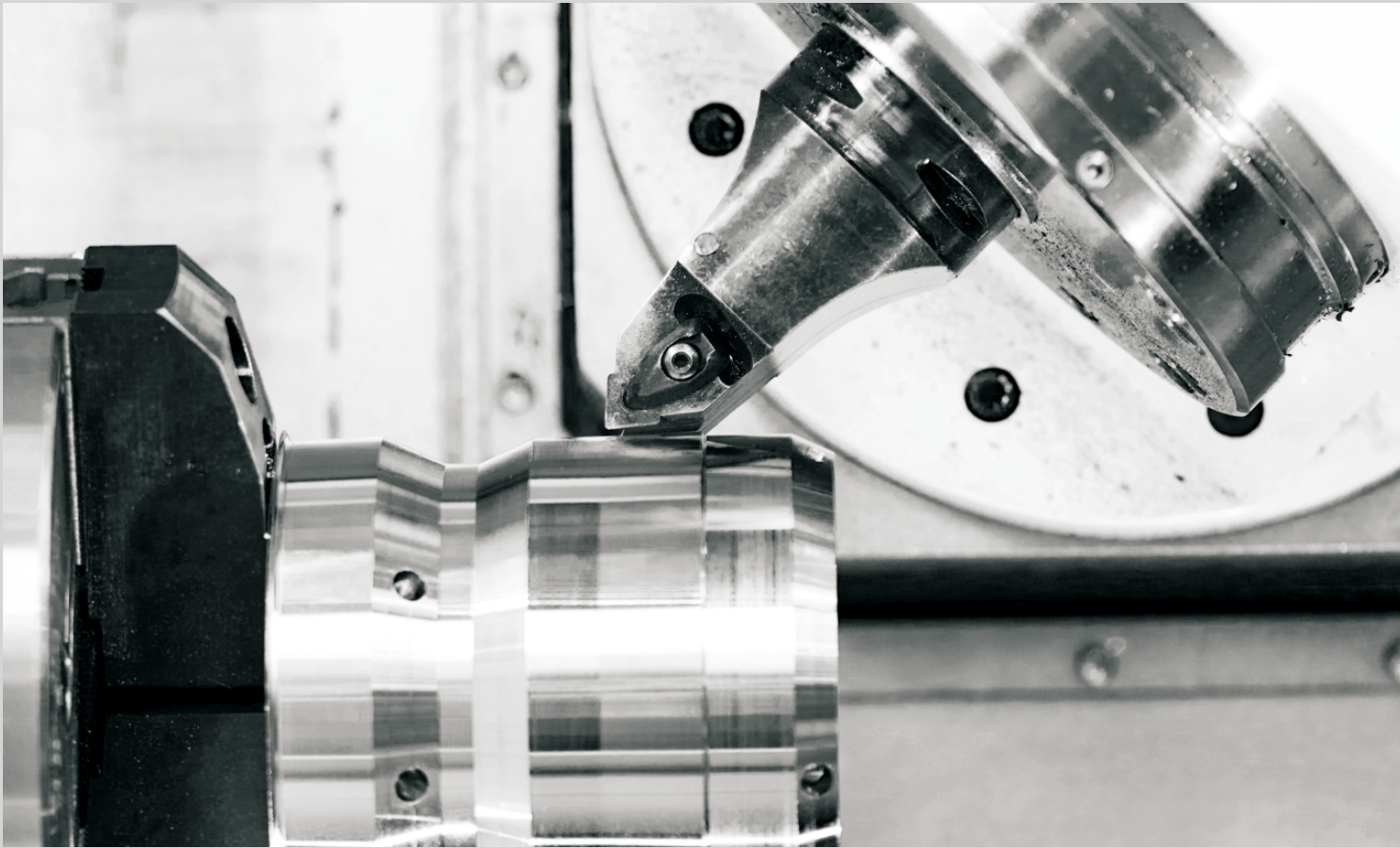


PCBN/PCD 超硬刀具

Diamond tool series



车削/铣削/钻削
TURNING/MILLING/DRILLING

KOVES®
科维丝工具

2025 PCBN/PCD DIAMOND TOOL SERIES

KOVES®
科维丝工具

东莞市科维丝精密工具有限公司
广东省东莞市长安镇乌沙社区蔡屋村振昌路7号
DONGGUAN KOVES PRECISION TOOLS CO.,LTD
NO.7Zhenchang Road Changan Town, Dongguan City, China
[Http:// www.pcbn.com](http://www.pcbn.com)
E-maill: koves@pcbn.com

ABOUT US

关于我们



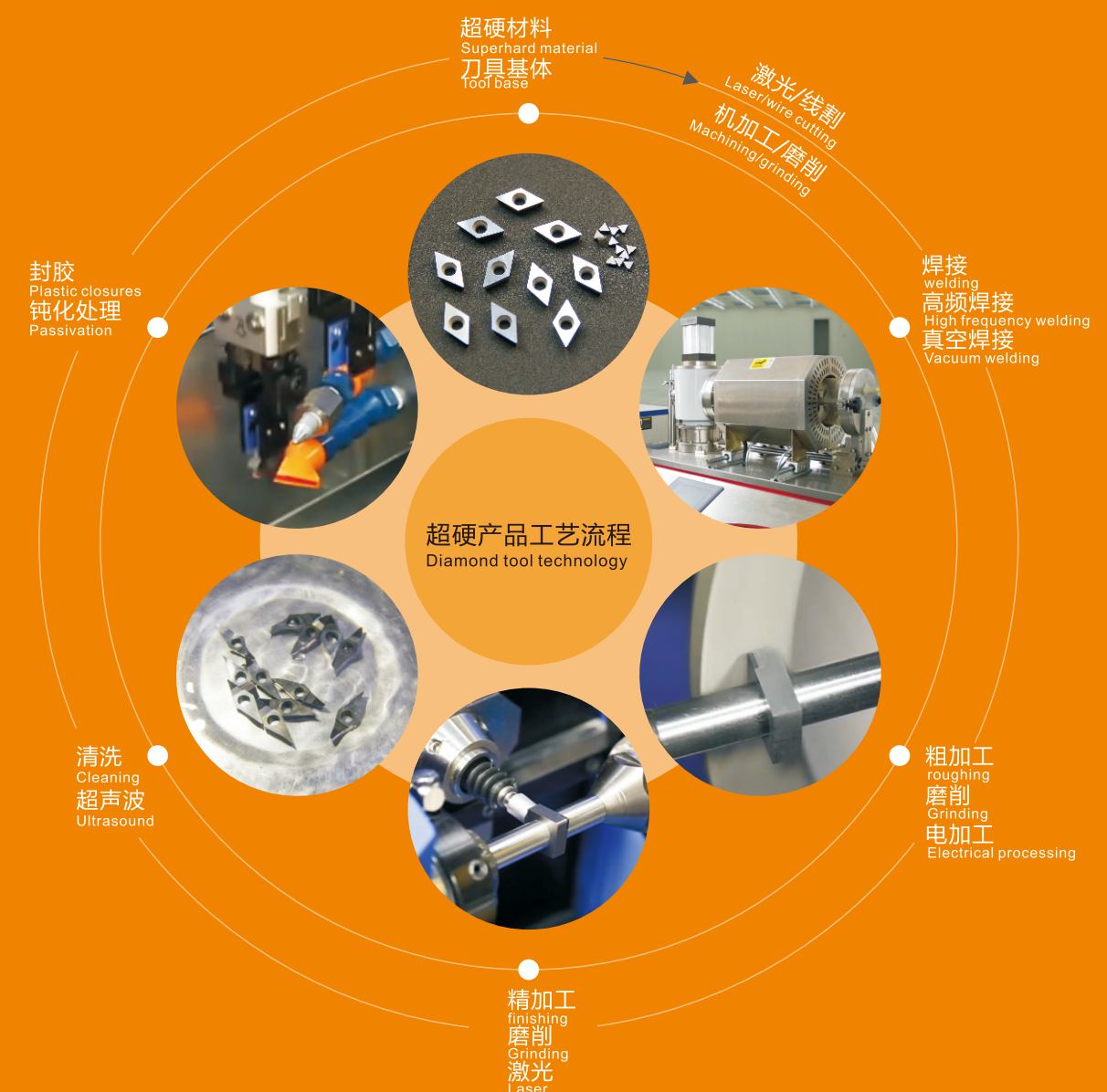
科维丝公司是一家面向全球服务、专注于切削工具产品生产与销售的企业。公司成立于2009年，从成立之初就注重技术服务为基础，公司建有“高性能数控刀具与工具系统技术联合实验室”，同时我们根据客户的产品和工艺需求：制定和优化加工工艺方案；选择合理切削参数；计算加工节拍；选择工具、刀具、刀片及附件；量身定做非标刀具；提供与机械加工相关的全套技术服务。

KOVES is a global service-oriented enterprise, specializing in the production, developing and sales of cutting tool products. KOVES was founded in 2009 and has been based on technical services since its inception. We have built a joint laboratory of high performance CNC tool and tool system technology. At the same time, we are based on the customer's product and process requirements: Develop and optimize process plans; choose reasonable cutting parameters; calculate machining cycles; select tools, cutters, blades and accessories; customized non-standard tools; provide a full range of technical services related to mechanical processing.



公司产品应用行业涵盖汽车、摩托车、柴油机、航空航天、军工、工程机械、矿山机械、机床、电机、汽轮机、重型机器、风电、核电、通用机械、手机通信等几乎所有机械制造行业。

KOVES products are used in automotive motorcycle, diesel engine, aerospace, military, engineering machinery, mining machinery, CNC machinery, electric motors, steam turbine, heavy machinery, wind power, nuclear power, general machinery, mobile communication etc.. almost all machinery manufacturing industry.



Contents

目录▶

	刀片编码系统..... B09-B10 Insert coding system
PCBN	PCBN简介及特点..... B01-B02 PCBN Introudction and Features
	科维丝PCBN材质介绍..... B03-B04 KOVES PCBN Material specification
	科维丝PCBN应用技术..... B05-B08 KOVES PCBN Application technology
	PCBN系列产品 页码 B01-B50 PCBN series products
	PCBN车刀片系列..... B11-B23 PCBN Turning insert
	PCBN铣刀片系列..... B24-B38 PCBN Milling insert
	PCBN立铣刀系列..... B39-B50 PCBN End milling
PCD	PCD简介及特点..... C PCD Introudction and Features
	科维丝PCD材质介绍..... C01 KOVES PCD Material specification
	PCD系列产品 页码 C01-C58 PCDseries products
	PCD车削刀片系列..... C02-C21 PCD Turning insert
	PCD铣削刀片系列..... C22-C33 PCDMilling insert
	PCD立铣刀系列..... C34-C48 PCD End milling
	PCD钻头系列..... C49-C58 PCD Drilling

PCBN刀片厂家牌号对照表
Grade table of PCBN

工件材料 Workpiece Material	分类代号 Code	各厂家牌号对照列表 Grade table of competitors and KOVES									
		科维丝 KOVES	住友 SUMITOMO	三菱 MITSUBISHI	泰珂洛 TUNGALOY	京瓷 KYOCERA	日本特 殊陶业 NTK	山特维克 SANDVIK	肯纳金属 KENNA METAL	伊斯卡 ISCAR	山高 SECO
K	K01	KBN980	NCB100 BNC500 BN7000 BN500	MB710 MB5015	BX910 BX930 BX870	KBN475 KBN60M	B30 B16	CB50 CB7525	KB1340	IB50 IB85	
	K10	KBN910 KBN900 KBN95N	BN7000 BN500	MB710. MB730 MB5015. MB4020	BX470. BX480. BX950	KBN60M KBN900	B23 B16	CB7925		IB55 IB90	CBN200. CBN300 CBN300P. CBN400C
	K20	KBN910 KBN900 KBN95N KBN800	BN7000 BNS800	MB730. MB4020 MB4120. MBS140	BX470. BX480 BXC90. BX90S	KBN900					
	K30	KBN800	BNS800	MB4120. MBS140 BC5030	BXC90 BX90S				KB5630		CBN500
S	S01	KBN980	NCB100 BN7000	MB730 MB4020 MB4120	BX904. BX950 BX470. BX480 M714B				KB5630 KB1340	IB85 IB05S IB10S	
H	H01	KBN10N	BNC2010 BNC100 BN1000 BN2000 BNX10	BC8105 BC8110 MBC010 MB810 MB8110	BXM10 BX310	KBN05M KBN10M KBN510	B5K B52	CB7105	KB5610	IB05H IB50 IB10HC	CH0550 CBN10 CBN100 CBN060K
	H10	KBN10N KBN20N KBN25N KBN5010	BNC2010 BNC2020 BNC160 BNC200 BN2000	BC8110 BC8120 MBC020 MB8025 MB8110 MB825	BXM10 BX330 BX530	KBN05M KBN25M KBN525	B5K B6K B52 B36	CB7015 CB7115 CB20	KBH20 KB5610 KB5625	IB10H IB55 IB25HA	CBN10 CBN100 CBN150 CBN060K CBN160C
	H20	KBN20N KBN25N KBN700 KBN610 KBN6020	BNC2020 BNC200 BNX20	BC8120. BC8020 MBC020 MB8025. MB8120	BXA20 BXM20 BX360	KBN30M KBN35M KBN900	B36 B40 B6K	CB7025 CB7125 CB50	KBH20 KB5625 KB5630	IB20H. IB20HC IB25H. IB25HC	CH2540 CBN150 CBN160C
	H30	KBN35N KBN610 KBN700 KBN710 KBN750 KBN7030	BNC300 BN350 BNX25	BC8130 MB8130 MB835	BXM20 BXA20 BXC50 BX380	KBN30M KBN35M KBN900	B40	CB7135 CB7525	KB5630	IB90	CH3515

PCD刀片厂家牌号对照表
Grade table of PCD

工件材料 Workpiece Material	分类代号 Code	各厂家牌号对照列表 Grade table of competitors and KOVES									
		科维丝 KOVES	住友 SUMITOMO	三菱 MITSUBISHI	泰珂洛 TUNGALOY	京瓷 KYOCERA	日本特 殊陶业 NTK	山特维克 SANDVIK	肯纳金属 KENNA METAL	伊斯卡 ISCAR	山高 SECO
N	N01	KPD01	DA1000 DA90	MD205	DX180 DX160	KPD001	PD1	CD05 CD01	KD1400	ID5	
	N10	KPD05 KCD05	DA1000 DA150	MD205 MD220	DX140	KPD001 KPD010 KPD230	PD2	CD1810	KD1400 KD1425	ID5	PCD05 PCD10
	N20	KPD10 KCD10	DA1000 DA2200	MD230 MD220	DX120 DX110	KPD230 KPD250	PD2		KD1400 KD1425		PCD05 PCD20
	N30	KPD25 KCD35	DA1000 DA2220	MD230 MD2030	DX110				KD1400		PCD05 PCD30 PCD30N



PCBN简介和特点

PCBN硬度仅次于金刚石和PCD，晶体结构和晶间排列相似，使其具有接近金刚石的硬度和抗压强度。

用PCBN材料制作的刀片具有极高的硬度以及良好的红硬性（可耐受1400~1500°C的高温）、抗氧化性（在1200~1300°C高温下不与铁系金属发生化学反应）和抗断裂韧性，是车削加工黑色金属材料的理想刀具。相比硬质合金和陶瓷刀具，PCBN导热性极好，同样车削条件下，PCBN刀具车削温度更低。

目前PCBN刀具已在加工淬硬钢、冷硬铸铁、热喷涂材料、纯镍等难加工材料和精密加工中得到广泛应用，并取得了显著的技术经济效益。

PCBN Introduction and Features

PCBN hardness is weaker than diamond and PCD only, Because of it's crystal structure and inter-crystalline arrangement, makes it closer to diamond hardness and compressive strength.

Blades made of PCBN material have extremely high hardness and good red hardness (tolerate high temperatures of 1400 to 1500°C), oxidation resistance (no chemical reaction with iron metals at temperatures of 1200 to 1300°C) and resistance Fracture toughness, It is the ideal tool for turning ferrous materials. Compared to cemented carbide and ceramic tools, PCBN has excellent thermal conductivity, and under the same turning conditions, PCBN tools have lower turning temperatures.

At present, PCBN tools have been widely used in machining hardened steels, chilled cast irons, thermal spray materials, pure nickel and other difficult to machined materials and precision machining, also it have achieved significant technical and economic benefits.

PCBN 适用加工材料

PCBN刀具主要适用于加工各种高硬材料（如冷作工具钢）、热作工具钢、高速钢、轴承钢、淬硬钢、粉末冶炼钢、粉末冶炼金属、马氏体不锈钢、高强度刚、高锰钢、白口铸铁、奥氏体软铁等）、软材料和耐磨材料（如灰口铸铁、烧结铁等）、难加工材料（如Inconel718、表面硬化合金、烧结WC、球墨铸铁、IGI等）。

Applicable processing materials

PCBN tool is mainly used for processing various high-hard materials (such as cold work tool steel), hot work tool steel, high speed steel, bearing steel, hardened steel, powder smelting steel, powder smelting metal, martensitic stainless steel, high-strength just, high manganese steel, white cast iron, austenitic soft iron, etc.), soft materials and wear-resistant materials (such as gray cast iron, sintered iron, etc.), hard-to-machine materials (such as Inconel 718, surface hardening alloy, sintered WC, Spheroidal Graphite cast iron, IGI, etc.).

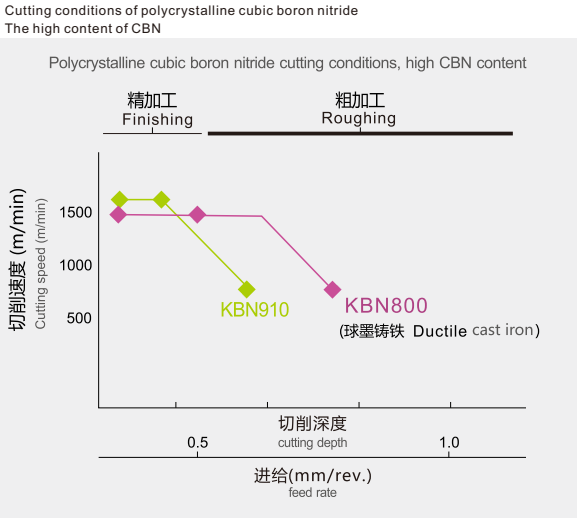


PCBN系列产品Inserts series

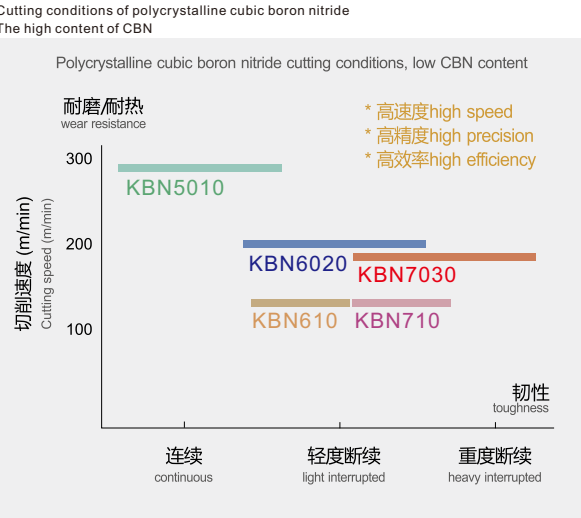
■ 背侧为硬质合金 Carbide on the back side
■ 中间为硬质合金 Carbide in the middle

	类型 Type	等级 Grade	特点 Features	应用 Application
高含量 CBN High CBN content	■	KBN1000	无结合材料，纳米~亚微米级的粒子直接结合，热传导率优良。 No binding material, nano- to sub-micron particles are directly bound, the thermal conductivity is excellent.	适合加工高温合金，难加工材料 Suitable for processing high temperature alloy, difficult to process materials
	■ ■	KBN900	高CBN含量、细颗粒、优秀的耐磨性与抗崩刃性 High CBN content, fine granule, excellent wear resistance and chipping resistance	适合加工各类铸铁和粉末金属合金 Suitable for various types of cast iron and powder metal alloys
	■ ■	KBN910	高CBN含量及金属结合剂、优秀的耐磨性 Suitable for processing all kinds of cast iron and powder metal alloys	适合加工各类铸铁 Suitable for processing all kinds of cast iron
	■ ■	KBN800	耐磨和耐热特性的结合 Combination of wear and heat resistance properties	适合加工非匀质铸铁 Suitable for processing non-homogeneous cast iron
低含量 CBN low CBN content	■ ■	KBN710	耐磨和抗冲击特性的结合 Combination of wear and impact resistance	适合重断续加工硬钢类 Suitable for heavy interrupted hard steel
	■	KBN7030	细颗粒CBN与陶瓷结合剂组合、优秀的韧性及抗冲击性 Fine granule CBN combined with ceramic binder for excellent toughness and impact resistance	适合淬火钢的中度断续及强断续加工 Suitable for medium and strong intermittent processing of hardened steel
	■ ■	KBN6020	CBN与结合剂分布均匀，优秀的热稳定性及耐磨损性能 The distribution of CBN and binder is uniform, Excellent thermal stability and wear resistance	适合淬火钢的弱断续及中度断续加工 Suitable for weak and medium intermittent processing of hardened steel
	■	KBN610	耐磨和耐热特性的结合 Combination of wear and heat resistance properties	广泛用于连续和轻度断续加工硬钢类 Widely used for continuous and light interrupted processing of hard steels
	■	KBN5010	杂质得到有效控制 优秀的热稳定性及耐磨损性能 Impurities are effectively controlled Excellent thermal stability and wear resistance	适合淬火钢的连续及弱断续加工 Suitable for continuous and weak discontinuous machining of hardened steel

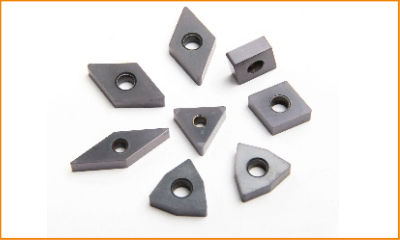
多晶立方氮化硼切削条件
高CBN含量



多晶立方氮化硼切削条件
低CBN含量



涂层PCBN刀片 Coating PCBN insert



■ 概要
The profile

由于采用了耐热性能优异的强韧CBN母材和特殊陶瓷涂层的组合，寿命比以往的CBN更高，并提高了加工精度。还有性价比优异的两面多角一次性刀片等应用范围广泛的产品形成系列，使用更轻松，更经济。此外，此次扩充了涂层CBN的刀尖式样，可有效进行高精度加工和抑制毛刺。

The strong and tough CBN base material with excellent heat resistance and special ceramic coating are used the combination of CBN, higher life than the previous, and improve the machining accuracy. There are cost-effective double-sided multi-angle disposable blades and other applications in a wide range product series, easier to use, more economic. In addition, the extension of the coating CBN tip pattern can be effectively carried out high precision machining and burr control.

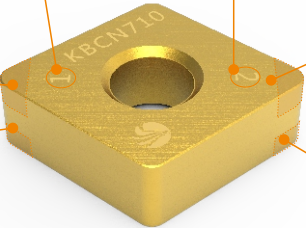
■ 特点
Features

两面焊有CBN
一次性刀片更具经济性
CBN is welded on both sides
Disposable blades are more economical

刀角管理简单
所有切刃后都标有编号
Tool Angle management is simple
All the cutting edges are numbered

牢固的焊接
采用新型焊接技术，强度提高
Solid welding
Adopting new welding technology, the strength is improved

特殊陶瓷涂层+
新开发CBN母材
实现了更长的寿命
Special ceramic coating +
Newly developed CBN base material
Longer life is achieved



■ 适用领域
Applicable fields

用途 use		条件 conditions	切削速度Vc (m/min) Cutting speed				
			100	200	300	400	500
淬 火 钢 Hardened steel	精 加 工 Finishing machining	通用 In common use 连续~弱断续 Continuous ~ weak intermittent (Rz=3.2以上)	KBCN5010 KBCN6020				
		强断续 Strong intermittent	KBCN7030				
		高精度 High precision (Rz=1.6~3.2)	KBCN6020 KBCN610				
		高效率 High efficiency (去除渗碳层) (Remove carburizing layer)	KBCN710 KBCN610				
铸 铁 Cast Iron		球墨铸铁 Nodular cast iron				KBCN800	

■ 已使用的刀角的管理
Used tool Angle management

使用前
Before using

使用后
After using

使用后刀角编码仍然清晰显示，可简单管理刀角。
涂 层色采用黑色，令用过的刀角鲜明可见。
After use, the insert angle code is still clearly displayed, which can easily manage the knife angle.
The coating color is black, so that the used corners are clearly visible.

材质介绍Material introduction

淬火钢切削

Hardened steel cutting

硬车-优势: Hard Turning – Advantages	系列	用途
以车代磨 Substitution of Grinding by Turning 降低生产成本 Decreased production costs 最小化投资Minimize investment 更高的工艺灵活性 Higher flexibility in manufacturing process 简化工艺流程 Simplify the process flow 环保Environmentally friendly	涂层PCBN	有加冷却液的工况 淬火钢加工首选 要求高效加工 要求高速高精度加工 Add coolant condition. Preferred for hardened steel processing. Demand efficient processing. High speed and high precision machining is Highired
	未涂层PCBN	低刚性加工 不能提高切削速度时的小零件加工 在加工多样硬质粒子材料时 Low rigidity machining Cannot improve the cutting speed when machining small parts In the processing of various hard particle materials

推荐材质The recommended material

	材质	结合材	含有率 %	粒度μm	硬度HV	抗折力Gpa	特点
涂层 coating	KBCN7030	TiCN	70-75	1	34-36	1.4-1.5	在强韧的母材上加上优秀的涂层，实现高效和长寿命 With excellent coating on strong base material, high efficiency and long life are achieved
	KBCN710	TiN	65-70	2	33-35	1.5-1.6	在强韧的母材上结合耐磨涂层，实现加工寿命长 The strong base material is combined with wear-resistant coating to achieve long processing life
	KBCN6020	TiN	60-65	2	31-33	1.2-1.3	在淬火钢的精加工时保持稳定的高精度 Maintain stable and high precision in the finishing of hardened steel
	KBCN610	TiN	55-60	2	31-33	1.2-1.3	优秀的耐磨损性涂层，实现稳定的加工 Excellent wear-resistant coating for stable processing
	KBCN5010	TiCN	50-55	1	30-32	1.1-1.2	提高涂层的和母材的耐磨损性，实现优良的表面粗糙度 Improve the abrasion resistance of coating and base material to achieve excellent surface roughness
无涂层 No coating	KBN7030	TiCN	70-75	1	34-36	1.4-1.5	淬火钢通用加工，优秀的抗崩损性和耐磨性 Hardened steel general processing, excellent resistance to breakage and wear resistance
	KBN710	TiN	65-70	2	33-35	1.5-1.6	优良的刀头强度，适用于断续加工 Excellent blade strength, suitable for intermittent machining
	KBN6020	TiN	60-65	2	31-33	1.2-1.3	优良的耐月牙洼磨损性，适用高效率加工 Excellent crescent depression wear resistance, suitable for high efficiency processing
	KBN610	TiN	55-60	2	31-33	1.2-1.3	通用材质，兼备了耐磨损性 Universal material with wear resistance
	KBN5010	TiCN	50-55	1	30-32	1.1-1.2	优秀的耐磨损性，适合高速连续加工 Excellent wear resistance, suitable for high-speed continuous machining

推荐切削条件表
Recommended Cutting Conditions

切削工况 Applications	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
		Vc(m/min)	f(mm/rev)	ap(mm)
连续切削	KBN5010	110-180-300	0.03-0.10-0.20	0.03-0.20-0.35
一般切削	KBN610	50-100-160	0.03-0.20-0.40	0.03-0.20-0.35
	KBN6020	80-160-200	0.03-0.10-0.20	0.03-0.20-0.35
断续切削	KBN710	50-100-150	0.03-0.10-0.20	0.03-0.20-0.35
	KBN7030	60-100-180	0.03-0.10-0.20	0.03-0.20-0.35

材质介绍Material introduction

铸铁切削

Cast iron cutting

科维丝CBN刀具特点: Koves CBN tool features:
1,立方氮化硼材料的结构属于立方结构，分子的原子与氮原子立方结构，原子间距小，使得立方氮化硼非常稳定，具有高硬度的特质， 2,立方氮化硼两种元素与铁没有亲和，不发生反应， 3,采用高强CBN微米结合多种微量元素的刀具材料，已形成类似于花键牛肉的超均匀分布的复合材料， 具有高硬度的同时还具有耐高温抗崩性好等，集各种优势于一身的刀具材料。 1. The structure of cubic boron nitride material belongs to the cubic structure. The molecular atoms and nitrogen atoms have the cubic structure, and the atomic spacing is small, which makes cubic boron nitride very stable and has the characteristics of high hardness. 2. The two elements of cubic boron nitride have no affinity with iron and do not react. 3, the use of high strength CBN micron tool materials combined with a variety of trace elements, has formed similar to spline beef ultra-uniform distribution of composite materials, With high hardness, but also has good high temperature resistance and collapse resistance, etc., set a variety of advantages in a tool material.

