

小零件刀具

整体解决方案
Overall Solution

SMALL PARTS CUTTING TOOL

基体与特殊的PVD涂层相结合，表面光洁度高，耐高温，适用于高速精加工。
Substrate combined with special PVD coating, with high surface finish & high temperature resistance. Suitable for high-speeding finishing.

经过特殊的涂层后处理技术，表面光滑，耐热温度高，抗氧化性能好，具有良好的耐磨性和抗冲击性。

After special coating after treatment technology, with smooth surface, high heat-resistant temperature, good oxidation resistance, good wear resistance & impact resistance.

BETTER PRECISION

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BETTER PRECISION TOOLS co.Ltd



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COMPANY INTRODUCTION | 企业简介

巴达精密刀具有限公司创立于2006年，位于广东省广州市花都区。公司致力于研发创新专业，以刀具技术为核心，从事各种硬质合金标准刀具、非标刀具、刀片、拉刀等生产。本公司产品服务于HDD小零件、3C、汽车、涡旋压缩机、模具、摩托车、航空航天等行业。

公司拥有自主知识产权二十多项，2021年被纳入广州市“专精特新”民营企业扶优计划培育企业，获得2020年纳税信用A级证书、2018年高新技术自动化企业、2018年广东省“守合同重信用”企业、2018中国机床工具工业协会会员、2016广州市科技创新小巨人企业，企业拥有先进的开发、制造工艺水平并获得2项发明专利，22项实用专利，通过ISO2001质量管理体系认证，在国内数控刀具行业起到领航作用地位，是广州市花都区中小企业文化促进社会责任先进单位。

BETTER PRECISION TOOLS CO., Ltd was founded in 2006, is located in Guangzhou Huadu District, GD Province. The company is committed to research & development of innovative professional, tool technology as the core, engaged in a variety of carbide standard tools, non-standard tools, inserts, broaches and other production. The company's products serve in small parts, 3C, automotive, vortex compressors, molds, motorcycles, aerospace and other industries.

Honor: BETTER PRECISION has more than 20 independent intellectual property rights. In 2021, it was included in the "specialized and fined" private enterprise support plan & cultivate enterprises of Guangzhou. In 2020, it was awarded Tax credit A grade certificate. In 2018, it was awarded as a high-tech automation enterprise. GD Province's "contract abiding & credit worthy" enterprises and as a member of < China Machine Tool Industry Association>. It got <Guangzhou Science and technology innovation small giant enterprises> in 2016. It has advanced development and manufacturing technology ability. And obtained 2pcs invention patents and 14pcs practical patents. It passed < the ISO2001 quality management system certification>. It plays a leading role in domestic CNC cutting tool industry. It is an advanced enterprise of social responsibility in Huadu District of Guangzhou.



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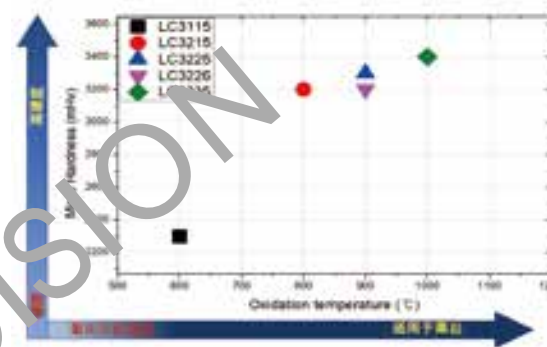
涂层介绍 Introduction of coating

涂层材质 Grade	纳米硬度 (HV) Nano Hardness	摩擦系数 μk	涂层颜色 Color	涂层厚度 $\approx \mu m$ Thickness	涂层特性 Feature	最高应用温度 ($^{\circ}C$) Max application temperature	被加工材料 Workpiece Material								
							钢 Steel	模具钢 Mold Steel	不锈钢 Stainless Steel	铸铁 Cast Iron	非铁合金 Nonferrous Copper Aluminum Alloys		石墨 Graphite	高温合金 Heat-resistant Alloys	
LC3115	2300	0.4	金黄色 Golden	1.0~3.0	涂层附着力好、表面光洁度高 Coating with good adhesion, high surface finish	600	通用加工 Universal								
LC3215	3200	0.35	紫黑色 Purple Black	1.0~3.0	兼具硬度与韧性的通用性涂层、附着力强 Universal coating with hardness & toughness, strong adhesion	800	通用加工 Universal				粗加工 Roughing				
LC3225	3300	0.4	黑灰色 Black gray	1.0~3.0	耐高温, 适合高速精加工 High temperature resistant, suitable for high speed finishing	900	通用加工 Universal	粗加工 Roughing	高速, 粗加工 High cutting speed Roughing					粗加工 Roughing	
LC3226	3200	0.3	黑灰色 Black	0.8~3.0	附着力好, 中, 高速加工, 表面光洁度高 Good adhesion, medium and high speed machining, high surface finish	900		精加工, 中加工, 高速 Finishing, medium speed, high speed	精加工, 中加工 Finishing, medium speed	精, 中, 粗加工 Finishing, medium speed, roughing				精加工 Finishing	
LSC3227	3200	0.3	灰黑色 Black	3.0~6.0	最优附着力, 最光滑的表面, 高硬度和韧性 The best adhesion, the smoothest surface, high hardness and toughness	1100	通用加工 Universal								
LC3335	3400	0.4	古铜色 Bronze	1.0~3.0	耐热温度高、抗氧化性能好、抗冲击、耐磨性好 High heat-resistant temperature, good oxidation resistance, Good impact resistance & wear resistance	1000		高速, 粗加工 High cutting speed Finishing	精加工 Finishing	精加工 Finishing				精加工 Finishing	
LSC3336	3400	0.4	古铜色 Bronze	1.5~3.0	极高的热稳定性 High thermal stability	1100	通用加工 Universal								
LCD100	8500	-	黑色 Black	8.0~15.0	高硬度, 高热导率, 高耐磨性; 适用于石墨加工。 High hardness, high thermal conductivity, high wear resistance; Suitable for graphite application	700					精加工 Finishing	精加工 Finishing			
LCD200	8000	-	黑色 Black	8.0~15.0	表面光滑, 自润滑性好, 高硬度、高热导率, 高耐磨性; 适用于非铁材料, 碳纤维复合材料等加工。 Smooth surface, good self-lubricating, high hardness, high thermal conductivity, high wear resistance; Suitable for machining non-ferrous & carbon fiber composite	700					通用加工 Universal	通用加工 Universal			
LP725	3300	0.4	黑灰色 Black gray	1.0~3.0	耐高温, 适合高速精加工 High temperature resistant, suitable for high speed finishing	900	通用加工 Universal	粗加工 Roughing	高速, 粗加工 High cutting speed Roughing					粗加工 Roughing	

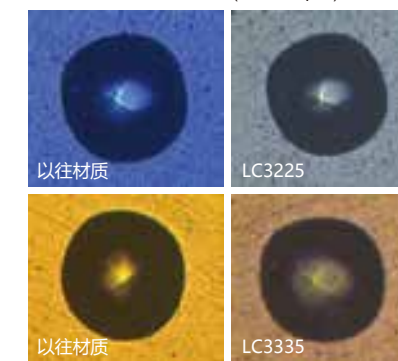
涂层特点 Coating Features

采用高Al含量的涂层, 其抗氧化性和硬度都有了很大的提高。在高速切削和难切削不锈钢加工过程中, 刀尖温升引起的磨损可以得到有效的抑制。

With high Al content, the hardness and oxidation resistance of the coatings are greatly improved. In the process of high speed machining and difficult cutting stainless steel, the wear caused by cutting edge temperature rise can be effectively restrained.



裂纹对比 (金刚石笔)
Crack contrast (diamond pen)



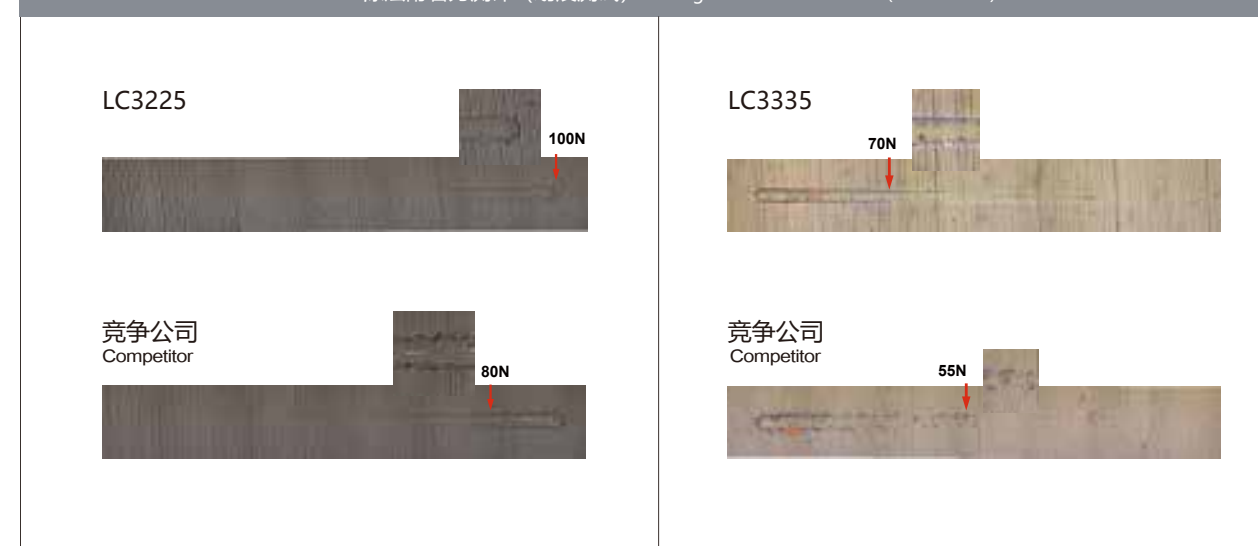
特殊的涂层工艺, 提升加工寿命和稳定性

Special coating process, can realize long tool life and stable machining of stainless steel

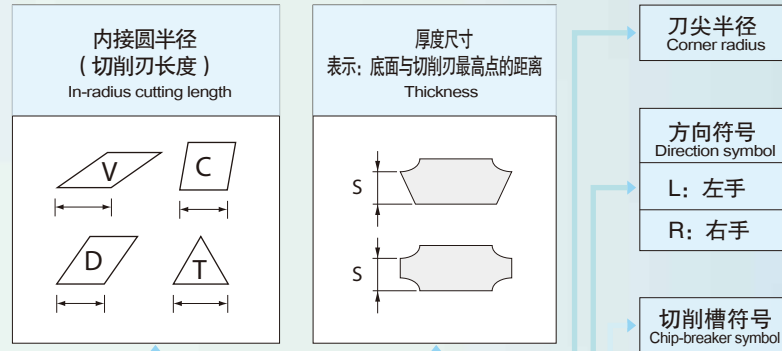
LC3225 / LC3335 的涂层工艺, 大幅提升了刀片表面平滑性和涂层附着力, 有效抑制不锈钢加工中发生的刀尖熔着, 提高尺寸精度和表面光洁度的稳定性。

LC3225 / LC3335 special coating process, greatly improves the surface smoothness and adhesion of the insert, effectively suppresses the melting of the cutting edge in stainless steel processing, and improves the dimensional accuracy and the stability of surface finish.

涂层附着力的测评 (划痕测试) Coating adhesion evaluation (scratch test)



ISO车刀片 ISO Turning Insert



命名方式 Named

V P E T 11 03 01 R - B10

形状符号 Shape symbol		后角符号 Back angle symbol		精度符号 Accuracy symbol			孔符号 Screw hole symbol			
符号	形状	符号	后角	符号	刀尖高度公差	厚度公差	内接圆公差	符号	孔的形状	刀片断屑槽
C	菱形顶角80°	B	5°	E	±0.025	±0.025	±0.025	G	圆驻孔	双面
D	菱形顶角55°	C	7°	G	±0.025	±0.13	±0.025	U	圆驻孔双面40°-60°	双面
T	正三角形	N	0°	M	±0.08 ~ ±0.18	±0.13	±0.05 ~ ±0.15	T	圆驻孔单面40°-60°	单面
V	菱形顶角35°	P	11°					H	圆驻孔单面0°-90°	单面

外径加工用刀片 External insert

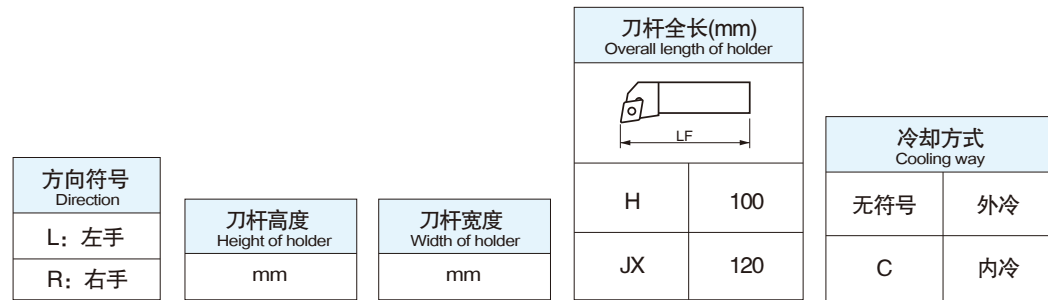
VB/VC/VP□□

型号 Description	形状 Shape	尺寸 Size			角度 Angle	适用刀杆参考页 Holder reference page
		IC	S	D1	θ	
VB_T1103_		6.35	3.18	2.8	5°	P009~P013
VC_T1104_					7°	
VP_T1104_					11°	
VB_T1604_		5°				

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r (mm)	硬质合金 Carbide				金属陶瓷 Cermet		加工状况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material				
			不涂层 Uncoated	涂层 Coated			不涂层 Uncoated	涂层 Coated		进给 f (mm/rev)	切深 ap (mm)	K	P	M	S	N
	VBET 110301R/L-B10	0.1	○	●	●			●	0.02-0.06	0.05-0.2	√	√	√	√		
	110302R/L-B10	0.2	●	●	●			●	0.05-0.1	0.2-0.4	√	√	√	√		
	1103005R/L-B45	<0.05	●	●	●			●	0.01-0.03	0.05-0.2	√	√	√	√		
	110301R/L-B45	<0.1	●	●	●	●		●	0.02-0.06	0.05-0.2	√	√	√	√		
	110302R/L-B45	<0.2	●	●	●	●		●	0.05-0.1	0.2-0.4	√	√	√	√		
	VBGT 1103005R/L-B05	0.05	○					●	0.01-0.03	0.05-0.2	√	√	√	√		
	110301R/L-B05	0.1	○					●	0.02-0.06	0.05-0.2	√	√	√	√		
	110302R/L-B05	0.2	●					●	0.05-0.1	0.2-0.4	√	√	√	√		
	110304R/L-B05	0.4	●				◆	0.1-0.2	0.2-0.4	√	√	√	√			
	160402R/L-B05	0.2	○				●	0.05-0.1	0.2-0.4	√	√	√	√			
	160404R/L-B05	0.4	●				◆	0.1-0.2	0.2-0.4	√	√	√	√			
	160408R/L-B05	0.08	○				◆	0.15-0.3	0.5-1.5	√	√	√	√			
	VBGT 110301-10C	0.1	●	●	○		●	0.02-0.06	0.05-0.2	√	√	√	√			
	110302-10C	0.2	●	●	●		●	0.05-0.1	0.2-0.4	√	√	√	√			
	110304-10C	0.4	●	○	●		◆	0.1-0.2	0.2-0.4	√	√	√	√			
	VCGT 1103005R/L-B40	0.05	●	●	●		●	0.01-0.03	0.05-0.2	√	√	√	√			
	110301R/L-B40	0.1	●	●	●		●	0.02-0.06	0.05-0.2	√	√	√	√			
	110302R/L-B40	0.2	●	○	○		●	0.05-0.1	0.2-0.4	√	√	√	√			
	110304R/L-B40	0.4	●	○	○		◆	0.1-0.2	0.2-0.4	√	√	√	√			
	VPET 1103005R/L-B10	0.05	●		○		●	0.01-0.03	0.05-0.2	√	√	√	√			
	1103008R/L-B10	0.08	●		○		●	0.02-0.04	0.05-0.2	√	√	√	√			
	110301R/L-B10	0.1	●		●	●	●	0.02-0.06	0.2-0.4	√	√	√	√			
	110302R/L-B10	0.2	●		●	●	●	0.05-0.1	0.2-0.4	√	√	√	√			
	110304R/L-B10	0.4	○		○		◆	0.1-0.2	0.2-0.4	√	√	√	√			
	1103005R/L-B45	<0.05	●		●	●	●	0.01-0.03	0.05-0.2	√	√	√	√			
	1103008R/L-B45	<0.08	○		○		●	0.02-0.04	0.05-0.2	√	√	√	√			
	110301R/L-B45	<0.1	●		●	●	●	0.02-0.06	0.2-0.4	√	√	√	√			
110302R/L-B45	<0.2	●		●	●	●	0.05-0.1	0.2-0.4	√	√	√	√				
	VPGT 110301-10C	0.1	●	●	●		●	0.02-0.06	0.2-0.4	√	√	√	√			
	110302-10C	0.2	●	●	●		●	0.05-0.1	0.2-0.4	√	√	√	√			
	110304-10C	0.4	●	●	●		◆	0.1-0.2	0.2-0.4	√	√	√	√			
	VPGT 110301-20C	0.1	●	●	●		●	0.02-0.06	0.2-0.4	√	√	√	√			
	110302-20C	0.2	●	●	●		●	0.05-0.1	0.2-0.4	√	√	√	√			
	VPGT 110301-30C	0.1	●	●	●		●	0.02-0.06	0.2-0.4	√	√	√	√			
	110302-30C	0.2	●	●	●		◆	0.05-0.1	0.2-0.4	√	√	√	√			

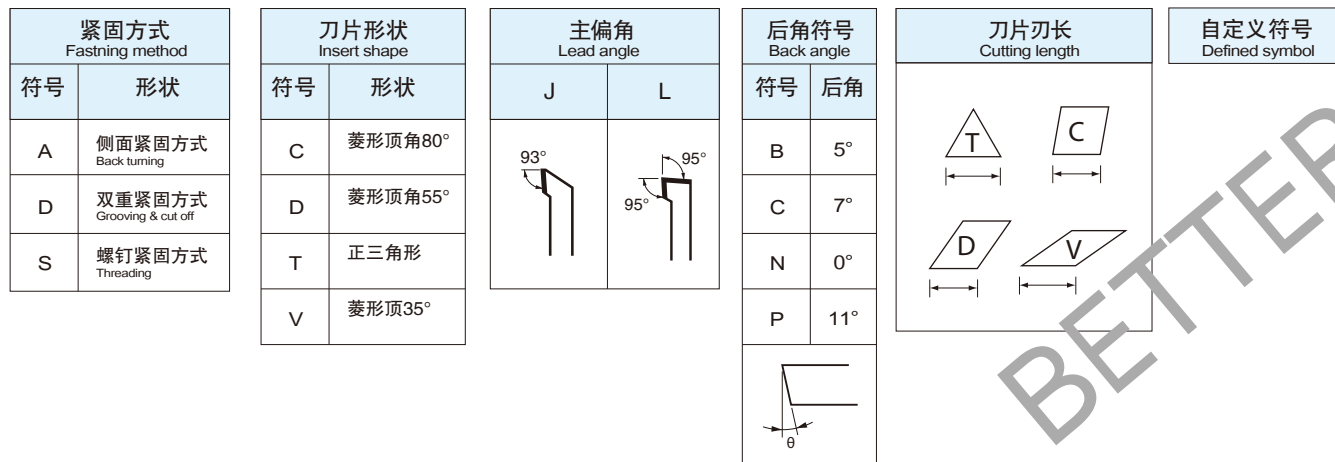
备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

ISO方刀杆 ISO Square type holder

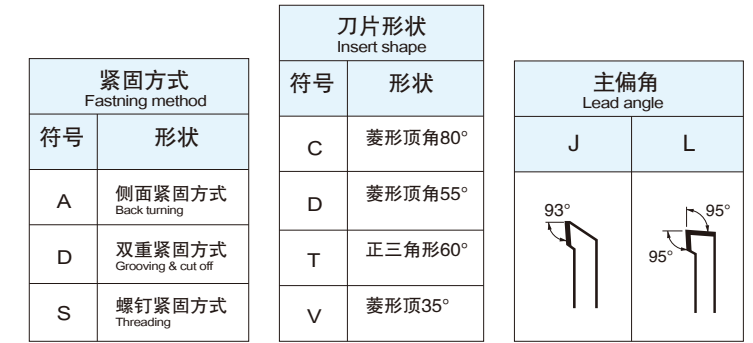


命名方式 Named

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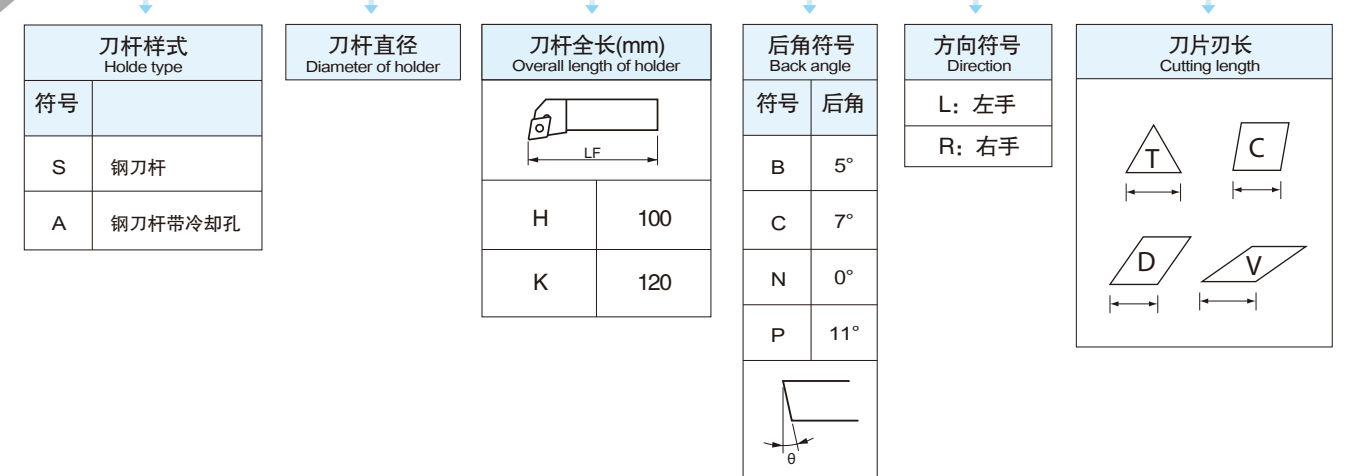


ISO圆刀杆 ISO Round type holder



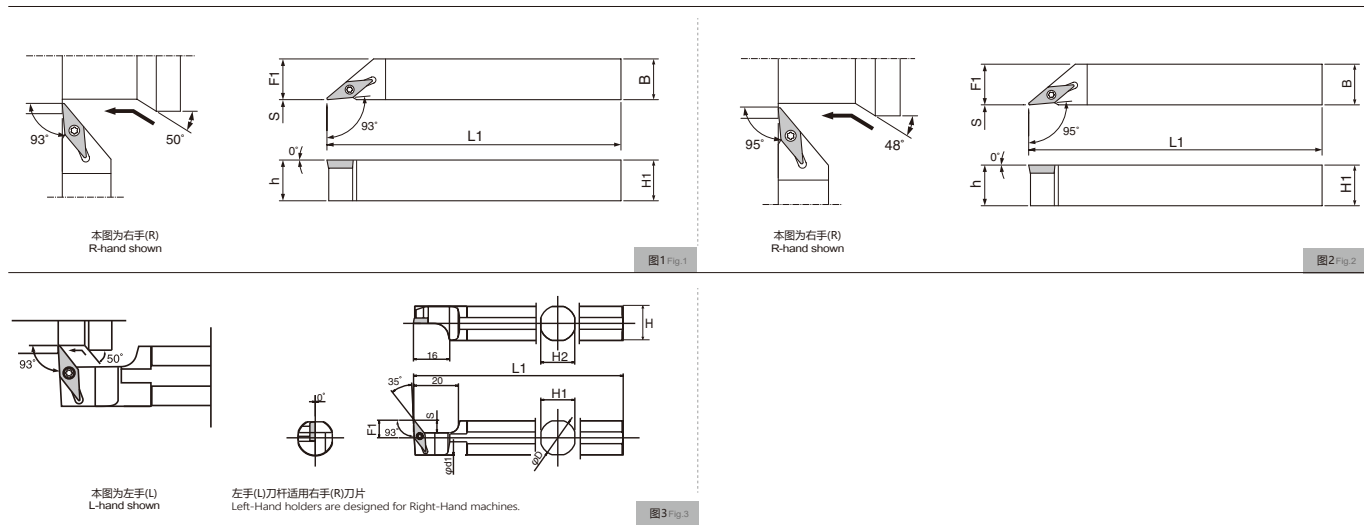
命名方式 Named

S 20 H - S C L C L 09



外径加工用刀杆 External holder

适用于VB/VC□□



SVJB - N / SVLB-N (无偏头) (外径端面/仿形清角加工) External/face/profiling/chamfering

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	F1	h	压紧螺丝 Forcing screw	扳手 Wrench		
VB型	方柄 Square type	SVJBR1010JX-11N	10	10	120	10	10	BD2506-6035	T7	VC*T11	图1 Fig.1
		SVJBR1212JX-11N	12	12		12	12				
		SVJBR1616JX-11N	16	16		16	16				
		SVJBL1010JX-11N	10	10		10	10				
		SVJBL1212JX-11N	12	12		12	12				
		SVJBL1616JX-11N	16	16		16	16				
		SVLBR1010JX-11N	10	10		10	10				
		SVLBR1212JX-11N	12	12		12	12				
	圆柄 Round type	SVLBR1616JX-11N	16	16	120	16	16	BD2506-6035	T7	VB*T11	图2 Fig.2
		SVLBR1010JX-11N	10	10		10	10				
		SVLBR1212JX-11N	12	12		12	12				
		SVLBR1616JX-11N	16	16		16	16				
		SVLBL1010JX-11N	10	10		10	10				
		SVLBL1212JX-11N	12	12		12	12				
		SVLBL1616JX-11N	16	16		16	16				

S□□H - SVUBL (外径/仿形加工) External/profiling

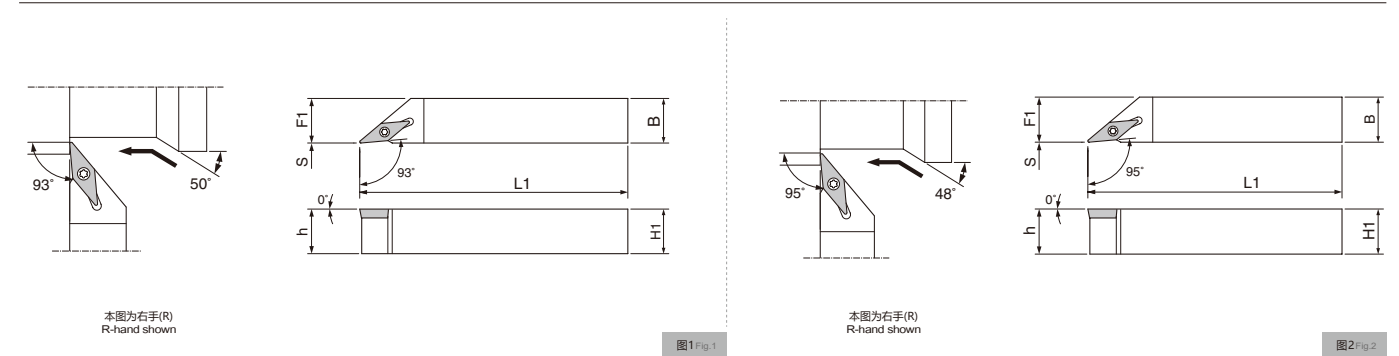
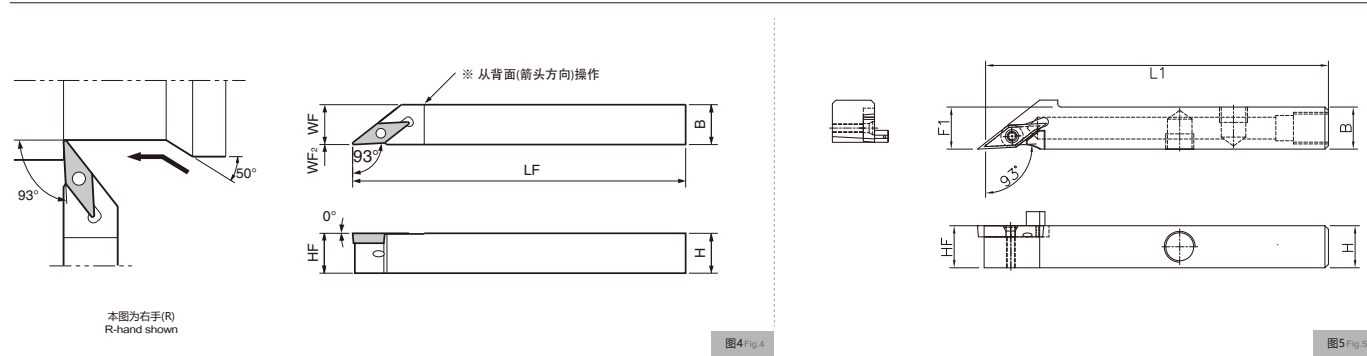
类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure	
			最小加工径	H	L1	H2	S	F1	压紧螺丝 Forcing screw			扳手 Wrench
VB型	圆柄 Round type	S16H-SVUBL11	20	16	100	15	8	16	BD2506-6035	T7	VB*T11	图3 Fig.3
		S20H-SVUBL11	25	20		19	8	18				
		S22H-SVUBL11	27	22		21	8.5	20				
		S25H-SVUBL11	34	25		23	8.5	21				
		S25.4H-SVUBL11	34	25.4		24	8.5	21				

SVJC - N / SVLC-N (无偏头) (外径端面/仿形清角加工) External/face/profiling/chamfering

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	F1	h	压紧螺丝 Forcing screw	扳手 Wrench		
VC型	方柄 Square type	SVJCR1010JX-11N	10	10	120	10	10	BD2506-6035	T7	VC*T11	图1 Fig.1
		SVJCR1212JX-11N	12	12		12	12				
		SVJCR1616JX-11N	16	16		16	16				
		SVJCL1010JX-11N	10	10		10	10				
		SVJCL1212JX-11N	12	12		12	12				
		SVJCL1616JX-11N	16	16		16	16				
		SVLCR1010JX-11N	10	10	120	10	10				
		SVLCR1212JX-11N	12	12		12	12				
		SVLCR1616JX-11N	16	16		16	16				
		SVLCL1010JX-11N	10	10		10	10				
		SVLCL1212JX-11N	12	12		12	12				
		SVLCL1616JX-11N	16	16		16	16				

S□□H - SVUCL (外径/仿形加工) External/profiling

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure	
			最小加工径	H	L1	H2	S	F1	压紧螺丝 Forcing screw			扳手 Wrench
VC型	圆柄 Round type	S16H-SVUCL11	20	16	100	15	8	16	BD2506-6035	T7	VC*T11	图3 Fig.3
		S20H-SVUCL11	25	20		19	8	18				
		S22H-SVUCL11	27	22		21	8.5	20				
		S25H-SVUCL11	34	25		23	8.5	21				
		S25.4H-SVUCL11	34	25.4		24	8.5	21				



AVJB - N (无偏头) (外径/仿形加工) External/profiling

类型 Type	形状 Shape	型号 Description	尺寸 Size					标准刀尖 (RE)	零件 Spare parts			刀片 Insert	刀杆示意图 Figure						
			H	HF	B	LF	WF		WF2	固定销 Pin	锁紧螺钉 Locking screw			扳手 Wrench					
VB型	方柄 Square type	AVJBR1010JX-11N	10	10	10	120	10	0.4	LF-11	SHB4X8R	H-2	VB*T11	图4 Fig.4						
		AVJBR1212JX-11N	12	12	12		12							0					
		AVJBR1616JX-11N	16	16	16		16							0					
		AVJBL1010JX-11N	10	10	10	120	10							0.4	LF-11	SHB4X8L	H-2	VB*T11	
		AVJBL1212JX-11N	12	12	12		12												0
		AVJBL1616JX-11N	16	16	16		16												0

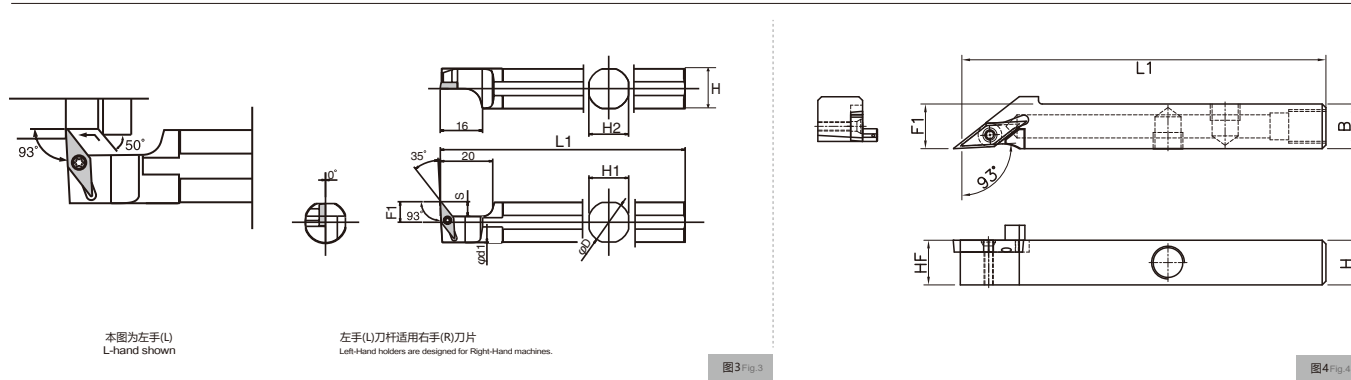
SVJB-NC 外径内冷刀杆 External coolant holder

类型 Type	形状 Shape	型号 Description	尺寸 Size					标准刀尖 (RE)	零件 Spare parts			刀片 Insert	刀杆示意图 Figure
			H	HF	B	LF	F1		压紧螺丝 Forcing screw	插销 Bolt	扳手 Wrench		
VB型	方柄 Square type	SVJBR1212H-11NC	12	12	12	120	12	0.4	BD2506-6035	S01	T7	VB(VC)*T11	图5 Fig.5
		SVJBR1616H-11NC	16	16	16		16						

SVJP - N / SVLP - N (无偏头) (外径/端面/仿形/清角加工) External/face/profiling/chamfering

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	F1	h	压紧螺丝 Forcing screw	扳手 Wrench		
VP型	方柄 Square type	SVJPR0808JX-11N	8	8	120	8	8	BD2506-6035	T7	VP*T11	图1 Fig.1
		SVJPR1010JX-11N	10	10		10	10				
		SVJPR1212JX-11N	12	12		12	12				
		SVJPR1616JX-11N	16	16		16	16				
		SVJPL0808JX-11N	8	8		8	8				
		SVJPL1010JX-11N	10	10		10	10				
		SVJPL1212JX-11N	12	12	12	12					
		SVJPL1616JX-11N	16	16	16	16					
		SVLPR1010JX-11N	10	10	120	10	10	BD2506-6035	T7	VP*T11	图2 Fig.2
		SVLPR1212JX-11N	12	12		12	12				
		SVLPR1616JX-11N	16	16		16	16				
		SVLPL1010JX-11N	10	10		10	10				
		SVLPL1212JX-11N	12	12		12	12				
		SVLPL1616JX-11N	16	16		16	16				

外经/内径加工刀片
External / Internal insert
PCD系列刀片
PCD series insert
镗孔/内孔加工刀片 (带30°后定位)
Boring tooling (with 30° back location)
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀片
High speed inserts
其他配套产品
Other tools



SVJP-NC 外冷内冷刀杆 External coolant holder

类型 Type	形状 Shape	型号 Description	尺寸 Size					标准刀尖 (RE)	零件 Spare parts			刀片 Insert	刀杆示意图 Figure
			H	HF	B	LF	F1		压紧螺丝 Forcing screw	插销 Bolt	扳手 Wrench		
VP型	方柄 Square type	SVJPR1212H-11NC	12	12	12	120	12	0.4	BD2506-6035	PG01	T7	VP*T11	图4 Fig.4
		SVJPR1616H-11NC	16	16	16								

S□□H - SVUPL (外冷/仿形加工) External/profiling

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure	
			最小加工径	H	L1	H2	S	F1	压紧螺丝 Forcing screw			扳手 Wrench
VP型	圆柄 Round type	S16H-SVUPL11	20	16	100	15	8	16	BD2506-6035	T7	VP*T11	图3 Fig.3
		S20H-SVUPL11	25	20		19	8	18				
		S22H-SVUPL11	27	22		21	8.5	20				
		S25H-SVUPL11	34	25		23	8.5	21				
		S25.4H-SVUPL11	34	25.4		24	8.5	21				

外径加工用刀片 External insert

型号 Description	形状 Shape	尺寸 Size			适用刀杆参考页 Holder reference page
		IC	S	D1	
CCGT0602_		6.35	2.4	2.8	P016~P021
CCGT09T3_		9.525	4	4.4	
CN_U0703_		7.5	3.2	3.6	
DCGT0702_		6.35	2.4	2.8	
DCGT11T3_		9.525	4	4.4	
TNGG1604_		9.525	4.8	3.81	

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide					金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material					
			不涂层 Uncoated	涂层 Coated				不涂层 Uncoated	涂层 Coated	进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H
	CCGT 0602005R/L-BU05	0.05	●			●	●			0.01~0.06	0.04~1.3	√	√	√	√		
	060201R/L-BU05	0.1	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√		
	060202R/L-BU05	0.2	●			●	●			0.03~0.11	0.06~1.7	√	√	√	√		
	060204R/L-BU05	0.4	●			●	●			0.05~0.18	0.10~2.5	√	√	√	√		
	09T301R/L-B45	<0.1	●			●	●			0.03~0.11	0.06~1.7	√	√	√	√		
	09T302R/L-B45	<0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√		
	09T304R/L-B45	<0.4	●			●	●			0.05~0.2	0.10~3.00	√	√	√	√		
	09T3003R/L-BU05	0.03	●			●	●			0.02~0.08	0.06~1.5	√	√	√	√		
	09T3005R/L-BU05	0.05	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√		
	09T301R/L-BU05	0.1	●			●	●			0.03~0.11	0.06~1.7	√	√	√	√		
	CNGU 070301-SM10	0.1	●			●	●			0.02~0.1	0.4~3.00	√	√	√	√		
	070302-SM10	0.2	●			●	●			0.02~0.1	0.4~3.00	√	√	√	√		
	CNMU 070302-EH05	0.2	●			●	●			0.1~0.3	0.5~3.00	√	√	√	√		
	070304-EH05	0.4	●			●	●			0.1~0.3	0.5~3.00	√	√	√	√		
	DCGT 070201R/L-B40	0.1	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√		
	070202R/L-B40	0.2	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√		
	070204R/L-B40	0.4	●			●	●			0.05~0.2	0.1~3.00	√	√	√	√		
	DCGT 0702003R/L-B10	0.03	●			●	●			0.01~0.06	0.04~1.3	√	√	√	√		
	0702005R/L-B10	0.05	●			●	●			0.01~0.06	0.04~1.3	√	√	√	√		
	070201R/L-B10	0.1	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√		
	070202R/L-B10	0.2	●			●	●			0.03~0.11	0.06~1.7	√	√	√	√		
	070204R/L-B10	0.4	●			●	●			0.05~0.2	0.10~3.00	√	√	√	√		

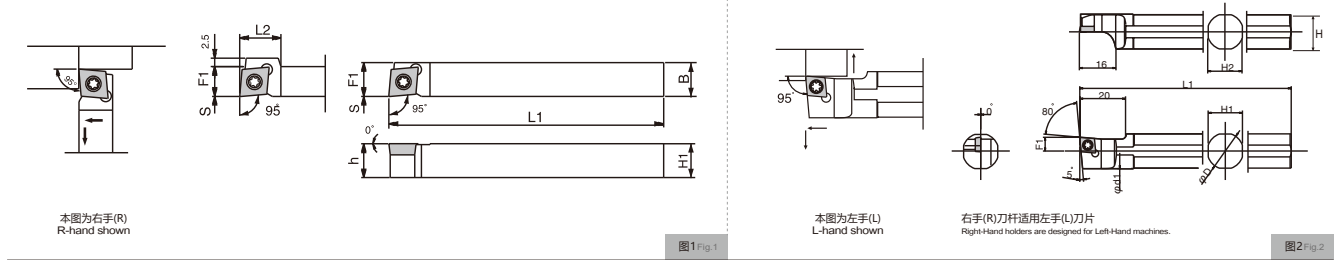
备注Note: 1. 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2. 材质标记★为优选材质。Grade with★is 1st choice.

