Chip Control	Long, Tangling Chips	Unsuitable Cutting Conditions			↓	↑	↑											
		Unsuitable Material and Cutting Conditions							◎		↓	↑						
	Chips Scattering	Unsuitable Cutting Conditions				↓	↓	◎										
		Unsuitable Geometry on cutting edge							◎		↑	↓						
Burrs Turned-down Edge	Steel, Aluminum-Burr	Unsuitable Cutting Conditions			↑	↓		◎										
		Insert Wear, Unsuitable Geometry	◎						◎	↑	↓	↑	↓					
	Iron Cast, Turned-down Edge	Unsuitable Cutting Conditions			↓	↑		◎										
		Insert Wear, Unsuitable Geometry	◎						◎	◎	↓	↓	↓					
	Soft Steel, Turned-down Edge	Unsuitable Cutting Conditions				↓	↓											
		Insert Wear, Unsuitable Geometry	◎						◎	↑	↑		↑		◎	◎	◎	◎

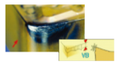
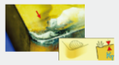
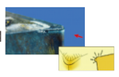
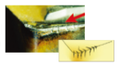
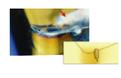
刀具磨损及解决方案

Insert Wear And Solution

刀具破损形式	现象	原因	解决方案
后刀面磨损	切削阻力增加，后刀面逐渐形成沟槽磨损。 表面质量变差或尺寸超差 	刀具材料过软 切削速度过高 后角过小 进给量太小	选用高耐磨性刀具材料 降低切削速度 增大后角 加大进给量
前刀面磨损（月牙洼磨损）	断屑控制不好，精加工表面恶化， 高速加工碳钢的情况下出现。 	刀具材料过软 切削速度过高 进给量太大 槽型强度太小	选用高耐磨性刀具材料 降低切削速度 降低进给量 选用强度更大的刀片槽型
崩刃	突发性崩刃（前后刀面）， 刀具寿命不稳定。 	刀具材料过硬 进给量大 切削刃强度不足 刀杆、刀柄刚性不足	先用韧性好的刀具材料 降低进给量 加大刃口修磨量（倒棱改倒圆） 加大刀具刚性和主偏角
刀片破裂	切削阻力增加表面粗糙度恶化。 	刀具材料过硬 进给量大 切削刃强度不足 刀杆，刀柄刚性不足	选用韧性好的刀具材料 降低进给量 加大刃口修磨量（倒棱改倒圆） 改善工件及刀具刚性
塑性变形（刀刃塌下）	工件尺寸变化，刀尖磨损， 刀刃折皱或纯化加工合金钢产生。 	刀具材料过软 切削速度过高 切削深度、进给量太大 切削刃温度过高	选用高耐磨性刀具材料 降低切削速度 减小切削深度进给量 选用导热系数高的刀具材料 （CVD和充分的切削液）
积屑瘤（粘结）	工件材料溶结到刀具切削刃精加工表面恶化， 切削阻力增加，加工软性材料 。 	切削速度低， 切削刃不锋利， 刀具材料不适合。	提高切削速度 增大前角 选用亲和力小的刀具材料 （涂层、金属陶瓷等）
热龟裂	由于热循环而崩损（多出现在铣削和断续切削） 	刀具材料过硬， 切削热引起的膨胀与收缩 （冷热循环）	干式切削或提供充足冷却液 选用韧性好更抗热冲击力的刀具材料
剥落	多出现在高硬度材料、有振动的切削 	切削刃上粘结　切屑排出不畅	增大前角使切削刃锋利 增大刀片容屑槽。
切深处沟槽磨损	切深处的局部失效，局部崩刃， 局部月牙洼。 	加工硬化材料、氧化皮、高温合金等	选用高耐磨性的CVD涂层材质 采用锥形切削（变切深） 减少主偏角

刀具磨损及解决方案

Insert Wear And Solution

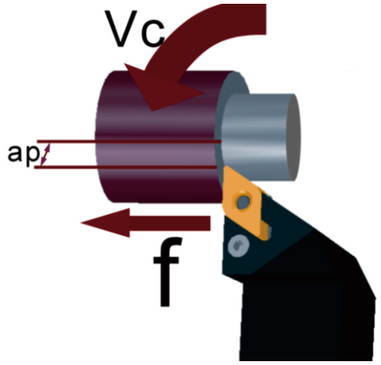
Tool Wear Types	Situation	Reason	Solutions
Flank Wear	Higher cutting resistance Notch wear on flank Poor roughness of surface or deterioration of accuracy. 	Soft grades Excessive cutting speed Small flank angle Low feed	Select a higher wear-resistant grade Reduce cutting speed Increase flank angle Increase feed
Crater Wear	Uncontrolled chip Poor surface quality when finishing High speed processing carbon steel 	Soft grades Excessive cutting speed Excessive feed The strength of chip breaker Insufficiet	Change to a higher wear-resistant grade Reduce cutting speed Reduce feed Select a higher strength chip breaker
Chipping	Sudden fracture of cutting edge (rake face and flank) Instability insert life 	Toughness insufficient Excessive feed rate Strength of cutting edge insufficient Instability of the tool	Select a tougher grade Decrease feed rate Increase honing of cutting edge (chamfering to rounding) Increase the stability and setting angle
Insert Fracture	Cutting resistance increased Poor surface roughness 	Toughness insufficient Excessive feed rate Strength of cutting edge insufficient Instability of the tool	Select a tougher grade Decrease feed rate Increase honing of cutting edge (chamfering to rounding) Increase the stability and setting angle
Plastic Deformation	Variation of dimension Nose wear,cutting edge drape or passivating, when processing alloy steel Poor surface roughness 	Soft grade Excessive cutting speed Excessive cutting depth and feed rate Overheat on cutting edge	Select a higher red hardness cutting material Decrease cutting speed Decrease cutting depth and feed rate Select a higher thermal conductivity cutting material(CVD+sufficient coolant)
Build-Up-Edge	Workpiece dissolve with Cutting edge Poor surface roughness when finishing Cutting resistance increased Cutting soft materials 	Cutting speed too low Cutting edge obtuse Unsuitable tool material	Increase cutting speed Increase rake angle Select small sticking force
Themal Crack	Crack by heat cycle (often happen in milling and interrupted cutting) 	Toughness of tool grade insufficient Swell and shrink by cutting heat(cold-thermocyling)	Cutting without coolant/Sufficient coolant Select a tougher and more thermal shock resistance grade
Flaking	Often in instability cutting and cutting high-hardness materials 	Build-up edge Uncontrolled chip	Increase rake angle Increase chip breaker
Notch Wear	Notch partial failure Partial chipping Partial cratering 	Processing hardened material, oxide-scale,superalloy	Select a higher wear-resistance CVD grade Adopt taper cutting (variable cutting depth) Decrease setting angle

车削三要素对加工的影响
Turning Parameters Wear And Solution

三要素的影响 Effects of Three Main Parameters

我们在切削加工中，通常都希望获得短的加工时间，长的刀具寿命和高的加工精度。因此，必须充分考虑工件材料的材质、硬度、形状状况及机床的性能，选择合适的刀具并使用高效率的切削条件，即我们所说的三要素。

Normally,short machining time,long tool life and high machining precision are expected in machining,so the material quality,hardness,and shape of the workpiece,and properties of machine should be fully consodered and then we can select suitable tools and adopt high-efficiency cutting parameters,namely three parameters.



切削速度（Vc）Cutting Speed（Vc）

工件在车床上旋转，我们将其每分钟的转数定义为主轴转速（n）。由于工件旋转，在其直径的切削点处产生切削速度，称为线速度，单位米/分钟。通常用线速度来考虑切削速度对加工的影响。

When the workpiece is rotating on the machine,the number of is rotation per minute is defined as Rotating speed of main axle(n).Because of its rotation,the cutting speed measured on the contacting point of diameter is defined as linear speed.m/min.Normally,linear,linear speed is considered to measure the effect of cutting speed on machining

切削速度的影响 Effect of Cutting Speed

切削速度对刀具寿命有非常大的影响。提高切削速度时，切削温度就上升，而使刀具寿命大大缩短。加工不同种类、硬度的工件，切削速度会有相应的变化。通过大量的切削实验得出：

Cutting speed has significant effect in tool life.When the cutting speed is increased,cutting temperature will increase and tool life will be shortened.Cutting speed varies according to the different types and hardness of work-piece.The below congclusions are reached after many cutting experiments:

（1）在通常情况下，切削速度提高20%，刀具耐用度降低1/2；切削速度提高50%，刀具耐用度将降至原来的1/5。

(1)Normally tool life would be reduced to half when the cutting speed is increased by 20%. Tool life would be 20% of the original life if the cutting speed is raised by 50%。

（2）低速（20-40m/min）切削易产生振动，使刀具寿命缩短。

(2)Low speed(20-40m/min)cutting could easily cause vibration and shorten tool life.

