株洲广胜硬质合金有限公司

ZHUZHOU GUANGSHENG CEMENTED CARBIDE CO.,LTD.



诚意，合作无间

SINCERITY , CLOSE COOPERATION

湖南·株洲

株洲广胜硬质合金有限公司
ZHUZHOU GUANGSHENG CEMENTED CARBIDE CO.,LTD.



企业简介
COMPANY PROFILE

株洲广胜硬质合金有限公司成立于2005年，坐落于株洲市交通便利、物流发达的董家塅高科技产业园，并在广东东莞、江苏昆山和浙江温岭设有办事处，是一家专业生产硬质合金长条、圆棒，板材，圆片、切削刀片、锯齿、地矿合金、复合片及其他非标硬质合金产品的股份制企业，也是集硬质合金产品研发、生产、经营为一体的厂商和供应商。

在十多年的发展历程中，公司斥资数千万元引进系列高端生产设备，同时引进一批具备从事合金产品材质、模具及其研发的专业技术人才，建立起完善的质量控制体系和技术服务团队，保证了产品生产及其质量的稳定性。本体具有硬度高、耐冲击、耐磨损、形状精确的特点。公司已通过ISO 9001：2008的认证。产品畅销国内，远销东南亚，欧美，非洲等国家和地区。

公司秉承“质量是企业的生命”的企业宗旨，追求高质量全方位的服务理念，务实创新，不断进步。在机械、矿山、航空航天等领域取得国内外用户的一致好评。我们将不断努力，竭尽全力满足客户的需求。衷心希望和您在互惠互利的基础上共同进步。

科技创新 质量保障 服务优良

Science and technology innovation, quality assurance, excellent service

四大基本（4 POINTS）

心态
调整心态 用心做事
团结
团结力量是无穷的
责任
责任是做人的基本
礼仪
尊重他人方可受到尊重

Attitude
Take a correct attitude and work by heart
Teamwork
Teamwork can make miracles
Responsibility
Responsibility is the basic principles
Courtesy
If you respect others firstly, you will get others respect

五大要求（5 REQUIREMENTS）

沟通
做好沟通 事半功倍
细心与耐心
细心做事 耐心改正
效率
看准目标 创造效率
学习
不断学习 提高自我
创新
不断创新 与时俱进

Communication
Good communication and get twice the result with half the effort
Carefulness and patience
Careful work and be patient for correcting
Efficiency
Clear goals, to create efficiency
Learn
Keep learning for self development
Innovation
Be innovative, and advancing with the times

Zhuzhou Guangsheng Cemented Carbide Co., Ltd was established in 2005, and located in Zhuzhou Dongjiaduan High-tech industrial Park with convenient transportation and advanced Logistics. The company has set up offices in Dongguan, GuangDong Province, in Kunshan, Jiangsu Province, in Wenling, Zhejiang Province. We are a professional manufacturer of tungsten carbide strips, rods, plates, round material, cutting inserts, saw tips, geological carbide products, compact and other non-standard special carbide products and also a reliable supplier in cemented carbide products development, production, and operation.

With 10 years of development, the company invested tens of millions to introduce series of advanced production equipment and brought in a batch of professional and technical specialists who have engaged in carbide material, mould and products research and development for many years, and established a perfect quality control system and technical service team to ensure products with high hardness, impact resistance, wear resistance, and shape precision. The company has been awarded ISO 9001:2008 Quality System Certificate. The products are sold well to many countries and regions including southeast Asia, Europe, United States and Africa.

Guangsheng adheres to the "quality is enterprise's life" as company purpose to pursue high quality service concept, pragmatic innovation and continuous improvement. We won customers high praise at home and abroad in machinery, metallurgy, mining, aerospace and other fields. We will strive its best to meet our customers requirements. Sincerely hope make common progress with you on the basis of mutual benefits.

株洲广胜硬质合金有限公司
ZHUZHOU GUANGSHENG CEMENTED CARBIDE CO.,LTD.

公司生产设备
Company production equipments








科技创新 质量保障 服务优良

Science and technology innovation, quality assurance, excellent service

硬质合金检测仪
Cemented carbide detecting instruments



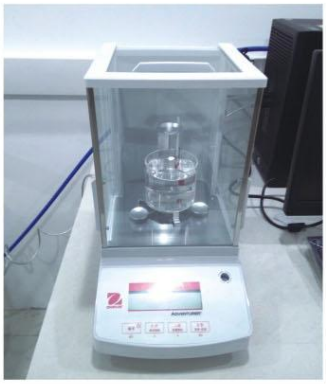
钴磁仪 Cobalt magnetic instrument



矫顽磁力计 Coercimeter



强度仪 Strength tester



密度仪 Density meter



硬度仪 Hardness tester

产品展示
Product display



株洲广胜硬质合金有限公司
ZHUZHOU GUANGSHENG CEMENTED CARBIDE CO.,LTD.

目录 CONTENTS

硬质合金长条 Cemented carbide strips 01

硬质合金板材 Cemented carbide plates 03

硬质合金圆片 Cemented carbide round materials 05

硬质合金地质矿山工具 Cemented carbide mining tools 07

硬质合金三角钻 Cemented carbide triangle drills 10

硬质合金锯齿 Cemented carbide saw tips 12

硬质合金复合片 Cemented carbide compacts 14

硬质合金圆棒 Cemented carbide rods 15

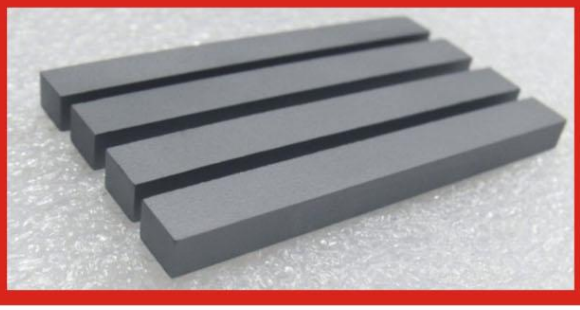
硬质合金刀片 Cemented carbide inserts 16

硬质合金异型产品 Cemented carbide non-standard products 20

硬质合金简单知识 Simple knowledge of cemented carbide 20

硬质合金长条
Cemented carbide strips





主要牌号及推荐用途
Grade,properties and applications

牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS07	K05	7	14.7	93	2000	0.6	超细晶粒，适用于制作加工硬木的刨刀和可转为刀片。 Ultra fine grain, for the production and processing of hardwood planer and indexable inserts.
GS08	K10	6	14.85	92	2200	0.8	超细晶粒，具有很高的耐磨性和韧性，适用于木工工具类，如硬木、刨花板、密度加工。 Fine grain ,high wear resistance and toughness, suitable for woodworking tools such as: hardwood, particle board, density board processing.
GS18	K20	10	14.4	92.2	2610	0.6	超细晶粒，加工硬木用长条的首选牌号，适于制作各类软木和硬木粗加工和一般加工用的各类可转位刀片、成型刀片和刨刀等，也可用于加工中高密度板、也适用于铸铁、有色金属和非金属材料加工，螺旋铣刀专用牌号。 Ultra fine grain, the prefereed grade for processing hardwood strips, suitable for making all kinds of softwood and hardwood rough and general machining all kinds of indexable inserts, molding and planing blade, can also be used for processing the high density board, also applies to cast iron, non-ferrous metals and non-metallic materials processing, Special grade for helical milling cutter.
GS09M	K20	10	14.5	92.5	2780	0.6	超细晶粒，具有超高耐磨性、抗粘结能力和热强性，适用于加工高温合金、不锈钢、高锰钢等材料。 Ultra fine grain, with strong bonding resistance and heat resistance, suitable for processing high temperature carbide, stainless steel, high manganese steel and other materials.
GS20T	K20	11	14.3	91.5	3000	0.8	超细晶粒，具有良好的耐磨性和强度，使用高切削速度和刀具路径量较小。适用于加工木材，胶合板和木条纤维板。 Ultra fine grain, has good wear resistance and strength, to use the high cutting speed and tool path smaller amount. Suitable for processing wood, plywood and fiber board of wood strips.
GS30T	K30	8	14.8	90	2200	1.8	木工长条经济型牌号、性价比高、适用于加工普通木材。 Economic grade for woodworking strips, cost-effective, suitable for processing ordinary wood.