推荐材质The recommended material

	材质 The material	结合材 Combined with the material	含有率 % Containing rate%	粒度μm Granularity micronsum	硬度HV HV hardness	抗折力Gpa Gpa bending force	特点 Features
无涂层 No coating	KBN910	TiN	90-95	2	41-44	1.8-1.9	高硬度、高抗弯强度、高耐温性 High hardness, high bending strength, high temperature resistance
	KBN950	TiN	95-98	2	44-45	1.9-2.0	适合铸铁加工用，耐磨损性与耐崩损性优异的材质 Suitable for cast iron processing, excellent abrasion resistance and collapse resistance material
涂层 coating	KBCN800	TiN	85-90	4	39-42	1.0-1.1	耐磨损性优良的母材和涂层，适合加工难切削铸铁材质 Base material and coating with excellent abrasion resistance, suitable for hard cutting cast iron

推荐切削条件表
Recommended Cutting Conditions

加工类型	工件材料 Workpiece Materials	布氏硬度 Brinell hardness HB	材质牌号 Grade	切削速度推荐值 Recommended Cutting Speed		
				Vc(m/min)	f(mm/rev)	ap(mm)
车削	灰口铸铁 Gray cast iron	<230	KBN910	500-2000(650)	0.1-1.0	<5.0
			KBN980	500-2000	0.1-1.0	<5.0
			KBCN800	200-1000	0.1-0.5	<3.0
	合金铸铁 Alloy cast iron	>200	KBN950	200-800	0.1-0.4	<3.0
			KBCN800	200-1000	0.1-0.6	<3.0
铣削	球墨铸铁 Nodular cast iron	QT450-QT550 QT600-QT700	KBN980	80-200	0.1-0.4	<3.0
			KBCN800	150-400	0.1-0.4	<0.5
	灰口铸铁 Gray cast iron	HT200-HT300 (HB<200)	KBN910	800-2000	0.1-1.0	<5.0
			KBN980	800-2000	0.1-1.0	<5.0

淬火钢加工用PCBN涂层刀片

PCBN coated inserts for hardened steel

P M K N S H

材质 **KBCN7030/KBCN6020/KBCN5010**



致力于高精度，高效加工

支持高精度加工，能够长时间保持优异的尺寸精度和表面粗糙度；

通过耐磨损的优异涂层，实现了CBN刀片的长寿命，发挥了优异的切削性能！

Committed to high precision, efficient processing

Support high precision machining, can maintain excellent dimensional accuracy and long time

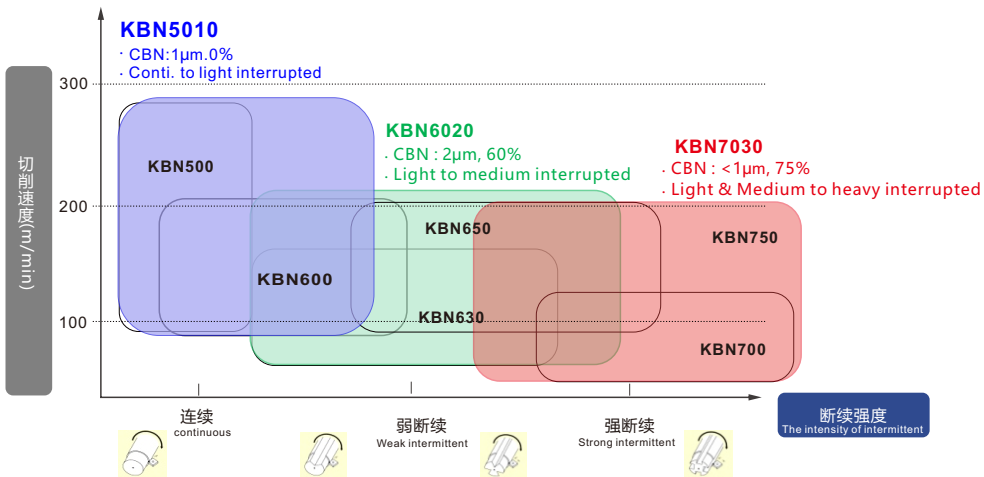
Surface roughness;

Long life of CBN blade is achieved through excellent wear-resistant coating,

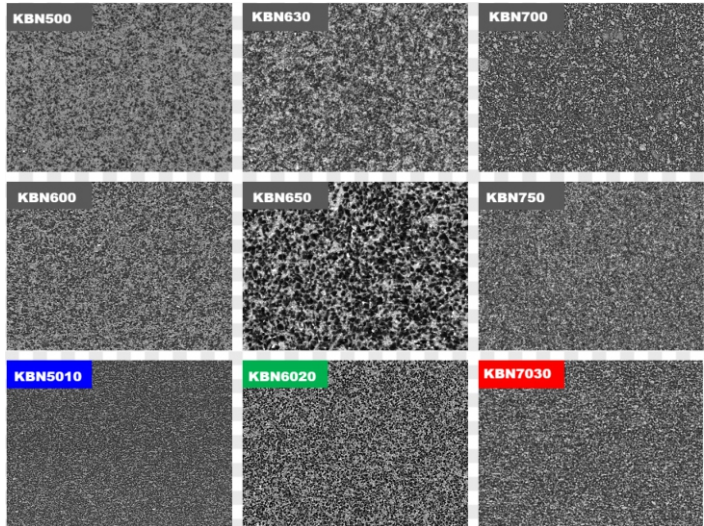
Play the excellent cutting performance!

适应领域 Areas of adaptation :

耐磨损性/耐热性
Abrasion resistance/heat resistance



组织比较 Organization comparison :

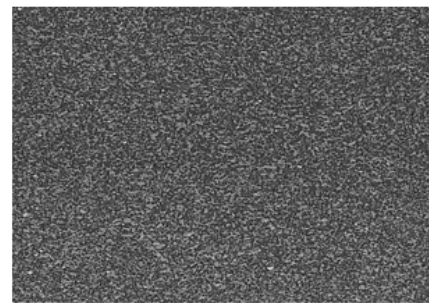


KBN5010/KBCN5010

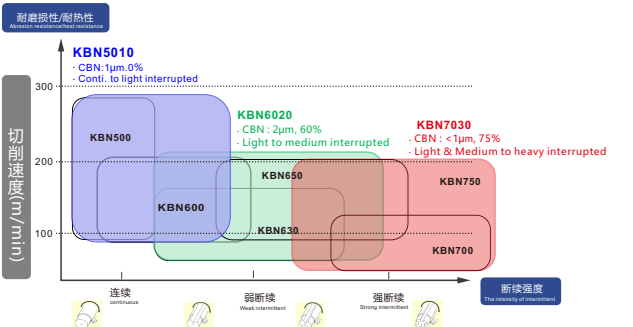
特点 Features:

Grade	Grain Size(?)	CBN (vol.%)	Binder	Characteristics & Applications
KBN5010	<1	50	TiCN	CBN与结合剂分散均匀 & 杂质得到有效控制。CBN Disperse evenly with binder. Impurities are effectively controlled. 优秀的热稳定性及耐磨损性能。Excellent thermal stability and wear resistance. 适用于淬火钢的连续及弱断续切削。Suitable for continuous and weak discontinuous cutting of hardened steel. 适合加工轴、齿轮、轴承零件等。Suitable for machining shaft, gear, bearing parts, etc.

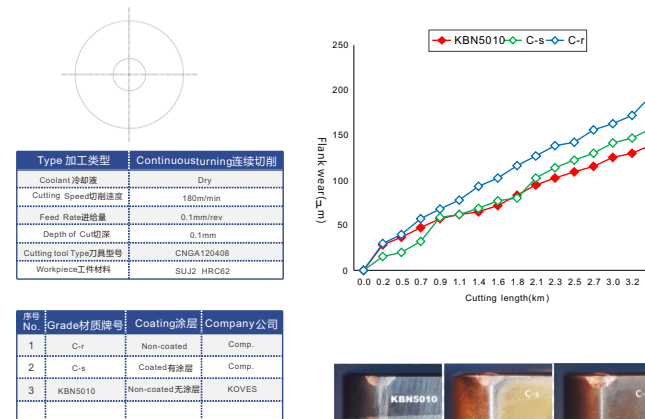
微观结构 Microstructure :



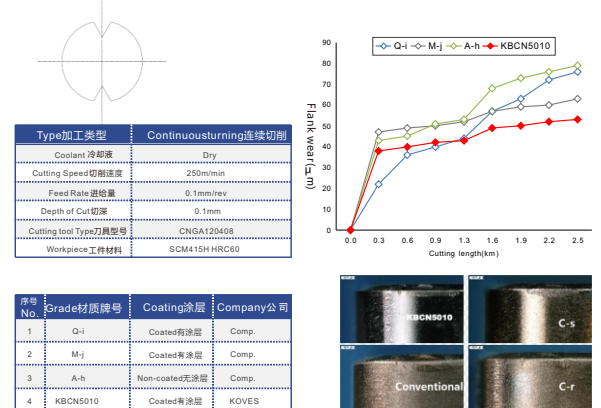
适用范围 Scope of application :



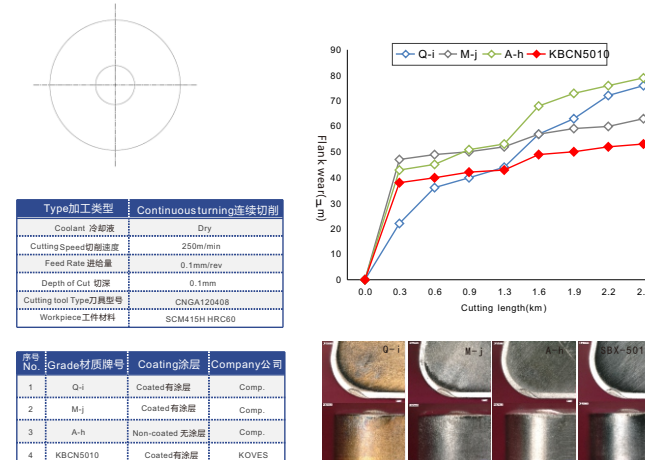
测试报告一 Test Report :



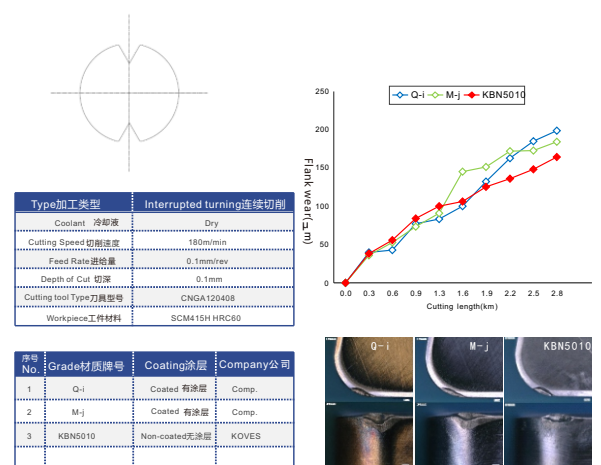
测试报告二 Test Report :



测试报告三 Test Report :



测试报告四 Test Report :

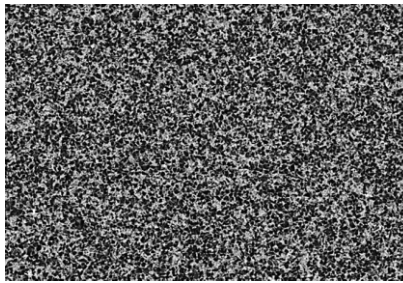


KBN6020/KBCN6020

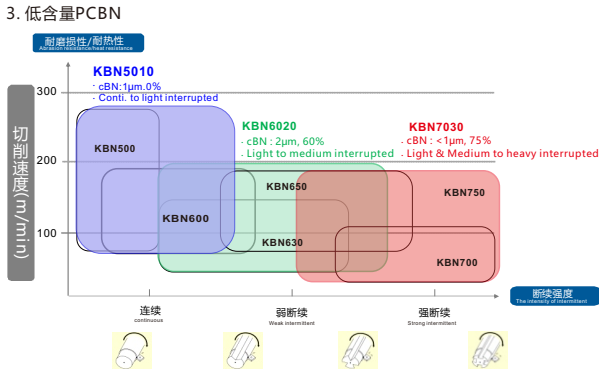
特点Features:

Grade	Grain Size (μm)	CBN (vol.%)	Binder	Characteristics & Applications
KBN6020	2	60	TiN	CBN与结合剂分布均匀 & 杂质得到有效控制。 优秀的热稳定性及耐磨损性能。 适用于淬火钢的弱断续及中度断续加工。 适合加工轴、齿轮等。 CBN and binder evenly distributed Impurities are effectively controlled. Excellent thermal stability and wear resistance. Suitable for weak and medium intermittent processing of hardened steel. Suitable for machining shaft, gear, etc.

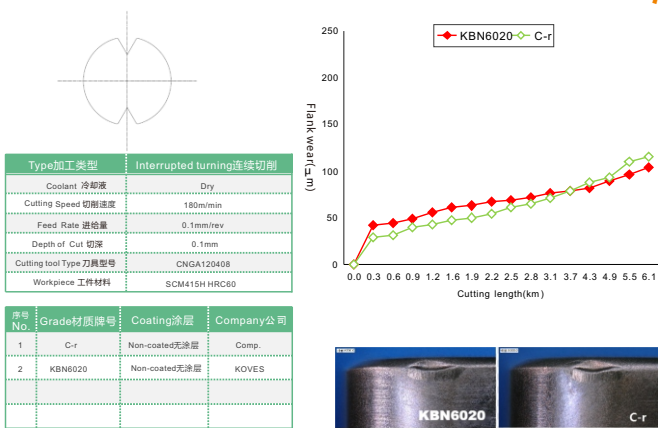
微观结构Microstructure:



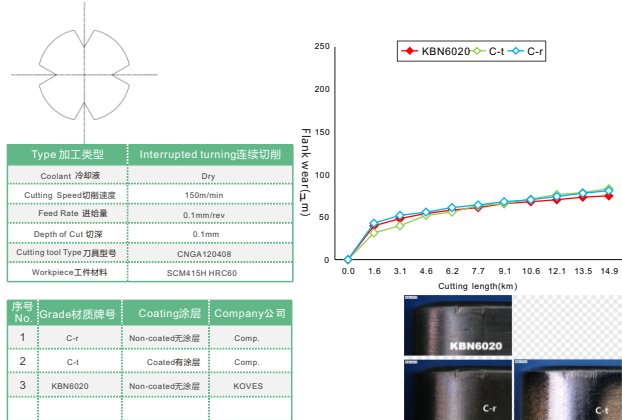
适用范围Scope of application:



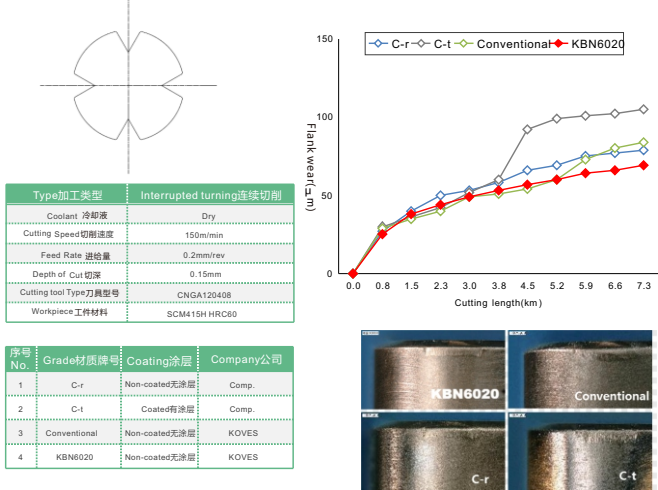
测试报告一Test Report:



测试报告二Test Report:



测试报告三Test Report:

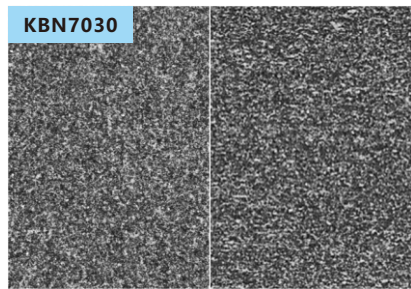


KBN7030/KBCN7030

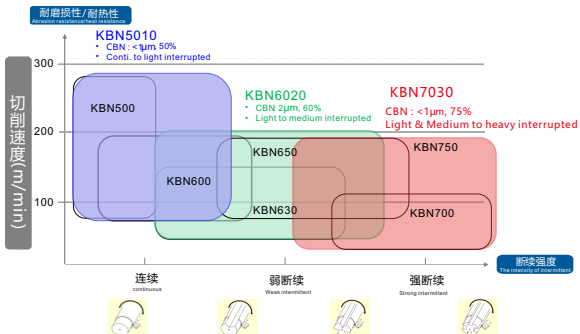
特点Features:

Grade	Grain Size (μm)	CBN (vol.%)	Characteristics & Applications
KBN7030	< 1	75	精细CBN颗粒与陶瓷结合剂相结合大大提升了材料的韧性。 适用于淬火钢的中度断续及强断续加工。适合轴及齿轮等断续加工。 fine combination of particles and ceramic binder greatly improves the toughness of the material. Suitable for medium and strong discontinuous machining of hardened steel. Suitable for shaft and gear discontinuous processing.

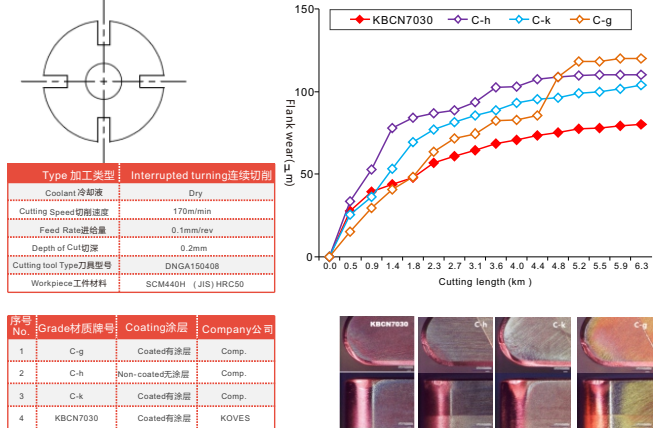
微观结构Microstructure:



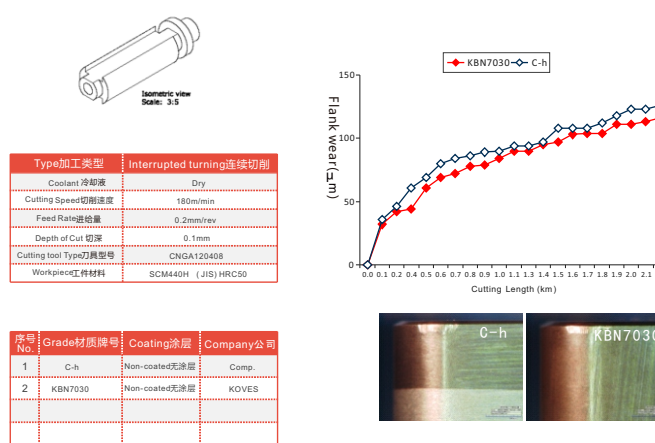
适用范围Scope of application:



测试报告一Test Report:

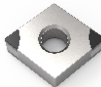


测试报告二Test Report:



刀片编号说明
Insert Identification System

4- 刃数 Flute/Edge	NU 1	C 2	N 3	M 4	G 5	12 6
------------------------	---------	--------	--------	--------	--------	---------

1 焊接 型式 Welding type	2 刀片形状 Insert shape		3 刀片后角 Insert clearance angle	4 精度代号 Tolerance																																																																																																																																																														
NU: 镶嵌式 Multi-cornered Single-use Type 	A 85° B 82° K 55°		 a <table><tr><td>A</td><td>3°</td></tr><tr><td>B</td><td>5°</td></tr><tr><td>C</td><td>7°</td></tr><tr><td>D</td><td>15°</td></tr><tr><td>E</td><td>20°</td></tr><tr><td>F</td><td>25°</td></tr><tr><td>G</td><td>30°</td></tr><tr><td>N</td><td>0°</td></tr><tr><td>P</td><td>11°</td></tr><tr><td>O</td><td>特殊 Special</td></tr></table>	A	3°	B	5°	C	7°	D	15°	E	20°	F	25°	G	30°	N	0°	P	11°	O	特殊 Special	<table><tr><th></th><th>d (±mm)</th><th>m (±mm)</th><th>s (±mm)</th><th>d=6.3/9.5/25</th><th>d=12.7</th><th>d=15.8/19.0/5</th></tr><tr><td>A</td><td>0.025</td><td>0.005</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>C</td><td>0.025</td><td>0.013</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>E</td><td>0.025</td><td>0.025</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>F</td><td>0.013</td><td>0.005</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>G</td><td>0.025</td><td>0.025</td><td>0.130</td><td>•</td><td>•</td><td>•</td></tr><tr><td>H</td><td>0.013</td><td>0.013</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>J</td><td>0.050</td><td>0.05</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td rowspan="3">K</td><td>0.050</td><td>0.013</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.080</td><td>0.013</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.100</td><td>0.013</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td rowspan="3">M</td><td>0.05</td><td>0.08</td><td>0.13</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.08</td><td>0.13</td><td>0.13</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.10</td><td>0.15</td><td>0.13</td><td>•</td><td>•</td><td>•</td></tr><tr><td rowspan="3">N</td><td>0.05</td><td>0.08</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.08</td><td>0.13</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.10</td><td>0.15</td><td>0.025</td><td>•</td><td>•</td><td>•</td></tr><tr><td rowspan="3">U</td><td>0.08</td><td>0.13</td><td>0.13</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.13</td><td>0.20</td><td>0.13</td><td>•</td><td>•</td><td>•</td></tr><tr><td>0.18</td><td>0.27</td><td>0.13</td><td>•</td><td>•</td><td>•</td></tr></table>								d (±mm)	m (±mm)	s (±mm)	d=6.3/9.5/25	d=12.7	d=15.8/19.0/5	A	0.025	0.005	0.025	•	•	•	C	0.025	0.013	0.025	•	•	•	E	0.025	0.025	0.025	•	•	•	F	0.013	0.005	0.025	•	•	•	G	0.025	0.025	0.130	•	•	•	H	0.013	0.013	0.025	•	•	•	J	0.050	0.05	0.025	•	•	•	K	0.050	0.013	0.025	•	•	•	0.080	0.013	0.025	•	•	•	0.100	0.013	0.025	•	•	•	M	0.05	0.08	0.13	•	•	•	0.08	0.13	0.13	•	•	•	0.10	0.15	0.13	•	•	•	N	0.05	0.08	0.025	•	•	•	0.08	0.13	0.025	•	•	•	0.10	0.15	0.025	•	•	•	U	0.08	0.13	0.13	•	•	•	0.13	0.20	0.13	•	•	•	0.18	0.27	0.13	•	•	•
	A	3°																																																																																																																																																																
	B	5°																																																																																																																																																																
C	7°																																																																																																																																																																	
D	15°																																																																																																																																																																	
E	20°																																																																																																																																																																	
F	25°																																																																																																																																																																	
G	30°																																																																																																																																																																	
N	0°																																																																																																																																																																	
P	11°																																																																																																																																																																	
O	特殊 Special																																																																																																																																																																	
	d (±mm)	m (±mm)	s (±mm)	d=6.3/9.5/25	d=12.7	d=15.8/19.0/5																																																																																																																																																												
A	0.025	0.005	0.025	•	•	•																																																																																																																																																												
C	0.025	0.013	0.025	•	•	•																																																																																																																																																												
E	0.025	0.025	0.025	•	•	•																																																																																																																																																												
F	0.013	0.005	0.025	•	•	•																																																																																																																																																												
G	0.025	0.025	0.130	•	•	•																																																																																																																																																												
H	0.013	0.013	0.025	•	•	•																																																																																																																																																												
J	0.050	0.05	0.025	•	•	•																																																																																																																																																												
K	0.050	0.013	0.025	•	•	•																																																																																																																																																												
	0.080	0.013	0.025	•	•	•																																																																																																																																																												
	0.100	0.013	0.025	•	•	•																																																																																																																																																												
M	0.05	0.08	0.13	•	•	•																																																																																																																																																												
	0.08	0.13	0.13	•	•	•																																																																																																																																																												
	0.10	0.15	0.13	•	•	•																																																																																																																																																												
N	0.05	0.08	0.025	•	•	•																																																																																																																																																												
	0.08	0.13	0.025	•	•	•																																																																																																																																																												
	0.10	0.15	0.025	•	•	•																																																																																																																																																												
U	0.08	0.13	0.13	•	•	•																																																																																																																																																												
	0.13	0.20	0.13	•	•	•																																																																																																																																																												
	0.18	0.27	0.13	•	•	•																																																																																																																																																												
N: 贯穿式 Sandwich Type 	L 90° O 135° P 108° C 80° D 55° E 75° M 86° V 35°	   		  																																																																																																																																																														
F: 整面式 Full face type 	R - S 90° T 60° W 80°	   																																																																																																																																																																
无: 整体式 Solid Type 																																																																																																																																																																		

5 切削槽及夹固形式 Chip-breaker and clamp type	
R   无中心孔 Without hole	Q  圆柱孔 + 双面倒角 40°~60° Cylindrical hole+double countersink
F   无中心孔 Without hole	C  圆柱孔 + 双面倒角 70°~90° Cylindrical hole+double countersink
N   无中心孔 Without hole	G  圆柱孔 Cylindrical hole
A   圆柱孔 Cylindrical hole	T   圆柱孔 + 单面倒角 40°~60° Cylindrical hole+ countersink
M   圆柱孔 Cylindrical hole	H   圆柱孔 + 单面倒角 70°~90° Cylindrical hole+ countersink
U   圆柱孔 + 双面倒角 40°~60° Cylindrical hole+double countersink	W   圆柱孔 + 单面倒角 40°~60° Cylindrical hole+ countersink
J   圆柱孔 + 双面倒角 70°~90° Cylindrical hole+double countersink	B   圆柱孔 + 单面倒角 70°~90° Cylindrical hole+ countersink
X 特殊设计 Special	

6 切削刃长度 Insert size									
d mm	C	D	R	S	T	V	W		
									
5.56	05	-	-	05	09	-	03		
6.0		-	06	-	-	-	-		
6.35	06	07	-	06	11	11	04		
6.65	-	-	-	-	-	-	-		
7.94	07	-	-	07	-	-	-		
8.0	-	-	08	-	-	-	-		
9.525	09	11	-	09	16	16	06		
10.0	-	-	10	-	-	-	-		
12.0	-	-	12	-	-	-	-		
12.7	12	15	-	12	22	22	08		
15.875	16	19	-	15	27	-	10		
16.0	-	-	16	-	-	-	-		
16.74	-	-	-	16	-	-	-		
19.05	19	-	-	19	33	-	13		
20.0	-	-	20	-	-	-	-		
25.4	25	-	25	25	-	-	-		

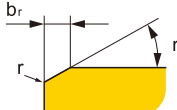
04 7	04 8	S 9	02020 10	95Z025 11	KBN 12
---------	---------	--------	-------------	--------------	-----------

7 刀片厚度 S(mm) Insert thickness
 01 S=1.59 T1 S=1.98 02 S=2.38 03 S=3.18 T3 S=3.97 04 S=4.76 05 S=5.56 06 S=6.35 07 S=7.94 09 S=9.52 

9 刃口形式 Cutting Edge Type
T 倒角 Chamfer 
S 倒角加倒圆 Chamfer and Honing 
FA 带断屑槽型 Chip breaker Type 