车削三要素对加工的影响
Turning Parameters Wear And Solution

进给量（fn） Feed Rate(fn)

进给量是指工件每旋转一周，刀具的移动量，单位为毫米/转。

Feed rate is defined as the moving distance of tool after workpiece rotates for one circle,measured by mm/rotation.

进给量的影响 Feed Rate(fn)

进给量是决定被加工表面质量的关键因素，同时也影响加工时切屑形成的范围和切屑的厚度。

在对刀具寿命影响方面，进给量过小，后刀面磨损大，刀具寿命大幅降低；进给量过大，切削温度升高，后刀面磨损也增大，但较之切削速度对刀具寿命的影响要小。

Feed rate is a key factor that determines surface quality. Meanwhtile it also affect the range of chip forming and the thickness of chips during machining.
In term of the effect on tool life,small feed rate leads to serious abrasion on clearance face,reducing tool life.

切削深度（ap） Cutting Depth(ap)

切削深度指未加工表面与已加工表面之间的差值，单位毫米。它是工件未加工直径与已加工直径差值的一半。

Cutting depth is defined as the difference between machined surface and unmachined surface.Measured by mm.it is half the difference value between the original diameter and machined diameter.

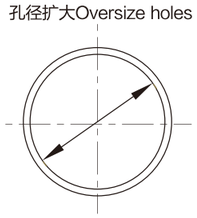
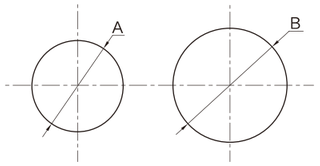
切削深度的影响 Effect of Cutting Depth

切削深度应根据工件的加工余量、形状、机床功率、刚性及刀具的刚性来确定。

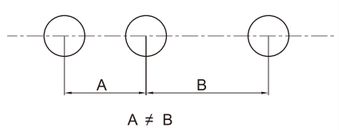
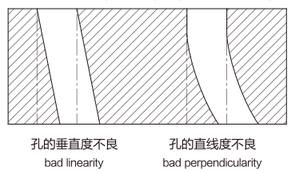
切削深度变化对刀具寿命影响不大。切削深度过小时，会造成刮擦，只切削刀工件表面的硬化层，缩短刀具寿命。当工件表面具有硬化的氧化层时，应在机床功率允许范围内选择尽可能大的切削深度，以避免刀尖只切削工件的表面硬化层，造成刀尖的异常磨损甚至破损。

Cutting depth should be determined by the machining alllowance and shape of workpiece,power and rigidity of machice, and tool rigidity.
The change of cutting depth has little effect on tool life.If the cutting depth is too low. The cutting nose only scrapes the hardened layer on the workpiece surface.reducing tool life.When there is hardened oxide layer on workpiece surface,higher cutting depth should be adopted within the possible range of machine’s power to avoid cutting nosr just cutting the hardened layer of workpiece.

孔加工孔常见问题及解决办法
Common Problems And Solutions For Drilling

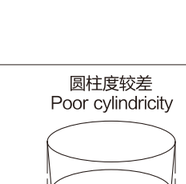
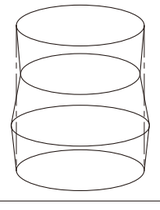
现象 Problem	原因 Cause	解决方法 Solution
孔径扩大Oversize holes 	钻头装夹不好 主轴本身跳动量过大 Poor clamping Large run-out around spindle	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时，仔细测量与调整 Select the holder and chuch with high Precisioncalibrating spindle Check and adjust after clamping drill
	顶角不对称 钻头跳动过大 横刃偏心 Non-symmetric point angle Large run-out Chisel edge is off center	修磨刀具 修磨后检查精度 Regrind drill Check the precision after clamping drill
孔径的一致性较差 Irregular hole size 	顶角不对称 钻头跳动过大 横刃偏心 刃带棱面磨损过大 Non-symmetric point angle Large run-out Chisel edge is off center Excessive margin abrasion	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时，仔细测量与调整 Select the holder and chuch with high Precision Calibrating spindle Check and adjust after clamping drill
	钻头装夹不好 主轴本身跳动量大 工件装夹不牢固 Poor clamping Large run-out around spindle Workpiece is not firmly held	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时，仔细测量与调整 Select the holder and chuch with high Precision Calibrating spindle Check and adjust after clamping drill
	进给量过大 Feed rate is too high	降低进给速度 Reduce the feed speed
	切削液供给不足 Coolant provide is not enough	改变切削液供给方法，增加流量 Change the coolant supply method, Or increase coolant volume

孔加工孔常见问题及解决办法
Common Problems And Solutions For Drilling

现象 Problem	原因 Cause	解决方法 Solution
孔的位置精度较差 Low position accuracy 	机床主轴重复定位精度低 钻头装夹不好 主轴本身跳动量大 Poor re-positioning of spindle Poor clamping Large run-out around spindle	提高机床重复定位精度 选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时，仔细测量与调整 Improve the re-positioning precision of Machineselect the holder and chuch With high precision Calibrating spindle Check and adjust after clamping drill
	被加工表面进给方向不垂直 The feed direction is not Vertical to the workpiece Surface	将被加工表面调整成与进给方向垂直 Adjust the feed direction vertical to The workpiece
	顶尖与轴心不重合(车床) Top center not align with the Spindle center	加工前仔细调整 Check and adjust alignment carefully Before drilling
	刀具磨损过大 Excessive margin abrasion	重新修磨 Regrind
	中心孔精度不好 Poor center hole accuracy	提高中心孔位置精度 Increase the position accuracy of hole
直线度不良 垂直度不良 Bad linearity bad perpendicularity 	顶角不对称 钻头跳动过大 横刃偏心 Non-symmetric point angle Large run-out Chisel edge is off center	修磨刀具 修磨后检查精度 Regrind drill Chech the precision after regrinding
	钻头刚性不足 Insufficient drill rigidity	提高钻头刚性 Increase drill rigidity
	被切削平面不平 顶尖与轴心不重合(车床) Uneven workpiece rigidity Top center not align with the Spindle center (lathe)	调整为水平面或预加工为水平面 预钻中心孔 The workpiece must be horizontal or Premachined to horizontal before drilling Pre-drill a center hole

孔加工孔常见问题及解决办法

Common Problems And Solutions For Drilling

现象 Problem	原因 Cause	解决方法 Solution
圆度较差 Poor roundness 	顶角不对称 钻头跳动过大 横刃偏心 Non-symmetric point angle Large run-out Chisel edge is off center	修磨刀具 修磨后检查精度 Regrind drill Chech the precision after regrinding
	钻头装夹不好 主轴本身跳动量大 工件装夹不牢固 Poor clamping Large run-out around spindle Workpiece is not firmly held	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时，仔细测量与调整 Select the holder and chuch with high Precisioncalibrating spindle check run Out and adjust after clamping drill
	后角过大 Clearance angle is too large	重新修磨切削刃 Regrind drill
	钻头刚性不足 Insufficient drill rigidity	提高钻头刚性 Increase drill rigidity
被加工工件表面质量差 Poor workpiece surface quality	修磨不当 Incorrect regriding	重新修磨校正 Regrind calibration
	切削液供给不足或型号不匹配 Insufficient coolant or Unsuitable coolant type	改变切削液供给方法，增加流量 采用润滑性好的切削油 Change the coolant supply method, Or increase coolant volume
	钻头装夹不好 主轴本身跳动量大 Poor clamping Large run-out around spindle	选择精度高的刀柄及夹具 校正主轴 Select the holder and chuch with high Precisioncalibrating spindle
	进给速度过大 Feed rate is too high	降低进给速度 Decrease the feed rate
	切削刃磨损过大，刃带棱面粘结严重。 Excessive abrasion on Cuttingedge Excessive build-up on margin	重新修磨切削刃，使用涂层钻头 Regrind drill Select a coated drill
	切削阻塞 Chip jamming	重选钻头(容屑槽型、螺旋角等) 重选加工方法 (进给速度的调整，采用分步阶梯方式等) Select a suitable drill(considering flute Geometry, helical angle etc)change the Cutting method (adjust feed rate, use Step feed etc.)
圆柱度较差 Poor cylindricity 	顶角不对称 钻头跳动量过大 横刃偏心 刃带棱面磨损过大 Non-symmetric point angle Large run-out Chisel edge is off center Excessive margin abrasion	重修磨刀具 修磨后检查精度 Regrind drill Chech the precision after regrinding
	进给速度过低 Feed rate is too low	提高进给速度 Increase the feed speed

