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**株洲创德硬质合金有限公司**

**PREFACE**

Zhuzhou Chuangde Cemented Carbide Co., Ltd was founded in 2009, Zhuzhou Hunan China. "CD Carbide" is our brand.

We are a producer of cemented carbide, including carbide saw tips, carbide roll rings, carbide disc cutters, carbide rods ,etc. And specialized inwateriet nozzles.We have highly qualified, motivated and experienced employees who areproviding synergies in our company which are necessary to create andguarantee high-quality and long-lasting solutions for our customers. We provide a worldwide distribution network .As a medium- sizedcompany we react fast and we are flexible to our customer requirementsBased on partnership, we supply suitable solutions for the respective needs.

**株洲创德硬质合金有限公司**  
ZHUSHOU CHUANGDE CEMENTED CARBIDE CO., LTD

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**Tungsten Carbide**  
**10+ Years**  
 Experience in Manufacturing Cemented Carbide.  
 One-stop Customized Service.

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**Tungsten Carbide Cutter**

- ★ Raw material
- ★ Stable properties
- ★ Long working life

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**Tungsten Alloy/Pure Tungsten Material**

★ Tungsten Ball ★ Tungsten Cylinder Weight ★ Tungsten Sheet Strip ★ Tungsten Rod Bar

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## 目录

### 一、硬质合金锯齿及其小制品系列

Cemented carbide serrated and small products

1、硬质合金锯齿系列	1
Series of carbide saw tips	
2、冲击钻片产品系列	15
Series of carbide tips for percussion drill	
3、其它小制品	16
Other small products	

### 二、硬质合金切削刀片系列

Cemented carbide inserts

1、硬质合金刀片牌号物理化学性能及用途推荐	20
Physical and mechanical properties of grades for cemented carbide inserts and their applications recommended	
2、焊接式硬质合金刀片使用说明	22
A guide to the applications of cemented carbide brazed tips	
3、硬质合金刀片材质选择要领	23
Carbide blade quality choose the point	
4、硬质合金机夹刀片产品型号表示规则及基本参数	24
The rigid alloy machine clip blade product model represents the rules and basic parameters	
5、产品索引	27
Product index	
6、硬质合金机夹车削刀片	29
Carbide machine clip cutting blade	
7、硬质合金铣削刀片	41
Carbide milling cutter	
8、硬质合金精磨铣削刀片	45
Cemented carbide finishing milling blade	
9、切槽、切断刀片	46
Cut and cut the blade	
10、凹圆弧成型车刀和轮毂车刀	47
Concave arc forming tool and wheel Gu turning tool	
11、国家标准焊接刀片	48
National standard welding blade	
12、国际标准焊接刀片	58
International standard welding blade	
13、73系列焊接刀片	61
Series 73	
14、81系列焊接刀片	66
Series 81	
15、83系列焊接刀片	70
Series 83	

16、85系列焊接刀片.....72  
Series 85

17、89系列焊接刀片.....74  
Series 89

### 三、硬质合金拉拔模坯系列

Cemented carbide dies

1、拉伸模坯.....81  
Drawing die blanks

2、冷墩冷冲模坯.....92  
Cold upsetting die blanks

### 四、硬质合金耐磨材料系列

Cemented carbide wear-resisting material

1、模压棒材产品系列.....95  
Moulded rod products series

2、板材、长条产品系列.....98  
Plank, long line product series

### 五、矿用硬质合金系列

Cemented carbide for mining

钻具用硬质合金.....101  
Carbide for drilling tools

### 六、金属粉末系列

Metal powder

1、碳化钨粉.....127  
Tungsten carbide powder

2、合金粉末.....128  
Alloy powder

3、锌熔合金粉末.....129  
Zinc reclaimed cemented carbide powder

4、碳化钨-碳化钛固溶体粉末.....129  
Tungsten carbide-Titanium carbide solid solution powder

5、钴粉.....130  
Cobalt powder

6、钨粉.....131  
Tungsten powder

## 一、硬质合金锯齿及小制品系列 Cemented carbide serrated and small products

### ◎硬质合金锯齿系列 Series of carbide saw tips

#### 硬质合金锯齿牌号性能及用途推荐

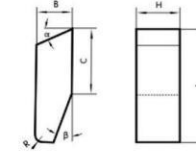
牌号 Grade	粘结相%	密度 g/cm <sup>3</sup>	硬度 Hardness HRA(HV)		抗弯强度 TRS Mpa	晶粒度 μm	推荐用途 Applications recommended
			HV10	HRA			
JD6	12	14.00	1350	89.5	1700	1.6	可用于普通切草锯片以及普通木材的加工 Can be used for ordinary according to piece as well as ordinary wood cut grassMaterial processing
JD20	7	14.70	1400	90.0	2300	1.6	适用于普通木材切割锯片 Suitable for common wood cutting saw blade
JD25	8.5	14.60	1350	89.5	2500	1.6	适用于普通木材切割锯片、亦可用于普通切铝锯片 For the cutting of ordinary wood, also for aluminum
JD1	5.5	15.00	1550	91.5	2200	1.2	适用于硬木、中高密度板、复合板的加工 Applicable to the hardwood, the high density board, composite Plate processing
JX5	7	14.85	1500	91.0	2300	1.2	适用于实木、复合板、及铝合金切割锯片 Suitable for hardwood, medium high density board, composite Plate processing
JX5A	5	14.90	1580	91.8	2300	1.2	适用于实木、复合板、铝材的加工 Applicable to real wood, composite panels, aluminum processing
JX6	6	14.95	1500	91.0	2300	1.2	普通木材切割锯 Common wood cutting saw
JX8	8	14.75	1450	90.5	2500	1.2	适用于普通木材、旧木、切铝锯片 Suitable for common wood, old wood, cut aluminum Saw blade
JX14	4	15.10	1640	93.3	2500	0.8	适用于硬木、中高密度板、复合板的加工 Suitable for hardwood, medium high density board, composite Plate processing

注：上述牌号所标明的参数均为典型值。

牌号 Grade	粘结相%	密度 g/cm <sup>3</sup>	硬度 Hardness HRA(HV)		抗弯强度 TRS Mpa	晶粒度 μm	推荐用途 Applications recommended
			HV10	HRA			
JX19	9	14.60	1450	90.5	2500	1.0	适用于铝合金及铜、铅等有色金属专业切割锯片 Applies to the cutting of aluminum Copper and lead, non-ferrous
JX16	6	14.90	1640	92.2	2400	1.0	适用于硬木、中密板等加工，也可用于铸铁和有色金属的精加工 Suitable for hard wood, medium plate and other processing, alloy can be used in fine machining of cast iron and nonferrous metals
JC04	10	14.45	1650	92.3	3200	0.8	适用于软木、硬木的粗加工和一般加工用的各类可转位刀片、刨刀、长条、圆棒等 Suitable for rough machining and a softwood and hardwood processing with all kinds of indexable insert, plane knife, bar, round bar, etc
JC05	6.5	14.70	2000	94.0	3000	0.6	适用于加工硬木、中高密度板等板材，也可用于铝型材的加工 Suitable for processing and hardwood, high density board such as plate, also can be used in the processing of aluminum
JC06	6.5	14.75	2050	94.3	3500	0.6	加工高密度板、软木、纤维板等不含腐蚀性板材的加工，也可用于加工高硬度高强度的金属合金等 Processing and high density board, cork, Fiber board etc. No corrosive plate processing, can also be used in processing of high hardness, high strength of metal alloys etc.
JC07	2.4	15.20	2120	94.5	2500	0.6	适用于刨花板、高密度板、胶合板等腐蚀性材料的加工 Suitable for particle board, high density board, glue corrosion materials such as plate processing
JC08	2.2	15.25	2200	94.8	2400	0.4	刨花板加工首选牌号，也适用于加工高密度板、胶合板等腐蚀性材料 Particle board processing preferred brand, also applies to processing and high density board, plywood and other corrosive material

注：上述牌号所标明的参数均为典型值。

常规锯齿标准代号尺寸对照表



型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	α°	β°	R
JX3016	3.0	1.6	2.5	10	40	0.5
JX4012	4.0	1.2	2.7	30	17	0.5
JX4013	4.0	1.3	2.7	20	20	0.5
JX4014	4.0	1.4	2.7	30	19	0.3
JX4020	4.0	2.0	3.0	10	35	0.5
JX4215	4.2	1.5	2.7	30	20	0.5
JX4314T	4.3	1.4	3.5	30	20	0.6
JX4514	4.5	1.4	3.0	28	15	0.6
JX4514T	4.5	1.4	3.0	33	25	0.5
JX4514R	4.5	1.4	3.4	30	20	0.5
JX4515	4.5	1.5	3.5	30	27	0.5
JX4518R	4.5	1.8	2.5	15	17	0.3
JX4615	4.6	1.5	3.6	30	26.6	0.5
JX4713	4.7	1.3	3.4	33	-	0.5
JX4714	4.7	1.4	3.2	30	20	0.5
JX4714A	4.7	1.4	3.7	25	20	0.5
JX4714Z	4.7	1.4	3.1	30	17	0.5
JX4714P	4.7	1.4	3.1	30	18	0.5
JX4715-B	4.7	1.5	-	30	30	0.5
JX47155	4.7	1.6	3.5	30	17	0.5
JX4814	4.8	1.4	2.7	27	14	0.3
JX4815	4.8	1.5	3.8	25	23	0.5
JX4815T	4.8	1.5	3.7	30	20	0.5
JX4815R	4.8	1.5	2.9	20	15	0.5
JX4815Z	4.8	1.5	3.2	30	17,21	0.5
JX4816	4.8	1.6	3.5	30	17	0.5
JX5013	5.0	1.3	3.9	20	15	0.5

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We can produce moulds as per your drawings and samples to the production of saw tips with different shapes and sizes.

型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX5013A	5.3	1.3	3.9	30	15	0.5
JX5014	5.0	1.4	3.5	30	15	0.5
JX5014A	5.0	1.4	3.5	20	15	0.5
JX5015	5.0	1.5	3.5	20	20	0.5
JX5015A	5.0	1.5	4.0	30	26.5	0.5
JX5015D	5.0	1.5	3.6	30	0.5*45	0.5*45
JX5015R	5.0	1.5	3.1	30	15	0.5
JX5016	5.0	1.6	4.0	30	22	0.5
JX5016A	5.0	1.6	4.3	25	0.7*45	0.6
JX5016B	5.0	1.6	3.4	20	30	0.5
JX5016C	5.0	1.6	3.8	25	20	0.5
JX5016D	5.0	1.6	3.0	33	14	0.2
JX5016P	5.0	1.6	3.7	20	22	0.5
JX5016K	5.0	1.6	3.0	25	17	0.5
JX5016Z	5.0	1.6	3.3	30	17	0.5
JX5017	5.0	1.7	3.7	20	17.1	0.2
JX5017A	5.0	1.7	3.5	25	25	0.5
JX5017B	5.0	1.7	3.1	25	18	0.5
JX5018A	5.0	1.8	3.5	30	22	0.5
JX5018B	5.0	1.8	3.4	25	20	0.5
JX5018R	5.0	1.8	3.0	15	17	0.3
JX5020	5.0	2.0	4.1	25	30	0.3*45
JX5020A	5.0	2.0	4.1	25	30	0.3*45
JX5020B	5.0	2.0	3.1	15	15	0.3*45
JX5022	5.0	2.2	2.5	30	15	0.5
JX5030	5.0	3.0	3.4	30	37	0.5
JX5035	5.0	3.5	3.4	30	37	0.5
JX5216	5.2	1.6	3.5	25	20	0.5
JX5216A	5.2	1.6	3.8	20	20	0.5
JX5216G	5.2	1.6	3.2	21	14	0.5
JX5217	5.2	1.7	3.3	30	20	0.6
JX5218	5.2	1.8	3.8	18	40	0.5

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型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX5220	5.2	2.0	2.7	30	15	0.5
JX5315	5.3	1.5	3.8	20	20	0.5
JX53155	5.3	1.6	4.3	28	15	0.5
JX5315A	5.3	1.5	4.0	30	20	0.5
JX5316	5.3	1.6	4.0	30	20	0.5
JX5316A	5.3	1.6	3.5	25	20	0.5
JX5316D	5.3	1.6	3.9	20	20	0.5
JX5316T	5.3	1.6	3.6	33	15.6	0.5
JX5316P	5.3	1.6	3.7	30	20	0.5
JX5317	5.3	1.7	4.1	10	18	0.5
JX5317B	5.3	1.7	4.1	30	20	0.5
JX5318	5.3	1.8	3.4	25	20	0.5
JX5320	5.3	2.0	3.5	25	30	0.5
JX5417	5.4	1.7	4.1	20	20	0.5
JX5514	5.5	1.4	4.1	30	12	0.5
JX5514X	5.5	1.4	4.1	20	12	0.2
JX5515A	5.5	1.5	4.3	28	15	0.5
JX5515B	5.5	1.5	5.0	30	45	0.8
JX5515C	5.5	1.5	3.6	15	20	0.5
JX5515R	5.5	1.5	3.9	20	14	0.5
JX55155	5.5	1.6	4.3	28	15	0.5
JX5516	5.5	1.6	4.3	28	15	0.5
JX5516A	5.5	1.6	-	30	14	0.5
JX5516B	5.5	1.6	3.9	20	14	0.5
JX5516C	5.5	1.6	4.3	28	15	0.5
JX5516D	5.5	1.6	3.7	30	21	0.5
JX5516G	5.5	1.6	3.5	19	14	0.5
JX5517	5.5	1.7	3.7	15	20	0.5
JX5517A	5.5	1.7	4.2	30	20	0.5
JX5517B	5.5	1.7	3.7	30	21	0.5
JX5517C	5.5	1.7	3.7	25	21.2	0.5
JX5517Z	5.5	1.7	3.7	30	16.3	0.5

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型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX5517Y	5.5	1.7	3.8	30	18	0.5
JX5518	5.5	1.8	3.7	30	24	0.5
JX5518A	5.5	1.8	3.9	25	25	0.5
JX5518G	5.5	1.8	-	25	45	0.5
JX5518R	5.5	1.8	4.0	30	22	0.5
JX5518P	5.5	1.8	3.6	30	20	0.5
JX5520A	5.5	2.0	3.4	30	20	0.5
JX5716	5.7	1.6	4.3	30	20	0.5
JX5717	5.7	1.7	4.3	30	20	0.5
JX5717C	5.7	1.7	4.3	30	20	0.5
JX5718	5.7	1.8	4.4	30	30	0.5
JX5719	5.7	1.9	4.4	25	25	0.5
JX5815	5.8	1.5	4.6	30	14	0.5
JX5816	5.8	1.6	3.9	30	20	0.5
JX5817	5.8	1.7	4.4	30	20	0.5
JX5818	5.8	1.8	3.0	30	15	0.5
JX5818A	5.8	1.8	4.5	25	30	0.5
JX5818B	5.8	1.8	3.8	30	20	0.5
JX5819G	5.8	1.9	-	23	-	0.5
JX5820	5.8	2.0	4.6	23	26	0.3
JX5820K	5.8	2.0	-	25	18	0.5
JX5916	5.9	1.6	4.4	30	17	0.5
JX5919T	5.9	1.9	4.3	30	20	0.6
JX6015	6.0	1.5	4.8	28	15	0.5
JX6016	6.0	1.6	4.6	30	20	0.5
JX6017	6.0	1.7	4.6	30	20	0.5
JX6017R	6.0	1.7	4.4	20	17	0.5
JX6018	6.0	1.8	4.5	20	20	0.5
JX6018A	6.0	1.8	4.6	30	20	0.5
JX6018B	6.0	1.8	4.4	30	20	0.5
JX6018C	6.0	1.8	4.2	25	24	0.5
JX6018E	6.0	1.8	4.5	12	23	0.5

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型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX6018F	6.0	1.8	3.5	20	20	0.5
JX6018G	6.0	1.8	4.5	17	18	0.5
JX6018Z	6.0	1.8	4.0	30	20	0.5
JX6019A	6.0	1.9	4.0	17	20	0.5
JX6019B	6.0	1.9	4.0	30	17	0.5
JX6019C	6.0	1.9	4.4	30	17	0.5
JX6020	6.0	2.0	4.4	25	20	0.5
JX6020A	6.0	2.0	5.5	28	45	1
JX6020B	6.0	2.0	3.0	25	0.8	0.5
JX6020C	6.0	2.0	4.0	20	17	0.5
JX6020D	6.0	2.0	1.5	15	18	0.5
JX6020G	6.0	2.0	4.0	25	22	0.2*45
JX6020H	6.0	2.0	3.6	21	16	0.5
JX6020K	6.0	2.0	4.0	25	15	0.5
JX6022	6.0	2.2	4.0	25	31	0.4
JX6022A	6.0	2.2	4.5	30	31	0.5
JX61185	6.1	1.9	4.0	25	21	0.2*45°
JX6216A	6.2	1.6	4.6	17	30	0.5
JX62216	6.2	2.16	3.8	20	30	0.5
JX6218	6.2	1.8	3.7	30	15	0.5
JX6219	6.2	1.9	4.8	30	20	0.5
JX6220B	6.2	2.0	4.2	30	20	0.5
JX6223	6.2	2.3	4.3	25	31	0.2
JX6318	6.3	1.8	4.2	30	16	0.5
JX6319	6.3	1.9	4.3	20	18	0.5
JX6319A	6.3	1.9	4.2	25	23	0.2
JX6320	6.3	2.0	-	30	25	0.5
JX6320G	6.3	2.0	3.9	33	16	0.5
JX6320K	6.3	1.9	-	30	24	0.5
JX6320Z	6.3	2.0	4.2	30	18	0.5
JX6321	6.3	2.1	4.5	30	30	0.5
JX6517	6.5	1.7	4.3	25	18	0.5

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型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX6517A	6.0	1.7	4.3	30	20	0.5
JX6518	6.5	1.8	5.7	25	45	0.5
JX6518B	6.5	1.8	5.7	25	45	0.5
JX6520	6.5	2.0	4.5	27	26	0.2*45
JX6520B	6.5	2.0	4.0	26	16	0.5
JX6520C	6.5	2.0	5.4	20	15	0.5
JX6520D	6.5	2.0	4.5	30	20	0.5
JX6520E	6.5	2.0	4.5	12	20	0.5
JX6520F	6.5	2.0	4.4	25	20	0.5
JX6520G	6.5	2.0	5.1	20	25	0.5
JX6520R	6.5	2.0	4.3	20	17	0.5
JX6523	6.5	2.3	4.6	20	20	0.5
JX6524A	6.5	2.4	4.3	30	27	0.5
JX6522	6.5	2.2	4.9	30	29	0.5
JX6525	6.5	2.5	4.3	25	20	0.5
JX6622T	6.6	2.2	4.7	30	25	0.6
JX6720	6.7	2.0	5.1	30	20	0.5
JX6817	6.8	1.7	4.6	25	17.6	0.2*45
JX6820	6.8	2.0	4.8	20	15	0.5
JX7018	7.0	1.8	5.4	20	20	0.5
JX7020	7.0	2.0	5.4	20	20	0.5
JX7020B	7.0	2.0	5.4	30	20	0.5
JX7021	7.0	2.1	6.0	30	20	0.5
JX7022	7.0	2.2	5.5	25	30	0.5
JX7022A	7.0	2.2	5.5	30	20	0.5
JX7022F	7.0	2.2	5.0	12	21	0.5
JX7023	7.0	2.3	5.1	30	30	0.5
JX7025	7.0	2.5	4.8	14	28	0.3
JX7025B	7.0	2.5	4.0	5	22	0.4
JX7025X	7.0	2.5	5.0	25	22	0.5
JX7028G	7.0	2.8	5.0	13	30	-
JX7030	7.0	3.0	4.1	30	30	0.5

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型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX7221	7.2	2.1	5.1	13	23	0.5
JX7223	7.2	2.3	4.5	25	30	0.5
JX7320	7.3	2.0	5.1	25	31	0.2
JX7418	7.4	1.8	5.1	22	20	0.5
JX7520	7.5	2.0	6.7	28	45	1
JX7522	7.5	2.2	5.0	30	20	0.5
JX7522X	7.5	2.2	5.1	20	16	0.5
JX7523	7.5	2.3	5.0	27	19	0.5
JX7523A	7.5	2.3	5.3	25	31	0.2*45
JX7523B	7.5	2.3	2.5	25	27	0.5
JX7524	7.5	2.4	0.5*45	5.8	22	30
JX7524A	7.5	2.0	-	5	30	24
JX7525	7.5	2.5	5.3	30	30	0.5
JX7525H	7.5	2.5	5.3	28	24	0.8
JX7525E	7.5	2.5	5.0	12	20	0.5
JX7530	7.5	3.0	5.0	25	30	0.5
JX7723	7.7	2.3	5.4	25	25	0.5
JX7821	7.8	2.1	5.5	27	14	0.5
JX7828	7.8	2.8	5.2	25	20	0.5
JX8020	8.0	2.0	5.5	27	13	0.5
JX8021	8.0	2.1	6.0	30	20	0.5
JX8022	8.0	2.2	5.8	25	17 $\times$ 39	0.2
JX8022R	8.0	2.2	5.6	30	16	0.5
JX8022X	8.0	2.2	5.6	20	16	0.5
JX8023	8.0	2.3	5.3	28	20	0.5
JX8023A	8.0	2.3	6.6	28	34	1
JX8023B	8.0	2.3	5.8	25	20	0.2
JX8023F	8.0	2.3	5.0	25	20	0.5
JX8023H	8.0	2.3	6.8	2.8	34	0.5
JX8023G	8.0	2.3	5.4	25	26	0.5
JX8024	8.0	2.4	5.7	12	23	0.5
JX8024A	8.0	2.4	5.6	25	25	0.5