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material					
			不涂层 Uncoated			涂层 Coated			不涂层 Uncoated	涂层 Coated	进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H
			LC10	LC3115	LC3215	★LC3225	★LC3335	LN10	LP725									
	DCGT 11T3003R/L-B40	0.03	●			●	●			0.01~0.06	0.04~0.13	√	√	√	√			
	11T3005R/L-B40	0.05	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	11T301R/L-B40	0.1	●			●	●			0.03~0.11	0.06~1.7	√	√	√	√			
	11T302R/L-B40	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	11T304R/L-B40	0.4	●			●	●			0.05~0.2	0.1~3.00	√	√	√	√			
	DCGT 11T3008R/L-B10	0.08	●			●	●			0.03~0.1	0.06~1.5	√	√	√	√			
	11T301R/L-B10	0.1	●			●	●			0.03~0.11	0.06~1.7	√	√	√	√			
	11T302R/L-B10	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	11T304R/L-B10	0.4	●			●	●			0.05~0.2	0.1~3.00	√	√	√	√			
	TNGG 160401R/L-B10	0.1	●			●	●			0.02~0.15	0.08~1.0	√	√	√	√			
	160402R/L-B10	0.2	●			●	●			0.03~0.2	0.1~1.5	√	√	√	√			
	160404R/L-B10	0.4	●			●	●			0.12~0.3	0.30~2.00	√	√	√	√			
	160408R/L-B10	0.8	●			●	●			0.15~0.4	0.40~3.00	√	√	√	√			
	TNGG 160402R/L-B05	0.2	●			●	●			0.03~0.2	0.1~1.5	√	√	√	√			
	160404R/L-B05	0.4	●			●	●			0.12~0.3	0.3~2.00	√	√	√	√			
	160408R/L-B05	0.8	●			●	●			0.15~0.4	0.4~3.00	√	√	√	√			

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

外径加工用刀杆 External holder

适用于CCGT



SCLC - N (无偏头) (外径/端面加工) External/face

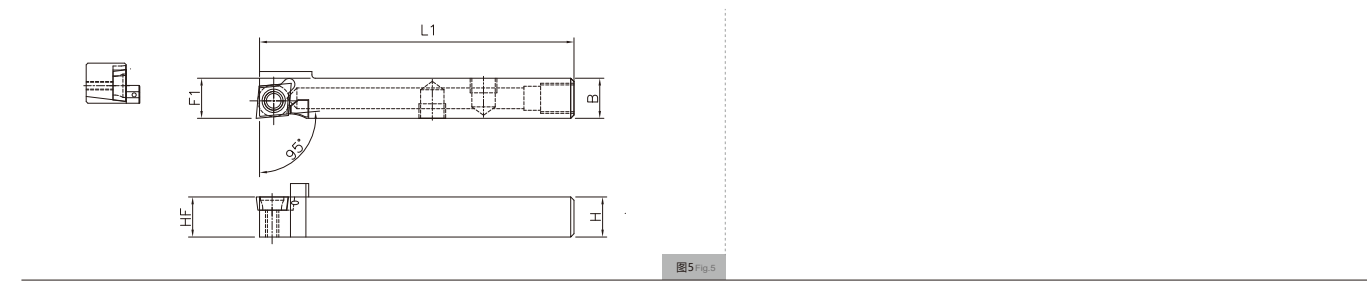
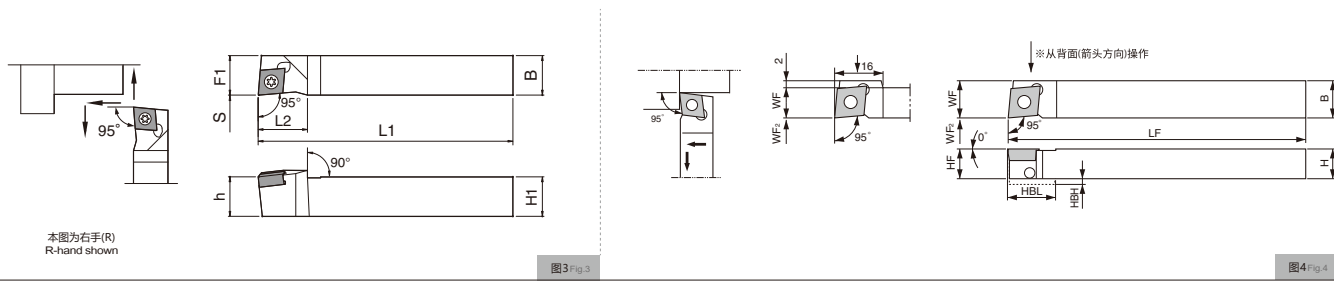
类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	h	L1	B	F1	L2	压紧螺丝 Forcing screw	扳手 Wrench		
C型	方柄 Square type	SCLCR1010JX-06N	10	10	120	10	10	-	BD2506-6035	T7	CC*T06	图1 Fig.1
		SCLCR1010JX-09N	10	10		10	10	15	BD4008-6055	T15	CC*T09	
		SCLCR1212JX-09N	12	12		12	12	-				
		SCLCR1616JX-09N	16	16	120	16	16	-	BD2506-6035	T7	CC*T06	
		SCLCL1010JX-06N	10	10		10	10	-				
		SCLCL1010JX-09N	10	10		10	10	15				
		SCLCL1212JX-09N	12	12		12	12	-				
		SCLCL1616JX-09N	16	16		16	16	-				

S□□H - SCLCL (外径/仿形加工) External/profiling

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			最小加工径	H	L1	H2	S	压紧螺丝 Forcing screw	扳手 Wrench		
C型	圆柄 Round type	S12H-SCLCL06	14	12	120	11	7	BD2506-6035	T7	CC*T06	图2 Fig.2
		S16H-SCLCL09	18	16		15	9				
		S20H-SCLCL09	22	20		19	11				
		S22H-SCLCL09	24	22		BD4008-6055	T15	21	12		
		S25H-SCLCL09	27	25				24	13.5		
		S25.4H-SCLCL09	27.4	25.4				24	13.7		

外径加工用刀杆 External holder

适用于CCGT



SCLN (无偏头) (外径端面加工) External/face

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure	
			H1	h	L1	B	F1	L2	S	压紧螺丝 Forcing screw			扳手 Wrench
C型	方柄 Square type	SCLNR1010JX-07N	10	10	120	10	10	15	0	BD3008-6042	T8	CNGU0703 CNMU0703	图3 Fig.3
		SCLNR1212JX-07N	12	12	120	12	12	15	0				
		SCLNR1616JX-07N	16	16	120	16	16	15	0				

SCLCL - NC 外径内冷刀杆 External coolant holder

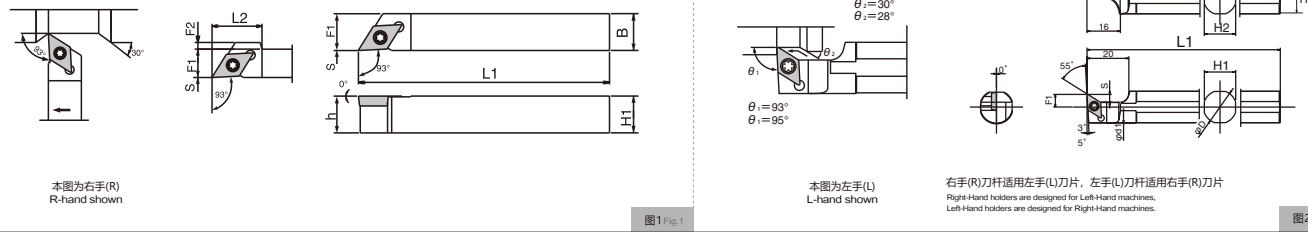
类型 Type	形状 Shape	型号 Description	尺寸 Size					标准刀尖 (RE)	零件 Spare parts			刀片 Insert	刀杆示意图 Figure
			H	HF	B	LF	F1		压紧螺丝 Forcing screw	插销 Bolt	扳手 Wrench		
C型	方柄 Square type	SCLCL1212H-09NC	12	12	12	120	12	0.4	BD4008-6055	PG01	T15	CC*T09	图5 Fig.5
		SCLCL1616H-09NC	16	16	16		16						

ACLCL - N (无偏头) (外径端面加工) External/face

类型 Type	形状 Shape	型号 Description	尺寸 Size								标准刀尖 (RE)	零件 Spare parts			刀片 Insert	刀杆示意图 Figure
			H	HF	HBH	B	LF	HBL	WF	WF2		固定销 Pin	锁紧螺钉 Locking screw	扳手 Wrench		
C型	方柄 Square type	ACLCL1010JX-06N	10	10	-	10	120	-	10	0	0.2	LF-11	SHB4X8L	H-2	CC*T06	图4 Fig.4
		ACLCL1010JX-09N	10	10	2	10		16	10							
		ACLCL1212JX-09N	12	12	-	12		-	12							
		ACLCL1616JX-09N	16	16	-	16		-	16							
		ACLCL1010JX-06N	10	10	-	10	120	-	10	0	0.2	LF-11	SHB4X8L	H-2	CC*T06	
		ACLCL1010JX-09N	10	10	2	10		16	10							
		ACLCL1212JX-09N	12	12	-	12		-	12							
		ACLCL1616JX-09N	16	16	-	16		-	16							

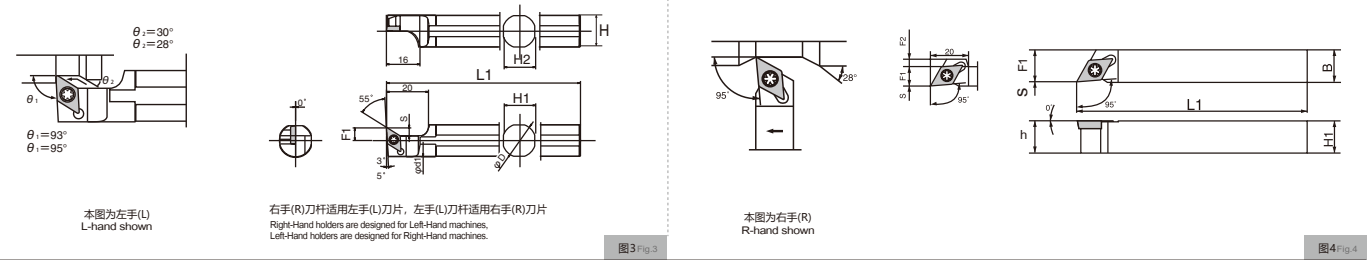
外径加工用刀杆 External holder

适用于DCGT



外径加工用刀杆 External holder

适用于DCGT



SDJC - N (无偏头) (外径端面加工) External/face

类型 Type	形状 Shape	型号 Description	尺寸 Size							零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1=h	B	L1	L2	F1	F2	S	压紧螺丝 Forcing screw	扳手 Wrench		
D型	方柄 Square type	SDJCR0808JX-07N	8	8	120	-	8	-	0	BD2506-6035	T7	DC*T07	图1 Fig.1
		SDJCR1010JX-07N	10	10		-	10	-	0				
		SDJCR1010JX-11N	10	10		20	10	3	0				
		SDJCR1212JX-11N	12	12		20	12	1	0	BD4008-6055	T15	DC*T11	
		SDJCR1616JX-11N	16	16		-	16	-	0				
		SDJCL0808JX-07N	8	8		-	8	-	0	BD2506-6035	T7	DC*T07	
		SDJCL1010JX-07N	10	10		-	10	-	0				
		SDJCL1010JX-11N	10	10		20	10	3	0				
		SDJCL1212JX-11N	12	12		20	12	1	0	BD4008-6055	T15	DC*T11	
		SDJCL1616JX-11N	16	16		-	16	-	0				

SDLC - N (无偏头) (外径端面加工) External/face

类型 Type	形状 Shape	型号 Description	尺寸 Size							零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1=h	B	L1	F1	F2	S	压紧螺丝 Forcing screw	扳手 Wrench			
D型	方柄 Square type	SDLCR1010JX-07N	10	10	120	10	-	0	BD2506-6035	T7	DC*T07	图4 Fig.4	
		SDLCR1010JX-11N	10	10		10	4	0					
		SDLCR1212JX-11N	12	12		12	2	0	BD4008-6055	T15	DC*T11		
		SDLCR1616JX-11N	16	16		16	-	0					
		SDLCL1010JX-07N	10	10	120	10	-	0	BD2506-6035	T7	DC*T07		
		SDLCL1010JX-11N	10	10		10	4	0					
		SDLCL1212JX-11N	12	12		12	2	0	BD4008-6055	T15	DC*T11		
		SDLCL1616JX-11N	16	16		16	-	0					

S□□H - SDUCL (外径/仿形加工) External/profiling

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			最小加工径	H	L1	H2	S	压紧螺丝 Forcing screw	扳手 Wrench		
D型	圆柄 Round type	S16H-SDUCL07	20	16	100	15	3.3	BD2506-6035	T7	DC*T07	图2 Fig.2
		S20H-SDUCL11	20	20		19	3.3				
		S22H-SDUCL11	29	22		21	6.1	BD4008-6055	T15	DC*T11	
		S25H-SDUCL11	32	25		24	6.1				
		S25.4H-SDUCL11	33	25.4		24	6.1				

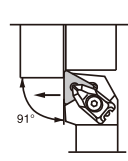
S□□H - SDLCL (外径/仿形加工) External/profiling

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			最小加工径	H	L1	H2	S	压紧螺丝 Forcing screw	扳手 Wrench		
D型	圆柄 Round type	S16H-SDLCL07	20	16	100	15	3.3	BD2506-6035	T7	DC*T07	图3 Fig.3
		S20H-SDLCL11	20	20		19	3.3				
		S22H-SDLCL11	29	22		21	6.1	BD4008-6055	T15	DC*T11	
		S25H-SDLCL11	32	25		24	6.1				
		S25.4H-SDLCL11	33	25.4		24	6.1				

外径/内径加工刀片
External / Internal insert
FC系列刀片
FC series insert
带孔/带槽刀片
Boring tooling (with/without slot)
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀柄
High speed handle
其他配套产品
Other tools

外径加工用刀杆 External holder

适用于DCGT



本图为右手(R)
R-hand shown

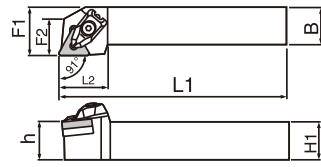


图5 Fig.5

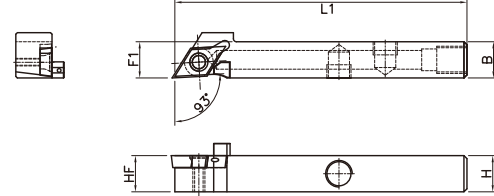


图6 Fig.6

DTGN (外径端面加工) External/face

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts						刀片 Insert	刀杆示意图 Figure
			H1	h	L1	B	F1	L2	压板 Plate	螺丝 Screw	弹簧 Spring	垫片 Washer	垫片螺丝 Washer screw	扳手 Wrench		
T型	方柄 Square type	DTGNR2020K-16	20	20	125	20	25	25	PC-2B	CS-2B	SP-2B	DT-32	BD305-6080	L-2.5	TNGG1604	图5 Fig.5
		DTGNR2525M-16	25	25	150	25	32									
		DTGNL2020K-16	20	20	125	20	25									
		DTGNL2525M-16	25	25	150	25	32									

L: 可以按照标准长度非标订做 Special size can be also ordered acceptable.

SDJCL - NC 外径内冷刀杆 External coolant holder

类型 Type	形状 Shape	型号 Description	尺寸 Size					标准刀架 (RE)	零件 Spare parts			刀片 Insert	刀杆示意图 Figure
			H	HF	B	LF	F1		压紧螺丝 Forcing screw	插销 Bolt	扳手 Wrench		
DC型	方柄 Square type	SDJCL1212H-11NC	12	12	12	120	12	0.4	BD4008-605	P-01	7-15	DC*T11	图6 Fig.6
		SDJCL1616H-09NC	16	16	16	16							

内孔加工用刀片 Internal insert

CCET / CCGT / DCET / DCGT / TBGT / TPGH / TCGH / TCGT

型号 Description	形状 Shape	IC	S	D1
CC_T0301_		3.5	1.4	1.9
CC_T0401_		4.3	1.8	2.3
CC_T0602_		6.35	2.38	2.8
CC_T09T3_		9.525	3.97	4.4
DC_T0702_		6.35	2.38	2.8
DC_T11T3_		9.525	3.97	4.4

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r (mm)	硬质合金 Carbide					金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material				
			不涂层 Uncoated	涂层 Coated				不涂层 Uncoated	涂层 Coated	进给 f (mm/rev)	切深 ap (mm)	K	P	M	S	N
	CCET 0301005R-L-BF45	<0.05	●	●	●	●	●	●	●	0.01~0.03	0.08~0.3	√	√	√	√	√
	030101R-L-BF45	<0.1	●	●	●	●	●	●	0.02~0.05	√		√	√	√	√	
	030102R-L-BF45	<0.2	●	●	●	●	●	●	0.03~0.8	√		√	√	√	√	
	030104R-L-BF10	0.4	●	●	●	●	●	●	0.04~0.15	√		√	√	√	√	
	0401005R-L-BF45	<0.05	●	●	●	●	●	●	0.01~0.03	0.08~0.4	√	√	√	√	√	
	040101R-L-BF45	<0.1	●	●	●	●	●	●	0.02~0.05		√	√	√	√	√	
	040102R-L-BF45	<0.2	●	●	●	●	●	●	0.03~0.8		√	√	√	√	√	
	040104R-L-BF10	0.4	●	●	●	●	●	●	0.04~0.15		√	√	√	√	√	
	0602003FR-L-BU05	0.03	●	●	●	●	●	●	●	0.01~0.06	0.04~1.3	√	√	√	√	√
	060201FR-L-BU05	0.1	●	●	●	●	●	●	●	0.02~0.08	0.05~1.5	√	√	√	√	√
060202FR-L-BU05	0.2	●	●	●	●	●	●	●	0.03~0.11	0.06~1.7	√	√	√	√	√	
09T3003FR-L-BU05	0.03	●	●	●	●	●	●	●	0.02~0.08	0.05~1.5	√	√	√	√	√	
09T301FR-L-BU05	0.1	●	●	●	●	●	●	●	0.03~0.11	0.06~1.7	√	√	√	√	√	
09T302FR-L-BU05	0.2	●	●	●	●	●	●	●	0.04~0.15	0.08~2.00	√	√	√	√	√	
	CCGT 060201-10C	0.1	●	●	●	●	●	●	●	0.03~0.06	0.06~1.00	√	√	√	√	√
	060202-10C	0.2	●	●	●	●	●	●	●	0.03~0.1	0.08~1.5	√	√	√	√	√
	060204-10C	0.4	●	●	●	●	●	●	●	0.05~0.12	0.10~1.5	√	√	√	√	√
	09T301-10C	0.1	●	●	●	●	●	●	●	0.03~0.13	0.06~1.00	√	√	√	√	√
	09T302-10C	0.2	●	●	●	●	●	●	●	0.04~0.15	0.08~1.5	√	√	√	√	√
	09T304-10C	0.4	●	●	●	●	●	●	●	0.06~0.2	0.10~1.5	√	√	√	√	√
	CCGT 09T301-30C	0.1	●	●	●	●	●	●	●	0.03~0.13	0.06~1.00	√	√	√	√	√
09T302-30C	0.2	●	●	●	●	●	●	●	0.04~0.15	0.08~1.5	√	√	√	√	√	
	DCET 0702003R-L-B10	0.03	●	●	●	●	●	●	●	0.01~0.06	0.04~1.3	√	√	√	√	√
	070201R-L-B10	0.1	●	●	●	●	●	●	●	0.02~0.08	0.05~1.5	√	√	√	√	√
	070202R-L-B10	0.2	●	●	●	●	●	●	●	0.03~0.11	0.06~1.5	√	√	√	√	√
	070204R-L-B10	0.4	●	●	●	●	●	●	●	0.05~0.2	0.10~2.00	√	√	√	√	√

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

内孔加工用刀片 Internal insert

CCET / CCGT / DCET / DCGT / TBGT / TPGH / TCGH / TCGT

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material					
			不涂层 Uncoated			涂层 Coated			LN10	LP725	进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H
			LC10	LC3115	LC3215	★ LC3225	★ LC3335	涂层 Coated										
	DCET 0702003R-L-BU05	0.03	●			●	●			0.01~0.06	0.04~1.3	√	√	√	√			
	070201FR-L-BU05	0.1	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	070202R-L-BU05	0.2	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	DCET 0702005R-L-B45	<0.05	●			●	●			0.01~0.06	0.04~1.3	√	√	√	√			
	070201R-L-B45	<0.1	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	070202R-L-B45	<0.2	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	070204R-L-B45	<0.4	●			●	●			0.04~0.18	0.10~2.00	√	√	√	√			
	0702005R-L-BU45	<0.05	●			●	●			0.01~0.06	0.04~1.3	√	√	√	√			
	070201R-L-BU45	<0.1	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	070202R-L-BU45	<0.2	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	11T3003R-L-B10	0.03	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	11T301R-L-B10	0.1	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	DCET 11T302R-L-B10	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	11T304R-L-B10	0.4	●			●	●			0.05~0.2	0.10~2.00	√	√	√	√			
	DCET 11T3005R-L-B45	<0.05	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	11T301R-L-B45	<0.1	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	11T302R-L-B45	<0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	11T304R-L-B45	<0.4	●			●	●			0.05~0.2	0.10~2.00	√	√	√	√			
	11T3005R-L-BF10	0.05	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	11T301R-L-BF10	0.1	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	11T302R-L-BF10	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	11T304R-L-BF10	0.4	●			●	●			0.05~0.2	0.10~2.00	√	√	√	√			
	11T3003FR-L-BU05	0.03	●			●	●			0.02~0.08	0.05~1.5	√	√	√	√			
	11T301FR-L-BU05	0.1	●			●	●			0.03~0.11	0.06~1.5	√	√	√	√			
	11T302FR-L-BU05	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	DCGT 070201-10C	0.1	●			●	●			0.03~0.06	0.06~1.00	√	√	√	√			
	070202-10C	0.2	●			●	●			0.03~0.1	0.08~1.5	√	√	√	√			
	070204-10C	0.4	●			●	●			0.05~0.12	0.10~1.5	√	√	√	√			
	11T301-10C	0.1	●			●	●			0.03~0.13	0.06~1.00	√	√	√	√			
	11T302-10C	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	11T304-10C	0.4	●			●	●			0.06~0.2	0.10~1.5	√	√	√	√			
	DCGT 070201-20C	0.1	●			●	●			0.03~0.06	0.06~1.00	√	√	√	√			
	070202-20C	0.2	●			●	●			0.03~0.1	0.08~1.5	√	√	√	√			
	11T301-20C	0.1	●			●	●			0.03~0.13	0.06~1.00	√	√	√	√			
	11T302-20C	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			
	DCGT 11T301-30C	0.1	●			●	●			0.03~0.13	0.06~1.00	√	√	√	√			
	11T302-30C	0.2	●			●	●			0.04~0.15	0.08~2.00	√	√	√	√			

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

内孔加工用刀片 Internal insert

CCET / CCGT / DCET / DCGT / TBGT / TPGH / TCGH / TCGT

型号 Description	形状 Shape	IC	S	D1
TBGT0601_		3.97	1.59	2.3
TPGH0802_		4.76	2.38	2.3
TPGH0902_		5.56	2.38	3
TPGH1102_		6.35	2.38	3.5
TPGH1103_		6.35	3.18	3.3
TCG_0902_		5.56	2.38	3
TCGT0902_		5.56	2.38	2.5
TCG_1102_		6.35	2.38	3.5

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material						
			不涂层 Uncoated			涂层 Coated			LN10	LP725	进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H	
			LC10	LC3115	LC3215	★ LC3225	★ LC3335	涂层 Coated											
	TBGT 0601003L-B05	0.03	●		●					0.02~0.06	0.08~0.7	√	√	√	√				
	060101R-L-B05	0.1	●		●	●						√	√	√	√				
	060102R-L-B05	0.2	●		●	●						√	√	√	√				
	060104R-L-B05	0.4	●		●	●						0.04~0.08	0.20~1.00	√	√	√	√		
	TPGH 080202R-L-B05	0.2	●		●	●				0.01~0.12	0.06~1.7	√	√	√	√				
	080204R-L-B05	0.4	●		●	●				0.01~0.15	0.08~1.7	√	√	√	√				
	090201R-L-B05	0.1	●		●	●				0.03~0.15	0.25~0.8	√	√	√	√				
	090202R-L-B05	0.2	●		●	●				0.10~0.2	0.30~1.00	√	√	√	√				
	090204R-L-B05	0.4	●		●	●				0.10~0.25	0.50~1.00	√	√	√	√				
	110202R-L-B05	0.2	●		●	●				0.01~0.12	0.06~2.00	√	√	√	√				
	110204R-L-B05	0.4	●		●	●				0.01~0.15	0.08~2.00	√	√	√	√				
	110302R-L-B05	0.2	●		●	●				0.01~0.12	0.06~2.00	√	√	√	√				
	110304R-L-B05	0.4	●		●	●				0.01~0.15	0.08~2.00	√	√	√	√				
	TPGH 110308R-L-B05	0.8	●		●	●				0.03~0.25	0.20~2.5	√	√	√	√				
	TPGH 160302R-L-B05	0.2	●		●	●				0.01~0.12	0.06~2.00	√	√	√	√				
	160304R-L-B05	0.4	●		●	●				0.01~0.15	0.08~2.00	√	√	√	√				
	160308R-L-B05	0.8	●		●	●				0.03~0.25	0.20~2.5	√	√	√	√				
	TCGH 0902005R-L-B40	0.05	●		●	●				0.02~0.06	0.05~1.5	√	√	√	√				
	TCGH 090201R-L-B40	0.1	●		●	●				0.03~0.15	0.25~0.8	√	√	√	√				
	090202R-L-B40	0.2	●		●	●				0.10~0.2	0.30~1.00	√	√	√	√				
	090204R-L-B40	0.4	●		●	●				0.10~0.25	0.50~1.00	√	√	√	√				

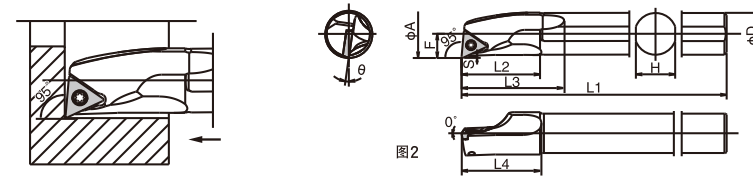
备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material							
			不涂层 Uncoated			涂层 Coated			不涂层 Uncoated		涂层 Coated		进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H
			LC10	LC3115	LC3215	★LC3225	★LC3335	LN10	LP725											
	TCGH 1102005R-L-B40	0.05	●			●	●			0.02~0.06	0.05~1.5	√	√	√	√					
	110201R-L-B40	0.1	●			●	●			0.03~0.15	0.25~0.8	√	√	√	√					
	110202R-L-B40	0.2	●			●	●			0.10~0.2	0.30~1.00	√	√	√	√					
	110204R-L-B40	0.4	●			●	●			0.10~0.25	0.50~1.00	√	√	√	√					
	TCGT 0902005R-L-B40	0.05	●			●	●			0.02~0.06	0.05~1.5	√	√	√	√					
	090201R-L-B40	0.1	●			●	●			0.03~0.15	0.25~0.8	√	√	√	√					
	090202R-L-B40	0.2	●			●	●			0.10~0.2	0.30~1.00	√	√	√	√					
	090204R-L-B40	0.4	●			●	●			0.10~0.25	0.50~1.00	√	√	√	√					
	TCGT 1102005R-L-B40	0.05	●			●	●			0.02~0.06	0.05~1.5	√	√	√	√					
	110201R-L-B40	0.1	●			●	●			0.03~0.15	0.25~0.8	√	√	√	√					
	110202R-L-B40	0.2	●			●	●			0.10~0.2	0.30~1.00	√	√	√	√					
	110204R-L-B40	0.4	●			●	●			0.10~0.25	0.50~1.00	√	√	√	√					

备注Note: 1. 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2. 材质标记★为优选材质。Grade with★is 1st choice.

内孔加工用刀杆 Internal holder

适用于TBGT / TCGH / TPGH



本图为右手(R)
R-hand shown

右手(R)刀杆适用左手(L)刀片, 左手(L)刀杆适用右手(R)刀片
Right-Hand holders are designed for Left-Hand machines,
Left-Hand holders are designed for Right-Hand machines.