如有特殊要求可按客户提供的要求进行生产。
We can supply tailor-made products of various specifications based on the requirements of our customers.

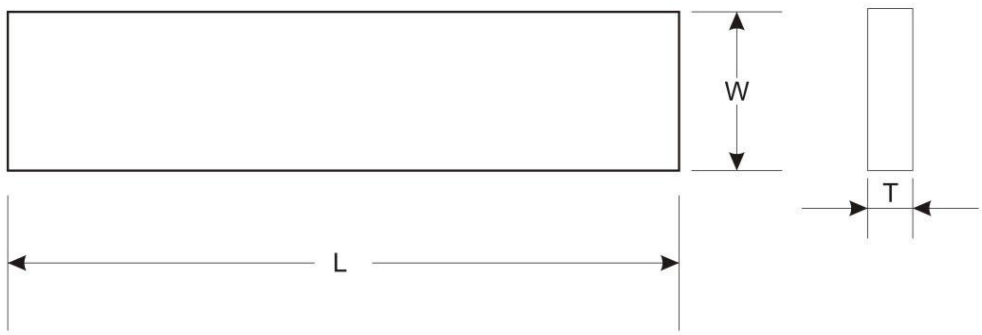




规格
Size

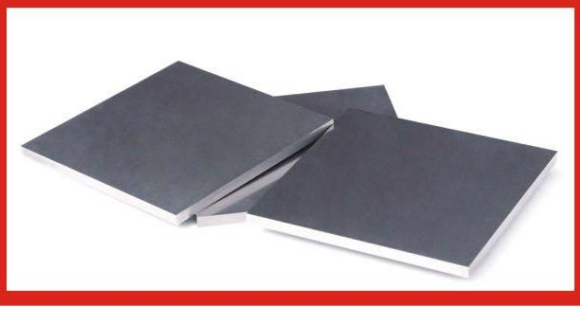
单位：mm

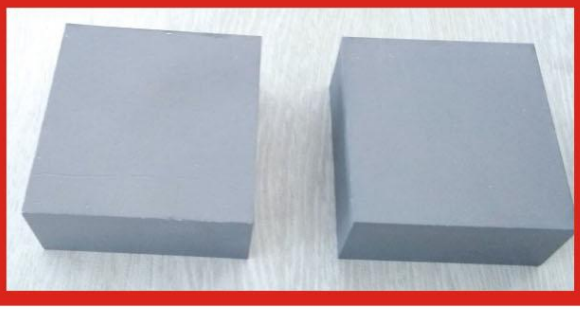
长度 Length	公差 Tolerance	宽度 Width	公差 Tolerance	厚度 Thickness	公差 Tolerance
L≤5	+0.10	W≤2.0	+0.10	T≤1.5	+0.10
5.0<L≤6.0	+0.12	2<W≤4.5	+0.12	T>1.5–2.5	+0.12
6.0<L<10.0	+0.15	4.5<W<6.0	+0.15	T>2.5–4.0	+0.15
10.0≤L<12	+0.18	6.0≤W<10.0	+0.20	T>4.0	+0.18
L>12	+0.2	W>10.0	+0.2		



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硬质合金板材
Cemented carbide plates