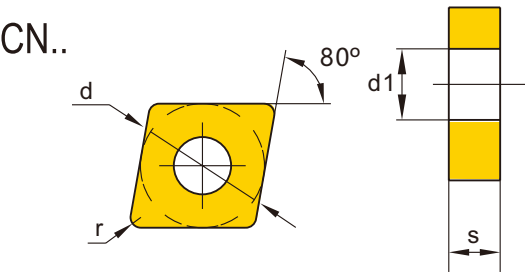
11修光刃角度 Trim edge Angle			
Kr 主偏角 The main Angle		修光刃角度 Trim edge Angle	
75	75°	025	0.25mm
85	85°	050	0.50mm
95	95°	075	0.75mm
		100	1.0mm

8 刀尖圆角半径 R Corner radius
 R 02 0.2 04 0.4 05 0.5 08 0.8 12 1.2 16 1.6 20 2.0 24 2.4 32 3.2 圆形刀片 Round insert 00 内切圆 (英制) Inch M0 内切圆 (公制) Metric

10 倒角形式 Chamfer type
 br rs r 倒角宽度Br以1/100mm表示, 角度Rs不带“°” The chamfering width Br is expressed as 1/100mm. Angle Rs does not have "°." 举例 Examples 0.10X20°X r0.03=0102003 0.05X20°X r0.02=0052002

12 材质 Materials
KBN 聚方氮化硼 PCBN Poly square boron nitride PCBN
KBCN 涂层聚方氮化硼 PCBN + Coated Coating polysquare boron nitride PCBN + Coated
KPD 聚晶金刚石 PCD Polycrystalline diamond PCD

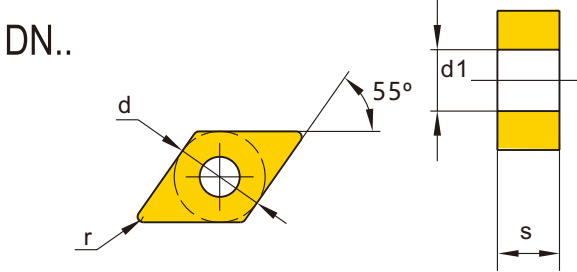
PCBN Inserts
PCBN刀片



型号 Model	尺寸Size (mm)		
	d	s	d1
CN..0903..	9.525	3.18	3.18
CN..1204..	12.7	4.76	5.16
4N-CN..1206..	12.7	6.00	5.16
CN..1606..	16.1	6.35	6.35
CN..1906..	19.05	6.35	7.94
CN..2509..	25.4	9.53	9.12

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S01525	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	4NU-CNGA120404	0.4	○	○			●		●				
	4NU-CNGA120408	0.8	○	○			●		●				
	4NU-CNGA120412	1.2	○	○			●		●				
	4NU-CNGA160612	1.2											
	2NU-CNGA120404	0.4	○	○			●		●	○	○	○	○
	2NU-CNGA120408	0.8	○	○			●		●	○	○	○	○
	2NU-CNGA120412	1.2	○	○			●		●	○	○	○	○
	2NU-CNGA160612	1.2											
	1NU-CNGA120404	0.4	○	○			●						
	1NU-CNGA120408	0.8	○	○			●						
	1NU-CNGA120412	1.2	○	○			●						
	4NR-CNGA120408	0.8	○				●						
	4NR-CNGA120412	1.2	○				●						
	4NR-CNGA160612	1.2	○				●						
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★
★ 首选Preferred		☆ 可选optional		● 标准库存standard stock				○ 订单生产order production					

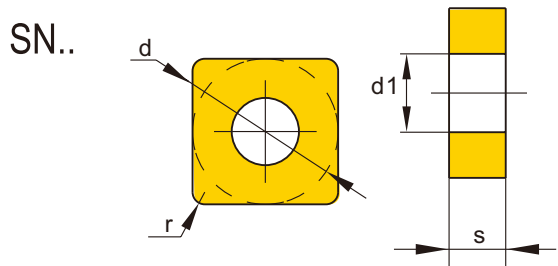
PCBN Inserts
PCBN刀片



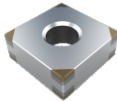
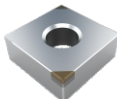
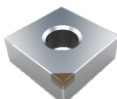
型号 Model	尺寸Size (mm)		
	d	s	d1
DN..1104..	9.525	4.76	3.81
DN..1504..	12.7	4.76	5.16
DN..1506..	12.7	6.35	5.16
4N-DN..1506	12.7	6.00	5.16

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S01525	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	4NU-DNGA150404	0.4	○	○			●		●				
	4NU-DNGA150408	0.8	○	○			●		●				
	4NU-DNGA150412	1.2	○	○			●		●				
	4NU-DNGA150604	0.4	○	○			●		●				
	4NU-DNGA150608	0.8	○	○			●		●				
	4NU-DNGA150612	1.2	○	○			●		●				
	2NU-DNGA150404	0.4	○	○			●		●	○	○	○	○
	2NU-DNGA150408	0.8	○	○			●		●	○	○	○	○
	2NU-DNGA150412	1.2	○	○			●		●	○	○	○	○
	2NU-DNGA150604	0.4	○	○			●		●	○	○	○	○
	2NU-DNGA150608	0.8	○	○			●		●	○	○	○	○
	2NU-DNGA150612	1.2	○	○			●		●	○	○	○	○
	1NU-DNGA150404	0.4	○	○			●		●				
	1NU-DNGA150408	0.8	○	○			●		●				
	1NU-DNGA150412	1.2	○	○			●		●				
	1NU-DNGA150604	0.4	○	○			●		●				
	1NU-DNGA150608	0.8	○	○			●		●				
	1NU-DNGA150612	1.2	○	○			●		●				
	4NR-DNGA150404	0.4	○				●						
	4NR-DNGA150408	0.8	○				●						
	4NR-DNGA150608	0.8	○				●						
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★
★ 首选Preferred		☆ 可选optional		● 标准库存standard stock				○ 订单生产order production					

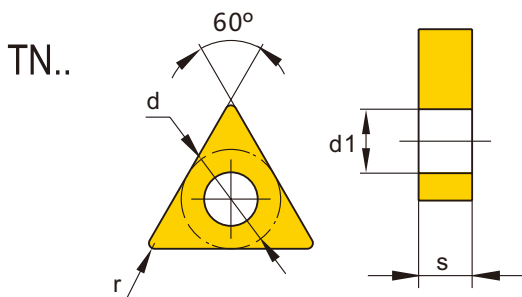
PCBN Inserts
PCBN刀片



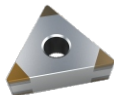
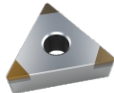
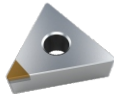
型号 Model	尺寸Size (mm)		
	d	s	d1
SN..1204..	12.7	4.76	5.16
SN..1506..	15.88	7.94	6.35
SN..1906..	19.05	6.35	7.94
SN..2509..	25.4	9.53	9.12

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S01525	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	4NU-SNGA120404	0.4	○	○			●		●				
	4NU-SNGA120408	0.8	○	○			●		●				
	4NU-SNGA120412	1.2	○	○			●		●				
	2NU-SNGA120404	0.4	○	○			●		●	○	○	○	○
	2NU-SNGA120408	0.8	○	○			●		●	○	○	○	○
	2NU-SNGA120412	1.2	○	○			●		●	○	○	○	○
	1NU-SNGA120404	0.4	○	○			●		●				
	1NU-SNGA120408	0.8	○	○			●		●				
	1NU-SNGA120412	1.2	○	○			●		●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★
★ 首选Preferred ☆ 可选optional		● 标准库存standard stock ○ 订单生产order production											

PCBN Inserts
PCBN刀片



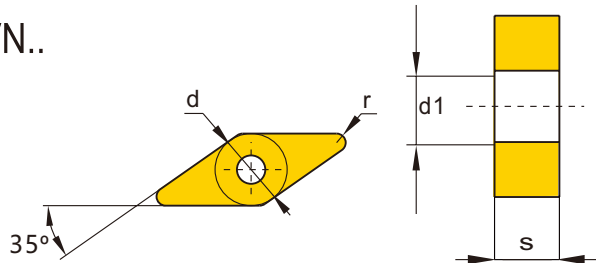
型号 Model	尺寸Size (mm)		
	d	s	d1
TN..1604..	9.525	4.76	3.81
TN..2204..	12.7	4.76	5.16
6N-TN..2206..	12.7	6.00	5.16

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S01525	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	6NU-TNGA160404	0.4	○	○			●		●	○	○	○	○
	6NU-TNGA160408	0.8	○	○			●		●	○	○	○	○
	6NU-TNGA160412	1.2	○	○			●		●	○	○	○	○
	3NU-TNGA160404	0.4	○	○			●		●	○	○	○	○
	3NU-TNGA160408	0.8	○	○			●		●	○	○	○	○
	3NU-TNGA160412	1.2	○	○			●		●	○	○	○	○
	1NU-TNGA160404	0.4	○	○			●		●				
	1NU-TNGA160408	0.8	○	○			●		●				
	1NU-TNGA160412	1.2	○	○			●		●				
	6NR-TNGA160404	0.4	○				●						
	6NR-TNGA160408	0.8	○				●						
	6NR-TNGA220612	1.2	○				●						
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

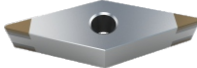
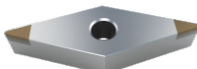
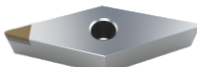
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

VN..

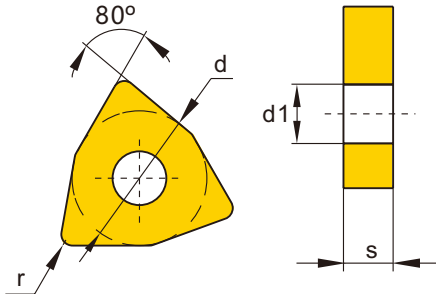


型号 Model	尺寸Size (mm)		
	d	s	d1
VN..1604..	9.525	4.76	3.81
4N-VN..1606..	9.525	6.0	3.81

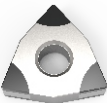
刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S01525	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	4NU-VNGA160404	0.4	○	○			●		●	○	○	○	○
	4NU-VNGA160408	0.8	○	○			●		●	○	○	○	○
	4NU-VNGA160412	1.2	○	○			●		●	○	○	○	○
	2NU-VNGA160404	0.4	○	○			●		●	○	○	○	○
	2NU-VNGA160408	0.8	○	○			●		●	○	○	○	○
	2NU-VNGA160412	1.2	○	○			●		●	○	○	○	○
	1NU-VNGA160404	0.4	○	○			●		●				
	1NU-VNGA160408	0.8	○	○			●		●				
	1NU-VNGA160412	1.2	○	○			●		●				
	4NR-VNGA160404	0.4	○	○			●						
	4NR-VNGA160408	0.8	○	○			●						
	4NR-VNGA160608	1.2	○	○			●						
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

PCBN Inserts
PCBN刀片

WN..

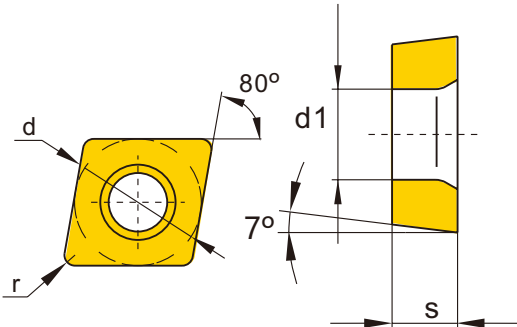


型号 Model	尺寸Size (mm)		
	d	s	d1
WN..0604..	9.525	4.76	3.81
WN..0804..	12.7	4.76	5.16
6N-WN..0806..	12.7	6.0	5.16

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S01525	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	6NU-WNGA080404	0.4	○	○			●		●				
	6NU-WNGA080408	0.8	○	○			●		●				
	6NU-WNGA080412	1.2	○	○			●		●				
													
	3NU-WNGA080404	0.4	○	○			●		●	○	○	○	○
	3NU-WNGA080408	0.8	○	○			●		●	○	○	○	○
	3NU-WNGA080412	1.2	○	○			●		●	○	○	○	○
													
	1NU-WNGA080404	0.4	○	○			●		●				
	1NU-WNGA080408	0.8	○	○			●		●				
	1NU-WNGA080412	1.2	○	○			●		●				
													
	6NR-WNGA080408	0.8	○				●						
	6NR-WNGA080412	1.2	○				●						
	6NR-WNGA080608	0.8	○				●						
	6NR-WNGA080612	1.2	○				●						
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

PCBN Inserts
PCBN刀片

CC..

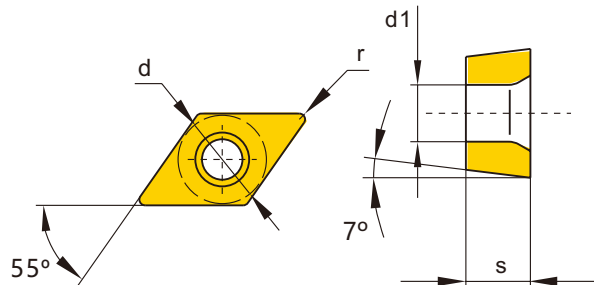


型号 Model	尺寸Size (mm)		
	d	s	d1
CC..0301..	3.5	1.4	1.9
CC..0401..	4.3	1.8	2.3
CC..0602..	6.35	2.38	2.8
CC..09T3..	9.525	3.97	4.4
CC..1204..	12.7	4.76	5.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2NU-CCGW060202	0.2	○	○			●		●	○	○	○	○
	2NU-CCGW060204	0.4	○	○			●		●	○	○	○	○
	2NU-CCGW060208	0.8	○	○			●		●	○	○	○	○
	2NU-CCGW09T302	0.2	○	○			●		●	○	○	○	○
	2NU-CCGW09T304	0.4	○	○			●		●	○	○	○	○
	2NU-CCGW09T308	0.8	○	○			●		●	○	○	○	○
	1NU-CCGW030102	0.2	○	○			●		●				
	1NU-CCGW030104	0.4	○	○			●		●				
	1NU-CCGW040102	0.2	○	○			●		●				
	1NU-CCGW040104	0.4	○	○			●		●				
	1NU-CCGW060202	0.2	○	○			●		●				
	1NU-CCGW060204	0.4	○	○			●		●				
	1NU-CCGW060208	0.8	○	○			●		●				
	1NU-CCGW09T302	0.2	○	○			●		●				
	1NU-CCGW09T304	0.4	○	○			●		●				
	1NU-CCGW09T308	0.8	○	○			●		●				
	T2NU-CCGW060202	0.2	○	○			●	●	●				
	T2NU-CCGW060204	0.4	○	○			●	●	●				
	T2NU-CCGW060208	0.8	○	○			●	●	●				
	T2NU-CCGW09T302	0.2	○	○			●	●	●				
	T2NU-CCGW09T304	0.4	○	○			●	●	●				
	T2NU-CCGW09T308	0.8	○	○			●	●	●				
铸铁Cast Iron			★	★	★	★							
耐热合金Heat Resistant Alloy				☆									
淬硬钢Hardened Steel									★	★	★	★	★
		★ 首选Preferred	☆ 可选optional		● 标准库存standard stock								

PCBN Inserts
PCBN刀片

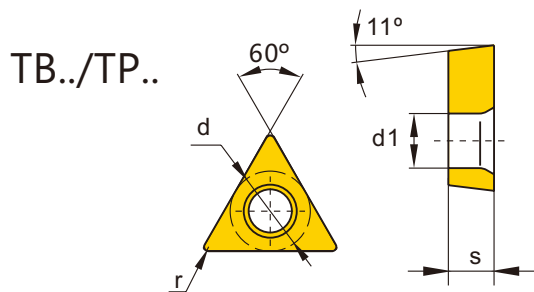
DC..



型号 Model	尺寸Size (mm)		
	d	s	d1
DC..0702..	6.35	2.38	2.8
DC..11T3..	9.525	3.97	4.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2NU-DCGW070202	0.2	○	○			●		●	○	○	○	○
	2NU-DCGW070204	0.4	○	○			●		●	○	○	○	○
	2NU-DCGW070208	0.8	○	○			●		●	○	○	○	○
	2NU-DCGW11T302	0.2	○	○			●		●	○	○	○	○
	2NU-DCGW11T304	0.4	○	○			●		●	○	○	○	○
	2NU-DCGW11T308	0.8	○	○			●		●	○	○	○	○
	1NU-DCGW070202	0.2	○	○			●		●				
	1NU-DCGW070204	0.4	○	○			●		●				
	1NU-DCGW070208	0.8	○	○			●		●				
	1NU-DCGW11T302	0.2	○	○			●		●				
	1NU-DCGW11T304	0.4	○	○			●		●				
	1NU-DCGW11T308	0.8	○	○			●		●				
铸铁Cast Iron			★	★	★	★							
耐热合金Heat Resistant Alloy				☆									
淬硬钢Hardened Steel									★	★	★	★	★
		★ 首选Preferred	☆ 可选optional		● 标准库存standard stock								

PCBN Inserts
PCBN刀片

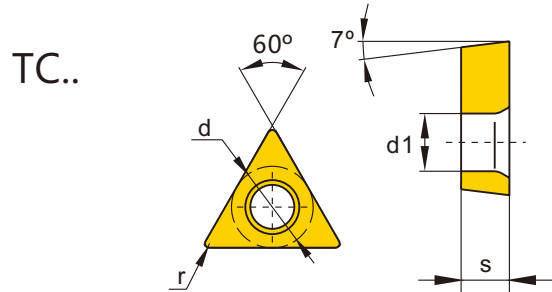


型号 Model	尺寸Size (mm)		
	d	s	d1
TB..0601..	3.97	1.59	2.3
TP..0802..	4.76	2.38	2.3
TP..0902..	5.56	2.38	3.0
TP..1102..	6.35	2.38	3.5
TP..1103..	6.35	3.18	3.5
TP..16T3..	9.525	3.18	4.5

刀片外形 Insert shape	型号 Model	r	刀片材质及适用加工材料 Insert grades and application										
			倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	3NU-TPGW080202	0.2	○	○			●		●	○	○	○	○
	3NU-TPGW080204	0.4	○	○			●		●	○	○	○	○
	3NU-TPGW090202	0.2	○	○			●		●	○	○	○	○
	3NU-TPGW090204	0.4	○	○			●		●	○	○	○	○
	3NU-TPGW110302	0.2	○	○			●		●	○	○	○	○
	3NU-TPGW110304	0.4	○	○			●		●	○	○	○	○
	3NU-TPGW16T302	0.2	○	○			●		●	○	○	○	○
	3NU-TPGW16T304	0.4	○	○			●		●	○	○	○	○
	3NU-TPGW16T308	0.8	○	○			●		●	○	○	○	○
	1NU-TBGW060102	0.2	○	○			●		●	○	○	○	○
	1NU-TBGW060104	0.4	○	○			●		●	○	○	○	○
	1NU-TPGW080202	0.2	○	○			●		●	○	○	○	○
	1NU-TPGW080204	0.4	○	○			●		●	○	○	○	○
	1NU-TPGW090202	0.2	○	○			●		●	○	○	○	○
	1NU-TPGW090204	0.4	○	○			●		●	○	○	○	○
	1NU-TPGW110302	0.2	○	○			●		●	○	○	○	○
	1NU-TPGW110304	0.4	○	○			●		●	○	○	○	○
	1NU-TPGW16T302	0.2	○	○			●		●	○	○	○	○
	1NU-TPGW16T304	0.4	○	○			●		●	○	○	○	○
	1NU-TPGW16T308	0.8	○	○			●		●	○	○	○	○
	T3NU-TPGW080202	0.2	○	○			●	●	●	○	○	○	○
	T3NU-TPGW080204	0.4	○	○			●	●	●	○	○	○	○
	T3NU-TPGW090202	0.2	○	○			●	●	●	○	○	○	○
	T3NU-TPGW090204	0.4	○	○			●	●	●	○	○	○	○
铸铁Cast Iron	T3NU-TPGW110302	0.2	○	○			●	●	●	○	○	○	○
	T3NU-TPGW110304	0.4	○	○			●	●	●	○	○	○	○
耐热合金Heat Resistant Alloy					★	★	★	★					
淬硬钢Hardened Steel					☆				★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

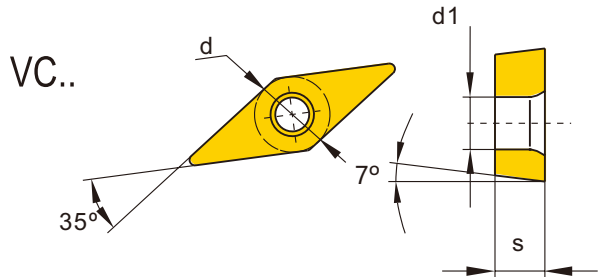


型号 Model	尺寸Size (mm)		
	d	s	d1
TC..0902..	5.56	2.38	2.5
TC..1102..	6.35	2.38	2.8
TC..1103..	6.35	3.18	2.8

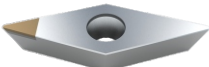
刀片外形 Insert shape	型号 Model	r	刀片材质及适用加工材料 Insert grades and application										
			倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	3NU-TCGW090202	0.2	○	○			●		●	○	○	○	○
	3NU-TCGW090204	0.4	○	○			●		●	○	○	○	○
	3NU-TCGW090208	0.8	○	○			●		●	○	○	○	○
	3NU-TCGW110202	0.8	○	○			●		●	○	○	○	○
	3NU-TCGW110204	0.8	○	○			●		●	○	○	○	○
	3NU-TCGW110208	0.8	○	○			●		●	○	○	○	○
	3NU-TCGW110302	0.2	○	○			●		●	○	○	○	○
	3NU-TCGW110304	0.4	○	○			●		●	○	○	○	○
	3NU-TCGW110308	0.8	○	○			●		●	○	○	○	○
	1NU-TCGW090202	0.2	○	○			●		●	○	○	○	○
	1NU-TCGW090204	0.4	○	○			●		●	○	○	○	○
	1NU-TCGW090208	0.8	○	○			●		●	○	○	○	○
	1NU-TCGW110202	0.2	○	○			●		●	○	○	○	○
	1NU-TCGW110204	0.4	○	○			●		●	○	○	○	○
	1NU-TCGW110208	0.8	○	○			●		●	○	○	○	○
	1NU-TCGW110302	0.2	○	○			●		●	○	○	○	○
	1NU-TCGW110304	0.4	○	○			●		●	○	○	○	○
	1NU-TCGW110308	0.8	○	○			●		●	○	○	○	○
	T3NU-TCGW090202	0.8	○	○			●		●	○	○	○	○
	T3NU-TCGW090204	0.8	○	○			●		●	○	○	○	○
	T3NU-TCGW090208	0.8	○	○			●	●	●	○	○	○	○
	T3NU-TCGW110202	0.2	○	○			●	●	●	○	○	○	○
	T3NU-TCGW110204	0.4	○	○			●	●	●	○	○	○	○
	T3NU-TCGW110208	0.8	○	○			●	●	●	○	○	○	○
铸铁Cast Iron	T3NU-TCGW110302	0.2	○	○			●	●	●	○	○	○	○
	T3NU-TCGW110304	0.4	○	○			●	●	●	○	○	○	○
耐热合金Heat Resistant Alloy					★	★	★	★					
淬硬钢Hardened Steel					☆				★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

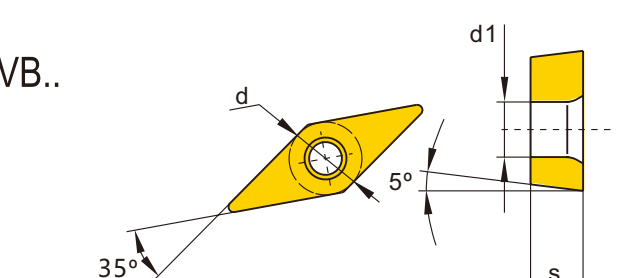


型号 Model	尺寸Size (mm)		
	d	s	d1
VC..1103..	6.35	3.18	2.8
VC..1604..	9.525	4.76	4.4

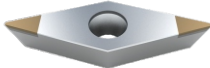
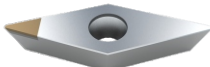
刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2NU-VCGW110302	0.2	○	○			●		●	○	○	○	○
	2NU-VCGW110304	0.4	○	○			●		●	○	○	○	○
	2NU-VCGW110308	0.8	○	○			●		●	○	○	○	○
	2NU-VCGW160402	0.2	○	○			●		●	○	○	○	○
	2NU-VCGW160404	0.4	○	○			●		●	○	○	○	○
	2NU-VCGW160408	0.8	○	○			●		●	○	○	○	○
	1NU-VCGW110302	0.2	○	○			●		●				
	1NU-VCGW110304	0.4	○	○			●		●				
	1NU-VCGW110308	0.8	○	○			●		●				
	1NU-VCGW160402	0.2	○	○			●		●				
	1NU-VCGW160404	0.4	○	○			●		●				
	1NU-VCGW160408	0.8	○	○			●		●				
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

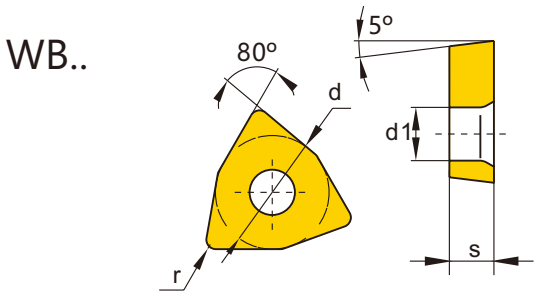
PCBN Inserts
PCBN刀片



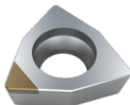
型号 Model	尺寸Size (mm)		
	d	s	d1
VB..1103..	6.35	3.18	2.8
VB..1604..	9.525	4.76	4.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2NU-VBGW110302	0.2	○	○			●		●	○	○	○	○
	2NU-VBGW110304	0.4	○	○			●		●	○	○	○	○
	2NU-VBGW110308	0.8	○	○			●		●	○	○	○	○
	2NU-VBGW160402	0.2	○	○			●		●	○	○	○	○
	2NU-VBGW160404	0.4	○	○			●		●	○	○	○	○
	2NU-VBGW160408	0.8	○	○			●		●	○	○	○	○
	1NU-VBGW110302	0.2	○	○			●		●				
	1NU-VBGW110304	0.4	○	○			●		●				
	1NU-VBGW110308	0.8	○	○			●		●				
	1NU-VBGW160402	0.2	○	○			●		●				
	1NU-VBGW160404	0.4	○	○			●		●				
	1NU-VBGW160408	0.8	○	○			●		●				
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

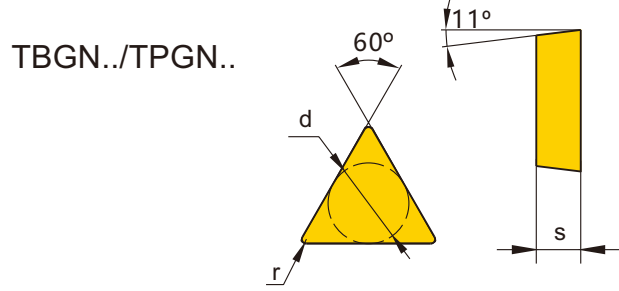
PCBN Inserts
PCBN刀片



型号 Model	尺寸Size (mm)		
	d	s	d1
WB..0601..	3.97	1.59	2.3

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	WBGW060102	0.2	○	○			●		●	○	○	○	○
	WBGW060104	0.4	○	○			●		●	○	○	○	○
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

PCBN Inserts
PCBN刀片

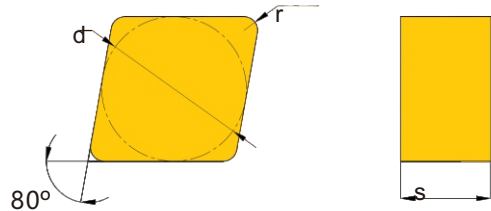


型号 Model	尺寸Size (mm)	
	d	s
TB..0601	3.97	1.59
TP..0902..	5.56	2.38
TP..1103..	6.35	3.18
TP..1603..	9.525	3.18

刀片外形 Insert shape		型号 Model		刀片材质及适用加工材料 Insert grades and application									
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	TBGN060102	0.2	○	○			●		●				
	TBGN060104	0.4	○	○			●		●				
	TPGN090204	0.4	○	○			●		●				
	TPGN090208	0.8	○	○			●		●				
	TPGN110302	0.2	○	○			●		●				
	TPGN110304	0.4	○	○			●		●				
	TPGN110308	0.8	○	○			●		●				
	TPGN160302	0.2	○	○			●		●				
	TPGN160304	0.4	○	○			●		●				
TPGN160308	0.8	○	○			●		●					
	1FN-TBGN060102	0.2	○	○			●						
	1FN-TBGN060104	0.4	○	○			●						
	1FN-TPGN090204	0.4	○	○			●						
	1FN-TPGN090208	0.8	○	○			●						
	1FN-TPGN110302	0.2	○	○			●						
	1FN-TPGN110304	0.4	○	○			●						
	1FN-TPGN110308	0.8	○	○			●						
	1FN-TPGN160302	0.2	○	○			●						
	1FN-TPGN160304	0.4	○	○			●						
	1FN-TPGN160308	0.8	○	○			●						
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

PCBN Inserts
PCBN刀片

CNGN..