图1 Fig.1

S□□X - STL(B/PC) (内径端面加工) Boring face

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure		
			ØA	ØD	L	F	H	θ	S			压紧螺丝 Forcing screw	扳手 Wrench
镗刀 Boring tool	圆柄 Round type	S06X-STLBR.06-08A	8	6	120	3.8	5	12°	0.5	BD2004-6037	T6	TBGT0601	图1 Fig.1
		S08X-STLPR.08-10A	10	8		5	7	10°	0.4	BD2506-6035	T7	TPGH0802	
		S08X-STLPR.09-10A	10	8		5	7	10°	0.4	BD2506-6035	T7	TPGH0902	
		S10X-STLPR.09-12A	12	10		6.2	9	8°	0.4			TPGH0902	
		S12X-STLPR.09-16A	16	12		8	11	5°	0.4	TPGH0902			
		S16X-STLPR.11-18A	18	16		9.2	15	3.5°	0.4	BD3008-6042	T8	TPGH1103	
		S08X-STLCR.09-10A	10	8		5	7	10°	0.4	BD3008-6042	T8	TCGH0902	
		S10X-STLCR.09-12A	12	10		6.2	9	8°	0.4			TCGH0902	
		S12X-STLCR.09-16A	16	12		8	11	5°	0.4	TCGH0902			
		S16X-STLCR.11-18A	18	16		9.2	15	3.5°	0.4	BD3008-6042	T8	TCGH1103	

BETTER PRECISION

外径/内径加工刀片
External / Internal insert

FG系列刀片
FG series insert

镗削/小孔镗刀系列 (带30°后角)
Boring boring (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀柄
High speed handle

其他配套产品
Other tools

金属陶瓷刀片

Cermet Insert

金属陶瓷用内孔加工刀片 VB□□

型号 Description	形状 Shape	IC	S	D1
VBGT1103_		6.35	3.18	2.8
VBGT1604_		9.525	4.76	4.4

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r (mm)	金属陶瓷 Cermet				加工况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material						
			不涂层 Uncoated	涂层 Coated	连续 Continuous	断续 Interrupted		进给 f (mm/rev)	切深 ap (mm)	K	P	M	S	N	H	
	VBGT 110305R-B05	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	110301R-B05	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	110302R-B05	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110304R-B05	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	VBGT 1103003R-B10	0.03	●	○	●	●	0.01~0.02	0.02~0.05	√	√	√	√				
	1103005R-B10	0.05	●	○	●	●	0.01~0.03	0.03~0.08	√	√	√	√				
	110301R-B10	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	110302R-B10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	VBGT 110304R-B10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	110301R-B20	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	1103003R-BU10	0.03	●	○	●	●	0.01~0.02	0.02~0.08	√	√	√	√				
	1103005R-BU10	0.05	●	○	●	●	0.01~0.03	0.03~0.10	√	√	√	√				
	VBGT 1103008R-BU10	0.08	●	○	●	●	0.01~0.04	0.15~0.20	√	√	√	√				
	110301R-BU10	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	110302R-BU10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110304R-BU10	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	VBGT 1103003R-BU20	0.03	●	○	●	●	0.01~0.02	0.02~0.08	√	√	√	√				
	1103005R-BU20	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	1103008R-BU20	0.08	●	○	●	●	0.01~0.04	0.15~0.20	√	√	√	√				
	110301R-BU20	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	VBGT 110302R-BU20	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110304R-BU20	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	160402R-B05	0.2	●	○	●	●	0.03~0.10	0.10~0.45	√	√	√	√				
	160404R-B05	0.4	●	○	●	●	0.05~0.20	0.20~1.00	√	√	√	√				
	VBGT 160408R-B05	0.8	●	○	●	●	0.10~0.40	0.50~2.00	√	√	√	√				

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

金属陶瓷用内孔加工刀片 CCGT / DCGT / T型

型号 Description	形状 Shape	IC	S	D1
CCGT0602_		6.35	2.38	2.8
CCGT09T3_		9.525	3.97	4.4
DCGT0702_		6.35	2.38	2.8
DCGT11T3_		9.525	3.97	4.4

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r (mm)	金属陶瓷 Cermet				加工况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material						
			不涂层 Uncoated	涂层 Coated	连续 Continuous	断续 Interrupted		进给 f (mm/rev)	切深 ap (mm)	K	P	M	S	N	H	
	0602005R-BU12	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	060201R-BU12	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	060202R-BU12	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	060204R-BU12	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	CCGT 09T301R-BU15	<0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	09T302R-BU15	<0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	09T304R-BU15	<0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	DCGT 070201R-BU12	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	070202R-BU12	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	070204R-BU12	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	DCGT 0702005R-B40	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	070201R-B40	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	070202R-B40	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	DCGT 070204R-B40	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	0702005R-B10	0.05	●	○	●	●	0.01~0.03	0.03~0.08	√	√	√	√				
	070201R-B10	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	DCGT 070202R-B10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	070204R-B10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	11T3005R-BU15	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	DCGT 11T301R-BU15	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	11T302R-BU15	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	11T304R-BU15	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	DCGT 11T3005R-B10	0.05	●	○	●	●	0.01~0.03	0.03~0.08	√	√	√	√				
	11T301R-B10	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	11T302R-B10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	11T304R-B10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	DCGT 11T3003R-B40	0.03	●	○	●	●	0.01~0.02	0.02~0.08	√	√	√	√				
	11T3005R-B40	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	11T301R-B40	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	11T302R-B40	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	DCGT 11T304R-B40	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

金属陶瓷用内孔加工刀片 CCGT / DCGT / TNGG

型号 Description	形状 Shape	IC	S	D1
TBGT0601_		3.97	1.59	2.3
TP_T0802_		4.76	2.38	2.3
TP_T0902_		5.56	2.38	3
TP_T1102_		6.35	3.18	3.3

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r (mm)	金属陶瓷 Cermet				加工工况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material						
			不涂层 Uncoated	涂层 Coated	连续 Continuous	断续 Interrupted		进给 f (mm/rev)	切深 ap (mm)	K	P	M	S	N	H	
	TBGT 0601005R-L-B05	0.05	●	○	●	●	0.01~0.03	0.03~0.08	√	√	√	√				
	060101R-L-B05	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	060102R-L-B05	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	060104R-L-B05	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TPGT 080201R-L-B05	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	080202R-L-B05	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	080204R-L-B05	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TPGT 080202R-L-BK10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	080204R-L-BK10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TPGT 090201R-L-B05	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	090202R-L-B05	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	090204R-L-B05	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TPGT 090202R-L-BK10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	090204R-L-BK10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TCGT 110202R-L-BK10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110204R-L-BK10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	110208R-L-BK10	0.8	●	○	●	●	0.08~0.40	0.60~2.50	√	√	√	√				
	TCGT 110202R-L-BU10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110204R-L-BU10	0.4	●	○	●	●	0.05~0.20	0.50~1.50	√	√	√	√				
	TCGT 1103005R-L-BK10	0.05	●	○	●	●	0.01~0.03	0.03~0.08	√	√	√	√				
	110301R-L-BK10	0.1	●	○	●	●	0.02~0.05	0.15~0.50	√	√	√	√				
	110302R-L-BK10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	TPGT 110302R-L-B05	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110304R-L-B05	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	110308R-L-B05	0.8	●	○	●	●	0.08~0.40	0.60~2.50	√	√	√	√				
	TPGT 110202R-L-B05	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110204R-L-B05	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TPGT 110302R-L-BK10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	110304R-L-BK10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	110308R-L-BK10	0.8	●	○	●	●	0.08~0.40	0.60~2.50	√	√	√	√				
	TPET 1103005R-L-BU10	0.05	●	○	●	●	0.01~0.03	0.08~0.10	√	√	√	√				
	110301R-L-BU10	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	110302R-L-BU10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

金属陶瓷用内孔加工刀片 CCGT / DCGT / TNGG

型号 Description	形状 Shape	IC	S	D1
TNGG1604_		9.525	4.76	3.81
TNGG2204_		12.7	4.76	5.16

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r (mm)	金属陶瓷 Cermet				加工工况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material						
			不涂层 Uncoated	涂层 Coated	连续 Continuous	断续 Interrupted		进给 f (mm/rev)	切深 ap (mm)	K	P	M	S	N	H	
	TNGG 160201R-L-BD15	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	160202R-L-BD15	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	160204R-L-BD15	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	160208R-L-BD15	0.8	●	○	●	●	0.08~0.40	0.60~2.50	√	√	√	√				
	TNGG 160201R-L-B10	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	160202R-L-B10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	160204R-L-B10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	160208R-L-B10	0.8	●	○	●	●	0.08~0.40	0.60~2.00	√	√	√	√				
	TNGG 160201R-L-B10	0.1	●	○	●	●	0.02~0.05	0.20~0.50	√	√	√	√				
	160202R-L-B10	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	160204R-L-B10	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	160208R-L-B10	0.8	●	○	●	●	0.08~0.40	0.60~2.00	√	√	√	√				
	TNGG 160402R-L-BU24	0.2	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	160404R-L-BU24	0.4	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				
	TNGG 220404R-L-BD24	0.4	●	○	●	●	0.03~0.10	0.30~0.80	√	√	√	√				
	220408R-L-BD24	0.8	●	○	●	●	0.05~0.20	0.50~1.00	√	√	√	√				

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

外观 / Internal insert
FC系列刀片
锋利刀片 (带30°后角)
Unique insert
CBN/PCD刀片
高速刀片
其他产品

金属陶瓷用内孔加工刀片 CCGT / DCGT / TNGG

型号 Description	形状 Shape	IC	S	D1	金属陶瓷 Cermets				加工工况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material							
					不涂层 Uncoated	涂层 Coated	涂层 Coated	涂层 Coated		进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H		
TPGH0802_		4.76	2.38	2.3															
TPGH0902_		5.56	2.38	3															
TPGH1102_		6.35	2.38	3.5															
TPGH1103_		6.35	3.18	3.3															

外观 Figure	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	金属陶瓷 Cermets				加工工况 Cutting Condition	推荐切削参数 Recommended cutting parameters		被加工材料 Workpiece Material									
			不涂层 Uncoated	涂层 Coated	涂层 Coated	涂层 Coated		进给 f(mm/rev)	切深 ap(mm)	K	P	M	S	N	H				
	TPGH 080201R-L-B05	0.1	●	○	●		●	0.02~0.05	0.20~0.50	√	√	√	√						
	080202R-L-B05	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	080204R-L-B05	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	TPGH 080202R-L-BK10	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	080204R-L-BK10	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	TPGH 090201R-L-B05	0.1	●	○	●		●	0.02~0.05	0.20~0.50	√	√	√	√						
	090202R-L-B05	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	090204R-L-B05	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	TPGH 090202R-L-BK10	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	090204R-L-BK10	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	TPGH 090202R-L-B60	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	090204R-L-B60	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	TPGH 110302R-L-B05	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	110304R-L-B05	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	110308R-L-B05	0.8	●	○	●		●	0.08~0.40	0.60~2.00	√	√	√	√						
	TPGH 110202R-L-B05	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	110204R-L-B05	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	TPGH 110302R-L-BK10	0.2	●	○	●		●	0.03~0.10	0.30~0.80	√	√	√	√						
	110304R-L-BK10	0.4	●	○	●		●	0.05~0.20	0.50~1.00	√	√	√	√						
	110308R-L-BK10	0.8	●	○	●		●	0.08~0.40	0.60~2.00	√	√	√	√						

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★ is 1st choice.

加工案例 Case studies

外径、内径加工用刀片 External / Internal insert

案例一 Case 1

刀具规格 Type	VPET110302R-B40 LC3225	
配刀杆 Holder	S16H-SVJPR11-26M	
加工材料 Workpiece	C45PBK(45#钢)	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	镗孔 boring	
切削参数 Cutting condition	转速 (r/min) 3800	
	进给量 (mm/min) 0.06	
结论 Conclusion	刀具寿命稳定在1500pcs Steady tool life is at 1500	

案例二 Case 2

刀具规格 Type	DCGT11T3005R-B50 LC3225	
配刀杆 Holder	SDLCR1212JX-11FF	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	精车端面加外径 Finishing in surface & O.D	
切削参数 Cutting condition	转速 (r/min) 3000	
	进给量 (mm/min) 0.015	
结论 Conclusion	刀具寿命稳定在6000+PCS Steady tool life is at 6000+.	

案例三 Case 3

刀具规格 Type	DCGT11T0301R-B10 LC3225 DCGT11T03015R-B10 LC3225	
配刀杆 Holder	SDLCR1212JX-11FF	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	精车端面加外径 Finishing in surface & O.D	
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.028	
结论 Conclusion	刀具寿命稳定12000PCS, 端面光滑纹路均匀, 客户采用我们方案。 Tool life is stable at 12000pcs, the surface is smooth and the grain is well-distributed. ACCEPTED.	

案例四 Case 4

刀具规格 Type	TPGH110302L-B05 LC3225	
配刀杆 Holder	STUPR1012H-11	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	精车内圆 I.D in finishing	
切削参数 Cutting condition	转速 (r/min) 1600 进给量 (mm/min) 0.02	
结论 Conclusion	刀具寿命稳定, 内孔光洁度能达到要求且排屑顺畅。 The roughness can reach to the requirement and smooth chip.	

FG系列刀片: 切槽、切断、后扫刀片(单孔)

Grooving & cut off & back turning insert (Single hole)

命名方式 Named

U B D R/L 050 - 010 - 005 - M10 - 16D R

系列号 Code	类别 Types	刀片代号 Type	Insert hand	刃宽 Edge width	刃长 Cutting Length	槽型 Chip-breaker		导程角 Lead angle
U	后扫 Back turning	A	L: 左手 R: 右手	槽宽 Slot width	刀片R角 Cutting edge R	标准 Standard	非标 Non-standard	导程角方向 Lead angle hand
B	切槽/切断 Grooving & cut off	B		050=0.5	005=0.05	-D	M10	
C		C	I	075=0.75	010=0.1	-V	K10	
D		D	J5	080=0.8	015=0.15	-N	P10	
E		E	M	095=0.95	020=0.2	-G 通用 common use	G10	
F		F	M5	100=1.0	030=0.3	-T 刃口强化型 strengthen type		
G		G	N	110=1.1	040=0.4			
G5		G5	P15					
H		H	Q					



FG系列刀片：切槽、切断刀片 Grooving & cut off insert

适合加工材料	K	铸铁	√	适用刀杆参考页
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
	H	高硬度材 (40HRC以下) 高硬度材 (40HRC以上)		

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	最大切深 CDX	刀尖圆弧 Re	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters 进给 f(mm/rev)		
						不涂层 Uncoated		涂层 Coated				不涂层 Uncoated			涂层 Coated	
						LC10	LC3115	LC3215	★ LC3225	★ LC3335	LN10	LP725	LN10		LP725	
		UG16R.L 033-005	0.33	0.8	0.05	●		●	●					0.01~0.05		
		050-005	0.50	1.2	0.05	●		●	●							
		075-010	0.75	2.0	0.10	●		●	●							
		095-010	0.95	2.0	0.10	●		●	●							
		100-010	1.00	2.0	0.10	●		●	●							
		120-010	1.20	2.0	0.10	●		●	●							
		125-010	1.25	2.0	0.10	●		●	●							
		140-010	1.40	2.0	0.10	●		●	●							
		145-010	1.45	2.0	0.10	●		●	●							
		150-010	1.50	2.0	0.10	●		●	●							
		175-010	1.75	2.0	0.10	●		●	●							
		200-010	2.00	2.5	0.10	●		●	●							
		250-010	2.50	2.5	0.10	●		●	●							
		UGR16R.L 200-100	2.00	2.5	1.00	●		●	●				0.01~0.05			
		300-150	3.00	2.5	1.50	●		●	●							

备注Note: 1. 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptably.
2. 材质标记★为优选材质。Grade with★is 1st choice.

FG系列刀片：切槽、切断刀片 Grooving & cut off insert

适合加工材料	K	铸铁	√	适用刀杆参考页
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
	H	高硬度材 (40HRC以下) 高硬度材 (40HRC以上)		

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	最大加工直径 CUTDIA	刀尖圆弧 Re	角度 PSIRR	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters 进给 f(mm/rev)		
							不涂层 Uncoated		涂层 Coated				不涂层 Uncoated			涂层 Coated	
							LC10	LC3115	LC3215	★ LC3225	★ LC3335	LN10	LP725	LN10		LP725	
		UCER.L 050-D	0.5	5.0	0.03	0°	●		●	●				0.01~0.03			
		070-D	0.7	8.0	0.05		●		●	●							
		075-D	0.75	8.0	0.05		●		●	●							
		100-D	1	12.0	0.05		●		●	●							
		125-D	1.25	12.0	0.05		●		●	●							
		150-D	1.5	12.0	0.05		●		●	●							
		200-D	2	12.0	0.05		●		●	●							
		100-V	1	12.0	0.05		●		●	●							
		125-V	1.25	12.0	0.05		●		●	●							
		150-V	1.5	12.0	0.05		●		●	●							
		200-V	2	12.0	0.05		●		●	●							
		050-N	0.5	5.0	0.03		●		●	●							
		070-N	0.7	8.0	0.05		●		●	●							
		075-N	0.75	8.0	0.05		●		●	●							
		100-N	1	12.0	0.05		●		●	●							
		125-N	1.25	12.0	0.05		●		●	●							
		150-N	1.5	12.0	0.05		●		●	●							
		200-N	2	12.0	0.05		●		●	●							
				UCNR.L 050-D	0.5		5.0	0.03	0°	●		●	●				0.01~0.03
				070-D	0.7		8.0	0.05		●		●	●				
075-D	0.75			8.0	0.05	●		●		●							
100-D	1			12.0	0.05	●		●		●							
125-D	1.25			12.0	0.05	●		●		●							
150-D	1.5			12.0	0.05	●		●		●							
200-D	2			12.0	0.05	●		●		●							
250-D	2.5			12.0	0.05	●		●		●							
300-D	3	12.0	0.05	●		●	●										

FG系列刀片: 切槽、切断刀片 Grooving & cut off insert

适合加工材料	K	铸铁	√	适用刀杆参考页
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
	H	高硬度材 (40HRC以下) 高硬度材 (40HRC以上)		

适合加工材料	K	铸铁	√	适用刀杆参考页
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
	H	高硬度材 (40HRC以下) 高硬度材 (40HRC以上)		

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	最大加工直径 CUTDIA	刀尖圆弧 Re	角度 PSIRR	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		
							不涂层 Uncoated		涂层 Coated		不涂层 Uncoated		涂层 Coated			LN10	LP725
							LC10	LC3115	LC3215	LC3225	LC3335	LC3335					
		UCNR.L100-V	1	12.0	0.05	0°	●		●	●					0.01~0.03		
		125-V	1.25	12.0	0.05		●		●	●							
		150-V	1.5	12.0	0.05		●		●	●							
		200-V	2	12.0	0.05		●		●	●							
		250-V	2.5	12.0	0.05		●		●	●							
		300-V	3	12.0	0.05		●		●	●							
		050-N	0.5	5.0	0.03		●		●	●							
		070-N	0.7	8.0	0.05		●		●	●							
		075-N	0.75	8.0	0.05		●		●	●							
		100-N	1	12.0	0.05		●		●	●							
		125-N	1.25	12.0	0.05		●		●	●							
		150-N	1.5	12.0	0.05		●		●	●							
		200-N	2	12.0	0.05		●		●	●							
		250-N	2.5	12.0	0.05		●		●	●							
		300-N	3	12.0	0.05		●		●	●							
		TCIR.L 050-G-16DR	0.5	5.0	0.03	16°	●		●	●				0.01~0.02			
		070-G-16DR	0.7	8.0	0.03		●		●	●							
		100-G-16DR	1.0	12.0	0.03		●		●	●							
		125-G-16DR	1.25	12.0	0.03		●		●	●							
		150-G-16DR	1.5	12.0	0.03		●		●	●							
		200-G-16DR	2.0	12.0	0.03		●		●	●							
		100-T-16DR	1.0	12.0	0.08		●		●	●							
		150-T-16DR	1.5	12.0	0.08		●		●	●							
		200-T-16DR	2.0	12.0	0.08		●		●	●							
		050-20DR	0.5	5.0	0		●		●	●							
		070-20DR	0.7	8.0	0		●		●	●							
		100-20DR	1.0	12.0	0		●		●	●							
		150-20DR	1.5	12.0	0		●		●	●							
		200-20DR	2.0	12.0	0		●		●	●							

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	最大加工直径 CUTDIA	刀尖圆弧 Re	角度 PSIRR	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters		
							不涂层 Uncoated		涂层 Coated		不涂层 Uncoated		涂层 Coated			LN10	LP725
							LC10	LC3115	LC3215	LC3225	LC3335	LC3335					
		TCIR.L 050-G	0.5	5.0	0.03	0°	●		●	●				0.01~0.03			
		070-G	0.7	8.0	0.03		●		●	●							
		100-G	1.0	12.0	0.03		●		●	●							
		125-G	1.25	12.0	0.03		●		●	●							
		150-G	1.5	12.0	0.03		●		●	●							
		200-G	2.0	12.0	0.03		●		●	●							
		100-T	1.0	12.0	0.08		●		●	●							
		150-T	1.5	12.0	0.08		●		●	●							
		200-T	2.0	12.0	0.08		●		●	●							
		050	0.5	5.0	0		●		●	●							
		070	0.7	8.0	0		●		●	●							
		100	1.0	12.0	0		●		●	●							
		150	1.5	12.0	0		●		●	●							
		200	2.0	12.0	0		●		●	●							
				TCISR.L 100-G	1.0		12.0	0.05	0°	●		●	●				
150-G	1.5			12.0	0.05	●		●		●							
200-G	2.0			12.0	0.05	●		●		●							
TCQSR.L 150-G	1.5			12.0	0.05	●		●		●							
200-G	2.0			12.0	0.05	●		●		●							
TCQR.L 150-G-16DR	1.5			16.0	0.05	●		●		●							
		200-G-16DR	2.0	16.0	0.05	16°	●		●	●				0.01~0.03			
		150-T-16DR	1.5	16.0	0.08		●		●	●							
		200-T-16DR	2.0	16.0	0.08		●		●	●							
		150-20DR	1.5	16.0	0		●		●	●							
		200-20DR	2.0	16.0	0		●		●	●							
		TCQR.L 150-G	1.5	16.0	0.05		●		●	●							
		200-G	2.0	16.0	0.05	0°	●		●	●				0.01~0.04			
		150-T	1.5	16.0	0.08		●		●	●							
		200-T	2.0	16.0	0.08		●		●	●							
		150	1.5	16.0	0		●		●	●							
		200	2.0	16.0	0		●		●	●							
		TCQR.L 150-G	1.5	16.0	0.05		●		●	●							

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

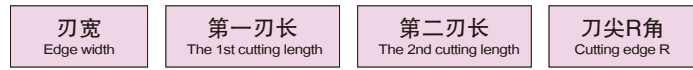
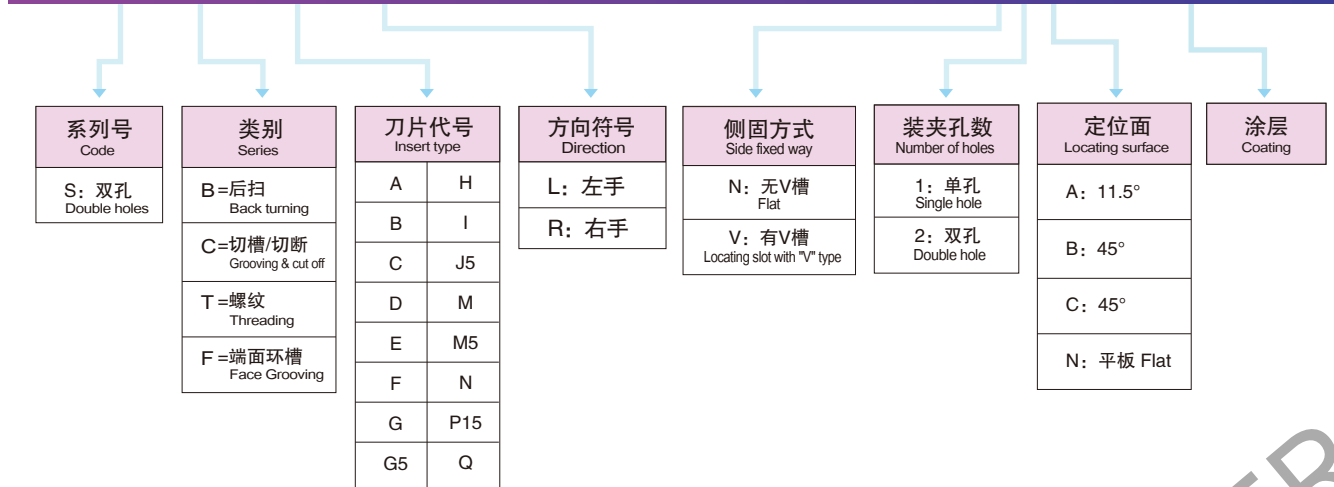
外观 / Internal insert
FG系列刀片
FC series insert
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀片
High speed inserts
其他产品
Other tools

FG系列刀片: 切槽、切断刀片(双孔)

Grooving & cut off & back turning insert (double holes)

命名方式 Named

S C A R 1.7 - 8.7 - 7.6 - R0.3 - N2A LC3225



系列号 Code	类别 Series	刀片代号 Insert type		方向符号 Direction	侧固方式 Side fixed way	装夹孔数 Number of holes	定位面 Locating surface	涂层 Coating
S: 双孔 Double holes	B=后扫 Back turning	A	H	L: 左手 R: 右手	N: 无V槽 Flat V: 有V槽 Locating slot with "V" type	1: 单孔 Single hole 2: 双孔 Double hole	A: 11.5° B: 45° C: 45° N: 平板 Flat	LC3225
	C=切槽/切断 Grooving & cut off	B	I					
	T=螺纹 Threading	C	J5					
	F=端面环槽 Face Grooving	D	M					
		E	M5					
		F	N					
		G	P15					
		G5	Q					

适合加工材料	K	铸铁	√	适用刀杆参考页 P051 ~ P052
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
	H	高硬度材 (40HRC以下) 高硬度材 (40HRC以上)		

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	刃长 mm		刀尖圆弧 Re	硬质合金 Carbide				金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters 进给 f(mm/rev)		
				CDX1	CDX2		不涂层 Uncoated		涂层 Coated		不涂层 Uncoated			涂层 Coated	
							LC10	LC3115	LC3225	LC3335	LN10	LP725			
<p>双孔带V 2 holes with slot</p>		SCFR.L 1.0-6.0-6.0-R0.1-V2N	1.0	6.0	6.0	0.1	●		●	●			0.01~0.03		
		1.0-6.0-6.0-R0.2-V2N	1.0	6.0	6.0	0.2	●		●	●			0.01~0.03		
		1.5-10.5-10.5-R0.1-V2N	1.5	10.5	10.5	0.1	●		●	●			0.01~0.04		
		1.5-10.5-10.5-R0.2-V2N	1.5	10.5	10.5	0.2	●		●	●			0.01~0.04		
		2.0-10.5-10.5-R0.2-V2N	2.0	10.5	10.5	0.2	●		●	●			0.01~0.04		
		2.0-10.5-10.5-R0.4-V2N	2.0	10.5	10.5	0.4	●		●	●			0.01~0.04		
		2.5-10.5-10.5-R0.2-V2N	2.5	10.5	10.5	0.2	●		●	●			0.01~0.04		
		2.5-10.5-10.5-R0.4-V2N	2.5	10.5	10.5	0.4	●		●	●			0.01~0.04		
		3.0-10.5-10.5-R0.2-V2N	3.0	10.5	10.5	0.2	●		●	●			0.01~0.05		
		3.0-10.5-10.5-R0.4-V2N	3.0	10.5	10.5	0.4	●		●	●			0.01~0.05		
<p>双孔平板 (flat)</p>		SCFR.L 1.0-6.0-6.0-R0.1-N2A	1.0	6.0	6.0	0.1	●		●	●			0.01~0.03		
		1.0-6.0-6.0-R0.2-N2A	1.0	6.0	6.0	0.2	●		●	●			0.01~0.03		
		1.5-8.7-8.7-R0.1-N2A	1.5	8.7	8.7	0.1	●		●	●			0.01~0.03		
		1.5-8.7-8.7-R0.2-N2A	1.5	8.7	8.7	0.2	●		●	●			0.01~0.03		
		2.0-8.7-8.7-R0.2-N2A	2.0	8.7	8.7	0.2	●		●	●			0.01~0.04		
		2.0-8.7-8.7-R0.4-N2A	2.0	8.7	8.7	0.4	●		●	●			0.01~0.04		
		2.5-8.7-8.7-R0.2-N2A	2.5	8.7	8.7	0.2	●		●	●			0.01~0.04		
		2.5-8.7-8.7-R0.4-N2A	2.5	8.7	8.7	0.4	●		●	●			0.01~0.04		
		3.0-8.7-8.7-R0.2-N2A	3.0	8.7	8.7	0.2	●		●	●			0.01~0.04		
		3.0-8.7-8.7-R0.4-N2A	3.0	8.7	8.7	0.4	●		●	●			0.01~0.04		
		3.5-8.7-8.7-R0.2-N2A	3.5	8.7	8.7	0.2	●		●	●			0.01~0.04		
		3.5-8.7-8.7-R0.4-N2A	3.5	8.7	8.7	0.4	●		●	●			0.01~0.04		

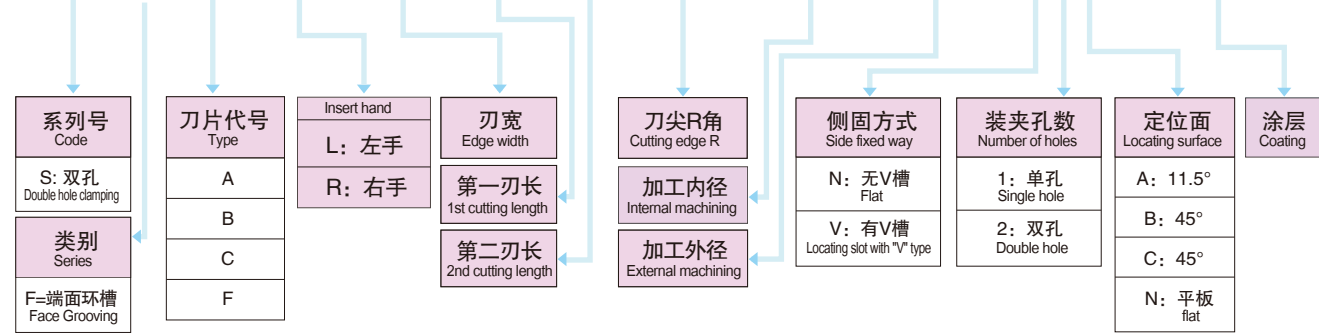
备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

FG系列刀片: 端面环槽刀片

Face Grooving

命名方式 (非标) Named

S F A R/L 1.7 - 8.7 - 7.6 - R0.3 - D25 - D28.4 - N2A LC3225



系列号 Code	刀片代号 Type	Insert hand	刃宽 Edge width	刀尖R角 Cutting edge R	侧固方式 Side fixed way	装夹孔数 Number of holes	定位面 Locating surface	涂层 Coating
S: 双孔 Double hole clamping	A	L: 左手 R: 右手	第一刃长 1st cutting length	加工内径 Internal machining	N: 无V槽 Flat	1: 单孔 Single hole	A: 11.5° B: 45° C: 45° N: 平板 flat	
类别 Series	B C F		第二刃长 2nd cutting length	加工外径 External machining	V: 有V槽 Locating slot with "V" type	2: 双孔 Double hole		
F=端面环槽 Face Grooving								

适合加工材料	K	铸铁	√	适用刀杆参考页
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
H	高硬度材 (40HRC以下)			P051 ~ P052
	高硬度材 (40HRC以上)			

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	刃长 mm		刀尖圆弧 Re	硬质合金 Carbide					推荐切削参数 Recommended cutting parameters			
				CDX1	CDX2		不涂层 Uncoated	涂层 Coated			不涂层 Uncoated		涂层 Coated		
								LC10	LC3115	LC3215	★ LC3225	★ LC3335	LN10	LP725	进给 f(mm/rev)
双孔无V槽 2 holes flat		SFFR/L 1.25-6.3-5.7-R0.2-D17.7-D20.2-N2A	1.25	6.3	5.7	0.20	●				●	●			
		1.5-7.4-6.7-R0.3-D24-D27-N2A	1.50	7.4	6.7	0.30	●				●	●			
		1.5-7.7-7.0-R0.3-D22-D25-N2A	1.50	7.7	7.0	0.30	●				●	●			
		1.7-8.1-7.6-R0.3-D25-D28.4-N2A	1.70	8.1	7.6	0.30	●				●	●			
		1.7-8.1-8.1-R0.3-D26-D29.4-N2A	1.70	8.1	8.1	0.30	●				●	●			
双孔带V槽 2 holes with "V" slot		SFFR/L 1.25-6.3-5.7-R0.2-D17.7-D20.2-V2A	1.25	6.3	5.7	0.20	●				●	●			0.01~0.03
		1.5-7.4-6.7-R0.3-D24-D27-V2A	1.50	7.4	6.7	0.30	●				●	●			
		1.5-7.7-7.0-R0.3-D22-D25-V2A	1.50	7.7	7.0	0.30	●				●	●			
		1.7-8.1-7.6-R0.3-D25-D28.4-V2A	1.70	8.1	7.6	0.30	●				●	●			
		1.7-8.1-8.1-R0.3-D26-D29.4-V2A	1.70	8.1	8.1	0.30	●				●	●			
双孔带V槽 (定位面: 平板) 2 holes with "V" slot (locating surface: flat)		SFFR/L 4.0-6.0-5.0-R0.4-D50-D58-V2N	4.00	6.0	5.0	0.40	●				●	●			0.01~0.04
		5.0-6.0-5.0-R0.8-D50-D60-V2N	5.00	6.0	5.0	0.80	●				●	●			
		6.0-6.0-5.0-R0.8-D50-D62-V2N	6.00	6.0	5.0	0.80	●				●	●			
		8.0-5.0-5.0-R0.8-D39-D55-V2N	8.00	5.0	5.0	0.80	●				●	●			

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

BETTER PRECISION

单孔槽刀杆

Single hole grooving holder

方向符号 Direction	刀杆高度 Height of holder	刀杆宽度 Width of holder
L: 左手 R: 右手	mm	mm

命名方式 Named

S U C E R 10 10 H

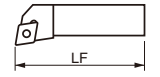
刀杆样式 Holder type	
符号	
S	钢刀杆 Steel
A	钢刀杆带冷却孔 Steel with cooling hole

系列号 Series item

加工类型 Machining type	
C	切断加工 Cut off
G	切槽加工 Grooving

加工类型 Machining type	
E	8.0
N	9.325
I	8.7
C	9.5

刀杆全长(mm) Overall length of holder	
H	100
JX	120



双孔槽刀杆

Double holes grooving holder

方向符号 Direction	刀杆宽刀杆高 Holder size : width * height	侧固方式 Side fixed way
L: 左手 R: 右手	1010=10*10 1212=12*12 1616=16*16	N: 无V槽 Flat V: 有V槽 Locating slot with "V" type

刀杆总长
Overall length of holder

命名方式 Named

S C A R - 1212 - 100 - T10.5 - N 2 C

系列号 Code
U
T
S

类别 Series	
B	后扫 Back turning
C	切槽/切断 Grooving & cut off
T	螺纹 Threading
F	端面环槽 Face grooving

刀片代号 Insert type	
A	H
B	I
C	J5
D	M
E	M5
F	N
G	P15
G5	Q

刀片伸出长度
Extension length of cutting edge

装夹孔数 Number of holes	
1:	单孔 Single hole
2:	双孔 Double hole

定位面	
A	
B	
C	
N	
D	

BETTER PRECISION

FG系列刀杆 FG series holder

适用于切槽、切断刀片 Suitable in grooving & cut off insert

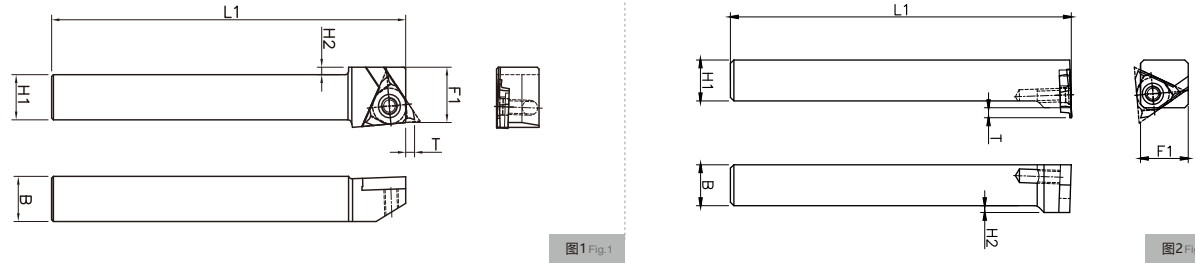


图1 Fig.1

图2 Fig.2

STUG - 16 (无偏头) (三角形槽刀) 3 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	H2	T	B	L1	F1	压紧螺丝 Forcing screw	扳手 Wrench		
切槽 Grooving	直型方柄 Straight type	STUGR1010H-16	10	4	2.5	10	100	10	BD4007-6055	T15	UG16R UGR16R	图1 Fig.1
		STUGR1212H-16	12	2	2.5	12	100	16				
		STUGR1616H-16	16	/	2.5	16	100	20				
		STUGL1010H-16	10	4	2.5	10	100	10	BD4007-6055	T15	UG16L UGR16L	
		STUGL1212H-16	12	2	2.5	12	100	16				
		STUGL1616H-16	16	/	2.5	16	100	20				

CH-STUG - 16 (7字型) (三角形槽刀) "7" shape with 3 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	H2	T	B	L1	F1	压紧螺丝 Forcing screw	扳手 Wrench		
切槽 Grooving	7字型方柄 "7" type	CH-STUGR1010H-16	10	4	2.5	10	100	14	BD4007-6055	T15	UG16L UGR16L	图2 Fig.2
		CH-STUGR1212H-16	12	2	2.5	12	100	14				
		CH-STUGR1616H-16	16	/	2.5	16	100	16				
		CH-STUGL1010H-16	10	4	2.5	10	100	14	BD4007-6055	T15	UG16R UGR16R	
		CH-STUGL1212H-16	12	2	2.5	12	100	14				
		CH-STUGL1616H-16	16	/	2.5	16	100	16				

FG系列刀杆 FG series holder

适用于切槽、切断刀片 Suitable in grooving & cut off insert

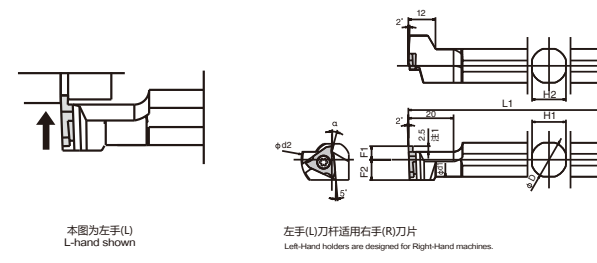


图3 Fig.3

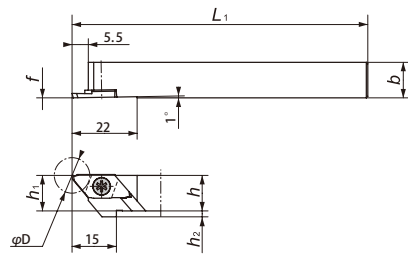
S□□H - TUGL16 (套筒刀杆) (三角形槽刀) Sleeve type with 3 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			ØD	H1	H2	F1	L	压紧螺丝 Forcing screw	扳手 Wrench		
切槽 Grooving	圆柄 Round type	S16H-TUGL16	16	15	15	120	BD4007-6055	T15	UG16R	图3 Fig.3	
		S20H-TUGL16	20	19	19						
		S22H-TUGL16	22	21.4	21.4						6
		S25H-TUGL16	25	24	24						
		S25.4H-TUGL16	25.4	24	24						

外委 内加工用刀片
External / Internal insert
FG系列刀片
FG series insert
披星/内刀系列 (带30°后定位)
Boring tooling (with 30° back location)
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀片
High speed inserts
其他配套产品
Other tools

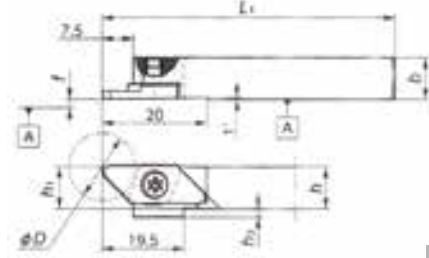
FG系列刀杆 FG series holder

适用于切槽、切断刀片 Suitable in grooving & cut off insert



本图为右手(R)
R-hand shown

图4 Fig.4

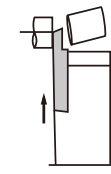


本图为右手(R)
R-hand shown

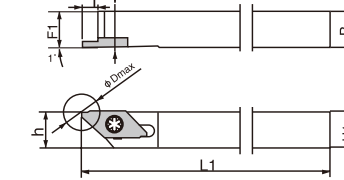
图5 Fig.5

FG系列刀杆 FG series holder

适用于切槽、切断刀片 Suitable in grooving & cut off insert

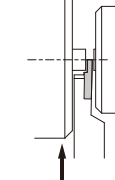


本图为右手(R)
R-hand shown

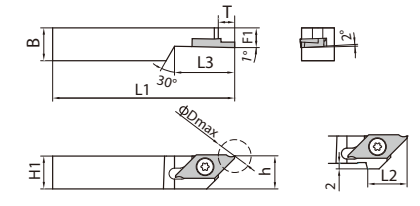


右手(R)刀杆适用右手(R)刀片
Right-Hand holders are designed for Right-Hand machines.