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	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX8024C	8.0	2.4	5.4	20	19	0.5
JX8024D	8.0	2.4	5.4	30	20	0.5
JX8024E	8.0	2.4	6.9	40	20	0.5
JX8024X	8.0	2.4	5.4	20	19	0.5
JX8025	8.0	2.5	5.5/4.0	25/28	31/15	0.2*45/0.75
JX8025A	8.0	2.5	5.5	25	31	0.2*45
JX8025B	8.0	2.5	5.4	20	20	0.5
JX8025C	8.0	2.5	1.8	15	21	0.5
JX8027	8.0	2.7	5.5	25	20	0.5
JX8030	8.0	3.0	6.8	25	45	1
JX8030B	8.0	3.0	5.1	25	30	0.6
JX8223	8.2	2.3	5.7	29	22	0.5
JX8224	8.2	2.4	5.5	25	20	0.5
JX8225	8.2	2.5	5.5	25	25	0.5
JX8228	8.2	2.8	5.8	25	28	0.5
JX8424	8.4	2.4	6.8	30	30	0.5*45
JX8520	8.5	2.0	6.0	30	16	-
JX8522R	8.5	2.2	5.9	30	19	0.5
JX8524	8.5	2.4	5.5	30	20	0.5
JX8523	8.5	2.3	5.7	25	20	0.5
JX8525	8.5	2.5	5.9	30	23	0.5
JX8525A	8.5	2.5	2.6	20	20	0.5
JX8525B	8.5	2.5	6.3	25	30	0.6
JX8525H	8.5	2.5	5.5	25	20	0.5
JX8528	8.5	2.8	6.0	27	13	0.2*45°
JX8528A	8.5	2.8	6.0	20	20	0.5
JX8529	8.5	2.9	6.0	27	27	0.2*45°
JX8530	8.5	3.0	6.0	27	27	1
JX8531	8.5	3.1	6.0	27	27	0.2*45°
JX8533	8.5	3.3	6.0	27	13	0.2*45°
JX8724	8.7	2.4	5.8	25	20	0.5
JX8732	8.7	3.2	6.0	30	30	0.6

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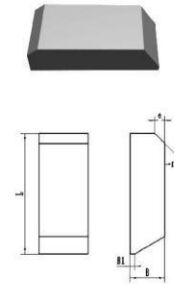
型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX8819	8.8	1.9	6.0	25	18	0.5
JX8826	8.8	2.6	6.0	25	25	0.5
JX8826B	8.8	2.6	5.0	25	20	0.5
JX8830	8.8	3.0	5.8	9	20	0.5
JX9023	9.0	2.3	5.3	28	20	0.5
JX9023A	9.0	2.3	6.7	20	25	0.2
JX9024	9.0	2.4	6.0	28	30	0.5
JX9025	9.0	2.5	8.5	28	57	1
JX9025A	9.0	2.5	5.3	28	20	0.5
JX9026	9.0	2.6	7.1	30	30	0.5*45
JX9026A	9.0	2.6	6.0	30	20	0.5
JX9028A	9.0	2.8	7.6	20	30	0.5
JX9028E	9.0	2.8	5.2	25	20	0.5
JX9030	9.0	3.0	7.3	30	30	0.5*45°
JX9040	9.0	4.0	3.0	30	15	0.5
JX9125	9.1	2.5	6.5	25	20	0.5
JX9226	9.2	2.6	6.6	25	20	0.5
JX9325	9.3	2.5	6.5	22	25	1
JX9525	9.5	2.5	6.7	20	25	0.2
JX9525C	9.5	2.5	9.0	28	45	1
JX9526	9.5	2.6	6.7	20	25	0.2*45°
JX9528	9.5	2.8	7.0	30	25	0.8
JX9528A	9.5	2.8	7.0	20	20	0.5
JX9528D	9.5	2.8	6.6	30	20	0.5
JX9530	9.5	3.0	6.3	25	20	0.5
JX9622	9.6	2.2	6.6	30	20	0.5
JX9632	9.6	3.2	6.8	30	30	-
JX10025	10.0	2.5	6.5	30	16	0.5
JX10025X	10.0	2.5	7.5	25	24	0.6
JX10028	10.0	2.8	5.0	28	16	0.75
JX10028A	10.0	2.8	7.5	27	26	0.5
JX10030	10.0	3.0	6.3	15	18	0.5

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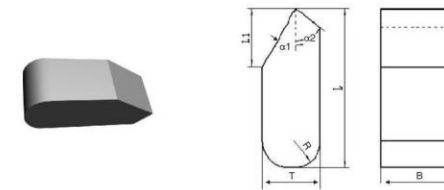
型号 type	基本尺寸 Dimension(mm)			参考尺寸		
	L	B	C	$\alpha^\circ$	$\beta^\circ$	R
JX10030A	10.0	3.0	7.0	30	20	0.5
JX10040	10.0	4.0	8.0	30	46	0.6*45
JX10325	10.3	2.5	6.8	25	20	0.5
JX10335	10.3	3.5	7.1	30	25	0.5
JX10525	10.5	2.5	10.0	28	45	1
JX10525A	10.5	2.5	7.0	30	17	0.5
JX10525B	10.5	2.5	7.9	20	21	0.5
JX10525F	10.5	2.5	6.9	25	20	0.5
JX10527B	10.5	2.7	6.5	30	20	0.5
JX10527D	10.5	2.7	5.5	21	15	0.5*45
JX10527H	105.0	2.7	6.9	25	20	0.5
JX10530	10.5	3.0	7.4	30	30	0.5
JX10530A	10.5	3.0	-	25	20	0.5
JX10530H	10.5	3.0	6.8	25	19	0.5*45
JX10535	10.5	3.5	7.4	25	30	0.5
JX10540	10.5	4.0	9.8	30	30	0.7
JX10830	10.8	3.0	7.0	30	20	0.5
JX10832	10.8	3.2	7.2	25	20	0.5
JX11528	11.5	2.8	8.0	27	22	0.2
JX12035	12.0	3.5	7.0	30	21	0.5
JX12040	12.0	4.0	7.2	20	20	0.8
JX12040A	12.0	4.0	10.8	8	0.8*45	-
JX12042	12.0	4.2	8.0	20	10	0.5
JX12530	12.5	3.0	8.0	30	25	0.5
JX12535	12.5	3.5	8.5	25	25	0.5
JX14050	14.0	5.0	11.0	30	20	0.5
JX16036	16.0	3.6	12.7	25	20	0.5
JX16530	16.5	3.0	-	30	30	0.5

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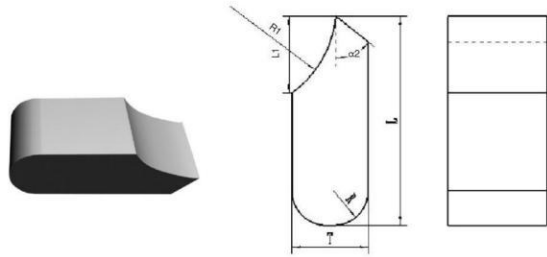
型号 type	基本尺寸 Dimension(mm)		参考尺寸		
	L	B	$\alpha^\circ$	e*r	B1
JT4514	4.5	1.4	25	0.5*45	0.2
JT5015B	5	1.5	30	0.5*45	0.2
JT5414	5.4	1.4	30	0.5*45	0.2
JT5515	5.5	1.5	30	0.5*45	0.15

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型号 type	基本尺寸 Dimension(mm)		参考尺寸			
	L	B	$\alpha1^\circ$	$\alpha2^\circ$	L1	R
JX5016G	5.0	1.6	50	50	0.67	R0.8
JX5317A	5.3	1.7	25	30	1.6	R0.85
JX5520Q	5.5	2.0	30	45	1.84	2-R0.9
JX5523G	5.5	2.3	23	37.5	3.2	2-R0.9
JX6220C	6.2	2.0	45	30	2.08	2-R0.9
JX6320C	6.3	2.0	45	30	2.08	2-R0.9
JX6523A	6.5	2.3	45	30	2.4	2-R0.9
JX6523P	6.5	2.3	30	45	2.43	2-R0.9
JX6523G	6.5	2.3/2.16	23	37.5	3.2	R0.9
JX6623G	6.6	2.3	15	-	-	2*R0.9
JX6923A	6.9	2.34/2.16	30	45	2.6	R0.9
JX7026P	7.0	2.6	24.8	35	2.92	R1.3
JX7436	7.4	3.6	35	45	1	R1.8
JX7243G	7.2	4.3	35	40	1.94	2*R0.9
JX9050G	9.0	5.0	30	42.5	3.95	2*R1.5

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型号 type	基本尺寸 Dimension(mm)		参考尺寸			
	L	B	R1	$\alpha 2^\circ$	L1	R
JX6519	6.5	1.9	R5	38	2.25	R0.95
JX6522R	6.5	2.2	R5.0	45	2.24	2*R0.9
JX6623	6.6	2.3	R5.12	35	3.02	R1.15
JX7026	7.0	2.6	R5.12	35	2.92	R1.3

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锯齿的主要尺寸允许公差范围

基本尺寸 Dimension(mm)							
长度 L(mm)	允许公差	厚度 C(mm)	允许公差	宽度 B(mm)	允许公差	角度	平行度
0-5.0	+0.08 -0.08	0-2.0	±0.05	0-2.0	±0.05	±2°	≤0.1mm
>5.0-7.0	±0.08			2.0-3.5	±0.05		
>7.0-9.0	±0.1	>2.0	±0.05	3.5-5.0	±0.05		
>9.0	±0.1			>5.0	±0.1		

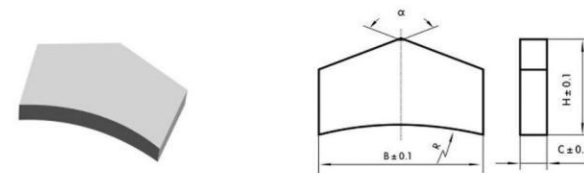
★ 若客户有特殊要求, 公差范围可适当调整。  
The tolerances can be adjusted appropriately. If the customer has special requirements.

冲击钻片产品系列  
Series of carbide tips for percussion drill

冲击钻片代号及尺寸对照表

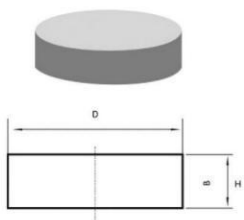
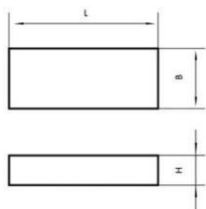


型号 type	基本尺寸 Dimension(mm)			
	B	H	C	$\alpha^\circ$
Y01004	6.2	5.2	1.8	130
Y97025	8.3	6.5	2.0	130
Y99046	10.3	7.2	2.3	130
Y20001	12.3	7.8	2.3	130
Y97026A	14.3	10.0	2.75	130
Y97003	16.3	10.5	2.75	130



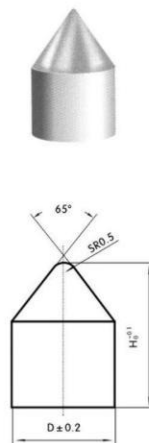
型号 type	基本尺寸 Dimension(mm)				
	B	H	C	R	$\alpha^\circ$
YK05025R	14.8	9.0	2.7	22	140
YK05026	15.0	10.0	2.7	17	140
YK06002	16.5	12.0	2.75	22	140

◎其它小制品  
Others small products

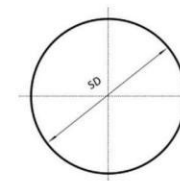
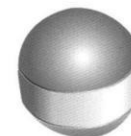


型号 type	基本尺寸 Dimension(mm)		
	L	B	H
DIA-1	3.95	1.63	1.63
DIA-2	5.56	1.63	1.63
DIA-3	4.0	2.0	1.0
D2A-4	6.2	1.0	1.0
J01040	2.0	2.0	2.0
9×6×1.4	9.0	6.0	1.4
13×10×2	13.0	10.0	2.0
14×10.5×2	14.0	10.5	2.0
4×4×2	4.0	4.0	2.0
3118695	5.0	2.5	1.5
5×1.5×1.5	5.0	1.5	1.5
4×2.5×1.5	4.0	2.5	1.5
4×1.5×1.5	4.0	1.5	1.5
8×3×3	8.0	3.0	3.0
20×12×3	20.0	12.0	3.0
30×2×2.6	30.0	2.0	2.6
10.5×9×1.2	10.5	9.0	1.2
5.54×1.59×1.59	5.54	1.59	1.59
8×2.5×1.5	8.0	2.5	1.5

型号 type	基本尺寸 Dimension(mm)	
	D	H
φ 1.9×4	φ 1.9	4.0
711278	φ 7.2	1.5
φ 8.5×1.5	φ 8.5	1.5

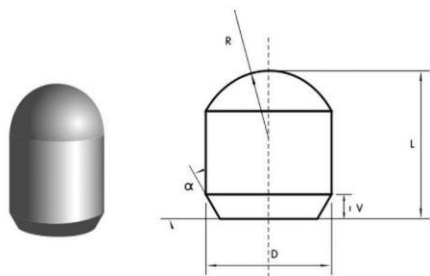


型号 type	基本尺寸 Dimension(mm)	
	D	H
Y04008	φ 3.6	8.0
Y04008A	φ 3.6	7.5
Y03029	φ 4.0	8.0
Y03028	φ 4.6	9.0
Y03028A	φ 4.6	8.0
Y03027	φ 6.8	11.5
Y3208-8.5R	φ 4.6	8.5

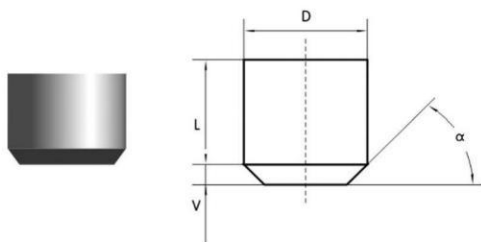


型号 type	基本尺寸 Dimension(mm)
	SD
φ 2.8	2.8
φ 5.0	5.0
φ 6.6	6.6

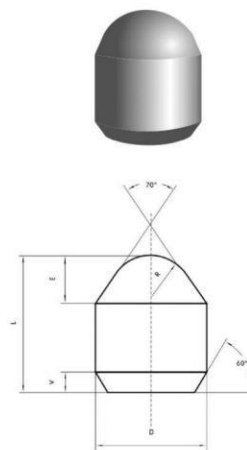
★ φ 2.8 以上的合金球都可生产



型号 type	基本尺寸 Dimension(mm)				
	D	L	V	R	$\alpha$
SQ $\phi$ 5.15×6	5.15	6.0	1.0	2.8	60°
SQ $\phi$ 6.2×8	6.2	8.0	0.5	3.2	45°
SQ $\phi$ 5×5.5	5.0	5.5	0.5	2.7	45°
SQ $\phi$ 4×4.4	4.0	4.4	0.5	2.1	45°



型号 type	基本尺寸 Dimension(mm)			
	D	L	V	$\alpha$
SP $\phi$ 6.2×6	6.2	6.0	1.0	60°
SP $\phi$ 4.15×4	4.15	4.0	1.0	60°
SP $\phi$ 3×3	3.0	3.0	0.5	45°



型号 type	基本尺寸 Dimension(mm)				
	D	L	R	E	V
SZ $\phi$ 8.2×10	8.2	10.0	3.0	3.5	1.5
SZ $\phi$ 6.2×8	6.2	8.0	3.2	2.0	1.5
SZ $\phi$ 5.15×6	5.15	6.0	2.5	2.5	1.0
SZ $\phi$ 4.15×5	4.15	5.0	2.0	2.0	1.0

型号 type	基本尺寸 Dimension(mm)	
	D	H
$\phi$ 1.47×4.4	1.47	4.4
$\phi$ 1.6×3	1.6	3
$\phi$ 1.7×3.5	1.7	3.5
$\phi$ 1.75×4.5	1.75	4.5
$\phi$ 1.8×3.8	1.8	3.8
$\phi$ 1.9×4.0	1.9	4.0
$\phi$ 1.98×2.5	1.98	2.5
$\phi$ 2.1×3.5	2.1	3.5
$\phi$ 2.3×5.2	2.3	5.2
$\phi$ 2.35×5.2	2.35	5.2
$\phi$ 2.4×2.0	2.4	2.0
$\phi$ 2.5×4.7	2.5	4.7
$\phi$ 3×8	3	8
$\phi$ 3.5×6	3.5	6
$\phi$ 4.6×5.8	4.6	5.8
$\phi$ 4.7×7	4.7	7

★高度H在10.0以下均可生产

## 二、硬质合金切削刀片系列 Cemented carbide inserts

### ◎硬质合金刀片牌号物理力学性能及用途推荐

Physical and mechanical properties of grades for cemented carbide inserts and their applications recommended

ISO 分类 分组代号 ISO Code	牌号 Grade	物理力学性能 Physical and mechanical properties			推荐用途 Applications recommended
		密度 Density g/cm <sup>3</sup>	硬度 Hardness HRA(HV)	抗弯强度 TRS Mpa	
K05	YG3	15.0	90.5	1300	适用于铸铁, 有色金属的精加工。 Suitable for finishing of cast iron and nonferrous metal.
K10	YG6X	14.8	91	1560	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。 The finishing & semi-finishing of cast iron and nonferrous metals and also for the machining of manganese steel and hardening steel.
	YG6A	14.7	91.5	1510	
K15	YG6	14.9	89.5	1670	适用于铸铁, 轻合金的半精加工, 亦可作铸铁, 低合金 钢铣削加工。 Suitable for the roughing of cast iron and light alloys and also for the milling of cast iron and low-alloy steel.
K20	YG8	14.6	89.0	1840	
M10	YW1	13	91	1290	适用于不锈钢, 普通合金钢的精加工和半精加工。 Suitable for finishing and semifinishing of stainless steel and conventional alloy steel.
	YW3	12.9	92	1390	
	YW4	12.3	92	1390	
M20	YW2	12.9	90.5	1460	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。 The grade can be used for the semifinishing of stainless steel and lowalloy steel and it is mainly used for the machining of railway wheel hubs.
P10	YT05	12.6	92.5	1260	适用于钢, 铸钢的精加工和半精加工, 宜采用中等进给量 和较高的切削速度。 Suitable for the finishing and semifinishing of steel and cast steel with a moderate feed rate and a rather high cutting speed.
	YT15	11.3	91.0	1300	
P20	YS14	11.4	91.5	1550	适用于钢, 铸钢的精加工和半精加工, 宜采用中等进给 量。YS25专用于钢, 铸钢的铣削加工。 Suitable for the finishing and semifinishing of steel and cast steel. YS25 is specially used for the milling of steel and cast steel.
	YT14	11.4	90.5	1400	
	YS25	13.0	90.5	1780	
P30	YT5	12.8	89.5	1560	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。 Suitable for the heavy duty rough turning of steel and cast steel with a big feed rate at a medium and low speed under unfavorable working conditions.

ISO 分类 分组代号 ISO Code	牌号 Grade	物理力学性能 Physical and mechanical properties			推荐用途 Applications recommended
		密度 Density g/cm <sup>3</sup>	硬度 Hardness HRA(HV)	抗弯强度 TRS Mpa	
K05-K10-M20	YT26	14.0	92.5	1600	红硬性高, 耐磨性好, 适于冷硬铸铁、有色金属的精加工, 半精 半精加工亦可用于锰钢、淬火钢的车削、铣削加工。 Suitable for fine and semi-finishing machining of chilled cast iron and non-ferrous metals with good performances of their mosetting and wear resistance, also suitable for turning and milling of manganese steel and hardened steel.
K20	YD201	14.90	91.0	1800	适用于铸铁, 轻合金的半精加工、粗加工, 亦可作为铸铁、低合 金钢的铣削加工。 Suitable for semi-finishing and the roughing of cast iron and light alloys and also for the milling of cast iron and low alloy steel.
M05-M10	YS8	13.9	92.5	1720	适用于铁基、镍基高温合金、高强度钢的精加工, 亦可用于冷硬 铸铁、耐热不锈钢、高锰钢、淬火钢的精加工。 It can be used for the finishing of iron based and nickel based high-temperature alloys and high- strength steel and it can also be used for the finishing of chilled cast iron, heat resistant stainless steel, high manganese steel and hardened steel.
M10	Y60	12.8	92.5	1500	主要用作石油管螺纹的加工, 亦可用于淬火钢的精加工。 mainly used for threading of petroleum pipe, also used for fine machining of hardened steel.
M20	M20	13.0	91.0	1750	钢、铸钢、锰钢、灰口铸铁、中等切削速度和进给量下的半精车和半 精铣。
P30	YC30S	12.9	90.0	1600	适用于钢和铸钢以及合金钢的铣削加工 used for the milling of steel, cast steel and alloy steel.
P35-P40	YC40	12.90	91.0	2200	适于钢、铸钢的强力切削, 宜在恶劣的条件下低速切削和大进给 量切削加工。 suitable for the heavy duty turning of steel and cast steel with a big feed rate under unfavorable working condition.
P40	M40	12.75	90.0	2100	适用于钢、铸钢的重力切削, 可采用大的切削用量, 亦可用于端 面铣削。 suitable for the heavy duty turning of steel and cast steel with a big steel rate and also for face milling.
	YC45	12.75	90.0	2300	

### ◎焊接式硬质合金刀片使用说明

A guide to the applications of cemented carbide brazed tips

◆**焊接式切削刀具结构应具有足够的刚性**

足够的刚性是以最大允许的外形尺寸，以及采用较高强度的钢号和热处理来保证。

◆**硬质合金刀片应固定牢靠**

硬质合金刀片应有足够的固定牢靠程度，它是靠刀槽及焊接质量来保证的，故要根据刀片形状及刀具几何参数，选择刀片镶槽形状。

在将刀片焊接至刀杆上以前须要对刀片、刀杆进行必要的检查，首先应检查刀片的支承面不能有严重弯曲。硬质合金焊接面不得有严重渗碳层，同时还应将硬质合金刀片表面及刀杆镶槽中的污垢进行清除，以保证焊接牢靠。

◆**对焊接用焊料的要求**

为了保证焊接强度，应选择合适的焊料。在焊接过程中，应保证良好的湿润性和流动性，并排除气泡，合焊料与合金焊接面充分接触，无缺焊现象。

◆**对焊接用熔剂的要求**

建议采用工业硼砂，在使用前在烘干炉中进行脱水处理，然后进行碾碎，过筛去除机械夹杂物，待用。

在焊接高钛低钴细颗粒合金及焊接长而薄的合金刀片时，为减少焊接应力，建议采用厚度为0.2-0.5mm的薄片或网孔径1-2mm的网状补偿垫片进行焊接。

由于硬质合金刀片脆性较大，对裂纹形成敏感性较强，所以刀具在刃磨过程中应避免过热或急冷，同时还要选择合适粒度和硬度的砂轮及合理的磨削工艺、避免产生刃磨裂纹，影响刀具使用寿命。

在安装刀具时，刀头伸出刀架的长度应尽量小，否则，容易引起刀具震动，从而损坏合金片。

刀具使用达到正常磨损时，必须进行重磨，重磨后刀具，一定要用油石对刃口及刀尖圆角进行研磨，这样会提高刀具的使用寿命及安全可靠性。

◆**The structure of brazed tips tools should be tough enough.**

Enough toughness shall be guaranteed by the maximum allowable sizes of the tips and by using a rather strong steel grade and heat treatment.

◆**Cemented carbide tips should be strongly fixed securely.**

The cemented carbide tips should have a secure fixation and it is guaranteed by the Flutes of the tool holders and the quality in welding, so the flutes of the tools holders must be selected based on the shapes and the geometrical parameters of the tips.