浅孔钻推荐切削参数表

Shallow Drilling Recommend Cutting Parameter Chat

ISO	材料 Material	硬度HB	直径Dc mm	进给量fn mm/r	切削速度 Vc m/min
P	碳钢 Carbon steel	80–200	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.09 0.05–0.09 0.06–0.10 0.07–0.11 0.08–0.12	200(170–240)
	低合金钢 Low alloy steel	150–260	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.09 0.05–0.12 0.06–0.14 0.08–0.16 0.10–0.20	170(140–220)
	高合金钢 High alloy steel	150–320	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.09 0.05–0.12 0.06–0.16 0.08–0.18 0.10–0.22	150(120–180)
	铸钢 Cast steel	180–250	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.08 0.05–0.08 0.06–0.10 0.07–0.11 0.07–0.12	140(120–170)
M	不锈钢 Stainless steel 铁素体 Ferritic stainless steel 马氏体 Martensitic stainless steel	150–270	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.09 0.05–0.12 0.06–0.16 0.08–0.18 0.10–0.22	160(110–230)
	奥氏体 Austenitic stainless steel	150–275	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.09 0.05–0.11 0.06–0.13 0.08–0.14 0.10–0.16	140(110–220)
K	可锻铸铁 Malleable cast iron	150–230	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.10 0.05–0.14 0.08–0.16 0.10–0.20 0.12–0.24	160(120–220)
	灰口铸铁 Grey cast iron	150–220	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.10 0.05–0.14 0.08–0.16 0.10–0.20 0.12–0.24	200(170–240)
	球墨铸铁 Nodular cast iron	160–250	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.09 0.05–0.12 0.06–0.14 0.08–0.16 0.10–0.20	160(130–200)
N	铝合金 Aluminium alloy	60–110	16.0–23.0 24.0–30.0 31.0–38.0 39.0–46.0 47.0–58.0	0.05–0.10 0.05–0.14 0.08–0.16 0.10–0.20 0.12–0.24	300(250–350)



D

通用技术信息
General Technical Reference

刀具规格选用办法
Selection Method Of Cutting Tool

普通车削刀具规格选用办法:

一、首先要了解您所需加工的材料状况，机床型号及状态。
二、选择适合的刀片形状，切削主偏角及刀片压紧方式。
三、依据以上因素及您的机床型号来确定刀杆的左右方向及尺寸等明细。
四、最后确定与以上各因素相应的刀片规格、槽型、牌号。

Selection Method of General Turning Tools:

1.Understand the processed material condition,Machine Model and condition.
2.Select the suitable insert shape,setting angle and clamoin designation.
3.According to above conditions select details of tools as L/R,demension,etc.
4.Select the type,chip break and grade of insert according to all conditions.

切断切槽刀具规格选用办法:

一、首先要了解您所需加工的材料状况，机床型号及状态。
二、根据加工方式（外圆、内孔、端面槽）确定切刀的基本类型。
三、依据以上因素及您的机床型号来确定刀杆的左右方向及尺寸等明细。
四、最后确定与以上各因素相应的刀片规格、定位方式、槽型、牌号等明细

Selection Method of Parting and Grooving tools:

1.Understand the processed material condition,Machine Model and condition.
2.Select the insert type according to processing methods(external,internal,face grooving)
3.According to above conditions select details of tools as L/R，demensions,etc.
4.Select the type,clamping designation,chip break and grade of insert according to all conditions

螺纹切削刀具规格选用办法:

一、首先要了解您所需加工的材料状况、机床型号及状态。
二、根据螺纹的制式、类型、加工方式初步确定刀具的类型。
三、依据以上因素及您的机床型号来确定刀杆的左右方向及尺寸等明细。
四、最后确定与以上各因素相应的刀片规格、槽型、牌号。

Selection Method of Threading Tools:

1.Understand the processed material condition,Machine Model and condition.
2.Select the tool type according to thread's type,processing methods,etc.
3.According to above conditions select details of cutting tools as L/R,demension,etc.
4.Select the type,chip break and grade of Insert according to all condition

刀具规格选用办法
Selection Method Of Cutting Tool

铣削刀具规格选用办法:

一、首先要了解您所需加工的材料状况，机床型号及状态。
二、根据加工方式来确定铣削刀具的基本类型（平面铣削、方肩铣、仿形铣、铣槽、倒角铣等）。
三、根据加工精度及加工面形状与尺寸等因素确定采用整体铣刀或可转位铣刀。
四、依据以上因素及您的机床型号来确定刀具的接口、尺寸等明细。
五、最后确定与以上各因素相应的刀片规格、槽型、牌号。

Selection Method of Milling Tool Specifications:

1. The first step is to understand the material condition, machine type and state you need to process.
2. Determine the basic type of milling tool according to the processing method(plane milling, Square shoulder milling, imitation milling, milling slot, corner milling, etc.).
3. According to the machining precision and the shape and size of the machining surface and other factors to determine the use of the overall milling cutter or transposable milling cutter.
4. According to the above factors and your machine model to determine the interface, dimensions and other details of the tool.
5. Finally determine the blade specification, groove type, and brand number corresponding to the above factors.

孔加工刀具规格选用办法:

一、首先要了解您所需加工的材料状况、机床型号及状态。
二、根据加工工艺来确定孔加工刀具的基本类型（钻削、镗销、铰削、螺纹加工、等方式）。
三、根据加工精度及加工孔的尺寸等因素确定采用整体刀具或可转位孔加工刀具。
四、依据以上因素及您的机床型号来确定刀具的接口、尺寸等明细。
五、最后确定与以上各因素相应的刀片规格、槽型、牌号。

Selection Method for Hole Processing Tool Specifications:

1. Understand the material condition, machine type and state you need to process.
2. Determine the basic types of hole cutting tools(drilling, boring, hinge, thread processing, etc.) according to the processing process.
3. According to the machining accuracy and the dimension of the machining hole, it is determined that the whole tool or the fork-turning tool is used.
4. According to the above factors and your machine model to determine the interface, dimensions and other details of the tool.
5. Finally determine the insert specification, groove type, and brand number corresponding to the above factors.

材料硬度与切削速度的修正系数表
The Correction Coefficient Table Of Hardness And Cutting Speed

工件材料 Material		理论硬度 Theoretical Hardness	材料硬度与切削速度的修正系数 The Correction Coefficient Table Of Hardness and Cutting Speed								
			硬度降低 Hardness Decrease ← 硬度差值（实测值—理论值） Hardness Difference(Measured Difference - Theoretical Difference) → 硬度增大 Hardness Increase								
			-60	-40	-20	0	20	40	60	80	100
P		HB180	1.42	1.24	1.11	1.00	0.91	0.84	0.77	0.72	0.67
M		HB180	1.44	1.25	1.11	1.00	0.91	0.84	0.78	0.73	0.68
K	灰口铸铁 Grey Cast Iron	HB220	1.21	1.13	1.06	1.00	0.95	0.9	0.86	0.82	0.79
K	球墨铸铁 Nodular Cast Iron	HB250	1.33	1.21	1.09	1.00	0.91	0.84	0.75	0.7	0.65
N		HB75			1.05	1.00	0.95				
S		HB350			1.12	1.00	0.89				
HRC				-6	-3	0.00	3	6	9		
H		HRC60		1.10	1.02	1.00	0.96	0.93	0.9		

实际加工速度=推荐加工速度X切削速度修正系数
Actual Processing Speed=Recommended Processing Speed*Correction Factor Of Cutting Speed

推荐的切削参数见刀片包装盒 Recommended Cutting Parameters See Packaging

表格使用举例：当您要加工的材料为普通的合金钢，理论硬度为HB180，选择的刀片为CNMG120404-MM时，推荐切削速度：V=250m/min。如果实测硬度值为HB220，则硬度差值为220-180=40，对照上表查到速度修正系数0.84，则实际加工速度Vc=250x0.84=210m/min。

i.e. Cutting general alloy steel, hardness HB180, CNMG120404-MM , the recommended cutting speed is V=250m/min. When measured hardness is HB220, the hardness difference is 40(220-180). Find The corresponding speed correction coefficient is 0.84 on above table, and then the actual processing speed Vc=250*0.84=210mm/min