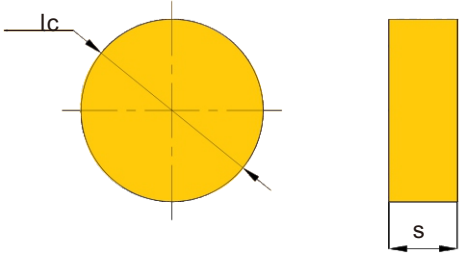
型号 Model	尺寸Size (mm)	
	IC	S
2FN-CNGN1204	12.7	4.76
2FN-CNGN1206	12.7	6.35

刀片外形 Insert shape	型号 Model	r	刀片材质及适用加工材料 Insert grades and application										
			倒棱 S02020	倒棱 S05020	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2FN-CNGN120408	0.8	○	○			●		●				
	2FN-CNGN120412	1.2	○	○			●		●				
	2FN-CNGN120608	0.8	○	○			●		●				
	2FN-CNGN120612	1.2	○	○			●		●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

RNGN..

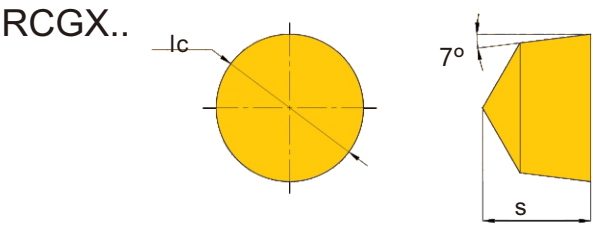


型号 Model	尺寸Size (mm)	
	IC	S
2FN-RNGN0904	9	4.76
2FN-RNGN1204	12	4.76

刀片外形 Insert shape	型号 Model	r	倒棱 S02020	倒棱 S05020	刀片材质及适用加工材料 Insert grades and application								
					KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2FN-RNGN0904	4.5	○	○			●		●				
	2FN-RNGN1204	6.0	○	○			●		●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

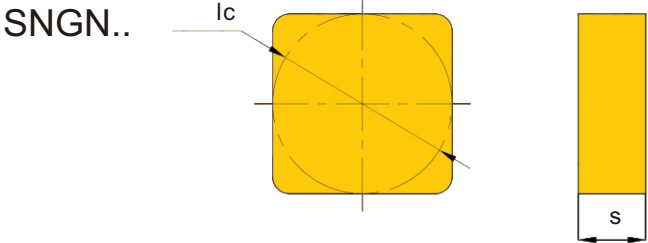


型号 Model	尺寸Size (mm)	
	IC	S
FN-RCGX0907	9.525	7.0
FN-RCGX1207	12.7	7.0

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S05020	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	FN-RCGX0907Y	4.5	○	○			●		●				
	FN-RCGX1207Y	6.0	○	○			●		●				
	FN-RCGX0907V	4.5	○	○			●		●				
	FN-RCGX1207V	6.0	○	○			●		●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片



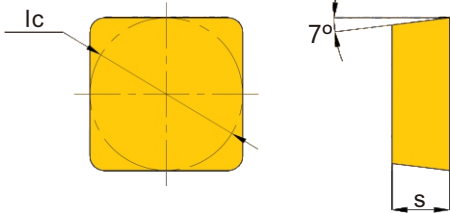
型号 Model	尺寸Size (mm)	
	IC	S
2FN-SNGN0904	9.525	4.76
2FN-SNGN1204	12.7	4.76
2FN-SNGN1206	12.7	6.0

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S02020	倒棱 S05020	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2FN-SNGN090408	0.8	○	○			●		●				
	2FN-SNGN090412	1.2	○	○			●		●				
	2FN-SNGN120408	0.8	○	○			●		●				
	2FN-SNGN120412	1.2	○	○			●		●				
	2FN-SNGN120608	0.8	○	○			●		●				
	2FN-SNGN120612	1.2	○	○			●		●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

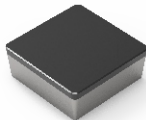
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

SCGN..

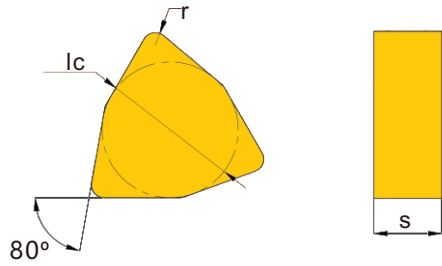


型号 Model	尺寸Size (mm)	
	IC	S
FN-SCGN0904	9.525	4.76
FN-SCGN1204	12.7	4.76

刀片外形 Insert shape	型号 Model	r	刀片材质及适用加工材料 Insert grades and application										
			倒棱 S02020	倒棱 S05020	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	1FN-SCGN090408	0.8	○	○			●		●				
	1FN-SCGN090408ZZ	0.8	○	○			●		●				
	1FN-SCGN090412	1.2	○	○			●		●				
	1FN-SCGN090412ZZ	1.2	○	○			●		●				
	1FN-SCGN120408	0.8	○	○			●		●				
	1FN-SCGN120408ZZ	0.8	○	○			●		●				
	1FN-SCGN120412	1.2	○	○			●		●				
	1FN-SCGN120412ZZ	1.2	○	○			●		●				
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

PCBN Inserts
PCBN刀片

WNGN..

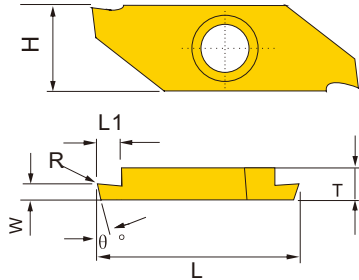


型号 Model	尺寸Size (mm)	
	IC	S
2FN-WNGN0804	12.7	4.76
2FN-WNGN0806	12.7	6.35

刀片外形 Insert shape	型号 Model	r	倒棱 S02020	倒棱 S05020	刀片材质及适用加工材料 Insert grades and application								
					KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2FN-WNGN080408	0.8	○	○			●		●				
	2FN-WNGN080412	1.2	○	○			●		●				
	2FN-WNGN080608	0.8	○	○			●		●				
	2FN-WNGN080612	1.2	○	○			●		●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

PCBN Inserts
PCBN刀片

KTPR/L..



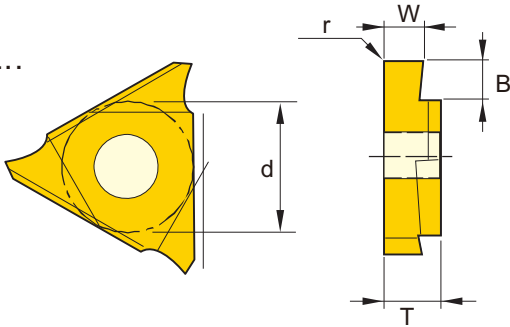
型号 Model	尺寸Size (mm)		
	d	T	d1
KTPR..	12.7	4.76	5.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		W	B	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	KTPR/L 100	1.00	2.0	○			●		●	○	○		
	KTPR/L 150	1.50	3.5	○			●		●	○	○		
	KTPR/L 200	2.00	3.5	○			●		●	○	○		
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

GBA43R/L..



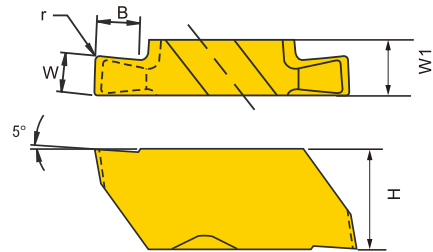
型号 Model	尺寸Size (mm)		
	d	T	d1
GBA43..	12.7	4.76	5.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		W	B	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	GBA43R/L 125	1.25	2.0	○			●		●	○	○		
	GBA43R/L 150	1.50	3.5	○			●		●	○	○		
	GBA43R/L 200	2.00	3.5	○			●		●	○	○		
	GBA43R/L 250	2.50	4.0	○			●		●	○	○		
	GBA43R/L 300	3.00	4.0	○			●		●	○	○		
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

NS

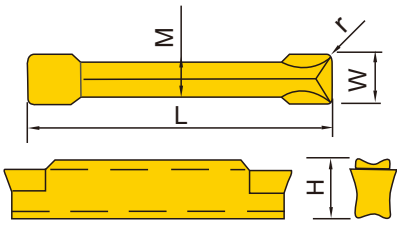


型号 Model	尺寸Size (mm)	
	W1	H
NS3..	4.95	8.74

刀片外形 Insert shape	型号 Model	W	B	刀片材质及适用加工材料 Insert grades and application									
				倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	NS3125R	1.25	2.0	○			●		●	○			
	NS3150R	1.50	3.5	○			●		●	○			
	NS3200R	2.00	3.5	○			●		●	○			
	NS3250R	2.50	4.0	○			●		●	○			
	NS3300R	3.00	4.0	○			●		●	○			
	NS3350R	3.50	6.0	○			●		●	○			
	NS3400R	4.00	6.0	○			●		●	○			
	NS3450R	4.50	8.0	○			●		●	○			
	NS3500R	5.00	8.0	○			●		●	○			
	NS3125L	1.25	2.0	○			●		●	○			
	NS3150L	1.50	3.5	○			●		●	○			
	NS3200L	2.00	3.5	○			●		●	○			
	NS3250L	2.50	4.0	○			●		●	○			
	NS3300L	3.00	4.0	○			●		●	○			
	NS3350L	3.50	6.0	○			●		●	○			
	NS3400L	4.00	6.0	○			●		●	○			
	NS3450L	4.50	8.0	○			●		●	○			
	NS3500L	5.00	8.0	○			●		●	○			
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★
★ 首选Preferred		☆ 可选optional		● 标准库存standard stock		○ 订单生产order production							

PCBN Inserts
PCBN刀片

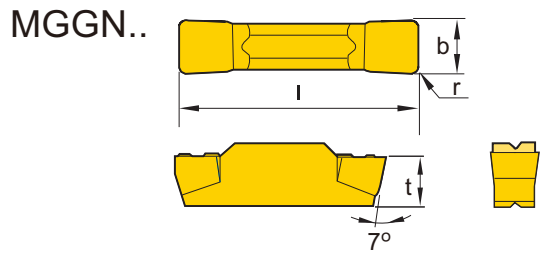
WD..



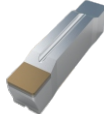
型号 Model	尺寸Size (mm)	
	L	H
WD22..	22	4.0
WD25..	25	4.0

刀片外形 Insert shape	型号 Model	W	r	倒棱 S01025	刀片材质及适用加工材料 Insert grades and application								
					KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	WD22N2.00S	2.00	0.2	○			●		●	○			
	WD22N3.00S	3.00	0.4	○			●		●	○			
	WD25N4.00S	4.00	0.4	○			●		●	○			
	WD25N5.00S	5.00	0.4	○			●		●	○			
	WD25N6.00S	6.00	0.4	○			●		●	○			
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★
★ 首选Preferred		☆ 可选optional		● 标准库存standard stock		○ 订单生产order production							

PCBN Inserts
PCBN刀片

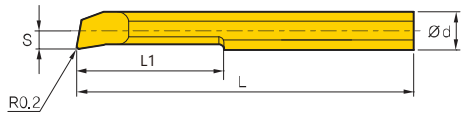


型号 Model	尺寸Size (mm)			
	b	r	t	l
MGGN150	1.5	0.15	4.8	16.0
MGGN200	2.0	0.20	4.8	16.0
MGGN250	2.5	0.20	4.8	18.5
MGGN300	3.0	0.40	4.8	21.0
MGGN400	4.0	0.40	4.8	21.0

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		W	r	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	MGGN150-V	1.5	0.2	○			●		●	○			
	MGGN200-V	2.0	0.2	○			●		●	○			
	MGGN250-V	2.5	0.2	○			●		●	○			
	MGGN300-V	3.0	0.4	○			●		●	○			
	MGGN400-V	4.0	0.4	○			●		●	○			
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional		● 标准库存standard stock ○ 订单生产order production											

PCBN Carbide boring bar PCBN
PCBN合金小镗刀

PSBR..

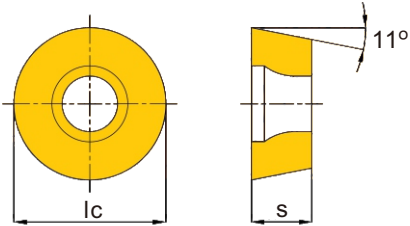


型号 Model	尺寸Size (mm)			
	d	L	L1	S
PSBR0303-50	2.8	50	25	1.4
PSBR0404-60	3.8	60	30	1.9
PSBR0505-70	4.8	70	40	2.4
PSBR0606-70	5.8	70	45	2.9
PSBR0707-80	6.8	80	60	3.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		W	r	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	PSBR0303-50	3.0	○	○			●		●			○	
	PSBR0404-60	4.0	○	○			●		●			○	
	PSBR0505-70	5.0	○	○			●		●			○	
	PSBR0606-70	6.0	○	○			●		●			○	
	PSBR0707-80	7.0	○	○			●		●			○	
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional		● 标准库存standard stock ○ 订单生产order production											

PCBN Inserts
PCBN刀片

RPGW..



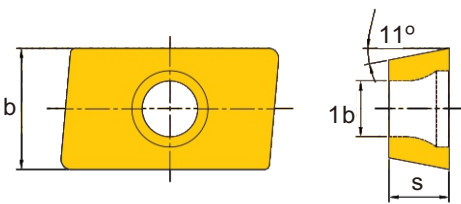
型号 Model	尺寸Size (mm)	
	IC	S
RP..1003M0	10	3.18
RP..1204M0	12	4.76

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	FN-RPGW1003M0	5.0	○	○					●				
	FN-RPGW1204M0	6.0	○	○					●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

AP..



型号 Model	尺寸Size (mm)		
	d	s	d1
AP..1135..	6.35	3.5	2.8
AP..1604..	9.525	4.76	4.4

刀片外形 Insert shape	型号 Model	r	刀片材质及适用加工材料 Insert grades and application											
			倒棱 S01020	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010	
	2NU-APGW113504	0.4	○	○			●		●					
	2NU-APGW113508	0.8	○	○			●		●					
	2NU-APGW113512	1.2	○	○			●		●					
	2NU-APGW160404	0.4	○	○			●		●					
	2NU-APGW160408	0.8	○	○			●		●					
	2NU-APGW160412	1.2	○	○			●		●					
	1NU-APGW113504	0.4	○	○			●		●					
	1NU-APGW113508	0.8	○	○			●		●					
	1NU-APGW113512	1.2	○	○			●		●					
	1NU-APGW160404	0.4	○	○			●		●					
	1NU-APGW160408	0.8	○	○			●		●					
	1NU-APGW160412	1.2	○	○			●		●					
	FN-APGW113504	0.4	○	○					●					
	FN-APGW113508	0.8	○	○					●					
	FN-APGW113512	1.2	○	○					●					
铸铁Cast Iron					★	★	★	★						
耐热合金Heat Resistant Alloy						☆								
淬硬钢Hardened Steel									★	★	★	★	★	
★ 首选Preferred		☆ 可选optional												
		● 标准库存standard stock												
		○ 订单生产order production												

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

KNR-PCBN Radius endmill
KNR-PCBN R角立铣刀



型号 Model	库存 Stock	刀径 Cutting Diameters	R角 Radius	切深 Cutting Depth	尺寸 Size (mm) 刀长 Cutting flutes length	全长 Total length	光杆直径 DN	柄径 Shank diameters	修光刀
KNR2D020R005-0054	○	0.2	0.05	0.1	0.5	50	0.17	4	无
KNR2D030R005-0054	○	0.3	0.05	0.15	0.5	50	0.27	4	
KNR2D040R005-0054	○	0.4	0.05	0.2	0.5	50	0.37	4	
KNR2D050R005-0054	○	0.5	0.05	0.3	0.5	50	0.47	4	
KNR2D050R005-0154	○	0.5	0.05	0.3	1.5	50	0.47	4	
KNR2D050R005-0254	○	0.5	0.05	0.3	2.5	50	0.47	4	
KNR2D050R010-0154	○	0.5	0.10	0.3	1.5	50	0.47	4	
KNR2D050R010-0254	○	0.5	0.10	0.3	2.5	50	0.47	4	
KNR2D100R005-0304	○	1.0	0.05	0.7	3.0	50	0.97	4	
KNR2D100R005-0504	○	1.0	0.05	0.7	5.0	50	0.97	4	
KNR2D100R010-0304	○	1.0	0.10	0.7	3.0	50	0.97	4	有
KNR2D100R010-0504	○	1.0	0.10	0.7	5.0	50	0.97	4	
KNR2D100R020-0304	○	1.0	0.20	0.7	3.0	50	0.97	4	
KNR2D100R020-0504	○	1.0	0.20	0.7	5.0	50	0.97	4	
KNR2D100R030-0304	○	1.0	0.30	0.7	3.0	50	0.97	4	
KNR2D100R030-0504	○	1.0	0.30	0.7	5.0	50	0.97	4	
KNR2D150R010-0454	○	1.5	0.10	1.2	4.5	50	1.47	4	
KNR2D150R010-0754	○	1.5	0.10	1.2	7.5	50	1.47	4	
KNR2D150R020-0454	○	1.5	0.20	1.2	4.5	50	1.47	4	
KNR2D150R020-0754	○	1.5	0.20	1.2	7.5	50	1.47	4	
KNR2D150R030-0454	○	1.5	0.30	1.2	4.5	50	1.47	4	
KNR2D150R030-0754	○	1.5	0.30	1.2	7.5	50	1.47	4	
KNR2D200R010-0604	○	2.0	0.10	1.5	6.0	50	1.97	4	
KNR2D200R020-0604	○	2.0	0.20	1.5	6.0	50	1.97	4	
KNR2D200R030-0604	○	2.0	0.30	1.5	6.0	50	1.97	4	
KNR2D200R050-0604	○	2.0	0.50	1.5	6.0	50	1.97	4	

●标准库存standard stock ○订单生产order production

型号的称呼方法

KNR 2 D050 R010 - 015 4

① 铣刀类型 End mill types	② 刀数 Cutting flutes	③ 刀径 Cutting Diameters	④ R角 Radius	⑤ 刀长 Cutting flutes length	⑥ 柄径 Shank diameters
--------------------------------	------------------------------	---------------------------------	-------------------	--	-------------------------------

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热线 NAK HPM Pre- Hardened Steel	淬火钢 Hardened steel			铸铁 Cast iron	钛合金 Titanium Alloy	高温 合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程 塑料 Plastics	玻璃 纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化铝 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
		○	○	◎	◎														

KNR-PCBN Radius endmill
KNR-PCBN R角立铣刀

- (1)为了保证稳定的切削，请使用刚性高的铣床。
(2)推荐使用不溶性切削液，以及使用喷雾或外部给油，
使用时，有因加工产生火花和刀具破损发生火灾的危险，所以请做好防火措施。
(3)请尽量缩短工具的悬伸量。
(4)根据机械刚性等不同加工条件也不相同，因此请每次调整加工条件。
(5)请根据需要的加工面粗糙度调整切深量。
- (1) In order to ensure stable cutting, please use high rigidity milling machine.
(2) Recommend the use of insoluble water cutting fluid, and use spray or external oil.
When using, there is a risk of fire due to sparks and tool breakage, so please take fire prevention measures.
(3) Please shorten the overhang of the tool as much as possible.
(4) According to the mechanical rigidity and other different processing conditions are not the same, so please adjust the processing conditions each time.
(5) Please adjust the cutting depth according to the required surface roughness.



切削参数表Standard Cutting Conditions

被削材			STAVAX, NAK80, SKD61(~52HRC)				ELMAX,DC53,SKD11改 (~62HRC)				YXR3,SKH(~70HRC)			
刀具 (mm)	刀头半径 (mm)	切刃长 (mm)	转速 (min ⁻¹)	进给速度 (mm/min)	ap (mm)	ae (mm)	转速 (min ⁻¹)	进给速度 (mm/min)	ap (mm)	ae (mm)	转速 (min ⁻¹)	进给速度 (mm/min)	ap (mm)	ae (mm)
0.2				400	0.005	0.03		400	0.005	0.03		250	0.005	0.02
0.3				500	0.010	0.05		500	0.010	0.05		300	0.005	0.03
0.4	0.05	0.05			0.015	0.1			0.015	0.1	40,000			0.05
			40,000			0.15	40,000			0.15				0.1
0.5	0.1	1.5		600	0.02	0.1		600	0.02	0.1	35,000	400		0.05
	0.05	2.5			0.01	0.05			0.01	0.05				
	0.1												0.01	
	0.2	3.0			0.03	0.3			0.03	0.2				0.1
1.0	0.3		35,000				35,000				30,000			
	0.05													
	0.1	5.0			0.02	0.2			0.02	0.1				
	0.2													
	0.3													
1.5	0.1	4.5		800		0.5		800			600			
	0.2													
	0.3													
	0.1	7.5	26,000		0.03		26,000		0.03		20,000		0.02	0.3
	0.2													
	0.3													
2.0	0.1										15,000		0.03	0.7
	0.2	6.0				0.7			0.7					
	0.3													
	0.5													

KNB-PCBN Ball endmill
KNB-PCBN 球头立铣刀



型号 Model	库存 Stock	球头半径 RE	刃径 DC	切深 APMX	尺寸 Size (mm) 切刀长 LU	全长 LF	光杆直径 DN	刀柄径 DMM
KNB2R020-0124	○	0.20	0.4	0.3	1.2	50	0.37	4
KNB2R020-0126	○	0.20	0.4	0.3	1.2	50	0.37	6
KNB2R020-0204	○	0.20	0.4	0.3	2.0	50	0.37	4
KNB2R020-0304	○	0.20	0.4	0.3	3.0	50	0.37	4
KNBR020-0404	○	0.20	0.4	0.3	4.0	50	0.37	4
KNB2R030-0154	○	0.30	0.6	0.4	1.5	50	0.57	4
KNB2R030-0156	○	0.30	0.6	0.4	1.5	50	0.57	6
KNB2R030-0304	○	0.30	0.6	0.4	3.0	50	0.57	4
KNB2R030-0404	○	0.30	0.6	0.4	4.0	50	0.57	4
KNB2R030-0504	○	0.30	0.6	0.4	5.0	50	0.57	4
KNB2R030-0604	○	0.30	0.6	0.4	6.0	50	0.57	4
KNB2R050-0254	○	0.50	1.0	0.6	2.5	50	0.97	4
KNB2R050-0256	○	0.50	1.0	0.6	2.5	50	0.97	6
KNB2R050-0304	○	0.50	1.0	0.6	3.0	50	0.97	4
KNB2R050-0404	○	0.50	1.0	0.6	4.0	50	0.97	4
KNB2R050-0604	○	0.50	1.0	0.6	6.0	50	0.97	4
KNB2R050-0804	○	0.50	1.0	0.6	8.0	50	0.97	4
KNB2R075-0404	○	0.75	1.5	0.9	4.0	50	1.47	4
KNB2R075-0406	○	0.75	1.5	0.9	4.0	50	1.47	6
KNB2R100-0554	○	1.00	2.0	1.4	5.5	50	1.97	4
KNB2R100-0556	○	1.00	2.0	1.4	5.5	50	1.97	6
KNB2R100-0804	○	1.00	2.0	1.4	8.0	50	1.97	4

● 标准库存standard stock ○ 订单生产order production

型号的称呼方法Address method of model number

KNB 2 R030 R010 - 015 4

① 铣刀类型 End mill types	② 刃数 Cutting flutes	③ 刃径 Cutting Diameters	④ 球头半径 Radius	⑤ 切刀长 Cutting flutes length	⑥ 刀柄径 shank diameter
--------------------------------	------------------------------	---------------------------------	---------------------	--------------------------------------	-------------------------------

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre- Hardened Steel	淬火钢 Hardened steel			铸铁 Cast iron	钛合金 Titanium Alloy	高温 合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程 塑料 Plastics	玻璃 纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
○			○	◎	◎														

◎ 首选Preferred ○ 可选optional

KNB-PCBN Ball endmill
KNB-PCBN 球头立铣刀

- (1)为了保证稳定的切削，请使用刚性高的铣床。
(2)推荐使用不溶水性切削液，以及使用喷雾或外部给油。
使用时，有因加工产生火花和刀具破损发生火灾的危险，所以请做好防火措施。
(3)请尽量缩短工具的悬伸量。
(4)根据机械刚性等不同加工条件也不相同，因此请每次调整加工条件。
(5)请根据需要的加工面粗糙度调整切深量。
- (1) In order to ensure stable cutting, please use high rigidity milling machine.
(2) Recommend the use of insoluble water cutting fluid, and use spray or external oil.
When using, there is a risk of fire due to sparks and tool breakage, so please take fire prevention measures.
(3) Please shorten the overhang of the tool as much as possible.
(4) According to the mechanical rigidity and other different processing conditions are not the same, so please adjust the processing conditions each time.
(5) Please adjust the cutting depth according to the required surface roughness.

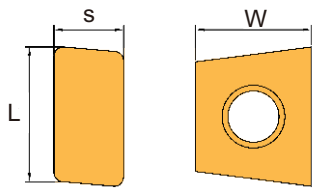


切削参数表Standard Cutting Conditions

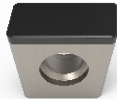
被削材By cutting material		STAVAX NAK80 SKD61(~52HRC)				ELMAX,DC53,SKD11 ~62HRC				YXR3,SKH(~70HRC)			
刀具半径 The blade radius (mm)	切刀长 Cutting blade length (mm)	转速 speed (min ⁻¹)	进给速度 Feed speed (mm/min)	ap (mm)	pf (mm)	转速 speed (min ⁻¹)	进给速度 Feed speed (mm/min)	ap (mm)	pf (mm)	转速 (min ⁻¹)	进给速度 (mm/min)	ap (mm)	pf (mm)
0.2	1.2	40,000	1,000	0.005	0.010	40,000	800	0.005	0.010	40,000	600	0.005	0.005
	2.0		800				600				400		
	3.0		600				500				300		
	4.0		500				400				200		
0.3	1.5	30,000	1,600	0.020	0.020	30,000	1400	0.010	0.020	30,000	1200	1.200	0.020
	2.0		1,500				1300				1100		
	3.0		1,400				1200				1000		
	4.0		1,200				1000				700		
	5.0		800				700				600		
	6.0		600				500				400		
0.5	2.5	40,000	2,800	0.005	0.050	40,000	2800	0.030	0.040	40,000	2200	2.200	0.030
	3.0		2,600				2600				2100		
	4.0		2,400				2400				2000		
	6.0		1,500				1500				1300		
0.7	8.0	32,000	1,200	0.020	0.020	32,000	1100	0.010	0.020	32,000	850	850	0.010
	4.0		2,400				2200				2000		
	5.5		4,000				4000				3000		
	8.0		3,000				2600				2200		

PCBN Inserts
PCBN刀片

LCGW..整面

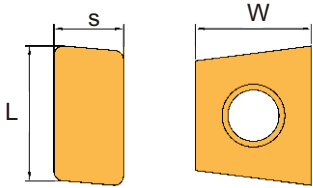


型号 Model	尺寸Size (mm)		
	S	L	W
LCGW1206	6	11.58	10
LCGW1508	8	15	13

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	APMX	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	1F-LCGW120608	0.8	5.0	○			●	●	●				
	1F-LCGW150808	0.8	8.0	○									
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional					● 标准库存standard stock					○ 订单生产order production			

PCBN Inserts
PCBN刀片

LCGW..焊接

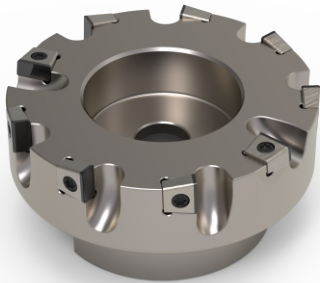


型号 Model	尺寸Size (mm)		
	S	L	W
LCGW1206	6	11.58	10
LCGW1508	8	15	13

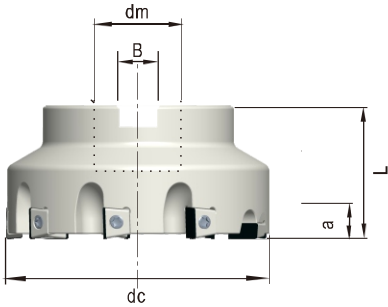
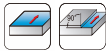
刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	APMX	倒棱 S01025	KBN1000	KBN900	KBN910	KBN980	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	2NU-LCGW120608	0.8	5.0	○			●	●	●				
	2UN-LCGW150808	0.8	8.0	○									
铸铁Cast Iron		★ ★ ★ ★											
耐热合金Heat Resistant Alloy		☆											
淬硬钢Hardened Steel		★ ★ ★ ★ ★											
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production													

90° Indexable Face Mills
90° 可转位面铣刀

FM90



- 采用单面四刀，高效经济的利器。
- 平装立装超厚刀片设计
- 适用于钢及铸铁中，重型铣削加工。
- Using single-sided, four-blade, efficient and economical sharp tools.
- Flat mounted vertical super thick blade design
- Suitable for medium and heavy milling of steel and cast iron.