Before welding of the tips to the tool holders, a check must be done on the tips And the tool holders. An initial check must be done to ensure that there is no serious bending on the support surface of the tips. There shall be no serious carburization on the welding surface of the tips and at the same time the contaminants on the surface of the tips and in the flutes of the tools holders must be eliminated to ensure the quality of a secure welding.

◆**There are requirements for the welding materials.**

In order to endure the toughness of the welding, a suitablewelding material must be selected. During the welding, good wettability and flowability must be guaranteed and the air bulbs must be got ridden of in order to ensure the sufficient contact of the welding material and the surface of the tips to be welded leaving nothing to be welded.

◆**There are requirements for the flux in the welding process.**

It is recommended that industrial borax is to be used. Before the use of the borax, it should be dewatered in a drying oven and then milled and sieved to get rid of the foreign objects.

During the welding of cemented carbide tips of fine grain size with high titanium and low cobalt content and long and thin cemented carbide tips it will be recommended that compensation shims of a thickness of 0.2-0.5mm or similar shims with holes of 1-2mm in order to reduce the stress in the welding process.

As cemented carbide tips are rather brittle and are most sensitive to the formation of cracks, excessive heating or rapid cooling must be prevented in the grinding of the tools and at the same time, grinding wheels with an appropriate grain size and hardness must be selected and a proper grinding technique to avoid cracks in the grinding of the edges of the tips and not to affect the lifetime of the tools.

When the tools are installed, the length of the tips outstretching the tools must be as less as possible, as otherwise the vibration of the tools will occur thus damaging the cemented carbide tips.

When the tools come to a normal bluntness, they must be reground, The edges and the radius of the edges must be ground with oilstones after the tools are ground to increase the lifetime and reliability of the tools.

### ◎硬质合金刀片材质选择要领

Carbide blade quality choose the point

#### (一) 车削用刀片材质的选择要领及推荐材质与适用范围

工作内容	超精加工		精加工		半精加工		粗加工		重粗加工	
	P01	P05	P10	P15	P20	P25	P30	P35	P40	P45
加工碳钢、合金钢、铸钢、软钢用精成牌硬质合金选材	YT30		YT15					YT5		
		YT05						YC40		
				YT14					YC45	

工作内容	精加工			半精加工			粗加工	
	K01	K05	K10	K15	K20	K25	K30	K35
加工铸铁、冷硬铸铁、淬火钢、有色金属及非金属用精成牌硬质合金选材		YG3						
		YT26			YD201			
			YG6					
			YG6X					
			YG6A					
					YG8			

工作内容	精加工		半精加工			粗加工	
	M05	M10	M15	M20	M30	M40	
加工不锈钢、锰钢、耐热金属用精成牌硬质合金选材	YS8			YT26			
	YW4						
			YW2				
			YW3				
			YW1				

(二) 铣削用刀片材质的选择要领

工作内容 ISO用途	精加工		半精加工		粗加工	
	P10	P15	P20	P25	P30	P40
加工碳 钢、合 金钢、及 铸钢、 软钢、 用精成 牌硬质 合金材		YS14				
		YT14				
			YS25			
				YC30S		
				YT5		

工作内容 ISO用途	精加工			半精加工			粗加工		
	K01	K05	K10	K15	K20	K25	K30	K35	K40
加工铸 铁、冷 硬铸、 淬 火、金 色非 有属 属及 金非 精用 成牌 硬质 合金 材		YT26							
		YG6X			YD201				
		YG6A							
		YG6							
					YG8				

◎ 硬质合金机夹刀片产品型号表示规则及基本参数

The rigid alloy machine clip blade product model represents the rules and basic parameters

一. 硬质合金机夹刀片毛坯分下列两类

a: 带孔机夹刀片毛坯

b: 无孔机夹刀片毛坯

The blanks of indexable inserts are divided into the following 2 categories:

a. Insert blanks with holes

b. Insert blanks without holes

二. 机夹刀片毛坯按下列方法表示:

a: 带孔机夹刀片毛坯的代号由型式、基本参数和槽型三部分构成。

The inserts blanks are indicated with the following designations:

a. The code for indexable inserts blanks with holes consists of type,

basic parameters and chipbreakers.

型式 Type	基本参数 Basic parameters				车削刀片 槽型种类 Chipbreakers	左 Left	
	内切圆直径D IC		刀尖圆弧半径r Edge radius				
代号 Code	外型 Shape	代号 Code	直径, mm Dia. mm	代号 Code	半径 mm Radius. mm	代号 Code	Z
X	毛坯 Blanks	10	10	03	0.3	A	
M	85°菱形 Rhombus 85°	13	13	05	0.5	B	
C	80°菱形 Rhombus 80°	16	16	10	1.0	C	
3	正三角形 Equilateral triangle	19	19	15	1.5	D	
T3	凸三角形 Convex triangle	25	25	20	2.0		
4	正四边形 Square						
5	正五边形 Equilateral pentahedron						
G	加工品 Ground inserts						

b: 无孔机夹刀片毛坯的代号由型式和基本参数构成

The code for indexable inserts blanks without holes consists of type and basic parameters.

型式 Type	基本参数 Basic parameters						
	内切圆直径D IC		刀尖圆弧半径r Edge radius		后角 $\alpha^\circ$		
代号 Code	外型 Shape	代号 Code	直径, mm Dia. mm	代号 Code	半径 mm Radius	代号 Code	$\alpha^\circ$
O	圆形 Round	04	4	03	0.3	0	0°
1	长方形 Rectangular	07	7	05	0.5	8	8°
XC	82°菱形 Rhombus 82	10	10	10	1.0	11	11°
3	正三角形 Equilateral triangle	13	13	15	1.5		
T3	凸三角形 Convex triangle	16	16	20	2.0		
4	正四边形 Square	19	19				
5	正五边形 Equilateral pentahedron	25	25				
G	加工品 Ground inserts						

C: 机夹刀片毛坯厚度的尺寸系列

The thickness of indexable inserts blanks

带孔机夹刀片毛坯厚度尺寸系列按表1规定

The thickness of inserts blanks with holes as per Table 1

表1

型式 Type	内切圆直径 mm IC mm				
	10	13	16	19	25
	刀片厚度 mm Thickness of inserts mm				
正三角形 Equilateral triangle	4.5	5.5	7.0	8.5	—
凸三角形 Convex triangle	3.5	4.5	5.5	7.0	8.5
正四边形 Square	3.5	4.5	5.5	7.0	8.5
菱形 Rhombus	3.5	4.5	5.5	7.0	—
正五边形 Equilateral pentahedron	—	—	4.5	5.5	7.0

无孔机夹刀片毛坯厚度尺寸按表2规定

The thickness of indexable inserts blanks without holes as per Table 2

表2

型式 Type	内切圆直径 mm IC mm				
	7	10	13	16	19
	刀片厚度 mm Thickness of inserts mm				
正三角形 Equilateral triangle	3.0	3.8	4.8	5.8	7.3
正四边形 Square	—	3.5	4.8	4.8	5.8

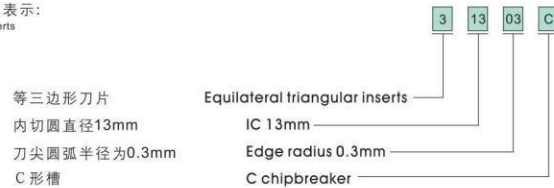
d: 各类机夹刀片毛坯内孔直径系列按表3规定

The diameter of inner holes of indexable inserts blanks as per Table 3.

表3

内切圆直径, mm IC mm	10	13	16	19	25
内孔直径, mm Dia. of inner hole	4.2	5.2	6.2	7.2	8.2

三. 车削刀片的表示:  
Code for turning inserts

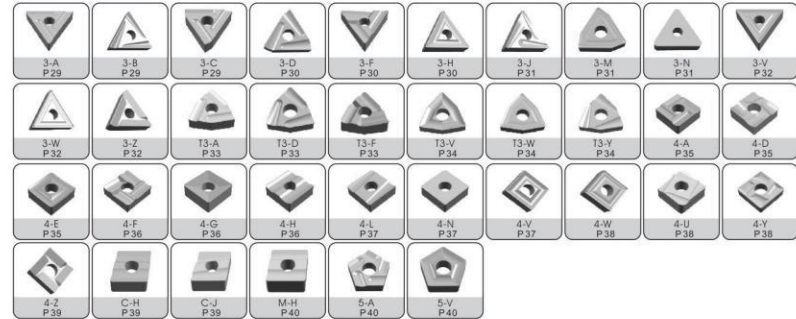


必要时, 可加宽断屑槽, 但需注明槽宽尺寸, 如31303C4系指加宽槽, 其槽宽为4mm左右。

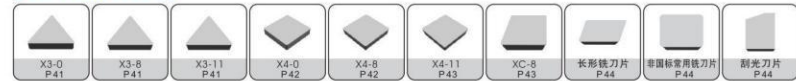
When necessary, the chipbreaker can be widened, but the width should be indicated. For example, 31303C4 means that the width of the widened chipbreaker is around 4mm.

产品索引  
Product index

机夹车削刀片



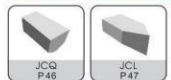
机夹铣削刀片



精磨铣削刀片



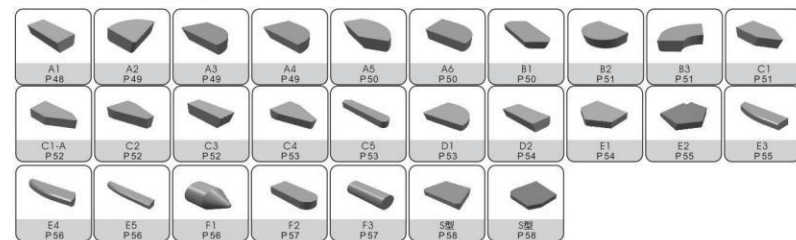
切槽、切断刀片



凹圆弧成型车刀和轮转车刀

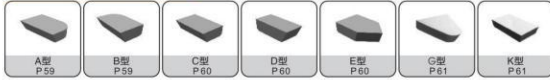


国家标准焊接刀片

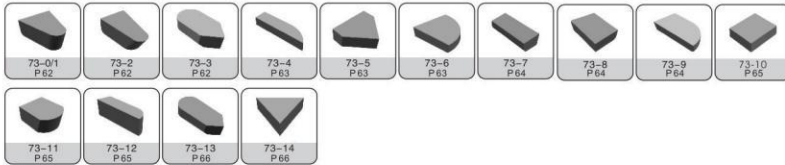




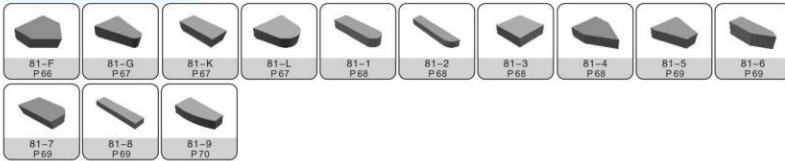
国际标准焊接刀片



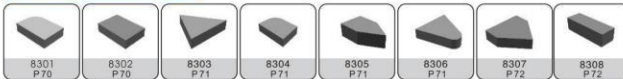
73系列



81系列



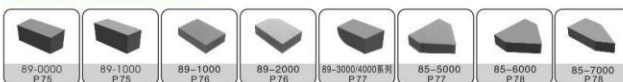
83系列



85系列



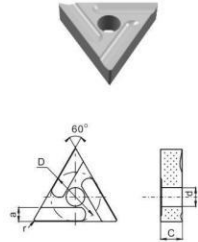
89系列



硬质合金机夹刀片(车削刀片)

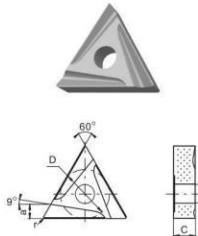
Carbide machine clip cutting blade

3-A



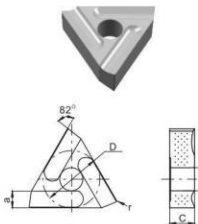
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
31005A	31005AZ	10 ± 0.08	4.5	4.2	0.5	2.4
31305A	31305AZ	13 ± 0.13	5.5	5.2	0.5	3.4
31305A4	31305A4Z	13 ± 0.13	5.5	5.2	0.5	4.4
31605A	31605AZ	16 ± 0.18	7.0	6.2	0.5	4.4
31605A5	31605A5Z	16 ± 0.18	7.0	6.2	0.5	5.4
31910A	31910AZ	19 ± 0.18	8.5	7.2	1.0	5.4

3-B



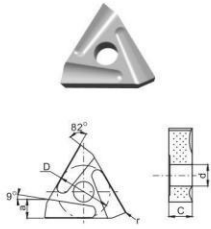
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
31005B	31005BZ	10 ± 0.08	4.5	4.2	0.5	2.4
31305B	31305BZ	13 ± 0.13	5.5	5.2	0.5	3.4
31605B	31605BZ	16 ± 0.18	7.0	6.2	0.5	4.4
31905B	31905BZ	19 ± 0.18	8.5	7.2	0.5	5.4

3-C



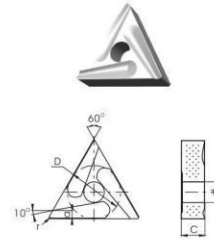
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
31003C	31003CZ	10 ± 0.08	4.5	4.2	0.3	2.4
31303C	31303CZ	13 ± 0.13	5.5	5.2	0.3	3.4
31303C5	31303C5Z	13 ± 0.13	5.5	5.2	0.3	5.0
31603C	31603CZ	16 ± 0.18	7.0	6.2	0.3	4.4
31603C6	31603C6Z	16 ± 0.18	7.0	6.2	0.3	6.0
31905C	31905CZ	19 ± 0.18	8.5	7.2	0.5	5.4

3-D



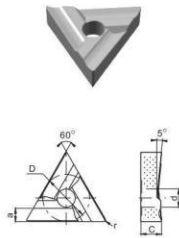
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈	
31003D	31003DZ	10 ± 0.08	4.5	4.2	0.3	3.4	
31303D	31303DZ	13 ± 0.13	5.5	5.2	0.3	4.4	
31303D5	31303D5Z	16 ± 0.18	7.0	5.2	0.3	5.4	
31603D	31603DZ	16 ± 0.18	7.0	6.2	0.3	5.4	
31905D	31905DZ	19 ± 0.18	8.5	7.2	0.5	6.4	

3-J



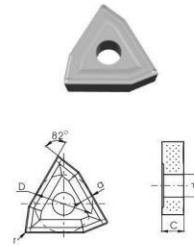
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈	
31005J	31005JZ	10 ± 0.08	4.5	4.2	0.5	2.4	
31305J	31305JZ	13 ± 0.13	5.5	5.2	0.5	3.4	
31605J	31605JZ	16 ± 0.18	7.0	6.2	0.5	4.4	
31905J	31905JZ	19 ± 0.18	8.5	7.2	0.5	5.4	

3-F



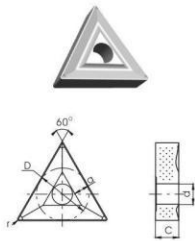
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈	
31005F	31005FZ	10 ± 0.08	4.5	4.2	0.5	2.3-2.8	
31305F	31305FZ	13 ± 0.13	5.5	5.2	0.5	3.3-3.8	
31605F	31605FZ	16 ± 0.18	7.0	6.2	0.5	4.3-4.8	
31610F	31610FZ	16 ± 0.18	7.0	6.2	1.0	4.3-4.8	
31905F	31905FZ	19 ± 0.18	8.5	7.2	0.5	5.3-5.8	
31910F	31910FZ	19 ± 0.18	8.5	7.2	1.0	5.3-5.8	

3-M



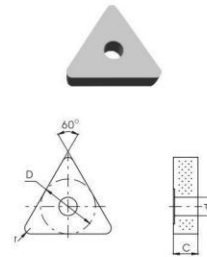
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈	
31003M	31003MZ	10 ± 0.08	4.5	4.2	0.3	2.4	
31303M	31303MZ	13 ± 0.13	5.5	5.2	0.3	3.4	
31603M	31603MZ	16 ± 0.18	7.0	6.2	0.3	4.4	
31905M	31905MZ	19 ± 0.18	8.5	7.2	0.5	5.4	

3-H



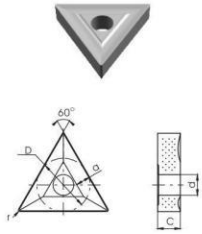
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈	
31005H		10 ± 0.08	4.5	4.2	0.5	2.4	
31305H		13 ± 0.13	5.5	5.2	0.5	3.4	
31310H		13 ± 0.13	5.5	5.2	1.0	3.4	
31320H		13 ± 0.13	5.5	5.2	2.0	3.4	
31605H		16 ± 0.18	7.0	6.2	0.5	4.4	
31610H		16 ± 0.18	7.0	6.2	1.0	4.4	
31620H		16 ± 0.18	7.0	6.2	2.0	4.4	
31910H		19 ± 0.18	8.5	7.2	1.0	5.4	
31920H		19 ± 0.18	8.5	7.2	2.0	5.4	

3-N



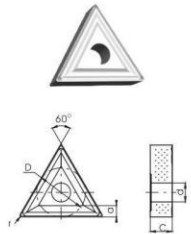
型号 Type	基本尺寸 Dimension(mm)					
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈	
31005N	10 ± 0.08	4.5	4.2	0.5		
31305N	13 ± 0.13	5.5	5.2	0.5		
31310N	13 ± 0.13	5.5	5.2	1.0		
31605N	16 ± 0.13	7.0	6.2	0.5		
31610N	16 ± 0.18	7.0	6.2	1.0		
31620N	16 ± 0.18	7.0	6.2	2.0		
31910N	19 ± 0.18	8.5	7.2	1.0		
31920N	19 ± 0.18	8.5	7.2	2.0		

3-V



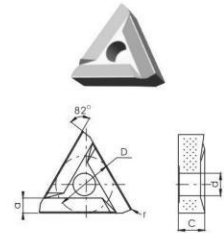
型号 Type	基本尺寸 Dimension(mm)					
	D ± Tol.	C ±0.13	d±0.13	r	α≈	
31005V	10±0.08	4.5	4.2	0.5	2.4	
31305V	13±0.13	5.5	5.2	0.5	3.4	
31310V	13±0.13	5.5	5.2	1.0	3.4	
31320V	13±0.13	5.5	5.2	2.0	3.4	
31605V	16±0.18	7.0	6.2	0.5	4.4	
31610V	16±0.18	7.0	6.2	1.0	4.4	
31620V	16±0.18	7.0	6.2	2.0	4.4	
31910V	19±0.18	8.5	7.2	1.0	5.4	
31920V	19±0.18	8.5	7.2	2.0	5.4	

3-W



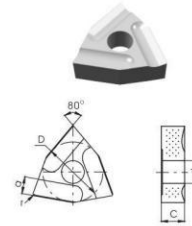
型号 Type	基本尺寸 Dimension(mm)					
	D ± Tol.	C ±0.13	d±0.13	r	α≈	
31005W	10±0.08	4.5	4.2	0.5	2.3	
31305W	13±0.13	5.5	5.2	0.5	3.0	
31310W	13±0.13	5.5	5.2	1.0	3.0	
31320W	13±0.13	5.5	5.2	2.0	3.0	
31605W	16±0.18	7.0	6.2	0.5	4.1	
31610W	16±0.18	7.0	6.2	1.0	4.1	
31620W	16±0.18	7.0	6.2	2.0	4.1	
31910W	19±0.18	8.5	7.2	1.0	5.1	
31920W	19±0.18	8.5	7.2	2.0	5.1	

3-Z



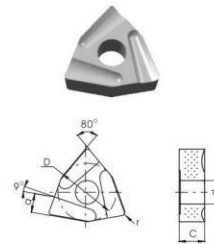
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ±0.13	d±0.13	r	α≈	
31003Z	31003ZZ	10±0.08	4.5	4.2	0.3	2.4	
31303Z	31303ZZ	13±0.13	5.5	5.2	0.3	3.4	
31603Z	31603ZZ	16±0.18	7.0	6.2	0.3	4.4	
31905Z	31905ZZ	19±0.18	8.5	7.2	0.5	5.4	

T3-A



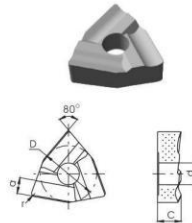
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ±0.13	d±0.13	r	α≈	
T31005A	T31005AZ	10±0.08	3.5	4.2	0.5	2.4	
T31305A	T31305AZ	13±0.13	4.5	5.2	0.5	3.4	
T31605A	T31605AZ	16±0.18	5.5	6.2	0.5	4.4	
T31615A5	T31615A5Z	16±0.18	5.5	6.2	1.5	5.4	
T31905A	T31905AZ	19±0.18	7.0	7.2	0.5	5.4	

T3-D



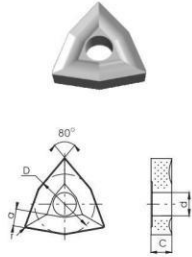
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ±0.13	d±0.13	r	α≈	
T31310D5	T31310D5Z	13±0.08	4.5	5.2	1.0	5.5	
T31610D6	T31610D6Z	16±0.13	5.5	6.2	1.0	6.5	
T31920D7	T31920D7Z	19±0.18	7.0	7.2	2.0	7.4	

T3-F



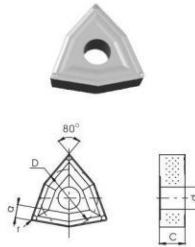
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ±0.13	d±0.13	r	α≈	
T31005F	T31005FZ	10±0.08	3.5	4.2	0.5	2.4	
T31305F	T31305FZ	13±0.13	4.5	5.2	0.5	3.4	
T31605F	T31605FZ	16±0.18	5.5	6.2	0.5	4.4	
T31905F	T31905FZ	19±0.18	7.0	7.2	0.5	5.4	

T3-V



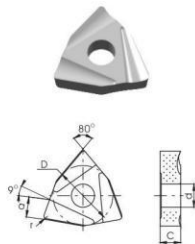
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
T31005V	10 ± 0.08	3.5	4.2	0.5	2.4
T31305V	13 ± 0.13	4.5	5.2	0.5	3.4
T31310V	13 ± 0.13	4.5	5.2	1.0	3.4
T31605V	16 ± 0.13	5.5	6.2	0.5	4.4
T31610V	16 ± 0.18	5.5	6.2	1.0	4.4
T31620V	16 ± 0.18	5.5	6.2	2.0	4.4
T31910V	19 ± 0.18	7.0	7.2	1.0	5.4
T31920V	19 ± 0.18	7.0	7.2	2.0	5.4