刀具寿命与切削速度的修正系数表

The Correction Coefficient Table Of Insert Life And Cutting Speed

刀具寿命 Insert Life / 刀片材质 Insert Material	刀具寿命和切削速度的修正系数 The Correction Coefficient Table Of Insert Life and Cutting Speed					
	10	15	30	45	60	90
BC1125	1.12	1.00	0.82	0.73	0.67	0.6
BC1225	1.11	1.00	0.84	0.76	0.71	0.64
BC1235	1.11	1.00	0.84	0.76	0.70	0.63
BC205	1.25	1.00	0.68	0.54	0.46	0.37
BC2051	1.55	1.00	0.47	0.30	0.22	0.14
BP8061U	1.15	1.00	0.82	0.74	0.69	0.64
BP8061	1.10	1.00	0.85	0.72	0.65	0.62
BP9106	1.10	1.00	0.85	0.72	0.65	0.62
BC2115	1.19	1.00	0.75	0.63	0.56	0.47
BC2125	1.22	1.00	0.73	0.61	0.54	0.45
BC3115	1.11	1.00	0.70	0.60	0.50	0.40
BC3125	1.22	1.00	0.80	0.65	0.60	0.55
BC3135	1.25	1.00	0.72	0.63	0.52	0.41
BP4351	1.20	1.00	0.84	0.70	0.63	0.59

实际加工速度=推荐加工速度X切削速度修正系数

Actual Processing Speed=Recommended Processing Speed*Correction Factor Of Cutting Speed

车削刀片断屑槽选择对照表

Comparison Table For Turning Insert Chipbrenker

负角刀片 Negative Inserts

ISO	加工范畴 Processing Category	安比特 ANBIT	特固克 TaeguTec	肯纳 KENNAMETAL	日立 HITACHI	株钻 ZCCCT	山特维克 SANDVIK	泰珂洛 TUNGALOY	京瓷 KYOCERA	克洛伊 KORLOY	住友 SUMITOMO	三菱 MITSUBISHI
P	超精加工 Superfinishing	R/L-F	FA	FF	FE		QF,LC	01、F	DP,GP,PP,VF,XP,XP-T,XF	VL	FA,FB,FL	PK,FH,FP,FY,FS
	精加工 Finishing	PF	FG,FA	FN	BE，B，CE，BH	DF	XF,PF,	TS,TSF,ZF,11,NS,AS,TQ,NM,CS	DP,GP,PP	VF,VB	SU，LU,FE	LP,C,SA, SH
	精加工(软刚) Finishing(Soft Steel)	PF	FC	FN		SF		17,TS,NS,CB 11，27，ZF	XQ,XS	VL	FL	SY
	精加工(修光刃) Finishing(Wiper)	WPF	WS	FW		WGF	WL,WF	AFW,FW,ASW,SW	WF,WP	HW	LUW,SEW	SW
	半精加工 Semifinishing	BMA BTM	MP,MC,PC,MT	MN	CT,AB,AH,AY,AE	DM,PM	PM,QM,XM	TM,AM,DM,ZM,通槽,TA	PG,GS,PS	VM,MP	GU（UG）UX, GE	MP,MA
	轻载粗 Light Roughing	PR	RT,通槽	RN,RP (单面)	RE，Y	DR（双面）LR(单面）	PR,HM XMR,通槽	TH,THS	全周,PH	B25,HR,GR	MU，MX,UX	GH,RP,通槽
	粗加工 Roughing	R/L-S	RX,RH,HD,HT,HY,HZ	MR，RN,RP(单面)	TE,UE,HX,HE,H	DR(单面) HDR(单面)	QR,MR PR,HR	TI,TRS,TUS	PX	GH,VH,VT	HG,HP,HU,HW,HF	HZ，HL,HM,HX,HR,HV

车削刀片断屑槽选择对照表

Comparison Table For Turning Insert Chipbrenker

负角刀片 Negative Inserts

ISO	加工范畴 Processing Category	安比特 ANBIT	特固克 TaeguTec	肯纳 KENNAMETAL	日立 HITACHI	株钻 ZCCCT	山特维克 SANDVIK	泰珂洛 TUNGALOY	京瓷 KYOCERA	克洛伊 KORLOY	住友 SUMITOMO	三菱 MITSUBISHI
M	精加工 Finishing	BF/MF	EA,SF	FP,FF	MP,AB,BH	EF	MF	SF,SA,SS	MQ,SQ	VP2,MP	SU,EF	SH,LM
	半精加工 Semifinishing	BM/MM	ET,EM	MP,UP	PV,DE, SE,AH	EM	MM,QM, XM,K	SM,S,TA	MU,MS, TK,SX	HS,MM	EX,EG,GU	MS,GM, MM,MA,ES
	粗加工 Roughing	BR/MR		MR,RP,P	AE	ER	MR	TH,SH,TU		GA,RM	HM,EM,MU	GH，HZ, RM,HL,HZ
K	精加工 Finishing	KF	MT	FN	VA,AH	PM	KF	CF,TA		MP	UZ	LK,MA
	半精加工 Semifinishing	KM	MG,RT	RP,UN	V,AE	PM	KM	CM,通槽	KQ,KG, C,全周	B25,MK	GZ(UX)	MK,GK,通槽
	粗加工 Roughing	KR	KT,RT	平板	RE,平板	平板	KR,KRR	CH,平板	KH,GC,ZS	MA,RK		PK，平板
S	精加工 Finishing	BF/SF	EA,SF	FS			SF	HRF	MQ	VP2	EF	FJ
	半精加工 Semifinishing	BM/SM	ML,MP, SU,MK	NG,UP,MS		VI	NGP,SM	HRM, HMM,SA	SQ,MS, MU,TK	VP3	EG,EX	MS
	粗加工 Roughing	BR/SR		RP			SR,SMR		SG,SX	VP4	MU,EM	RS,GJ

车削刀片断屑槽选择对照表

Comparison Table For Turning Insert Chipbrenker

正角刀片 Positive Inserts

ISO	加工范畴 Processing Category	安比特 ANBIT	特固克 TaeguTec	肯纳 KENNAMETAL	日立 HITACHI	株钻 ZCCCT	山特维克 SANDVIK	泰珂洛 TUNGALOY	京瓷 KYOCERA	克洛伊 KORLOY	住友 SUMITOMO	三菱 MITSUBISHI
P	精加工 Finishing	BF	FA,SA,FG	LF,FP	JQ	SF,HF	PF,UF,XF	01,PF FS,JS	PF,DP,GP, PP,VF	VL,VF	FC,FB, LU(FP,FK)	FP,FV, LP,SV
	精加工(修光刃) Finishing(Wiper)		WS	FW			WF		WP		LUW,SDW	SW
	半精加工 Semifinishing	BHMP	PC,MT, PMR	MF,MP	JE	HM	XM,PM, UM,PR,XR	PM,PS,PF PSF,PSS 23,24	HQ,GK, 全周	HMP,MP	MU	MV,MP, 全周
	半精加工（修光刃） Semifinishing(Wiper)		WT	MW			WM,PR, UR,KM					MW
M	精加工 Finishing	BF		FP,FF	MP	EF	MF	SS&	CF,CK,GQ, GF,MQ,SK	VP1	FC	FM,LM
	半精加工 Semifinishing	BM		MP,UP		EM	MM	PM	HQ,GK	VL	MU	MM，通槽
K	半精加工 Semifinishing	BHMP		MW,平板		HR,HM，平板	KM,KR,KF	无断屑槽,CM CM Without chipbreaker	平板	MP	MU	MK,通槽, 平板
S	精加工 Finishing	HS		GT-LF,R.GV, GT-HP		NF,NSF	SF,01		MQ	VP1	SI	FS,LS, FS-P, LS-P,FJ, LS,MS
	半精加工 Semifinishing	BM		MT-LF,R.GV-T, MT-FP			MM,QM, SMR			VL		
N	通用切削 General cutting	B405	FL	GT-HP,GT-LF, GW-F,GW-E		LH	AL	PP,AL	AH	AK,AR	AG,AW,AY	AZ