型号 Model	库存 Stock	尺寸 (mm) Dimensions					齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench	重量 Weight
		dc	dm	a	B	L					
FM90-63-22-LC12-04	●	63	22	15	10.4	40	4	LC..1206..	M4.0X12	T15	
FM90-80-27-LC12-06	●	80	27	15	12.4	50	6				
FM90-100-32-LC12-08	●	100	32	15	14.4	50	8				
FM90-125-40-LC12-10	●	125	40	15	16.4	60	10				
FM90-160-40-LC12-14	●	160	40	15	16.4	63	14				
FM90-200-60-LC12-18	○	200	60	15	23.7	63	18				
FM90-250-60-LC12-24	○	250	60	15	23.7	63	24				

刀片需单独订购。Blades to be ordered separately.

● 标准库存standard stock ○ 订单生产order production

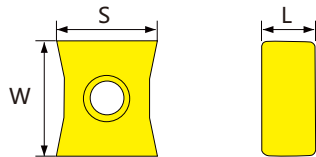
型号 Model	库存 Stock	尺寸 (mm) Dimensions					齿数 No.of teeth	刀片 Insert	螺钉 Screw	扳手 Torx wrench	重量 Weight
		dc	dm	a	B	L					
FM90-63-22-LC15-04	●	63	22	15	10.4	40	4	LC. . 1508. .	M5. 0*15	T20	
FM90-80-27-LC15-05	●	80	27	15	12.4	40	5				
FM90-100-32-LC15-06	●	100	32	15	14.4	50	6				
FM90-125-40-LC15-07	●	125	40	15	16.4	63	7				
FM90-160-40-LC15-08	●	160	40	15	16.4	63	8				
FM90-200-60-LC15-10	●	200	60	15	23.7	63	10				
FM90-250-60-LC15-12	●	250	60	15	23.7	63	12				

刀片需单独订购。Blades to be ordered separately.

● 标准库存standard stock ○ 订单生产order production

PCBN Inserts
PCBN刀片

LNKG..焊接



型号 Model	尺寸Size (mm)		
	S	L	W
LNKG1506	13	15	7

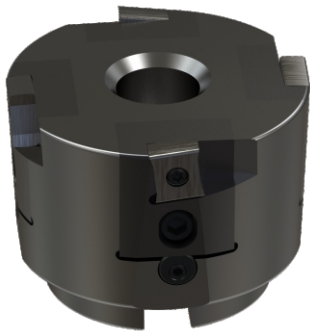
刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application											
		r	APMX	倒棱 S01025	KBN1000	KBN900	KBN910	KBN800	KBN710	KBN7030	KBN6020	KBN610	KBN5010
	4NU-LNGG150608	0.8	3.0	○			●	●	●				
铸铁Cast Iron					★	★	★	★					
耐热合金Heat Resistant Alloy						☆							
淬硬钢Hardened Steel									★	★	★	★	★

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

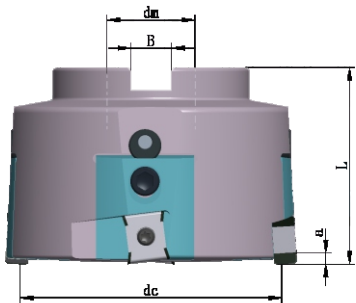
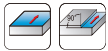
92° Indexable Face Mills

92° 可转位面铣刀

FM92



- 采用可调节装夹，实现高光加工表面。
- 立装超厚刀片设计
- 适用于钢及铸铁精铣削加工。
- Adopt adjustable clamping to achieve high-gloss machining surface.
- Vertical mounting of ultra-thick blade design
- Suitable for medium and heavy milling of steel and cast iron.



型号 Model	库存 Stock	尺寸 (mm) Dimensions									
		dc	dm	a	B	L					
FM92-80-27-LN15-04	●	80	27	2	12.4	60	4	LN..1506..	M4.0X12	T15	
FM92-100-32-LN15-04	●	100	32	2	14.4	60	4				
FM92-125-40-LN15-04	●	125	40	2	16.4	60	4				
FM92-160-40-LN15-06		160	40	2	16.4	60	6				
FM92-200-60-LN15-06		200	60	2	23.7	60	6				

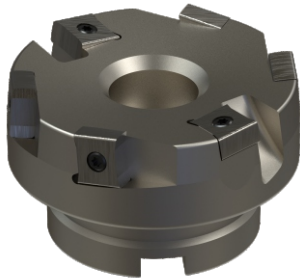
刀片需单独订购。Blades to be ordered separately.

● 标准库存standard stock ○ 订单生产order production

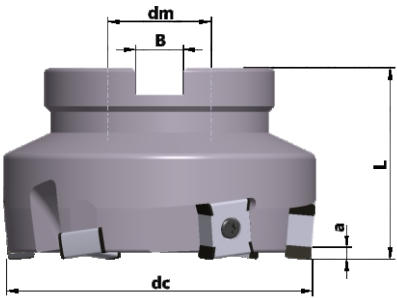
84° Indexable Face Mills

84° 可转位面铣刀

FM84



- 可用8个角，高效经济的利器
- 平装立装超厚刀片设计
- 适用于钢及铸铁中，重型铣削加工。
- 8 corners available, a cost-effective and efficient tool.
- Flat mounted vertical super thick blade design
- Suitable for medium and heavy milling of steel and cast iron.



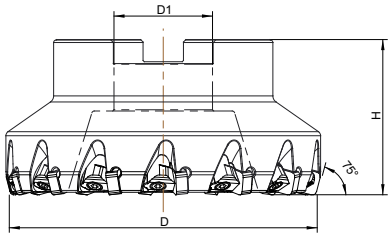
型号 Model	库存 Stock	尺寸 (mm) Dimensions									
		dc	dm	a	B	L					
FM84-50-22-LN15-04	●	50	22	3	10.4	40	4	LN..1506..	M4.0X12	T15	
FM84-63-22-LN15-04	●	63	22	3	10.4	40	4				
FM84-80-27-LN15-06	●	80	27	3	12.4	50	6				
FM84-100-32-LN15-08	●	100	32	3	14.4	50	8				
FM84-125-40-LN15-10	●	125	40	3	16.4	60	10				

刀片需单独订购。Blades to be ordered separately.

● 标准库存standard stock ○ 订单生产order production

Indexable Face Mills series
面铣刀系列

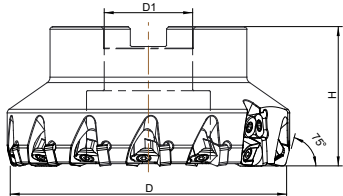
可转位CBN高效面铣刀
Indexable CBN High-efficiency Face mills



型号 Model	库存 Stock	尺寸 (mm) Dimensions			 齿数 No. of teeth	 刀片 Insert	 楔块 Wedge	 螺钉 Screw	 扳手 Torx wrench
		φD	φD1	H					
FME01-063-A22-SN09-07	●	63	22	40	7	2FN-SNGN 0904ENS	FME01-1	FME01-2	FME01-3
FME01-080-A27-SN09-09	●	80	27	50	9				
FME01-100-B32-SN09-12	●	100	32	50	12				
FME01-125-B40-SN09-14	●	125	40	63	14				
FME01-160-B40-SN09-18	●	160	40	63	18				
FME01-200-C60-SN09-24	●	200	60	63	24				
FME01-250-C60-SN09-30	●	250	60	63	30				
FME01-315-D60-SN09-36	●	315	60	70	36				

● 标准库存 standard stock ○ 订单生产 order production

可转位CBN精密面铣刀
Indexable CBN Precision Face mills



型号 Model	库存 Stock	尺寸 (mm) Dimensions			 修光 刀片 Repair blade	 齿数 No. of teeth	 铣削刀片 Milling blade	 修光 刀片 Repair blade	 楔块 Wedge	 调整块 Adjustm ent block	 螺钉 Screw	 扳手 Torx wrench
		φD	φD1	H								
FME02-063-A22-SN09-07	●	63	22	40	1	6	2FN-SNGN 0904ENS	2FN-SNGN 1204ZZ	FME02-1	FME02-2	FME02-3	FME02-4
FME02-080-A27-SN09-09	●	80	27	50	1	8						
FME02-100-B32-SN09-12	●	100	32	50	2	10						
FME02-125-B40-SN09-14	●	125	40	63	2	12						
FME02-160-B40-SN09-18	●	160	40	63	3	15						
FME02-200-C60-SN09-24	●	200	60	63	4	20						
FME02-250-C60-SN09-30	●	250	60	63	5	25						
FME02-315-D60-SN09-36	●	315	60	70	6	30						

● 标准库存 standard stock ○ 订单生产 order production

PCD刀具

KPD05/KPD10/KPD25

科维丝PCD刀具是采用高温高压的优 质PCD和优质的硬质合金为基体焊接而成的。可满足车削、铣削等不同加工的需求。

在铝合金和铜合金加工方面有超长的刀具寿命。

在非合金材料，如陶瓷、石材、橡胶、石墨、石材等方面加工性能优越。

KOVES PCD tool adopt high temperature and high pressure PCD material welding on superior hard alloy substrate.

It can meet all kinds of processing demands of turning and milling.It has the ultra long tool life in the aluminum alloy and copper alloy processing.

It also have superior machining in non-alloy materials,such as ceramics,stone,rubber, graphite,wood and so on.

www.pcbn.com

www.pcbn.com



PCD Inserts
PCD刀片

PCD材质 PCD material

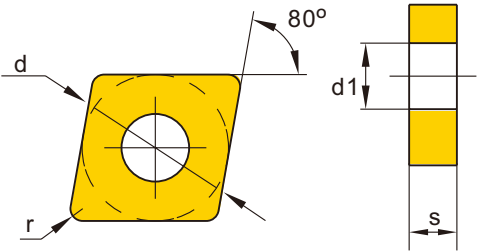
材质 Grades	特性 Characteristic	应用 Application	颗粒尺寸 Grain size (μm)	硬度 Hardness (Hv)	抗弯强度 Bending strength (kgf)
KPD05	超微颗粒钻精华，可以制造锋利切削刃，是有色金属加工的合适材质 Ultra fine particle drilling essence, can make sharp cutting edge, It is a suitable material for non-ferrous metal processing	塑料、木头、铝合金精加工 Plastic, wood, aluminum alloy processing.	5μm	10,000 ~ 12,000	220
KPD10	细颗粒的材质，粒度精密，适合有色金属、石墨加工 Fine particle material, fine granularity, suitable for non-ferrous metals, graphite processing	高硅铝合金、紫青铜合金、橡胶、木头、石墨加工 High silicon aluminum alloy, purple bronze alloy, rubber, wood, graphite processing	10μm	10,000 ~ 12,000	200
KPD25	粗颗粒的材质具有杰出的耐磨性用于高硅铝合金和硬质合金加工 Rough grained material has excellent wear resistance For high silicon aluminum alloy and cemented carbide processing	硬质合金、陶瓷粗加工、高硅铝合金、岩石、石材 Carbide, ceramic rough processing, high silicon aluminum alloy, rock, stone	25μm	10,000 ~ 12,000	110
KCD02	精密加工 Precision machining	低硅铝合金，铜合金，贵金属的精加工。 Low silicon aluminum alloy, copper alloy, Finishing of precious metals.	2μm	10,000 ~ 12,000	
KCD05	良好的EDM加工，抗冲击性强 Good EDM processing, strong impact resistance	低硅铝合金(电子、汽车)，木塑复合材料，铜合金，PCB,塑料。 Low silicon aluminum alloy (electronics, automotive), Wood plastic composite materials, copper alloy, PCB, plastic.	5μm	10,000 ~ 12,000	
KCD10	通用，韧性和耐磨性良好的平衡 General purpose, good balance of toughness and wear resistance	通用性好，粗加工和精加工，强烈推荐中低含量铝合金 Good versatility, rough machining and Finishing, highly recommended Low content aluminum alloy	10μm	10,000 ~ 12,000	
KCD25	良好的EDM加工，较高的耐磨性 Good EDM processing, high wear resistance	通用性好，粗加工和精加工，强烈推荐中低含量铝合金。特殊制造，优异的耐磨性。 Good versatility, rough machining and fineProcessing, medium and low contents highly recommendedMeasure aluminum alloy. Specially manufactured,Excellent wear resistance.	25μm	10,000 ~ 12,000	
KCD35	较好的电火花加工，寿命长,耐热性和抗冲击性较好。 Good EDM, long service life, good heat resistance and impact resistance.	用于复合材料、强化地板、非金属硬脆材料、硬质合金、硅铝合金(硅含量>12%)、其他高耐磨材料，如陶瓷、碳化物等。 For composite materials and reinforced ground: Plate, non-metallic hard and brittle materialsCemented carbide, silicon aluminum alloy (silicon content > 12%), other high Wear resistant materials, such as ceramics, carbides, etc.	≥95	1-3 ~ 25-35	
KCD40	较好的电火花加工，寿命长,耐热性和抗冲击性较好。 Good EDM, long service life, good heat resistance and impact resistance.	用于树脂、复合材料、玻璃钢、高密度增强木板、硅铝合金等。 Used for resin, composite materials, FRP, high densityReinforced wood board, silicon aluminum alloy, etc.	≥95	25-40	
KCD60			60μm	10,000 ~ 12,000	

推荐切削条件 Recommended cutting conditions

被加工材质 Processed material	切削速度 Cutting speed (m/min)	进给 Feeding (mm/rev)	切深 Cut deep (mm)	推荐材质 Recommended material	
				1 st	2 nd
铝合金 (4%~8% Si) Aluminum alloy (4%~8%, Si)	1000~3000	0.1~0.6	~3	KPD10	KPD25
铝合金 (9%~14% Si) Aluminum alloy (9%~14%, Si)	600~2500	0.1~0.5	~3	KPD10	KPD25
铝合金 (15%~18% Si) Aluminum alloy (15%~18%, Si)	300~700	0.1~0.4	~3	KPD10	KPD25
紫铜，青铜合金 Red copper, bronze alloy	~1000	0.05~0.2	~3	KPD10	KPD25
高强度塑料 High strength plastic	~1000	0.1~0.3	~2	KPD10	KPD25
木材 wood	~4000	0.1~0.4	-	KPD10	KPD25
硬质合金 Cemented carbide	10~30	~0.2	~0.5	KPD05	KPD10

PCD Inserts
PCD刀片

CN..

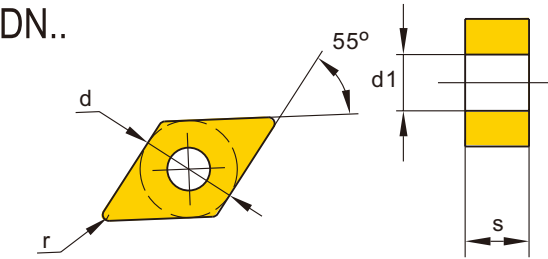


型号 Model	尺寸Size (mm)		
	d	s	d1
CN..0903..	9.525	3.18	3.81
CN..1204..	12.7	4.76	5.16
CN..1606..	15.88	6.35	6.35
CN..1906..	19.05	6.35	7.94
CN..2509..	25.4	9.53	9.12

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	CNMM120402	0.2	1		●						
	CNMM120404	0.4	1		●						
	CNMM120408	0.8	1		●						
	CNMM120412	1.2	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

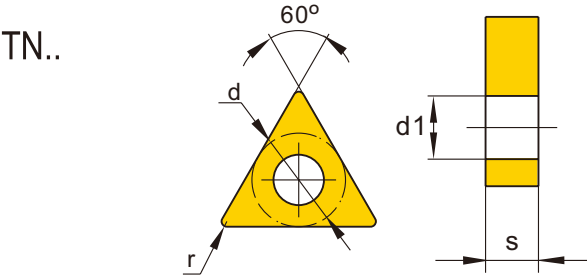


型号 Model	尺寸Size (mm)		
	d	s	d1
DN..1104..	9.525	4.76	3.81
DN..1504..	12.7	4.76	5.16
DN..1506..	12.7	6.35	5.16

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	DNMM150402	0.2	1		●						
	DNMM150404	0.4	1		●						
	DNMM150408	0.8	1		●						
	DNMM150412	1.2	1		●						
	DNMG150404FA	0.4	1		●						
	DNMG150408FA	0.8	1		●						
	DNMG150412FA	1.2	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

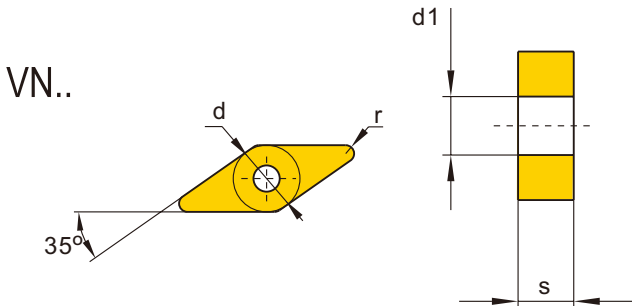


型号 Model	尺寸Size (mm)		
	d	s	d1
TN..1604..	9.525	4.76	3.81
TN..2204..	12.7	4.76	5.16

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	TNMM160402	0.2	1		●						
	TNMM160404	0.4	1		●						
	TNMM160408	0.8	1		●						
	TNMM160412	1.2	1		●						
	TNMG160404FA	0.4	1		●						
	TNMG160408FA	0.8	1		●						
	TNMG160412FA	1.2	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

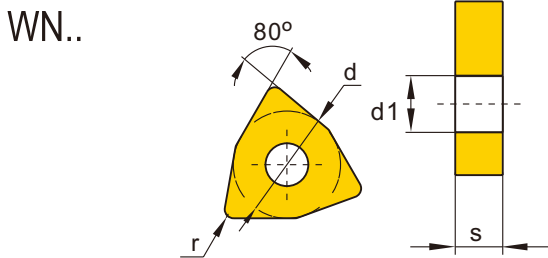


型号 Model	尺寸Size (mm)		
	d	s	d1
VN..1604..	9.525	4.76	3.81

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	VNMM160402	0.2	1		●						
	VNMM160404	0.4	1		●						
	VNMM160408	0.8	1		●						
	VNMM160412	1.2	1		●						
	VNMG160404FA	0.4	1		●						
	VNMG160408FA	0.8	1		●						
	VNMG160412FA	1.2	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

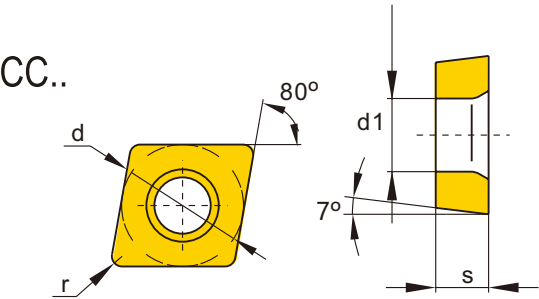


型号 Model	尺寸Size (mm)		
	d	s	d1
WN..0604..	9.525	4.76	3.81
WN..0804..	12.7	4.76	5.16

刀片外形 Insert shape	型号 Model	r	刀尖数 Corner	刀片材质及适用加工材料 Insert grades and application							
				KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	WNMM080402	0.2	1		●						
	WNMM080404	0.4	1		●						
	WNMM080408	0.8	1		●						
	WNMM080412	1.2	1		●						
	WNMG080404FA	0.4	1		●						
	WNMG080408FA	0.8	1		●						
	WNMG080412FA	1.2	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

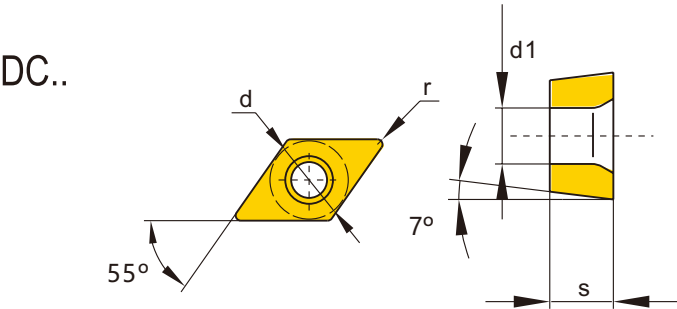


型号 Model	尺寸Size (mm)		
	d	s	d1
CC..0301..	3.5	1.4	1.9
CC..0401..	4.3	1.8	2.3
CC..0602..	6.35	2.38	2.8
CC..09T3..	9.525	3.97	4.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	CCGW040101	0.1	1		●						
	CCGW040102	0.2	1		●						
	CCGW040104	0.4	1		●						
	CCGW060201	0.1	1		●						
	CCGW060202	0.2	1		●						
	CCGW060204	0.4	1		●						
	CCGW09T301	0.1	1		●						
	CCGW09T302	0.2	1		●						
	CCGW09T304	0.4	1		●						
	CCGW09T308	0.8	1		●						
	CCMT060201	0.1	1		●						
	CCMT060202	0.2	1		●						
	CCMT060204	0.4	1		●						
	CCMT09T301	0.1	1		●						
	CCMT09T302	0.2	1		●						
	CCMT09T304	0.4	1		●						
	CCMT09T308	0.8	1		●						
	CCGW060204FA	0.4	1		●						
	CCGW09T304FA	0.4	1		●						
	CCGW09T308FA	0.8	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

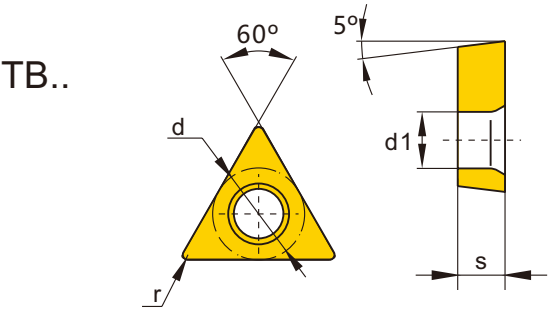


型号 Model	尺寸Size (mm)		
	d	s	d1
DC..0702..	6.35	2.38	2.8
DC..11T3..	9.525	3.97	4.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	DCGW070201	0.1	1		●						
	DCGW070202	0.2	1		●						
	DCGW070204	0.4	1		●						
	DCGW11T301	0.1	1		●						
	DCGW11T302	0.2	1		●						
	DCGW11T304	0.4	1		●						
	DCGW11T308	0.8	1		●						
	DCMT070201	0.1	1		●						
	DCMT070202	0.2	1		●						
	DCMT070204	0.4	1		●						
	DCMT11T301	0.1	1		●						
	DCMT11T302	0.2	1		●						
	DCMT11T304	0.4	1		●						
	DCMT11T308	0.8	1		●						
	DCGW070204FA	0.4	1		●						
	DCGW11T304FA	0.4	1		●						
	DCGW11T308FA	0.8	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

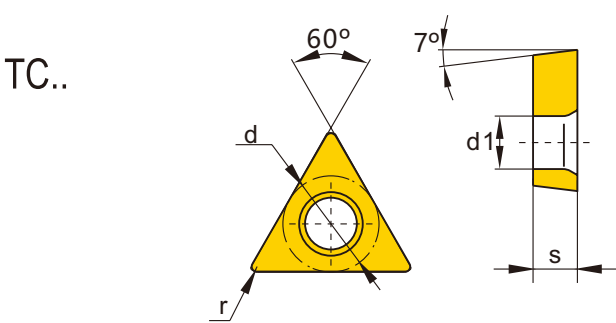


型号 Model	尺寸Size (mm)		
	d	s	d1
TB..0601..	3.97	1.59	2.3

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	TBGW060101	0.1	1		●						
	TBGW060102	0.2	1		●						
	TBGW060104	0.4	1		●						
	TBMT060101	0.1	1		●						
	TBMT060102	0.2	1		●						
	TBMT060104	0.4	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

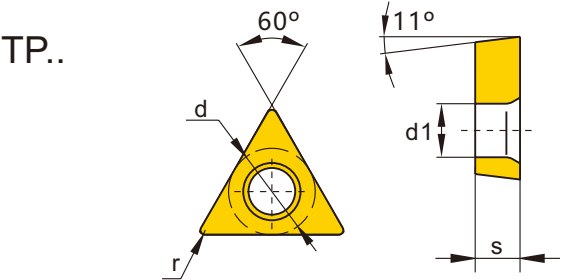


型号 Model	尺寸Size (mm)		
	d	s	d1
TC..0902..	5.56	2.38	2.5
TC..1102..	6.35	2.38	2.5
TC..16T3..	9.525	3.97	4.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	TCGW090201	0.1	1		●						
	TCGW090202	0.2	1		●						
	TCGW090204	0.4	1		●						
	TCGW110201	0.1	1		●						
	TCGW110202	0.2	1		●						
	TCGW110204	0.4	1		●						
	TCGW110208	0.8	1		●						
	TCMT090201	0.1	1		●						
	TCMT090202	0.2	1		●						
	TCMT090204	0.4	1		●						
	TCMT110201	0.1	1		●						
	TCMT110202	0.2	1		●						
	TCMT110204	0.4	1		●						
	TCMT110208	0.8	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

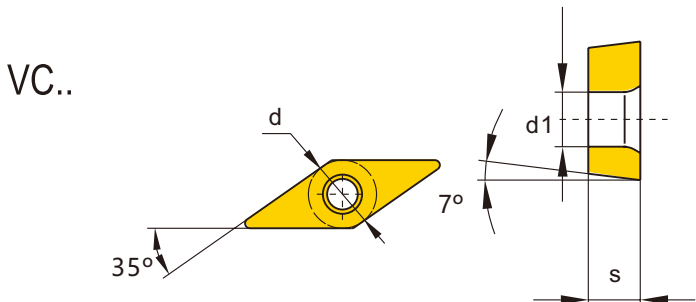


型号 Model	尺寸Size (mm)		
	d	s	d1
TP..0802..	4.76	2.38	2.3
TP..0902..	5.56	2.38	3.0
TP..1102..	6.35	2.38	3.5
TP..1103..	6.35	3.18	3.3
TP..16T3....	9.525	3.18	4.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	TPGW080201	0.1	1		●						
	TPGW080202	0.2	1		●						
	TPGW080204	0.4	1		●						
	TPGW090201	0.1	1		●						
	TPGW090202	0.2	1		●						
	TPGW090204	0.4	1		●						
	TPGW110301	0.1	1		●						
	TPGW110302	0.2	1		●						
	TPGW110304	0.4	1		●						
	TPMT080201	0.1	1		●						
	TPMT080202	0.2	1		●						
	TPMT080204	0.4	1		●						
	TPMT090201	0.1	1		●						
	TPMT090202	0.2	1		●						
	TPMT090204	0.4	1		●						
	TPMT110301	0.1	1		●						
	TPMT110302	0.2	1		●						
	TPMT110304	0.4	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