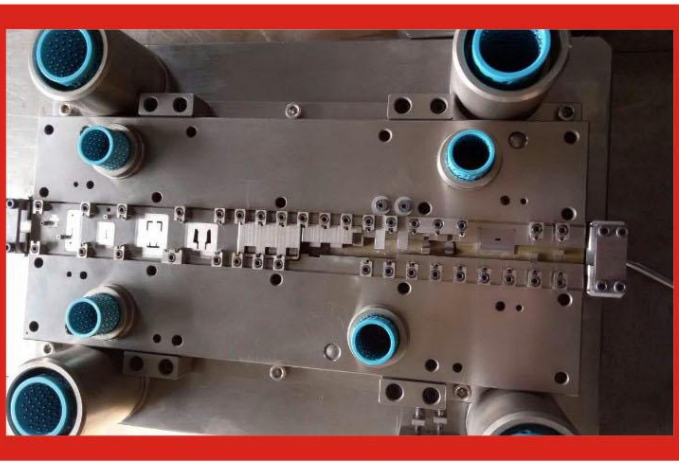


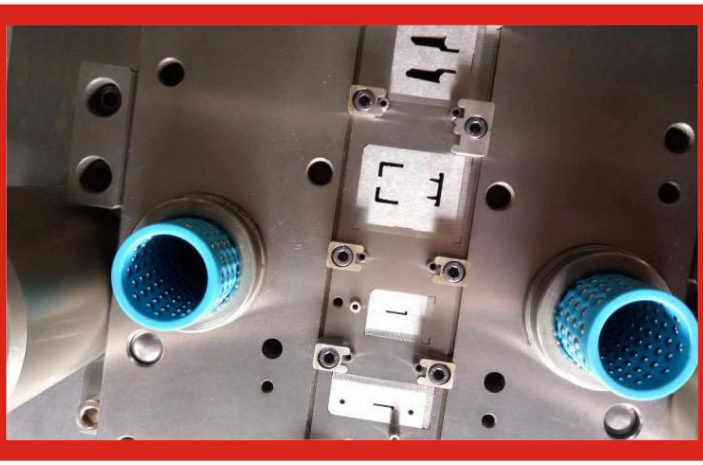


主要牌号及推荐用途
Grade,properties and applications

牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS30B	K30	10	14.4	91.8	2400	0.8	含有10%抗腐蚀粘合剂的亚微米晶粒结构，具有高边缘锐度及非常好的抗耐磨性，但相比更高含量抗腐蚀粘合剂的牌号，抗震性能较差。ISO K-30 牌号在高速冲压下具有理想的抗耐磨性，中薄板材可以压印黄铜、压制铁环、非粘性钢材、冲压模具、冲压切削刀片模具、引线框架（0.30英寸薄铜片）、韧铜、拉伸模(300个不锈钢系列）。 10% corrosion-resistant binder with sub micron grain structure. Very good wear resistance with high edge sharpness but less shock resistance than higher binder grades. ISO K-30 grade with ideal wear resistance in high-speed stamping. Medium and thin sheets, for coining brass, can die ironing rings, non-gummy steels, compacting dies, stamping dies for razor blades, lead frames(thin copper 0.30), annealed copper, draw dies(300 series stainless steel)。
GS35B	K40	12	14.2	90.0	3200	2.0	含有12%抗腐蚀粘合剂的粗晶粒结构，具有高强度的抗冲击性，但抗耐磨性能较差，可用于标准冲压-压制模具、定型模具、锻压模具、冷镦压制，比较适合0.75英寸厚的冷轧钢板模具、冲孔冲击（305不锈钢材质）、以及胶粘刚。 12% corrosion-resistant binder with coarse grain structure. Very high strength for heavy impact with low wear properties. For standard stamping-impacting punches, coining dies, forming dies, can die punches, swaging dies, cold forming, very severe draw dies for 0.75 thick cold-rolled steel, piercing punches (305 stainless steel), gummy steel
GS40B	K40	15	14.0	90.4	3200	0.8	传统粘合剂并添加了15%的钴含量，适用于引线框架并连接冲压的亚微米晶粒结构。具有很高的强度并且对于低强度的冲压有很好的耐磨性。用于冲压切削刀片模具、电火花冲压、引线框架模具、分层压制、弹性钢材冲压、压制模具（硬质金属材料），但不适合于冲压厚度较大的不锈钢材料。 Conventional binder with 15% cobalt with sub micron grain structure for lead frame and connector stamping. Very high strength and excellent wear resistance for low-impact applications.Stamping dies for razor blades, electronic stamping, leadframe dies, lamination, spring steel stamping, crush rolls, coining dies (hard metal). Not recommended for stamping thick stainless steel.

如有特殊要求可按客户提供的要求进行生产。
We can supply tailor-made products of various specifications based on the requirements of our customers.





规格
Size

单位：mm

长度 Length	公差 Tolerance	宽度 Width	公差 Tolerance	厚度 Thickness	公差 Tolerance
105	0.5~1.0	105	0.5~1.0	1	0.5~1.0
105	0.5~1.0	105	0.5~1.0	2	0.5~1.0
105	0.5~1.0	105	0.5~1.0	3	0.5~1.0
105	0.5~1.0	105	0.5~1.0	4	0.5~1.0
105	0.5~1.0	105	0.5~1.0	5	0.5~1.0
105	0.5~1.0	105	0.5~1.0	6	0.5~1.0
105	0.5~1.0	105	0.5~1.0	7	0.5~1.0
105	0.5~1.0	105	0.5~1.0	8	0.5~1.0
105	0.5~1.0	105	0.5~1.0	9	0.5~1.0
105	0.5~1.0	105	0.5~1.0	10	0.5~1.0
105	0.5~1.0	105	0.5~1.0	11	0.5~1.0
105	0.5~1.0	105	0.5~1.0	12	0.5~1.0
105	0.5~1.0	105	0.5~1.0	13	0.5~1.0
105	0.5~1.0	105	0.5~1.0	14	0.5~1.0
105	0.5~1.0	105	0.5~1.0	15	0.5~1.0
105	0.5~1.0	105	0.5~1.0	16	0.5~1.0
105	0.5~1.0	105	0.5~1.0	17	0.5~1.0
105	0.5~1.0	105	0.5~1.0	18	0.5~1.0
105	0.5~1.0	105	0.5~1.0	19	0.5~1.0
105	0.5~1.0	105	0.5~1.0	20	0.5~1.0
105	0.5~1.0	105	0.5~1.0	21	0.5~1.0
105	0.5~1.0	105	0.5~1.0	22	0.5~1.0
105	0.5~1.0	105	0.5~1.0	23	0.5~1.0
105	0.5~1.0	105	0.5~1.0	24	0.5~1.0
105	0.5~1.0	105	0.5~1.0	25	0.5~1.0

如有特殊要求可按客户提供的要求进行生产。
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硬质合金圆片
Cemented carbide round materials





主要牌号及推荐用途
Grade,properties and applications

牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS09M	M10	10	14.5	92.5	2780	0.6	圆片刀首选牌号，适用于低速洗削耐热合金和钛合金，作切断刀和丝锥尤佳。也适用于不锈钢和普通合金钢的精加工和半精加工，加工表壳用钢件和不锈钢效果尤好。 The first choice grade for round material, suitable for low-speed milling of heat-resisting alloys and titanium, especially for cutting knives and taps. Also suitable for finishing and semi-finishing of stainless steel and ordinary steel, especially good effect for processing of steel case and stainless steel.
GS09	K20	9	14.55	91.5	2500	1.0	PCB线路板加工的圆片刀首选牌号，也适用于铸铁、有色金属及合金、非金属材料的精铣，尤其适用于铜、铝、镁等合金的高速洗削。 The preferred grade for processing of PCB circuit board, also suitable for precision milling of cast iron, non-ferrous metals and alloys , non-metallic materials, especially suitable for high speed milling of copper, aluminum and magnesium alloys.
GS18	K20	10	14.4	92.2	2610	0.6	适用于铸铁，有色金属的精加工，半精加工，亦可用于锰钢，淬火钢加工。 Suitable for finishing and semi-finishing of cast iron, non-ferrous metal, also can be used for processing of manganese steel, hardened steel.
GS32T	K30	9	13.9	92.2	2200	1.2	适用于铸铁，有色金属及轻合金的粗加工，非金属材料不平整和间断切削时的粗铣加工和普通PCB线路板切削。 Suitable for roughing of cast iron , nonferrous metals and light alloys, and rough milling of non-metallic materials uneven surfaces and intermittent cutting. Cutting of ordinary PCB circuit board.