材料对照表
Material Comparison

钢 Steel

ISO	国家和标准Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB（P类）	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
碳素钢材 Carbon Steel	15	1.0401	C15	1015	080M15		C15C16	F.111	1350	CC12	
	20	1.0402	C22	1020	050A20	2C	C20C21	F.112	1450	CC20	
	35	1.0501	C35	1035	060A35		C35	F.113	1550	CC35	
	45	1.0503	C45	1045	080M40		C45	F.114	1650	CC45	
	55	1.0535	C55	1055	070M55		C55		1655		
	60	1.0601	C60	1060	080A62	43D	C60			CC55	
	Y15	1.7015	9SMN28	1213	230M07		CF9SMn28	11SMn28	1912	S250	SUM22
锰钢钢材 Manganese Steel	40Mn	1.1157	40Mn4	1039	150M36	15				35M5	
	25	1.1158	Ck25	1025							S25C
	35Mn2	1.1167	36Mn5	1335				36Mn5	2120	40Mn5	SMn438(H)
	30Mn	1.117	28Mn6	1330	150M28	14A	C28Mn			20M5	SCMn1
	35Mn	1.1183	Cf35	1035	060A35		C36		1572	XS38TS	S35C
		1.0718	9SMnPb28	12L13			CF9MnPb28	11SMnPb28	1914	S250Pb	SUM22L
		1.0722	10SPb20				CF10Pb20	10SPb		10PbF2	
		1.0726	35S20	1140	212M36	8M		F210G	1957	35MF4	
	Y13	1.0736	9SMn36	1215	240M07	1B	CF9SMn36	12SMn35		S300	
		1.0737	9SMnPb36	12L14			CF9SMnPb36	12SMnPb35	1926	S300Pb	
	55Si2Mn	1.0904	55Si9	9255	250A53	45	55Si8	56Si7	2085	55S7	
		1.0961	60SiCr7	9262			60SiCr8	60SiCr8		60SC7	
	15	1.1141	Ck15	1015	080M15	32C	C16	C15K	1370	XC12	S15C
	Ck45	1.1191	45	1045	080M46		C45	C45K	1672	XC42	S45C
	55	1.1203	Ck55	1055	070M55		C50	C55K		XC45	S55C
	50	1.1213	Cf53	1050	060A52		C53		1674	XC48TS	S50C
	60Mn	1.1221	Ck60	1060	080A62	43D	C60		1678	XC60	S68C
		1.1274	Ck101	1095	060A96				1870		SUP4
		1.3401	X120Mn12		Z120M12		XG120Mn12	X120Mn12		X120M12	SCMnH/1
	Gr15,45Gr	1.3505	100Cr6	52100	534A99	31	100Cr6	F.131	2258	100C6	SUJ2
		1.5415	15Mo3	ASTMA204Gr,A	1501-240		16Mo3KW	16Mo3	2912	15D3	
		1.5426	16Mo5	4520	1503-245-420		16Mo5	16Mo5			
		1.5622	14Ni6	ASTMA350LF5			14Ni6	15Ni6		16N6	
		1.5662	X8Ni9	ASTM A353	1501-509:510		X10Ni9	XBNi09			

材料对照表
Material Comparison

钢 Steel

ISO	国家和标准Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB（P类）	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
镍铬钢钢材 Nickel Chromium Steel		1.5680	12Ni19	2515						Z18N5	
		1.5710	36NiCr6	3135	640A35	111A				35NC6	SNC236
		1.5732	14NiCr10	3415			16NiCr11	15NiCr11		14NC11	SNC415(H)
		1.5752	14NiCr14	3415，3310	655M13 655A12	36A				12NC15	SNC815(H)
镍铬钼钢钢材 Nickel Chromium Molybdenum Steel		1.6511	36CrNiMo4	9840	816M40	110	38CrNiMo4(KB)	35CrNiMo4		40NCD3	
		1.6523	21NiCrMo2	8620	850M20	362	20NiCrMo2	20NiCrMo2	2503	20NCD2	SNCCM220(H)
		1.6546	40NiCrMo2	8740	311-Type7		40NiCrMo2(KB)	40NiCrMo2			SNC240
	40CrNiMoA	1.6582	34CrNiMo6	4340	817M40	24	35CrNiMo6(KB)		2541	35NCD6	
		1.6587	17CrNiMo6		820A16			14CrNiMo13		18NCD6	
铬钢钢材 Chromium Steel	15Cr	1.7015	15Cr3	5015	523M15					12C3	SCr415(H)
	35Cr	1.7033	34Cr4	5132	530A32	18B	34Cr4(KB)	35Cr4		32C4	SCr430(H)
	40Cr	1.7035	41Cr4	5140	530M40	18	41Cr4	42Cr4		42C4	SCr440(H)
	40Cr	1.7045	42Cr4	5140				42Cr4	2245		SCr440
锰铬钢钢材 Manganese Chromium Steel	18CrMn	1.7131	16MnCr15	5115	527M20		16MnCr15	16MnCr15	2511	16MC5	
	20CrMn	1.7176	55Cr3	5155	527A60	48				55C3	SUP9(A)
	30CrMn	1.7218	25CrMo4	4130	1717CDS110		25CrMo4(KB)	55Cr3	2225	25CD4	SCM420; SCM430
	35CrMo	1.722	34CrMo4	4137，4135	708A37	19B	35CrMo4	34CrMo4	2234	35CD4	SCM432 SCRRM3
	40CrMoA	1.7223	41CrMo4	4140，4142	708M40	19A	41CrMo4	41CrMo4	2244	42CD4TS	SCM440
	42CrMo，42CrMnMo	1.7225	42CrMo4	4140	708M40	19A	42CrMo4	42CrMo4	2244	42CD4	SCM440(H)
铬钼钢钢材 Chromium Molybdenum Steel		1.7262	15CrMo5					12CrMo4	2216	12CD4	SCM415(H)
		1.7335	13CrMo44	ASTM A182 F11 F12	1501-620Cr. 27		14CrMo44	14CrMo45	15CD3.5;15CD4.5		
		1.7361	32CrMo12		722M24	40B	32CrMo12	F.124.A	2240	30CD12	
		1.738	10CrMo910	ASTM A182 F22	1501-622Cr.31;45		12CrMo9,10	TU.H	2218	12CD9;10	
		1.7715	14MoV63		1503-660-440			13MoCrV6			
	50CrVA	1.8159	50CrV4	6150	735A50	47	50CrV4	51CrV4	2230	50CV4	SUP10
		1.8509	41CrAlMo7		905M39	41B	41CrAlMo7	41CrAlMo7	2940	40CAD6,12	
		1.8523	39CrMoV139		897M39	40C	36CrMoV12				

材料对照表
Material Comparison

钢 Steel

ISO	国家和标准Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB（P类）	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
钢类Steel	T10	1.1545	C105W1	W.110			C98KU C100KU	F.515 F.516	1880	Y1105	
	T12A	1.1663	C125W	W.112			C120KU	(C120)		Y2120	SK2
	CrV,9SiCr	1.2067	100Cr6	L3	BL3			100Cr6		Y100C6	
	Cr12	1.208	X210Cr12	D3	BD3		X210Cr13KU X250Cr12KU	X210Cr12		Z200Cr12	SKD1
	4Cr5MoVSi	1.2344	X40CrMoV51	H13	BH13			X40CrMoV5	2242	Z40CDV5	SKD61
	Cr6WV	1.2363	X100CrMoV51	A2	BA2		X35CrMoV05KU X40CrMoV51KU	X100CrMoV5	2260	Z100CDV5	SKD12
	CrWMo	1.2419	105WCr6				X100CrMoV51KU	105WCr5	2140	105WC13	SKS31 SKS2 SKS3
	Cr12W	1.2436	X210CrW12				10WCr6 107WCr5KU	X210CrW12	2312		SKD2
	5CrNiMo	1.2542	45WCrV7	S1	BS1		X215CrW121KU	45WCrSi8	2710		
	3Cr2W8V	1.2581	X30WCrV93 X30WCrV93KU	H21	BH21		45WCrV8KU	X30WCrV9		Z30WCV9	SKD5
	Cr12MoV	1.2601	X165CrMoV12				X28W09KU X3OWCrV93KU	X160CrMoV12	2310		SKD11
	5CrNiMo	1.2731	55NiCrMoV6	L6			X165CrMoW12KU	F.250.S		55NCDV7	SKT4
	V	1.2833	100V1	W210	BW2					Y1105V	SKS43
	W6Mo5Cr4V2Co5	1.3243	S6-5-2-5					HS6-5-2-5	2723	Z85WDKCV	SKH55
	W18Cr4VCo5	1.3255	S18-1-2-5	T4	BT4		HS6-5-2-5	HS18-1-1-5		Z80WKCV 10-05-04-1	SKH3
	W6Mo5Cr4V2	1.3343	S6-5-2S	M2	BM2		X78WCo1805KU	HS6-5-2	2722	Z85WDCV 06-05-04-02	SKH9
		1.3348	S2-9-2	M7		Z	X82WMo0605KU	HS-2-9-2	2782	Z100WCWV 09-02-04-02	
	W18Cr4V	1.3355	S18-0-1	T1	BT1		HS2-9-2	HS18-0-1		Z80WCV 18-04-01	SKH2
	W6Mo5Cr4V3		S6-5-3	M3			X75W18KU				SKH52
				M42	BM42						SKH59