图6 Fig.6



本图为左手(L)
L-hand shown



左手(L)刀杆适用左手(L)刀片
Left-Hand holders are designed for Left-Hand machines.

图7 Fig.7

SUCER/L 两刃切槽切断 (直型) Straight type with 2 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size							零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L1	F1	h	T	Ø Dmax	压紧螺丝 Forcing screw	扳手 Wrench		
切槽切断 Grooving & cut off	直型方柄 Straight type	SUCER1010H	10	10	100	10	10	5.5	12	BD4009-6058	T15	UCEL	图4 Fig.4
		SUCER1212H	12	12		12	12						
		SUCER1616H	16	16		16	16						
		SUCEL1010H	10	10		10	10					UCER	
		SUCEL1212H	12	12		12	12						
		SUCEL1616H	16	16		16	16						

SUCE/NL - SE (副轴用) (双头切槽切断刀) Secondary with 2 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size							零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	F1	h	T	Ø Dmax	压紧螺丝 Forcing screw	扳手 Wrench		
切槽切断 Grooving & cut off	方柄 Square type	SUCEL1212K-SE	12	12	120	5.5	12	5.5	12	BD4005-6058	T15	UCEL	图7 Fig.7
		SUCNL1212K-SE	12	12								UCNL	
		SUCEL1616K-SE	16	16								UCEL	
		SUCNL1616K-SE	16	16								UCNL	

SUCNR/L 两刃切槽切断 (直型) Straight type with 2 cutting edge

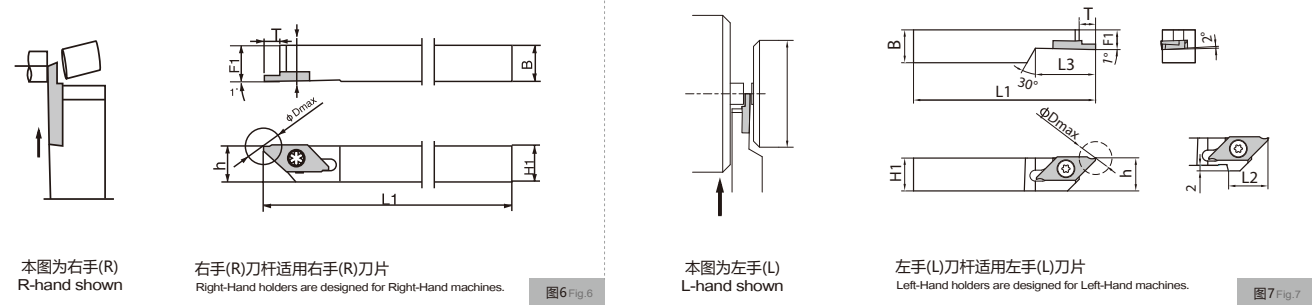
类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure	
			h	b	L1	h1	h2	f	Ø Dmax	压紧螺丝 Forcing screw			扳手 Wrench
切槽切断 Grooving & cut off	方柄 Square type	SUCNR1010H	10	10	100	10	2	0.0	16	BD4009-6058	T15	UCNR /UBNR	图5 Fig.5
		SUCNR1212H	12	12		12	0	0.0					
		SUCNR1616H	16	16		16	0	0.0					
		SUCNL1010H	10	10		10	2	0.0				UCNR /UBNR	
		SUCNL1212H	12	12		12	0	0.0					
		SUCNL1616H	16	16		16	0	0.0					

备注Note: 切槽切断 (直型) 刀杆与后扫刀 (直型) 刀杆共用。Grooving & cut off is same as the backing turning in straight type holder.

外圆/内圆加工刀片
External/Internal insert
FG系列刀片
FG series insert
铰孔/镗孔刀片 (带30°后定位)
Boring tooling (with 30° back location)
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀片
High speed insert
其他产品
Other tools

FG系列刀杆 FG series holder

适用于切槽、切断刀片 Suitable in grooving & cut off insert



本图为右手(R) R-hand shown
右手(R)刀杆适用右手(R)刀片
Right-Hand holders are designed for Right-Hand machines.

本图为左手(L) L-hand shown
左手(L)刀杆适用左手(L)刀片
Left-Hand holders are designed for Left-Hand machines.

STC (双头切槽切断刀) 2 cutting edge

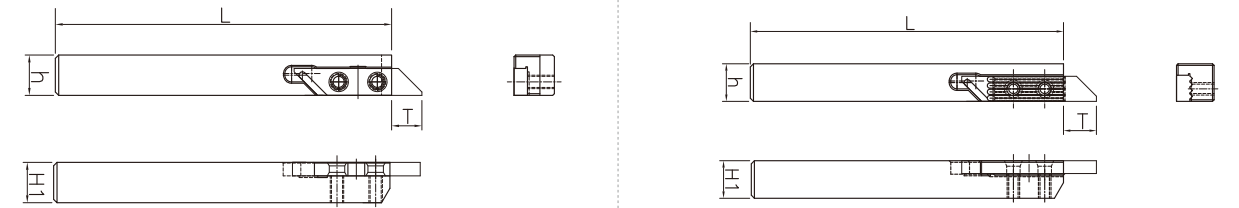
类型 Type	形状 Shape	型号 Description	尺寸 Size							零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	F1	h	T	Ø Dmax	压紧螺丝 Forcing screw	扳手 Wrench		
切槽切断 Grooving & cut off	方柄 Square type	STCIR1010H	10	10	100	10	10	5.5	12	BD4509-5756	T20	TCIR/TBIR	图6 Fig.6
		STCIR1212H	12	12		12	12						
		STCIR1616H	16	16		16	16						
		STCIL1010H	10	10		10	10						
		STCIL1212H	12	12		12	12						
		STCIL1616H	16	16		16	16						
		STCQR1010H	10	10		10	10						
		STCQR1212H	12	12		12	12						
		STCQR1616H	16	16		16	16						
		STCQL1010H	10	10		10	10						
		STCQL1212H	12	12		12	12						
		STCQL1616H	16	16		16	16						

STC - SE (副轴用) (双头切槽切断刀) Secondary with 2 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size							零件 Spare parts		刀片 Insert	刀杆示意图 Figure		
			H1	B	L	F1	h	T	Ø Dmax	压紧螺丝 Forcing screw	扳手 Wrench				
切槽切断 Grooving & cut off	方柄 Square type	STCIL1212K-SE	12	12	120	5.5	12	5.5	12	BD4505-5760	T20	TCIL	图7 Fig.7		
		STCQL1212K-SE	12	12										12	12
		STCIL1616K-SE	16	16										16	16
		STCQL1616J-SE	16	16										16	16

FG系列刀杆 FG series holder

适用于双孔外圆切槽、切断刀片, 端面环槽刀片
Suitable in turning cylindrical grooving, cut off & face grooving with 2 holes



装平板刀片

图1 Fig.1

装带V槽刀片

图2 Fig.2

SCBR/L 切槽切断、平装刀片 Grooving & cut off, Normal type

类型 Type	形状 Shape	型号 Description	尺寸 Size				零件 Parts		刀片 Insert	刀杆示意图 Figure
			总长L	刀片伸出量T	刀杆高h	刀杆宽H1	压紧螺丝 Forcing screw	扳手 Wrench		
切槽切断 (平板) Grooving & cut off (flat)	方柄 Square type	SCBR 1212-100-T9.0-N2C	100	9.0	12	12	BD4009-6055	T15	SCBR	图1 Fig.1
		SCBR 1616-120-T9.0-N2C	120	9.0	16	16				
		SCBR 2020-150-T9.0-N2C	150	9.0	20	20				
		SCBR 2525-150-T9.0-N2C	150	9.0	25	25				
		SCBL 1212-100-T9.0-N2C	100	9.0	12	12				
		SCBL 1616-120-T9.0-N2C	120	9.0	16	16				
		SCBL 2020-150-T9.0-N2C	150	9.0	20	20				
		SCBL 2525-150-T9.0-N2C	150	9.0	25	25				

SFFR/L 切槽切断、环槽平装刀杆 Grooving & cut off & face grooving, Normal type

类型 Type	形状 Shape	型号 Description	尺寸 Size				零件 Parts		刀片 Insert	刀杆示意图 Figure
			总长L	刀片伸出量T	刀杆高h	刀杆宽H1	压紧螺丝 Forcing screw	扳手 Wrench		
环槽(带V) Surface grooving (with V)	方柄 Square type	SFFR 1212-100-T10.5-V2C	100	10.5	12	12	BD4009-4351	T15	SFFR	图2 Fig.2
		SFFR 1616-120-T10.5-V2C	120	10.5	16	16				
		SFFR 2020-150-T10.5-V2C	150	10.5	20	20				
		SFFR 2525-150-T10.5-V2C	150	10.5	25	25				
		SFFL 1212-100-T10.5-V2C	100	10.5	12	12				
		SFFL 1616-120-T10.5-V2C	120	10.5	16	16				
SFFL 2020-150-T10.5-V2C	150	10.5	20	20						
SFFL 2525-150-T10.5-V2C	150	10.5	25	25						

FG系列刀杆 FG series holder

适用于双孔外圆切槽、切断刀片，端面环槽刀片
Suitable in turning cylindrical grooving, cut off & face grooving with 2 holes

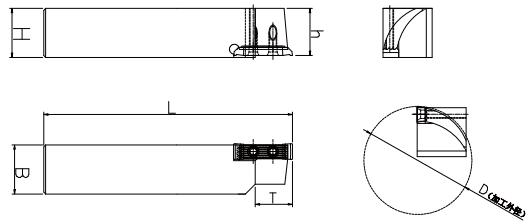


图3 Fig.3

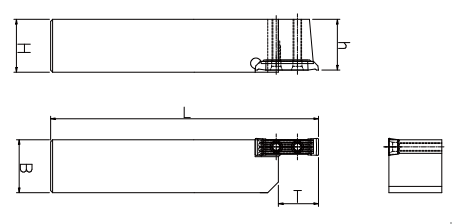


图4 Fig.4

SFFR/L 端面环槽 平装刀杆 Face grooving, Normal type

类型 Type	形状 Shape	型号 Description	尺寸 Size				零件 Spare parts		刀片 Insert	刀杆示意图 Figure	
			总长L	刀片伸出量T	中心高h	刀杆宽B	加工外径	压紧螺丝 Forcing screw			扳手 Wrench
端面环槽 (带V平装) Surface grooving (with V normal type)	方柄 Square type	SFFR 2020-150-T18-V2C-D55	150	18	20	20	D55	BD4009-4351	T15	SFFR	图3 Fig.3
		SFFR 2525-150-T18-V2C-D62	150	18	25	25	D62				
		SFFL 2020-150-T18-V2C-D55	150	18	20	20	D55				
		SFFL 2525-150-T18-V2C-D62	150	18	25	25	D62				

SCFR/L 切槽切断 平装刀杆 Grooving & cut off, Normal type

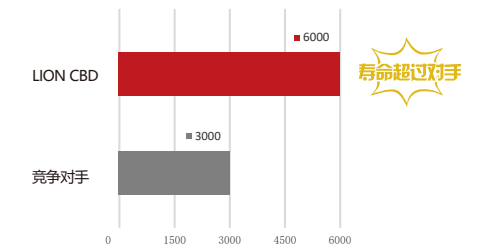
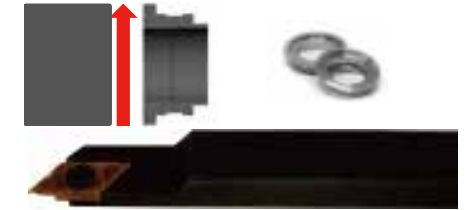
类型 Type	形状 Shape	型号 Description	尺寸 Size				零件 Parts		刀片 Insert	刀杆示意图 Figure
			总长L	刀片伸出量T	刀杆高h	刀杆宽B	压紧螺丝 Forcing screw	扳手 Wrench		
切槽切断 (带V平装) Grooving & cut off (with V normal type)	方柄 Square type	SCFR- 1212-100-T18-V2C	100	18	12	12	BD4009-4351	T15	SCFR	图4 Fig.4
		SCFR- 1616-120-T18-V2C	120	18	16	16				
		SCFR- 2020-150-T18-V2C	150	18	20	20				
		SCFR- 2525-150-T18-V2C	150	18	25	25				
		SCFL- 1212-100-T18-V2C	100	18	12	12			SCFL	
		SCFL- 1616-120-T18-V2C	120	18	16	16				
		SCFL- 2020-150-T18-V2C	150	18	20	20				
		SCFL- 2525-150-T18-V2C	150	18	25	25				

加工案例 Case studies

切槽、切断刀片 Grooving & cut off insert

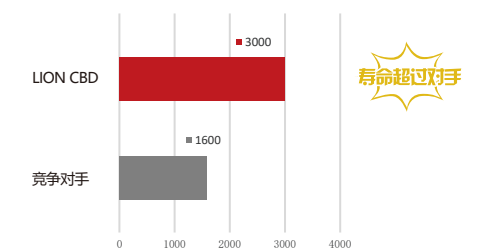
案例一 Case 1

刀具规格 Type	UCEL100-N LC3335
配刀杆 Holder	SUCEL1212K-SE
加工材料 Workpiece	SUS316L-HB340
冷却方式 Cooling Method	油冷 oil cooling
加工类型 Machining type	切断 Cut off
切削参数 Cutting condition	转速 (r/min) 2000
	进给量 (mm/min) 0.03
结论 Conclusion	寿命比竞争公司高出一倍，客户非常满意 Tool life is 2 times than competitor. ACCEPTED.



案例二 Case 2

刀具规格 Type	UCEL080-N LC3335
配刀杆 Holder	SUCEL1212K-SE
加工材料 Workpiece	钛合金 Titanium
冷却方式 Cooling Method	油冷 Oil cooling
加工类型 Machining type	切断 Cut off
切削参数 Cutting condition	转速 (r/min) 3000
	进给量 (mm/min) 0.05
结论 Conclusion	客户使用寿命从2400调到2800再调到3000，客户非常满意 Tool life is from 2400pcs to 2800 then finally to 3000, ACCEPTED.



案例三 Case 3

刀具规格 Type	UCNL085-N LC3335	
配刀杆 Holder	SUCNL1212K-SE	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切断 Cut off	
切削参数 Cutting condition	转速 (r/min) 2500 进给量 (mm/min) 0.01-0.03	
结论 Conclusion	寿命比其他公司高出一倍，客户非常满意 The tool life is twice as long as competitor, and the end-user is very satisfied.	

案例四 Case 4

刀具规格 Type	UCER100-D LC3225	
配刀杆 Holder	SUCER1212H	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切断 Cut off	
切削参数 Cutting condition	转速 (r/min) 2500 进给量 (mm/min) 0.03-0.04	
结论 Conclusion	切断7000件时工件总长没有超过0.02MM,稳定加工。寿命超过对手,客户采纳我们方案。 When cutting off at 7000pcs, the total length of the workpiece is within 0.02mm, and the processing is stable. Tool life is longer than competitor. ACCEPTED.	

案例五 Case 5 (非标定制) non-standard size

刀具规格 Type	SCBR200-8-8-010-P10-LC3335	
配刀杆 Holder	SCBR 1212-100-T9.0-N2C	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切槽 Grooving	
切削参数 Cutting condition	转速 (r/min) 5000 进给量 (mm/min) 0.05	
结论 Conclusion	外圆开粗，使用切槽方式排屑和效率都有提升，寿命和对手相比我司的翻倍，客户采纳我们方案。 Outer circle roughing, applying in grooving, chip removal and efficiency have been improved. Compared with competitor of tool life, ours is two times. ACCEPTED.	

案例六 Case 6 (非标定制) non-standard size

刀具规格 Type	SCBR300-4-4-025-N2C-LC3225	
配刀杆 Holder	SCBR 1212-100-T9.0-N2C	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切槽 Grooving	
切削参数 Cutting condition	转速 (r/min) 5000 进给量 (mm/min) 0.05	
结论 Conclusion	寿命超过对手，客户满意 Tool life is higher than competitor. ACCEPTED.	

案例七 Case 7

刀具规格 Type	SCFR080-5-3-000-V2C-LC3225	
配刀杆 Holder	SCFR 1212-100-T10.5-V2C	
加工材料 Workpiece	316L 3/4	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切槽 Grooving	
切削参数 Cutting condition	转速 (r/min) 4500 进给量 (mm/min) 0.01	
结论 Conclusion	寿命超过对手, 客户满意 Tool life is higher than competitor. ACCEPTED.	

案例八 Case 8

刀具规格 Type	UG16R057-003-15° LC3335	
配刀杆 Holder	STUGR1212H-16	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切槽 Grooving	
切削参数 Cutting condition	转速 (r/min) 4000 进给量 (mm/min) 0.025	
结论 Conclusion	寿命超过对手, 加工的槽底没有振刀纹, 纹路细腻均匀, 可以达到客户要求。 Tool life is longer than competitor. The groove bottom has no line pattern, and the grain is well-distributed. It can meet end-user's requirement.	

案例九 Case 9 (非标定制) non-standard size

刀具规格 Type	UG16R057-1.0-2.55-LC3335	
配刀杆 Holder	STUGR1212H-16	
加工材料 Workpiece	SUS316L 3/4H	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	切断 Cut off	
切削参数 Cutting condition	转速 (r/min) 4000 进给量 (mm/min) 0.01	
结论 Conclusion	工件薄壁件, 我司改成三刃斜口方式切削。比对手多一刃且每刃寿命超过对手。客户非常满意。 Thin-walled part, we apply 3 cutting edge with oblique way test insert than competitor 2 cutting edge. And tool life is more than competitor at 1 cutting edge. The end-user is much satisfied.	

案例十 Case 10 (非标定制) non-standard size

刀具规格 Type	UG16R097-003 LC3115 UG16R077-003 LC3115	
配刀杆 Holder	STUGR1212H-16	
加工材料 Workpiece	不锈钢 Stainless steel	
冷却方式 Cooling Method	湿式 Wet	
加工类型 Machining type	切槽 Grooving	
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.05	
结论 Conclusion	同等加工条件下, 槽刀寿命每刃加工1200件, 竞争对手加工1000件每刃, 寿命上升20% In same cutting conditions, tool life is 20% high than competitor.	

加工案例 Case studies

切槽、切断刀片 Grooving & cut off insert

案例十一 Case 11

刀具规格 Type	MG22R095-005-D20.57 LC3225 MG22R150-010-D14 LC3225 MG22R200-010-D14 LC3225	
配刀杆 Holder	STMGR2020H-22	
加工材料 Workpiece	不锈钢	
竞争对手 Competitor	竞争公司三角形系列 3 cutting edges	
切削参数 Cutting condition	转速 (r/min) 3000	<p>寿命相当</p>
	进给量 (mm/min) 0.05	
结论 Conclusion	达到客户要求寿命 Meet customer's requirement.	

加工案例 Case

端面环槽刀片 Face grooving with 2 holes

案例一 Case 1

刀具规格 Type	SCFR080-5-3-000-V2C-LC3225	
配刀杆 Holder	SFBL-2525-150-T9.0-N2C	
加工材料 Workpiece	SUS316L-B	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	端面槽加工 Face grooving	<p>寿命稳定</p>
切削参数 Cutting condition	转速 (r/min) 1400	
	进给量 (mm/min) 0.06~0.1	
结论 Conclusion	刀具寿命稳定 Steady tool life	

FG系列刀片：后扫刀片

Back Turning

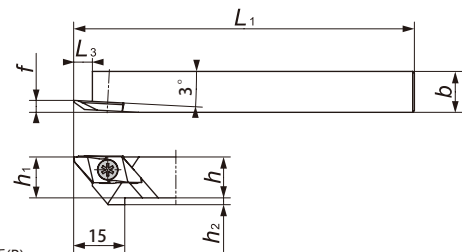
适合加工材料	K	铸铁	√	通用刀杆 参考页
	P	碳钢/合金钢	√	
	M	不锈钢	√	
	S	钛合金	√	
	N	有色金属		
H	高硬度材 (40HRC以下) 高硬度材 (40HRC以上)		P060 ~ P062	

外观 Figure	形状 Shape (图示均为右手R)	型号 Description	刃宽 CW	加工深度 a	刀尖圆弧 Re	硬质合金 Carbide						金属陶瓷 Cermet		推荐切削参数 Recommended cutting parameters	
						不涂层 Uncoated		涂层 Coated		不涂层 Uncoated		涂层 Coated		进给 f(mm/rev)	切深 ap(mm)
						LC10	LC3115	LC3215	★ LC3225	★ LC3335	LN10	LP725			
		UBFL 60F00	0.5	3.7	0.00	●			●	●			0.01~0.1	0.20~2.5	
		60F10	0.5	3.7	0.10	●			●	●					
		60F10M	0.5	3.7	0.08	●			●	●					
		60F20	0.5	3.7	0.20	●			●	●					
		55F00	0.5	3.0	0.00	●			●	●					
		55F10	0.5	3.0	0.10	●			●	●					
		60FV	0.7	4.8	0.00	●			●	●					
		UBNR 60FVB	0.7	4.5	0.00	●			●	●			0.01~0.15	0.50~2.5	
		60FPB10	0.7	4.5	0.10	●			●	●					
		60F10M	0.7	4.5	0.08	●			●	●					
		60FPB10M	0.7	4.5	0.08	●			●	●					
		60FPB20M	0.7	4.5	0.18	●			●	●					
		60FV	0.7	6.3	0.00	●			●	●					
		60FV10	0.7	4.8	0.10	●			●	●					
		UBMR 45000	0.5	2.7	0.00	●			●	●			0.01~0.08	0.50~5.00	
		45005	0.5	2.7	0.05	●			●	●					
		45010	0.5	2.7	0.10	●			●	●					
		45015	0.5	2.7	0.15	●			●	●					
		45020	0.5	2.7	0.20	●			●	●					
		TBI R15005M	1.5	2.6	<0.05	●			●	●			0.01~0.15	0.20~3.00	
		R15010M	1.5	2.6	<0.1	●			●	●					
		R28005M	2.8	4.6	<0.05	●			●	●					
		R28010M	2.8	4.6	<0.1	●			●	●					
		L28005MR	2.8	4.6	<0.05	●			●	●					
		TBQ L28010MR	2.8	4.6	<0.1	●			●	●			0.01~0.15	0.20~5.00	
		R38005M	3.8	6.3	<0.05	●			●	●					
		R38010M	3.8	6.3	<0.1	●			●	●					
		L38005MR	3.8	6.3	<0.05	●			●	●					
		L38010MR	3.8	6.3	<0.1	●			●	●					
		TBP15 R4005	2.8	4.2	0.05	●			●	●			0.02~0.1	0.5~4.00	
		R4015	2.8	4.2	0.15	●			●	●					
		R4005M	2.8	4.2	<0.05	●			●	●					
		R4015M	2.8	4.2	<0.15	●			●	●					

备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★is 1st choice.

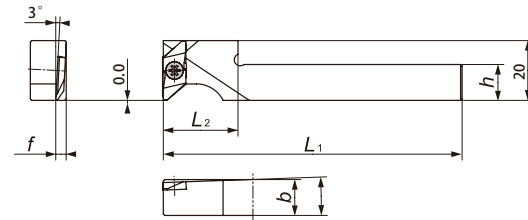
FG系列刀杆 FG series holder

适用于后扫刀片 Suitable in back turning insert



本图为右手(R)
R-hand shown

图1 Fig.1



本图为左手(L)
L-hand shown

左手(L)刀杆适用右手(R)刀片
Left-Hand holders are designed for Right-Hand machines.

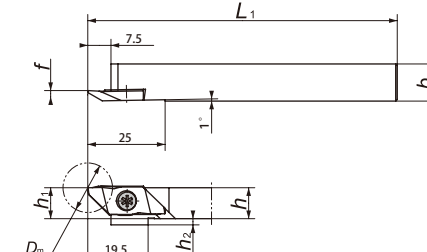
图2 Fig.2

SUBER_L 两刃后扫 (直型) Straight type with 2 cutting edge in back turning

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure			
			h	b	L1	h1	f	压紧螺丝 Forcing screw	扳手 Wrench					
后扫 Back turning	直型方柄 Straight type	SUBER1010H	10	10	100	10	3.5	BD4009-6058	T15	UBER	图1 Fig.1			
		SUBER1212H	12	12		12	3.5							
		SUBER1616H	16	16		16	3.5							
		SUBEL1010H	10	10	100	10	3.5					BD4009-6058	T15	UBEL
		SUBEL1212H	12	12		12	3.5							
		SUBEL1616H	16	16		16	3.5							

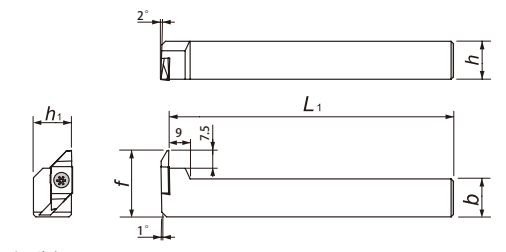
FG系列刀杆 FG series holder

适用于后扫刀片 Suitable in back turning insert



本图为右手(R)
R-hand shown

图3 Fig.3



本图为左手(L)
L-hand shown

图4 Fig.4

SUCNR_L 两刃后扫 (直型) Straight type with 2 cutting edge in back turning

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure			
			h	b	L1	h1	f	压紧螺丝 Forcing screw	扳手 Wrench					
后扫 Back turning	直型方柄 Straight type	SUCNR1010H	10	10	100	20	3.4	BD4009-6058	T15	UBNR /UCNR	图3 Fig.3			
		SUCNR1212H	12	12		20	3.4							
		SUCNR1616H	16	16		25	3.4							
		SUCNL1010H	10	10	100	20	3.4					BD4009-6058	T15	UBNL /UCNL
		SUCNL1212H	12	12		20	3.4							
		SUCNL1616H	16	16		25	3.4							

备注Note: 后扫刀直型刀杆与切槽切断刀杆共用。Grooving & cut off is same as the backing turning in straight type holder.

CH-SUBER_L 两刃后扫 (空间刀杆) Space type with 2 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure			
			h	b	L1	h1	f	压紧螺丝 Forcing screw	扳手 Wrench					
后扫 Back turning	空间方柄 Space type	CH-SUBER1010H	10	10	100	10	3.5	BD4009-6058	T15	UBER	图2 Fig.2			
		CH-SUBER1212H	12	12		12	3.5							
		CH-SUBER1616H	16	16		16	3.5							
		CH-SUBEL1010H	10	10	100	10	3.5					BD4009-6058	T15	UBEL
		CH-SUBEL1212H	12	12		12	3.5							
		CH-SUBEL1616H	16	16		16	3.5							

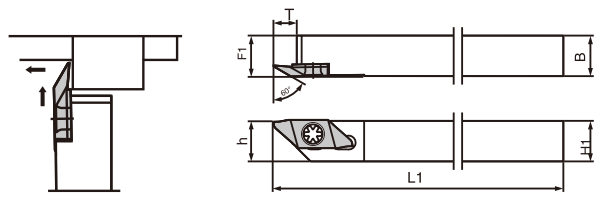
SUBNR_L 两刃后扫 (7字型) "7" shape with 2 cutting edge

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure			
			h	b	L1	h1	f	压紧螺丝 Forcing screw	扳手 Wrench					
后扫 Back turning	7字型方柄 "7" shape	CH-SUBNR1010H	10	10	100	10	3.4	BD4009-6058	T15	UBNL	图4 Fig.4			
		CH-SUBNR1212H	12	12		12	3.4							
		CH-SUBNR1616H	16	16		16	3.4							
		CH-SUBNL1010H	10	10	100	10	3.4					BD4009-6058	T15	UBNR
		CH-SUBNL1212H	12	12		12	3.4							
		CH-SUBNL1616H	16	16		16	3.4							

外圆 / 内圆加工刀片
External / Internal insert
FG系列刀片
FG series insert
背扫 / 背扫加工刀片
Back turning / Back turning insert
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀片
High speed insert
其他配件
Other tools

FG系列刀杆 FG series holder

适用于后扫刀片 Suitable in back turning insert



本图为右手(R) R-hand shown
 右手(R)刀杆适用右手(R)刀片, 左手(L)刀杆适用左手(L)刀片
 Right-Hand holders are designed for Right-Hand machines.
 Left-Hand holders are designed for Left-Hand machines.

图5 Fig.5

STCIR/L 两刃后扫 2 cutting edge in back turning

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	L2	F1	T	压紧螺丝 Forcing screw	扳手 Wrench		
后扫 Back turning	方柄 Square type	STBIR1010H	10	10	100	15	10	6	BD4509-5756	T20	TBIR/ TCIR	图5 Fig.5
		STBIR1212H	12	12		-	12					
		STBIR1616H	16	16		-	16					
		STBIL1010H	10	10		15	10	6				
		STBIL1212H	12	12		-	12					
		STBIL1616H	16	16		-	16					

备注Note: 后扫刀直型刀杆与切槽切断刀杆共用。Grooving & cut off is same as the backing turning in straight type holder.

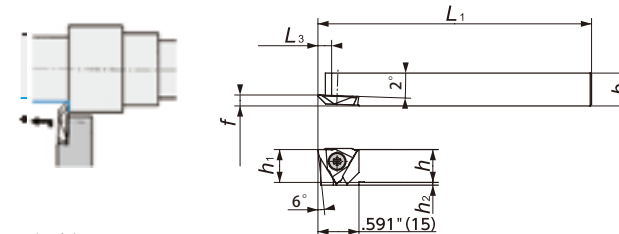
STCQR/L 两刃后扫 2 cutting edge in back turning

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L	L2	F1	T	压紧螺丝 Forcing screw	扳手 Wrench		
后扫 Back turning	方柄 Square type	STBQR1010H	10	10	100	20	10	8	BD4509-5756	T20	TBQR/ TCQL	图5 Fig.5
		STBQR1212H	12	12		-	12					
		STBQR1616H	16	16		-	16					
		STBQL1010H	10	10		20	10	8				
		STBQL1212H	12	12		-	12					
		STBQL1616H	16	16		-	16					

备注Note: 后扫刀直型刀杆与切槽切断刀杆共用。Grooving & cut off is same as the backing turning in straight type holder.

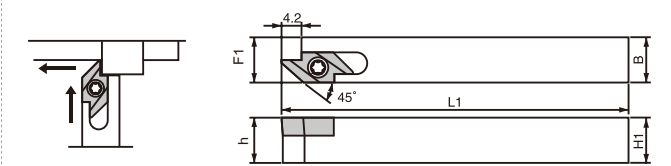
FG系列刀杆 FG series holder

适用于后扫刀片 Suitable in back turning insert



本图为右手(R) R-hand shown

图6 Fig.6



本图为右手(R) R-hand shown

图7 Fig.7

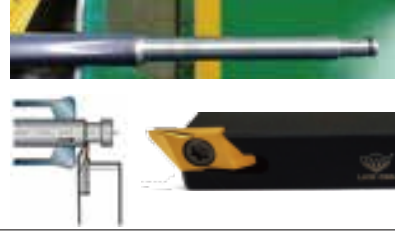
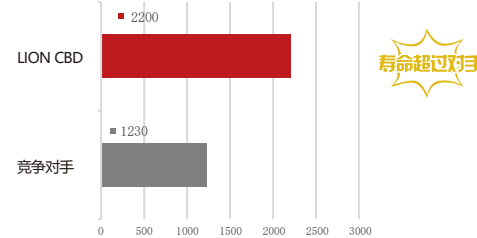
SUBMR 10 三角形后扫刀 3 cutting edge in back turning

类型 Type	形状 Shape	型号 Description	尺寸 Size						零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			h	b	L	h1	L3	f	压紧螺丝 Forcing screw	扳手 Wrench		
三刃后扫 3 cutting edge	方柄 Square type	SUBMR1010H-16	10	10	120	12	5	4	BD4007-6055	T15	UBM	图6 Fig.6
		SUBMR1212H-16	12	12		16	5	4				
		SUBMR1616H-16	16	16		20	5	4				

STBPR - 40 双头后扫 2 cutting edge in back turning

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			H1	B	L2	F1	h	压紧螺丝 Forcing screw	扳手 Wrench		
后扫 Back turning	方柄 Square type	STBPR1010JX-40	10	10	120	10	10	BD3083-60	T8	TBP15	图7 Fig.7
		STBPR1212JX-40	12	12		12	12				
		STBPR1616JX-40	16	16		16	16				

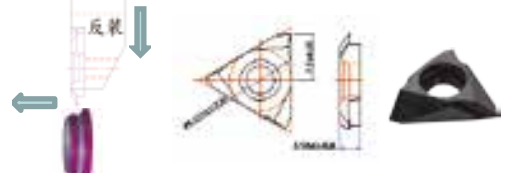
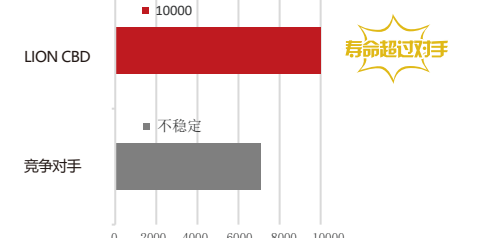
加工案例 Case studies
后扫刀片 Back turning insert
案例一 Case 1

刀具规格 Type	UBER60F10 LC3335	
配刀杆 Holder	SUCEL1212K-SE	
加工材料 Workpiece	钢件 Steel	
冷却方式 Cooling Method	湿式 Wet	
加工类型 Machining type	后扫 Back turning	 <p>LION CBD: 2200 竞争对手: 1230 寿命超过对手</p>
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.05	
结论 Conclusion	同等加工条件下, 后扫刀寿命每刃加工2200件, 竞争对手加工1230件每刃 In same cutting conditions, tool life is 50% high than competitor.	


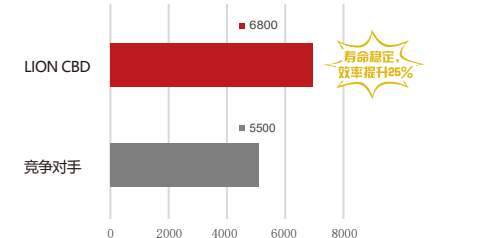
案例二 Case 2

刀具规格 Type	UBER60F00 LC3225	
配刀杆 Holder	SUBER1010H	
机床型号 Machine type	西铁城L12 Citizen L12	
加工材料 Workpiece	SUS304	
冷却方式 Cooling Method	湿式 Wet	
加工类型 Machining type	后扫 Back turning	
切削参数 Cutting condition	N=2200 r/min f=0.02 mm/rev, ap=0.2mm	同等加工条件下, 我司后扫刀寿命每刃加工8000件, 寿命远优于N公司。 In same cutting conditions, tool life is more higher than competitor.
结论 Conclusion		

加工案例 Case studies
后扫刀片 Back turning insert
案例三 Case 3

刀具规格 Type	UBMR45015 LC3225	
配刀杆 Holder	SUBMR1212H-16	
加工材料 Workpiece	SUS316L 3/4	 <p>LION CBD: 10000 竞争对手: 不稳定 寿命超过对手</p>
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	后扫 Back turning	同寿命稳定在10000+PCS Steady tool life is at 10000+.
切削参数 Cutting condition	转速 (r/min) 4500 进给量 (mm/min) 0.025	
结论 Conclusion		

案例四 Case 4

刀具规格 Type	TBP15R4005M LC3335	
配刀杆 Holder	STBPR1212JX-40	
加工材料 Workpiece	不锈钢 Stainless steel	 <p>LION CBD: 6800 竞争对手: 5500 寿命稳定, 效率提升15%</p>
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	后扫 Back turning	寿命稳定。能达到大切深效果, 效率有提高15%, 客户满意我们方案 Steady tool life. It can reach to the cutting depth effect. It can increase 15% efficiency. ACCEPTED.
切削参数 Cutting condition	转速 (r/min) 进给量 (mm/min)	
结论 Conclusion		

BETTER PRECISION

 外圆 / 内圆加工刀片
 External / Internal insert

 FC系列刀片
 FC series insert

 背扫/后扫刀片系列 (背扫/后扫刀片)
 Back turning / Back turning insert series


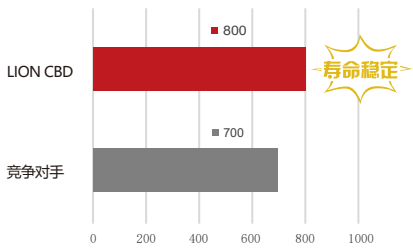
 特色刀片
 Unique insert

 CBN/PCD刀片
 CBN/PCD insert

 高速刀片
 High speed insert

 其他配套产品
 Other tools

案例五 Case 5

刀具规格 Type	SBBR055-075-010	
配刀杆 Holder	SCBR 1212-100-T9-N2C	
加工材料 Workpiece	不锈钢/易削铁 Stainless steel / easy cutting iron	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	后扫 Back turning	
切削参数 Cutting condition	转速 (r/min) 2000 进给量 (mm/min) 0.02	
结论 Conclusion	寿命800+ Tool life is 800+.	