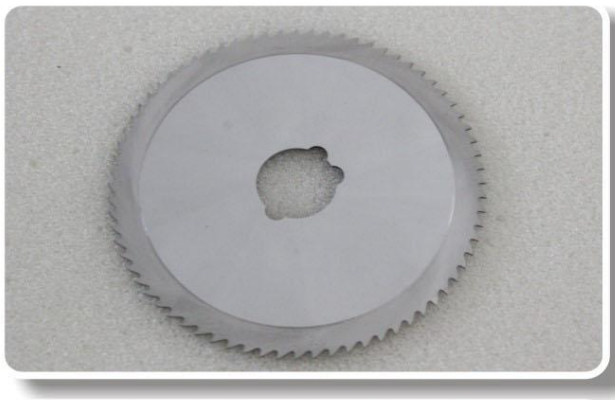
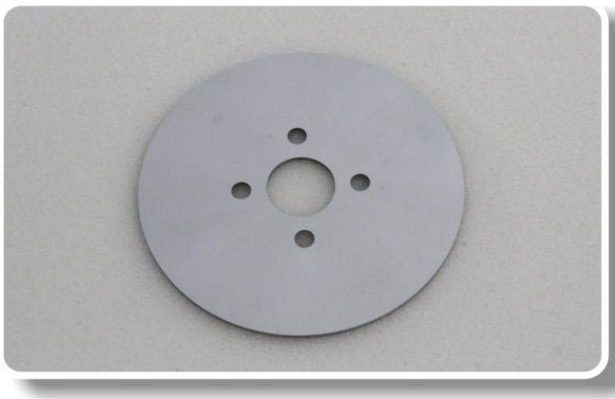
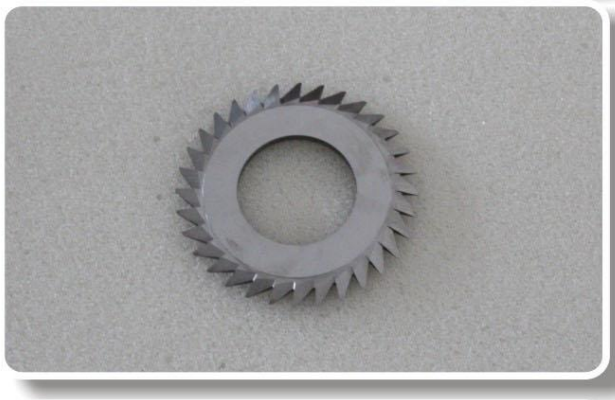
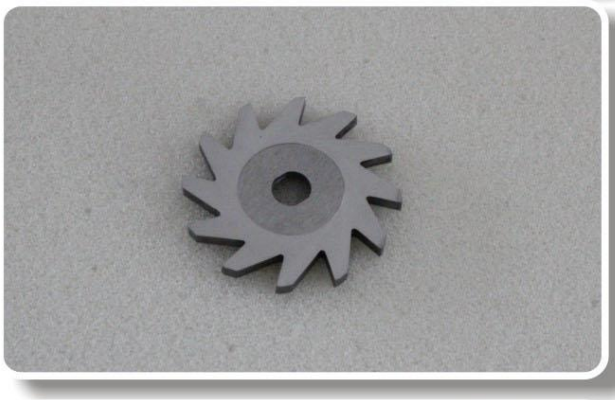
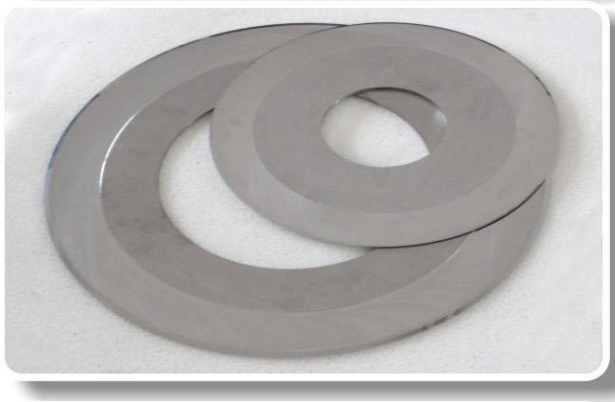
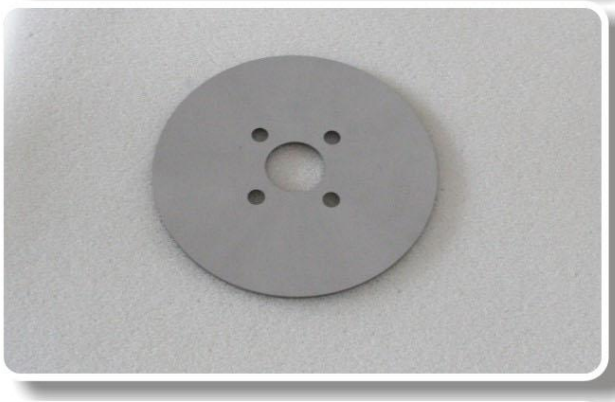
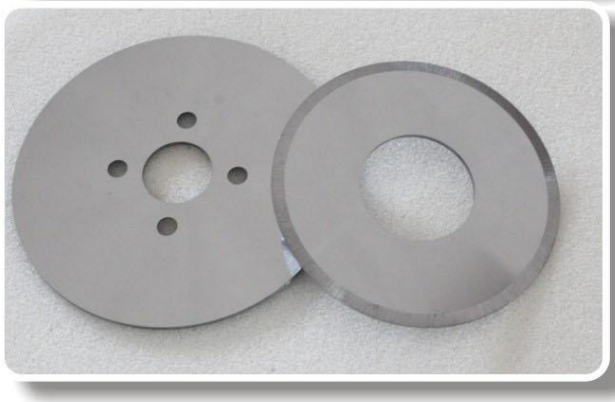
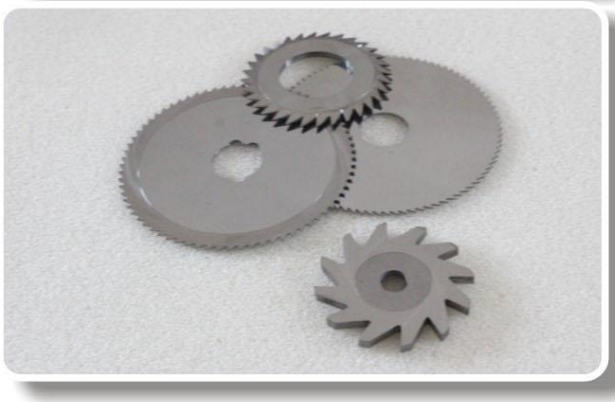
规格
Size

单位：mm

外径 Outer Diameter	公差 Tolerance	内径 Inside Diameter	公差 Tolerance	厚度 Thickness	公差 Tolerance
13~200	1~3	4~40	-0.5~-1.5	0.6~10	0.3~0.5

如有特殊要求可按客户提供的要求进行生产。
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硬质合金圆片刀具
Cemented carbide round material tools

硬质合金地质矿山工具
Cemented carbide mining tools



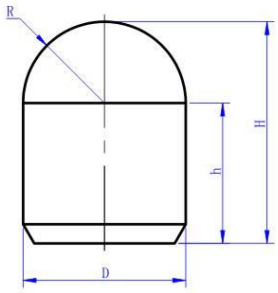


主要牌号及推荐用途
Grade,properties and applications

牌号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS02Q	K20	6	14.93	90.2	2700	2.0	适用于中低风压冷镶齿钻头，钻凿中硬以上的岩层。 Suitable for medium and low air pressure of cold rock drill bit, drilling in the hard rock.
GS01Q	K20	7	14.88	89.5	2800	2.0	适用于中低风压冷镶齿凿岩钻头，有较好的韧性，适于钻凿中硬岩层和砾石。 Applied to medium and low air pressure of cold rock drill bit, good toughness, suitable for drilling in hard rocks and the gravel.
GS35T	K30	10	14.60	89.0	2900	2.0	适用于焊接齿凿岩钻头，钻凿中硬以上岩层。 Suitable for welding of rock drill bit, drill in hard rock.
GS13W	K40	13	14.20	86.5	2800	5.0	主要用于盾构齿、牙轮钻球齿、冲击回转钎片、凿进硬岩层和坚硬岩层。 Mainly applied to the buttons of tricone bits and inserts of rotary percussion bits to cut hard and very hard formations.

如有特殊要求可按客户提供的要求进行生产。
We can supply tailor-made products of various specifications based on the requirements of our customers.