材料对照表
Material Comparison

钢 Steel

ISO	国家和标准Nations And Standard					
	中国	德国		日本	大同(日本)	美国
	GB（P类）	W-nr	DIN	JIS	DAIDO	AISI/SAE
模型钢类 Die Steel				塑料模具钢		
					PX5N	P20mod
					NAK55	
					NAK80	
	3Cr13			SUS420J2mod	S-STAR	420mod
				冷作模具钢		
				SKS93	YK30	2
	9CrWMn			SKS3mod	GOA	01mod
	Cr12MoV	X165CrMoV12		SKD11	DC11	D2
				SKD11mod	DC53	D2mod
				热作模具钢		
	4Cr5MoSiV1	X40CrMoV51		SKD61	DHA1	H13
					DH21	
					DH31-S	
					DH2F	

材料对照表
Material Comparison

不锈钢 Stainless Steel

ISO	国家和标准Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB（P类）	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
不锈钢 Stainless Steel	0Cr13;1Cr12	1.4000	X6Cr13	403	403S17		X6Cr13	F.3110	2301	Z6C13	SUS403
		1.4001	X7Cr14					F.8401			
	1Cr13	1.4006	X10Cr13	410	410S21	56A	X12Cr13	F.3401	2302	Z10C14	SUS410
	1Cr17	1.4016	X6Cr17	430	430S15	60	X8Cr17	F.3113	220	Z8C17	SUS430
	2Cr13	1.4021	X20Cr13	410	S62	56B; 56C	X20C13	F.3401		Z20C13	SUS410
		1.4027	G-X20Cr14		420C29	56B				Z20C13M	SCS2
	4Cr13	1.4034	X46Cr13		420S45	56D	X40Cr14	F.3405	2304	Z40CM;Z38C13M	SUS420J2
	1Cr17Ni2	1.4057	X20CrNi172	431	431S29	57	X16CNi16	F.3427	2321	Z15CNi6.02	SUS431
	Y1Cr17	1.4104	X12CrMoS17	430F			X10CrS17	F.3117	2383	Z10CF17	SUS430F
	1Cr17Mo	1.4113	X6CrMo171	434	434S17		x8CrMo17		2325	Z8CD17.01	SUS434
		1.4313	X5CrNi134		425C11					Z4CND13.4M	SCS5
		1.4408	G-X6CrNiMo1810		316C16			F.8414			SCS14
	4Cr9Si2	1.4718	X45CrSi93	HW3	401S45	52	X45CrSi8	F.322		Z45CS9	SUH1
	0Cr13Al	1.4724	X10CrAl13	405	403S17		X10CrAl12	F.311		Z10C13	SUS405
	Cr17	1.4742	X10CrAl18	430	430S15	60	X8Cr17	F.3113		Z10CAS18	SUS430
	8Cr2OSi2Ni	1.4757	X80CrNiSi20	HNV6	443S65	59	X80CrSiNi20	F.320V		Z80CSN20.02	SUH4
	2Cr25N	1.4762	X10CrAl24	446			X16Cr26		2322	Z10CAS24	SUH446
不锈钢 Stainless Steel	0Cr18Ni9	1.4301	X5CrNi1810	304	304S15	58E	X5CrNi1810	F.3551 F.354 F.3504	2332	Z6CN18.09	SUS304
	1Cr18Ni9MoZr	1.4305	X10CrNiS189	303	303S21	58M	X10CrNiS18.09	F.3508	2346	Z10CNF18.09	SUS303
	0Cr19Ni10	1.4306	X2CrNi1911	304L	304S12		X2CrNi18.11	F.3503	2352	Z2CN18.10	SCS19
		1.4308	G-X6CrNi189		304C15					Z6CN18.10M	SCS13
	Cr17Ni7	1.4310	X12CrNi177	301			X12CrNi1707	F.3517	2331	Z12CN17.07	SUS301
		1.4311	X2CrNiN1810	304LN	304S62				2371	Z2CN18.10	SUS304LN
	0Cr19Ni9	1.4350	X5CrNi189	304	304S31	58E	X5CrNi1810			Z6CN18.09	SUS304
	0Cr17Ni11Mo2	1.4401	X5CrNiMo1712	316	316S16	Z6CND17.11	X5CrNiMo1712	F.3543	2347	1.4401	SUS316
	00Cr17Ni13Mo2	1.4429	X2CrNiMoN17133	316LN					2375	Z2CND17.13	SUS316LN
	0Cr27Ni12Mo3	1.4435	X2CrNiMo18143	316L	316S12		X2CrNiMo1713		2353	Z2CDN17.13	SCS16
	00Cr19Ni13Mo3	1.4438	X2CrNiMo17133	317L	317S12		X2CrNiMo18.16		2367	Z2CND19.15	SUS317L
		1.4460	X8CrNiMo275	329L					2324		SUS329L; SCH11 SCS11
	1Cr18Ni9Ti	1.4541	X6CrNiTi1810	321	2337	321S12	X6CrNiTi1811	F.3553	58B	Z6CNT18.10	SUS321
	1Cr18Ni11Nb	1.4550	X6CrNiNb1810	347	347S17	58F	X6CrNiTi1811	F.3552	2338	Z6CNNb18.1	SUS347
	Cr18Ni12Mo2Ti	1.4571	X6CrNiMoTi17122	316Ti	320S17	58J	X6CrNiMoTi17	F.3535	2350	Z6NDT17.12	
不锈钢 Stainless Steel		1.4581	G-X5CrNiMoNb1810		318C7		XG8CrNiMo18			Z4CNDNb1812M	SCS22
	Cr17Ni12Mo3Nb	1.4583	X10CrNiMoNb1812	318			X6CrNiMoTiNb17			Z6CNDNb1713B	
	1Cr23Ni13	1.4828	X15CrNiSi2012	309	309S24					Z15CNS20.1	SUH309
	0Cr25Ni20	1.4845	X12CrNi2521	310S	310S24		X6CrNi2520	F.331	2361	Z12CN2520	SUH310
	Cr15Ni36W3Ti	1.4864	X12NiCrSi3616	330						Z12CN35.1	SUH330
		1.4865	G-X40NiCrSi3818		330C11		XG50NiCr3919				SCH15
	5Cr2Mn9Ni4N	1.4871	X53CrMnNiN219	EV8	349S54;321S12	58B	X53CrMnNiN219			Z52CMN21.0	SUH35
	1Cr18Ni9Ti	1.4878	X12CrNiTi189	321	321S320	58C	X6CrNiTi1811	F.3523		Z6CNT18.12	Su321

材料对照表
Material Comparison

铸铁 Cast Iron

ISO	国家和标准Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB（P类）	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
球墨铸铁 Nodular Iron	QT400-18	GGG40		60-40-18	400/17		GS370-17	FGE38-17	0717-02	FGS370-17	FCD400
	QT450-10			65-45-12	420/12		GS400-13	FGE42-12		FGS400-12	FCD450
	QT500-7	GGG50		70-50-05	500/7		GS500-7	FGE50-7	0727-02	FGS500-7	FCD500
	QT600-3	GGG60		80-60-03	600/7		GS600-2	FGE60-2	0732-03	FGS600-2	FCD600
	QT700-2	GGG70		100-70-03	700/2		GS700-2	FGE70-2	0737-01	FGS700-2	FCD700
	QT800-2	GGG80		120-90-02	800/2		GS800-2	FGE80-2	0864-03	FGS800-2	FCD800
	QT900-2				900/2						
灰口铸铁 Grey Cast Iron		GG40		NO.60					0140	FGL400	FC350
	HT350	GG35		NO.50	350		G35	FG35	0135	FGL350	FC300
	HT300	GG30		NO.45	300		G30	FG30	0130	FGL300	FC250
	HT250	GG25		NO.35	250		G25	FG25	0125	FGL250	FC200
	HT200	GG20		NO.30	200		G20	FG20	0120	FGL200	FC150
	HT150	GG15		NO.20	150		G15	FG15	0115	FGL150	FC100
	Ht100				100		G10		0110		