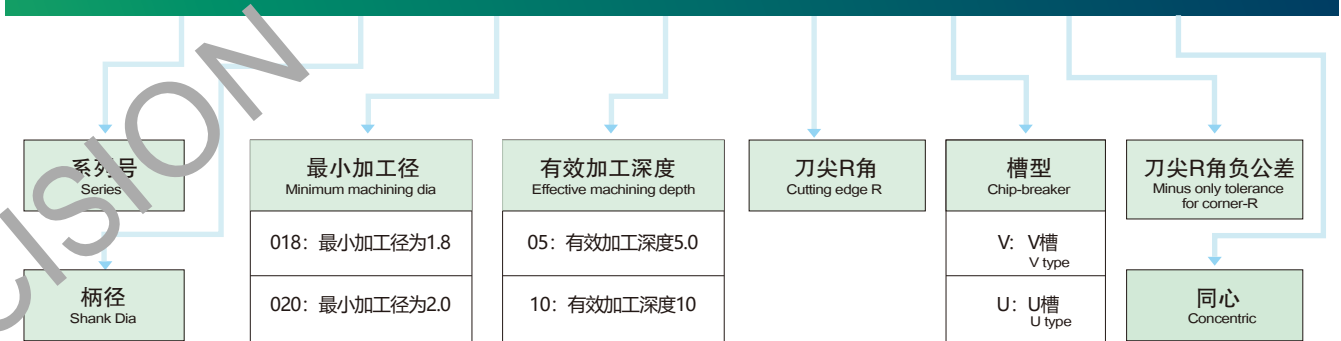
整硬小镗刀系列
Carbide micro boring tools

XTB小镗刀

XTB Boring tools of inner grooving series

命名方式 Named

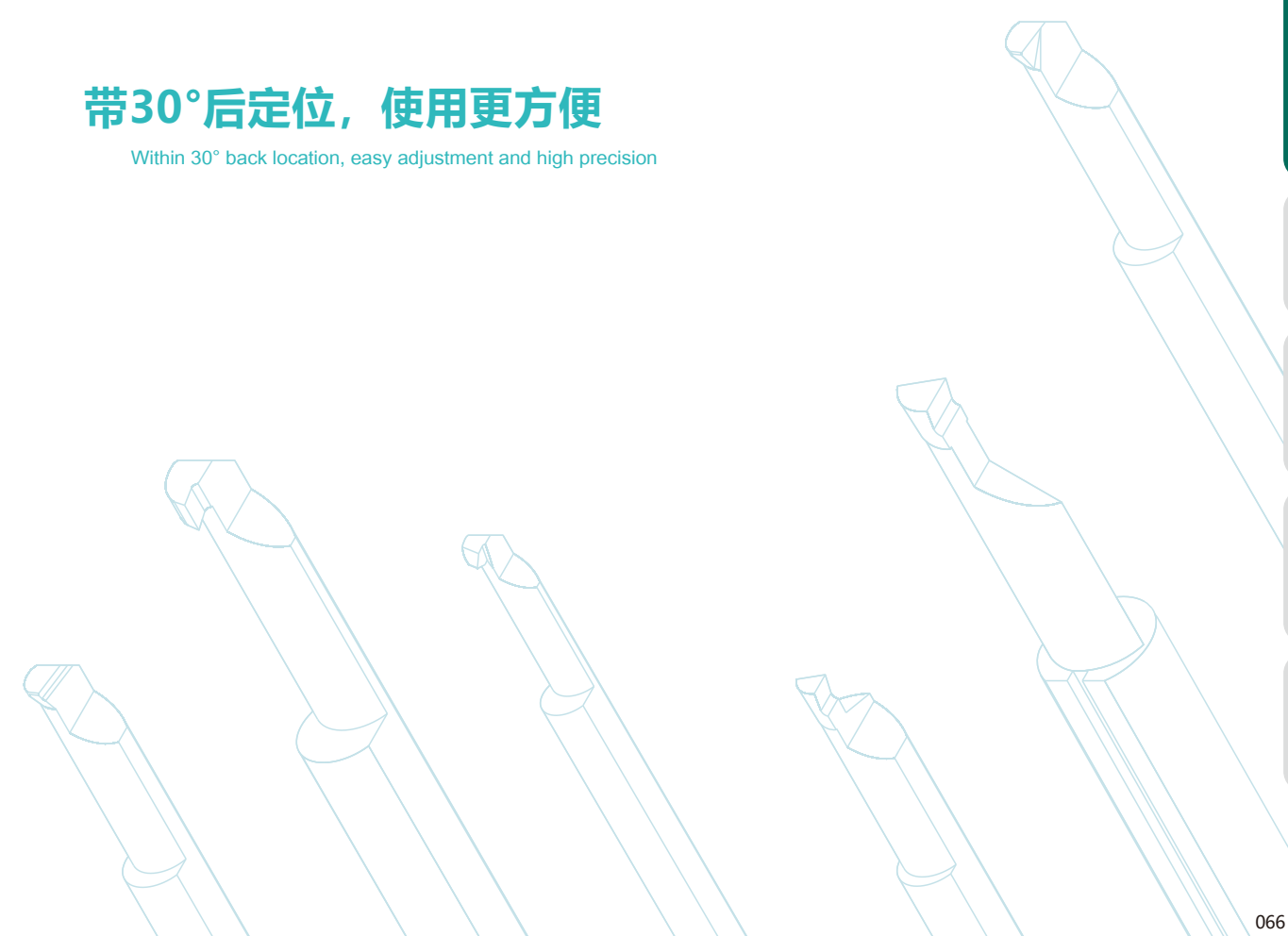
XTB 04 - 020 06 - 005 V S T

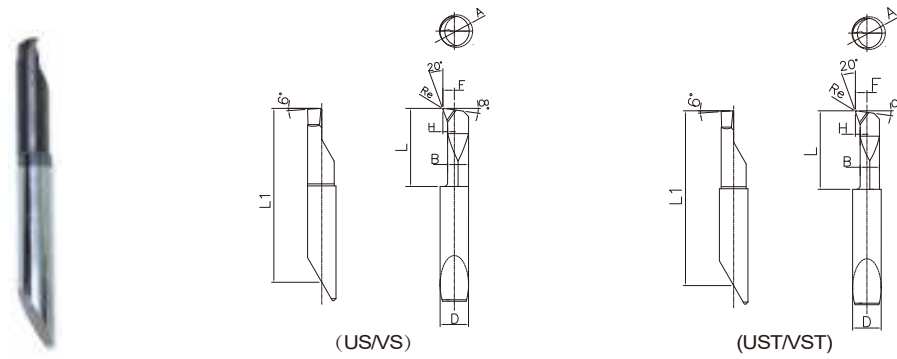


带30°后定位, 使用更方便

Within 30° back location, easy adjustment and high precision

BETTER PRECISION





系列 Series	型号 Description	最小 加工径 A	D	H	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet		
										不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated	
										LC10	LC3225	LN10	LP725	
XTB04 U槽	04013-005US	4.2	4.0	0.65	R0.05	1.9	3.25	13	32	●	●	●		
	R0.1				●					●	●			
XTB04 V槽	04013-005VS	4.2	4.0	0.65	R0.05	1.9	3.25	13	32	●	●	●		
	R0.1				●					●	●			
XTB06 U槽	05720-005US	6.2	6.0	1	R0.05	2.75	4.75	20	43	●	●	●		
	R0.1				●					●	●			
XTB06 V槽	05720-005VS	6.2	6.0	1	R0.05	2.75	4.75	20	43	●	●	●		
	R0.1				●					●	●			
XTB04 U槽	01805-005UST	2.0	4.0	-	R0.05	0.8	1.45	5	27	●	●	●		
	02106-005UST	2.5		0.4		0.95	1.6	6	27	●	●	●		
	02610-005UST	3.0		0.4		1.2	2.1	10	27	●	●	●		
	03110-005UST	3.5		0.5		1.45	2.5	10	27	●	●	●		
	03510-005UST	4.0		0.6		1.65	2.8	10	27	●	●	●		
	03513-005UST							13	32	●	●	●		
	03518-005UST	18		37		●	●	●						
	03510-010UST	4.0		0.6		R0.1	1.65	2.8	10	27	●	●	●	
	03513-010UST								13	32	●	●	●	
	03518-010UST								18	37	●	●	●	
XTB04 V槽	01805-005VST	2.0	4.0	-	R0.05	0.8	1.45	5	27	●	●	●		
	02106-005VST	2.5		0.4		0.95	1.6	6	27	●	●	●		
	02610-005VST	3.0		0.4		1.2	2.1	10	27	●	●	●		
	03110-005VST	3.5		0.5		1.45	2.5	10	27	●	●	●		
	03510-005VST	4.0		0.6		R0.05	1.65	2.8	10	27	●	●	●	
	03513-005VST								13	32	●	●	●	
	03518-005VST	18		37		●	●	●						
	03510-010VST	4.0		0.6		R0.1	1.65	2.8	10	27	●	●	●	
	03513-010VST								13	32	●	●	●	
	03518-010VST								18	37	●	●	●	

系列 Series	型号 Description	最小 加工径 A	D	H	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet	
										不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated
										LC10	LC3225	LN10	LP725
XTB06 U槽	04218-005UST	4.5	6.0	0.65	R0.05	2	3.45	13	32	●	●	●	
	04222-005UST							18	37	●	●	●	
	05218-005UST	5.5				2.5	4.45	18	43	●	●	●	
	05228-005UST							28	57	●	●	●	
	04213-010UST	4.5				2	3.45	13	32	●	●	●	
	04218-010UST							18	37	●	●	●	
	04222-010UST	5.5				2.5	4.45	22	43	●	●	●	
	05218-010UST							18	43	●	●	●	
	05228-010UST	28				57	●	●	●				
	04213-020UST	4.5				2	3.45	13	32	●	●	●	
04218-020UST	18		37	●	●			●					
04222-020UST	5.5	2.5	4.45	22	43	●	●	●					
05218-020UST				18	43	●	●	●					
05228-020UST	28	57	●	●	●								
XTB06 V槽	04213-005VST	4.5	6.0	0.65	R0.05	2	3.45	13	32	●	●	●	
	04218-005VST							18	37	●	●	●	
	04222-005VST	5.5				2.5	4.45	22	43	●	●	●	
	05218-005VST							18	43	●	●	●	
	05228-005VST	28				57	●	●	●				
	04213-010VST	4.5				2	3.45	13	32	●	●	●	
	04218-010VST							18	37	●	●	●	
	04222-010VST	5.5				2.5	4.45	22	43	●	●	●	
	05218-010VST							18	43	●	●	●	
	05228-010VST	28				57	●	●	●				
04213-020VST	4.5	2	3.45	13	32	●	●	●					
04218-020VST				18	37	●	●	●					
04222-020VST	5.5	2.5	4.45	22	43	●	●	●					
05218-020VST				18	43	●	●	●					
05228-020VST	28	57	●	●	●								

外径、内径加工用刀片
External/Internal insert

FG系列刀片
FG series insert

球面刀系列 (带30°后角位)
Ball end mill series (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

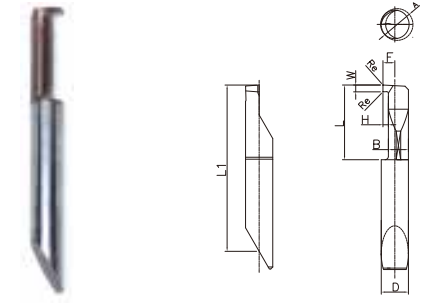
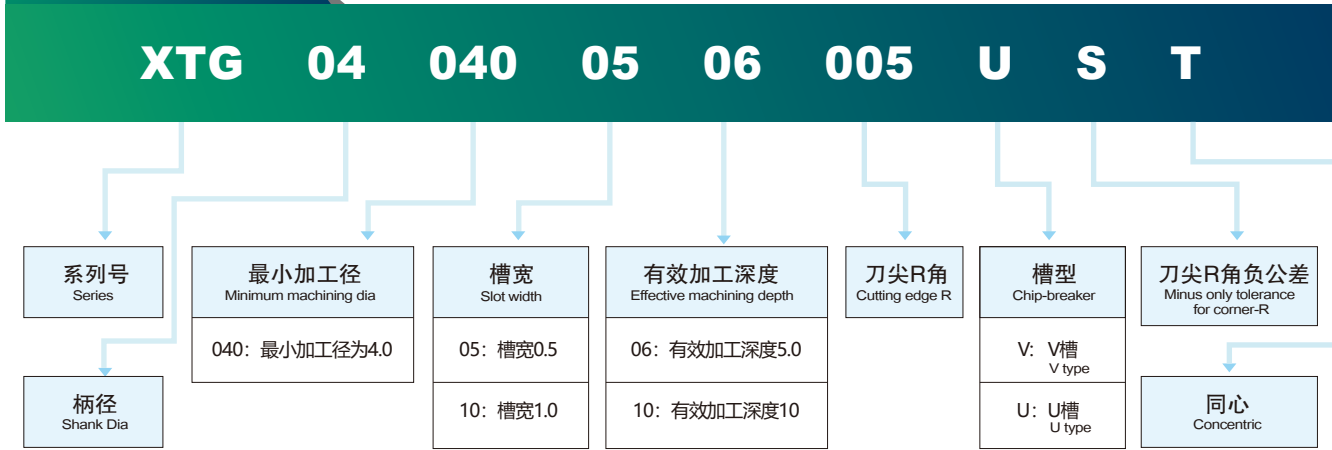
高速刀柄
High speed handle

其他新产品
Other tools

XTG小镗刀系列

XTG Boring tools series

命名方式 Named



系列 Series	型号 Description	最小加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet						
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated					
											LC10	★ LC9225	★ LC9335	LN10	LP725				
XTG04 U槽	0400706-005US	4.2	4.0	0.6	0.5	R0.05	1.9	3.3	6	27	●	●	●						
	0401006-005US			0.9	1.0			●			●	●							
	0401506-005US			1.5	●			●			●								
	0402006-005US			2.0	●			●			●								
	0400510-005US			0.6	0.5			●			●	●							
	0401010-005US			0.9	1.0			●			●	●							
	0401510-005US			1.5	●			●	●										
	0402010-005US			2.0	●			●	●										
	0400515-005US			0.6	0.5			●	●	●									
	0401015-005US			0.9	1.0			●	●	●									
	0401515-005US			1.5	●			●	●										
	0402015-005US			2.0	●			●	●										
	0400506-010US			0.6	0.5			R0.1	1.9	3.3	6	27	●	●	●				
	0401006-010US			0.9	1.0					●			●	●					
	0401506-010US			1.5	●					●			●						
	0402006-010US			2.0	●					●			●						
	0400510-010US			0.6	0.5					3.3			10	32	●	●	●		
	0401010-010US			0.9	1.0					3					●	●	●		

BETTER PRECISION

外径/内径加工刀片
External/Internal insert

FG系列刀片
F.G series insert

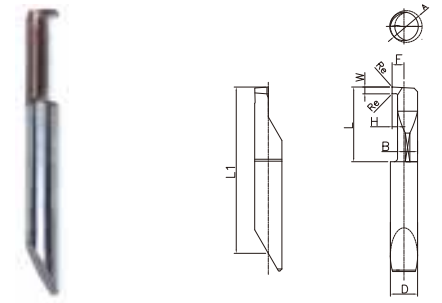
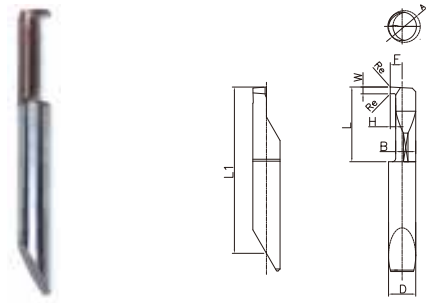
镗刀系列 (带30°后角位)
Boring tooling (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀柄
High speed handle

其他新产品
Other tools



系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet					
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated				
											LC10	LC9225	LN10	LP725				
XTG04 V槽	0401510-010US	4.2	4.0	0.9	1.5	R0.1	1.9	3	10	32	●	●	●					
	0402010-010US				2.0						●	●	●					
	0400515-010US				0.6						0.5	3.3	●	●	●			
	0401015-010US				0.9						1.0	3	15	37	●	●	●	
	0401515-010US										1.5				●	●	●	
	0402015-010US										2.0				●	●	●	
	0400506-005VS			0.6	0.5	3.3		●	●	●								
	0401006-005VS			0.9	1.0	3		6	27	●	●	●						
	0401506-005VS				1.5					●	●	●						
	0402006-005VS				2.0					●	●	●						
	0400510-005VS			0.6	0.5	3.3		●	●	●								
	0401010-005VS			0.9	1.0	3		10	32	●	●	●						
	0401510-005VS				1.5					●	●	●						
	0402010-005VS				2.0					●	●	●						
	0400515-005VS			0.6	0.5	3.3		●	●	●								
	0401015-005VS			0.9	1.0	3		15	27	●	●	●						
	0401515-005VS				1.5					●	●	●						
	0402015-005VS				2.0					●	●	●						
	0400506-010VS			0.6	0.5	3.3		●	●	●								
	0401006-010VS			0.9	1.0	3		6	27	●	●	●						
	0401506-010VS				1.5					●	●	●						
	0402006-010VS				2.0					●	●	●						
	0400510-010VS			0.6	0.5	3.3		●	●	●								
	0401010-010VS			0.9	1.0	3		10	32	●	●	●						
	0401510-010VS				1.5					●	●	●						
	0402010-010VS				2.0					●	●	●						
	0400515-010VS			0.6	0.5	3.3		●	●	●								
	0401015-010VS			0.9	1.0	3		15	37	●	●	●						
0401515-010VS	1.5	●	●		●													
0402015-010VS	2.0	●	●		●													

系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet			
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated		
											LC10	LC9225	LN10	LP725		
XTG06 U槽	0607510-005US	6.2	6.0	0.8	0.75	R0.05	2.9	5.1	10	32	●	●	●			
	0610010-005US				1.2						1.0	4.7	●	●	●	
	0612010-005US				1.2						1.2	●	●	●		
	0607515-005US			0.8	0.75	5.1		15	37	●	●	●				
	0610015-005US									1.2	1.0	4.7	●	●	●	
	0612015-005US									1.2	1.2	●	●	●		
	0607520-005US			0.8	0.75	5.1		20	47	●	●	●				
	0610020-005US									1.2	1.0	4.7	●	●	●	
	0612020-005US									1.2	1.2	●	●	●		
	0607510-010US			0.8	0.75	5.1		10	32	●	●	●				
	0610010-010US									1.2	1.0	4.7	●	●	●	
	0612010-010US									1.2	1.2	●	●	●		
	0607515-010US			0.8	0.75	5.1		15	37	●	●	●				
	0610015-010US									1.2	1.0	4.7	●	●	●	
	0612015-010US									1.2	1.2	●	●	●		
	0607520-010US			0.8	0.75	5.1		20	47	●	●	●				
	0610020-010US									1.2	1.0	4.7	●	●	●	
	0612020-010US									1.2	1.2	●	●	●		
	0615010-005US			1.6	1.5	4.3		10	32	●	●	●				
	0620010-005US									1.95	2.0	3.95	●	●	●	
	0615015-005US									1.6	1.5	4.3	●	●	●	
	0620015-005US			1.95	2.0	3.95		15	37	●	●	●				
	0615020-005US									1.6	1.5	4.3	●	●	●	
	0620020-005US									1.95	2.0	3.95	●	●	●	
	0615010-010US			1.6	1.5	4.3		10	32	●	●	●				
	0620010-010US									1.95	2.0	3.95	●	●	●	
	0615015-010US									1.6	1.5	4.3	●	●	●	
	0620015-010US			1.95	2.0	3.95		15	37	●	●	●				
	0615020-010US									1.6	1.5	4.3	●	●	●	
	0620020-010US									1.95	2.0	3.95	●	●	●	

BETTER PRECISION

外径/内径加工刀片
External/Internal insert

FG系列刀片
F-G series insert

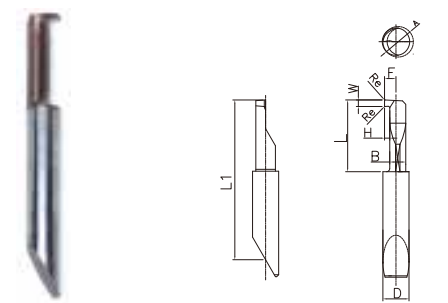
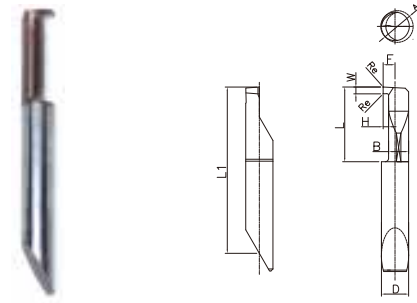
球面小径力系列 (带30°后角位)
Ball nose tooling (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀柄
High speed handle

其他新产品
Other tools



系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet	
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated
											LC10	* LC3225	* LC3335	LN10
XTG06 V槽	0607510-005VS	6.2	6.0	0.8	0.75	R0.05	2.9	5.1	10	32	●	●	●	
	0610010-005VS			1.2	1.0			4.7	10	32	●	●	●	
	0612010-005VS			1.2	1.2			4.7	10	32	●	●	●	
	0607515-005VS			0.8	0.75			5.1	15	37	●	●	●	
	0610015-005VS			1.2	1.0			4.7	15	37	●	●	●	
	0612015-005VS			1.2	1.2			4.7	15	37	●	●	●	
	0607520-005VS			0.8	0.75			5.1	20	47	●	●	●	
	0610020-005VS			1.2	1.0			4.7	20	47	●	●	●	
	0612020-005VS			1.2	1.2			4.7	20	47	●	●	●	
	0607510-010VS			0.8	0.75			5.1	10	32	●	●	●	
	0610010-010VS			1.2	1.0			4.7	10	32	●	●	●	
	0612010-010VS			1.2	1.2			4.7	10	32	●	●	●	
	0607515-010VS			0.8	0.75			5.1	15	37	●	●	●	
	0610015-010VS			1.2	1.0			4.7	15	37	●	●	●	
	0612015-010VS			1.2	1.2			4.7	15	37	●	●	●	
	0607520-010VS			0.8	0.75			5.1	20	47	●	●	●	
	0610020-010VS			1.2	1.0			4.7	20	47	●	●	●	
	0612020-010VS			1.2	1.2			4.7	20	47	●	●	●	
	0615010-005VS			1.6	1.5			4.3	10	32	●	●	●	
	0620010-005VS			1.95	2.0			3.95	10	32	●	●	●	
	0615015-005VS			1.6	1.5			4.3	15	37	●	●	●	
	0620015-005VS			1.95	2.0			3.95	15	37	●	●	●	
	0615020-005VS			1.6	1.5			4.3	20	47	●	●	●	
	0620020-005VS			1.95	2.0			3.95	20	47	●	●	●	
	0615010-010VS			1.6	1.5			4.3	10	32	●	●	●	
	0620010-010VS			1.95	2.0			3.95	10	32	●	●	●	
	0615015-010VS			1.6	1.5			4.3	15	37	●	●	●	
	0620015-010VS			1.95	2.0			3.95	15	37	●	●	●	
	0615020-010VS			1.6	1.5			4.3	20	47	●	●	●	
	0620020-010VS			1.95	2.0			3.95	20	47	●	●	●	

系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet	
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated
											LC10	* LC3225	* LC3335	LN10
XTG04 U槽	0350506-005UST	3.7	4.0	0.6	0.5	R0.05	1.65	2.8	6	27	●	●	●	
	0351006-005UST				1.0				6	27	●	●	●	
	0351006-005UST				1.5				6	27	●	●	●	
	0352006-005UST				2.0				6	27	●	●	●	
	0350510-005UST				0.5				10	32	●	●	●	
	0351010-005UST				1.0				10	32	●	●	●	
	0351510-005UST				1.5				10	32	●	●	●	
	0352010-005UST				2.0				10	32	●	●	●	
	0350515-005UST				0.5				15	37	●	●	●	
	0351015-005UST				1.0				15	37	●	●	●	
	0351515-005UST				1.5				15	37	●	●	●	
	0352015-005UST				2.0				15	37	●	●	●	
	0350506-010UST				0.5				6	27	●	●	●	
	0351006-010UST				1.0				6	27	●	●	●	
	0351506-010UST				1.5				6	27	●	●	●	
	0352006-010UST				2.0				6	27	●	●	●	
	0350510-010UST				0.5				10	32	●	●	●	
	0351010-010UST				1.0				10	32	●	●	●	
	0351510-010UST				1.5				10	32	●	●	●	
	0352010-010UST				2.0				10	32	●	●	●	
	0350515-010UST				0.5				15	37	●	●	●	
	0351015-010UST				1.0				15	37	●	●	●	
	0351515-010UST				1.5				15	37	●	●	●	
	0352015-010UST				2.0				15	37	●	●	●	

外径、内径加工用刀片
External / Internal insert

FG系列刀片
F-G series insert

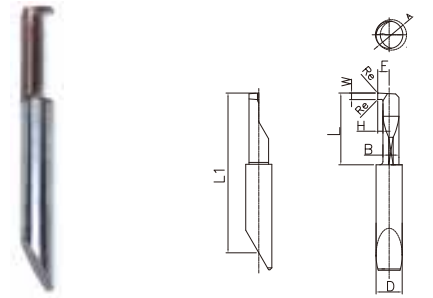
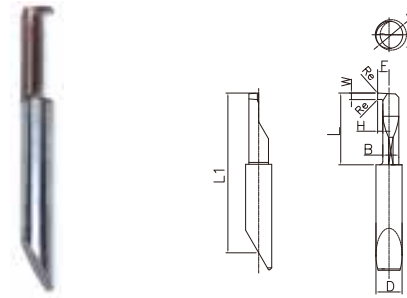
带柄小槽力系列 (带30°后定位)
Beang tooling (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀柄
High speed handle

其他新产品
Other tools



系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet				
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated			
											LC10	LC3225	LC3335	LN10	LP725		
XTG04 V槽	0350506-005VST	3.7	4.0	0.6	0.5	R0.05	1.65	2.8	6	27	●	●	●				
	0351006-005VST				1.0						●	●	●				
	0351506-005VST				1.5						●	●	●				
	0352006-005VST				2.0						●	●	●				
	0350510-005VST				0.5						●	●	●				
	0351010-005VST				1.0						●	●	●				
	0351510-005VST				1.5				●	●	●						
	0352010-005VST				2.0				●	●	●						
	0350515-005VST				0.5				●	●	●						
	0351015-005VST				1.0				●	●	●						
	0351515-005VST				1.5				●	●	●						
	0352015-005VST				2.0				●	●	●						
	0350506-010VST				0.5				R0.1	1.65	2.8	6	27	●	●	●	
	0351006-010VST				1.0									●	●	●	
	0351506-010VST				1.5									●	●	●	
	0352006-010VST				2.0									●	●	●	
	0350510-010VST				0.5									●	●	●	
	0351010-010VST				1.0									●	●	●	
	0351510-010VST				1.5							●	●	●			
	0352010-010VST				2.0							●	●	●			
0350515-010VST	0.5	●	●	●													
0351015-010VST	1.0	●	●	●													
0351515-010VST	1.5	●	●	●													
0352015-010VST	2.0	●	●	●													
0350506-010VST	0.5	R0.05	1.65	2.8	6	27	●	●				●					
0351006-010VST	1.0						●	●				●					
0351506-010VST	1.5						●	●				●					
0352006-010VST	2.0						●	●				●					
0350510-010VST	0.5						●	●				●					
0351010-010VST	1.0						●	●				●					
0351510-010VST	1.5				●	●	●										
0352010-010VST	2.0				●	●	●										
0350515-010VST	0.5				●	●	●										
0351015-010VST	1.0				●	●	●										
0351515-010VST	1.5				●	●	●										
0352015-010VST	2.0				●	●	●										
0350506-010VST	0.5				R0.1	1.65	2.8	6	27	●	●	●					
0351006-010VST	1.0									●	●	●					
0351506-010VST	1.5									●	●	●					
0352006-010VST	2.0									●	●	●					
0350510-010VST	0.5									●	●	●					
0351010-010VST	1.0									●	●	●					
0351510-010VST	1.5							●	●	●							
0352010-010VST	2.0							●	●	●							
0350515-010VST	0.5	●	●	●													
0351015-010VST	1.0	●	●	●													
0351515-010VST	1.5	●	●	●													
0352015-010VST	2.0	●	●	●													

系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet				
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated			
											LC10	LC3225	LC3335	LN10	LP725		
XTG06 U槽	0350750-005UST	3.7	6.0	0.6	0.75	R0.05	1.65	2.8	10	32	●	●	●				
	0351010-005UST				1.0						●	●	●				
	03512010-005UST				1.2						●	●	●				
	03507515-005UST				0.75						●	●	●				
	03510015-005UST				1.0						●	●	●				
	03512015-005UST				1.2						●	●	●				
	03507520-005UST				0.75				●	●	●						
	03510020-005UST				1.0				●	●	●						
	03512020-005UST				1.2				●	●	●						
	03507510-010UST				0.75				R0.1	1.65	2.8	10	32	●	●	●	
	03510010-010UST				1.0									●	●	●	
	03512010-010UST				1.2									●	●	●	
	03507515-010UST				0.75									●	●	●	
	03510015-010UST				1.0									●	●	●	
	03512015-010UST				1.2									●	●	●	
	03507520-010UST				0.75				R0.05	1.65	2.8	20	47	●	●	●	
	03510020-010UST				1.0									●	●	●	
	03512020-010UST				1.2									●	●	●	
	03515010-005UST				1.5									●	●	●	
	03520010-005UST				2.0									●	●	●	
	03515015-005UST				1.5									●	●	●	
	03520015-005UST				2.0				R0.1	1.65	2.8	15	37	●	●	●	
	03515020-005UST				1.5									●	●	●	
	03520020-005UST				2.0									●	●	●	
	03515010-010UST				1.5									●	●	●	
	03520010-010UST				2.0									●	●	●	
	03515015-010UST				1.5									●	●	●	
	03520015-010UST				2.0				R0.05	1.65	2.8	20	47	●	●	●	
	03515020-010UST				1.5									●	●	●	
	03520020-010UST				2.0									●	●	●	
03515010-010UST	1.5	●	●	●													
03520010-010UST	2.0	R0.1	1.65	2.8	10	32	●	●						●			
03515015-010UST	1.5						●	●						●			
03520015-010UST	2.0						●	●	●								
03515020-010UST	1.5						●	●	●								
03520020-010UST	2.0						●	●	●								
03515010-010UST	1.5						●	●	●								

外径、内径加工刀片
External / Internal insert

FG系列刀片
FG series insert

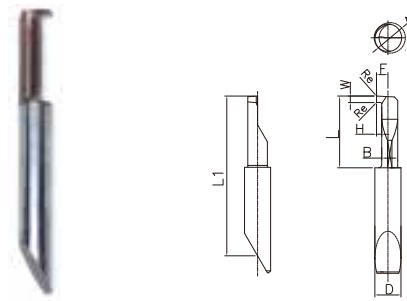
整型/磨刀系列 (带30°后角位)
Boring tooling (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀柄
High speed handle

其他配套产品
Other tools



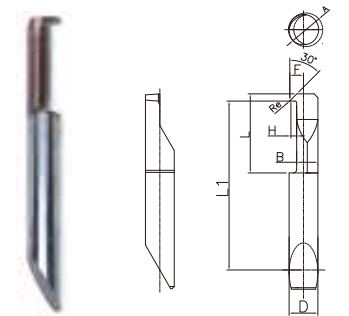
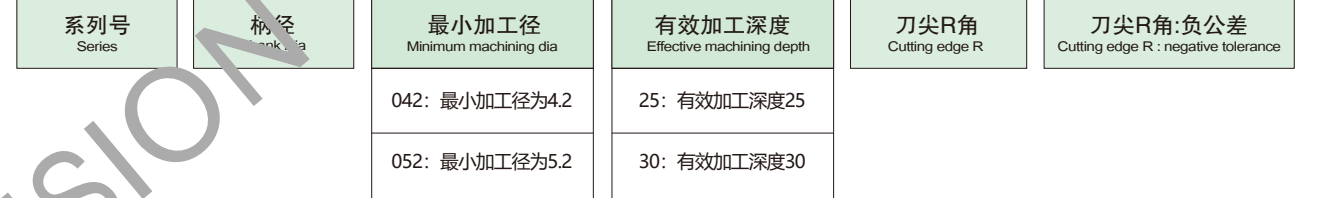
系列 Series	型号 Description	最小 加工径 A	D	H	W	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet																
											不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated															
											LC10	*LC3225	LN10	LP725															
XTG06 V槽	03507510-005VST	3.7	6.0	0.6	0.75	R0.05	1.65	2.8	10	32	●	●	●																
	03510010-005VST				1.0						●	●	●																
	03512010-005VST				1.2						●	●	●																
	03507515-005VST				0.75						●	●	●																
	03510015-005VST				1.0						●	●	●																
	03512015-005VST				1.2						●	●	●																
	03507520-005VST				0.75						●	●	●																
	03510020-005VST				1.0						●	●	●																
	03512020-005VST				1.2						●	●	●																
	03507510-010VST				0.75						R0.1	1.65	2.8	10	32	●	●	●											
	03510010-010VST				1.0											●	●	●											
	03512010-010VST				1.2											●	●	●											
	03507515-010VST				0.75											●	●	●											
	03510015-010VST				1.0											●	●	●											
	03512015-010VST				1.2											●	●	●											
	03507520-010VST				0.75											●	●	●											
	03510020-010VST				1.0											●	●	●											
	03512020-010VST				1.2											●	●	●											
	03515010-005VST				1.5											R0.05	1.65	2.8	10	32	●	●	●						
	03520010-005VST				2.0																●	●	●						
	03515015-005VST				1.5																●	●	●						
	03520015-005VST				2.0																●	●	●						
	03515020-005VST				1.5																●	●	●						
	03520020-005VST				2.0																●	●	●						
	03515010-010VST				1.5																R0.1	1.65	2.8	10	32	●	●	●	
	03520010-010VST				2.0																					●	●	●	
	03515015-010VST				1.5																					●	●	●	
	03520015-010VST				2.0																					●	●	●	
	03515020-010VST				1.5																					●	●	●	
	03520020-010VST				2.0																					●	●	●	

XTR小镗刀

XTR Boring tools of reversing series

命名方式 Named

XTR 04 - 042 25 - 015 S



系列 Series	型号 Description	最小 加工径 A	D	H	Re	F	B	L	L1	硬质合金 Carbide		金属陶瓷 Cermet	
										不涂层 Uncoated	涂层 Coated	不涂层 Uncoated	涂层 Coated
										LC10	*LC3225	LN10	LP725
XTG04	04225-015S	4.2	4.0	0.80	R0.15	1.95	2.6	25	40	●	●	●	
XTG05	05230-015S	5.2	5.0	1.00	R0.15	2.45	3.8	30	50	●	●	●	
XTG06	06230-015S	6.2	6.0	1.80	R0.15	2.95	4	30	50	●	●	●	

整硬小镗刀用 套筒

Boring tools sleeve holder

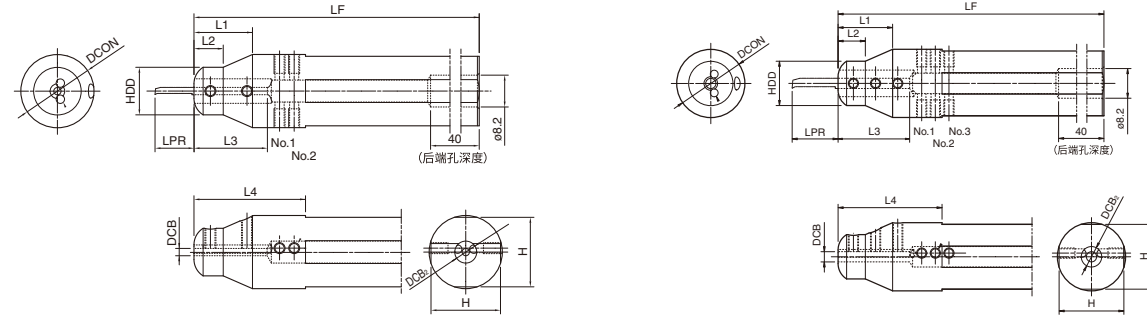


图1 Fig.1

HXTB (镗刀、内孔槽刀、内孔倒拉刀)

类型 Type	型号 Description	尺寸 Size										零件 Spare parts			对应镗刀 Match the boring tool	刀杆示意图 Figure	
		DCB	DCON	HDD	HDD2	DCB2	H	LF	L1	L2	L3	L4	定位销 Locating pin	紧固螺钉 Fastening screw			扳手 Wrench
套筒 Sleeve holder	HXTB1604	4	16	16	20	8	15	100	25	8	15.5	16	CP025	SH4P	L-1.5	XTB XTG	Fig.1
	HXTB1605	5	16	16	20	8	15	100	30	8	15.5	30					
	HXTB1606	6	16	16	20	8	15	100	30	8	15.5	30					
	HXTB1607	7	16	16	20	8	15	100	30	8	15.5	30	CP025	SH4P	L-1.5	XTB XTG	
	HXTB2004	4	20	16	-	10	19	100	15.5	8	-	12					
	HXTB2005	5	20	16	-	10	19	100	15.5	8	-	12					
	HXTB2006	6	20	16	-	10	19	100	15.5	8	-	12					
HXTB2007	7	20	16	-	10	19	100	15.5	8	-	12						

加工案例 Case studies

整硬小镗刀系列 (带30°后定位) Boring tooling (within 30° back location)

案例一 Case 1 (XTG系列, 非标定制) XTG series, non-standard size

刀具规格 Type	D4-0.19-A2.5-L4.4-D4.0-30L-TD	
加工材料 Workpiece	SUS316L 3/4	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	内孔 Inner hole	
切削参数 Cutting condition	转速 (r/min) S=3000	<p>刀具寿命稳定 Steady tool life</p>
	进给量 (mm/min) F=0.02	
结论 Conclusion		

案例二 Case 2 (XTG系列, 非标定制) XTG series, non-standard size

刀具规格 Type	D4.95-R0.1-D5-35L	
加工材料 Workpiece	SUS316L 3/4	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	内孔 Inner hole	
切削参数 Cutting condition	转速 (r/min) S=3800	<p>寿命稳定, 能达到断屑效果, 排屑顺畅。铁屑不会挤压在孔内。 Stable tool life. It can reach to the chipping effect and smooth chip. The chipping will not squeeze into the hole.</p>
	进给量 (mm/min) F=0.02	
结论 Conclusion		

案例三 Case 3 (非标定制) non-standard size

刀具规格 Type	3.5-R0.1-H5-D4-50L	
加工材料 Workpiece	SUS316L 3/4	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	内孔 Inner hole	
切削参数 Cutting condition	转速 (r/min) S=3000 进给量 (mm/min) F=0.03	
结论 Conclusion	寿命与竞争对手持平, 双头刀具成本降低, 客户非常满意。 Stable tool life. It can reach to the chipping effect and and smooth chip. The chipping will not squeeze into the hole.	