T3-W



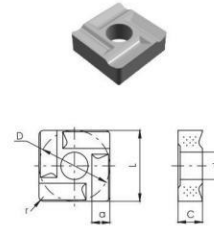
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
T31005W	10 ± 0.08	3.5	4.2	0.5	2.4
T31305W	13 ± 0.13	4.5	5.2	0.5	3.4
T31310W	13 ± 0.13	4.5	5.2	1.0	3.4
T31605W	16 ± 0.13	5.5	6.2	0.5	4.4
T31610W	16 ± 0.18	5.5	6.2	1.0	4.4
T31620W	16 ± 0.18	5.5	6.2	2.0	4.4
T31910W	19 ± 0.18	7.0	7.2	1.0	5.4
T31920W	19 ± 0.18	7.0	7.2	2.0	5.4

T3-Y



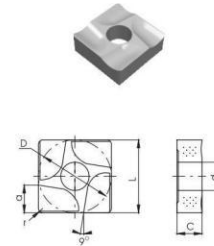
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
T31610Y5	T31610Y5Z	16 ± 0.13	5.5	6.2	1.0	5.0
T31920Y6	T31920Y6Z	19 ± 0.18	7.0	7.2	2.0	6.0

4-A



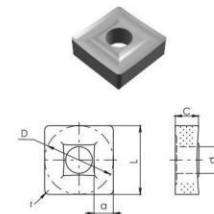
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005A	41005AZ	10 ± 0.08	3.5	4.2	0.5	2.4
41305A	41305AZ	13 ± 0.13	4.5	5.2	0.5	3.4
41315A	41315AZ	13 ± 0.13	4.5	5.2	1.5	3.4
41605A	41605AZ	16 ± 0.18	5.5	6.2	0.5	4.4
41610A5	41610A5Z	16 ± 0.18	5.5	6.2	1.0	5.4
41905A	41905AZ	19 ± 0.18	7.0	7.2	0.5	5.4

4-D



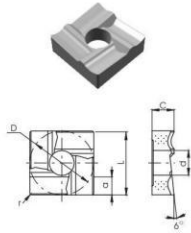
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41610D6	41610D6Z	16 ± 0.18	5.5	6.2	1.0	6.0
41920D7	41920D7Z	19 ± 0.18	7.0	7.2	2.0	7.0
42220D8	42220D8Z	22 ± 0.25	8.5	8.2	2.0	8.5

4-E



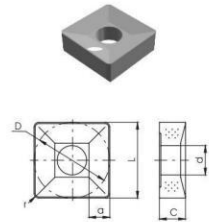
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005E	10 ± 0.08	3.5	4.2	0.5	2.4
41305E	13 ± 0.13	4.5	5.2	0.5	3.4
41310E	13 ± 0.13	4.5	5.2	1.0	3.4
41605E	16 ± 0.18	5.5	6.2	0.5	4.4
41610E	16 ± 0.18	5.5	6.2	1.0	4.4
41620E	16 ± 0.18	5.5	6.2	2.0	4.4
41910E	19 ± 0.18	7.0	7.2	1.0	5.4
41920E	19 ± 0.18	7.0	7.2	2.0	5.4

4-F



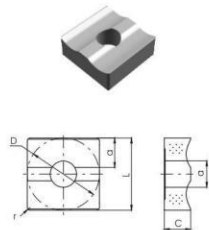
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005F	41005FZ	10 ± 0.08	3.5	4.2	0.5	2.4
41305F	41305FZ	13 ± 0.13	4.5	5.2	0.5	3.4
41605F	41605FZ	16 ± 0.18	5.5	6.2	0.5	4.4
41905F	41905FZ	19 ± 0.18	7.0	7.2	0.5	5.4

4-G



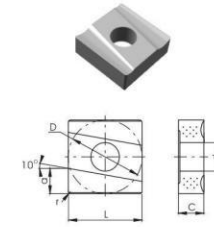
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005G	10 ± 0.08	3.5	4.2	0.5	2.4
41010G	10 ± 0.08	3.5	4.2	1.0	2.4
41305G	13 ± 0.13	4.5	5.2	0.5	3.4
41310G	13 ± 0.13	4.5	5.2	1.0	3.4
41605G	16 ± 0.18	5.5	6.2	0.5	4.4
41610G	16 ± 0.18	5.5	6.2	1.0	4.4
41620G	16 ± 0.18	5.5	6.2	2.0	4.4
41910G	19 ± 0.18	7.0	7.2	1.0	5.4
41920G	19 ± 0.18	7.0	7.2	2.0	5.4

4-H



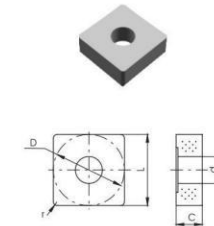
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005H	10 ± 0.08	3.5	4.2	0.5	2.4
41305H	13 ± 0.13	4.5	5.2	0.5	3.4
41605H	16 ± 0.18	5.5	6.2	0.5	4.4
41605H6	16 ± 0.18	5.5	6.2	0.5	6.0
41905H	19 ± 0.18	7.0	7.2	0.5	5.4
41910H	19 ± 0.18	7.0	7.2	1.0	5.4
41910H7	19 ± 0.18	7.0	7.2	1.0	7.0
42210H8	22 ± 0.25	8.5	8.2	1.0	8.0
42510H8	25 ± 0.25	8.5	8.2	1.0	8.0
42510H10	25 ± 0.25	8.5	9.12	1.0	10.0

4-L



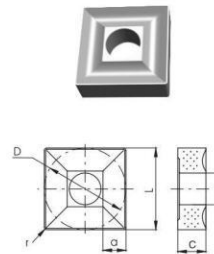
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005L	41005LZ	10 ± 0.08	3.5	4.2	0.5	3.4
41305L	41305LZ	13 ± 0.13	4.5	5.2	0.5	4.4
41605L	41605LZ	16 ± 0.18	5.5	6.2	0.5	5.4
41905L	41905LZ	19 ± 0.18	7.0	7.2	0.5	6.4
41910L	41910LZ	19 ± 0.18	7.0	7.2	1.0	6.4
42210L	42210LZ	22 ± 0.25	8.5	8.2	1.0	8.0

4-N



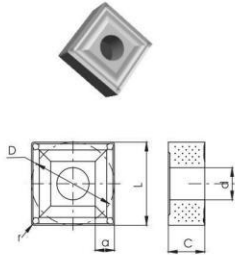
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005N	10 ± 0.08	3.5	4.2	0.5	
41305N	13 ± 0.13	4.5	5.2	0.5	
41310N	13 ± 0.13	4.5	5.2	1.0	
41605N	16 ± 0.13	5.5	6.2	0.5	
41610N	16 ± 0.18	5.5	6.2	1.0	
41620N	16 ± 0.18	5.5	6.2	2.0	
41910N	19 ± 0.18	7.0	7.2	1.0	
41920N	19 ± 0.18	7.0	7.2	2.0	

4-V



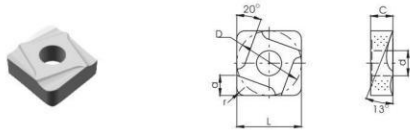
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005V	10 ± 0.08	3.5	4.2	0.5	2.4
41305V	13 ± 0.13	4.5	5.2	0.5	3.4
41310V	13 ± 0.13	4.5	5.2	1.0	3.4
41605V	16 ± 0.18	5.5	6.2	0.5	4.4
41610V	16 ± 0.18	5.5	6.2	1.0	4.4
41620V	16 ± 0.18	5.5	6.2	2.0	4.4
41910V	19 ± 0.18	7.0	7.2	1.0	5.4
41920V	19 ± 0.18	7.0	7.2	2.0	5.4
42220V	22 ± 0.25	8.5	8.2	2.0	8.0

4-W



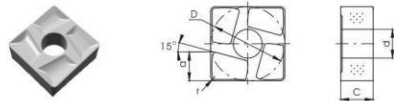
型号 Type	基本尺寸 Dimension(mm)				
	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005W	10 ± 0.08	3.5	4.2	0.5	2.3
41305W	13 ± 0.13	4.5	5.2	0.5	3.0
41310W	13 ± 0.13	4.5	5.2	1.0	3.0
41605W	16 ± 0.13	5.5	6.2	0.5	4.1
41610W	16 ± 0.18	5.5	6.2	1.0	4.1
41620W	16 ± 0.18	5.5	6.2	2.0	4.1
41910W	19 ± 0.18	7.0	7.2	1.0	5.1
41920W	19 ± 0.18	7.0	7.2	2.0	5.1

4-U



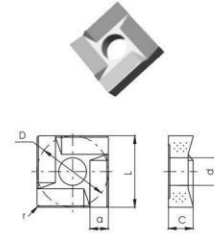
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41320U	41320UZ	13 ± 0.13	4.5	5.2	2.0	3.4
41620U	41620UZ	16 ± 0.18	5.5	6.2	2.0	5.4

4-Y



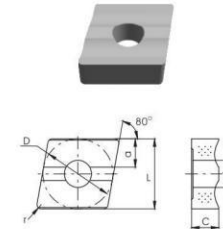
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41620Y	41620YZ	16 ± 0.18	5.5	6.2	2.0	6.4
41930Y	41930YZ	19 ± 0.18	7.0	7.2	3.0	7.4

4-Z



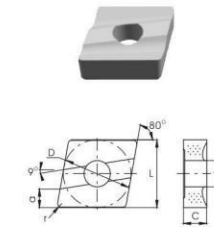
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
41005Z	41005ZZ	10 ± 0.08	3.5	4.2	0.5	2.4
41305Z	41305ZZ	13 ± 0.13	4.5	5.2	0.5	3.4
41605Z	41605ZZ	16 ± 0.18	5.5	6.2	0.5	4.4
41905Z	41905ZZ	19 ± 0.18	7.0	7.2	0.5	5.4

C-H



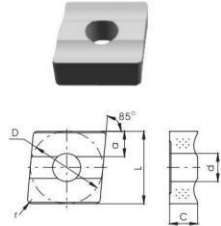
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
C1305H4	C1305H4Z	13 ± 0.13	4.5	5.2	0.5	4.5
C1305H5	C1305H5Z	13 ± 0.13	4.5	5.2	0.5	5.4
C1610H6	C1610H6Z	16 ± 0.18	5.5	6.2	1.0	6.4
C1910H6	C1910H6Z	19 ± 0.18	7.0	7.2	1.0	6.4
C1910H7	C1910H7Z	19 ± 0.18	7.0	7.2	1.0	7.4

C-J



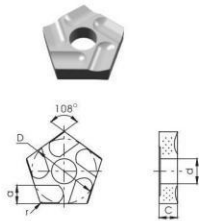
型号 Type		基本尺寸 Dimension(mm)				
右 Right	左 Left	D ± Tol.	C ± 0.13	d ± 0.13	r	α≈
C1005J	C1005JZ	10 ± 0.08	3.5	4.2	0.5	2.4
C1305J	C1305JZ	13 ± 0.13	4.5	5.2	0.5	3.4
C1610J	C1610JZ	16 ± 0.18	5.5	6.2	1.0	4.4
C1910J	C1910JZ	19 ± 0.18	7.0	7.2	1.0	5.4

M-H



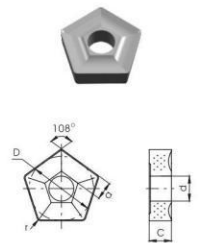
型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ±0.13	d±0.13	r	α≈	
M1610H5	M1610H5Z	16±0.18	5.5	6.2	1.0	5.4	
M1910H7	M1910H7Z	19±0.18	7.0	7.2	1.0	7.4	
M2220H8	M2220H8Z	22±0.25	8.5	8.2	2.0	8.4	

5-A



型号 Type		基本尺寸 Dimension(mm)					
右 Right	左 Left	D ± Tol.	C ±0.13	d±0.13	r	α≈	
51605A	51605AZ	16±0.18	4.5	6.2	0.5	4.4	
51610A	51610AZ	16±0.18	4.5	6.2	1.0	4.4	
51620A	51620AZ	16±0.18	4.5	6.2	2.0	4.4	
51910A	51910AZ	19±0.18	5.5	7.2	1.0	5.4	
51920A	51920AZ	19±0.18	5.5	7.2	2.0	5.4	

5-V

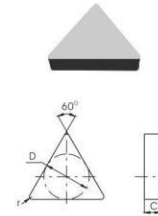


型号 Type	基本尺寸 Dimension(mm)					
	D ± Tol.	C ±0.13	d±0.13	r	α≈	
51610V	16±0.18	4.5	6.2	1.0	4.4	
51620V	16±0.18	4.5	6.2	2.0	4.4	
51910V	19±0.18	5.5	7.2	1.0	5.4	
51920V	19±0.18	5.5	7.2	2.0	5.4	
51930V	19±0.18	5.5	7.2	3.0	5.4	

◎ 硬质合金机夹刀片(铣削刀片)

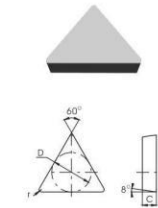
Carbide milling cutter

X3-0



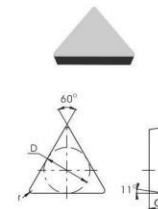
型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ±0.13	r	
X307050	7.34±0.08	3.3	0.5	
X310050	10.34±0.08	3.85	0.5	
X313050	13.45±0.13	4.85	0.5	
X313100	13.45±0.13	4.85	1.0	
X316100	16.50±0.18	5.85	1.0	
X316150	16.50±0.18	5.85	1.5	
X316200	16.50±0.18	5.85	2.0	

X3-8



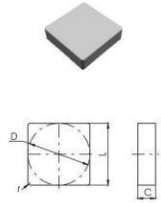
型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ±0.13	r	
X307058	7.34±0.08	3.3	0.5	
X310058	10.34±0.08	3.85	0.5	
X313058	13.34±0.13	4.85	0.5	
X313108	13.34±0.13	4.85	1.0	
X316058	16.50±0.18	5.85	0.5	
X316108	16.50±0.18	5.85	1.0	
X316208	16.50±0.18	5.85	2.0	

X3-11



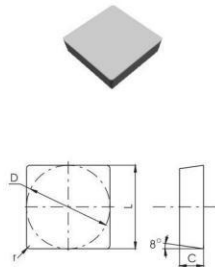
型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ±0.13	r	
X3070511	7.34±0.10	3.3	0.5	
X3100511	10.34±0.10	3.85	0.5	
X3130511	13.45±0.15	4.85	0.5	
X3131011	13.45±0.15	4.85	1.0	
X3130511A	13.45±0.15	5.1	0.5	
X3160511	16.50±0.18	5.85	0.5	
X3161011	16.50±0.18	5.85	1.0	

X4-0



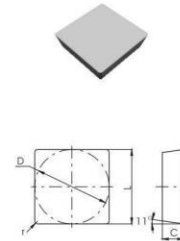
型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ± 0.13	r	
X410050	10.4±0.08	3.85	0.5	
X413050	13.4±0.13	4.85	0.5	
X413100	13.4±0.13	4.85	1.0	
X416050	16.5±0.18	4.85	0.5	
X416100	16.5±0.18	4.85	1.0	
X419100	19.6±0.18	5.85	1.0	
X419200	19.6±0.18	5.85	2.0	
X425100				
X425200	25.6±0.25	7.35	2.0	

X4-8



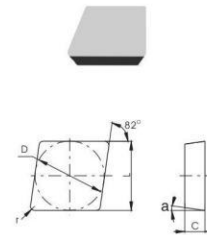
型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ± 0.13	r	
X410058	10.4±0.08	3.3	0.5	
X413058	13.4±0.13	3.85	0.5	
X413058T	13.4±0.13	4.85	0.5	
X413108T	13.4±0.13	4.85	1.0	
X416058	16.5±0.18	4.85	0.5	
X416108	16.5±0.18	4.85	1.0	
X416158	16.5±0.18	4.85	1.5	
X419108	19.6±0.18	5.85	1.0	
X419208	19.6±0.18	5.85	2.0	
X425108	25.6±0.25	7.35	1.0	
X425208	25.6±0.25	7.35	2.0	

X4-11



型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ± 0.13	r	
X4100511	10.4±0.10	3.3	0.5	
X4130511-B	13.4±0.15	3.5	0.5	
X4130511	13.4±0.15	3.85	0.5	
X4130511T	13.4±0.15	4.85	0.5	
X4131011T	13.4±0.15	4.85	1.0	
X4130511A	13.4±0.15	5.1	0.5	
X4160511	16.5±0.18	4.85	0.5	
X4160511-B	16.4 <sup>+0.05</sup> <sub>-0.08</sub>	4.9 <sup>+0.05</sup> <sub>-0.08</sub>	0.5	
X4160511A-B	16.3 <sup>+0.05</sup> <sub>-0.08</sub>	5.1 <sup>+0.05</sup> <sub>-0.08</sub>	0.5	
X4161011A	16.5±0.18	5.10	0.5	
X4161011	16.5±0.18	4.85	1.0	
X4161511	16.5±0.18	4.85	1.5	
X4191011	19.5±0.18	5.85	1.0	
X4192011	19.5±0.18	5.85	2.0	
X4251011	25.6±0.25	7.35	1.0	
X4252011	25.6±0.25	7.35	2.0	

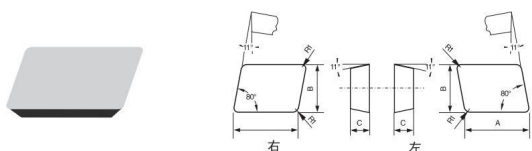
XC系列



型号 Type	基本尺寸 Dimension(mm)			
	D ± Tol.	C ± 0.13	r	a
XC161008(851035)	16.5±0.2	4.8	1.0	8
XC161011-B	16.5±0.2	4.85	1.0	11
XC161008-5.1(851035-5.1)	16.5±0.2	5.1	1.0	8

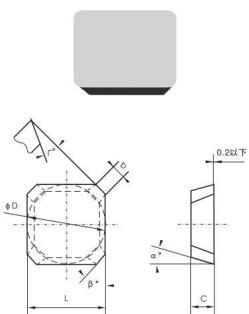


长形铣刀片



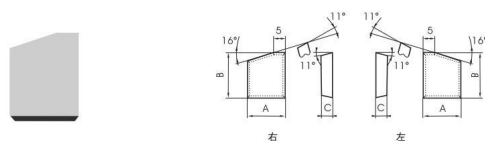
型号 Type		基本尺寸 Dimension(mm)		
右 Right	左 Left	A	B	C
CPGN1604R	CPGN1604L	16.4±0.1	12.4±0.1	4.9±0.1

非国标铣刀盘常用铣刀片



型号 Type	基本尺寸 Dimension(mm)					
	D=L	C	b	$\alpha$	$\beta$	$\Gamma$
X4160511-B65D	16.4±0.1	4.9±0.1	2.5	11	65	20
X4160515-B45	16.4±0.1	4.9±0.1	1.5	15	45	15
X4160515-B45D	16.4±0.1	4.9±0.1	2.5	15	45	20
X4160516-B45	16.4±0.1	4.9±0.1	2.5	16	45	16
X4160516A-B	16.3±0.1	5.1±0.1	-	16	-	-
X4160518	16.4±0.1	4.9±0.1	-	18	-	-
X4160520-B45	16.0±0.1	4.9±0.1	2.0	20	45	25

刮光刀片

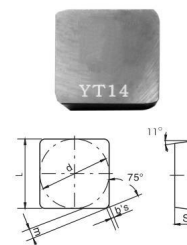


型号 Type		基本尺寸 Dimension(mm)		
右 Right	左 Left	A	B	C
Y96004	Y96005	16.4±0.1	19.0±0.1	4.85±0.1
Y96004-5.1	Y96005-5.1	16.4±0.1	19.0±0.1	5.10±0.1

硬质合金机夹刀片(精磨铣削刀片)

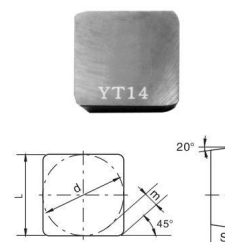
Cemeted carbide finishing milling blade

面铣刀片



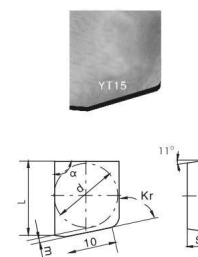
型号规格	尺寸			
	L=d	s	m	b's
SPCN1203ED R/L	12.7	3.175	0.9	1.4
SPCN1504ED R/L	15.875	4.76	1.25	
SPCN1905ED R/L	19.05	5.56	1.48	2.0

45° 铣刀片



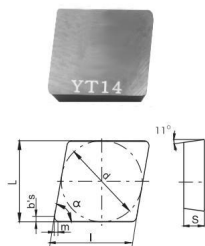
型号规格	尺寸			
	L	d	S	m
SECN1203AFN	12.7	12.7	3.175	1.622
SECN1504AFN	15.875	15.875	4.76	2.043

刮光铣刀片



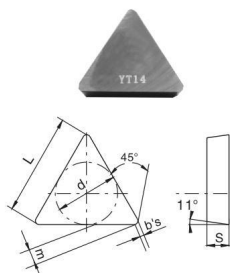
型号规格	尺寸					
	L	d	S	m	Kr	$\alpha$
LPEX1804ED R/L	18.3	15.875	4.76	1.32	75°	80°
LPCX1504ZP R/L	17.62	15.8		0.97	80°	
LPCX1604PP R/L	18.19		4.5	1.20	90°	82°

直角三面刃铣刀



型号规格	尺寸					
	L=d	l	S	m	b's	$\alpha$
82° 4×H16 Y/Z	16	-	4.5	0.93	0.93	82°
88° 4×H13 Y/Z	13	12.5		0.164	1.2	88°
88° 4×H16 Y/Z	16	15.5	5.5	0.21	1.4	88°
88° 4×H19 Y/Z	19	18.5		0.258		88°
90° 4×H16 Y/Z	16	16	4.5	1.25	1.4	90°

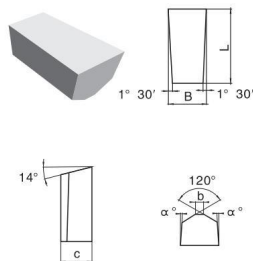
三角形刀片



型号规格	尺寸				
	L	d	S	m	b's
TPCN1103PD R/L	11	6.35	3.175	1.63	0.7
TPCN1603PD R/L	16.5	9.525	3.175	2.45	1.3
TPCN2204PD R/L	22	12.7	4.76	3.55	1.4