牌号对照表
Grade Comparison

类别	代号 ISO Code	安比特 ANBIT	钻石 ZCCCT	三菱 MITSUBISHI	可乐伊 Korloy	特固克 TaeguTec	住友工业 SUMITOMO	泰珂洛 TUNGALOY	京瓷 KYOCERA	日立工具 HITACHI	山特维克 SANDVIK	肯纳金属 KENNAMETAL
CVD 车削 Turning	P01	BC1110		UE6105		TT8105	AC8015P AC810P	T9205 T9105	CA510 CA5505	HG8010	GC4305 GC4315	KCP05B KCP05 KCPK05 KCK05B KCK05 KCK15B KCK15
	P10	BC1125	YBC151 YBC152	UE6105 MC6015 UE6110 MY5015	NC3215	TT8105 TT8115	AC8015P AC810P	T9205 T9105 T9215 T9115	CA510 CA515 CA5505 CA5515	HG8010	GC4305 GC4315 GC4325	KCP05B KCP05 KCPK05 KCP10B KCP10 KCK15B KCK15 KCK20B
	P20	BC1125 BC1225	YBC251 YBC252	MC6015 UE6110 MC6025 UE6020 MY5015	NC3225 NC3120	TT5100 TT8125	AC8025P AC820P	T9215 T9115 T9225 T9125	CA025P CA525 CA5515 CA5525 CR9025	HG8025 IP2000 GM25	GC4315 GC4325 GC4225 GC1515	KCP10B KCP10 KCP25B KCP25 KCM15B KCM15
	P30	BC1235	YBC252 YBC351 YBC352	MC6025 UE6020 MC6035 UE6035 UH6400	NC3030	TT8125 T5100	AC8035P AC830P AC6030M AC630M	T9225 T9125 T9235 T9135 T6130	CA025P CA525 CA5525 CA530 CA5535 CR9025	IP3000 GM8035	GC4315 GC4325 GC4335 GC2025	KCP25B KCP25 KCP30B KCP30 KCM15B
	P40	BC1235	YBC351 YBC352	MC6035 UE6035 UH6400	NC5330	TT8135 TT7100	AC8035P AC830P AC6030M AC630M		CA530 CA5535	GM8035 GX30	GC4325 GC4335	KCP30B KCP30 KCP40B KCP40 KCM25B KCM25 KCM35B KCM35
	M10	BC2115		MC7015 US7020	NC9115	TT9215	AC6020M AC610M	T9235 T9135 T6130	CA6515	IP1050S	GC2015 GC1515	KCM15B KCM15
	M20	BC2125	YBM151 YBM153	MC7015 US7020 MC7025	NC9115 NC9125	TT9225	AC6020M AC6030M AC610M AC630M	T9215 T9115	CA6525	IP1050S	GC2015 GC2025 GC2020	KCP30B KCP30 KCP40B KCP40 KCM15B KCM15 KCM25B KCM25
	M30	BC2135	YBM151 YBM251	MC7025 US735	NC9125 NC9135	TT9235	AC6030M AC630M AC8035P AC830P	T6120 T9215 T9115		IP100S GX30	GC2025 GC2020	KCP40B KCP40 KCM25B KCM25 KCM35B KCM35
	M40	BC2135	YB253	US735	NC9135	TT9235	AC6030M AC630M	T6130		IP100S GX30		KCM35B KCM35
	K01	BC3110	YBD052	MC5005 UC5105	NC6310	TT7005	AC4010K AC405K	T5105	CA310 CA4010 CA4505 CA5505	HX3505	GC3210	KCK05B KCK05
	K10	BC3115	YBD102	MC5015 UC5115 MY5015	NC6310 NC6315	TT7015	AC4010K AC4015K AC405K AC415K	T5105 T515 T5115 T9215	CA310 CA315 CA4010 CA4115 CA4505 CA4515 CA5505	HX3505 HX3515 HG8010	GC3210	KCK05B KCK05 KCK15B KCK15
	K20	BC3125	YBD152 YBD252	MC5015 UC5115 UE6110 MY5115	NC6315	TT7015 TT7025	AC4015K AC415K AC420K AC425K AC8025P	T515 T5115 T5125 T9215	CA315 CA320 CA4115 CA4120 CA4515	HX3515 HG8010	GC3210 GC3225	KCK15B KCK15 KCK20B KCK20
	K30	BC3135		UE6110				T5125	CA320	HG8010	GC3225	KCP05B KCP05 KCPK05 KCP10B KCP10 KCP25B KCP25 KCK20B KCK20

牌号对照表
Grade Comparison

类别	代号 ISO Code	安比特 ANBIT	钻石 ZCCCT	三菱 MITSUBISHI	可乐伊 Korloy	特固克 TaeguTec	住友工业 SUMITOMO	泰珂洛 TUNGALOY	京瓷 KYOCERA	日立工具 HITACHI	山特维克 SANDVIK	肯纳金属 KENNAMETAL
CVD 铣削 Milling	P10					TT7515	ACP2000 ACP100				GC4220 GC4230 GC3040	KC930M KC935P
	P20	BC4025	YBC301 YBC251	F7030 MC7020	NC5330	TT7515	ACP2000 ACP100	T3225			GC4220 GC4230 GC3040	SC6525 SP6519
	P30	BC4025 BC4225	YBM351	F7030 MC7020	NC5330 NC5340 NCM325	TT7800	ACP2000 ACP100	T3130 T3225			GC4230 GC3040 GC2040 M30B	MP91M SC6525 KCPK30 X500
	P40		YBC302		NC5340 NC325 NCM325 NC5350 NCM335	TT7800					GC4240 GC4230 GC3040 GC2040 M30B	KCPK30 X500
	M10						ACM200					
	M20	BC2125	YBM251 YBM253	F7030 MC7020	NC5330		ACM200	T3225	CA6535	GX2160 AX2040	GC2040 GC4230	SC6525
	M30	BC2135	YBM302	F7030 MC7020	NC5330 NC5340 NCM325 NC5350	TT7800	ACM200	T3225 T3130			GC2040 GC4230 GC4240 M30B S40T	SC6525 X500
	M40				NCM335 NC5350	TT7800					GC2040 M30B S40T GC4240	X500
	K10	BC3115	YBD151	MC5020		TT7515	ACK2000 ACK100 ACK200	T1215 T1115				SC3025 KCK15
	K20	BC3115	YBD252	MC5020	NC5330	TT7515	ACK200 ACK200	T1215	CA420M	GX2120	GC3220 K20W	KCK15 SC3025 MP91M
	K30	BC3125	YBD252		NC5340						GC3040	MP91M KCPK30 SC6525

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Grade Comparison

类别	代号 ISO Code	安比特 ANBIT	钻石 ZCCCT	三菱 MITSUBISHI	可乐伊 Korloy	特固克 TaeguTec	住友工业 SUMITOMO	泰珂洛 TUNGALOY	京瓷 KYOCERA	日立工具 HITACHI	山特维克 SANDVIK	肯纳金属 KENNAMETAL
PVD 车削 Turning	P10	BP1115	YBG102	VP10MF MS6015	PC8105		AC1030U ACZ150 AC5025S AC520U	AH710	PR930 PR1005 PR1025 PR1115 PR1215 PR1425 PR1225		GC1025 GC1125	KCS10 KCU10 KC5010
	P20	BP1125 BP8061	YBG202	VP10RT VP20RT VP15TF VP20MF	PC8110 PC230	TT9020 TT9030	AC1030U AC5025S AC520U AC530U	AH120 AH725 AH730 SH725 SH730 J740	PR930 PR1025 PR1115 PR1215 PR1225 PR1625	IP2000	GC1025 GC1125	KCS10 KCU10 KCU25 KC5010 KC5025
	P30	BP1135	YBG202	VP10RT VP20RT VP15TF VP20MF	PC5300 PC8115	TT8020 TT8080 TT9030	AC1030U AC530U	AH120 AH725 AH7025 AH730 SH725 SH730 GH730 GH330 J740	PR1025 PR1225 PR1535	IP3000 CY250	GC1025 GC1125	KCU25 KC5025
	P40					TT8020 TT8080 TT9080	AC1030U	AH120 AH725 AH645		IP3000	GC1025	
	M10	BP2015	YBG202 YBG205	VP10MF MS6015	PC8105 PC8110	TT5080	AC515S AC5025S AC510U AC520U ACZ150	AH8005 AH630	PR1025 PR1215 PR1225	IP050S IP100S JP9105 JP9115	GC1115 GC1125	KCS10 KCU10 KC5010
	M20	BP9106 BP8061 BP2025	YBG202 YBG205	VP10RT VP20RT VP15TF VP20MF	PC8110 PC8110 PC5300	TT5080 TT9080	AC5015S AC5025S AC1030U AC520U	AH8015 AH630 AH120 AH7025 AH725 SH725 SH730	PR930 PR1025 PR1125 PR1215 PR1425 PR1225 PR1515	IP100S HS9115	GC1115 GC1125 GC2035	KCS10 KCU10 KCU25 KC5010 KC5025
	M30	BP2035		VP10RT VP20RT VP15TF VP20MF MP7035	PC9030 PC5300 PC5400	TT8020 TT8080 TT9020 TT9080	AC5025S AC6040M AC1030U AC520U AC530U	AH645 AH120 AH725 SH725 SH730 J740	PR1125 PR1535		GC1125 GC2035	KCU25 KC5025
	M40			MP7035	PC5400	TT8020 TT8080 TT9020 TT9080	AC6040M AC1030U AC530U	AH645		GX30	GC2035	
	K10	BP3015					AC1030U AC510U ACZ150	GH110 AH110	PR905 PR1215	HX3305 HG3305 HX3515 HG8010 TH315 ATH10E	GC3330 GC3220 K20W K20D K20M K15W	KCS10 KCU10 KCU25 KC5010
	K20	BP3025		VP10RT VP20RT VP15TF	PC5300		AC1030U AC510U AC530U ACZ150	AH120 AH7025	PR905 PR1215		GC3330 GC3220 GC3040 K20W K20D GC4230 K20M K15W	KCS10 KCU10 KCU25 KC5010 KC5025
	K30	BP3035		VP10RT VP20RT VP15TF			AC1030U AC530U	AH120 GH130			GC3330 GC3040 K20W GC4240 GC4230	