案例四 Case 4 (非标定制) non-standard size

刀具规格 Type	R0.15*H8*D6*45L	
加工材料 Workpiece	SUS316L 3/4	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	内孔 Inner hole	
切削参数 Cutting condition	转速 (r/min) S=3000 进给量 (mm/min) F=0.03	
结论 Conclusion	同寿命稳定在6000+ Steady tool life is at 6000+.	

案例五 Case 5 (非标定制) non-standard size

刀具规格 Type	XTB04-02721-015VST	
配刀杆 Holder	HXTB1604	
加工材料 Workpiece	440B和3CR13MO	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	镗孔 Boring	
切削参数 Cutting condition	转速 (r/min) S=3500 进给量 (mm/min) F=0.02	寿命稳定 Steady tool life
结论 Conclusion		

案例六 Case 6 (非标定制) non-standard size

刀具规格 Type	XTB04-03227-015VST	
配刀杆 Holder	HXTB1604	
加工材料 Workpiece	440B和3CR13MO	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	镗孔 Boring	
切削参数 Cutting condition	转速 (r/min) S=3500 进给量 (mm/min) F=0.02	寿命稳定 Steady tool life
结论 Conclusion		

BETTER PRECISION

外圆 / 内加工刀片
External / Internal insert

FG系列刀片
FG series insert

整硬小镗刀系列 (带30°后定位)
Boring boring (within 30 °back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀片
High speed insert

其他配套产品
Other tools

加工案例 Case studies

整硬小镗刀系列 (带30°后定位) Boring tooling (within 30° back location)

案例七 Case 7 (非标定制) non-standard size

刀具规格 Type	XTB06-05230-020UST	
配刀杆 Holder	HXTB1606	
加工材料 Workpiece	硬钢和软钢 Hard steel & soft steel	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	镗孔 Boring	
切削参数 Cutting condition	转速 (r/min) S=3500	
	进给量 (mm/min) F=0.025	
结论 Conclusion	寿命稳定 Steady tool life	

案例八 Case 8 (非标定制) non-standard size

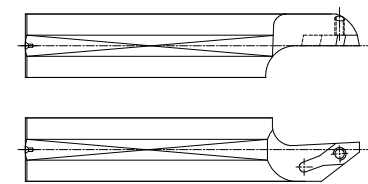
刀具规格 Type	XTB06-0630-015VS	
配刀杆 Holder	HXTB1606	
加工材料 Workpiece	硬钢 Hard steel	
冷却方式 Cooling Method	油冷 Oil cooling	
加工类型 Machining type	镗孔 Boring	
切削参数 Cutting condition	转速 (r/min) S=3500	
	进给量 (mm/min) F=0.025	
结论 Conclusion	寿命稳定 Steady tool life	

特色刀片 Unique insert

VP□□



修光刃效果 Wiper
外圆加工, 更好的表面质量
Excircle machining, Better surface quality



舍弃式的镗孔刀设计, 更方便快捷。
With flexible boring designed more convenient

外观 Figure	刀片示意图 Insert	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application	
				不涂层 Uncoated	涂层 Coated			不涂层 Uncoated	涂层 Coated		
				LC10	LC3115	LC3215	* LC3225	* LC3335	LN10	LP725	
		VPGT 1103008R-XM-D4	0.08				●	●			内孔加工, 外圆加工 Internal machining External machining
		110301R-XM-D4	0.1				●	●			
		1103015R-XM-D4	0.15				●	●			
		110302R-XM-D4	0.2				●	●			



外观 Figure	刀片示意图 Insert	型号 Description	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application	
				不涂层 Uncoated	涂层 Coated			不涂层 Uncoated	涂层 Coated		
				LC10	LC3115	LC3215	* LC3225	* LC3335	LN10	LP725	
		VPGT 1103005R-RM	0.05				●	●			端面加工, 外圆加工 Surface machining External machining
		1103008R-RM	0.08				●	●			
		110301R-RM	0.1				●	●			
		1103015R-RM	0.15				●	●			
		110302R-RM	0.2				●	●			



外圆/内孔加工刀片
External / Internal insert
FG系列刀片
FG series insert
整硬小镗刀系列 (带30°后定位)
Boring tooling (within 30° back location)
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高精度刀柄
High precision handle
其他配套产品
Other tools

外观 Figure	刀片示意图 Insert	型号 Description	刀尖圆弧 公差±0.02 r(mm)	硬质合金 Carbide					金属陶瓷 Cermet		应用 Application
				不涂层 Uncoated		涂层 Coated			不涂层 Uncoated	涂层 Coated	
				LC10	LC3115	LC3215	*LC3225	*LC3335	LN10	LP725	
		VPET 1103003R-QG	0.03				●	●			内孔加工 Internal machining
		1103005R-QG	0.05				●	●			
		1103008R-QG	0.08				●	●			
		110301R-QG	0.1				●	●			



外观 Figure	刀片示意图 Insert	型号 Description	刀尖圆弧 公差±0.02 r(mm)	硬质合金 Carbide					金属陶瓷 Cermet		应用 Application
				不涂层 Uncoated		涂层 Coated			不涂层 Uncoated	涂层 Coated	
				LC10	LC3115	LC3215	*LC3225	*LC3335	LN10	LP725	
	 A处放大图 10x:1	VPET 110302FB	0.1				●	●			端面加工 Surface machining



特色刀片用刀杆 Holder with unique insert

适用于VP□□

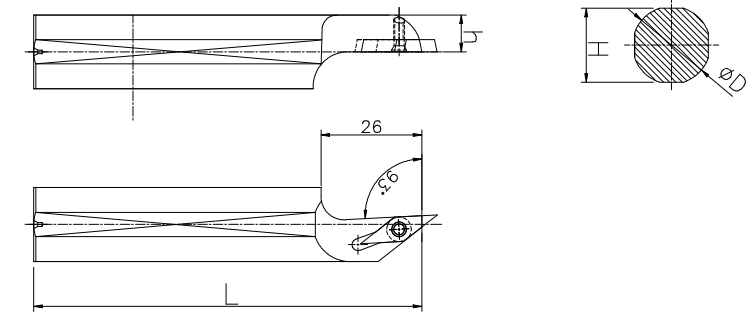


图1 Fig.1

S□□H SVJPL

类型 Type	形状 Shape	型号 Description	尺寸 Size					零件 Spare parts		刀片 Insert	刀杆示意图 Figure
			D	H	L	最小加工径	h	压紧螺丝 Forcing screw	扳手 Wrench		
VP型	圆柄 Round type	S16H-SVJPR11-26M	16	15	100	16	7.5	BD2506-6035	T7	VP11	图1 Fig.1
		S20H-SVJPR11-26M	20	19		18	9.5				
		S22H-SVJPR11	22	21		20	10.5				
		S25H-SVJPR11	25	23		21	11.5				
		S25.4H-SVJPR11	25.4	24		21	12				

外径、内径加工刀片
External/Internal insert

FG系列刀片
F.G series insert

标准小柄刀系列 (带30°后角位)
Basic holding holder (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高精度刀柄
High precision handle

其他配套产品
Other tools

特色刀片 Unique insert

GXR/L □ □ (内径槽刀) Internal grooving

外观 Figure	刀片示意图 Insert	型号 Description	尺寸 Size				硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
			W1	L1	R	W	不涂层 Uncoated		涂层 Coated		LN10	LP725	
							LC10	LC3115	LC9215	★ LC3225			
		GXR/L 100-005A	1.00	1.5	0.05	6.69			●	●			内径切槽 Internal grooving
		120-005A	1.20	1.5	0.05	6.69			●	●			
		125-005A	1.25	1.5	0.05	6.69			●	●			
		100-005B	1.00	2.2	0.05	8.46			●	●			
		120-005B	1.20	2.2	0.05	8.46			●	●			
		125-005B	1.25	2.2	0.05	8.46			●	●			



备注Note: 1, 以上规格皆为常备库存, 如有特别需要可非标定制。Above sizes are conventional stock, and special size can be also ordered acceptable.
2, 材质标记★为优选材质。Grade with★ is 1st choice.

特色刀片内径槽刀用刀杆 Internal grooving holder

适用于 GXR/L

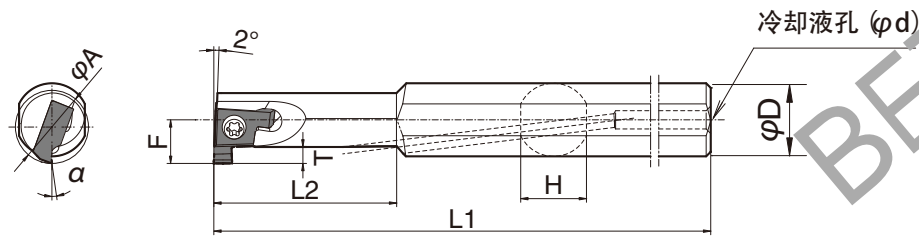


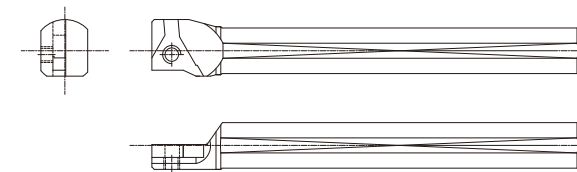
图1 Fig.1

SGXR/L - NT (一般型、带冷却孔) Normal type with cooling hole

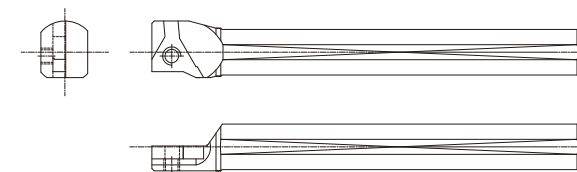
类型 Type	形状 Shape	型号 Description	尺寸 Size							刀片 Insert	刀杆示意图 Figure
			最小加工径 C.A	C.D	H	L1	L2	F	T		
GXR/L	圆柄 Round type	SGXR0808A-NT	8	8	7.2	100	20	4.8	1.5	GXR...-005A	图1 Fig.1
		SGXL0808A-NT	8	8	7.2	100	20	4.8	1.5	GXL...-005A	
		SGXR1010B-NT	10	10	9	125	25	6.2	2.2	GXR...-005B	
		SGXL1010B-NT	10	10	9	125	25	6.2	2.2	GXL...-005B	

UG XX 三角形槽刀片 Triangle grooving insert

外观 Figure	刀片示意图 Insert	型号 Description	尺寸 Size				硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
			R	LC10	LC3115	LC9215	不涂层 Uncoated		涂层 Coated		LN10	LP725	
							★ LC3225	★ LC3335					
		UG26R 020-0.9-010-FB	0.1						●	●			端面加工 Facing



外观 Figure	刀片示意图 Insert	型号 Description	尺寸 Size			硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
			R	θ	L	不涂层 Uncoated		涂层 Coated		LN10	LP725	
						LC10	LC3115	LC9215	★ LC3225			
		UG26R 157-4.2-010	0.1	8°	4.20				●	●		外径加工 External



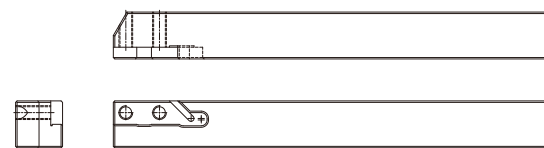
切断刀/CLG Cut off insert

外观 Figure	刀片示意图 Insert	型号 Description	尺寸 Size				硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
			w	θ	r	L	不涂层 Uncoated		涂层 Coated		LN10	LP725	
							LC10	LC3115	LC3215	★ LC3225			
		CLG 20N-005	2.0	0°	0.05	19.1				●	●		切断 Cut off
		20N-020	2.0	0°	0.20	19.1				●	●		
		20S6-005	2.0	6°	0.05	19.1				●	●		
		20S15-005	2.0	15°	0.05	19.1				●	●		



SBBR 双孔后扫刀片 Back turning insert(double holes)

外观 Figure	刀片示意图 Insert	型号 Description	尺寸 Size				硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
			w	θ	r	L	不涂层 Uncoated		涂层 Coated		LN10	LP725	
							LC10	LC3115	LC3215	★ LC3225			
		SBBR 055-060-010	0.55	30°	0.10	6							外径加工 External
		055-060-015	0.55	30°	0.15	6				●	●		
		055-075-010	0.55	25°	0.10	7.5				●	●		
		055-075-015	0.55	25°	0.15	7.5				●	●		



内孔槽刀 Internal grooving

UCNL Internal grooving

外观 Figure	刀片示意图 Insert	型号 Description	刃宽W (公差±0.01) Width of cutting edge	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
					不涂层 Uncoated	涂层 Coated			LN10	LP725	
						LC10	LC3115	LC3215			
		UCNL 080-1.45-2.13-020-QG	0.8	R0.01					●	●	内孔沟槽 粗精加工 Internal grooving, rough & finish machining
		100-1.59-2.13-010-QG	1	R0.01					●	●	



UCNL - 加强型 Internal grooving reinforced type

外观 Figure	刀片示意图 Insert	型号 Description	刃宽W (公差±0.01) Width of cutting edge	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
					不涂层 Uncoated	涂层 Coated			LN10	LP725	
						LC10	LC3115	LC3215			
		UCNL 100-1.59-2.13-018-QG-M10-加强	1	R0.18					●	●	内孔沟槽 粗精加工 Internal grooving, rough & finish machining
		135-1.59-2.13-018-QG-M10-加强	1.35	R0.18					●	●	



外经、内径加工刀片
External / Internal insert

FG系列刀片
FG series insert

标准内径刀系列 (带30°后角位)
Standard boring insert (with 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高精度刀柄
High precision handle

其他配套产品
Other tools

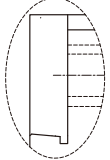
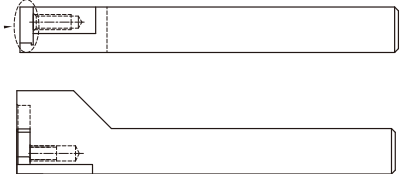
FVPET - 哑光型 Matte finish type

外观 Figure	刀片示意图 Insert	型号 Description	刀尖圆弧 (公差 ±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
				不涂层 Uncoated		涂层 Coated		* LN10	* LP725	
				LC10	LC3115	LC3215	* LC3225			
		FVPET 110303R-QG	0.3				●	●		内孔哑光 Internal matte finish



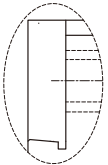
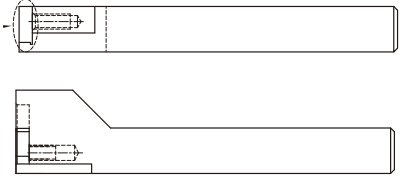
SFNL - 内孔外径槽刀 Internal outer diameter grooving

外观 Figure	刀片示意图 Insert	型号 Description	刃宽W (公差 ±0.01) Width of cutting edge	刀尖圆弧 (公差 ±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
					不涂层 Uncoated		涂层 Coated		* LN10	* LP725	
					LC10	LC3115	LC3215	* LC3225			
		SFNL 040-4.5-010-P10-D4.072	0.4	R0.1				●	●	内孔外径槽 粗精加工 Internal outer diameter grooving, rough & finish machining	

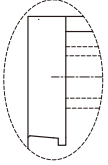
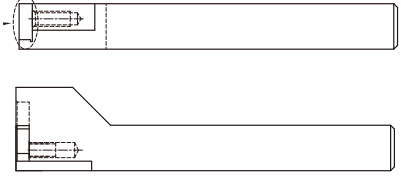



SFNL - 端面环槽刀 Surface annular grooving

外观 Figure	刀片示意图 Insert	型号 Description	刃宽W (公差 ±0.01) Width of cutting edge	刀尖圆弧 (公差 ±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
					不涂层 Uncoated		涂层 Coated		* LN10	* LP725	
					LC10	LC3115	LC3215	* LC3225			
		SFNL 100-2.5-4.0-010-P10-D4.072	1	R0.1				●	●	端面环槽 粗加工 Surface annular grooving, rough machining	

外观 Figure	刀片示意图 Insert	型号 Description	刃宽W (公差 ±0.01) Width of cutting edge	刀尖圆弧 (公差 ±0.02) r(mm)	硬质合金 Carbide				金属陶瓷 Cermet		应用 Application
					不涂层 Uncoated		涂层 Coated		* LN10	* LP725	
					LC10	LC3115	LC3215	* LC3225			
		SFNL 100-4.0-010-P10-D4.072	1	R0.1				●	●	端面环槽 粗精加工 Surface annular grooving, rough & finish machining	

外经、内径加工刀片
External / Internal insert

FG系列刀片
FG series insert

端面环槽刀系列 (带30°后角刃)
End face annular grooving (with 30° back angle)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高精度刀柄
High precision handle

其他配套产品
Other tools

UG26R(内孔勾刀) Internal grooving

外观 Figure	刀片示意图 Insert	型号 Description	刃宽W (公差±0.01) Width of cutting edge	刀尖圆弧 (公差±0.02) r(mm)	硬质合金 Carbide					金属陶瓷 Cermet		应用 Application
					不涂层 Uncoated		涂层 Coated			不涂层 Uncoated	涂层 Coated	
					LC10	LC3115	LC3215	★ LC3225	★ LC3335	LN10	LP725	
		UG26R253-W1.25-4.0-015	1.25	R0.15				●	●			内孔沟槽加工 Internal grooving

加工案例 Case studies

案例一 Case 1

刀具规格 Type	UCNL100-1.59-2.13-010-QG-LC3335	
配刀杆 Holder	S20H-SUCNL16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔沟槽粗加工 Internal grooving, rough machining	
切削参数 Cutting condition	转速 (r/min) 2800 进给量 (mm/min) 0.02	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

案例二 Case 2

刀具规格 Type	UCNL100-1.59-2.13-018-QG-M10-LC3335	
配刀杆 Holder	S20H-SUCNL16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔沟槽粗加工 Internal grooving rough machining	
切削参数 Cutting condition	转速 (r/min) 2800 进给量 (mm/min) 0.02	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

BETTER PRECISION

外观
External / Internal insert

FG系列刀片
FG series insert

标准/内孔刀系列 (带30°后定位)
Boring tooling (with in. 30° back location)

特色刀片
Unique insert

CBN/PCD刀片
CBN/PCD insert

高速刀片
High speed insert

其他配套产品
Other tools

加工案例 Case studies

案例三 Case 3

刀具规格 Type	UCNL135-1.0-1.5-010-QG-M10-LC3225	
配刀杆 Holder	S20H-SUCNL16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔勾槽粗加工 Internal grooving rough machining	
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.03	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

案例四 Case 4

刀具规格 Type	UCNL080-1.45-2.13-020-QG-LC3335	
配刀杆 Holder	S20H-SUCNL16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔勾槽精加工 Internal grooving, finish machining	
切削参数 Cutting condition	转速 (r/min) 3000 进给量 (mm/min) 0.025	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

案例五 Case 5

刀具规格 Type	UCNL135-1.59-2.13-018-QG-M10-LC3335-加强 strengthen	
配刀杆 Holder	S20H-SUCNL16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔勾槽粗加工 Internal grooving, rough machining	
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.03	
结论 Conclusion	津上205: 8000~10000 排刀机: 4000~6000	

案例六 Case 6

刀具规格 Type	UCNL100-1.59-2.13-018-QG-M10-LC3335-加强	
配刀杆 Holder	S20H-SUCNL16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔勾槽精加工 Internal grooving, finish machining	
切削参数 Cutting condition	转速 (r/min) 4000 进给量 (mm/min) 0.025	
结论 Conclusion	津上205: 8000~10000 排刀机: 5000~6000	

加工案例 Case studies

案例七 Case 7

刀具规格 Type	FGHSR056005-1.0-2.0-50°-P10-KD LC3335-623	
配刀杆 Holder	FGHSR-1212-100-T3-TBT	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	后扫 back turning	
切削参数 Cutting condition	转速 (r/min) 4500 进给量 (mm/min) 0.025	
结论 Conclusion	寿命稳定在10000+PCS Steady tool life at 10000 +.	

案例八 Case 8

刀具规格 Type	UG16R050-1.0-2.55-KD-LC3335-623	
配刀杆 Holder	STUGR1212H-16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	切槽 grooving	
切削参数 Cutting condition	转速 (r/min) 4000 进给量 (mm/min) 0.01	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

案例九 Case 9

刀具规格 Type	UG16R050-003-15°E-KD-LC3335-623	
配刀杆 Holder	STUGR1212H-16	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	切槽 grooving	
切削参数 Cutting condition	转速 (r/min) 4000 进给量 (mm/min) 0.025	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

案例十 Case 10

刀具规格 Type	FVPET110303R-QG LC3335	
配刀杆 Holder	S20H-SVLP11-26M	
加工材料 Workpiece	SUS316Li 3/4H/SUS316Li	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔哑光 Internal matte finish	
切削参数 Cutting condition	转速 (r/min) 3000 进给量 (mm/min) 0.02	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

加工案例 Case studies

案例十一 Case 11

刀具规格 Type	SFNL040-4.5-010-P10-D4.072-LC3335-0.4mm外径槽	
配刀杆 Holder	CH-SUBNR1212H-TBT	
加工材料 Workpiece	钛合金 Titanium alloy	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	内孔外径槽 Internal outer diameter grooving	
切削参数 Cutting condition	转速 (r/min) 2800 进给量 (mm/min) 0.02	
结论 Conclusion	稳定加工, 寿命超过对手, 客户采纳我们的方案 Steady machining, tool life is much higher than competitor. Accepted.	

案例十二 Case 12

刀具规格 Type	SFNL100-2.5-4.0-010-D4.072-P10-LC3335	
配刀杆 Holder	CH-SUBNR1212H-TBT	
加工材料 Workpiece	钛合金 Titanium alloy	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	端面环槽 surfacing annual grooving	
切削参数 Cutting condition	转速 (r/min) 2300 进给量 (mm/min) 0.03	
结论 Conclusion	稳定加工, 寿命超过对手, 客户采纳我们的方案 Steady machining, tool life is much higher than competitor. Accepted.	

案例十三 Case 13

刀具规格 Type	SFNL100-4.0-010-P10-D4.072-LC3335-0.5mm端面槽	
配刀杆 Holder	CH-SUBNR1212H-TBT	
加工材料 Workpiece	钛合金 Titanium alloy	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	端面环槽 surfacing annular grooving	
切削参数 Cutting condition	转速 (r/min) 2800 进给量 (mm/min) 0.02	
结论 Conclusion	稳定加工, 寿命超过对手, 客户采纳我们的方案 Steady machining, tool life is much higher than competitor. Accepted.	

案例十四 Case 14

刀具规格 Type	UG26R148-4.0-005-32°	
配刀杆 Holder	S20H-TUGL26	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	精镗孔 finish boring	
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.04	
结论 Conclusion	达到客户要求寿命 Meet customer's tool life requirement.	

加工案例 Case studies

案例十五 Case 15

刀具规格 Type	UG26R157-5.0-015	
配刀杆 Holder	S20H-TUGL26	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	粗镗孔 rough boring	
切削参数 Cutting condition	转速 (r/min) 3500 进给量 (mm/min) 0.05	
结论 Conclusion	达到客户要求寿命 Meet customer's tool life requirement.	

案例十六 Case 16

刀具规格 Type	UG26R253-W1.25-4.0-015	
配刀杆 Holder	S20H-TUGL26	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	切槽 grooving	
切削参数 Cutting condition	转速 (r/min) 4000 进给量 (mm/min) 0.025	
结论 Conclusion	刀具寿命稳定 Steady tool life.	

CBN/PCD刀片 CBN/PCD Insert

CBN负角车刀片

型号 Description	形状 Shape	IC	S	D1
CNGA1204__		12.7	4.76	5.16
DNGA1504__		12.7	4.76	5.16
DNGA1506__		12.7	6.35	5.16
TNGA1604__		9.525	4.76	3.81
VNGA1604__		9.525	4.76	3.81
WNGA0804__		12.7	4.76	3.81

外观 Figure	型号 Description	尺寸 Size			涂层 Coated								推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material					
		刀尖圆弧 Re	刃长 LE	刃数 Z	BKKN01	BKKN10	BKKN20	BKKN30	BPN001	BPN010	BPN020	BPN030	BPC020	进给 f(mm/rev)	切深 ap(mm)	淬火钢	灰口铸铁	球墨铸铁	轧制材料	烧焊金属
	CNGA 120404-2	0.4	2.2	2	●									0.01~0.06	0.05~0.2	√	√	√	√	√
	120408-2	0.8	2.2	2	●	●				●				0.04~0.12	0.1~0.4	√	√	√	√	√
	120412-2	1.2	2.2	2	●						●			0.08~0.25	0.2~0.8	√	√	√	√	√
	DNGA 150404-2	0.4	2.2	2						●				0.01~0.06	0.05~0.2	√	√	√	√	√
	150408-2	0.8	2.2	2		●				●				0.04~0.12	0.1~0.4	√	√	√	√	√
	150412-2	1.2	2.2	2		●				●				0.08~0.25	0.2~0.8	√	√	√	√	√
	150604-2	0.4	2.2	2						●				0.01~0.06	0.05~0.2	√	√	√	√	√
	150608-2	0.8	2.2	2		●		●		●				0.04~0.12	0.1~0.4	√	√	√	√	√
	150612-2	1.2	2.2	2										0.08~0.25	0.2~0.8	√	√	√	√	√
	TNGA 160404-2	0.4	2.2	2		●								0.01~0.06	0.05~0.2	√	√	√	√	√
	160408-3	0.8	2.2	2		●								0.04~0.12	0.1~0.4	√	√	√	√	√
	160412-3	1.2	2.2	2		●				●				0.08~0.25	0.2~0.6	√	√	√	√	√
	160416-3	1.6	2.2	2						●				0.1~0.3	0.2~0.8	√	√	√	√	√
	VNGA 160404-2	0.4	2.2	2		●								0.01~0.06	0.05~0.2	√	√	√	√	√
	160408-2	0.8	2.2	2						●				0.04~0.12	0.1~0.4	√	√	√	√	√
	160412-2	1.2	2.2	2		●				●				0.08~0.25	0.2~0.8	√	√	√	√	√
	WNGA 080404-3	0.4	2.2	2						●				0.01~0.06	0.05~0.2	√	√	√	√	√
	080408-3	0.8	2.2	2		●								0.04~0.12	0.1~0.4	√	√	√	√	√
	080412-3	1.2	2.2	2							●			0.08~0.25	0.2~0.8	√	√	√	√	√

CBN正角车刀片

型号 Description	形状 Shape	IC	S	D1
CCGW0602__		6.35	2.38	2.8
CCGW09T3__		9.525	3.97	4.4
DCGW0702__		6.35	2.38	2.8
DCGW11T3__		9.525	3.97	4.4

外观 Figure	型号 Description	尺寸 Size			涂层 Coated								推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material				
		刀尖圆弧 Re	刃长 LE	刃数 Z	BKN001	BKN010	BKN020	BKN030	BPNO01	BPNO10	BPNO20	BPNO30	BPC020	进给 f(mm/rev)	切深 ap(mm)	淬火钢	灰口铸铁	球墨铸铁	轧制材料
	CCGW 060202-2	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	060204-2	0.4	2	2	●					●			0.01~0.06	0.05~0.2	√	√	√	√	√
	060208-2	0.8	2	2	●								0.04~0.12	0.1~0.4	√	√	√	√	√
	09T302-2	0.2	2	2	●					●			0.01~0.04	0.04~0.1	√	√	√	√	√
	09T304-2	0.4	2	2	●								0.01~0.06	0.05~0.2	√	√	√	√	√
	09T308-2	0.8	2	2					●			0.04~0.12	0.1~0.4	√	√	√	√	√	
	DCGW 070202-2	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	070204-2	0.4	2	2					●				0.01~0.06	0.05~0.2	√	√	√	√	√
	070208-2	0.8	2	2					●				0.04~0.12	0.1~0.4	√	√	√	√	√
	11T302-2	0.2	2	2		●							0.01~0.04	0.04~0.1	√	√	√	√	√
	11T304-2	0.4	2	2			●	●	●				0.01~0.06	0.05~0.2	√	√	√	√	√
	11T308-2	0.8	2	2					●	●			0.04~0.12	0.1~0.4	√	√	√	√	√

CBN正角车刀片

型号 Description	形状 Shape	IC	S	D1
TCGW1103__		6.35	3.18	3.4
TPGW0802__		4.76	2.38	2.3
TPGW0902__		5.56	2.38	2.8
TPGW1102__		6.35	2.38	2.8
TPGW1103__		6.35	3.18	3.4

外观 Figure	型号 Description	尺寸 Size			涂层 Coated								推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material				
		刀尖圆弧 Re	刃长 LE	刃数 Z	BKN001	BKN010	BKN020	BKN030	BPNO01	BPNO10	BPNO20	BPNO30	BPC020	进给 f(mm/rev)	切深 ap(mm)	淬火钢	灰口铸铁	球墨铸铁	轧制材料
	TCGW 110302-3	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	110304-3	0.4	2	2			●						0.01~0.06	0.05~0.2	√	√	√	√	√
	110308-3	0.8	2	2						●			0.04~0.12	0.1~0.4	√	√	√	√	√
	TPGW 080202-1	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	080204-1	0.4	2	2									0.01~0.06	0.05~0.2	√	√	√	√	√
	080208-1	0.8	2	2			●						0.04~0.12	0.1~0.4	√	√	√	√	√
	090202-3	0.2	2	2						●			0.01~0.04	0.04~0.1	√	√	√	√	√
	090204-3	0.4	2	2						●			0.01~0.06	0.05~0.2	√	√	√	√	√
	090208-3	0.8	2	2									0.04~0.12	0.1~0.4	√	√	√	√	√
	110202-3	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	110204-3	0.4	2	2			●						0.01~0.06	0.05~0.2	√	√	√	√	√
	110208-3	0.8	2	2			●						0.04~0.12	0.1~0.4	√	√	√	√	√
	110302-3	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	110304-3	0.4	2	2									0.01~0.06	0.05~0.2	√	√	√	√	√
110308-3	0.8	2	2									0.04~0.12	0.1~0.4	√	√	√	√	√	

BETTER PRECISION

外观/ Internal insert
FC系列刀片
Boring tooling (with in 30' back location)
特色刀片
CBN/PCD刀片
高速刀柄
其他配套产品

CBN正角车刀片

型号 Description	形状 Shape	IC	S	D1
VBGW1103__		6.35	3.18	2.8
VBGW1604__		9.525	4.76	4.4
VCGW1103__		6.35	3.18	2.8
VCGW1604__		9.525	4.76	4.4

外观 Figure	型号 Description	尺寸 Size			涂层 Coated								推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material				
		刀尖圆弧 Re	刃长 LE	刃数 Z	BKN001	BKN010	BKN020	BKN030	BPNO01	BPNO10	BPNO20	BPNO30	BPCO20	进给 f(mm/rev)	切深 ap(mm)	淬火钢	灰口铸铁	球墨铸铁	轧制材料
	VBGW 110302-2	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	110304-2	0.4	2	2	●								0.01~0.06	0.05~0.2	√	√	√	√	√
	110308-2	0.8	2	2	●								0.04~0.12	0.1~0.4	√	√	√	√	√
	VCGW 160402-2	0.2	2	2								●	0.01~0.04	0.04~0.1	√	√	√	√	√
	160404-2	0.4	2	2								●	0.01~0.06	0.05~0.2	√	√	√	√	√
	160408-2	0.8	2	2		●							0.04~0.12	0.1~0.4	√	√	√	√	√
	110302-2	0.2	2	2									0.01~0.04	0.04~0.1	√	√	√	√	√
	110304-2	0.4	2	2	●								0.01~0.06	0.05~0.2	√	√	√	√	√
	110308-2	0.8	2	2	●								0.04~0.12	0.1~0.4	√	√	√	√	√
	160402-2	0.2	2	2								●	0.01~0.04	0.04~0.1	√	√	√	√	√
	160404-2	0.4	2	2									0.01~0.06	0.05~0.2	√	√	√	√	√
	160408-2	0.8	2	2		●							0.04~0.12	0.1~0.4	√	√	√	√	√

PCD负角车刀片

型号 Description	形状 Shape	IC	S	D1
CNGA1204__		12.7	4.76	5.16
DNGA1504__		12.7	4.76	5.16
TNGA1604__		9.525	4.76	3.81
VNGA1604__		9.525	4.76	3.81

外观 Figure	型号 Description	尺寸 Size			涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material					
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝合金 铝青铜	铜 黄铜 青铜	镁合金	硬质合金	钛合金	玻璃纤维增强塑料
	CNGA 120404	0.4	3.0	2						0.03~0.1	0~2	√	√	√	√	√	√
	120408	0.8	3.0	2		●				0.05~0.15	0~3	√	√	√	√	√	√
	DNGA 150404	0.4	3.0	2						0.03~0.1	0~2	√	√	√	√	√	√
	150408	0.8	3.0	2			●			0.05~0.15	0~3	√	√	√	√	√	√
	TNGA 160404	0.4	3.0	2						0.03~0.1	0~2	√	√	√	√	√	√
	160408	0.8	3.0	2						0.05~0.15	0~3	√	√	√	√	√	√
	VNGA 160404	0.4	3.0	2			●			0.03~0.1	0~2	√	√	√	√	√	√
	160408	0.8	3.0	2						0.05~0.15	0~3	√	√	√	√	√	√

BETTER PRECISION

外观/内加工用刀片 External/Internal insert
PC系列刀片 PC series insert
钻孔/镗孔用刀片 (带30°后角位) Boring tooling (with 30° back location)
特色刀片 Unique insert
CBN/PCD刀片 CBN/PCD insert
高速刀片 High speed insert
其他配件产品 Other tools

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
CCGW0602__		6.35	2.38	2.8
CCGW09T3__		9.525	3.97	4.4
CCGW1204__		12.7	4.76	5.5
CCMW0602__		6.35	2.38	2.8
CCMW09T3__		9.525	3.97	4.4
CCMW1204__		12.7	4.76	5.5

外观 Figure	型号 Description	尺寸 Size			涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝合金 铝合金	铜 黄铜 青铜	镁合金	硬合金	钛合金	玻璃纤维增强塑料	硅酸盐塑料
	CCGW 060202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	060204	0.4	2.5	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	060208	0.8	2.5	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	09T302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	09T304	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	09T308	0.8	3.0	2			●			0.1~0.6	0.04~1	√	√	√	√	√	√	√
	120402	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	120404	0.4	3.0	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	CCMW 060202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	060204	0.4	2.5	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	060208	0.8	2.5	2		●				0.1~0.6	0.04~1	√	√	√	√	√	√	√
	09T302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	09T304	0.4	3.0	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	09T308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	120402	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	120404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
CPGW0602__		6.35	2.38	2.8
CPGW09T3__		9.525	3.97	4.4
CPMW0602__		6.35	2.38	2.8
CPMW09T3__		9.525	3.97	4.4
CPMW1204__		12.7	4.76	5.5

外观 Figure	型号 Description	尺寸 Size			涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝合金 铝合金	铜 黄铜 青铜	镁合金	硬合金	钛合金	玻璃纤维增强塑料	硅酸盐塑料
	CPGW 060202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	060204	0.4	2.5	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	060208	0.8	2.5	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	09T302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	09T304	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	09T308	0.8	3.0	2			●			0.1~0.6	0.04~1	√	√	√	√	√	√	√
	120402	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	120404	0.4	3.0	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	CPMW 060202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	060204	0.4	2.5	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	060208	0.8	2.5	2		●				0.1~0.6	0.04~1	√	√	√	√	√	√	√
	09T302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	09T304	0.4	3.0	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	09T308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	120402	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	120404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	120408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
DCGW0702_		6.35	2.38	2.8
DCGW11T3_		9.525	39.7	4.4
DCMW0702_		6.35	2.38	2.8
DCMW11T3_		9.525	39.7	4.4