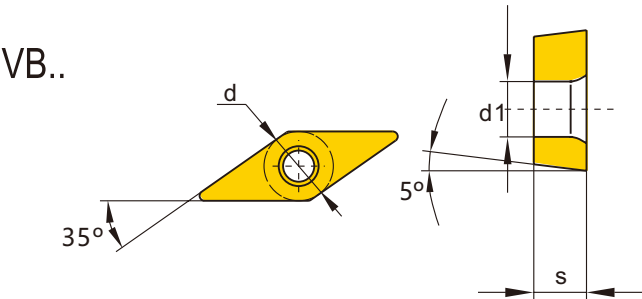


型号 Model	尺寸Size (mm)		
	d	s	d1
VC..1103..	6.35	3.18	2.8
VC..1604..	9.525	4.76	4.4

刀片外形 Insert shape	型号 Model	r	刀尖数 Corner	刀片材质及适用加工材料 Insert grades and application							
				KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	VCGW110301	0.1	1		●						
	VCGW110302	0.2	1		●						
	VCGW110304	0.4	1		●						
	VCGW110308	0.8	1		●						
	VCGW160401	0.1	1		●						
	VCGW160402	0.2	1		●						
	VCGW160404	0.4	1		●						
	VCGW160408	0.8	1		●						
	VCMT110301	0.1	1		●						
	VCMT110302	0.2	1		●						
	VCMT110304	0.4	1		●						
	VCMT110308	0.8	1		●						
	VCMT160401	0.1	1		●						
	VCMT160402	0.2	1		●						
	VCMT160404	0.4	1		●						
	VCMT160408	0.8	1		●						
	VCGW110304FA	0.4	1		●						
	VCGW160404FA	0.4	1		●						
	VCGW160408FA	0.8	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

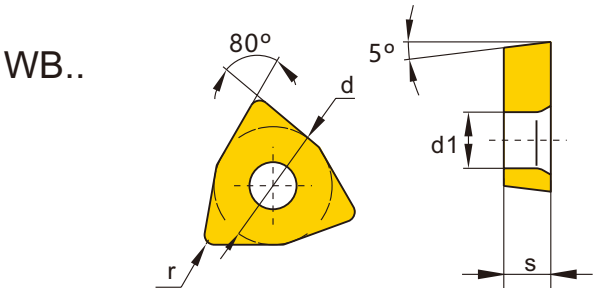
PCD Inserts
PCD刀片



型号 Model	尺寸Size (mm)		
	d	s	d1
VB..1103..	6.35	3.18	2.8
VB..1604..	9.525	4.76	4.4

刀片外形 Insert shape	型号 Model	r	刀尖数 Corner	刀片材质及适用加工材料 Insert grades and application							
				KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	VBGW110301	0.1	1	●	●						
	VBGW110302	0.2	1	●	●						
	VBGW110304	0.4	1	●	●						
	VBGW110308	0.8	1	●	●						
	VBGW160401	0.1	1	●	●						
	VBGW160402	0.2	1	●	●						
	VBGW160404	0.4	1	●	●						
	VBGW160408	0.8	1	●	●						
	VBMT110301	0.1	1	●	●						
	VBMT110302	0.2	1	●	●						
	VBMT110304	0.4	1	●	●						
	VBMT110308	0.8	1	●	●						
	VBMT160401	0.1	1	●	●						
	VBMT160402	0.2	1	●	●						
	VBMT160404	0.4	1	●	●						
	VBMT160408	0.8	1	●	●						
	VBGW110304FA	0.4	1	●	●						
	VBGW160404FA	0.4	1	●	●						
	VBGW160408FA	0.8	1	●	●						
有色金属Nonferrous Metal				★							
耐热合金Heat Resistant Alloy				☆							
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production											

PCD Inserts
PCD刀片

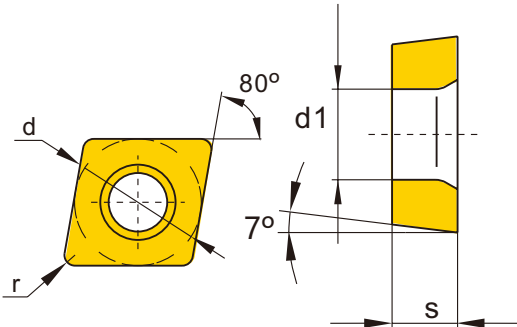


型号 Model	尺寸Size (mm)		
	d	s	d1
WB..0601..	3.97	1.59	2.3

刀片外形 Insert shape	型号 Model	r	刀尖数 Corner	刀片材质及适用加工材料 Insert grades and application							
				KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	WBGW060101	0.1	1	●	●						
	WBGW060102	0.2	1	●	●						
	WBGW060104	0.4	1	●	●						
	WBMT060101	0.1	1	●	●						
	WBMT060102	0.2	1	●	●						
	WBMT060104	0.4	1	●	●						
有色金属Nonferrous Metal				★							
耐热合金Heat Resistant Alloy				☆							
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production											

PCD Inserts
PCD刀片

CC..



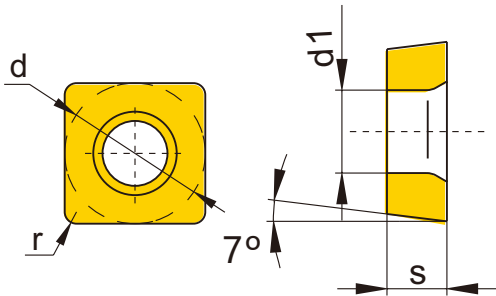
型号 Model	尺寸Size (mm)		
	d	s	d1
CC..0602..	6.35	2.38	2.8
CC..09T3..	9.525	3.97	4.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r		KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	CCGT060204F01L	0.4			●						
	CCGT060204F01R	0.4			●						
	CCGT060208F01L	0.8			●						
	CCGT060208F01R	0.8			●						
	CCGT09T304F01L	0.4			●						
	CCGT09T304F01R	0.4			●						
	CCGT09T308F01L	0.8			●						
	CCGT09T308F01R	0.8			●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

SC..



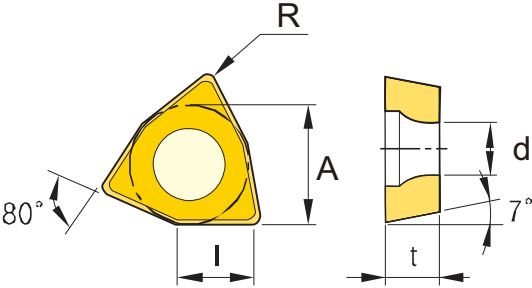
型号 Model	尺寸Size (mm)		
	d	s	d1
SC..1204..	12.7	4.76	5.5

刀片外形 Insert shape	型号 Model	r	刀片材质及适用加工材料 Insert grades and application							
			KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	FN-SCGW120408	0.8		●						
	FN-SCGW120412	1.2		●						
有色金属Nonferrous Metal				★						
耐热合金Heat Resistant Alloy				☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

WC..



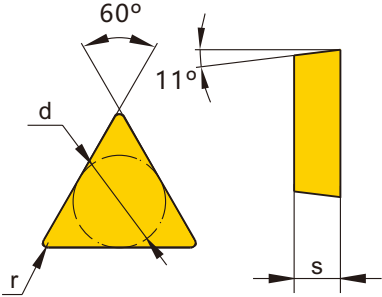
型号 Model	尺寸Size (mm)			
	l	t	A	d
WC..06T3..	6.5	3.97	9.529	4.4
WC..0804..	8.7	4.76	12.7	5.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application								
		r	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	FN-WCGW06T308	0.8		●						
	FN-WCGW080412	1.2		●						
有色金属Nonferrous Metal				★						
耐热合金Heat Resistant Alloy				☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

TP..

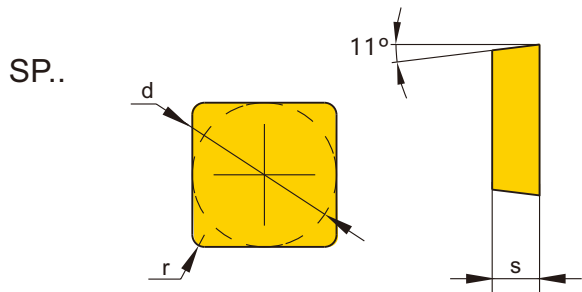


型号 Model	尺寸Size (mm)	
	d	s
TP..0902..	5.56	2.38
TP..1103..	6.35	3.18
TP..1603..	9.525	3.18

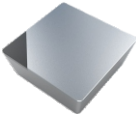
刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application								
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25
	TPGN090201	0.1	1		●					
	TPGN090202	0.2	1		●					
	TPGN090204	0.4	1		●					
	TPGN090208	0.8	1		●					
	TPGN110302	0.2	1		●					
	TPGN110304	0.4	1		●					
	TPGN110308	0.8	1		●					
	TPGN160302	0.2	1		●					
	TPGN160304	0.4	1		●					
TPGN160308	0.8	1		●						
有色金属Nonferrous Metal						★				
耐热合金Heat Resistant Alloy						☆				

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片



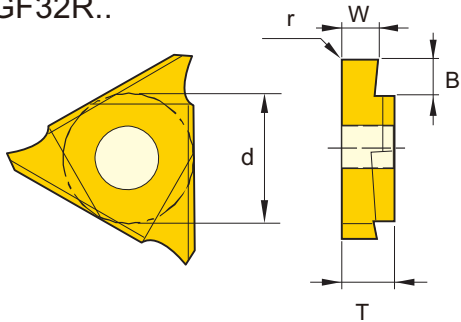
型号 Model	尺寸Size (mm)	
	d	s
SP..0903..	9.525	3.18
SP..1203..	12.7	3.18

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		r	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	SPGN090302	0.2	1		●						
	SPGN090304	0.4	1		●						
	SPGN090308	0.8	1		●						
	SPGN120304	0.4	1		●						
	SPGN120308	0.8	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

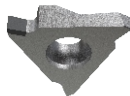
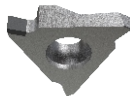
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

GBA43/TGF32R..



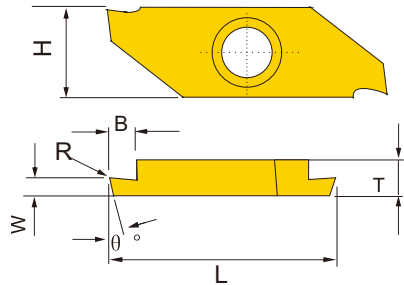
型号 Model	尺寸Size (mm)		
	d	T	d1
GBA43..	12.7	4.76	5.5
TGF32R..	9.525	3.18	4.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application										
		W	B	r	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	GBA43R125	1.25	2.0	0.1		●						
	GBA43R150	1.50	3.5	0.1		●						
	GBA43R200	2.00	3.5	0.1		●						
	GBA43R250	2.50	4.0	0.1		●						
	GBA43R300	3.00	4.0	0.1		●						
	TGF32R125	1.25	2.0	0.1		●						
	TGF32R150	1.50	2.0	0.1		●						
	TGF32R200	2.00	2.5	0.1		●						
有色金属Nonferrous Metal						★						
耐热合金Heat Resistant Alloy						☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

KTPR..



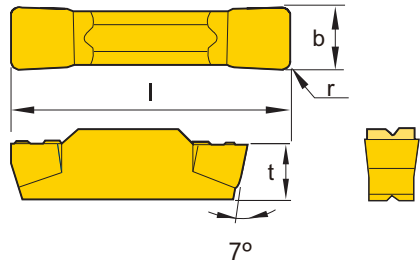
型号 Model	尺寸Size (mm)		
	L	T	H
KTPR...	25	3.5	9.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application										
		W	B	r	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	KTPR150	1.50	3.5	0.1		●						
	KTPR200	2.00	4.0	0.1		●						
	KTPR250	2.50	4.0	0.1		●						
						●						
	KTPR150FA	1.50	1.50	1.50		●						
	KTPR200FA	2.00	2.00	2.00		●						
	KTPR250FA	2.50	2.50	2.50		●						
有色金属Nonferrous Metal						★						
耐热合金Heat Resistant Alloy						☆						

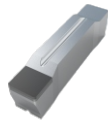
★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

MGGN..MRGN



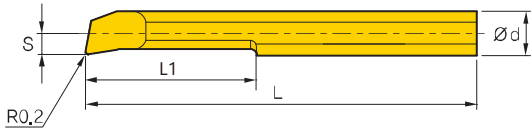
型号 Model	尺寸Size (mm)			
	b	r	t	l
MGGN150	1.5	0.15	4.8	16.0
MGGN200	2.0	0.20	4.8	16.0
MGGN250	2.5	0.20	4.8	18.5
MGGN300	3.0	0.40	4.8	21.0
MGGN400	4.0	0.40	4.8	21.0
MRGN6030	6.0	3.00	5.8	26.0
MRGN8040	8.0	4.00	6.5	31.0

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		w	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	MGGN150	1.5	1		●						
	MGGN200	2.0	1		●						
	MGGN250	2.5	1		●						
	MGGN300	3.0	1		●						
	MGGN400	4.0	1		●						
	MRGN6030	6.0	1		●						
	MRGN8040	8.0	1		●						
有色金属Nonferrous Metal						★					
耐热合金Heat Resistant Alloy						☆					

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD carbide boring bar
PCD合金小镗刀

PSBR..



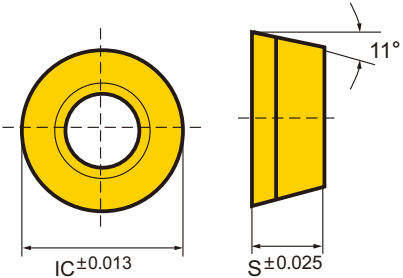
型号 Model	尺寸Size (mm)			
	d	L	L1	S
PSBR0303-50	2.8	50	25	1.4
PSBR0404-60	3.8	60	30	1.9
PSBR0505-70	4.8	70	40	2.4
PSBR0606-70	5.8	70	45	2.9
PSBR0707-80	6.8	80	60	3.4

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		Dmin	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	PSBR0303-50	3.0	1		●						
	PSBR0404-60	4.0	1		●						
	PSBR0505-70	5.0	1		●						
	PSBR0606-70	6.0	1		●						
	PSBR0707-80	7.0	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

RPKW..



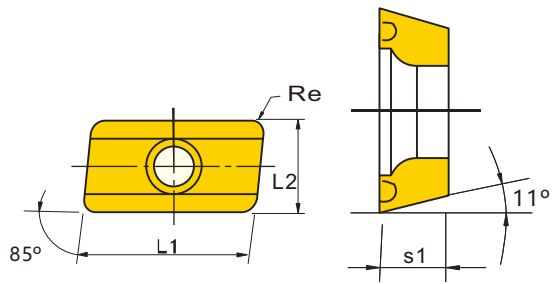
型号 Model	尺寸Size (mm)	
	IC	S
RPKW1003MO	10	3.18
RPKW1204MO	12	4.76

刀片外形 Insert shape	型号 Model	r	刀尖数 Corner	刀片材质及适用加工材料 Insert grades and application							
				KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	RPKW1003MO	5.0	FACE		●						
	RPKW1204MO	6.0	FACE		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

AP..



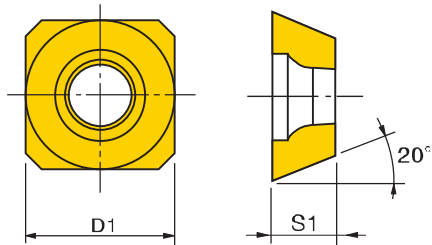
型号 Model	尺寸Size (mm)		
	L2	L1	S
AP..1135..	6.6	11.3	3.6
AP..1604..	9.56	16.4	4.76

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		Re	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	APKT113504	0.4	1		●						
	APKT113508	0.8	1		●						
	APKT113512	1.2	1		●						
	APKT160404	0.4	1		●						
	APKT160408	0.8	1		●						
	APKT160412	1.2	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

PCD Inserts
PCD刀片

SEKT..



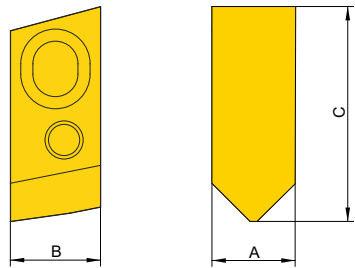
型号 Model	尺寸Size (mm)	
	d1	s1
SEKT1204..	12.7	4.76

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application									
		Re	刀尖数 Corner	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	SEKT1204AFFN	C0.45	1		●						
有色金属Nonferrous Metal					★						
耐热合金Heat Resistant Alloy					☆						

★ 首选Preferred ☆ 可选optional ● 标准库存standard stock ○ 订单生产order production

Adjustable Aluminum Face Mills
可调式铝用面铣刀片

选用刀夹

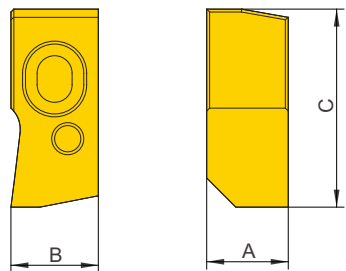


刀夹外形 Insert shape	型号 Model	库存 Stock	A	B	C
	FM45-SE12	○	12	13	31
	FM45-PCD	○	12	13	31

● 标准库存 standard stock ○ 订单生产 order production

Adjustable Aluminum Face Mills
可调式铝用面铣刀片

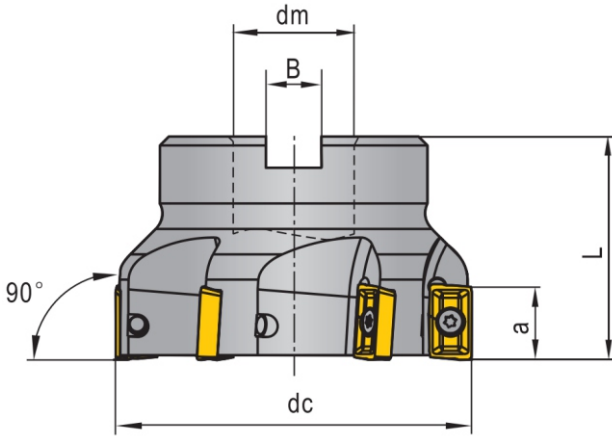
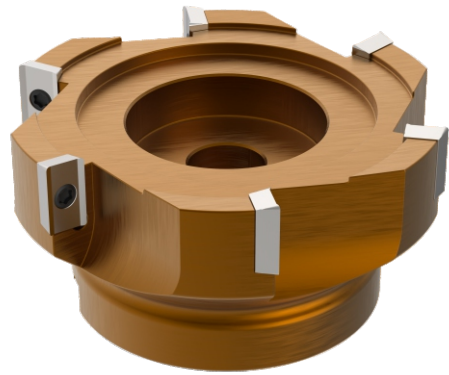
选用刀夹



刀夹外形 Insert shape	型号 Model	库存 Stock	A	B	C
	FM90-AP16	○	14	15	34
	FM90-PCD	○	14	15	34

● 标准库存 standard stock ○ 订单生产 order production

Indexable Aluminum Face Mills
可转位铝用面铣刀

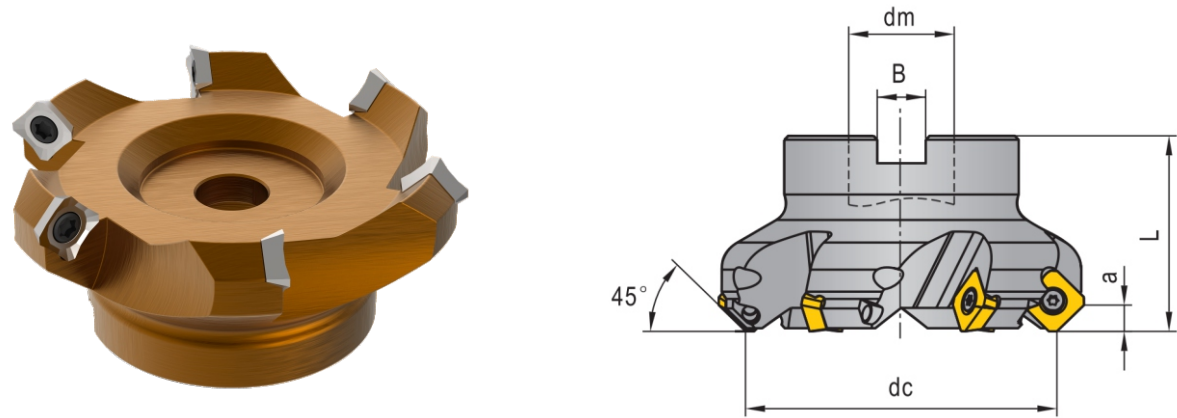


型号 Model	库存 Stock	dc	dm	L	B	a	刀片 Applicable inserts	螺丝 Clamp screw	扳手 Wrench
BAP400R-50-22-4T-AL	○	50	22	50	10.4	14	APMT 1604 PDER	M4x10	T15
BAP400R-63-22-4T-AL	○	63	22	50	10.4	14			
BAP400R-80-27(22)-6T-AL	○	80	27	50	12.4	14			
BAP400R-100-32(22/27)-6T-AL	○	100	32	50	14.4	14			
BAP400R-125-40(27/32)-7T-AL	○	125	40	63	16.4	14			
BAP400R-160-40(27/32)-8T-AL	○	160	40	63	16.4	14			
BAP400R-200-40(27/32)-10T-AL	○	200	40	63	16.4	14			
BAP400R-250-40-12T-AL	○	250	40	63	16.4	14			

* 刀片需单独订购。Blades to be ordered separately.

● 标准库存 Standard inventory ○ 订单生产 The order production

Indexable Aluminum Face Mills
可转位铝用面铣刀

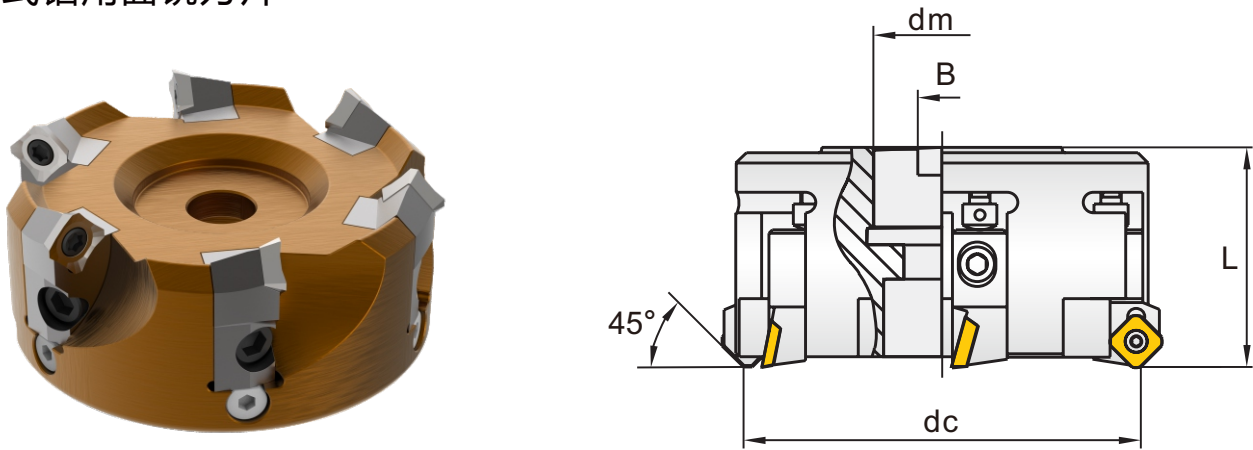


型号 Model	库存 Stock	尺寸 Size (mm)				刀片 Applicable inserts	螺丝 Clamperscrew	扳手 Wrench
		dc	dm	L	B			
KM12-50-22-4T-AL	○	50	22	50	10.4	SEKT 1204	A50110D M5x11	T20
KM12-63-22-4T-AL	○	63	22	50	10.4			
KM12-80-27(22)-5T-AL	○	80	27	50	12.4			
KM12-100-32(22/27)-6T-AL	○	100	32	50	14.4			
KM12-125-40(27/32)-6T-AL	○	125	40	63	16.4			
KM12-160-40(27/32)-8T-AL	○	160	40	63	16.4			
KM12-200-40(27/32)-10T-AL	○	200	40	63	16.4			
KM12-250-40-10T-AL	○	250	40	63	16.4			

* 刀片需单独订购。Blades to be ordered separately.

●标准库存 Standard inventory ○订单生产 The order production

Adjustable Aluminum Face Mills
可调式铝用面铣刀片

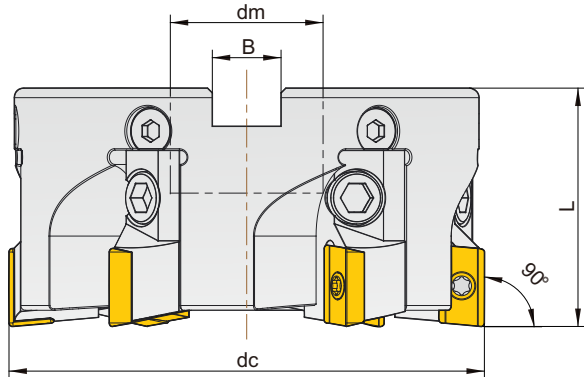
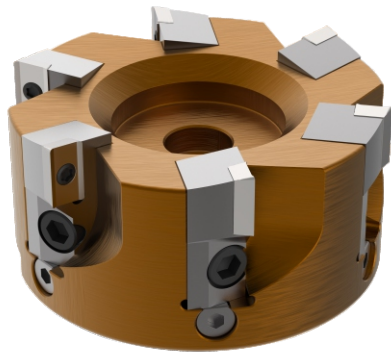


型号 Model	库存 Stock	尺寸 Size (mm)				刀片 Applicable inserts	螺丝 Clamperscrew	扳手 Wrench	刀夹 Cartridge
		dc	dm	B	L				
KM12-63-22-5T-AL-KT	○	63	22	10.4	63	SEKT 1204	M5x11	T20	FM45-SE12
KM12-80-22/27-6T-AL-KT	○	80	27	12.4	63				
KM12-100-32-7T-AL-KT	○	100	32	14.4	63				
KM12-125-40-8T-AL-KT	○	125	40	16.4	63				
KM12-160-40-10T-AL-KT	○	160	40	16.4	63				
KM12-200-40-10T-AL-KT	○	200	40	25.7	63				
KM12-250-60-14T-AL-KT	○	250	60	25.7	63				
KM12-300-60-14T-AL-KT	○	300	60	25.7	63				

* 刀片需单独订购。Blades to be ordered separately.

●标准库存 Standard inventory ○订单生产 The order production

Adjustable Aluminum Face Mills
可调式铝用面铣刀片



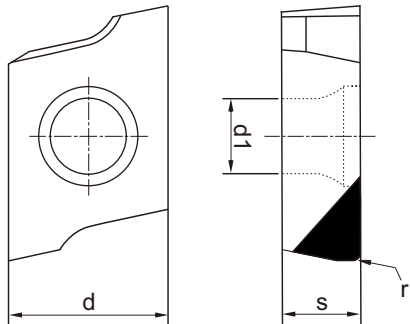
型号 Model	库存 Stock	尺寸 Size (mm)				刀片 Applicable inserts	螺丝 Clampserew	扳手 Wrench	刀夹 Cartridge
		dc	dm	B	L				
BAP400R-63-22-4T-AL-KT	○	63	22	10.4	63	APMT 1604 PDER	M4x10	T15	FM90-AP16
BAP400R-80-27-4T-AL-KT	○	80	27	12.4	63				
BAP400R-100-27-6T-AL-KT	○	100	37	14.4	63				
BAP400R-125-32-6T-AL-KT	○	125	32	16.4	63				
BAP400R-160-40-10T-AL-KT	○	160	40	16.4	63				
BAP400R-200-40-10T-AL-KT	○	200	40	25.7	63				
BAP400R-250-40-14T-AL-KT	○	250	40	25.7	63				
BAP400R-300-40-14T-AL-KT	○	300	40	25.7	63				

* 刀片需单独订购。Blades to be ordered separately.

● 标准库存 Standard inventory ○ 订单生产 The order production

Adjustable Aluminum Face Mills
可调式铝用面铣刀片

XG..