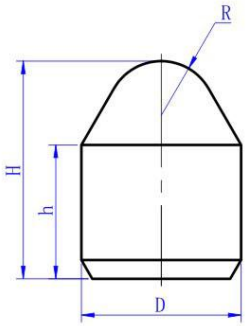
球型齿 Spherical Buttons





型号 Model	基本尺寸 basic size		型号 Model	基本尺寸 basic size	
	直径 Diameter	高度 Height		直径 Diameter	高度 Height
GQ0406	4.2	6	GQ1522	12.5	22
GQ0507	5.2	7	GQ1624	16.2	24
GQ0709	7.2	9	GQ1825	18.2	25
GQ0914	9.5	14	GQ1928	19.2	28
GQ1217	12.2	17	GQ2635	26.2	35
GQ1422	14.2	22	GQ2838	28.5	38

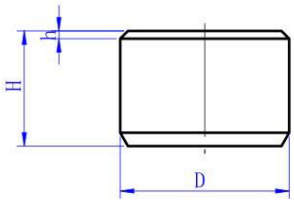
锥型齿 Conical Buttons





型号 Model	基本尺寸 basic size		型号 Model	基本尺寸 basic size	
	直径 Diameter	高度 Height		直径 Diameter	高度 Height
GZ0507	5.45	7	GZ1217	12.35	17
GZ0710	7.45	10	GZ1419	14.35	19
GZ0812	8.35	12	GZ1418	14.80	18
GZ0913	9.25	13	GZ1625	16.35	25
GZ1015	10.25	15	GZ2238	22.35	38

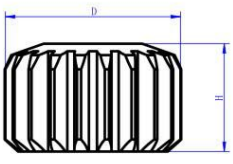
平头齿 Flat Top Buttons

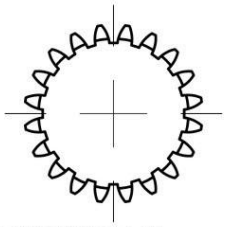




型号 Model	基本尺寸 basic size		型号 Model	基本尺寸 basic size	
	直径 Diameter	高度 Height		直径 Diameter	高度 Height
GP0406	4.30	6	GP0806	8.25	6.9
GP0506	5.30	6	GP1009	10.35	9.6
GP0606	6.76	6	GP1212	12.30	12.0
GP0707	7.50	7	GP1615	16.20	15.0

锯型齿 Serrated Buttons



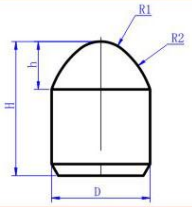




型号 Model	基本尺寸 basic size	
	直径 Diameter	高度 Height
GJ0605	6.5	5.0
GJ0807	8.3	7.0
GJ1106	11.5	6.5
GJ1309	13.0	9.0

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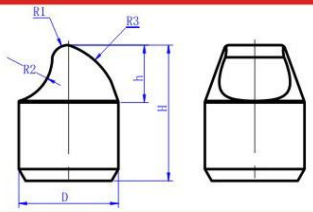
抛物型齿 Parabolic Buttons





型号 Model	基本尺寸 Basic size			型号 Model	基本尺寸 Basic size		
	直径 Diameter	高度 Height	球冠高度 Spherical Crown High		直径 Diameter	高度 Height	球冠高度 Spherical Crown High
GPW0711	7.30	11	3.93	GPW1218	12.35	18	7.6
GPW0812	8.35	12	4.48	GPW1320	13.10	20	7.1
GPW0914	9.25	14	5.00	GPW1422	14.35	22	7.1
GPW1015	10.25	15	5.58	GPW1622	16.50	22	12.5

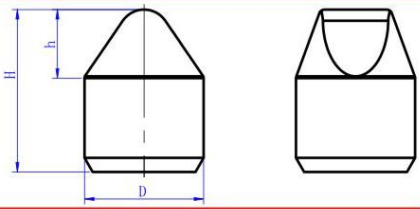
勺型齿 Spoon Buttons





型号 Model	基本尺寸 Basic size			型号 Model	基本尺寸 Basic size		
	直径 Diameter	高度 Height	球冠高度 Spherical Crown High		直径 Diameter	高度 Height	球冠高度 Spherical Crown High
GS0813	8.3	13.0	4.7	GS1619	16.35	19.5	11.1
GS1115	11.5	15.1	6.9	GS1625	16.35	25.4	13.1
GS1320	13.2	20.0	9.4	GS2239	22.80	39.7	21.9
GS1418	14.3	18.0	8.1	GS3047	30.50	47.0	19.5

楔型齿 Wedge Buttons





型号 Model	基本尺寸 Basic size			型号 Model	基本尺寸 Basic size		
	直径 Diameter	高度 Height	球冠高度 Spherical Crown High		直径 Diameter	高度 Height	球冠高度 Spherical Crown High
GX1014	10.35	14	6.0	GX1421	14.50	21.0	8.1
GX1114	11.50	14	7.5	GX1619	16.35	19.5	10.0
GX1217	12.20	17	6.0	GX1828	18.50	28.0	13.3
GX1318	13.20	18	7.5	GX2032	20.50	32.0	15.5

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硬质合金三角钻
Cemented carbide triangle drills



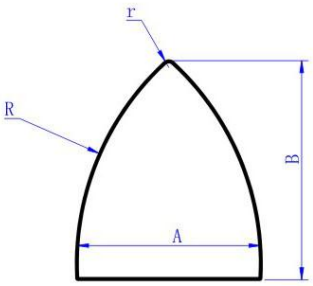


主要牌号及推荐用途
Grade,properties and applications

牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS06	K20	6	14.8	92.3	2600	1.8	三角钻通用牌号，适用于陶瓷、花岗石、瓷砖及砖墙等脆硬材料钻孔。 Common grade for carbide triangle drill, Suitable for drill hole for brittle-hard material, e.g. ceramic, granite, ceramic tile and brack wall.
GS07	K20	7	14.7	93.0	2000	0.6	适用于陶瓷、花岗石、瓷砖及砖墙等脆硬材料钻孔。 Suitable for drill hole for brittle-hard material, e.g. ceramic, granite, ceramic tile and brack wall.
GS10T	K20	7.5	14.6	92.0	2200	1.5	适用于陶瓷、花岗石、瓷砖及砖墙等脆硬材料钻孔。 Suitable for drill hole for brittle-hard material, e.g. ceramic, granite, ceramic tile and brack wall.

如有特殊要求可按客户提供的要求进行生产。
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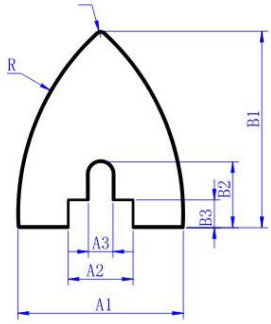
平口三角钻 Flat triangle drill

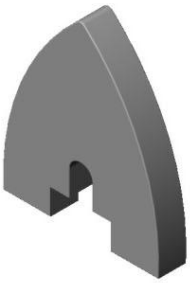




型号 Model	尺寸 Size		
	A	B	R
GST-01	4.45	7.8	10.30
GST-02	5.25	9.2	12.30
GST-03	6.60	8.1	9.52
GST-04	8.40	10.1	14.50
GST-05	10.40	11.2	16.50