外观 Figure	型号 Description	尺寸 Size			涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝合金 铝青铜	铜 黄铜 青铜	镁合金	硬质合金	钛合金	玻璃纤维 碳纤维	硅酸盐材料
	DCGW 070204	0.4	2.5	2				●		0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	11T302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	11T304	0.4	3.0	2				●		0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	11T308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	DCMW 070204	0.4	2.5	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	11T302	0.2	3.0	2		●				0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	11T304	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	11T308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
TCGW0802_		4.76	2.38	2.5
TCGW0902_		5.56	2.38	2.5
TCGW1103_		6.35	3.18	2.8
TCGW1604_		9.525	4.76	4.4
TCMW0802_		4.76	2.38	2.5
TCMW0902_		5.56	2.38	2.5
TCMW1103_		6.35	3.18	2.8
TCMW1604_		9.525	4.76	4.4

外观 Figure	型号 Description	尺寸 Size			涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝合金 铝青铜	铜 黄铜 青铜	镁合金	硬质合金	钛合金	玻璃纤维 碳纤维	硅酸盐材料
	TCGW 080202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	080204	0.4	2.5	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	090202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	090204	0.4	2.5	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	110302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	110304	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	110308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	160402	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	160404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	160408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	TCMW 080202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	080204	0.4	2.5	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	090202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	090204	0.4	2.5	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	110302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	110304	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	110308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	160402	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
160404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√	
160408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√	

BETTER PRECISION

外观 / Internal insert
PCD系列刀片
PCD系列刀片 (带30°后角位)
Boring tooling (with 30° back location)
特色刀片
Unique insert
CBN/PCD刀片
CBN/PCD insert
高速刀片
High speed inserts
其他产品
Other tools

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
TPGW0802__		4.76	2.38	2.5
TPGW0902__		5.56	2.38	2.5
TPGW1103__		6.35	3.18	2.8
TPGW1604__		9.525	4.76	4.4
TPMW0802__		4.76	2.38	2.5
TPMW0902__		5.56	2.38	2.5
TPMW1103__		6.35	3.18	2.8
TPMW1604__		9.525	4.76	4.4

外观 Figure	型号 Description	尺寸 Size					涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝 Al	铜 Cu	镁 Mg	硬 Hard	钛 Ti	玻 Glass	硅 Si		
	TPGW 080202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	080204	0.4	2.5	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	090202	0.2	2.5	2		●				0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	090204	0.4	2.5	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	110302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	110304	0.4	3.0	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	110308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√		
	160402	0.2	3.0	2				●		0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	160404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	160408	0.8	3.0	2						0.01~0.6	0.04~1	√	√	√	√	√	√	√		
	TPMW 080202	0.2	2.5	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	080204	0.4	2.5	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	090202	0.2	2.5	2		●				0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	090204	0.4	2.5	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	110302	0.2	3.0	2						0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	110304	0.4	3.0	2			●			0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	110308	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√		
	160402	0.2	3.0	2				●		0.02~0.2	0.01~0.2	√	√	√	√	√	√	√		
	160404	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√		
	160408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√		

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
VCGW1103__		6.35	3.18	2.8
VCGW1604__		9.525	4.76	4.4
VCMW1103__		6.35	3.18	2.8
VCMW1604__		9.525	4.76	4.4

外观 Figure	型号 Description	尺寸 Size			涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刀尖圆弧 Re	刃长 LE	刃数 Z	BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝 Al	铜 Cu	镁 Mg	硬 Hard	钛 Ti	玻 Glass	硅 Si
	VCGW 110302	0.2	3.0	2					●	0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	110304	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	110308	0.8	3.0	2					●	0.1~0.6	0.04~1	√	√	√	√	√	√	√
	160402	0.2	3.0	2		●				0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	160404	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	160408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	160412	1.2	3.0	2						0.12~0.8	0.04~1	√	√	√	√	√	√	√
	VCMW 110302	0.2	3.0	2		●				0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	110304	0.4	3.0	2						0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	110308	0.8	3.0	2		●				0.1~0.6	0.04~1	√	√	√	√	√	√	√
	160402	0.2	3.0	2		●				0.02~0.2	0.01~0.2	√	√	√	√	√	√	√
	160404	0.4	3.0	2		●				0.06~0.4	0.02~0.6	√	√	√	√	√	√	√
	160408	0.8	3.0	2						0.1~0.6	0.04~1	√	√	√	√	√	√	√
	160412	1.2	3.0	2						0.12~0.8	0.04~1	√	√	√	√	√	√	√

PCD正角车刀片

型号 Description	形状 Shape	IC	S	D1
RDEW0803		8	3.18	2.9
RDEW1003		10	3.18	4.4
RDEW1204		12	4.76	4.4
RDEW2006		20	6.35	6.6

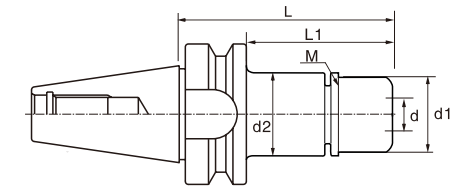
外观 Figure	型号 Description	尺寸 Size		涂层 Coated					推荐切削参数 Recommended cutting parameters		适合加工材料 Workpiece Material						
		刃数 Z		BD010	BD020	BD050	BD100	BD250	进给 f(mm/rev)	切深 ap(mm)	铝/铝合金	铜/青铜	镁合金	硬合金	钛合金	玻璃纤维增强塑料	硅酸盐材料
	RDEW 0803	1							0.04~0.25	0~1.5	√	√	√	√	√	√	
	1003	1				●			0.04~0.25	0~1.5	√	√	√	√	√	√	
	1204	1							0.04~0.25	0~1.5	√	√	√	√	√	√	
	2006	1		●					0.04~0.25	0~1.5	√	√	√	√	√	√	

BT小型高速刀柄 BT mini high speed handle

G2.5

40000RPM

- ◆ 高速雕铣机专用刀柄
High-speed carving and milling machine for to
- ◆ T型螺牙设计, 扭力提升50%, 避免掉刀
T-thread design, Torque increase 50%, avoid falling knife
- ◆ 非偏心平衡全圆螺帽
Non-eccentric full balanced round nut.
- ◆ 噪音低、风阻小
low noise, little wind resistance.
- ◆ 前后自适应定位, 重复装夹精度高
Adaptive localization, before and after repeated clamping precision is high



※ 拉钉为标准配置

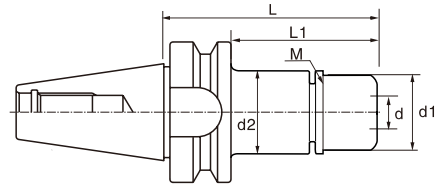
型号 Cat. No	夹持直径 Chucking Dia Φd	d1	L	L1	M	螺帽 Nut	筒夹 Collet	扳手 spanner
ISO 10-ER11-35MS	2.0~7.0	16	35	29.5	M13X0.75	HN-ER11MS	ER11	HS-ER11MS
-ER16-35MS	3.0~10.0	22	35	29.5	M19X1.0	HN-ER16MS	ER16	HS-ER16MS
-ER20-35MS	3.0~13.0	28	35	29.5	M24X1.0	HN-ER20MS	ER20	HS-ER20MS
ISO 20-ER11-35MS	2.0~7.0	16	35	27	M13X0.75	HN-ER11MS	ER11	HS-ER11MS
-ER16-35MS	3.0~10.0	22	35	27	M19X1.0	HN-ER16MS	ER16	HS-ER16MS
-ER20-35MS	3.0~13.0	28	35	27	M24X1.0	HN-ER20MS	ER20	HS-ER20MS
ISO 25-ER11-35MS	2.0~7.0	16	35	27	M13X0.75	HN-ER11MS	ER11	HS-ER11MS
-ER16-35MS	3.0~10.0	22	35	27	M19X1.0	HN-ER16MS	ER16	HS-ER16MS
-ER20-35MS	3.0~13.0	28	35	27	M24X1.0	HN-ER20MS	ER20	HS-ER20MS
-ER25-35MS	3.0~16.0	35	35	27	M30X1.0	HN-ER25MS	ER25	HS-ER25MS
ISO 30-ER16-60MS	3.0~10.0	22	60	44.1	M19X1.0	HN-ER16MS	ER16	HS-ER16MS
-ER20-60MS	3.0~13.0	28	60	44.1	M24X1.0	HN-ER20MS	ER20	HS-ER20MS
-ER25-60MS	3.0~16.0	35	60	44.1	M30X1.0	HN-ER25MS	ER25	HS-ER25MS

BT-GSK高速刀柄 BT-GSK high speed SK collet chuck

G2.5

40000RPM

- ◆ SK筒夹 (4°), 重复装夹精度更高。
SK collet(4°), higher repeat clamping accuracy
- ◆ 全圆螺帽, 噪音低、风阻小。
Full Circle nuts, low noise, little wind resistance



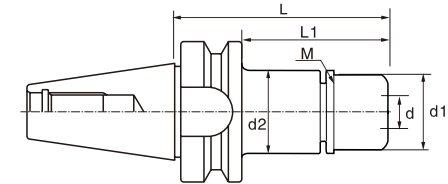
型号 Cat. No	夹持直径 Chuck Dia Φd	d1	d2	L	L1	M	螺帽 nut	筒夹 collet	筒夹拆卸器 COLLET PULLER 标配品	扳手 spanner	重量 Weight (KG)
BT30-GSK6-60	2~6.0	19.5	20.0	60	38	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	0.7
-GSK6-75	2~6.0	19.5	20.0	75	53	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	0.8
-GSK6-90	2~6.0	19.5	20.0	90	68	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	0.7
-GSK10-60	3~10.0	27.1	27.6	60	38	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	0.9
-GSK10-75	3~10.0	27.1	27.6	75	53	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	0.9
-GSK10-90	3~10.0	27.1	27.6	90	68	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.0
-GSK10-120	3~10.0	27.1	27.6	120	98	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.1
-GSK13-60	3~13.0	33	33.5	60	38	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.15
-GSK13-75	3~13.0	33	33.5	75	53	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.2
-GSK13-90	3~13.0	33	33.5	90	68	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.25
-GSK13-120	3~13.0	33	33.5	120	98	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.35
-GSK16-60	3~16.0	40	40.5	60	38	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.1
-GSK16-75	3~16.0	40	40.5	75	53	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.1
-GSK16-90	3~16.0	40	40.5	90	68	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.2
-GSK16-120	3~16.0	40	40.5	120	98	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.5
-GSK20-60	4~20.0	48	48.5	60	38	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.5
-GSK20-75	4~20.0	48	48.5	75	53	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.25
-GSK20-90	4~20.0	48	48.5	90	68	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.3
-GSK20-120	4~20.0	48	48.5	120	98	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.45

BT-GSK高速刀柄 BT-GSK high speed SK collet chuck

G2.5

40000RPM

- ◆ SK筒夹 (4°), 重复装夹精度更高。
SK collet(4°), higher repeat clamping accuracy
- ◆ 全圆螺帽, 噪音低、风阻小。
Full Circle nuts, low noise, little wind resistance



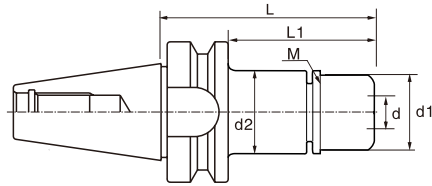
型号 Cat. No	夹持直径 Chuck Dia Φd	d1	d2	L	L1	M	螺帽 nut	筒夹 collet	筒夹拆卸器 COLLET PULLER 标配品	扳手 spanner	重量 Weight (KG)
BT40-GSK6-60	2~6.0	19.5	20.0	60	33	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	0.9
-GSK6-75	2~6.0	19.5	20.0	75	48	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	1.0
-GSK6-90	2~6.0	19.5	20.0	90	63	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	1.1
-GSK6-120	2~6.0	19.5	20.0	120	93	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	1.3
-GSK10-60	3~10.0	27.1	27.6	60	33	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.1
-GSK10-75	3~10.0	27.1	27.6	75	48	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.2
-GSK10-90	3~10.0	27.1	27.6	90	63	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.2
-GSK10-120	3~10.0	27.1	27.6	120	93	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.4
-GSK10-150	3~10.0	27.1	27.6	150	123	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	1.4
-GSK13-60	3~13.0	33	33.5	60	53	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.3
-GSK13-75	3~13.0	33	33.5	75	48	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.5
-GSK13-90	3~13.0	33	33.5	90	63	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.5
-GSK13-150	3~13.0	33	33.5	150	123	M27X1.0	HN-GSK13	SK13	CX13	GH33	1.6
-GSK16-60	3~16.0	40	40.5	75	33	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.35
-GSK16-75	3~16.0	40	40.5	75	48	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.4
-GSK16-90	3~16.0	40	40.5	90	63	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.5
-GSK16-120	3~16.0	40	40.5	120	93	M32X1.5	HN-GSK16	SK16	CX16	GH40	1.7
-GSK16-150	3~16.0	40	40.5	150	123	M32X1.5	HN-GSK16	SK46	CX16	GH40	1.8
-GSK20-75	4~20	48	48.5	75	48	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.8
-GSK20-90	4~20	48	48.5	90	63	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.8
-GSK20-120	4~20	48	48.5	150	123	M40X1.5	HN-GSK20	SK20	CX20	GH48	1.8
-GSK25-90	6~25	55	55.5	90	63	M45X1.5	HN-GSK25	SK25	CX25	GH55	1.8
-GSK25-120	6~25	55	55.5	120	93	M45X1.5	HN-GSK25	SK25	CX25	GH55	2.0

BT-GSK高速刀柄 BT-GSK high speed SK collet chuck

G2.5

40000RPM

- ◆ SK筒夹 (4°), 重复装夹精度更高。
SK collet(4°), higher repeat clamping accuracy
- ◆ 全圆螺帽, 噪音低、风阻小。
Full Circle nuts, low noise, little wind resistance



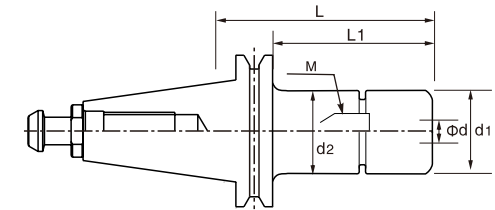
型号 Cat. No	夹持直径 Chuck Dia Φd	d1	d2	L	L1	M	螺帽 nut	筒夹 collet	筒夹拆卸器 COLLET PULLER 标配品	扳手 spanner	重量 Weight (KG)
BT50-GSK10-105	3~10.0	27.1	27.6	105	67	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	4.2
-GSK10-135	3~10.0	27.1	27.6	135	97	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	4.4
-GSK10-165	3~10.0	27.1	27.6	165	127	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	4.6
-GSK13-105	3~13.0	33	33.5	105	67	M27X1.0	HN-GSK13	SK13	CX13	GH33	4.5
-GSK13-135	3~13.0	33	33.5	135	97	M27X1.0	HN-GSK13	SK13	CX13	GH33	4.6
-GSK13-165	3~13.0	33	33.5	165	127	M27X1.0	HN-GSK13	SK13	CX13	GH33	4.6
-GSK16-105	3~16.0	40	40.5	105	67	M32X1.5	HN-GSK16	SK16	CX16	GH40	4.7
-GSK16-135	3~16.0	40	40.5	135	97	M32X1.5	HN-GSK16	SK16	CX16	GH40	4.9
-GSK16-165	3~16.0	40	40.5	165	127	M32X1.5	HN-GSK16	SK16	CX16	GH40	4.9
-GSK16-200	3~16.0	40	40.5	200	162	M32X1.5	HN-GSK16	SK16	CX16	GH40	5.0
-GSK20-105	4~20.0	48	48.5	105	67	M40X1.5	HN-GSK20	SK20	CX20	GH48	5.1
-GSK20-135	4~20.0	48	48.5	135	97	M40X1.5	HN-GSK20	SK20	CX20	GH48	5.1
-GSK20-165	4~20.0	48	48.5	165	127	M40X1.5	HN-GSK20	SK20	CX20	GH48	5.2
-GSK20-200	4~20.0	48	48.5	200	162	M40X1.5	HN-GSK20	SK20	CX20	GH48	5.2
-GSK25-105	6~25	55	55.5	105	67	M45X1.5	HN-GSK25	SK25	CX25	GH55	5.2
-GSK25-135	6~25	55	55.5	135	97	M45X1.5	HN-GSK25	SK25	CX25	GH55	5.5
-GSK25-165	6~25	55	55.5	165	127	M45X1.5	HN-GSK25	SK25	CX25	GH55	5.6
-GSK25-200	6~25	55	55.5	200	162	M45X1.5	HN-GSK25	SK25	CX25	GH55	5.8

ISO-GER高速ER刀柄 ISO-GER high speed ER collet chuck

G2.5

40000RPM

- ◆ 高速雕铣机专用刀柄
High-speed carving and milling machine for tool holder
- ◆ T型螺牙设计, 扭力提升50%, 避免掉刀
T-thread design, Torque increase 50%, avoid falling knife
- ◆ 非偏心平衡全圆螺帽
Non-eccentric full balanced round nut.
- ◆ 噪音低、风阻小
low noise, little wind resistance.
- ◆ 前后自适应定位, 重复装夹精度高
Adaptive localization, before and after repeated clamping precision is high



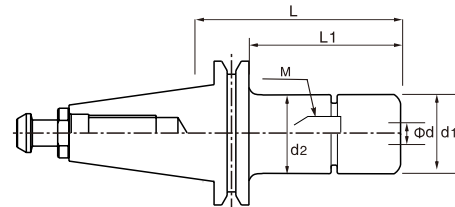
※ 拉钉为标准配置

型号 Cat. No	夹持直径 Chuck Dia Φ	d1	d2	L	L1	M	螺帽 Nut	筒夹 Collet	扳手 spanner	锁刀座
ISO20-GER16MINI-35	3.0~10.0	25	25.5	35	26.2	M19X1.0	HN-GER16MINI	ER16	GH25	ISO20
ISO25-GER16MINI-35	3.0~10.0	25	25.5	35	26.2	M19X1.0	HN-GER16MINI	ER16	GH25	ISO25
-GER20MINI-35	3.0~13.0	30	30.5	35	26.2	M24X1.0	HN-GER20MINI	ER20	GH30	ISO25
ISO30-GER20MINI-60	3.0~10.0	25	25.5	60	40.9	M19X1.0	HN-GER20MINI	ER20	GH25	ISO30
-GER25MINI-60	3.0~16.0	35	35.5	60	40.9	M30X1.0	HN-GER25MINI	ER25	GH40	ISO30

ISO-GSK高速SK筒夹刀柄 ISO-GSK high speed SK collet chuck

G2.5
40000RPM

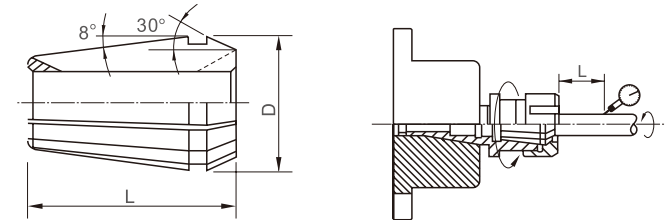
- ◆ 高速雕铣机专用刀柄
- ◆ 为了增加刀具的夹持力，SK筒夹设计单边小角度为4°，比其它筒夹多20%的夹持力，在夹持铣刀加工时，更加稳定。
- ◆ 全圆螺帽，噪音低、风阻小



※ 均为标准配置

型号 Cat. No	夹持直径 Chuck Dia Φd	d1	d2	L	L1	M	螺帽 Nut	筒夹 Collet	筒夹拆卸器 COLLET PULLER 标配品	扳手 Spanner	锁刀座
ISO20-GSK6-35	2~6.0	19.5	20	35	29.5	M15.5X1.0	HN-GSK6	SK6	CX6	GH19	ISO20
-GSK10-35	3~10.0	27.1	27.6	35	26.2	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	ISO20
ISO25-GSK10-35	3~10.0	27.1	27.6	35	26.2	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	ISO25
ISO30-GSK10-60	3~10.0	27.1	27.6	60	40.9	M21.5X1.0	HN-GSK10	SK10	CX10	GH27	ISO30
-GSK16-60	3~16.0	40	40.5	60	40.9	M32X1.5	HN-GSK16	SK16	CX16	GH40	ISO30

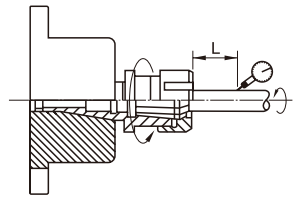
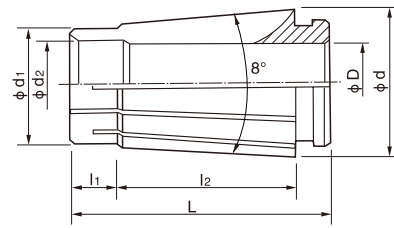
ER弹性筒夹 ER spring collet



名称 Style	型号 Cat. No	夹持直径 Chuck Dia	
ER11	ER11-2	1.5~2.0	
	-2.5	2.0~2.5	
	-3	2.5~3.0	
	-3.5	3.0~3.5	
	-4	3.5~4.0	
	-4.5	4.0~4.5	
	-5	4.5~5.0	
	-5.5	5.0~5.5	
	-6	5.5~6.0	
	-6.5	6.0~6.5	
ER16	ER16-3	2.0~3.0	
	-4	3.0~4.0	
	-5	4.0~5.0	
	-6	5.0~6.0	
	-7	6.0~7.0	
	-8	7.0~8.0	
	-9	8.0~9.0	
	-10	9.0~10.0	
	ER20	ER20-2	1.0~2.0
		-3	2.0~3.0
-4		3.0~4.0	
-5		4.0~5.0	
-6		5.0~6.0	
-7		6.0~7.0	
-8		7.0~8.0	
-9		8.0~9.0	
-10		9.0~10.0	
-11		10.0~11.0	
-12		11.0~12.0	
-13		12.0~13.0	

名称 Style	型号 Cat. No	夹持直径 Chuck Dia	
ER25	ER25-3	2.0~3.0	
	-4	3.0~4.0	
	-5	4.0~5.0	
	-6	5.0~6.0	
	-7	6.0~7.0	
	-8	7.0~8.0	
	-9	8.0~9.0	
	-10	9.0~10.0	
	-11	10.0~11.0	
	-12	11.0~12.0	
	-13	12.0~13.0	
	-14	13.0~14.0	
	-15	14.0~15.0	
	-16	15.0~16.0	
	ER32	ER32-3	2.0~3.0
		-4	3.0~4.0
-5		4.0~5.0	
-6		5.0~6.0	
-7		6.0~7.0	
-8		7.0~8.0	
-9		8.0~9.0	
-10		9.0~10.0	
-11		10.0~11.0	
-12		11.0~12.0	
-13		12.0~13.0	
-14		13.0~14.0	
-15		14.0~15.0	
-16		15.0~16.0	
-17	16.0~17.0		
-18	17.0~18.0		
-19	18.0~19.0		
-20	19.0~20.0		

SK弹性筒夹 SK spring collet



名称 Style	型号 Cat. No	夹持直径 Chucking Dia
SK6	SK6-0.8	0.75~0.8
	-1	0.9~1.0
	-1.25	1.15~1.25
	-1.5	1.3~1.5
	-1.75	1.55~1.75
	-2	1.8~2.0
	-2.25	2.05~2.25
	-2.5	2.3~2.5
	-2.75	2.55~2.75
	-3	2.8~3.0
	-3.5	3.0~3.5
	-4	3.5~4.0
SK10	-4.5	4.0~4.5
	-5	4.5~5.0
	-5.5	5.0~5.5
	-6	5.5~6.0
	SK10-2	1.75~2.0
	-2.25	2.0~2.25
	-2.5	2.25~2.5
	-2.75	2.5~2.75
	-3	2.75~3.0
	-3.5	3.0~3.5
SK16	-4	3.5~4.0
	-4.5	4.0~4.5
	-5	4.5~5.0
	-5.5	5.0~5.5
	-6	5.5~6.0
	-6.5	6.0~6.5
	-7	6.5~7.0
	-7.5	7.0~7.5
	-8	7.5~8.0
	-8.5	8.0~8.5
	-9	8.5~9.0
	-9.5	9.0~9.5
-10	9.5~10.0	

名称 Style	型号 Cat. No	夹持直径 Chucking Dia
SK13	SK13-3	2.5-3.0
	SK13-4	3.5-4.0
	SK13-5	4.5-5.0
	SK13-6	5.5-6.0
	SK13-7	6.5-7.0
	SK13-8	7.5-8.0
	SK13-9	8.5-9.0
	SK13-10	9.5-10.0
	SK13-11	10.5-11.0
	SK13-12	11.5-12.0
	SK13-13	12.5-13.0

名称 Style	型号 Cat. No	夹持直径 Chucking Dia
SK16	SK16-3	2.75~3.0
	-3.5	3.0~3.5
	-4	3.5~4.0
	-4.5	4.0~4.5
	-5	4.5~5.0
	-5.5	5.0~5.5
	-6	5.5~6.0
	-6.5	6.0~6.5
	-7	6.5~7.0
	-7.5	7.0~7.5
	-8	7.5~8.0
	-8.5	8.0~8.5
	-9	8.5~9.0
	-9.5	9.0~9.5
	-10	9.5~10.0
	-10.5	10.0~10.5
-11	10.5~11.0	
-11.5	11.0~11.5	
-12	11.5~12.0	
-12.5	12.0~12.5	
-13	12.5~13.0	
-13.5	13.0~13.5	
-14	13.5~14.0	
-14.5	14.0~14.5	
-15	14.5~15.0	
-15.5	15.0~15.5	
-16	15.5~16.0	

名称 Style	型号 Cat. No	夹持直径 Chucking Dia
SK20	SK20-4	3.5-4.0
	SK20-5	4.5-5.0
	SK20-6	5.5-6.0
	SK20-7	6.5-7.0
	SK20-8	7.5-8.0
	SK20-9	8.5-9.0
	SK20-10	9.5-10.0
	SK20-11	10.5-11.0
	SK20-12	11.5-12.0
	SK20-13	12.5-13.0
	SK20-14	13.5-14.0
	SK20-15	14.5-15.0
	SK20-16	15.5-16.0
	SK20-17	16.5-17.0
	SK20-18	17.5-18.0
	SK20-19	18.5-19.0
SK20-20	19.5-20.0	

名称 Style	型号 Cat. No	夹持直径 Chucking Dia
SK25	SK25-6	5.5~6
	-8	7.5~8.0
	-10	9.5~10.0
	-12	11.5~12.0
	-16	15.5~16.0
	-16.5	16.0~16.5
	-17	16.5~17.0
	-17.5	17.0~17.5
	-18	17.5~18.0
	-18.5	18.0~18.5
	-19	18.5~19.0
	-19.5	19.0~19.5
	-20	19.5~20.0
	-20.5	20.0~20.5
	-21	20.5~21.0
	-21.5	21.0~21.5
	-22	21.5~22.0
	-22.5	22.0~22.5
	-23	22.5~23.0
	-23.5	23.0~23.5
-24	23.5~24.0	
-24.5	24.0~24.5	
-25	24.5~25.0	
-25.4	25.0~25.4	

其他配套产品 Other tools

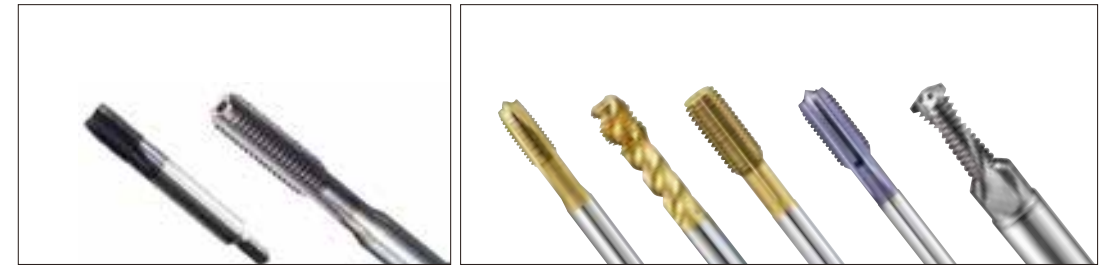
1, 阶梯钻、钻头 Step drill, Drill



2, 深孔钻 Deep hole drill



3, 丝锥 Tap



4, 铣刀 Endmill



5, 铰刀 Reamer



案例一 Case 1

刀具规格 Type	D18*25I*2F*D16*120L	
加工材料 Workpiece	不锈钢	
机床 Machine type	津上B0325-II	
加工类型 Machining type	开粗	
切削参数 Cutting condition	S=800 r/min, F=0.07 mm/rev, ap=7mm	
结论 Conclusion	客户要求寿命: 5000pcs 满足客户加工要求。 Required tools life is 5000. Meet customer's requirement.	

案例二 Case 2

刀具规格 Type	D9.5x20HX48LXD7.0X2FX140°	
加工材料 Workpiece	不锈钢316L Stainless steel	
加工类型 Machining type	开粗 Roughing	
切削参数 Cutting condition	S=2300 r/min, F=0.06 mm/rev, ap=5.5mm	
结论 Conclusion	客户要求寿命: 10000pcs; 我们的加工寿命提高了10%, 客户满意。 Required tools life is 5000. Tool life is 10% higher than competitor. Meet customer's requirement.	

案例三 Case 3

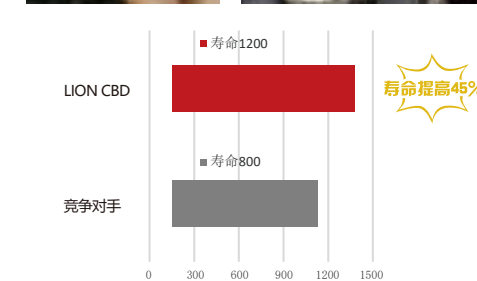
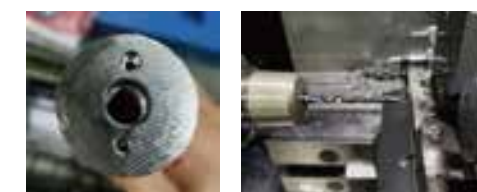
刀具规格 Type	D12.7-30-50-D7-ZT	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	钻孔 drilling	
切削参数 Cutting condition	转速 (r/min) 2300 进给量 (mm/min) 0.08	
结论 Conclusion	寿命稳定在5000+pcs Steady tool life at 5000+.	

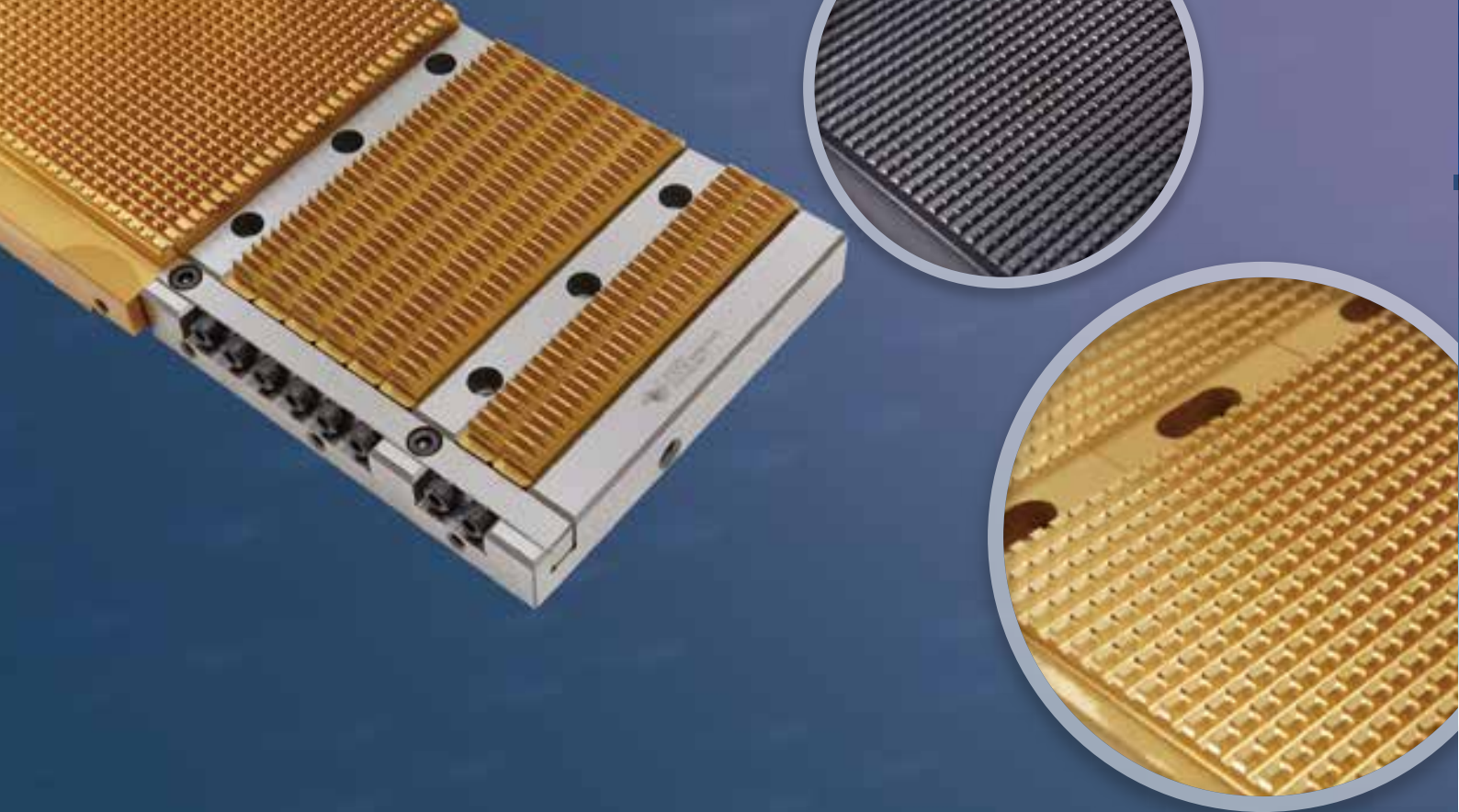
案例四 Case 4

刀具规格 Type	D12.4-30-50-D7-ZT	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	钻孔 drilling	
切削参数 Cutting condition	转速 (r/min) 2300 进给量 (mm/min) 0.08	
结论 Conclusion	寿命稳定在5000+pcs Steady tool life at 5000+.	