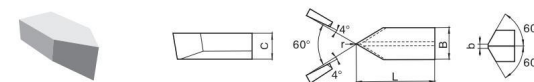
◎硬质合金机夹刀片(切槽、切断刀片)  
Cut and cut the blade

JCQ



型号 Type	基本尺寸 Dimension(mm)				
	B	L	C	b	$\alpha$
JCQ3	3.2±1.2	12±0.25	3.5±0.2	0.2	1° 30'
JCQ3.5	3.5±0.2	14±0.25	4±0.2	0.4	30°
JCQ4	4.2±0.2	14±0.25	5.5±0.25	0.5	1° 30'
JCQ4.5	4.5±0.2	16±0.35	4±0.2	0.5	30°
JCQ5	5.2±0.25	16±0.35	6±0.25	0.5	1° 30'
JCQ5.5	5.5±0.25	18±0.35	5±0.25	0.5	30°
JCQ6	6.2±0.25	18±0.35	6.5±0.25	0.5	1° 30'
JCQ6.5	6.5±0.25	18±0.35	6±0.25	0.5	30°
JCQ8	8.2±0.25	22±0.35	7.5±0.25	1.0	1° 30'
JCQ10	10.2±0.25	25±0.35	8±0.25	1.0	1° 30'
JCQ12	12.2±0.25	28±0.5	10.5±0.25	1.5	1° 30'
JCQ16	16.2±0.25	30±0.5	12.50±0.25	1.5	1° 30'

JCL



型号 Type	基本尺寸 Dimension(mm)				
	L	B ±0.25	C ±0.25	b	r
JCL15-120	15±0.35	4	4	0.5	0.5
JCL20-120	20±0.35	6	6	0.8	0.5
JCL20-120A	20±0.35	6	4.76	0.8	0.5
JCL25-120	25±0.35	8	7.5	1.2	0.5
JCL25-120A	25±0.35	8	6.35	1.2	0.5
JCL28-120	28±0.50	10	8	1.5	0.5
JCL30-120	30±0.50	12	10	1.5	0.5

◎硬质合金机夹刀片(凹圆弧成型车刀和轮毂车刀)  
Concave arc forming tool and wheel Gu turning tool

B 4型



型号 Type	基本尺寸 Dimension(mm)			
	D	d	H	R
B428	28.3	10	10	35
B433	33	12	10	35
B446	46.5	15	12	41.7

◎ 硬质合金焊接刀片(国家标准焊接刀片)  
National standard welding blade

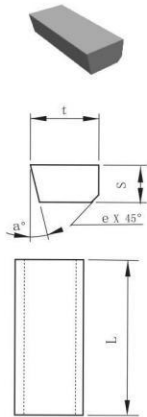
L、t、S、允许偏差

Tolerances of L, t, and S

基本尺寸 Dimensions	允许偏差 Tolerances	E1、E2型的尺寸允许偏差 Tolerances of L for Type E2 an	
		上偏差 Tolerance Plus	下偏差 Tolerance Minus
≤6	±0.2	+0.3	-0.1
>6~12	±0.3	+0.4	-0.2
>12~25	±0.4	+0.6	-0.3
>25~40	±0.6	+0.8	-0.4
>40	±0.7	+1.0	-0.4

A1制造外圆车刀、镗刀和切槽刀

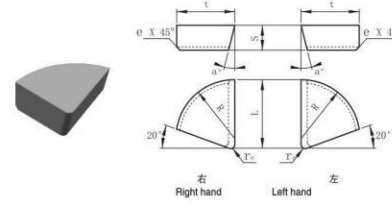
Type A1  
For making periphery turning tools, boring tools and grooving tools.



型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	e	α°
A106	6	5	2.5	-	0
A108	8	7	3.0	-	0
A110	10	6	3.5	0.8	14
A112	12	10	4.0	0.8	14
A114	14	12	4.5	0.8	14
A116	16	10	5.5	0.8	14
A118	18	12	7.0	0.8	14
A118A	18	16	6.0	0.8	14
A120	20	12	7.0	0.8	14
A122	22	15	8.5	0.8	14
A122A	22	18	7.0	0.8	14
A125	25	15	8.5	0.8	14
A125A	25	20	10.0	0.8	14
A130	30	16	10.0	0.8	14
A136	36	20	10.0	0.8	14
A140	40	18	10.5	1.2	14
A150	50	20	10.5	1.2	14
A160	60	22	10.5	1.2	14
A170	70	25	12	1.2	14

A2型制造镗刀和端面车刀

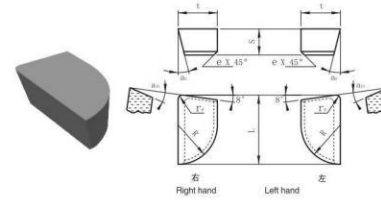
Type A2  
For making boring tools and end turning tools.



型号 Type		基本尺寸 Dimension(mm)						
R.H.	L.H.	L	t	S	R	r <sub>f</sub>	e	α°
A208	-	8	7	2.5	7	0.5	-	0
A210	-	10	8	3.0	8	1.0	-	0
A212	A212Z	12	10	4.5	10	1.0	0.8	14
A216	A216Z	16	14	6.0	14	1.0	0.8	14
A220	A220Z	20	18	7.0	18	1.0	0.8	14
A225	A225Z	25	20	8.0	20	1.0	0.8	14

A3型制造端面车刀和外圆车刀

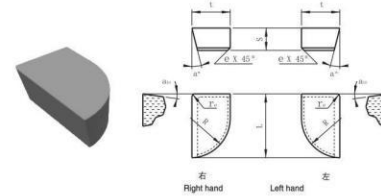
Type A3  
For making end and periphery turning tools.



型号 Type		基本尺寸 Dimension(mm)						
R.H.	L.H.	L	t	S	R	r <sub>f</sub>	e	α°
A310	-	10	6	3	6	1	-	0
A312	A312Z	12	7	4	7	1	0.8	14
A315	A315Z	15	9	6	9	1	0.8	14
A320	A320Z	20	11	7	11	1	0.8	14
A325	A325Z	25	14	8	14	1	0.8	14
A330	A330Z	30	16	9.5	16	1	0.8	14
A340	A340Z	40	18	10.5	18	1	1.2	14

A4型制造外圆车刀、镗刀和端面车刀

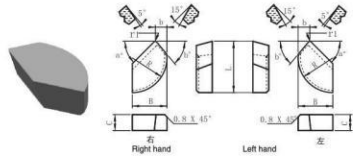
Type A4  
For making periphery turning tools, boring tools and end turning tools.



型号 Type		基本尺寸 Dimension(mm)						
R.H.	L.H.	L	t	S	R	r <sub>f</sub>	e	α°
A406	-	6	5	2.5	5	0.5	-	0
A408	-	8	6	3	6	0.5	-	0
A410	A410Z	10	6	3.5	6	1	-	14
A412	A412Z	12	8	4.5	8	1	0.8	14
A416	A416Z	16	10	5.5	10	1	0.8	14
A420	A420Z	20	12	7	12.5	1	0.8	14
A425	A425Z	25	15	8.5	16	1	0.8	14
A430	A430Z	30	16	6	16	1	0.8	14
A430A	A430AZ	30	16	9.5	16	1	0.8	14
A440	A440Z	40	18	8	18	1	0.8	14
A440A	A440AZ	40	18	10.5	18	1	1.2	14
A450	A450Z	50	20	8	20	1.5	0.8	14
A450A	A450AZ	50	20	12	20	1.5	1.2	14

**A5型 制造直头外圆车刀、通孔镗刀及装配式端铣刀**

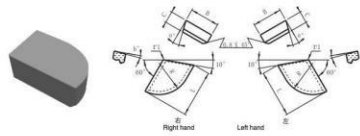
Type A5  
For making straight shank periphery turning tools,  
Boring through tools and mounting type end milling tools.



型号 Type		基本尺寸 Dimension(mm)						
R.H.	L.H.	L	B	C	b	R	a°	β°
A515	A515Z	15	10	4.5	5	10	45	40
A518	A518Z	18	12	5.5	4	12	45	50

**A6型 制造镗刀、外圆车刀**

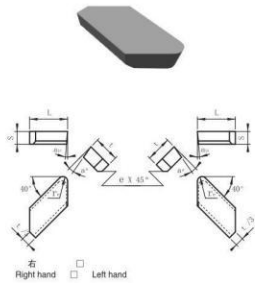
Type A6  
For making boring tools and periphery turning tools



型号 Type		基本尺寸 Dimension(mm)						
R.H.	L.H.	L	B	C	R	a°	β°	
A612	A612Z	12	8	3	8	14	5	
A615	A615Z	15	10	4	10	14	5	
A618	A618Z	18	12	4.5	12	14	5	

**B1型 制造成型车刀、燕尾槽刨刀和燕尾槽铣刀**

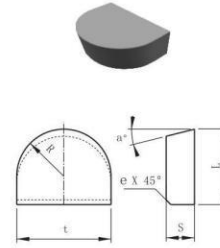
Type B1  
For making forming turning tools, planing and milling tools for  
machining dove tail grooves.



型号 Type		基本尺寸 Dimension(mm)							
R.H.	L.H.	L	t	S	r <sub>f</sub>	e	a°	a <sub>1</sub> °	
B108	-	8	6	3	1.5	-	0	0	
B112	B112Z	12	8	4	1.5	1	10	5	
B116	B116Z	16	10	5	1.5	1	10	5	
B120	B120Z	20	14	6	1.5	1	10	5	
B120A	B120AZ	20	16	7	1.5	1.5	10	5	
B125	B125Z	25	14	5	1.5	1.5	10	5	
B125A	B125AZ	25	18	8	1.5	1.5	10	5	
B130	B130Z	30	20	8	1.5	1.5	10	5	

**B2型 制造凹圆弧成型车刀和轮缘车刀**

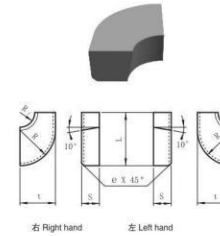
Type B2  
For making forming tools for machining concave radii and forming turning tools for railway wheels



型号 Type	基本尺寸 Dimension(mm)					
	L	t	S	R	e	a°
B208	8	8	3	4	-	-
B210	10	10	3.5	5	0.8	14
B212	12	12	4.5	6	0.8	14
B214	14	16	5	8	0.8	14
B216	16	20	6	10	0.8	14
B220	20	25	7	12.5	0.8	14
B225	25	30	8	15	0.8	14
B228	28	35	9	17.5	0.8	14

**B3型 制造倒圆角车刀**

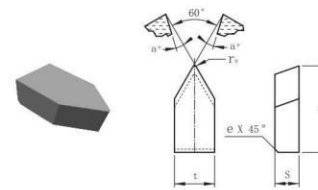
Type B3  
For making turning tools for radius machining



型号 Type		基本尺寸 Dimension(mm)					
R.H.	L.H.	L	t	S	R	R <sub>1</sub>	e
B312	B312Z	12	8	4	8	3	0.8
B315	B315Z	15	10	5	10	5	0.8
B318	B318Z	18	12	6	12	6	0.8
B322	B322Z	22	16	7	16	10	0.8

**C1型 制造螺纹车刀及外圆精车刀**

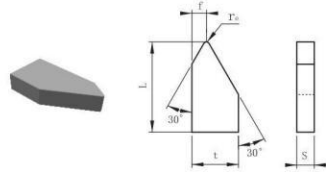
Type C1  
For making threading tools & turning tools for the finishing of  
peripheries



型号 Type	基本尺寸 Dimension(mm)					
	L	t	S	r <sub>f</sub>	e	a°
C110	10	4	3	0.5	-	-
C116	16	6	4	0.5	0.8	10
C120	20	8	5	0.5	0.8	10
C122	22	10	6	0.5	0.8	10
C125	25	12	7	0.5	0.8	10

**C1-A型 制造螺纹车刀及外圆精车刀**

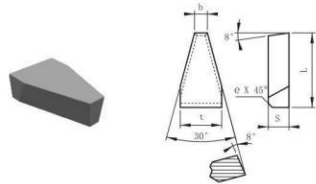
Type C1-A  
For making threading turning tools & turning tools for the finish of peripheries



型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	r <sub>e</sub>	f
C110A	10	6.5	2.5	0.5	1.6
C116A	16	8	3	0.5	2.5
C120A	20	10	4	0.5	3.5

**C2型 制造精车刀和梯形螺纹车刀**

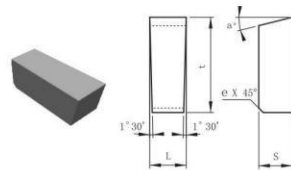
Type C2  
For making finishing turning tools and trapezoid threading turning tools.



型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	b	e
C215	15	7	4	1.8	0.8
C218	18	10	5	3.1	0.8
C223	23	14	5	4.9	0.8
C228	28	18	6	7.7	0.8
C236	36	28	7	13.1	0.8

**C3型 制造切断刀和切槽刀**

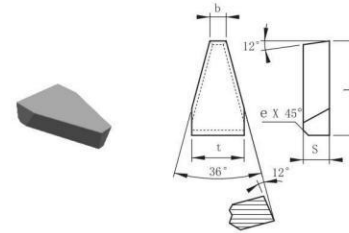
Type C3  
For making parting tools and grooving tools.



型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	e	a°
C303	3.5	12	3	-	-
C304	4.5	14	4	0.8	14
C305	5.5	17	5	0.8	14
C306	6.5	17	6	0.8	14
C308	8.5	20	7	0.8	14
C310	10.5	22	8	0.8	14
C312	12.5	22	10	0.8	14
C316	16.5	25	11	1.2	14

**C4型 制造加工三角皮带轮切槽刀**

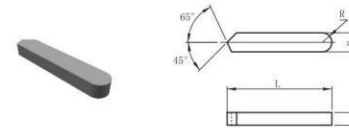
Type C4  
For making grooving tools for machining wheels of triangular belts.



型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	b	e
C420	20	12	5	3	0.8
C425	25	16	5	4	0.8
C430	30	20	6	5.5	0.8
C435	35	25	6	7.5	0.8
C442	42	35	8	12.5	0.8
C450	50	42	8	15	0.8

**C5型 制造面粉轧辊拉丝刀**

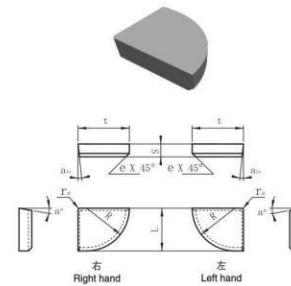
Type C5  
For making turning tools for the grooving of rolls in wheat flour production.



型号 Type	基本尺寸 Dimension(mm)			
	L	B	C	R
C539	39	4	4	2
C545	45	6	4	3

**D1型 制造端面铣刀、外圆车刀、镗刀**

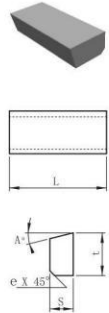
Type D1  
For making end milling tools, periphery turning tools and boring tools.



R.H.	L.H.	基本尺寸 Dimension(mm)							
		t	L	S	R	r <sub>e</sub>	e	a°	a'°
D110	-	10	8	2.5	8	0.5	-	0	0
D112	-	12	10	3	10	0.5	-	0	0
D115	D115Z	15	12	3.5	12.5	0.5	0.8	10	6
D120	D120Z	20	16	4	16	1	0.38	10	6
D125	D125Z	25	20	5	20	1	0.8	10	6
D130	D130Z	30	20	6	20	1	0.8	10	6

**D2型 制造三面刃铣刀、T型槽铣刀和浮动镗刀**

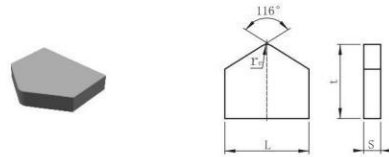
Type D2  
For making 3-edged milling tools, milling tools for T grooves and adjustable boring tools.



型号 Type	基本尺寸 Dimension(mm)					型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	e	a°		L	t	S	e	a°
D206	6	7	3	-	0	D222	22	6	3	-	0
D208	8	4	3	-	0	D222A	22	14	4	0.8	14
D210	10	5	3	-	0	D224	24	14	4	0.8	14
D210A	10	10	3	-	0	D226	26	10	5	0.8	14
D212	12	6	3	-	0	D226A	26	14	5	0.8	14
D212A	12	12	3.5	-	14	D228	28	10	4	0.8	14
D214	14	7	3.5	-	14	D228A	28	14	4	0.8	14
D214A	14	12	3.5	-	14	D230	30	14	5	0.8	14
D216	16	7	3.5	-	14	D232	32	12	5	0.8	14
D216A	16	12	3.5	0.8	14	D232A	32	14	4	0.8	14
D218	18	5	3	-	0	D236	36	14	4	0.8	14
D218A	18	7	3.5	0.8	14	D238	38	12	5	0.8	14
D218B	18	12	3.5	0.8	14	D240	40	14	5	0.8	14
D220	20	10	4	0.8	14	D246	46	14	5	0.8	14

**E1型 制造加工非金属和金属材料直槽钻头**

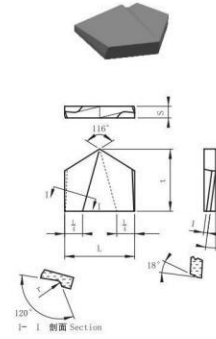
Type E1  
For making straight flute drills for machining non-metal and metal materials.



型号 Type	基本尺寸 Dimension(mm)			
	L	t	S	r <sub>e</sub>
E105	5	5	1.5	1
E106	6	6	1.5	1
E107	7	6	1.5	1
E108	8	7	1.8	1
E109	9	8	2	1
E110	10	9	2	1

**E3型 制造麻花钻头和直槽钻头**

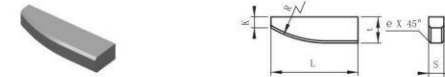
Type E2  
For making twist drills and straight flute drills.



型号 Type	基本尺寸 Dimension(mm)				型号 Type	基本尺寸 Dimension(mm)			
	L	t	S	r		L	t	S	r
E210	10.8	9	2	1	E226	26	22	4.5	2
E211	11.8	10	2.5	1	E227	27.5	22	4.5	2
E213	13	11	2.5	1	E228	28.5	22	4.5	2
E214	14	12	2.5	1	E229	29.5	24	5	2
E215	15	13	2.5	1	E230	30.5	24	5	2
E216	16	14	3	1	E231	31.5	24	5	2
E217	17	15	3	1.5	E233	33.5	26	5	2
E218	18	16	3	1.5	E236	36.5	26	5	2
E219	19	17	3	1.5	E239	39.5	26	5	2
E220	20	18	3.5	1.5	E242	42	28	6	2
E221	21	18	3.5	1.5	E244	44	28	6	2
E222	22	18	3.5	1.5	E247	47	28	6	2
E223	23	18	4	1.5	E250	50	30	6	2
E224	24	18	4	1.5	E252	52	30	6	2
E225	25	22	4.5	2					

**E3型 制造键槽铣刀 端铣刀及深孔扩孔钻**

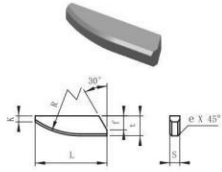
Type E3  
For making keyway milling tools, end milling tools and broaching bits.



型号 Type	基本尺寸 Dimension(mm)					
	L	t	S	K	R	e
E312	12	6	1.5	1.5	20	-
E315	15	3.5	2	1.5	20	-
E315A	15	7	2	1.5	20	-
E320	20	4.5	2.5	2.5	25	-
E320A	20	6	3.5	2.5	25	0.5
E320B	20	9	2.5	2.5	25	-
E325	25	8	3	3.5	30	0.5
E325A	25	15	3	3.5	30	0.5
E330	30	10	4	3.5	30	0.5
E330A	30	21	4	3.5	30	0.5
E335	35	10	5	3.5	30	0.5
E340	40	12	5	3.5	30	0.5
E345	45	12	6	3.5	30	0.5

**E4型 制造扩孔钻**

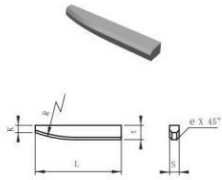
Type E4  
For making broaching drill bits.



型号 Type	基本尺寸 Dimension(mm)						
	L	t	S	f	K	R	e
E415	15	4	2	2.5	1.5	1.5	-
E418	18	5	2.5	3.5	1.5	20	-
E420	20	6	3	5	1.5	25	0.5
E425	25	8	3.5	6	2	25	0.5
E430	30	10	4	8	2	30	0.5

**E5型 制造手动绞刀及机动绞刀**

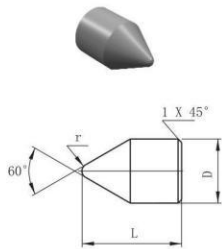
Type E5  
For making hand-operated reamers and automatic reamers.



型号 Type	基本尺寸 Dimension(mm)					
	L	t	S	K	R	e
E515	15	2.5	1.3	1.5	20	-
E518	18	3	1.5	1.5	25	-
E522	22	3.5	2	1.5	25	-
E525	25	4	2.5	2	30	-
E530	30	5	3	2	30	0.5
E540	40	6	3.5	2	30	0.5

**F1型 制造车床和外圆磨床顶尖**

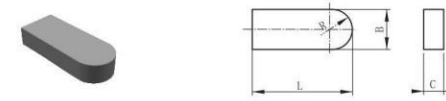
Type F1  
For making core clampers for lathes and periphery grinders.



型号 Type	基本尺寸 Dimension(mm)		
	D	L	r
F108	8	15	1
F112	12	20	1.5
F115	15	24	1.5
F118	18	28	2
F124	24	35	2
F130	30	40	2.5
F136	36	50	2.5
F140	40	60	3

**F2型 制造扩孔钻的导向块**

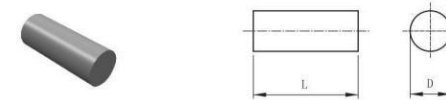
Type F2  
For making guides of broaching drill bits.



型号 Type	基本尺寸 Dimension(mm)			
	L	B	C	R
F216	16	8	5	4
F216A	16	10	5	5
F216B	16	12	6	6
F218	18	2.5	2.5	1.25
F220	20	3	3	1.5
F225	25	5	4	2.5
F230	30	6	5	3
F230A	30	8	5	4
F230B	30	10	5	5
F230C	30	12	6	6
F209	35	8	5	4
F211	40	10	5	5
F213	45	12	6	6

**F3型 制造可卸镗刀及耐磨零件**

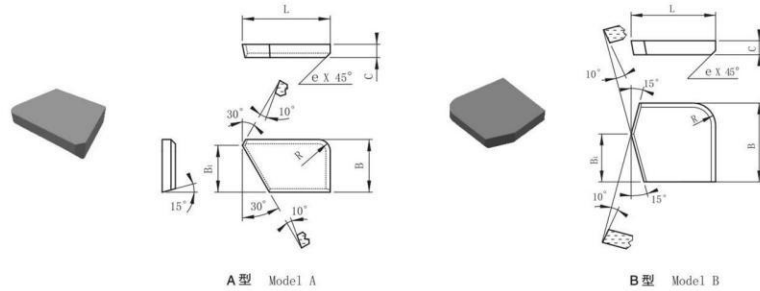
Type F3  
For making dismountable boring tools and wear parts.