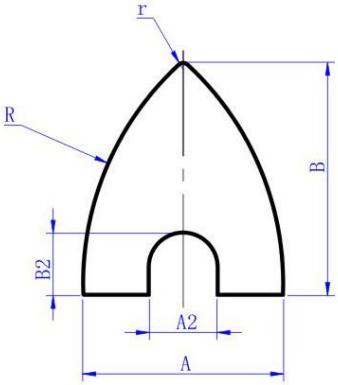
桃形三角钻 Peach shaped triangle drill

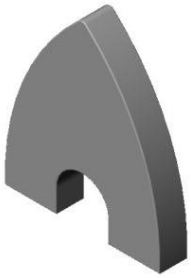




型号 Model	尺寸 Size						
	A_1	A_2	A_3	B_1	B_2	B_3	R_1
GST-20	6.2	4.7	/	11.0	/	1.0	14.3
GST-21	8.2	5.6	2.6	12.0	4.0	0.8	17.1
GST-22	10.2	6.6	3.4	14.0	4.7	1.0	20.3
GST-23	12.2	6.6	3.4	15.5	5.2	1.0	20.3

桃心三角钻 Peach shape triangle drill





型号 Model	尺寸 Size				
	A	A_2	B	B_2	R
GST-6	5.25	1.6	9.2	1.6	12.30
GST-7	6.25	2.0	10.3	2.0	14.30
GST-8	8.25	2.8	12.6	2.5	17.10
GST-9	9.60	3.0	14.6	3.0	20.00
GST-10	10.30	4.5	15.0	3.0	20.30
GST-11	12.30	4.5	17.5	3.5	23.30
GST-12	14.45	4.7	20.5	7.6	20.30
GST-13	16.45	5.4	21.5	8.0	22.40
GST-14	6.60	2.1	11.0	3.5	12.79
GST-15	8.60	2.6	13.6	5.0	16.80
GST-16	10.50	3.0	15.0	5.5	16.93
GST-17	11.60	3.0	15.6	3.0	20.00
GST-18	12.50	5.0	19.0	6.0	22.88
GST-19	14.50	6.0	20.0	7.0	20.72

株洲广胜硬质合金有限公司
ZHUZHOU GUANGSHENG CEMENTED CARBIDE CO.,LTD.

硬质合金锯齿
Cemented carbide saw tips



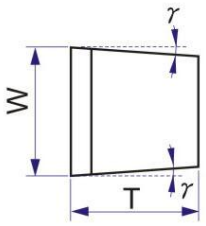


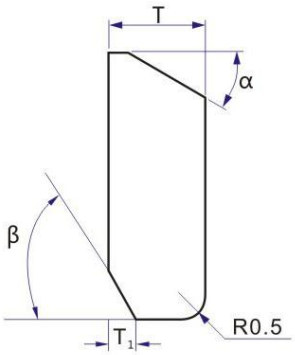
主要牌号及推荐用途
Grade,properties and applications

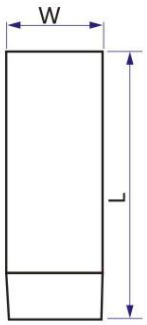
牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
YG6A	K10	6	14.85	92.50	2000	1.0	适用于硬木、中高密度板、铜、铝型材。 Suitable for hardwood, MDF, HDF, cooper and aluminum.
GS08	K10	6	14.85	92.0	2000	0.8	适用于普通木材、PVC、铜、铝型材。 Suitable for ordinary wood, PVC, cooper and aluminum.
GS30T	K30	8	14.80	90.0	2200	1.8	适用于加工普通木材。 Suitable for machining ordinary wood.

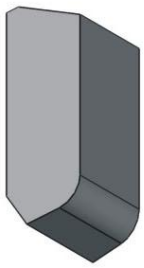
如有特殊要求可按客户提供的要求进行生产。
We can supply tailor-made products of various specifications based on the requirements of our customers.

规格
Size









单位：mm

型号 Model	尺寸 Size					
	L	T	T_1	α	β	γ
GS3318	3.3	1.8	0.5	28.0	65.0	0.0
GS5017	5.0	1.7	0.9	28.0	70.0	0.0
GS6018	6.0	1.8	0.5	20.0	60.0	0.0
GS6020	6.0	2.0	0.8	28.0	70.0	0.0
GS7020	7.0	2.0	0.9	28.0	70.0	0.0
GS7021	7.0	2.1	0.9	28.0	70.0	0.0
GS7025-4°	7.0	2.5	1.2	30.0	70.0	4.0
GS7030	7.0	3.0	0.4		80.0	0.0
GS7525	7.5	2.5	1.2	25.0	70.0	0.0
GS7525-4°	7.5	2.5	1.2	30.0	70.0	4.0
GS7527	7.5	2.7	1.2	25.0	70.0	0.0
GS8025-4°	8.0	2.5	1.2	28.0	70.0	4.0
GS8028	8.0	2.8	1.1	25.0	70.0	0.0
GS8525	8.5	2.5	1.1	25.0	70.0	0.0
GS9025-4°	9.0	2.5	1.1	30.0	70.0	4.0
GS9530	9.5	3.0	1.2	28.0	70.0	0.0
GS1025	10.0	2.5	1.1	30.0	70.0	0.0
GS1030	10.0	3.0	1.1	30.0	70.0	0.0
GS1130	11.0	3.0	2.0	45.0	30.0	0.0
GS1340	13.0	4.0	1.5	30.0	70.0	0.0

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硬质合金复合片
Cemented carbide compacts





主要牌号及推荐用途
Grade,properties and applications

牌号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS15F	K30	12	14.3	89.5	2800	1.0	适用于PCD、PCBN用基体及地矿类。 Suitable for PCD and PCBN matrix.
GS10F	K30	10	14.5	90.0	2400	1.0	适用于PCD、PCBN用基体及地矿类。 Suitable for PCD and PCBN matrix.

规格
Size

单位：mm

直径 Diameter	公差 Tolerance	厚度 Thickness	公差 Tolerance
ϕ8	±0.02	6.5	±0.02
ϕ10	±0.02	3.2	±0.02
ϕ12.7	±0.02	14.5	±0.02
ϕ13.44	±0.02	3.5	±0.02
ϕ13.44	±0.02	4.0	±0.02
ϕ13.44	±0.02	4.5	±0.02
ϕ13.44	±0.02	6.5	±0.02
ϕ13.44	±0.02	6.9	±0.02
ϕ13.44	±0.02	7.0	±0.02

单位：mm

直径 Diameter	公差 Tolerance	厚度 Thickness	公差 Tolerance
ϕ14.96	±0.02	12.2	±0.02
ϕ16	±0.02	24.5	±0.02
ϕ20	±0.02	24.5	±0.02
ϕ48	±0.02	0.5	±0.02
ϕ48	±0.02	0.7	±0.02
ϕ48	±0.02	1.1	±0.02
ϕ48	±0.02	1.5	±0.02
ϕ48	±0.02	2.0	±0.02
ϕ48	±0.02	2.7	±0.02
ϕ61.87	±0.02	6.5	±0.02

如有特殊要求可按客户提供的要求进行生产。
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硬质合金圆棒
Cemented carbide rods





主要牌号及推荐用途
Grade,properties and applications

牌号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GSY10	K30	8	14.6	92	2600	0.6	灰色铸铁 Grey cast iron 非合金钢 Unalloyed steels
GSY15	K20	10	14.5	91.9	3000	0.6	耐腐耐热钢 Corrosion and heat resistant steels 不锈钢 Stainless steels 有色金属 Non ferrous metals 塑料 Plastics
GSY20	K40	12	14.1	92	3200	0.6	耐腐耐热钢 Corrosion and heat resistant steels 不锈钢 Stainless steels 钛合金 Titanium alloys 有色金属 Non ferrous metals