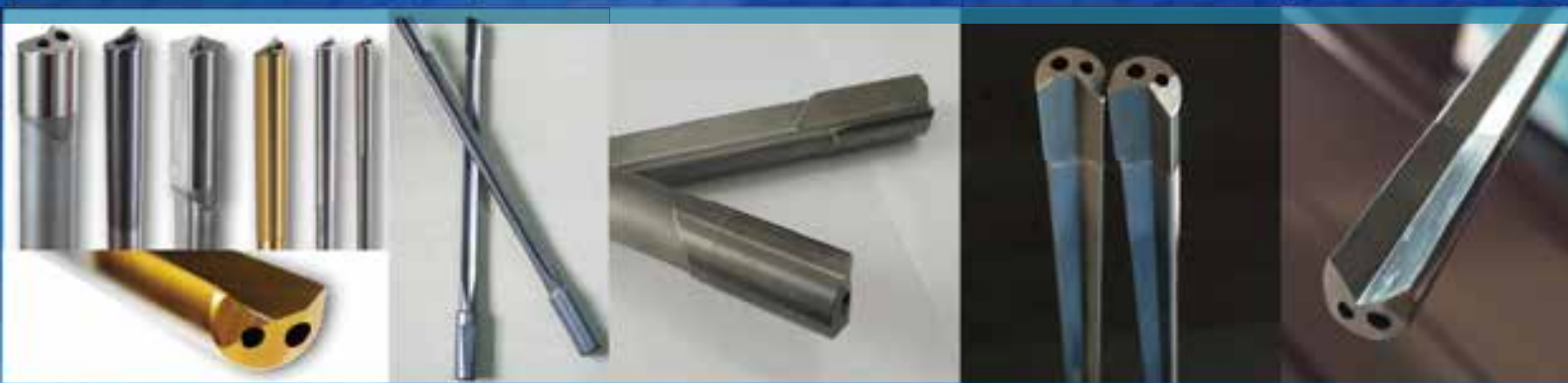
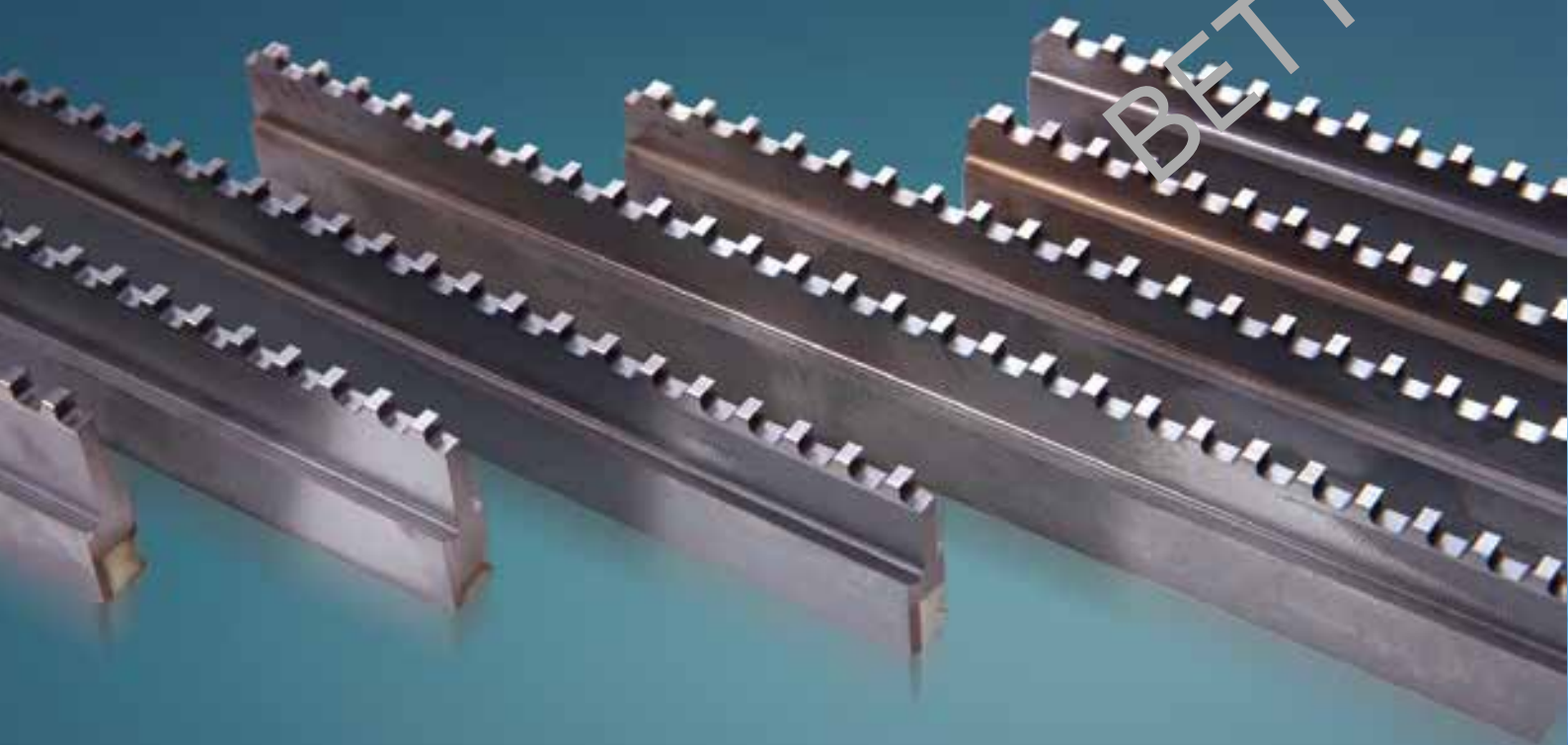
案例五 Case 5

刀具规格 Type	D2.95x41xSD4xL80(内冷)	
加工材料 Workpiece	SUS316Li 3/4H	
冷却方式 Cooling Method	油冷 oil cooling	
加工类型 Machining type	钻孔 drilling	
切削参数 Cutting condition	转速 (r/min) 4800 进给量 (mm/min) 0.05	
结论 Conclusion	耐磨性好, 排屑顺畅, 加工寿命稳定在1200件, 比竞争对手提高45%。 Good wear resistance, chipping removal smoothly and stable processing life at 1200pcs, 45% higher than that of competitor.	





平面拉刀 Surface broach
 齿条拉刀 Rack broach



枪钻 Gundrill



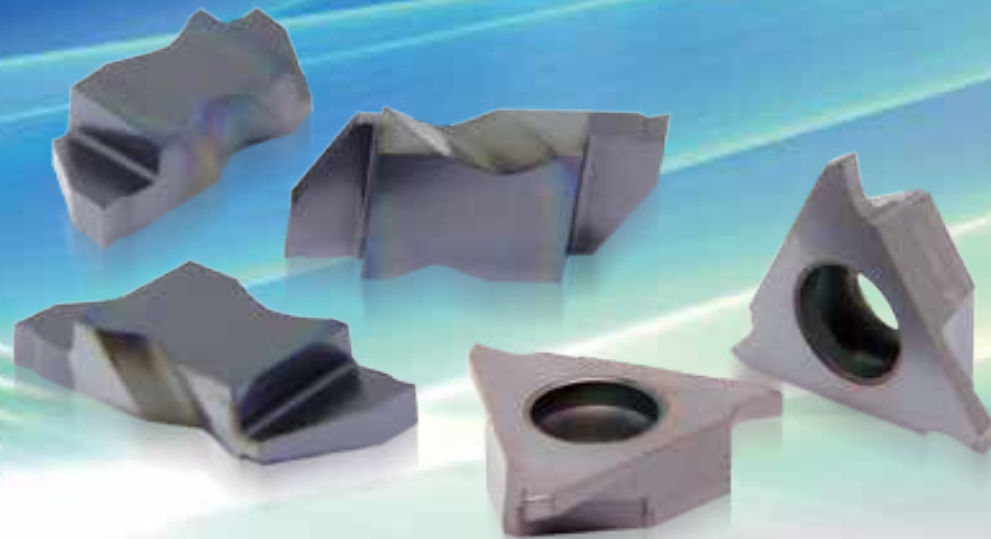
MG/UG, T-Notch 精磨浅槽加工刀片

FINISHING SHALLOW GROOVING INSERT

- 1, 坚固的夹紧设计方式, 有效抵抗侧面和径向的切削力
- 2, 涵盖了端面切槽、内外径切槽、螺纹加工

已成功广泛应用于小零件加工行业、汽车加工行业、医疗、空调压缩机行业等。
It is widely used in Small parts, Automotive, Medical treatment, Compressor of AC, etc.

MG/UG系列: MG22/16 (带5° 定位)、UG16
T-Notch系列: TG32



LC220 GROOVING INSERT MACHINING LC220

槽刀片



特性: 搭载复合涂层, 适用于铸铁、钢件、不锈钢等内外圆槽切削要求
Feature: with combined coating, applied in cast iron, steel, stainless steel machining in inner circle & excircle machining.

型号 DESCRIPTION	图示 FIG	适合加工材料 Work-piece material					
		铸铁 K	钢 P	不锈钢 M	耐热合金 S	有色金属 N	淬硬钢 H
MGMN150-G LC220		✓	✓	✓			
MGMN200-G LC220		✓	✓	✓			
MGMN250-G LC220		✓	✓	✓			
MGMN300-M LC220		✓	✓	✓			
MGMN400-M LC220		✓	✓	✓			
MGMN500-M LC220		✓	✓	✓			
MGMN600-M LC220		✓	✓	✓			

LC210 MOLD MILLING
MACHINING LC210

模具铣刀片

特性: 搭载复合涂层, 适用铸铁、钢件、不锈钢等加工, 满足高速切削要求
Feature: with combined coating, applied in cast iron, steel, stainless steel machining, meeting the requirements of high speed cutting.

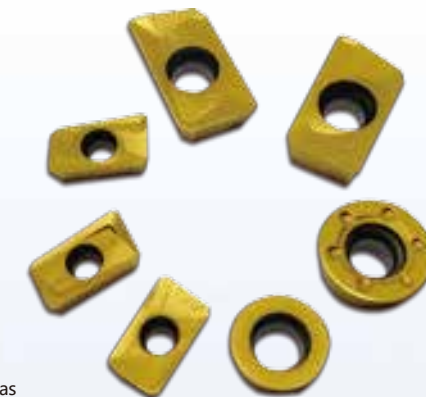



型号 DESCRIPTION	图示 FIG	适合加工材料 Work-piece material					
		铸铁	钢	不锈钢	耐热合金	有色金属	淬硬钢
		K	P	M	S	N	H
APMT1135PDER-H2 LC210		✓	✓	✓			
APMT1604PDER-H2 LC210		✓	✓	✓			
APMT1135PDER-M2 LC210		✓	✓	✓			
APMT1604PDER-M2 LC210		✓	✓	✓			
APMT1135-DL LC210		✓	✓	✓			
APMT1604-DL LC210		✓	✓	✓			
RPMW1003M0-HM LC210		✓	✓	✓			
RPMW10T3M0-HM LC210		✓	✓	✓			
RDMW1204M0T-PM LC210		✓	✓	✓			

LC320 MOLD MILLING
MACHINING LC320

模具铣刀片

特性: 具有硬度高、耐磨、强度和韧性较好、耐热、耐腐蚀等一系列优良性能, 广泛应用于切削耐热钢、不锈钢、高锰钢、工具钢等难加工的材料。
Feature: Excellent performance such as high hardness, wear resistance, good strength and toughness, heat resistance and corrosion resistance. Widely used to cut difficult materials such as heat-resistant steel, stainless steel, high manganese steel and so on.



型号 DESCRIPTION	图示 FIG	适合加工材料 Work-piece material					
		铸铁	钢	不锈钢	耐热合金	有色金属	淬硬钢
		K	P	M	S	N	H
APMT1135PDER-H2 LC320		✓	✓	✓			
APMT1604PDER-H2 LC320		✓	✓	✓			
APMT1135PDER-M2 LC320		✓	✓	✓			
APMT1604PDER-M2 LC320		✓	✓	✓			
APMT1135-DL LC320		✓	✓	✓			
APMT1604-DL LC320		✓	✓	✓			
RPMW1003M0-HM LC320		✓	✓	✓			
RPMW10T3M0-HM LC320		✓	✓	✓			
RDMW1204M0T-PM LC320		✓	✓	✓			

LC420 MOLD MILLING MACHINING LC420
模具铣刀片

特性：通用加工，广泛应用于铸铁、钢件、不锈钢等加工。满足高速切削要求
Feature: general machining, applying in cast iron, steel, stainless steel and etc. It can meet the high machining requirement.



型号 DESCRIPTION	图示 FIG	适合加工材料 Work-piece material					
		铸铁	钢	不锈钢	耐热合金	有色金属	淬硬钢
		K	P	M	S	N	H
APMT1135PDER-H2 LC420		√	√	√			
APMT1604PDER-H2 LC420		√	√	√			
APMT1135PDER-M2 LC420		√	√	√			
APMT1604PDER-M2 LC420		√	√	√			
APMT1135-DL LC420		√	√	√			
APMT1604-DL LC420		√	√	√			
RPMW1003M0-HM LC420		√	√	√			
RPMW10T3M0-HM LC420		√	√	√			
RDMW1204M0T-PM LC420		√	√	√			

LC415 MOLD MILLING MACHINING LC415
模具铣刀片

特性：超微粒硬质合金PVD涂层，具有优异耐磨损性和耐缺损性，尤其在平面铣刀用刀片上拥有极高的通用性，可在多种多样的加工中发挥高性能。
Feature: Ultra-fine particle cemented carbide PVD coating with excellent wear resistance & defect resistance, especially on surface machining, it can play a high performance in a variety of processing.



型号 DESCRIPTION	图示 FIG	适合加工材料 Work-piece material					
		铸铁	钢	不锈钢	耐热合金	有色金属	淬硬钢
		K	P	M	S	N	H
APMT1135PDER-H2 LC415		√	√	√			
APMT1604PDER-H2 LC415		√	√	√			
APMT1135PDER-M2 LC415		√	√	√			
APMT1604PDER-M2 LC415		√	√	√			
APMT1135-DL LC415		√	√	√			
APMT1604-DL LC415		√	√	√			
RPMW1003M0-HM LC415		√	√	√			
RPMW10T3M0-HM LC415		√	√	√			
RDMW1204M0T-PM LC415		√	√	√			



涡旋压缩机解决方案

SCROLL COMPRESSOR SOLUTION

LION CBD(莱恩卡柏)涡旋铣刀以其较好的耐磨性、极高的精度、合理化的角度设计，广泛应用于压缩机制造行业。

Scroll Milling, with better resistance、high accuracy、reasonable angle design, it is widely used in Compressor manufacturing industry.

被加工材料：灰口铸铁(HT250,FC250,FC225)、球墨铸铁(QT400/500/600,FCD450)、压铸铝(AL4032/4042)

Applied in work-piece material of Gray cast iron(HT250,FC250,FC225), Nodular cast iron(QT400/500/600,FCD450), Die-casting aluminum (AL4032/4042).

整体立铣刀系列

ENDMILL SERIES

立铣刀系列包括：ME通用加工、ME-E 经济型通用加工、HE-E 经济型高硬钢加工、AE-E经济型铝用加工
ENDMILL SERIES includes: ME universal machining, ME-E economic universal machining, HE-E high hardness steel machining, AE-E economic aluminium machining.

实现“钢、铸铁、不锈钢、铝合金、高硬钢”等的高效、稳定加工
For machining steel, cast iron, stainless steel, aluminium alloy and hardened steel

BETTER PRECISION





铸铁车削KT刀片

KT TURNING INSERT FOR CAST IRON

LION CBD(莱恩卡柏)KT刀片针对灰口铸铁，球墨铸铁的加工，广泛应用于压缩机零部件、刹车盘、飞轮、凸轮轴、水泵、卡车轮毂等铸铁零件的加工。

KT series is applied in grey cast iron & nodular cast iron. KT series is widely used in machining cast iron parts of compressor parts, brake disc, flywheel, camshaft, pump, truck wheels etc..

全系列ISO刀具：W型、C型、S型、T型、D型、V型

ISO turning series: W, C, S, T, D, V type.



刹车盘 brake disc



轴承 bearing cap



曲轴 crank shaft



气缸 cylinder



气缸 cylinder

铸铁槽刀解决方案

GROOVING FOR CAST IRON SOLUTION

FG系列包含：外圆槽刀片、端面槽刀片、内圆槽刀片

LGI系列长条型槽刀，已经成功广泛应用于小零件加工业、压缩机制造业。

FG & LGI series includes machining: External grooving, Face grooving, Boring grooving. They have been successfully applied in SMALL PARTS & COMPRESSOR industry.

Mcoat系列特殊涂层，采用超精细颗粒粉末合金材料毛坯

优异的磨削工艺，使刃口保证锋利

实现切槽加工的高可靠性与长寿命！

Unique coating "Mcoat".

High reliability & long tool life grooving by micro-grain carbide substrate.

Excellent grinding technology, sharpen the cutting edge.



走芯机专业配件 CNC Professional accessories

中心导套/主轴夹头

Center bush / Spindle chuck



各种夹头品牌及规格

Various chuck brand & Specifications

CITIZEN 西铁城	主夹			导套			背夹		
	d	D	L	d	D	L	d	D	L
4型	8	11.5	36	9	12.5	38.5	8	11.5	36
10型(R07)	15	20	45.5	16	20	50	15	20	45.5
12型	16	20	62	18	22	60	16	20	62
16型	20	28	67	22	29	68	20	28	67
20型	26	36	67	30	35	59	26	36	67
25型	30	42	78	34	41	87.5	30	42	78
32型	37	47	92	42	48	82	37	47	92

TSUGAMI 津上	主夹			导套			背夹		
	d	D	L	d	D	L	d	D	L
03型	10	14.8	43	11	14.5	52	10	16	49
7型	10	16	47	11	14.5	52	10	16	47
10型(含NP11)	14	20	47	15	19	54			
B012(Ⅲ~Ⅵ)型	23.8	28	62	23	28	72	23.8	28	62
18型	28	35	77	30	36	70	23.8	28	62
20型	28	35	77	30	36	70	25	35	77
26型	33	40	80	34	41	87.5	33	40	80
32型	37	44	91	41	46	82	37	44	91
38型	43	53	92	48	54	81	48	54	100

备注: TSUGAMI 20电导套尺寸d=26, D=77, 18型旋转导套通NP17。固定导套通S20。

STAR 斯大	主夹			导套			背夹		
	d	D	L	d	D	L	d	D	L
10型	15	21	64	16	20	59			
12型	18	25	67	21	24	58			
16型	20	28	67	22	29	68	20	28	67
20型	26	36	67	30	35	59	26	36	67
23型	28	35	77	30	35	59	28	35	77
32型	37	47	92	42	49	82	37	47	92

TORNUS 瑞士特纳斯	主夹			导套			背夹		
	d	D	L	d	D	L	d	D	L
7型	10	15.5	48	11	14.5	52			
10型	13	19.5	64	16	21	64			
13型	20	26	54	24	29.5	61	20	26	54
20型	25	35	77	28	34	82	25	35	77
26型(DT26)	30	38	65	34	41	87.5	30	38	65

HANWHA 韩华	主夹			导套			背夹		
	d	D	L	d	D	L	d	D	L
12型	16	21	64	18	22	60	16	21	64
16型	22	30	55	22	29	68	22	30	55
20型	25	35	77	28	34	82	25	35	77
26型	32	45	75	34	41	87.5	32	45	75
32型	37	47	92	42	49	82	37	47	92
35型	40	50	92	45	52	82	40	50	92

NOMURA 野村	主夹			导套			背夹		
	d	D	L	d	D	L	d	D	L
10型	16	22	53	16	20	63	16	22	53
16型	20	26	67	22	26	70.5	20	26	67
20型	26	36	67	30	35	67.5	26	36	67

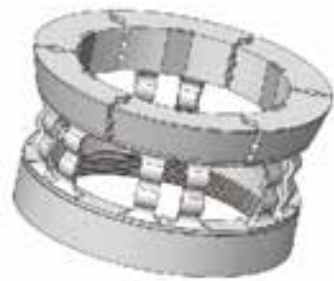
各种夹头品牌及规格

Various chuck brand & Specifications

型号	d	L	D	型号	d	L	D
161E	∅ 32.0	75	∅ 45.0	SAD-25	∅ 30.0	66	∅ 43.0
162E	∅ 35.0	70	∅ 43.0	SAD-40	∅ 48.0	84	∅ 66.0
163E	∅ 35.0	80	∅ 48.0	SAD-50	∅ 56.0	94	∅ 68.0
164E	∅ 38.1	108	∅ 49.0	SAD-65	∅ 75.0	100	∅ 93.0
171E	∅ 42.0	94	∅ 55.0	5C	∅31.75	88	∅ 37.3
173E	∅ 48.0	94	∅ 60.0	16C	∅ 48.0	117	∅ 57.4
177E	∅ 58.0	94	∅ 70.0	20C	∅ 60.4	163	∅ 73.0
185E	∅ 66.0	110	∅ 84.0				
193E	∅ 90.0	130	∅107.0				

特色夹头

Special chuck



螺母、弹簧、锥套

Nut, spring, taper sleeve



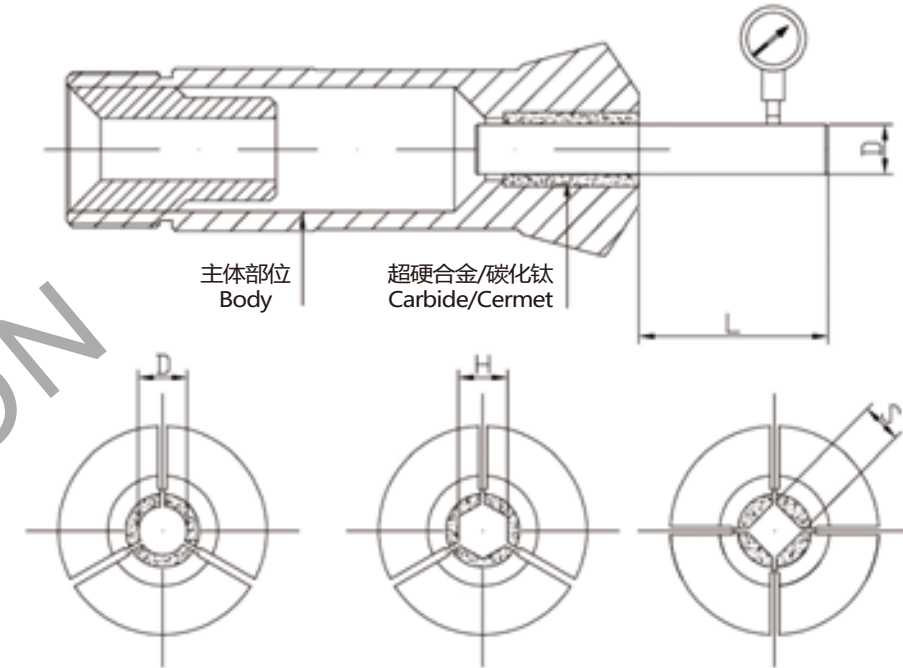
精度表

Accuracy table

Accuracy Chart精度表 单位:mm													
Guide Bush中心导套						Collet & Subcollet夹头							
Roundness Tolerance圆形			Hexagonal & Square方形			Roundness Tolerance圆形				Hexagonal & Square方形			
D	L	TIR	H&S	L	TIR	D	L	CC:TIR	SUB:TIR	D	L	CC:TIR	SUB:TIR
≤1.0	4	0.004	1~6	10	0.01	≤1.0	4	0.005	0.005	1~6	10	0.02	0.01
1~2	6	0.005				1~2	6	0.008	0.008				
2~4	10	0.005				2~4	10	0.008	0.008				
4~6	16	0.005				4~6	16	0.01	0.008				
6~10	25	0.005	6~8	25	0.018	6~10	25	0.01	0.008	6~8	25	0.025	0.018
10~18	40	0.008				10~18	40	0.015	0.008				
18~24	50	0.008	18~30	50	0.02	18~24	50	0.015	0.008	18~30	50	0.03	0.02
24~30	60	0.012				24~30	60	0.015	0.008				
30~40	70	0.015	30~50	65	0.025	30~40	70	0.02	0.008	30~50	65	0.03	0.025
40~50	85	0.018				40~50	85	0.02	0.015				

品质与检测标准

Quality and detecting standards



常规合金规格

Common carbide specifications

序号	规格D*L*d	序号	规格D*L*d
1	5×7×1×60度	15	20×20×15×60度
2	7×11×2×60度	16	21×21×16×60度
3	8×12×3×60度	17	22×22×17×60度
4	9×14×4×60度	18	23×23×18×60度
5	10×15×5×60度	19	24×24×19×60度
6	11×15×6×60度	20	25×25×20×60度
7	12×15×7×60度	21	26×26×21×60度
8	13×16×8×60度	22	27×27×22×60度
9	14×16×9×60度	23	28×28×23×60度
10	15×18×10×60度	24	29×29×24×60度
11	16×18×11×60度	25	30×28×25×60度
12	17×18×12×60度	26	31×28×26×60度
13	18×18×13×60度	27	32×29×27×60度
14	19×18×14×60度	28	33×32×28×60度

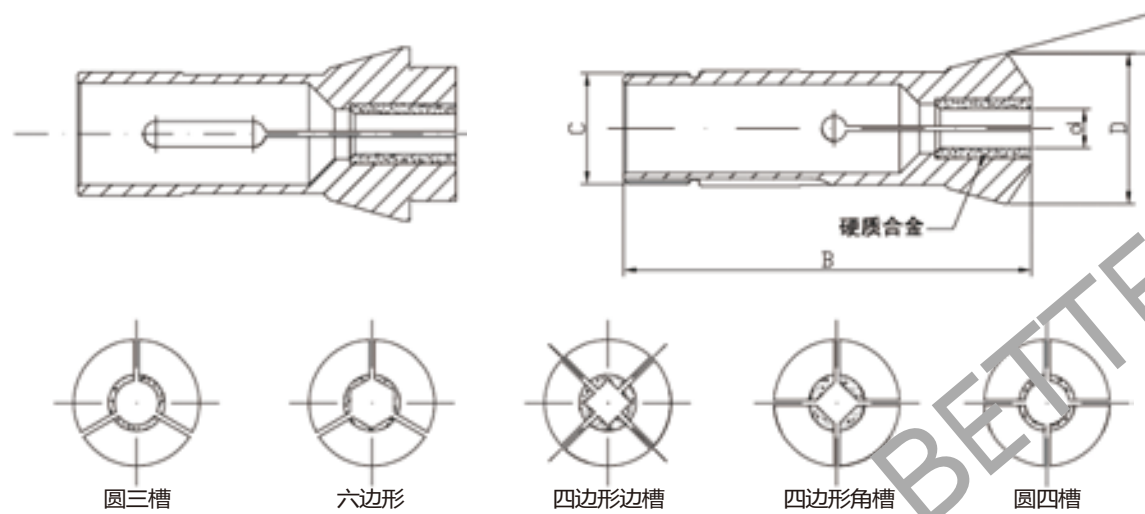
加长合金规格

Lengthen carbide specifications

序号	规格D*L*d
1	10×32×5×60度
2	11×32×6×60度
3	12×32×7×60度
4	13×37×8×60度
5	14×37×9×60度
6	15×37×10×60度
7	16×37×11×60度
8	17×37×12×60度

典型孔、槽形状

Typical hole, slot shape



内环槽、R槽形状图

Inner groove, R groove shape

d(内径)	环形槽/条	环形槽宽/深	R槽
ø6.1- ø7.9			R0.5
ø8.0- ø15.0	3	1.5/0.5	R0.5
ø15.1- ø32.0	4	1.5/0.5	R0.6
ø32.1- ø50.0	5	2.0/0.5	R0.7



增补型号表

Augment model table

型号	d	L	D	型号	d	L	D
161E	ø 32.0	75	ø 45.0	SAD-25	ø 30.0	66	ø 43.0
162E	ø 35.0	70	ø 43.0	SAD-40	ø 48.0	84	ø 66.0
163E	ø 35.0	80	ø 48.0	SAD-50	ø 56.0	94	ø 68.0
164E	ø 38.1	108	ø 49.0	SAD-65	ø 75.0	100	ø 93.0
171E	ø 42.0	94	ø 55.0	5C	ø31.75	88	ø 37.3
173E	ø 48.0	94	ø 60.0	16C	ø 48.0	117	ø 57.4
177E	ø 58.0	94	ø 70.0	20C	ø 60.4	163	ø 73.0
185E	ø 68.0	110	ø 84.0				
193E	ø 90.0	130	ø107.0				

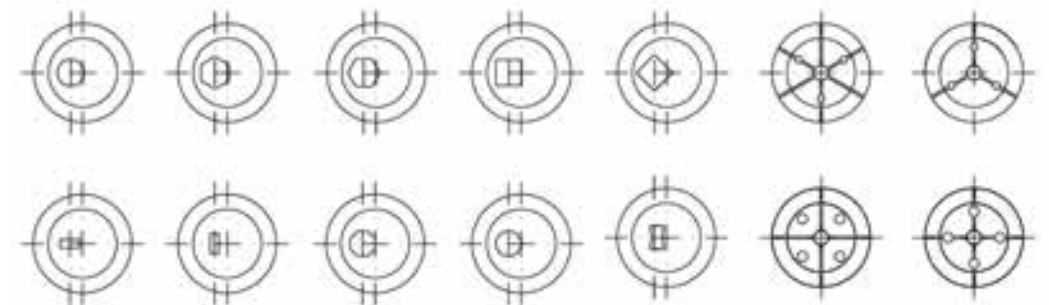
先段加长

First segment lengthening



偏心图形

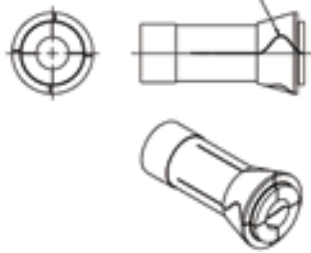
Off-centre figure



闪电夹头

Lightning chuck

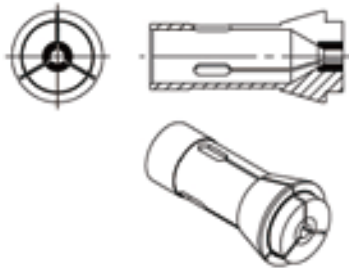
闪电形的槽，减轻送料拉伤



带钨钢夹头

Chuck with carbide

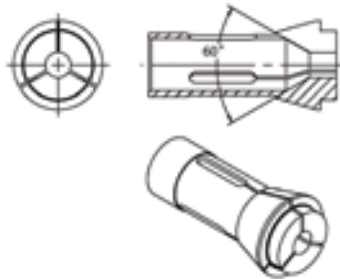
带钨钢的夹头，钨钢硬度HRA89以上



进料60°夹头

Feed prot 60° chuck

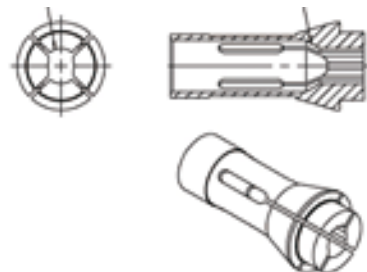
进料口60°，使缓和撞击



异形孔夹头

Irregular hole chuck

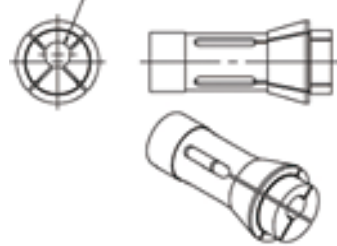
异形孔 60°锥孔，方便进料



偏心圆孔或矩形孔夹头

Off-centre round hole or rectangular hole chuck

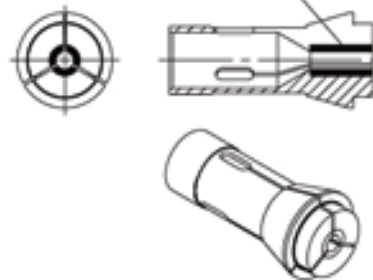
偏心圆孔或偏心矩形孔



带加长钨钢夹头

Chuck with lengthen carbide

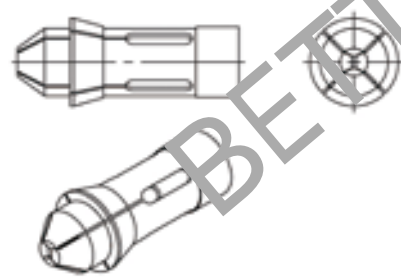
加长钨钢的夹头



S20 SC加长

S20 SC lengthen

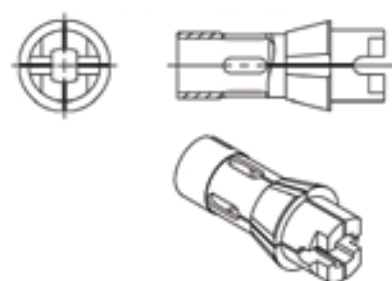
前端加长 四槽等分，受力均匀



L16加长异形夹头(骨钉)

L16 lengthen irregular hole chuck (Bone screw)

骨钉加工专用夹头



后拉及前推夹头内控精度表

Pull back & push forward chuck, internal control accuracy table

测量长度	直径mm	TIR(A级)	TIR(AA级)
10mm	<3	0.005	0.003
3倍径	3~6	0.008	0.005
3倍径	6~10	0.012	0.008
3倍径	10~15	0.015	0.01
3倍径	15~20	0.018	0.012
3倍径	20~25	0.025	0.015
3倍径	30~40	0.03	0.018

后拉及前推夹头内控精度表

ER drill shank automatic control accuracy table

钻柄总长	单面锥面跳动mm	双头锥面同心度mm
≤70	0.003	0.005
70~100	0.003	0.006
100~120	0.003	0.008
120~200	0.003	0.01
200~320	0.004	0.015

主、副轴夹头，导套

Main spindle chuck & vice spindle chuck, bush

本产品主要适用于进口高精度数控车床。本品具有精度高（跳动≤0.002），磨损小，经久耐用等特点。

八瓣爪、荒爪、膜片夹头

Eight pental claw, uncut claw, diaphragm chuck

本产品主要用于超精密气动主轴夹座。本品具有精度高（跳动≤0.001），重复定位精度高特点。主要用于PCB检测，精密刀具检测、薄壁件、脆弱件等精密定位夹持等。

攻牙柄、钻柄

Tapping holder, drilling holder

该产品主要用于钻孔攻丝之用，适用于各种精密数控车床，多轴钻孔机，多轴攻丝机等设备。该产品具有螺纹保护功能，（退刀可拉伸）精度高，可靠性好等特点。

卡爪、开闭爪

Claw, open & close claw

该产品用于主精密数控车床内轴抓母体内，起开关主轴之用，该产品具有可靠性高，耐磨性好等特点。

筒夹夹头、定点移动式筒夹夹头、夹头适配器

Simple clip chuck, fixed-point mobile clip chuck, chuck adapter

夹头套、夹头座、高强度的合金钢通过复杂的热处理工艺，以及高精度的研磨，使本产品具有定位精度高耐磨损，拆卸方便等特点。

ER浮动刀柄 ER Floating chuck

Parallel floating for perfect holes

在车床上使用铰刀时，通常需要补偿卡盘和待加工孔之间的轴误差。此误差可以通过使用自定心浮动刀柄来消除。

PH/PHC/PHC-C/MPH

特性和优点

浮动阻力可调

可在自动定心和自由浮动之间无级调节。浮动运动不受限制。

调节刀具重量

通过调节浮动阻力可以实现最佳设置。

垂直和水平应用

即使在水平方向上，可调式自动定心也可将刀具保持在浮动刀柄的中心。防止出现颤痕并延长刀具使用寿命。

滚珠和滑动轴承组合

结合滚珠和滑动轴承，易于浮动：

- 滚珠轴承在低负荷应用中进行平滑的铰孔
- 滑动轴承在高负荷应用中抵抗高强度压力

双重密封防污

防止冷却液和切屑进入浮动刀柄。

出色钻孔质量

刀具只能进行平行浮动。

PH/ER浮动刀柄

特性 REGO-FIX浮动刀柄是用于铰孔和攻丝的特色工具：

- 特殊设计使刀具可以在垂直和水平方向上自动定心
- 自定心功能可以保证铰孔或攻丝刀具的精准定位。这点在水平方向上的应用中尤其重要，因为在水平方向采用普通浮动刀柄时，刀具的重量通常会使其自身偏离旋转轴。
- 浮动始终平行于旋转轴，旋转既可以是顺时针也可以是逆时针方向

适用于内冷刀具的PHC/ER浮动刀柄

特性 适用于内冷刀具的PHC/ER浮动刀柄专为内部冷却而设计，具有与PH/ER浮动刀柄相同的优势。

浮动刀柄PHC-C/ER REGO-FIX CAPTO

特性 此款REGO-FIX CAPTO浮动刀柄采用山特维克可乐满授权的多边形接口。

用于紧凑空间的MPH/ERMX浮动刀柄

应用 REGO-FIX MPH/ERMX浮动刀柄是应用于紧凑空间中的有效解决方案。

用于紧凑空间内部冷却的MPHC/ERMXC浮动刀柄

应用 MPHC浮动刀柄是内冷功能刀柄的微型版本，在现代化铰孔应用中很常见。



RECOOL 应用于车床

简单、快速地将外冷转变为内冷切削液系统

RECOOL APPLICATING in turning LATHE
Simple, rapidly change external cooling into internal cooling cutting fluid system

特殊解决方案: reCool® RCS/RCR

reCool® 切削液系统可以在2分钟内实现外冷转内冷，目前可供应刀具静止型和刀具旋转型两款。

reCool® 刀具静止型切削液系统RCS (用于瑞士机床)

- 2分钟内将现有外冷型车床改装成内冷型切削液系统，并保证低成本的翻新改造。
- 适用于使用公制螺纹(DIN6499/ISO15488)的ER弹簧夹头的固定刀座*
- 最高切削压力110bar**
- RCS/ERMX 适于乳化液和切削油
- 无需保养
- 使用内冷刀具(选用DS/ER密封环)，使用外冷刀具(选用KS/ER集中冷却环)
- reCool® 刀具静止型切削液系统可适用于相应转换头的内螺纹刀座。
- 使用高压软管RHS-HP,其标准型最大切削压力为100bar

reCool® 刀具旋转型切削液系统RCR

- 2分钟内将现有动力刀座改装成内冷型切削液系统，并保证低成本的翻新改造。
- 适用于使用公制螺纹(DIN6499/ISO15488)的ER弹簧夹头的动力刀座和车床。
- 最高适用转速12,000rpm*
- 高压软管的最高切削压力可达150bar，标准软管可达100bar
- 采用无需保养的切削液润滑式滑动轴承
- 使用内冷刀具(选用DS/ER密封环)，使用外冷刀具(选用KS/ER集中冷却环)
- RCR/ER(M) 适于乳化液和切削油
- 通过reCool® 接头，将动力刀座内螺纹转变成外螺纹。因此，reCool® 可适用于各种类型的动力刀座。
- 不适于机械式密封夹头DM

* RCR/ER40,最高适用6,000 rpm

使用reCool® 切削液系统的优点:

- 优化切削液的供应，将切削液输送至切削刃：提升刀具使用寿命和降低生产周期。
- 最佳切屑移除效果
- 冷却集中，压力没有因飞散和喷洒而损失。



reCool® 刀具静止型切削液系统RCS



reCool® 刀具旋转型切削液系统RCR/ER,RCR/ERM