型号 Type	基本尺寸 Dimension(mm)	
	D	L
F303	3.5	10
F304	4.5	12
F305	5.5	15
F306	6.5	18
F307	7.5	20
F308	8.5	22

S型 制造扩孔钻头

Type S  
For making broaching drill bits.



型号 Type	型式 Model	基本尺寸 Dimension(mm)					
		L	B	B <sub>1</sub>	C	R	e
S16	A	16	7	6.3	2	3	0.5
S20	A	20	10.6	9.5	3	4	0.5
S25	A	25	14.5	12.9	4.5	4	0.8
S30	A	30	18	16	4.5	4	0.8
S25	B	25	22	14	4.5	8	0.8
S30	B	30	28	17	5	8	0.8
S35	B	35	33	20	6	10	1.2
S40	B	40	40	23	6	10	1.2

◎ 硬质合金焊接刀片(国际标准焊接刀片)

International standard welding blade

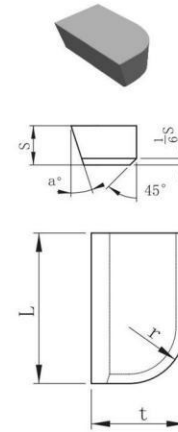
L、t、S、允许偏差

Tolerances of L, t, and S

基本尺寸 Dimension	≤6	>6-12	>12-25	>25-50	>50
允许偏差 Tolerances	+0.3 0	+0.4 0	+0.6 0	+1.0 0	+2.0 0

A型

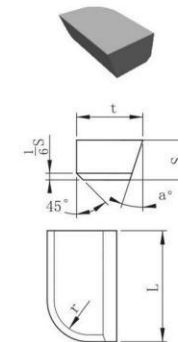
Type A



型号 Type	基本尺寸 Dimension(mm)				
	L	t	S	r	a°
A5	5	3	2	2	-
A6	6	4	2.5	2.5	-
A8	8	5	3	3	-
A10	10	6	4	4	18
A12	12	8	5	5	18
A16	16	10	6	6	18
A20	20	12	7	7	18
A25	25	14	8	8	18
A32	32	18	10	10	18
A40	40	22	12	12	18
A50	50	25	14	14	18

B型

Type B

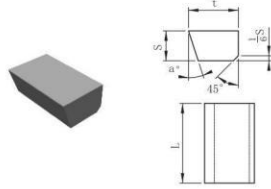


型号 Type	基本尺寸 Dimension(mm)				
	L	t	s	r	a°
B5	5	3	2	2	-
B6	6	4	2.5	2.5	-
B8	8	5	3	3	-
B10	10	6	4	4	18
B12	12	8	5	5	18
B16	16	10	6	6	18
B20	20	12	7	7	18
B25	25	14	8	8	18
B32	32	18	10	10	18
B40	40	22	12	12	18
B50	50	25	14	14	18



**C型**

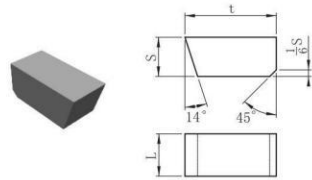
Type C



型号 Type	基本尺寸 Dimension(mm)			
	L	t	s	a°
C5	5	3	2	-
C6	6	4	2.5	-
C8	8	5	3	-
C10	10	6	4	18
C12	12	8	5	18
C16	16	10	6	18
C20	20	12	7	18
C25	25	14	8	18
C32	32	18	10	18
C40	40	22	12	18
C50	50	25	14	18

**D型**

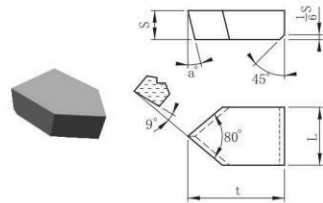
Type D



型号 Type	基本尺寸 Dimension(mm)		
	L	t	s
D3	3.5	8	3
D4	4.5	10	4
D5	5.5	12	5
D6	6.5	14	6
D8	8.5	16	8
D10	10.5	18	10
D12	12.5	20	12

**E型**

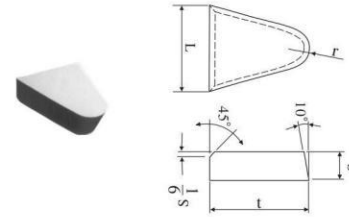
Type E



型号 Type	基本尺寸 Dimension(mm)			
	L	T	s	a°
E4	4	10	2.5	-
E5	5	12	3	-
E6	6	14	3.5	9
E8	8	16	4	9
E10	10	18	5	9
E12	12	20	6	9
E16	16	22	7	9
E20	20	25	8	9
E25	25	28	9	9
E32	32	32	10	9

**G型 (非标)**

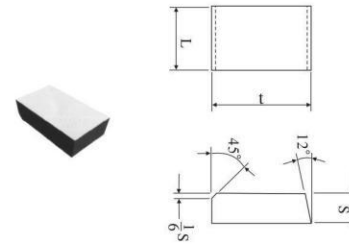
Type G(non-standard)



型号 Type	基本尺寸 Dimension(mm)			
	L	t	s	r
G8	8.0	12.0	4.0	1.0
G10	10.0	14.0	4.0	1.5
G12	12.0	17.0	5.0	2.5
G16	16.0	20.0	6.0	3.5
G20	20.0	24.0	6.0	4.5
G25	25.0	28.0	8.0	6.0
G30	30.0	34.0	10.0	8.0

**K型 (非标)**

Type K(non-standard)



型号 Type	基本尺寸 Dimension(mm)		
	L	t	s
K2	2.5	15.0	4.0
K3	3.5	15.0	4.0
K4	4.5	15.0	4.0
K5	5.5	15.0	4.0
K6	6.5	15.0	4.0
K7	7.5	15.0	4.0
K8	8.5	20.0	6.0
K9	9.5	20.0	6.0
K10	10.5	20.0	6.0
K12	12.5	20.0	6.0

**◎硬质合金焊接刀片(73系列)**

Series 73

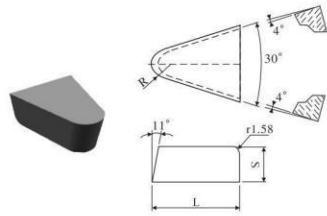
**L、t、S、允许偏差**

Tolerances of L, t, and S

基本尺寸 Dimension	≤4.8	4.8-9.52	9.52-25.4	25.4-50.8
允许偏差 Tolerances	+0.25 0	+0.38 0	+0.5 0	+1.0 0

73-0/1系列

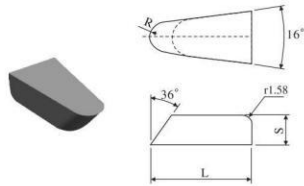
Series 73-0/1



型号 Type	基本尺寸 Dimension(mm)		
	L	S	R
73-05	11.1	2.4	1.6
73-06	11.1	4	1.6
73-07	12.7	3.2	2.4
73-08	12.7	4.8	2.4
73-09	15.9	4	3.2
73-1	15.9	6.4	3.2
73-11	19.1	4.8	4
73-12	19.1	6.4	4
73-13	19.1	7.9	4
73-14	22.2	6.4	4.8
73-15	22.2	7.9	4.8
73-16	22.2	9.5	4.8
73-17	28.6	7.9	5.6
73-18	31.8	9.5	6.4

73-2系列

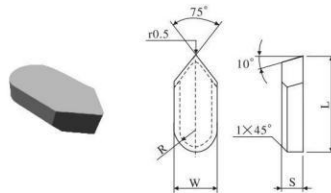
Series 73-2



型号 Type	基本尺寸 Dimension(mm)		
	L	S	R
73-2	16.7	4.8	2.4
73-21	13.5	4	1.6
73-22	11.9	3.2	1.6
73-23	10.3	2.4	1.2
73-24	19.8	6.4	4

73-3系列

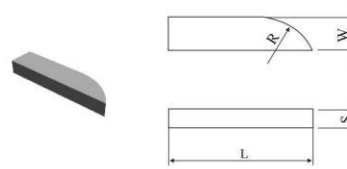
Series 73-3



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
73-3	18	8	4	4

73-4系列

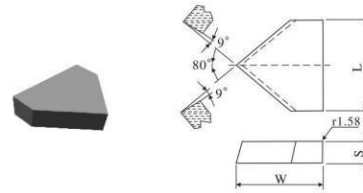
Series 73-4



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
73-4	22.2	6.4	3.2	9.5
73-41	19.1	4.8	2.8	7.9
73-42	17.5	4	2.3	7.9
73-43	17.5	3.2	1.8	6.4
73-44	12.7	2.4	1.4	6.4
73-45	9.5	1.6	0.9	6.4

73-5系列

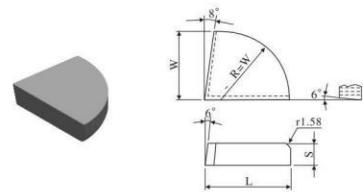
Series 73-5



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
73-5	10.3	9.5	2.4
73-51	13.5	12.7	3.2
73-52	16.7	15.9	4
73-53	19.8	19.1	4.8
73-54	26.2	25.4	6.4
73-55	8.7	7.9	2

73-6系列

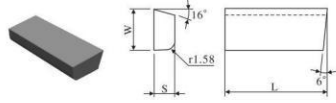
Series 73-6



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
73-6R	11.1	9.5	3.2
73-6L	11.1	9.5	3.2
73-61R	15.9	12.7	4
73-61L	15.9	12.7	4
73-62R	15.9	12.7	4.8
73-62L	15.9	12.7	4.8
73-63R	22.2	19.1	6.4
73-63L	22.2	19.1	6.4

73-7系列

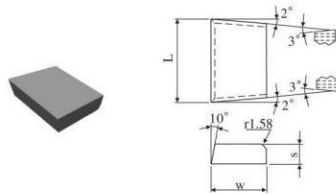
Series 73-7



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
73-7	15.9	6.4	3.2
73-71	19.1	7.9	4
73-72	22.2	9.5	4.8

73-8系列

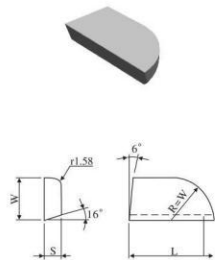
Series 73-8



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
73-8	13.5	9.5	3.2
73-81	16.7	11.1	4
73-82	13.5	9.5	4.8
73-83	19.8	12.7	4.8
73-84	19.8	12.7	6.4
73-85	26.2	15.9	6.4

73-9系列

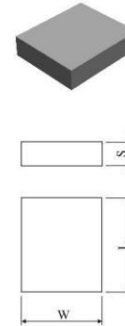
Series 73-9



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
73-9R 73-9L	12.7	6.4	2.4
73-91R 73-91L	15.9	7.9	3.2
73-92R 73-92L	19.1	9.5	4
73-93R 73-93L	22.2	12.7	4.8
73-94R 73-94L	22.2	12.7	6.4
73-95R 73-95L	30.2	15.9	6.4

73-10系列

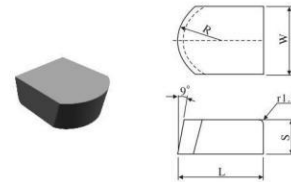
Series 73-10



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
73-10	4.8	4.8	1.6
73-100	6.4	6.4	1.6
73-101	7.9	6.4	2.4
73-102	9.5	7.2	2.4
73-103	10.3	10.3	2.4
73-104	11.1	7.1	3.2
73-105	12.7	4.8	2.4
73-106	12.7	10.3	3.2
73-107	12.7	12.7	4
73-108	15.9	9.5	4
73-109	15.9	13.5	4
73-1091	19.1	2.4	1.6
73-1092	19.1	9.5	4
73-1093	19.1	12.7	4.8
73-1094	25.4	4.8	2.4
73-1095	25.4	6.4	2.4
73-1096	25.4	9.5	4.8
73-1097	31.8	9.5	3.2
73-1098	31.8	12.7	6.4

73-11系列

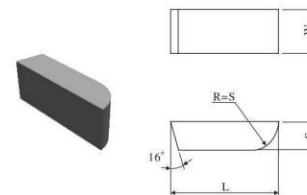
Series 73-11



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
73-110	19.8	15.9	7.9	9.9

73-12系列

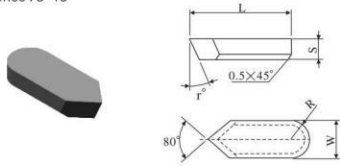
Series 73-12



型号 Type	尺寸 Dimensions (mm)		
	L	W	S
73-120	9.5	2.4	2.4
73-121	11.1	3.2	3.2
73-122	14.3	4.8	4
73-123	15.9	6.4	4
73-124	19.1	7.9	4.8
73-125	22.2	9.5	6.4

73-13系列

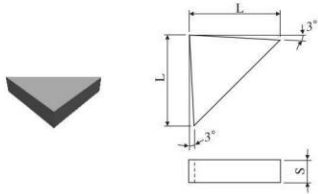
Series 73-13



型号 Type	基本尺寸 Dimension(mm)				
	L	W	S	R	r'
73-130	16.5	6.2	3.3	3.1	16
73-131	18.5	8.3	4.3	4.2	21
73-132	20.5	10	5.3	5	16

73-14系列

Series 73-14



型号 Type	基本尺寸 Dimension(mm)	
	L	S
73-140	15.9	4
73-141	19.1	4.8

◎ 硬质合金焊接刀片(81系列)  
Series 81

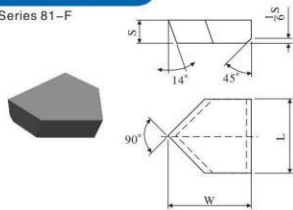
L、t、S、允许偏差

Tolerances of L, t, and S

基本尺寸 Dimension	≤6	6~12	12~25	25~50	50~100	>10
允许偏差 Tolerances	+0.3 0	+0.4 0	+0.6 0	+1.0 0	+2.0 0	3%

81-F系列

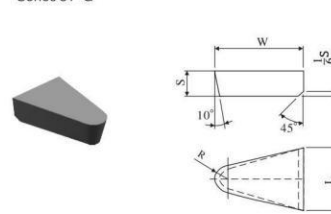
Series 81-F



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-F10	10	12	4
81-F13	13	15	4
81-F16	16	18	5
81-F20	20	20	7
81-F25	25	25	8
81-F30	30	30	9

81-G系列

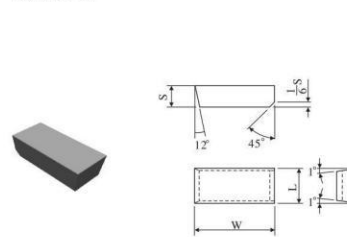
Series 81-G



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
81-G8	8	12	4	1
81-G10	10	14	4	1.5
81-G12	12	17	5	2.5
81-G16	16	20	6	3.5
81-G20	20	24	6	4.5
81-G25	25	28	8	6
81-G30	30	34	10	8

81-K系列

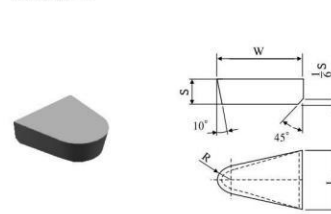
Series 81-K



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-K2	2.5	15	4
81-K3	3.5		
81-K4	4.5		
81-K5	5.5		
81-K6	6.5		
81-K7	7.5		
81-K8	8.5	20	6
81-K9	9.5		
81-K10	10.5		
81-K12	12.8		

81-L系列

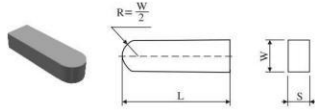
Series 81-L



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
81-L10	10	10	4	4
81-L13	13	13	4	5
81-L16	16	16	5	6
81-L20	20	20	7	8
81-L25	25	25	8	10
81-L30	30	30	9	12

81-1系列

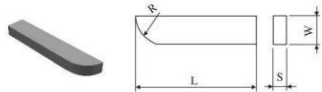
Series 81-1



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-1	20	6	4
81-11	25	6	5
81-12	30	8	6

81-2系列

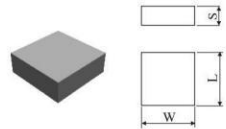
Series 81-2



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
81-2	19	2.5	1.5	4
81-21	20	3.5	2	4

81-3系列

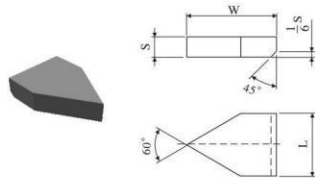
Series 81-3



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-3	9.9	9.9	3
81-31	12.5	12.5	4

81-4系列

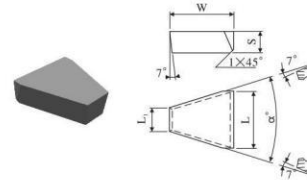
Series 81-4



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-4	9.9	14	3
81-41	12.5	18	4

81-5系列

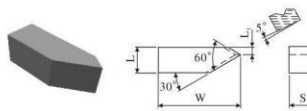
Series 81-5



型号 Type	基本尺寸 Dimension(mm)				
	L	W	S	L <sub>1</sub>	α
81-5	12	15	5	4.8	32
81-51	16	18	6	6.6	34
81-52	20	22	6	8.2	34
81-53	25	30	8	9.5	34
81-54	35	40	10	15.2	34

81-6系列

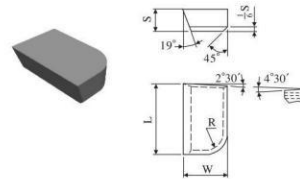
Series 81-6



型号 Type	基本尺寸 Dimension(mm)			
	B	H	C	L <sub>1</sub>
81-6R	3	12	3	1
81-6L				
81-61R	4	14	4	1.2
81-61L				
81-62R	5	16	5	1.5
81-62L				

81-7系列

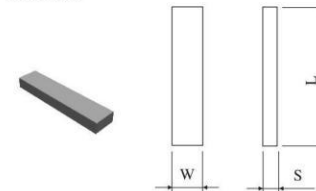
Series 81-7



型号 Type	基本尺寸 Dimension(mm)			
	L	W	S	R
81-7	12	8	4	4
81-71	16	10	5	5
81-72	20	10	8	8

81-8系列

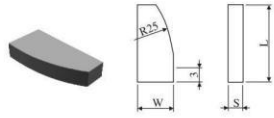
Series 81-8



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-8	12	2.5	1.5
81-81	16	3.5	1.8
81-82	20	4.5	2.5
81-83	25	5	3

81-9系列

Series 81-9



型号 Type	基本尺寸 Dimension(mm)		
	L	W	S
81-9	12	5.5	1.5
81-91	16	6.5	1.8
81-92	16	7.5	1.8
81-93	20	8.5	2
81-94	20	9.5	2.3
81-95	20	11	2.3

◎硬质合金焊接刀片(83系列)

Series 83

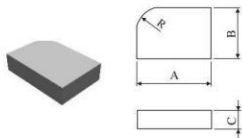
A、B、C允许偏差

Tolerances of A, B, and C

基本尺寸 Dimension	允许偏差 Tolerances					
	≤6	6-12	12-25	25-50	50-100	>10
允许偏差 Tolerances	+0.3 0	+0.4 0	+0.6 0	+1.0 0	+2.0 0	3%

8301系列

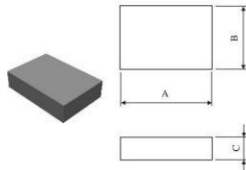
Series 8301



型号 Type	基本尺寸 Dimension(mm)			
	A	B	C	R
8301-0	10	6	3	4
8301-1	13	9	3	5
8301-2	16	11	4	5
8301-3	19	13	5	5
8301-4	22	15	6	8
8301-5	25	17	7	8
8301-6	30	20	8	8

8302系列

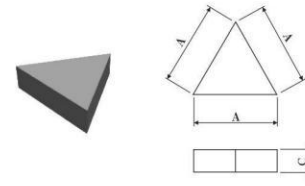
Series 8302



型号 Type	基本尺寸 Dimension(mm)		
	A	B	C
8302-0	10	6	3
8302-1	13	9	3
8302-2	16	11	4
8302-3	19	13	5
8302-4	22	15	6
8302-5	25	17	7
8302-6	30	20	8

8303系列

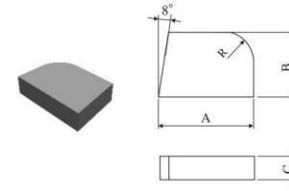
Series 8303



型号 Type	基本尺寸 Dimension(mm)	
	A	C
8303-0	10	3
8303-1	12	3
8303-2	15	4
8303-3	18	5
8303-4	24	6
8303-5	24	7
8303-6	28	8

8304系列

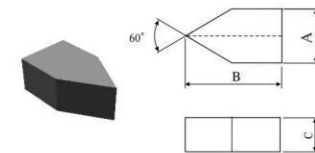
Series 8304



型号 Type	基本尺寸 Dimension(mm)			
	A	B	C	R
8304-0	10	6	3	4
8304-1	13	9	3	5
8304-2	16	11	4	5
8304-3	19	13	5	5
8304-4	22	15	6	8
8304-5	25	17	7	8
8304-6	30	20	8	8

8305系列

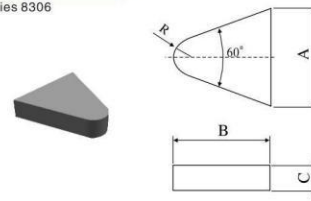
Series 8305



型号 Type	基本尺寸 Dimension(mm)		
	A	B	C
8305-1	5	8	3
8305-2	6	10	4
8305-3	7	12	5
8305-4	9	16	6
8305-5	10	18	7
8305-6	11	20	8

8306系列

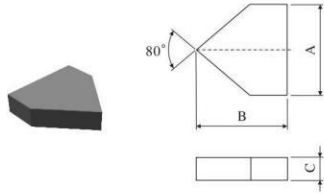
Series 8306



型号 Type	基本尺寸 Dimension(mm)			
	A	B	C	R
8306-0	10	10	3	2
8306-1	13	13	3	2.5
8306-2	16	16	4	3
8306-3	19	19	5	4
8306-4	22	22	6	4
8306-5	25	25	7	5
8306-6	30	30	8	6