规格
Size

单位：mm

直径 Diameter	公差 Tolerance	长度 Length	公差 Tolerance
ϕ3	+0.4	310-330	+1.0~+1.5
ϕ4	+0.4	310-330	+1.0~+1.5
ϕ5	+0.4	310-330	+1.0~+1.5
ϕ6	+0.4	310-330	+1.0~+1.5
ϕ7	+0.4	310-330	+1.0~+1.5
ϕ8	+0.4	310-330	+1.0~+1.5
ϕ9	+0.4	310-330	+1.0~+1.5
ϕ10	+0.5	310-330	+1.0~+1.5
ϕ12	+0.5	310-330	+1.0~+1.5
ϕ14	+0.5	310-330	+1.0~+1.5

直径 Diameter	公差 Tolerance	长度 Length	公差 Tolerance
ϕ16	+0.5	310-330	+1.0~+1.5
ϕ18	+0.5	310-330	+1.0~+1.5
ϕ20	+0.6	310-330	+1.0~+1.5
ϕ22	+0.6	310-330	+1.0~+1.5
ϕ25	+0.6	310-330	+1.0~+1.5
ϕ28	+0.6	310-330	+1.0~+1.5
ϕ30	+0.8	310-330	+1.0~+1.5
ϕ32	+0.8	310-330	+1.0~+1.5
ϕ35	+0.8	310-330	+1.0~+1.5
ϕ40	+0.8	310-330	+1.0~+1.5
ϕ45	+0.8	310-330	+1.0~+1.5

如有特殊要求可按客户提供的要求进行生产。
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硬质合金刀片
Cemented carbide inserts





主要牌号及推荐用途
Grade,properties and applications

牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS18	K10	10	14.4	92.2	2610	0.6	适用于铸铁、有色金属精加工、半精加工、也可用于锰钢、淬火钢加工。 Suitable for the finishing and semi-finishing of cast iron and nonferrous metals, and also for the machining of manganese steel and hardened steel.
GS15T	K15	6	14.9	92.7	1800	1.8	适用于铸铁、轻合金的粗加工、也可做铸铁、低合金钢铣削加工。 Suitable for the roughing of cast iron and light alloys, also for the milling of cast iron and low-alloy steel.
GS30T	K20	8	14.8	90.0	2200	1.8	适用于铸铁、轻合金的粗加工、也可做铸铁、低合金钢铣削加工。 Suitable for the roughing of cast iron and light alloys, also for the milling of cast iron and low-alloy steel.
GS25P	P20	8	11.4	90.5	1400	1.8	适用于钢、铸钢的精加工和半精加工、宜采用中等进给量专用于钢、铸钢的铣削加工。 Suitable for finishing and semi-finishing of steel and cast steel with a moderate feed rate.

如有特殊要求可按客户提供的要求进行生产。
We can supply tailor-made products of various specifications based on the requirements of our customers.

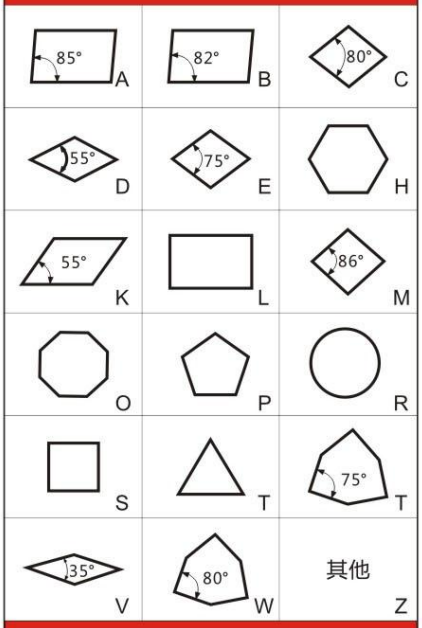




牌 号 Grade	牌号 ISO Grade	粘结相含量 cementing Phase	密度 Density g/cm³	硬度 Hardness HRA ≥	抗压强度 T.R.S ≥MPa	晶粒度 Grain Size μm	推荐用途 Performances & Recommended applications
GS30P	P30	9	12.3	92.5	1900	1.8	适用于钢、铸钢的重切削加工，在作业条件不好的中低速度大进给量粗加工，专用于钢和铸钢的粗铣加工。 Suitable for the heavy cutting of steel and cast steel with a big feed rate at a medium and low speed under unfavorable working conditions.
GS09M	M10	10	14.5	92.5	2780	0.6	适用于不锈钢、普通合金钢的精加工和半精加工。 Suitable for finishing and semi-finishing of stainless steel and conventional alloy steel.
GS20M	M20	8	12.5	91.5	1800	0.8	适用于不锈钢、低合金钢的半精加工，主要用于火车轮箍加工。 Suitable for the semi-finishing of stainless steel and low-alloy steel and it is mainly used for the machining of railway wheel hubs.
GS23	M30	10	13.0	91.5	1650	1.0	适用于耐热合金粗加工。 Suitable for rough machining of heat resisting alloy.

如有特殊要求可按客户提供的要求进行生产。
We can supply tailor-made products of various specifications based on the requirements of our customers.

刀片形状/代号



形状代号

公制

代号	有无孔	有无断屑槽	刀片剖面	代号	有无孔	有无断屑槽	刀片剖面
B	有	无	>65°	N	无	无	
H	有	单面	>65°	R	无	单面	
C	有	无	>65°	F	无	双面	
J	有	双面	>65°	A	有	无	
W	有	无	≤65°	M	有	单面	
T	有	单面	≤65°	G	有	双面	
Q	有	无	≤65°	X	--	--	特殊
U	有	双面	≤65°				

断屑槽及夹固形式

T P K N

主切削刃后角

代号	后角（度）	代号	后角（度）
A	3°	B	5°
C	7°	D	15°
E	20°	F	25°
G	30°	N	0°
P	11°	O	其他的后角

公差



代号	刀尖高度m 公差(mm)	内接圆 ϕD1 公差(mm)	厚度S1 公差(mm)
A	±0.005	±0.025	±0.025
F	±0.005	±0.013	±0.025
C	±0.013	±0.025	±0.025
H	±0.013	±0.013	±0.025
E	±0.025	±0.025	±0.025
G	±0.025	±0.025	±0.13
J	±0.005	±0.05~±0.13	±0.025
K	±0.013	±0.05~±0.13	±0.025
L	±0.025	±0.05~±0.13	±0.025
M	±0.08~±0.18	±0.05~±0.13	±0.13
N	±0.08~±0.18	±0.05~±0.13	±0.025
U	±0.13~±0.38	±0.08~±0.25	±0.13

(参考)M级精度详细情况(按形状、大小分)

● 刀尖高度公差(mm)