牌号对照表
Grade Comparison

类别	代号 ISO Code	安比特 ANBIT	钻石 ZCCCT	三菱 MITSUBISHI	可乐伊 Korloy	特固克 TaeguTec	住友工业 SUMITOMO	泰珂洛 TUNGALOY	京瓷 KYOCERA	日立工具 HITACHI	山特维克 SANDVIK	肯纳金属 KENNAMETAL
PVD 铣削 Turning	P10	BP9102 BP9105 BP9502	YBG252		PC2005 PC2010 PC2015	TT2510 TT7080	ACP2500 ACP200	AH120 AH725	PR830 PR1025 PR1225	PCA12M PN15M PN215 JP4115	GC1010 GC1025 GC1030	KC5010M KC515M
	P20	BP4351C BP5302C BP5353E	YBG202 YBG205 YBG9320 YBG252	MP6120 VP15TF	PC2505 PC2510	TT2510 TT7080 TT8020 TT9030 TT9080	ACP3000 ACU2500 ACP200 ACP300	AH120 AH725 AH3135 AH9030 AH3225 AH9130	PR1525 PR830 PR1025 PR1225 PR1230	CY150 CY9020 JP4120	GC1025 GC1030 GC2030	KC522M KC525M KCSM30 SP6519
	P30	BP5352C BP9108 P9508	YBG302	MP6120 VP15TF MP6130 VP30RT	PC3600 PC3500 PC210F PC5300	TT8020 TT8080 TT9030 TT9080	ACP3000 ACU2500 ACP200 ACP300	AH120 AH725 AH3135 AH130 AH3225 AH9130	PR1230 PR1535	HC844 CY25 CY250 CY259V JS4045	GC1030 GC1010 GC2030	KC525M KC530 KC725M KC735M KCPM40 KCSM30 X400
	P40	BP4235	YBG302	VP30RT	PC5400	TT8020 TT8080 TT9030 TT9080	ACP3000 ACU2500 ACP300	AH140		PTH30E PTH40H JS4060 GX2140	GC1030 GC2030	KC725M KC735M KCPM40
	M10		YBG252		PC210F		ACU2500 ACM100 ACK300 ACP300	AH725	PR1025 PR1225	PN15M PN215	GC1010 GC1030	KC515M SP4019 SP6519
	M20	BP9106	YBG202 YBG205 YBG9320 YBG252	VP15TF MP7130 MP7030 VP20RT	PC5300	TT9030 TT9080	ACU2500 ACK300 ACP300	AH725 AH3135 AH130 AH6030 AH3225 AH9130	PR1525 PR1025 PR1225	JP4120	GC1030 GC1040 GC2030 S30T	KC522M KC525M SP4019 SP6519 X700
	M30	BP8061	YBG302	VP15TF MP7130 MP7030 VP20RT MP7140	PC9530 PC5400	TT8020 TT8080 TT9030 TT9080	ACM300	AH3135 AH130 AH9130	PR1535	HC844 CY250 JS4045	GC1040 S30T GC2030	KC522M KC525M KC725M KC735M KCPM40 KCSM30 KCSM40 SC6525 X700
	M40		YBG302	MP7140 VP30RT	PC5400	TT8020 TT8080 TT9030 TT9080	ACM300	AH140		PTH30E PTH40H JM4160 GX2160 AX2040		KC725M KCPM40 KCSM40
	K10	BP9105	YBG102 YBG252	MP8010	PC8110 PC6510	TT6080	ACK3000 ACU2500	AH110 GH120	PR510 PR905 PR1210	ATH10E TH315 CY100H	GC1010 GC1020	KC514M KC515M KCK20 SP4019
	K20	BP9105	YBG152	VP15TF VP20RT	PC5300	TT6080	ACK3000 ACU2500 ACK300	AH120 AH9030 AH9130	PR905 PR1210	CY9020 CY150 PTH13S JP4120 GX2120	GC1020	KC514M KC520M KC524M KCK20 SP6519
	K30	BP9508		VP15TF VP20RT			ACK3000 ACU2500 ACK300	AH120		CY250 JS4045 GX2040		KC522M KC524M SP6519

硬度对照表
Hardness Comparison

硬度 Hardness				抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(VH)	布氏 Brinell Hardness(BH)	
HRC	HRA	HV	HB	
70.0	86.6	1037		
69.5	86.3	1017		
69.0	86.1	997		
68.5	85.8	978		
68.0	85.5	959		
67.5	85.2	941		
67.0	85.0	923		
66.5	84.7	906		
66.0	84.4	889		
65.5	84.1	872		
65.0	83.9	856		
64.5	83.6	840		
64.0	83.3	825		
63.5	83.1	810		
63.0	82.8	795		
62.5	82.5	780		
62.0	82.2	766		
61.5	82.0	752		
61.0	81.7	739		
60.5	81.4	726		
60.0	81.2	713		2555
59.5	80.9	700		2500
59.0	80.6	688		2450
58.5	80.3	676		2395
58.0	80.1	664		2345
57.5	79.8	653		2295
57.0	79.5	642		2250
56.5	79.3	631		2205
56.0	79.0	620		2160
55.5	78.7	609		2115
55.0	78.5	599		2075
54.5	78.2	589		2035
54.0	77.9	579		1995
53.5	77.7	570		1955
53.0	77.4	561		1920
52.5	77.1	551		1885
52.0	76.9	543		1850
51.5	76.6	534		1815

硬度 Hardness				抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(VH)	布氏 Brinell Hardness(BH)	
HRC	HRA	HV	HB	
51.0	76.3	501		1780
50.5	76.1	494		1750
50.0	75.8	488		1720
49.5	75.5	481		1690
49.0	75.3	474		1660
48.5	75.0	468		1630
48.0	74.7	461		1605
47.5	74.5	455		1575
47.0	74.2	449		1550
46.5	73.9	442		1525
46.0	73.7	436		1500
45.5	73.4	430		1475
45.0	73.2	424		1450
44.5	72.9	418		1430
44.0	72.6	413		1405
43.5	72.4	407		1385
43.0	72.1	401		1360
42.5	71.8	396		1340
42.0	71.6	391		1320
41.5	71.3	385		1300
41.0	71.1	380		1280
40.5	70.8	375		1260
40.0	70.5	370		1245
39.5	70.3	365		1225
39.0	70.0	360		1210
38.5		355		1190
38.0		350		1175
37.5		345		1160
37.0		341		1140
36.5		336		1125
36.0		332		1110
35.5		327		1095
35.0		323		1080
34.5		318		1065
34.0		314		1050
33.5		310		1035
33.0		306		1020
32.5		302		1010

ANBIT Cemented Carbide

硬度对照表
Hardness Comparison

硬度 Hardness				抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(VH)	布氏 Brinell Hardness(BH)	
HRC	HRA	HV	HB	
32.0		304	298	995
31.5		300	294	980
31.0		296	291	970
30.5		292	287	960
30.0		289	283	950
29.5		285	280	935
29.0		281	276	920
28.5		278	273	910
28.0		274	269	900
27.5		271	266	890
27.0		268	263	880
26.5		264	260	870
26.0		261	257	860
25.5		258	254	850
25.0		255	251	835
24.5		252	248	830

硬度 Hardness				抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(VH)	布氏 Brinell Hardness(BH)	
HRC	HRA	HV	HB	
24.0		249	245	820
23.5		246	242	810
23.0		243	240	800
22.5		240	237	790
22.0		237	234	785
21.5		234	232	775
21.0		231	229	765
20.5		229	227	760
20.0		226	225	750
19.5		223	222	745
19.0		221	220	735
18.5		218	218	730
18.0		216	216	725
17.5		214	214	715
17.0		211	211	710

A 车削刀片 Turning Insert
B 铣削刀片 Milling Insert
C 钻削刀片 Drilling Insert
D 技术信息 Technical Specification

ANBIT Cemented Carbide

A 车削刀片 Turning Insert
B 铣削刀片 Milling Insert
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D 技术信息 Technical Specification