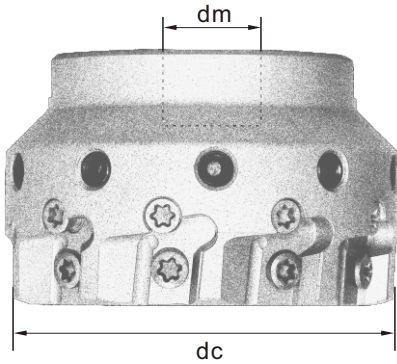
型号 Model	尺寸 Size (mm)		
	d	s	d1
XG..1705..	9.5	4.7	4.5

刀片外形 Insert shape	型号 Model	刀片材质及适用加工材料 Insert grades and application								
		r	KPD05	KPD10	KPD25	KCD02	KCD05	KCD10	KCD25	KCD60
	XGMT170504FR	0.4		●						
	XGMT170508FR	0.8		●						
有色金属Nonferrous Metal		★								
耐热合金Heat Resistant Alloy		☆								

★ 首选 Preferred ☆ 可选 optional

● 标准库存 standard stock ○ 订单生产 order production

Adjustable Aluminum Face Mills Cutter Disc
可调式铝用面铣刀盘



型号 Model	库存 Stock	尺寸 Size (mm)		刀片 Applicable inserts	螺丝 Clampserew	扳手 Wrench
		dc	dm			
KXGM90R-50-22-7T	○	50	22	XGMT1705..	M4x9	T15
KXGM90R-63-22-10T	○	63	22			

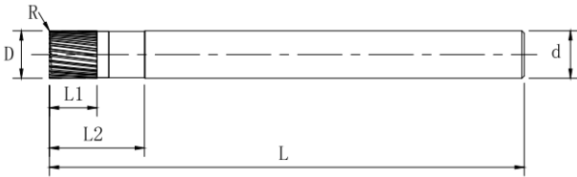
* 刀片需单独订购。Blades to be ordered separately.

●标准库存Standard inventory ○订单生产The order production

CRM-PCD Flat bottomed milling cutter
CRM-PCD平底磨头铣刀



- 1、PCD皇冠刀适用于多种高硬度材料，如硬质合金、陶瓷、玻璃、复合材料等。
2、PCD皇冠刀在高温下仍能保持良好性能，适合高速加工和高温环境。
- 1: PCD crown cutters are suitable for a variety of high-hardness materials, such as cemented carbide, ceramics, glass, composite materials, etc.
2: PCD crown cutters can still maintain good performance at high temperatures and are suitable for high-speed processing and high-temperature environments.



型号 Model	库存 Stock	R	刃径 Flute Diameter D	有效长 Effective length L1	刃长 Flute length L2	全长 Total length L	柄径 Shank Diameter d	z	材质 material D010
CRM-01-1.5-08T-7-04-50	○	-	1	7	1.5	50	4	8	●
CRM-02-1.5-18T-7-04-50	○	-	2	7	1.5	50	4	18	●
CRM-03-2.5-20T-7-04-50	○	-	3	7	2.5	50	4	20	●
CRM-04-2.5-24T-7-04-50	○	-	4	7	2.5	50	4	24	●
CRM-06-3.5-28T-7-06-50	○	-	6	7	3.5	50	6	28	●
CRM-08-3.5-36T-7-08-50	○	-	8	7	3.5	50	8	36	●
CRM-10-3.5-40T-7-10-50	○	-	10	7	3.5	50	10	40	●

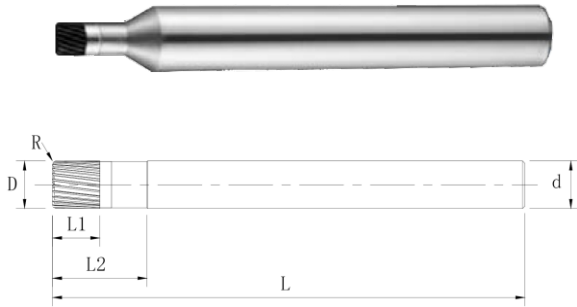
标准库存standard stock

订单生产order production

CRM-PCD Round nose milling cutter
CRM-PCD圆鼻磨头铣刀



- 1、PCD皇冠刀适用于多种高硬度材料，如硬质合金、陶瓷、玻璃、复合材料等。
- 2、PCD皇冠刀在高温下仍能保持良好性能，适合高速加工和高温环境。
- 1: PCD crown cutters are suitable for a variety of high-hardness materials, such as cemented carbide, ceramics, glass, composite materials, etc.
- 2: PCD crown cutters can still maintain good performance at high temperatures and are suitable for high-speed processing and high-temperature environments.



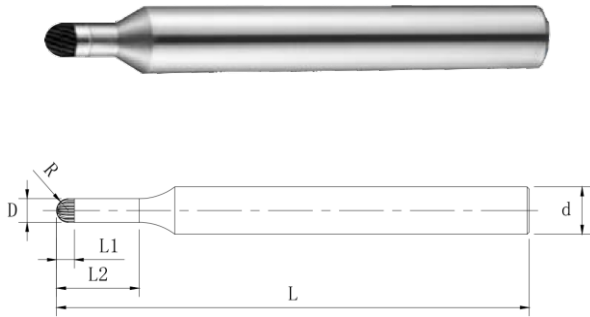
型号 Model	库存 Stock	R	刃径 Flute Diameter D	有效长 Effective length L1	刃长 Flute length L2	全长 Total length L	柄径 Shank Diameter d	z	材质 material D010
CRM-01-1.5-08T-7-04-50-R0.05	○	0.05	1	7	1.5	50	4	8	●
CRM-02-1.5-18T-7-04-50-R0.1	○	0.1	2	7	1.5	50	4	18	●
CRM-03-2.5-20T-7-04-50-R0.2	○	0.2	3	7	2.5	50	4	20	●
CRM-04-2.5-24T-7-04-50-R0.2	○	0.2	4	7	2.5	50	4	24	●
CRM-06-3.5-28T-7-06-50-R0.2	○	0.2	6	7	3.5	50	6	28	●
CRM-08-3.5-36T-7-08-50-R0.2	○	0.2	8	7	3.5	50	8	36	●
CRM-10-3.5-40T-7-10-50-R0.2	○	0.2	10	7	3.5	50	10	40	●

标准库存standard stock 订单生产order production

CRM-PCD Ball end milling cutter
CRM-PCD球头磨头铣刀



- 1、PCD皇冠刀适用于多种高硬度材料，如硬质合金、陶瓷、玻璃、复合材料等。
- 2、PCD皇冠刀在高温下仍能保持良好性能，适合高速加工和高温环境。
- 1: PCD crown cutters are suitable for a variety of high-hardness materials, such as cemented carbide, ceramics, glass, composite materials, etc.
- 2: PCD crown cutters can still maintain good performance at high temperatures and are suitable for high-speed processing and high-temperature environments.



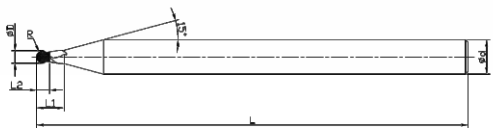
型号 Model	库存 Stock	R	刃径 Flute Diameter D	有效长 Effective length L1	刃长 Flute length L2	全长 Total length L	柄径 Shank Diameter d	z	材质 material D010
CRM-01-1.5-08T-7-04-50-R0.5	○	0.5	1	7	1.5	50	4	8	●
CRM-02-1.5-18T-7-04-50-R1.0	○	1	2	7	1.5	50	4	18	●
CRM-03-2.5-20T-7-04-50-R1.5	○	1.5	3	7	2.5	50	4	20	●
CRM-04-2.5-24T-7-04-50-R2.0	○	2	4	7	2.5	50	4	24	●
CRM-06-3.5-28T-7-06-50-R3.0	○	3	6	7	3.5	50	6	28	●

标准库存standard stock 订单生产order production

HCBE-PCD Ball endmill for tungsten carbide
HCBE-硬质合金加工用金刚石球头铣刀

焊接
PCD

●直径范围 Tool dia: D0.4-D2.0mm
●直径公差 Dia tolerance: D: 0,-0.01mm
d: 0,-0.003mm
●R公差 R tolerance: R: +0.005mm
-0.005mm



1、加工精度高，加工面光洁度好。
2、排屑顺畅。几乎不产生粘刀现象。

1. It has high machining precision and good surface finish.
2. Chip removal is smooth. Almost no stick knife phenomenon.

型号 Model	库存 Stock	R	刃径 Flute Diameter D	有效长 Effective length L1	刃长 Flute length L2	避空直径 Neck Diameter D1	PCD层 PCD length	全长 Total length L	柄径 Shank Diameter d
HCBE020	○	0.2	0.4	0.8	0.3	0.36	0.6	50	4
HCBE025	○	0.25	0.5	1.0	0.4	0.46	0.8	50	4
HCBE030	○	0.3	0.6	1.2	0.5	0.56	1	50	4
HCBE040	○	0.4	0.8	1.6	0.6	0.76	1	50	4
HCBE050	○	0.5	1.0	2.0	1.0	0.95	1	50	4
HCBE060	○	0.6	1.2	2.4	1.2	1.15	2	50	4
HCBE070	○	0.7	1.4	2.8	1.4	1.35	2	50	4
HCBE075	○	0.75	1.5	3.0	1.5	1.45	2	50	4
HCBE080	○	0.8	1.6	3.2	1.5	1.55	2	50	4
HCBE090	○	0.9	1.8	3.6	1.5	1.75	2	50	4
HCBE100	○	1.0	2.0	4.0	1.5	1.95	2	50	4

●标准库存standard stock ○订单生产order production

HCRE-PCD Corner R endmill for tungsten carbide
HCRE-硬质合金加工用金刚石R角铣刀

焊接
PCD

●直径范围 Tool dia: D0.4-D2.0mm
●直径公差 Dia tolerance: D: 0,-0.01mm
d: 0,-0.003mm
●R公差 R tolerance: R: +0.005mm
-0.005mm



1、加工精度高，加工面光洁度好。
2、排屑顺畅。几乎不产生粘刀现象。

1. It has high machining precision and good surface finish.
2. Chip removal is smooth. Almost no stick knife phenomenon.

型号 Model	库存 Stock	刃径 Flute Diameter D	R角 Corner R R	有效长 Effective length L1	刃长 Flute length L2	避空直径 Neck Diameter D1	PCD层 PCD length	全长 Total length L	柄径 Shank Diameter d
HCRE05005	○	0.5	0.05	1	0.5	0.46	0.8	50	4
HCRE05010	○	0.5	0.1	1	0.5	0.16	0.8	50	4
HCRE05020	○	0.5	0.2	1	0.5	0.46	0.8	50	4
HCRE10005	○	1	0.05	2	1	0.95	1	50	4
HCRE10010	○	1	0.1	2	1	0.95	1	50	4
HCRE10020	○	1	0.2	2	1	0.95	1	50	4
HCRE15005	○	1.5	0.05	3	1.5	1.45	2	50	4
HCRE15010	○	1.5	0.1	3	1.5	1.45	2	50	4
HCRE15020	○	1.5	0.2	3	1.5	1.45	2	50	4
HCRE20005	○	2	0.05	4	1.5	1.95	2	50	4
HCRE20010	○	2	0.1	4	1.5	1.95	2	50	4
HCRE20020	○	2	0.2	4	1.5	1.95	2	50	4

●标准库存standard stock ○订单生产order production

切削参数表Standard Cutting Conditions

被削材 Work Material	硬质合金 Tungsten carbide					
	R mm	回転数 Rotation min ⁻¹	进给速度 Feed mm/min	进给速度2 Feed2 mm/min	切削量 Cutting Depth Ad mm	切削量 Cutting Depth Rd mm
	0.2	50000	70~140	15~50	0.005~0.008	0.03
	0.25	50000	70~140	15~50	0.005~0.008	0.04
	0.3	45000	85~160	25~55	0.008~0.011	0.05
	0.4	35000	90~165	30~60	0.008~0.011	0.07
	0.5	30000	100~170	30~60	0.01~0.02	0.1
	0.6	30000	100~170	30~60	0.012~0.024	0.13
	0.7	28000	115~170	30~65	0.014~0.028	0.16
	0.75	27000	115~170	30~65	0.015~0.03	0.17
	0.8	26000	120~175	35~70	0.016~0.032	0.19
	0.9	25000	120~175	35~75	0.018~0.036	0.22
	1.0	25000	120~175	40~80	0.02~0.04	0.25

切削参数表Standard Cutting Conditions

被削材 Work Material	硬质合金 Tungsten carbide					
	直径 Drill Dia. mm	回転数 Rotation min ⁻¹	进给速度 Feed mm/min	进给速度2 Feed2 mm/min	切削量 Cutting Depth Ad mm	切削量 Cutting Depth Rd mm
	0.5	35000	150~300	20~40	0.005~0.01	0.03
	1.0	30000	300~550	30~60	0.005~0.01	0.125
	1.5	25000	250~150	30~60	0.007~0.014	0.18
	2.0	20000	200~400	30~60	0.01~0.02	0.25

C37

www.pcbn.com

www.pcbn.com

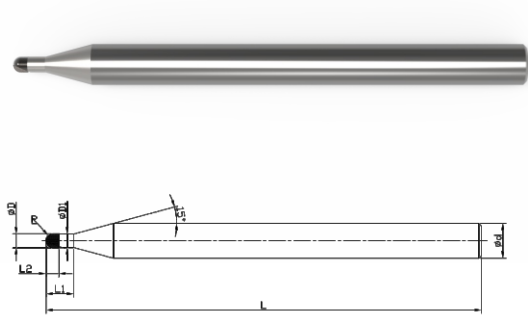
C38

HBE-PCD Ball endmill
HBE-金刚石球头铣刀



- 直径范围 Tool dia: D0.4-D3.0mm
- 直径公差 Dia tolerance: D: 0,-0.005mm
d: 0,-0.003mm
- R公差 R tolerance: R: +0.003mm
-0.003mm

- 1、加工精度高，加工面光洁度好。
2、排屑顺畅。几乎不产生粘刀现象。
1. It has high machining precision and good surface finish.
2. Chip removal is smooth. Almost no stick knife phenomenon.



型号 Model	库存 Stock	R	刃径 Flute Diameter D	有效长 Effective length L1	刃长 Flute length L2	PCD层 PCD length	全长 Total length L	柄径 Shank Diameter d	
HBE010	○	0.1	0.2	0.6	0.2	1	50	4	
HBE015	○	0.15	0.3	0.9	0.3	1	50	4	
HBE020	○	0.2	0.4	1.2	0.4	1	50	4	
HBE025	○	0.25	0.5	1.5	0.5	1	50	4	
HBE030	○	0.3	0.6	1.8	0.6	1	50	4	
HBE040	○	0.4	0.8	2.4	0.8	1	50	4	
HBE050	○	0.5	1.0	3.0	1.0	1	50	4	
HBE060	○	0.6	1.2	3.6	1.2	1	50	4	
HBE070	○	0.7	1.4	4.2	1.4	1	50	4	
HBE075	○	0.75	1.5	4.5	1.5	2	50	4	
HBE080	○	0.8	1.6	4.8	1.5	2	50	4	
HBE090	○	0.9	1.8	5.4	1.5	2	50	4	
HBE100	○	1.0	2.0	6.0	1.5	2	50	4	
HBE150	○	1.5	3.0	9.0	2.0	3	50	4	

●标准库存standard stock ○订单生产order production

切削参数表Standard Cutting Conditions

被削材 Work Material	铝合金 Aluminum Alloy			高硅铝 High silicon Aluminum			陶瓷 Machinable Ceramics			石英 Quartz Glass			铜和铜合金 Copper and Copper Alloy			MMC (陶瓷30%) MMC(Ceramics30%)			碳纤维 Carbon			石墨 Graphite		
	切削速度 Cutting Speed mm/min	直径 Drill Dia. mm	150~250~400m/min	80~150~300m/min	5~8~15m/min	30~50~75m/min	60~120~300m/min	20~30~40m/min	100~150~250m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min	150~200~350m/min		
0.1	0.15	60000	360	0.005	0.02	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	
			420	0.01	0.03	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	
0.2	0.25	60000	450	0.02	0.06	0.06	0.10	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	0.02	0.06	
			550	0.03	0.07	0.07	0.10	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	0.03	0.07	
0.3	0.4	60000	640	0.05	0.1	0.1	0.15	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	0.05	0.1	
			720	0.1	0.15	0.15	0.2	0.1	0.15	0.1	0.15	0.1	0.15	0.1	0.15	0.1	0.15	0.1	0.15	0.1	0.15	0.1	0.15	
0.5	0.6	60000	750	0.1	0.3	0.3	0.4	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.1	0.3	
			800	0.15	0.4	0.4	0.5	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	
0.7	0.75	60000	800	0.15	0.4	0.4	0.5	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	
			800	0.15	0.4	0.4	0.5	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	
0.8	0.9	60000	800	0.15	0.4	0.4	0.5	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	
			800	0.15	0.4	0.4	0.5	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	0.15	0.4	
1	1.5	60000	1000	0.2	0.5	0.5	0.6	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	0.2	0.5	
			1300	0.2	0.8	0.8	0.9	0.2	0.8	0.2	0.8	0.2	0.8	0.2	0.8	0.2	0.8	0.2	0.8	0.2	0.8	0.2	0.8	

HSE-PCD endmill
HSE-金刚石平底铣刀

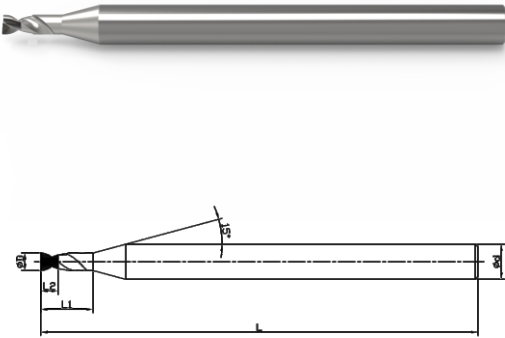


- 直径范围 Tool dia: D0.2-D6.0mm
- 直径公差 Dia tolerance: D: 0,-0.01mm
d: 0,-0.003mm

- 1、加工精度高，加工面光洁度好。
2、排屑顺畅。几乎不产生粘刀现象。
1. It has high machining precision and good surface finish.
2. Chip removal is smooth. Almost no stick knife phenomenon.

型号 Model	库存 Stock	刃径 Flute Diameter D	有效长 Effective length L1	刃长 Flute length L2	PCD层 PCD length	全长 Total length L	柄径 Shank Diameter d		
HSE020	○	0.2	0.6	0.2	1	50	4		
HSE030	○	0.3	0.9	0.3	1	50	4		
HSE040	○	0.4	1.2	0.4	1	50	4		
HSE050	○	0.5	1.5	0.5	1	50	4		
HSE060	○	0.6	1.8	0.6	1	50	4		
HSE070	○	0.7	2.1	0.7	1	50	4		
HSE080	○	0.8	2.4	0.8	1	50	4		
HSE090	○	0.9	2.7	0.9	1	50	4		
HSE100	○	1.0	3.0	1	1	50	4		
HSE110	○	1.1	3.3	1	1	50	4		
HSE120	○	1.2	3.6	1	1	50	4		
HSE130	○	1.3	3.9	1	1	50	4		
HSE140	○	1.4	4.2	1	1	50	4		
HSE150	○	1.5	4.5	1.5	2	50	4		
HSE160	○	1.6	4.8	1.5	2	50	4		
HSE170	○	1.7	5.1	1.5	2	50	4		
HSE180	○	1.8	5.4	1.5	2	50	4		
HSE190	○	1.9	5.7	1.5	2	50	4		
HSE200	○	2.0	6.0	2	2	50	4		
HSE210	○	2.1	6.3	2	2	50	4		
HSE220	○	2.2	6.6	2	2	50	4		
HSE230	○	2.3	6.9	2	2	50	4		
HSE240	○	2.4	7.2	2	2	50	4		
HSE250	○	2.5	7.5	2	2	50	4		
HSE260	○	2.6	7.8	2	2	50	4		
HSE270	○	2.7	8.1	2	2	50	4		
HSE280	○	2.8	8.4	2	2	50	4		
HSE290	○	2.9	8.7	2	2	50	4		
HSE300	○	3.0	9.0	2.5	3	50	6		
HSE350	○	3.5	10.5	2.5	3	50	6		
HSE400	○	4.0	12.0	2.5	3	50	6		
HSE450	○	4.5	13.5	2.5	3	50	6		
HSE500	○	5.0	15	3	4	60	6		
HSE550	○	5.5	16.5	3	4	60	6		
HSE600	○	6.0	18.0	3	4	60	6		

●标准库存standard stock ○订单生产order production



切削参数表Standard Cutting Conditions

被削材 Work Material	铝合金 Aluminum Alloy	高硅铝 High silicon Aluminum	陶瓷 Machinable Ceramics	石英 Quartz Glass	铜和铜合金 Copper and Copper Alloy	MMC (陶瓷30%) MMC(Ceramic30%)	碳纤维 Carbon	石墨 Graphite
切削速度 Cutting Speed mm/min	250~350~500m/min	150~2150~400m/min	5~8~15m/min	40~60~80m/min	150~200~350m/min	20~30~40m/min	150~200~350m/min	150~250~400m/min
直径 Drill Dia. mm	0.2	0.2	0.003	0.003	0.003	0.003	0.003	0.003
0.3	60000	50000	5	36	50000	47000	50000	50000
0.4	60000	50000	6	40	50000	30000	560	320
0.5	60000	50000	7	45	50000	24000	600	370
0.6	60000	50000	7	45	50000	20000	720	420
0.7	60000	50000	7	45	50000	16000	720	420
0.8	60000	50000	7	45	50000	15000	720	420
0.9	60000	50000	7	45	50000	13000	750	450
1	60000	50000	7	45	50000	10500	750	450
1.1	60000	50000	8	45	50000	9500	800	500
1.2	60000	50000	8	45	50000	8600	800	500
1.3	60000	50000	8	45	50000	8000	800	500
1.4	60000	50000	8	45	50000	7300	800	500
1.5	60000	50000	8	45	50000	6800	800	500
1.6	60000	50000	8	45	50000	6300	850	560
1.7	60000	50000	8	45	50000	6000	850	560
1.8	60000	50000	8	45	50000	5300	850	560
1.9	60000	50000	8	45	50000	5000	850	560
2	60000	50000	9	45	50000	4700	1000	600
2.1	60000	50000	9	45	50000	4500	1000	600
2.2	60000	50000	9	45	50000	4300	1000	600
2.3	60000	50000	9	45	50000	4100	1000	600
2.4	60000	50000	9	45	50000	4000	1000	600
2.5	60000	50000	9	45	50000	4000	1000	600
2.6	60000	50000	9	45	50000	4000	1000	600
2.7	60000	50000	9	45	50000	4000	1000	600
2.8	60000	50000	9	45	50000	4000	1000	600
2.9	60000	50000	9	45	50000	4000	1000	600
3	60000	50000	10	45	50000	4000	1000	600
3.5	60000	50000	10	45	50000	4000	1000	600
4	60000	50000	10	45	50000	4000	1000	600
4.5	60000	50000	10	45	50000	4000	1000	600
5	60000	50000	10	45	50000	4000	1000	600
5.5	60000	50000	10	45	50000	4000	1000	600
6	60000	50000	10	45	50000	4000	1000	600

PCE1-PCD Straight endmill 1 flute
PCE1-金刚石直刃铣刀（单刃）



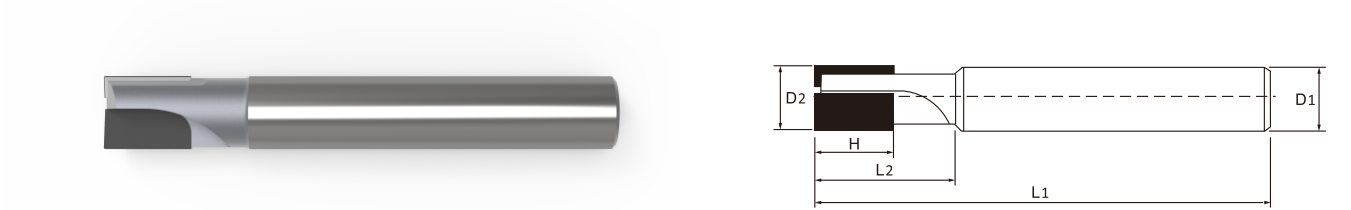
型号 Model	库存 Stock	D1 柄径	D2 刃径	L1 全长	L2 切深	H 刃长	Z 齿数
PCE1-2.0X6	○	6	2	50	5~8	3	1
PCE1-2.5X6	○	6	2.5	50	5~8	4	1
PCE1-3.0X6	○	6	3	50	5~8	5	1
PCE1-3.5X6	○	6	3.5	50	5~8	5	1
PCE1-4.0X6	○	6	4	50	8~10	6	1
PCE1-5.0X6	○	6	5	50	8~10	6	1
PCE1-6.0X6	○	6	6	50	10~15	8	1
PCE1-7.0X6	○	6	7	50	10~15	8	1
PCE1-8.0X8	○	8	8	60	15~20	10	1
PCE1-8.5X8	○	8	8.5	60	15~20	10	1
PCE1-9.0X8	○	8	9	60	15~20	10	1
PCE1-10.0X10	○	10	10	70	15~20	12	1
PCE1-11.0X10	○	10	11	70	15~20	12	1
PCE1-10.0X12	○	12	10	70	15~20	15	1
PCE1-12.0X12	○	12	12	70	15~20	15	1
PCE1-14.0X14	○	14	14	70	15~20	15	1
PCE1-15.0X16	○	16	15	70	22~28	18	1
PCE1-16.0X16	○	16	16	70	22~28	18	1

● 标准库存standard stock ○ 订单生产order production

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
							○		◎		◎	◎	◎	◎	◎	◎	◎	○	◎

◎ 首选Preferred ○ 可选optional

PCE2-PCD Straight endmill 2 flute
PCE2-金刚石直刃铣刀（双刃）



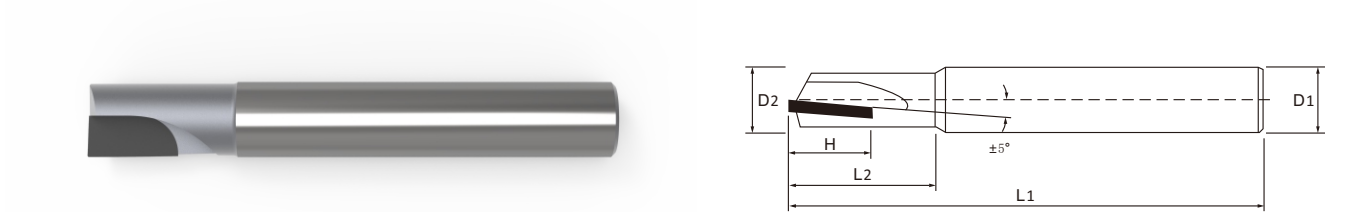
型号 Model	库存 Stock	D1 柄径	D2 刃径	L1 全长	L2 切深	H 刃长	Z 齿数
PCE2-4.0X6	○	6	4	50	8~10	6	2
PCE2-5.0X6	○	6	5	50	8~10	6	2
PCE2-6.0X6	○	6	6	50	10~15	8	2
PCE2-7.0X6	○	6	7	50	10~15	8	2
PCE2-8.0X8	○	8	8	60	15~20	10	2
PCE2-8.5X8	○	8	8.5	60	15~20	10	2
PCE2-9.0X8	○	8	9	60	15~20	10	2
PCE2-10.0X10	○	10	10	70	15~20	12	2
PCE2-11.0X10	○	10	11	70	15~20	12	2
PCE2-10.0X12	○	12	10	70	15~20	15	2
PCE2-12.0X12	○	12	12	70	15~20	15	2
PCE2-14.0X14	○	14	14	70	15~20	15	2
PCE2-15.0X16	○	16	15	70	22~28	18	2
PCE2-16.0X16	○	16	16	70	22~28	18	2

● 标准库存standard stock ○ 订单生产order production

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
							○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	◎