8307系列

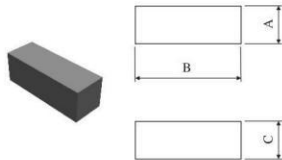
Series 8307



型号 Type	基本尺寸 Dimension(mm)		
	A	B	C
8307-0	10	10	3
8307-1	13	13	3
8307-2	16	16	4
8307-3	19	19	5
8307-4	25	20	6
8307-5	25	22	7
8307-6	30	25	8

8308系列

Series 8308



型号 Type	基本尺寸 Dimension(mm)		
	A	B	C
8308-1	3	8	3
8308-3	4	13	4
8308-4	5	15	5
8308-5	6	17	6
8308-6	8	20	8

◎ 硬质合金焊接刀片(85系列)

Series 85

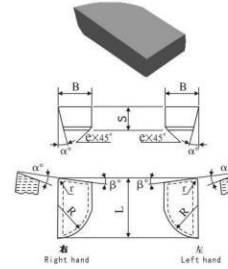
L、B、S允许偏差

Tolerances of L, B, and S

基本尺寸 Dimension	≤6	>6-12	>12-19	>19-25	>25-50
允许偏差 Tolerances	±0.25	±0.3	±0.4	±0.5	±0.6

85-AR/AL系列

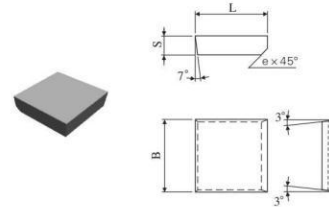
Series 85AR/AL



型号 Type	基本尺寸 Dimension(mm)								
	L	B	S	R	r	e	$\alpha^\circ$	$\beta^\circ$	
85-AR4	85-AL4	8	5	2.6	5	0.4	0.8	7	8
85-AR5	85-AL5	13	6.5	2.6	6.5	0.4	0.8	7	8
85-AR6	85-AL6	13	6.5	2.6	6.5	0.4	0.8	7	8
85-AR7	85-AL7	13	6.5	2.6	6.5	0.8	0.8	7	8
85-AR8	85-AL8	16	8	3.4	8	0.8	1	7	8
85-AR10	85-AL10	19	10	4.2	10	0.8	1	7	8
85-AR12	85-AL12	21	11	5	11	0.8	1.2	7	8
85-AR16	85-AL16	25	14	6.6	14	0.8	1.2	7	8

85-C系列

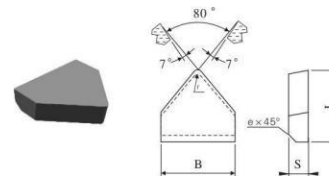
Series 85-C



型号 Type	基本尺寸 Dimension(mm)			
	L	B	S	e
85-C4	8	6	1.8	0.8
85-C5	10	8	2.6	0.8
85-C6	10	10	2.6	0.8
85-C7	13	11	2.6	0.8
85-C8	13	13	3.4	0.8
85-C10	16	16	4.2	0.8
85-C12	19	19	5	1.6
85-C16	19	19	6.6	1.6

85-D系列

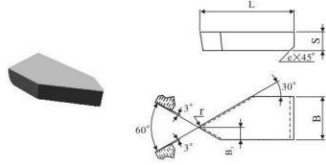
Series 85-D



型号 Type	基本尺寸 Dimension(mm)				
	L	B	S	r	e
85-D4	8	6.5	1.8	0.4	0.8
85-D5	10	8	2.6	0.4	0.8
85-D6	13	9.5	2.6	0.4	0.8
85-D7	13	11	2.6	0.8	1
85-D8	13	12.7	3.4	0.8	1
85-D10	16	15.9	4.2	0.8	1
85-D12	19	19	5	0.8	1.6
85-D16	19	25.4	6.6	0.8	1.6

85-ER系列

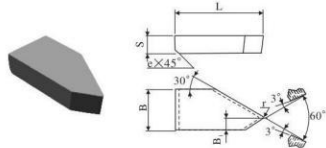
Series 85-ER



型号 Type	基本尺寸 Dimension(mm)					
	L	B	S	B	r	e
85-ER4	6.5	4.8	1.6	1.6	0.5	0.8
85-ER5	8	4.8	2.3	1.6	0.5	0.8
85-ER6	9.5	6.4	2.3	1.6	0.5	0.8
85-ER7	11	6.4	2.3	1.6	0.5	0.8
85-ER8	16	8	3.2	2.3	0.5	0.8
85-ER10	19	9.5	4	2.3	0.5	1
85-ER12	24.6	11	4.8	3.2	0.5	1
85-ER16	32	12.7	5.6	3.2	0.5	1

85-EL系列

Series 85-EL



型号 Type	基本尺寸 Dimension(mm)					
	L	B	S	B	r	e
85-EL4	6.5	4.8	1.6	1.6	0.5	0.8
85-EL5	8	4.8	2.3	1.6	0.5	0.8
85-EL6	9.5	6.4	2.3	1.6	0.5	0.8
85-EL7	11	6.4	2.3	1.6	0.5	0.8
85-EL8	16	8	3.2	2.3	0.5	0.8
85-EL10	19	9.5	4	2.3	0.5	1
85-EL12	24.6	11	4.8	3.2	0.5	1
85-EL16	32	12.7	5.6	3.2	0.5	1

◎ 硬质合金焊接刀片(89系列)

Series 89

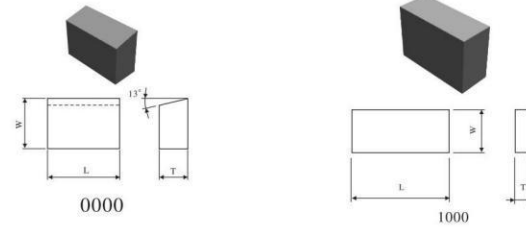
L、W、T允许偏差

Tolerances of L, W, and T

基本尺寸 Dimension(mm)		≤9.52	9.52-25.4	
公差 Tolerances	L, T	+0.38 0	+0.51 0	
	W	-0.25 -0.64	-0.25 -0.64	5000、6000
		+0.38 0	+0.5 0	其它Others
弯曲度 Flatness		≤12.7	12.7-25.4	25.4-38.1
		≤0.08	≤0.13	≤0.16

89-0000 10000系列

Series 89-0000 10000

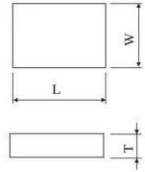


型号Type		基本尺寸 Dimension(mm)		
		L	W	T
89-1000	89-0000			
89-1350	89-0350	14.3	9.5	6.4
89-1360	89-0360	19.1	9.5	6.4
89-1370	89-0370	15.9	11.1	6.4
89-1380	89-0380	19.1	12.7	6.4
89-1390	89-0390	25.4	14.3	6.4
89-1400	89-0400	15.9	15.9	6.4
89-1405	89-0405	19.1	19.1	6.4
89-1410	89-0410	25.4	19.1	6.4
89-1420	89-0420	15.9	11.1	7.9
89-1430	89-0430	23.8	11.1	7.9
89-1440	89-0440	19.1	12.7	7.9
89-1450	89-0450	25.4	12.7	7.9
89-1460	89-0460	25.4	15.9	7.9
89-1470	89-0470	19.1	19.1	7.9
89-1475	89-0475	25.4	19.1	7.9
89-1480	89-0480	31.8	19.1	7.9
89-1490	89-0490	19.1	12.7	9.5
89-1500	89-0500	25.4	12.7	9.5
89-1510	89-0510	25.4	15.9	9.5
89-1520	89-0520	31.8	19.1	9.5
89-1525	89-0525	38.1	19.1	9.5
89-1530	89-0530	25.4	19.1	12.7
89-1540	89-0540	31.8	19.1	12.7
89-1550	89-0550	38.1	19.1	12.7

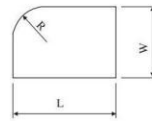


89-1000 2000系列

Series 891000 2000



1000

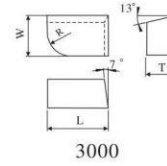


2000

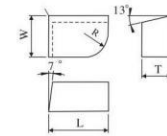
型号Type		基本尺寸 Dimension(mm)			
		L	W	T	R
89-1000	89-2000				
89-1010	89-2010	15.9	3.2	1.6	3.2
89-1020	89-2020	6.4	4.8	1.6	3.2
89-1030	89-2030	7.9	6.4	1.6	3.2
89-1040	89-2040	7.9	4.8	2.4	3.2
89-1050	89-2050	12.7	4.8	2.4	3.2
89-1060	89-2060	9.5	6.4	2.4	3.2
89-1070	89-2070	12.7	6.4	2.4	3.2
89-1080	89-2080	9.5	7.9	2.4	4.8
89-1090	89-2090	9.5	9.5	2.4	4.8
89-1100	89-2100	12.7	9.5	2.4	6.4
89-1105	89-2105	12.7	11.1	2.4	3.2
89-1110	89-2110	19.1	4.8	3.2	3.2
89-1120	89-2120	12.7	6.4	3.2	3.2
89-1130	89-2130	15.9	6.4	3.2	3.2
89-1140	89-2140	19.1	6.4	3.2	4.8
89-1150	89-2150	11.1	7.9	3.2	4.8
89-1160	89-2160	12.7	7.9	3.2	4.8
89-1170	89-2170	15.9	7.9	3.2	4.8
89-1180	89-2180	12.7	9.5	3.2	4.8
89-1190	89-2190	19.1	9.5	3.2	4.8
89-1200	89-2200	12.7	12.7	3.2	6.4
89-1210	89-2210	19.1	12.7	3.2	6.4
89-1215	89-2215	19.1	19.1	3.2	6.4
89-1220	89-2220	14.3	9.5	4	4.8
89-1230	89-2230	19.1	9.5	4	4.8
89-1240	89-2240	15.9	15.9	4	6.4
89-1250	89-2250	11.1	7.9	4.8	4.8
89-1260	89-2260	15.9	7.9	4.8	4.8
89-1270	89-2270	12.7	9.5	4.8	4.8
89-1280	89-2280	15.9	9.5	4.8	4.8
89-1290	89-2290	19.1	9.5	4.8	4.8
89-1300	89-2300	15.9	11.1	4.8	6.4
89-1310	89-2310	20.6	11.1	4.8	6.4
89-1320	89-2320	12.7	12.7	4.8	6.4
89-1330	89-2330	19.1	12.7	4.8	6.4
89-1340	89-2340	19.1	19.1	4.8	6.4

89-3000 4000系列

Series 89-3000 4000



3000

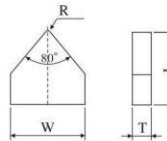


4000

型号Type		基本尺寸 Dimension(mm)			
		L	W	T	R
89-3000	89-4000				
89-3350	89-4350	14.3	9.5	6.4	4.8
89-3360	89-4360	19.1	9.5	6.4	4.8
89-3370	89-4370	15.9	11.1	6.4	6.4
89-3380	89-4380	19.1	12.7	6.4	6.4
89-3390	89-4390	25.4	14.3	6.4	6.4
89-3400	89-4400	15.9	15.9	6.4	6.4
89-3450	89-4405	19.1	19.1	6.4	6.4
89-3410	89-4410	25.4	19.1	6.4	6.4
89-3420	89-4420	15.9	11.1	7.9	6.4
89-3430	89-4430	23.8	11.1	7.9	6.4
89-3440	89-4440	19.1	12.7	7.9	6.4
89-3450	89-4450	25.4	12.7	7.9	6.4
89-3460	89-4460	25.4	15.9	7.9	6.4
89-3470	89-4470	19.1	19.1	7.9	6.4
89-3475	89-4475	25.4	19.1	7.9	6.4
89-3480	89-4480	31.8	19.1	7.9	6.4
89-3490	89-4490	19.1	12.7	9.5	6.4
89-3500	89-4500	25.4	12.7	9.5	6.4
89-3510	89-4510	25.4	15.9	9.5	6.4
89-3520	89-4520	31.8	19.1	9.5	6.4
89-3525	89-4525	38.1	19.1	9.5	6.4
89-3530	89-4530	25.4	19.1	12.7	6.4
89-3540	89-4540	31.8	19.1	12.7	6.4
89-3550	89-4550	38.1	19.1	12.7	6.4

89-5000系列

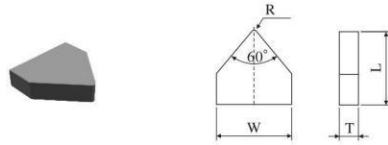
Series 89-5000



型号Type	基本尺寸 Dimension(mm)			
	L	W	T	R
89-5080	9.5	7.9	2.4	0.4
89-5100	12.7	9.5	2.4	0.4
89-5105	12.7	11.1	2.4	0.8
89-5200	12.7	12.7	3.2	0.8
89-5240	15.9	15.9	4	0.8
89-5340	19.1	19.1	4.8	0.8
89-5410	19.1	25.4	6.4	0.8

89-6000系列

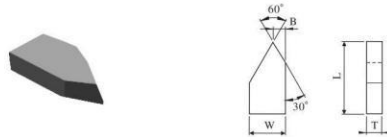
Series 89-6000



型号 Type	基本尺寸 Dimension(mm)			
	L	W	T	R
89-6030	7.9	6.4	1.6	0.4
89-6080	9.5	7.9	2.4	0.4
89-6100	12.7	9.5	2.4	0.8
89-6200	12.7	12.7	3.2	0.8
89-6205	14.3	12.7	3.2	0.8
89-6240	15.9	15.9	4	0.8
89-6340	19.1	19.1	4.8	0.8

89-7000系列

Series 89-7000



型号 Type	基本尺寸 Dimension(mm)			
	L	W	T	B
89-7060	9.5	6.4	2.4	1.6
89-7160	12.7	7.9	3.2	3.2
89-7230	19.1	9.5	4	3.2

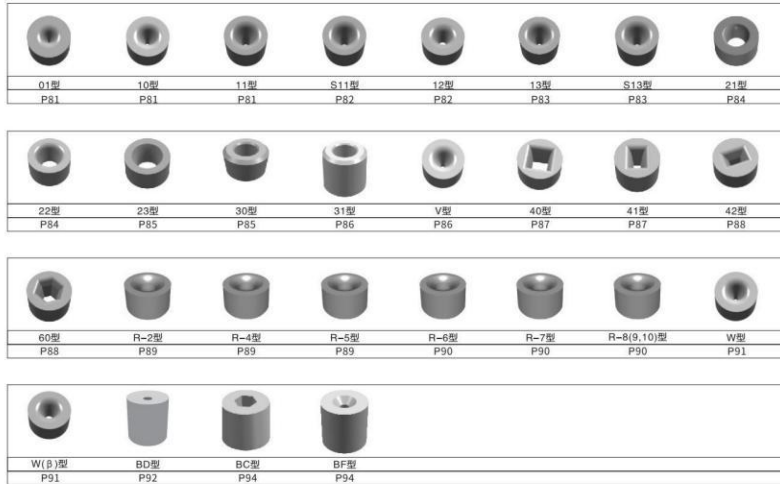
三、硬质合金模坯 Cmented carbide dies

模具类硬质合金牌号性能及使用推荐

Mold class performance of cemented carbide grades and use

牌号 Grade	硬度 Hardness HRA	抗弯强度 TRS N/mm <sup>2</sup>	密度 Density g/cm <sup>3</sup>	推荐用途 Applications recommended
YG6X	92	1800	14.9	可用于应用不大的条件下，拉制直径6.0mm以下的钢丝，有色金属线材或棒材模。 It can be used to make steel wire, non-ferrous metal wire or bar material with less than 6.0mm diameter.
YG6	90.5	2000	14.9	可用于较大应用条件下，拉制直径20mm以下的钢丝，有色金属及合金棒材，也可用于拉制直径10mm以下的管材。 It can be used for steel wire, non-ferrous metal and alloy bars under 20mm diameter, and can also be used for drawing pipes with diameter of less than 10mm.
YG8	90	2200	14.7	可用于钢、有色金属及合金棒材和管材的拉丝，也可用于制造机械零件、工具及易损零件。 Can be used in steel, non-ferrous metal and alloy bars and pipes, also can be used in manufacturing machinery parts, tools and vulnerable parts.
YG8.2	89	2000	14.6	
YG8L	89	2000	14.6	
YG11	88.5	2300	14.4	可用于高压压缩率钢棒和钢管拉伸，在较大应力下工作的顶锤、穿孔及冲压模具。 It can be used for high compression steel rod and steel pipe drawing, and the top hammer, perforation and stamping die of working under greater stress.
YG15	87	2600	14.0	
YL50	87	2600	14.4	
YG20	85	2800	13.6	可用于制冲压模具、如冲压手表零件等，冲压电池壳，牙膏皮的模具，小尺寸的钢球、螺钉、螺帽等的冲压模具等。 It can be used for stamping die, such as punching watch parts, stamping battery shell, tooth paste mould, small size steel ball, screw, nut, etc.
YG20C	83.5	2800	13.6	可用于标准件，轴承，工具等行业用的冷锻，冷冲，冷压模具，弹头和弹壳的冲压模具。 It can be used in standard parts, bearings, tools and other industries for cold forging, cold pressing, cold pressing mould, warhead and shell stamping die.
TL40.5	82	3000	13.3	

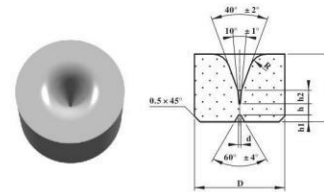
## 索引Index



## ◎拉伸模坯 Drawing die blanks

### 01型 拉制黑色、有色金属丝模坯

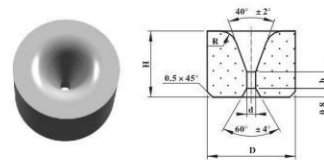
Type 01  
Carbide drawing die nibs for drawing ferrous and non-ferrous metal wires



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h
01-	6	4	0.2-0.8	0.8
	8	6	1.0	1.0

### 10型 有色金属线材拉制模坯

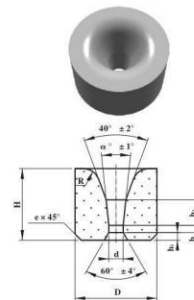
Type 10  
Carbide drawing die nibs for drawing ferrous and non-ferrous metal wires



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h
10-	6	4	0.4-0.8	0.8-1.2
	8	6	0.2-0.8	1.0-1.5

### 11型 拉制黑色金属线材模坯

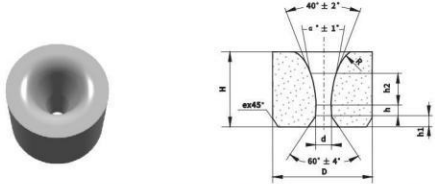
Type 11  
Carbide drawing die nibs for drawing ferrous and non-ferrous metal wires



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h	α°
11-	8	6	0.26-1.0	0.3-0.6	10°
	13	10	0.4-2.3	0.3-1.4	10°
	16	14	0.4-3.5	0.3-1.4	12°
	22	18	1.8-4.7	1.2-2.4	14°
	22	20	5.2-5.7	2.6-2.8	14°

**S11型 拉制黑色金属线材大压缩角模坯**

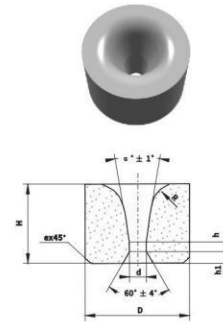
Type S11  
Carbide drawing die nibs with Large reducing angles for drawing ferrous metal wires



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h	α °
S11-	8	6	0.3-1.0	0.3-0.6	14°
	10	8	0.7	0.6	14°
	13	10	0.4-2.8	0.3-1.6	16°
	15	13	0.5-3.0	0.3-1.4	16°
	16	14	0.4-3.8	0.3-1.8	16°
	20	17	1.2-4.7	2.0-2.6	18°
	21	17	1.8-5.7	1.2-3.0	18°
	22	18	1.7-6.4	1.2-3.0	18°

**13型 拉制黑色、有色金属棒材模坯**

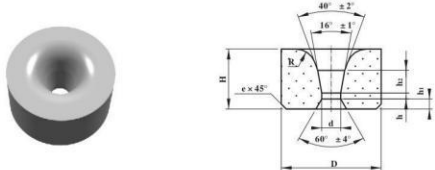
Type 13  
Carbide drawing dies nibs for drawing ferrous and non-ferrous metal rods



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h	α °
13-	30	21	3.7-9.6	1.5-4	14°
	40	24	9.0	6	
	40	25	10.5-15.5	5	
	50	28	16.5-24.5	5.5-6	
	60	35	25.5-34.5	7-7.5	18°
	75	35	35.5-43.5	8	
	90	35	45-57	9	20°
	110	40	59-69	10-11	
140	50	71-81.5	12		

**12型 拉制有色金属线材、棒材模坯**

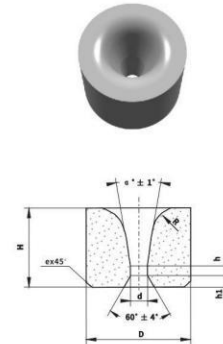
Type 12  
Carbide drawing nibs for drawing non-ferrous metal wires and rods



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h
12-	8	6	0.4-0.8	0.3-0.6
	13	8	0.4-2.3	0.3-1.0
	16	10	0.8-3.0	0.5-1.2
	20	12	1.0-5.0	1.0-1.4
	22	14	4.2-5.7	1.6-2.0
	26	16	6.4-8.0	2.0
	28	14	2.6-4.6	1.3-2.5

**S13型 拉制黑色、有色金属线材大压缩角模坯**

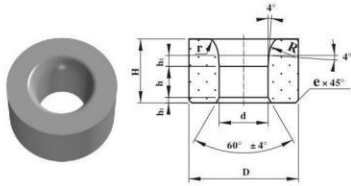
Type S13  
Carbide drawing die nibs with large reducing angles for drawing ferrous and non-ferrous metal wires



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h	α °	
S13-	25	18	5.8	2.5	20°	
	28	19	6.0-10.9	3-5		
	27	18	4.7-6.7	2.5		
	28	20	3.7-9.6	2.5		
	30	21	2.8-12.0	2.5-3.5		
	35	24	9.6-12.0	5		
	38	24	9.6-15.5	5		
	40	25	9.0-15.5	5		
	40	28	10.3	6		
	50	28	16.5-24.5	5.5-6		
	60	35	25.5-34.5	7		
	75	35	35.5-47.5	8		
	90	35	45-57	9-10		22°
	110	40	59-69	10-11		
	140	50	71-84	12		