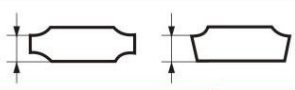
内接圆	正三角形	正方形	80°菱形	55°菱形	35°菱形	圆形
6.35	±0.08	±0.08	±0.08	±0.11	±0.16	--
9.525	±0.08	±0.13	±0.08	±0.11	±0.16	--
12.7	±0.13	±0.15	±0.13	±0.15	--	--
15.875	±0.15	±0.15	±0.15	±0.18	--	--
19.05	±0.15	±0.15	±0.15	±0.18	--	--
25.4	--	±0.18	--	--	--	--

● 内接圆 ϕD1公差(mm)

内接圆	正三角形	正方形	80°菱形	55°菱形	35°菱形	圆形
6.35	±0.05	±0.05	±0.05	±0.05	±0.05	--
9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
12.7	±0.08	±0.08	±0.08	±0.08	--	±0.08
15.875	±0.10	±0.10	±0.10	±0.10	--	±0.10
19.05	±0.10	±0.10	±0.10	±0.10	--	±0.10
25.4	--	±0.13	--	--	--	±0.13

内接圆直径（mm）	刀片形状 C	D	R	S	T	V	W
3.97					06		
5.0			05				
5.56					09		
6.0			06				
6.35	06	07			11	11	
8.0			08				
9.525	09	11	09	09	16	16	06
10.0			10				
12.0			12				
12.7	12	15	12	12	22	22	08
15.875	16		15	15	27		
16.0		19	16				
19.05	19		19	19	33		
20.0			20				
25.0	25	25	25			22	
25.4			25	25		27	
31.75			31				
32			32			33	

切削刃长度



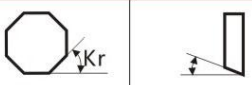
厚度指刀片底面与切削刃最高部分之间的高度

代号	刀片厚度（mm）
00	0.79
T0	0.99
01	1.59
T1	1.98
02	2.38
T2	2.58
03	3.18
T3	3.97
04	4.76
T4	4.96
05	5.56
T5	5.95
06	6.35
T6	6.75
07	7.94
09	9.52
T9	9.72
11	11.11
12	12.70

刀片厚度

15 04 ED T21 R -DM

修光刃



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

切削刃倒棱（mm）

F	0-5°	0-0.10	K
E	1-10°	1-0.15	P
	2-15°	2-0.20	
T	3-20°	3-0.25	W
	4-25°	4-0.30	
S	5-30°	5-0.35	不标
		6-0.40	
		7-0.45	

断屑槽型代号

切削方向

R	右
L	左
N	双向

硬质合金异型产品
Cemented carbide non-standard products





如有特殊要求可按客户提供的要求进行生产。
We can supply tailor–made products of various specifications based on the requirements of our customers.

硬质合金简单知识
Simple knowledge of cemented carbide

硬质合金可分成三大类

P类（YT类）合金主要用于钢材切削加工

K类（YG类）合金主要用于铸铁及有色金属的切削加工及矿山用具

M类（YW类）合金主要用于合金钢切削加工，也可用于钢材和铸铁切削加工

Cemented carbide can be divided into three types :

P type (YT type), mainly used for cutting and machining of steel.

K type (YG type), mainly used for cutting and machining of cast iron and nonferrous metals, and mining tools.

M type (YW type), mainly used for cutting and machining of alloy steel, also for steel and cast iron.

硬质合金不良品判定一般为渗碳，脱碳和有孔洞现象，这些视为材质问题。
The determination of cemented carbide defectives are generally divided into carburization, decarburization and hole phenomenon, these are regarded as material quality problems.
没有材质问题，则有寿命影响问题，视为没有找到合适的牌号或者使用方法不当。
If there is no problem for material quality, then will have life impact problem, these are regarded as not used a suitable grade or improper using method.

一般而言:

颗粒度越细，硬度越高，强度越低

颗粒度越粗相反硬度越低，强度越高

钴含量越多，硬度越低，强度越高，焊接性越高

In general :

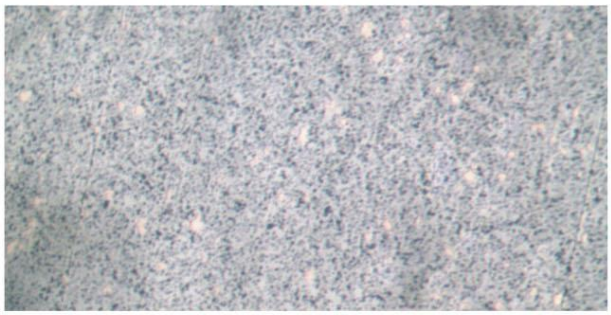
The finer grain size, the higher hardness, the lower strength.

The more coarse grain size, the lower hardness, the higher strength.

The higher the cobalt content, the lower hardness, the higher strength, the higher welding performance.



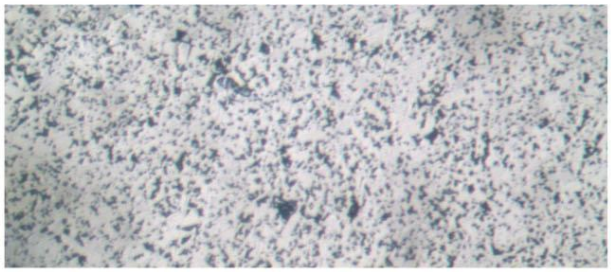
细颗粒产品表面图
Surface picture of fine grain products



细颗粒产品显微镜图
Microscope picture of fine grain products



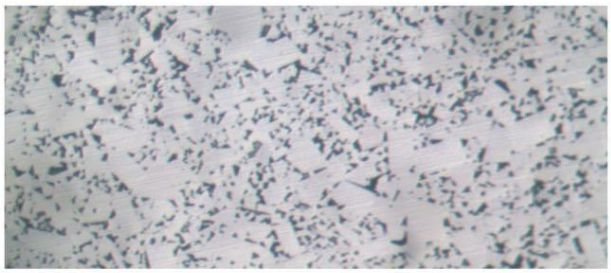
中颗粒产品表面图
Surface picture of medium grain products



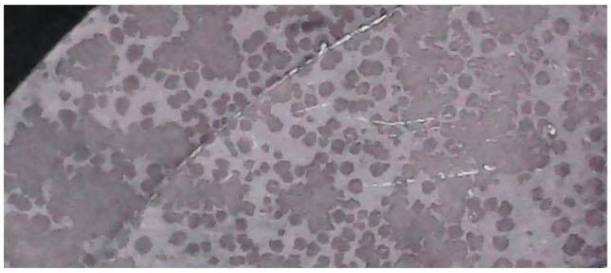
中颗粒产品显微镜图
Microscope picture of medium grain products



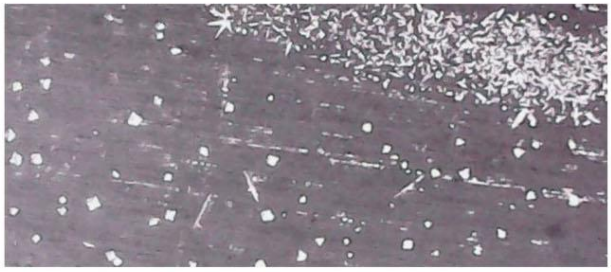
粗颗粒产品表面图
Surface picture of coarse grain products



粗颗粒产品显微镜图
Microscope picture of coarse grain products



渗碳现象
Caburization phenomenon



脱碳现象
Decarburization phenomenon

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