◎ 首选Preferred ○ 可选optional

PCES1-PCD Spiral endmill 1 flute
PCES1-金刚石螺旋刀铣刀（单刃）



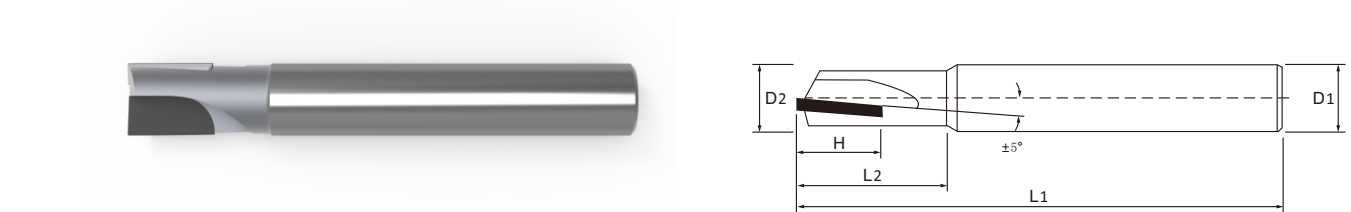
型号 Model	库存 Stock	D1 柄径	D2 刃径	L1 全长	L2 切深	H 刃长	Z 齿数
PCES1-2.0X6	○	6	2	50	5~8	3	1
PCES1-2.5X6	○	6	2.5	50	5~8	4	1
PCES1-3.0X6	○	6	3	50	5~8	5	1
PCES1-3.5X6	○	6	3.5	50	5~8	5	1
PCES1-4.0X6	○	6	4	50	8~10	6	1
PCES1-5.0X6	○	6	5	50	8~10	6	1
PCES1-6.0X6	○	6	6	50	10~15	8	1
PCES1-7.0X6	○	6	7	50	10~15	8	1
PCES1-8.0X8	○	8	8	60	15~20	10	1
PCES1-8.5X8	○	8	8.5	60	15~20	10	1
PCES1-9.0X8	○	8	9	60	15~20	10	1
PCES1-10.0X10	○	10	10	70	15~20	12	1
PCES1-11.0X10	○	10	11	70	15~20	12	1
PCES1-10.0X12	○	12	10	70	15~20	15	1
PCES1-12.0X12	○	12	12	70	15~20	15	1
PCES1-14.0X14	○	14	14	70	15~20	15	1
PCES1-15.0X16	○	16	15	70	22~28	18	1
PCES1-16.0X16	○	16	16	70	22~28	18	1

● 标准库存standard stock ○ 订单生产order production

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬硬钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
							○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	◎

◎ 首选Preferred ○ 可选optional

PCES2-PCD Spiral endmill 2 flute
PCES2-金刚石螺旋刀铣刀（双刃）



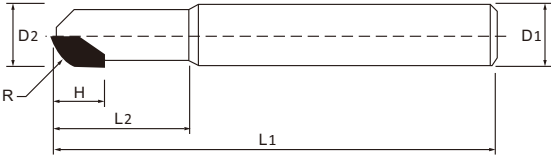
型号 Model	库存 Stock	D1 柄径	D2 刃径	L1 全长	L2 切深	H 刃长	Z 齿数
PCES2-4.0X6	○	6	4	50	8~10	6	2
PCES2-5.0X6	○	6	5	50	8~10	6	2
PCES2-6.0X6	○	6	6	50	10~15	8	2
PCES2-7.0X6	○	6	7	50	10~15	8	2
PCES2-8.0X8	○	8	8	60	15~20	10	2
PCES2-8.5X8	○	8	8.5	60	15~20	10	2
PCES2-9.0X8	○	8	9	60	15~20	10	2
PCES2-10.0X10	○	10	10	70	15~20	12	2
PCES2-11.0X10	○	10	11	70	15~20	12	2
PCES2-10.0X12	○	12	10	70	15~20	15	2
PCES2-12.0X12	○	12	12	70	15~20	15	2
PCES2-14.0X14	○	14	14	70	15~20	15	2
PCES2-15.0X16	○	16	15	70	22~28	18	2
PCES2-16.0X16	○	16	16	70	22~28	18	2

● 标准库存standard stock ○ 订单生产order production

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
							○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	◎

◎ 首选Preferred ○ 可选optional

PCB1- PCD Ball endmill 1 flute
PCB1-金刚石球头铣刀（单刃）



型号 Model	库存 Stock	D1 柄径	D2 刃径	L1 全长	L2 切深	H 刃长	Z 齿数	R 半径
PCB1-R1.0X6	○	6	2	50	5~8	3	1	1.5
PCB1-R1.75X6	○	6	3.5	50	5~8	3	1	1.75
PCB1-R2.0X6	○	6	4	50	8~10	4	1	2
PCB1-R2.5X6	○	6	5	50	8~10	5	1	2.5
PCB1-R3.0X6	○	6	6	50	10~15	6	1	3
PCB1-R3.5X6	○	6	7	50	10~15	6	1	3.5
PCB1-R4.0X8	○	8	8	60	15~20	7	1	4
PCB1-R4.25X8	○	8	8.5	60	15~20	8	1	4.25
PCB1-R4.5X8	○	8	9	60	15~20	8	1	4.5
PCB1-R5.0X10	○	10	10	70	15~20	8	1	5
PCB1-R5.5X10	○	10	11	70	15~20	9	1	5.5
PCB1-R5.0X12	○	12	10	70	18~25	9	1	5
PCB1-R6.0X12	○	12	12	70	18~25	10	1	6
PCB1-R7.0X14	○	14	14	70	18~25	10	1	7
PCB1-R7.5X16	○	16	15	70	22~28	11	1	7.5
PCB1-R8.0X16	○	16	16	70	22~28	12	1	8

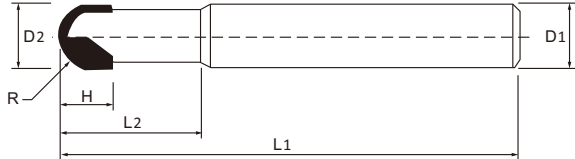
● 标准库存standard stock

○ 订单生产order production

加工材料 Work Material																
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC	铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic 碳纤维 Carbon Fiber
					○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

◎ 首选Preferred ○ 可选optional

PCB2- PCD Ball endmill 2 flute
PCB2-金刚石球头铣刀（双刃）



型号 Model	库存 Stock	D1 柄径	D2 刃径	L1 全长	L2 切深	H 刃长	Z 齿数	R 半径
PCB2-R2.0X6	○	6	4	50	8~10	4	2	2
PCB2-R2.5X6	○	6	5	50	8~10	5	2	2.5
PCB2-R3.0X6	○	6	6	50	10~15	6	2	3
PCB2-R3.5X6	○	6	7	50	10~15	6	2	3.5
PCB2-R4.0X8	○	8	8	60	15~20	7	2	4
PCB2-R4.25X8	○	8	8.5	60	15~20	8	2	4.25
PCB2-R4.5X8	○	8	9	60	15~20	8	2	4.5
PCB2-R5.0X10	○	10	10	70	15~20	8	2	5
PCB2-R5.5X10	○	10	11	70	15~20	9	2	5.5
PCB2-R5.0X12	○	12	10	70	18~25	9	2	5
PCB2-R6.0X12	○	12	12	70	18~25	10	2	6
PCB2-R7.0X14	○	14	14	70	18~25	10	2	7
PCB2-R7.5X16	○	16	15	70	22~28	11	2	7.5
PCB2-R8.0X16	○	16	16	70	22~28	12	2	8

● 标准库存standard stock

○ 订单生产order production

加工材料 Work Material																
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC	铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic 碳纤维 Carbon Fiber
					○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	◎

◎ 首选Preferred ○ 可选optional

SCD烧结式定柄金刚石钻头
SCD Sintered diamond drill (endmill shank)



- 1、与传统的金刚石钻头相比，由于是整体烧结，可以进行理想的高速加工。

2、刃部强度高，不会产生金刚石脱焊问题。

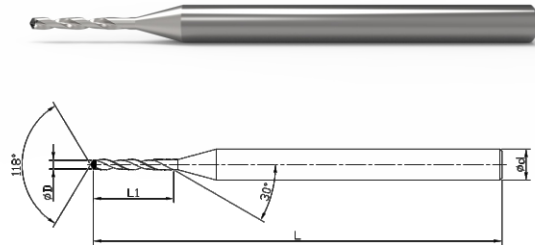
3、加工精度高，加工面光洁度好。

4、排屑顺畅。几乎不产生粘刀现象。
1. Compared with the traditional diamond bit, it can be used for ideal high-speed machining due to its integral sintering.

2. Because of the high strength of the cutting edge, the problem of diamond desoldering will not occur.

3. It has high machining precision and good surface finish.

4. Chip removal is smooth. Almost no stick knife phenomenon.



型号 Model	库存 Stock	尺寸 (mm)				
		ØD	ℓ ₁	L	Ød	
SCD0040	○	0.4	6	40	3	
SCD0041	○	0.41	6	40	3	
SCD0042	○	0.42	6	40	3	
SCD0043	○	0.43	6	40	3	
SCD0044	○	0.44	6	40	3	
SCD0045	○	0.45	6	40	3	
SCD0046	○	0.46	6	40	3	
SCD0047	○	0.47	6	40	3	
SCD0048	○	0.48	6	40	3	
SCD0049	○	0.49	6	40	3	
SCD0050	○	0.5	6	40	3	
SCD0051	○	0.51	6	40	3	
SCD0052	○	0.52	6	40	3	
SCD0053	○	0.53	6	40	3	
SCD0054	○	0.54	6	40	3	
SCD0055	○	0.55	6	40	3	
SCD0056	○	0.56	6	40	3	
SCD0057	○	0.57	6	40	3	
SCD0058	○	0.58	6	40	3	
SCD0059	○	0.59	6	40	3	
SCD0060	○	0.6	7	40	3	
SCD0061	○	0.61	7	40	3	
SCD0062	○	0.62-	7	40	3	
SCD0063	○	0.63	7	40	3	
SCD0064	○	0.64	7	40	3	
SCD0065	○	0.65	7	40	3	
SCD0066	○	0.66	7	40	3	
SCD0067	○	0.67	7	40	3	
SCD0068	○	0.68	7	40	3	
SCD0069	○	0.69	7	40	3	
SCD0070	○	0.7	8	40	3	
SCD0071	○	0.71	8	40	3	
SCD0072	○	0.72	8	40	3	
SCD0073	○	0.73	8	40	3	
SCD0074	○	0.74	8	40	3	

●标准库存standard stock ○订单生产order production

SCD烧结式定柄金刚石钻头
SCD Sintered diamond drill (endmill shank)



- 1、与传统的金刚石钻头相比，由于是整体烧结，可以进行理想的高速加工。

2、刃部强度高，不会产生金刚石脱焊问题。

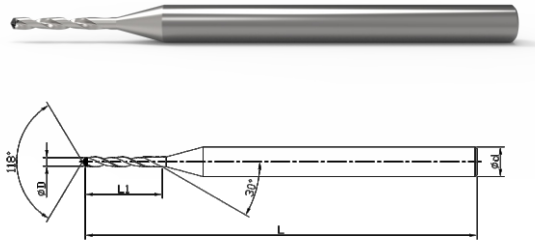
3、加工精度高，加工面光洁度好。

4、排屑顺畅。几乎不产生粘刀现象。
1. Compared with the traditional diamond bit, it can be used for ideal high-speed machining due to its integral sintering.

2. Because of the high strength of the cutting edge, the problem of diamond desoldering will not occur.

3. It has high machining precision and good surface finish.

4. Chip removal is smooth. Almost no stick knife phenomenon.



型号 Model	库存 Stock	尺寸 (mm)			
		ØD	ℓ ₁	L	Ød
SCD0110	○	1.1	10	40	3
SCD0111	○	1.11	10	40	3
SCD0112	○	1.12	10	40	3
SCD0113	○	1.13	10	40	3
SCD0114	○	1.14	10	40	3
SCD0115	○	1.15	10	40	3
SCD0116	○	1.16	10	40	3
SCD0117	○	1.17	10	40	3
SCD0118	○	1.18	10	40	3
SCD0119	○	1.19	10	40	3
SCD0120	○	1.2	10	40	3
SCD0121	○	1.21	10	40	3
SCD0122	○	1.22	10	40	3
SCD0123	○	1.23	10	40	3
SCD0124	○	1.24	10	40	3
SCD0125	○	1.25	10	40	3
SCD0126	○	1.26	10	40	3
SCD0127	○	1.27	10	40	3
SCD0128	○	1.28	10	40	3
SCD0129	○	1.29	10	40	3
SCD0130	○	1.3	10	40	3
SCD0131	○	1.31	10	40	3
SCD0132	○	1.32	10	40	3
SCD0133	○	1.33	10	40	3
SCD0134	○	1.34	10	40	3
SCD0135	○	1.35	10	40	3
SCD0136	○	1.36	10	40	3
SCD0137	○	1.37	10	40	3
SCD0138	○	1.38	10	40	3
SCD0139	○	1.39	10	40	3
SCD0140	○	1.4	10	40	3
SCD0141	○	1.41	10	40	3
SCD0142	○	1.42	10	40	3
SCD0143	○	1.43	10	40	3
SCD0144	○	1.44	10	40	3
SCD0145	○	1.45	10	40	3

●标准库存standard stock ○订单生产order production

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
							○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	◎

●最适合Fit best ○适合Fit

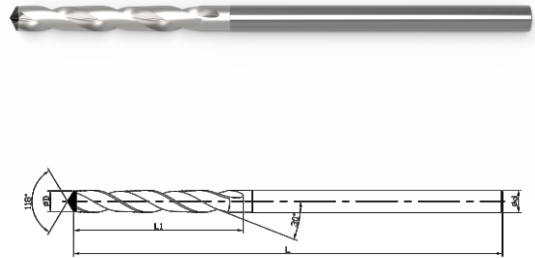
加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel ~55 HRC ~60 HRC ~70 HRC			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
							○	○	○	○	○	○	○	○	○	○	○	○	○

●最适合Fit best ○适合Fit

SCLD烧结式直柄金刚石钻头
SCLD Sintered diamond drill (straight shank)



- 1、与传统的金刚石钻头相比，由于是整体烧结，可以进行理想的高速加工。
- 2、刃部强度高，不会产生金刚石脱焊问题。
- 3、加工精度高，加工面光洁度好。
- 4、排屑顺畅。几乎不产生粘刀现象。
- 1. Compared with the traditional diamond bit, it can be used for ideal high-speed machining due to its integral sintering.
- 2. Because of the high strength of the cutting edge, the problem of diamond desoldering will not occur.
- 3. It has high machining precision and good surface finish.
- 4. Chip removal is smooth. Almost no stick knife phenomenon.



型号 Model	库存 Stock	尺寸 (mm)			
		ØD	ℓ ₁	L	Ød
SCLD010	○	1	20	75	1
SCLD011	○	1.1	20	75	1.1
SCLD012	○	1.2	20	75	1.2
SCLD013	○	1.3	20	75	1.3
SCLD014	○	1.4	20	75	1.4
SCLD015	○	1.5	20	75	1.5
SCLD016	○	1.6	20	75	1.6
SCLD017	○	1.7	20	75	1.7
SCLD018	○	1.8	20	75	1.8
SCLD019	○	1.9	20	75	1.9
SCLD020	○	2	30	100	2
SCLD021	○	2.1	30	100	2.1
SCLD022	○	2.2	30	100	2.2
SCLD023	○	2.3	30	100	2.3
SCLD024	○	2.4	30	100	2.4
SCLD025	○	2.5	30	100	2.5
SCLD026	○	2.6	30	100	2.6
SCLD027	○	2.7	30	100	2.7
SCLD028	○	2.8	30	100	2.8
SCLD029	○	2.9	30	100	2.9
SCLD030	○	3	40	120	3
SCLD031	○	3.1	40	120	3.1
SCLD032	○	3.2	40	120	3.2
SCLD033	○	3.3	40	120	3.3
SCLD034	○	3.4	40	120	3.4
SCLD035	○	3.5	40	120	3.5
SCLD036	○	3.6	40	120	3.6
SCLD037	○	3.7	40	120	3.7
SCLD038	○	3.8	40	120	3.8
SCLD039	○	3.9	40	120	3.9
SCLD040	○	4	40	120	4
SCLD041	○	4.1	40	120	4.1
SCLD042	○	4.2	40	120	4.2
SCLD043	○	4.3	40	120	4.3
SCLD044	○	4.4	40	120	4.4

型号 Model	库存 Stock	尺寸 (mm)			
		ØD	ℓ ₁	L	Ød
SCLD045	○	4.5	40	120	4.5
SCLD046	○	4.6	40	120	4.6
SCLD047	○	4.7	40	120	4.7
SCLD048	○	4.8	40	120	4.8
SCLD049	○	4.9	40	120	4.9
SCLD050	○	5	60	150	5
SCLD051	○	5.1	60	150	5.1
SCLD052	○	5.2	60	150	5.2
SCLD053	○	5.3	60	150	5.3
SCLD054	○	5.4	60	150	5.4
SCLD055	○	5.5	60	150	5.5
SCLD056	○	5.6	60	150	5.6
SCLD057	○	5.7	60	150	5.7
SCLD058	○	5.8	60	150	5.8
SCLD059	○	5.9	60	150	5.9
SCLD060	○	6	60	150	6
SCLD061	○	6.1	60	150	6.1
SCLD062	○	6.2	60	150	6.2
SCLD063	○	6.3	60	150	6.3
SCLD064	○	6.4	60	150	6.4
SCLD065	○	6.5	60	150	6.5
SCLD066	○	6.6	60	150	6.6
SCLD067	○	6.7	60	150	6.7
SCLD068	○	6.8	60	150	6.8
SCLD069	○	6.9	60	150	6.9
SCLD070	○	7	60	150	7
SCLD071	○	7.1	60	150	7.1
SCLD072	○	7.2	60	150	7.2
SCLD073	○	7.3	60	150	7.3
SCLD074	○	7.4	60	150	7.4
SCLD075	○	7.5	60	150	7.5
SCLD076	○	7.6	60	150	7.6
SCLD077	○	7.7	60	150	7.7
SCLD078	○	7.8	60	150	7.8
SCLD079	○	7.9	60	150	7.9

●标准库存standard stock ○订单生产order production

加工材料 Work Material																			
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre-Hardened Steel	淬火钢 Hardened steel			铸铁 Cast iron	钛合金 Titanium Alloy	高温合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程塑料 Plastics	玻璃纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide	单晶硅 Silicon	陶瓷 Ceramic	碳纤维 Carbon Fiber
			~55 HRC	~60 HRC	~70 HRC														
							○	○	◎	◎	◎	◎	◎	◎	◎	◎	◎	○	◎

※最适合Fit best ○适合Fit

SCLD烧结式直柄金刚石钻头
SCLD Sintered diamond drill (straight shank)

型号 Model	库存 Stock	尺寸 (mm)			
		ØD	ℓ ₁	L	Ød
SCLD080	○	8	80	180	8
SCLD081	○	8.1	80	180	8.1
SCLD082	○	8.2	80	180	8.2
SCLD083	○	8.3	80	180	8.3
SCLD084	○	8.4	80	180	8.4
SCLD085	○	8.5	80	180	8.5
SCLD086	○	8.6	80	180	8.6
SCLD087	○	8.7	80	180	8.7
SCLD088	○	8.8	80	180	8.8
SCLD089	○	8.9	80	180	8.9
SCLD090	○	9	80	200	9
SCLD091	○	9.1	80	200	9.1
SCLD092	○	9.2	80	200	9.2
SCLD093	○	9.3	80	200	9.3
SCLD094	○	9.4	80	200	9.4
SCLD095	○	9.5	80	200	9.5
SCLD096	○	9.6	80	200	9.6
SCLD097	○	9.7	80	200	9.7
SCLD098	○	9.8	80	200	9.8
SCLD099	○	9.9	80	200	9.9
SCLD100	○	10	80	200	10

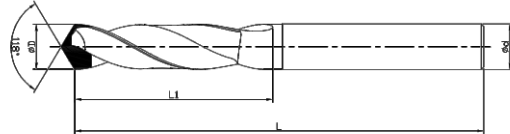
型号 Model	库存 Stock	尺寸 (mm)			
		ØD	ℓ ₁	L	Ød
SCLD101	○	10.1	80	200	10.1
SCLD102	○	10.2	80	200	10.2
SCLD103	○	10.3	80	200	10.3
SCLD104	○	10.4	80	200	10.4
SCLD105	○	10.5	80	200	10.5
SCLD106	○	10.6	80	200	10.6
SCLD107	○	10.7	80	200	10.7
SCLD108	○	10.8	80	200	10.8
SCLD109	○	10.9	80	200	10.9
SCLD110	○	11	120	250	11
SCLD111	○	11.1	120	250	11.1
SCLD112	○	11.2	120	250	11.2
SCLD113	○	11.3	120	250	11.3
SCLD114	○	11.4	120	250	11.4
SCLD115	○	11.5	120	250	11.5
SCLD116	○	11.6	120	250	11.6
SCLD117	○	11.7	120	250	11.7
SCLD118	○	11.8	120	250	11.8
SCLD119	○	11.9	120	250	11.9
SCLD120	○	12	120	250	12

●标准库存standard stock ○订单生产order production

切削参数表Standard Cutting Conditions

被削材 Work Material	铝合金 Aluminum Alloy		高硅铝 High Silicon Aluminum		铜合金 Copper Alloy		FRP复合材料 Fiber reinforced plastics		MMC复合材料 MMC(ceramics30%)		镁合金 Magnesium Alloy		工程塑胶 Plastics	
直径 Drill Dia. mm	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev	回転数 Rotation min ⁻¹	进给速度 Feed mm/rev
0.5	20000	0.005~0.01	12000	0.005~0.01	10000	0.005~0.01	10000	0.005~0.01	10000	0.005~0.01	10000	0.005~0.01	10000	0.005~0.01
1	15000	0.01~0.03	10000	0.01~0.03	10000	0.01~0.03	10000	0.01~0.03	10000	0.01~0.03	10000	0.01~0.03	10000	0.01~0.03
1.5	14000	0.03~0.06	9000	0.03~0.06	10000	0.02~0.05	10000	0.02~0.05	10000	0.02~0.05	10000	0.02~0.05	10000	0.02~0.05
2	13000	0.05~0.15	8000	0.05~0.15	9000	0.03~0.06	9000	0.03~0.06	8500	0.02~0.08	9000	0.03~0.06	9000	0.03~0.06
3	12000	0.08~0.2	8000	0.08~0.2	8000	0.04~0.08	8000	0.04~0.08	8000	0.03~0.1	8000	0.04~0.08	8000	0.04~0.08
4	12000	0.1~0.25	8000	0.1~0.25	7500	0.06~0.12	7500	0.06~0.12	7500	0.04~0.12	7500	0.06~0.12	7500	0.06~0.12
5	12000	0.15~0.3	7000	0.15~0.3	6500	0.08~0.15	6500	0.08~0.15	6500	0.05~0.14	6500	0.08~0.15	6500	0.08~0.15
6	12000	0.15~0.3	6500	0.15~0.3	5500	0.1~0.18	5500	0.1~0.18	5300	0.06~0.15	5500	0.1~0.18	5500	0.1~0.18
7	12000	0.15~0.3	5500	0.15~0.3	5000	0.12~0.2	5000	0.12~0.2	4500	0.07~0.16	5000	0.12~0.2	5000	0.12~0.2
8	12000	0.15~0.3	5000	0.15~0.3	4500	0.12~0.2	4500	0.12~0.2	4000	0.08~0.18	4500	0.12~0.2	4500	0.12~0.2
9	12000	0.15~0.3	4200	0.15~0.3	4000	0.12~0.2	4000	0.12~0.2	3500	0.09~0.19	4000	0.12~0.2	4000	0.12~0.2
10	10000	0.15~0.3	3800	0.15~0.3	3500	0.12~0.2	3500	0.12~0.2	3200	0.1~0.2	3500	0.12~0.2	3500	0.12~0.2
11	9000	0.15~0.3	3500	0.15~0.3	3000	0.12~0.2	3000	0.12~0.2	3000	0.11~0.2	3000	0.12~0.2	3000	0.12~0.2
12	8000	0.15~0.3	3300	0.15~0.3	2800	0.12~0.2	2800	0.12~0.2	2800	0.12~0.2	2800	0.12~0.2	2800	0.12~0.2

PHD焊接式直柄金刚石钻头
PHD Welding diamond drill (end mill shank)



型号 Model	库存 Stock	尺寸 (mm)		
		D/d	L1	L
PHD020	○	2.0	12	38
PHD035	○	3.5	20	52
PHD040	○	4.0	22	55
PHD055	○	5.5	28	66
PHD060	○	6.0	28	66
PHD075	○	7.5	34	74
PHD090	○	9.0	40	84
PHD105	○	10.5	43	89
PHD120	○	12.0	51	102

●标准库存standard stock ○订单生产order production

加工材料 Work Material																
碳素钢 S45C S55C Carbon Steel	合金钢 SK-SCM SUS Alloy Steel	预热钢 NAK HPM Pre- Hardened Steel	淬火钢 Hardened steel			铸铁 Cast iron	钛合金 Titanium Alloy	高温 合金 Heat Resistant Alloy	铜合金 Copper Alloy	铝合金 Aluminum Alloy	树脂 Resin	工程 塑料 Plastics	玻璃 纤维 Glass Fiber	电木 Bakelite	石墨 Graphite	氧化锆 Zirconium oxide
			~55 HRC	~60 HRC	~70 HRC											

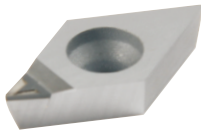
◉最适合Fit best ◐适合Fit



PCD断屑槽金刚石刀片
FA/KPD10
PCD Chipbreaker inserts



- (1)PCD断屑槽型刀片，效率高、寿命长。
- (2)可让内孔加工排屑更顺畅，满足高加工表面要求。
- (3)可防止不顺畅排屑造成的刀具损坏、刀杆断裂、工件报废。



- (1) PCD chipbreaker insert has more high efficiency,long life.
- (2) It can make the hole processing of chip removal more smoothly, and meet the high processing surface requirements.
- (3) It can prevent tool damage, cutter breakage and workpiece scrapping caused by unsmooth chip removal.

排屑效果对比：
Turning contrast



带断屑槽
With chipbreaker

不带断屑槽
Without chipbreaker

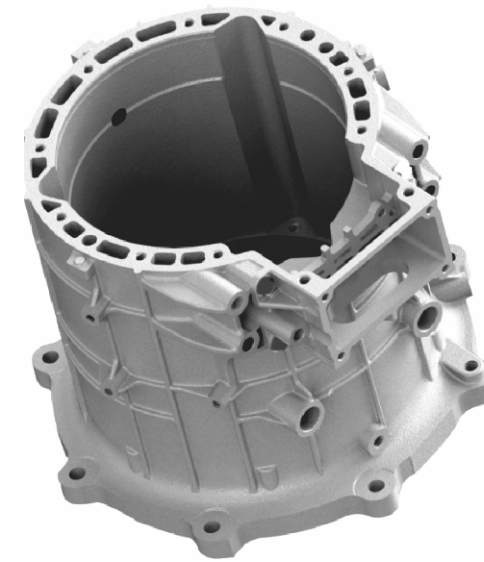
非标刀具 Non-standard cutter

根据要求制作各种尺寸的非标刀具，提供完美的加工方案，解决以往加工效率差，精度低，表面光洁度差，耗时长等各种问题！

According to the requirements of various sizes of non-standard tool, We can provide perfect machining way to solve the poor efficiency, low accuracy, poor surface finishing, long time consuming problems!



方案配套能力 Scheme supporting capacity



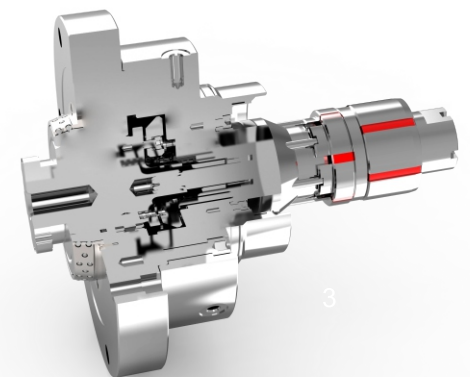
驱动电机壳体 Electric Engine Housing



1、电机壳体粗镗刀
1, Motor shell rough boring cutter



2、电机壳体精镗刀
2, motor shell fine boring cutter



3、高精度电机壳夹具
3, high precision motor housing fixture