21型 用于管材减壁模坯

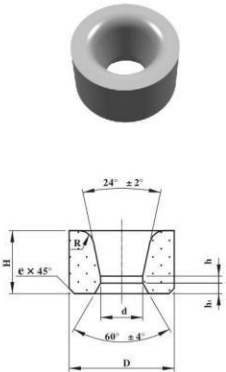
Type 21  
Wall thickness reducing carbide die nibs for drawing metal tubes



型号 Type	D	H	d尺寸范围 Range of d	h
21-	50	35	20.0-24.0	17
	60	45	26.0-30.0	20
	70	45	32.0-40.0	
	80	45	42.0-46.0	
	90	45	48.0-54.0	
100	45	58.0-62.0		

22型 拉制有色金属管材模坯

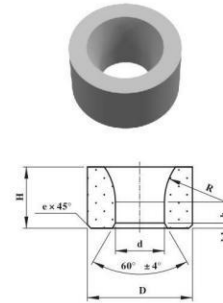
Type 22  
Carbide drawing die nibs for drawing non-ferrous metal tubes



型号 Type	D	H	d尺寸范围 Range of d	h尺寸范围 Range of h
22-	20	13	2.8-5.7	1.5
	30	18	6.7-13.5	2-4
	35	18	14.5-17.5	4
	45	24	12.5-23.5	3
	50	25	24.5-30.5	5-6
	60	30	24.5-33.5	3.5
	65	32	34.5-39.5	6
	70	35	34.5-35.5	6.5
	75	35	40.5-42.5	6.5
	85	40	47.5	6.5
	80	35	34.5-47	6.5
	90	40	46-53	6.5
	100	40	55-57	
	120	45	59-67.0	
130	50	69-77		
140	50	79-88		

23型 用于管材减径模坯、减壁模坯

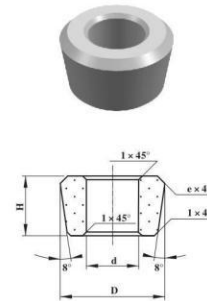
Type 23  
Diameter and wall thickness reducing carbide die nibs for drawing metal tubes



型号 Type	D	H	d尺寸范围 Range of d	h
23-	50	32	20.0-24.0	12
	60	35	26.0-30.0	15
	70	42	32.0-36.0	
	75	42	38.0-40.0	
	85	45	42.0-46.0	18
	100	50	48.0-54.0	
	110	50	56.0-62.0	20

30型 用于管材减径芯棒模坯

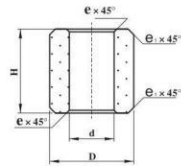
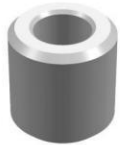
Type 30  
Carbide floating plugs for drawing metal tubes



型号 Type	d	H	D尺寸范围 Range of d	e
30-	4	10	11	1
	6	12	13, 15	1
	8	12	17	1
	10	14	19.5, 21.5	1
	12	16	23.5	1
	14	16	25.5, 27.5	1-2
	17	27	28-37	2
	19	27	38.2, 39.4	2
	21	27	40-43	3
	23	32	44-46	3-4
	25	32	47-53	4
	27	32	54-57	4
	28	35	58-64	4

31型 拉制管材芯棒模坯

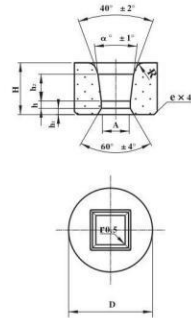
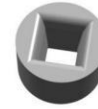
Type 31  
Carbide floating plugs for drawing tubes



型号 Type	d	H	D尺寸范围 Range of d
31-	7	25	14.0-16.0
	8	25	17.0-18.0
	10	30	19.0-22.0
	12	30	23.0-27.0
	16	35	28.0-32.0
	20	35	33.0-42.0
	22	40	43.0-44.0
	26.4	45	45.0-47.0

40型 拉制正方形棒材模坯

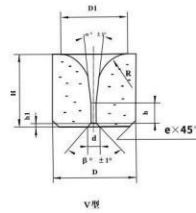
Type 40  
Carbide drawing die nibs for drawing square metal bars



型号 Type	D	H	A尺寸范围 Range of d	h	α°
40-	16	12	1.8-2.4	1	14°
	22	18	2.8-4.0	1.5	
	30	21	4.6-4.7	2	
	35	25	7.7-9.7	3	
	45	25	10.7-14.7	3.5	
	50	28	15.7-18.7	4	
	60	30	19.7-23.7	5	16°
	65	32	24.7-27.5	6	
	70	35	28.5-31.5	8	16°
	80	35	32.5-37.5		
	90	40	38.5-41.5		
	100	40	42.5-47.5	20°	
120	45	49.5-53.5			

V型

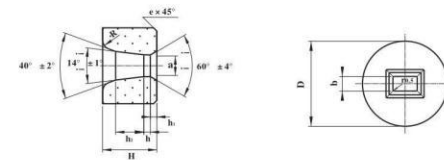
Type V



型号 Type	D	H	d尺寸范围 Range of d	h	α°
V-	15	13	0.6-3.6	3-5.5	12°
	19	17	1.8-6.5	6-7	14°
	25	20	5.7-7.7	7-8	14°
	35	21	8.2-11.5	8-10.5	14°

41型 拉制有色金属矩形材模坯

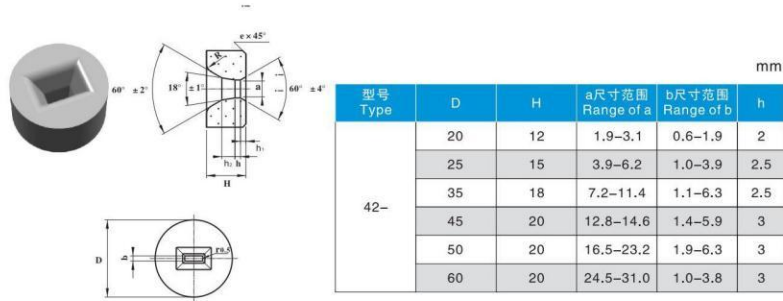
Type 41  
Carbide drawing die nibs for drawing rectangular non-ferrous metal bars



型号 Type	D	H	a尺寸范围 Range of a	b尺寸范围 Range of b	h
41-	30	21	6.7	4.7	2
	35	25	7.7-9.7	5.7-7.7	3
	45	25	11.7	5.7-9.7	3.5
	50	28	13.7-17.6	6.7-15.7	4
	60	30	19.2-23.6	7.7-14.7	5

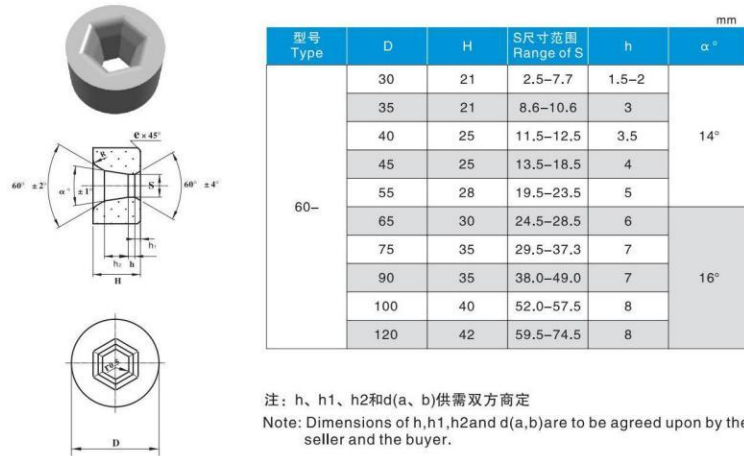
42型 拉制有色金属扁材模坯

Type 42  
Carbide drawing die nibs for drawing non-ferrous metal strips



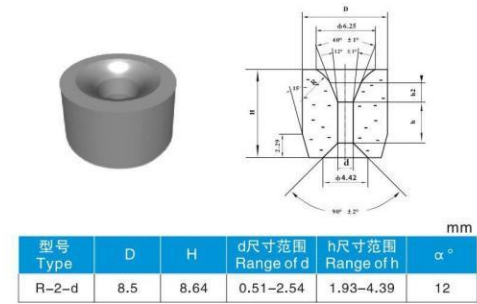
60型 拉制六方形黑色金属棒材模坯

Type 60  
Carbide drawing die nibs for drawing hexagonal ferrous metal bars



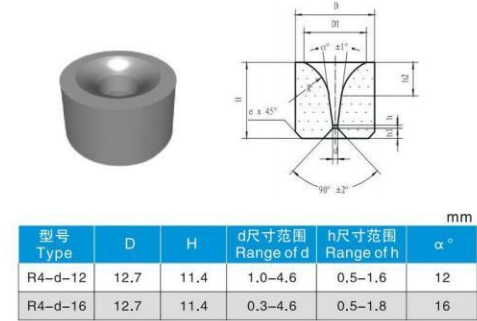
R-2型

Type R-2



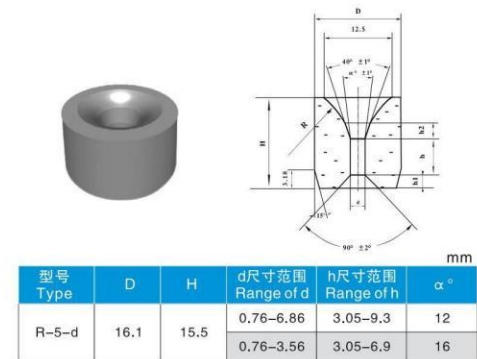
R4型

Type R4



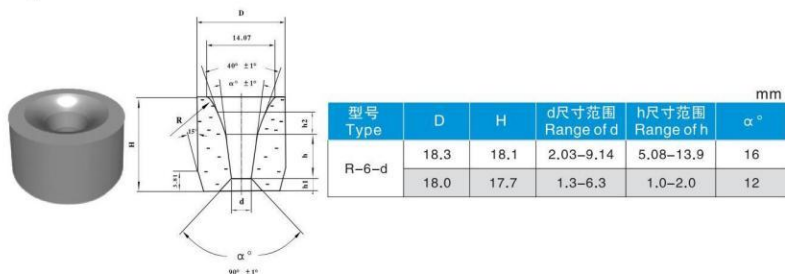
R-5型

Type R-5



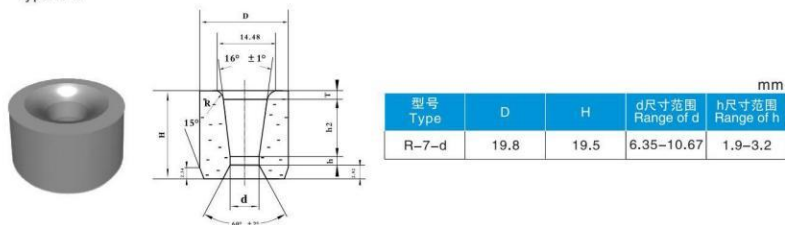
R-6型

Type R-6



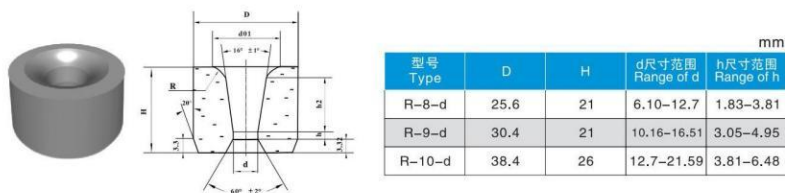
R-7型

Type R-7



R-8(9,10)型

Type R-8(9,10)



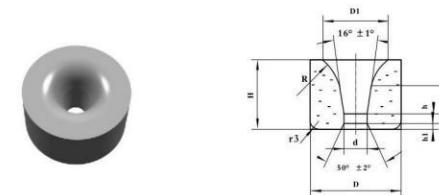
W型

Type W



W(β)型

Type W(β)

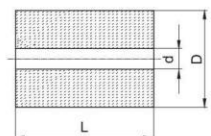




冷镦冷冲模坯  
Cold upsetting die blanks

标准螺栓镦粗模坯

Heading die blanks for making standard bolts



型号 Type	尺寸 Dimension			适应范围 Applicable rang
	d	D	L Range of L	
BDP00710-	0.7	10	12.0-20.0	M1
BDP01010-	1.0	10	12.0-20.0	M1.5-M2
BDP01013-	1.0	13	15.0-40.0	M1.5-M2
BDP01213-	1.2	13	15.0-40.0	M1.5-M2
BDP01510-	1.5	10	12.0-25.0	M2
BDP01516-	1.5	16	15.0-45.0	M2
BDP01813-	1.8	13	12.0-45.0	M2.5
BDP01816-	1.8	16	20.0-45.0	M2.5
BDP02113-	2.1	13	15.0-30.0	M3
BDP02116-	2.1	16	25.0-45.0	M3
BDP02316-	2.3	16	15.0-45.0	M3
BDP02522-	2.5	22	20.0-60.0	M3
BDP02813-	2.8	13	15.0-30.0	M4
BDP02816-	2.8	16	25.0-40.0	M4
BDP02818-	2.8	18	20.0-50.0	M4
BDP02820-	2.8	20	20.0-50.0	M4
BDP02822-	2.8	22	20.0-60.0	M4
BDP02825-	2.8	25	20.0-60.0	M4
BDP03216-	3.2	16	15.0-45.0	M4
BDP03218-	3.2	18	15.0-50.0	M4
BDP03616-	3.6	16	20.0-50.0	M5
BDP03618-	3.6	18	20.0-60.0	M5
BDP03822-	3.8	22	20.0-40.0	M5
BDP03830-	3.8	30	50.0-60.0	M5

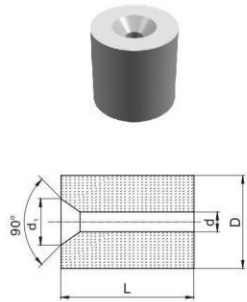
标准螺栓镦粗模坯

Heading die blanks for making standard bolts

型号 Type	尺寸 Dimension			适应范围 Applicable rang
	d	D	L Range of L	
BDP04218-	4.2	18	20.0-60.0	M5
BDP04616-	4.6	16	20.0-30.0	M6
BDP04622-	4.6	22	20.0-60.0	M6
BDP05422-	5.4	22	20.0-60.0	M6
BDP06422-	6.4	22	20.0-60.0	M8
BDP06425-	6.4	25	20.0-60.0	M8
BDP06430-	6.4	30	20.0-60.0	M8
BDP07230-	7.2	30	20.0-50.0	M10
BDP08230-	8.2	30	25.0-60.0	M10
BDP08235-	8.2	35	20.0-60.0	M10
BDP09230-	9.2	30	20.0-60.0	M12
BDP10030-	10.0	30	30.0-60.0	M12
BDP10035-	10.0	35	20.0-60.0	M12
BDP11235-	11.2	35	20.0-60.0	M12
BDP11240-	11.2	40	30.0-60.0	M12
BDP11835-	11.8	35	20.0-60.0	M14
BDP11840-	11.8	40	20.0-30.0	M14
BDP13235-	13.2	35	20.0-60.0	M14
BDP13240-	13.2	40	25.0-50.0	M14
BDP13835-	13.8	35	25.0-60.0	M16
BDP13840-	13.8	40	25.0-35.0	M16
BDP14445-	14.4	45	25.0-60.0	M18
BDP15445-	15.4	45	30.0-50.0	M18
BDP16445-	16.4	45	25.0-60.0	M20
BDP17445-	17.4	45	25.0-60.0	M20
BDP19445-	19.4	45	25.0-55.0	M22
BDP21050-	21.0	50	25.0-55.0	M24
BDP24460-	24.4	60	30.0-50.0	M27

BC型 沉头顶模毛坯

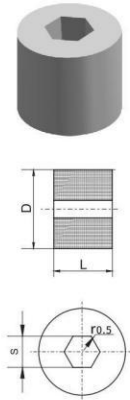
Type BC die blanks with sink



型号 Type	尺寸 Size				适应范围 Applicable rang	牌号 Grade	α°
	d	D	L	d <sub>1</sub>			
BC281330	2.8	13.0	30.0	7.0	M4	YG15 YG20 YG20C	90°
BC381630	3.8	16.0	30.0	8.5	M5		
BC381640	3.8	16.0	40.0	8.5	M5		
BC382250	3.8	22.0	50.0	8.5	M5		
BC461630	4.6	16.0	30.0	10.5	M6		
BC462250	4.6	22.0	50.0	10.5	M6		
BC643030	6.4	30.0	30.0	15.0	M8		
BC643055	6.4	30.0	55.0	15.0	M8		
BC823655	8.2	36.0	55.0	18.0	M10		
BC1004055	10.0	40.0	55.0	22.0	M12		
BC1184555	11.8	45.0	55.0	25.0	M14		
BC1386060	13.8	60.0	60.0	29.0	M16		

BF型 内六方模毛坯

Type BF internal hexagonal die blanks



型号 Type	尺寸 Size			适应范围 Applicable rang	牌号 Grade
	S	D	L		
BF0261210	2.6	12	10	M1.6	YG15 YG20 YG20C
BF0341210	3.4		M2		
BF0441612	4.4	16	12	M2.5	
BF0481612	4.8		M3		
BF0632016	6.3	20	16	M4	
BF0722416	7.2			M5	
BF0923016	9.2	30	M6		
BF1213210	12.1	32	10	M8	
BF1213220			20		
BF1504024	15.0	40	24	M10	
BF1504030			30		
BF1704430	17.0	44	36	M12	
BF1995236	19.9	52		M14	
BF2285842	22.8	58	42	M16	
BF2817250	28.1	72	50	M20	

四、硬质合金耐磨材料系列 Cemented carbide wear-resisting material

模压棒材产品系列

Moulded rod products series

硬质合金棒材牌号、性能及推荐用途

Grade properties and recommended applications of carbide rods

牌号 Grade	物理力学性能 Physical and mechanical properties			推荐用途 Applications recommended
	硬度不低于 Hardness ≥ HRA	抗弯强度 TRS Mpa	密度 Donsity g/cm <sup>3</sup>	
YG6X棒	91.5	1700	14.4-14.9	适用于冷硬铸铁、球墨铸铁、耐热合金钢、有色金属和非金属的半精加工。 It's suitable for the finish machining of chilled cast iron, ductile cast iron, heat-resisting alloy steel, nonferrous metal and nonmetal.
JL05	91.5	1800	14.7-15.1	适用于冷硬铸铁、球墨铸铁、耐热合金钢、有色金属和非金属的半精加工。同时也可以制作要求较高的耐磨零件。 It's suitable for the finish machining of chilled cast iron, ductile cast iron, heat-resisting alloy steel, nonferrous metal and nonmetal and it can make for the wear part with high quality requirement
YG10X棒	90	2000	14.3-14.6	通用性好，具有较好的硬度和韧性，适用于制作各种整体孔加工刀具，如整体钻头、铣刀、铰刀、镗孔刀等。主要用于加工各种铸铁及有色金属的精加工。 Good commonality high hardness and toughness. It is suitable for manufacturing various kinds of integral end mills. Such as integral drill, milling cutter, hole boring cutter, reamer bit and so on. It's mainly used for the finish machining of various kinds of cast iron and nonferrous metal.
JL10	90.5	2200	14.2-14.5	通用性好，具有较好的硬度和强度，用于加工各种钢件和有色金属的半精加工。 Good commonality, with high hardness and TRS. It's used for the semifinishing of various steel and nonferrous metal.
JL15	91.5	2400	14.5-15.0	属于细颗粒产品，耐磨性能和抗冲击性能好，用于各种金属非金属的半精加工和精加工。 Fine particle size product. With good wear resistance and shock resistance. It is used for the semifinishing and finish machining of various metal and nonmetal
JL20	92.5	3000	14.7-15.1	属于细颗粒产品，有优越的耐磨性能和抗冲击性能。用于各种金属非金属精加工。同时也可用于耐热钢件、不锈钢、镍基和高温合金的加工。 Fine particle size product. With excellent wear resistance and shock resistance. It is used for the finish machining of various metal and nonmetal. It also can be used for machining heat-resisted steel, stainless steel, nickel base, high-temperature alloy.

模压棒材型号规格

Type and specifications Of moulded rods

其余未注尺寸，可根据客户需求定制。精磨圆棒客户要求可以全部满足。  
This size of others can be supplied on the demand of the clients, Finishing grind rods can be full supplied.



型号 type	基本尺寸 Dimension (mm)			
	直径 (mm) Diameter	直径公差 Diameter tolerance	长度 (mm) length	长度公差 (mm) length tolerance
Φ4×L	4	+0.3-0.4	10-300	0~+3
Φ4.5×L	4.5	+0.3-0.4	10-300	0~+3
Φ5×L	5	+0.3-0.4	10-300	0~+3
Φ5.5×L	5.5	+0.3-0.4	10-300	0~+3
Φ6×L	6	+0.3-0.4	10-300	0~+3
Φ6.5×L	6.5	+0.3-0.4	10-300	0~+3
Φ7×L	7	+0.3-0.4	10-330	0~+3
Φ7.5×L	7.5	+0.3-0.4	10-300	0~+3
Φ8×L	8	+0.3-0.4	10-300	0~+3
Φ8.5×L	8.5	+0.3-0.4	10-300	0~+3
Φ9×L	9	+0.3-0.4	10-300	0~+3
Φ9.5×L	9.5	+0.3-0.4	10-300	0~+3
Φ10×L	10	+0.3-0.4	10-300	0~+3
Φ10.5×L	10.5	+0.3-0.4	10-300	0~+3
Φ11×L	11	+0.4-0.6	10-300	0~+3
Φ11.5×L	11.5	+0.4-0.6	10-300	0~+3
Φ12×L	12	+0.4-0.6	10-300	0~+3
Φ12.5×L	12.5	+0.4-0.6	10-300	0~+3
Φ13×L	13	+0.4-0.6	10-300	0~+3
Φ13.5×L	13.5	+0.4-0.6	10-300	0~+3
Φ14×L	14	+0.4-0.6	10-300	0~+3
Φ14.5×L	14.5	+0.4-0.6	10-300	0~+3
Φ16×L	16	+0.4-0.6	10-300	0~+3
Φ16.5×L	16.5	+0.4-0.6	10-330	0~+3
Φ18×L	18	+0.4-0.6	10-300	0~+3
Φ18.5×L	18.5	+0.4-0.6	10-300	0~+3
Φ20×L	20	+0.4-0.6	10-300	0~+3
Φ22×L	22	+0.4-0.6	10-300	0~+3
Φ25×L	25	+0.4-0.6	10-300	0~+3
Φ30×L	30	+0.4-0.6	10-300	0~+3

耐磨材料类硬质合金牌号性能及使用推荐

Hard alloy brand performance and recommendation of wear resistant materials

牌号 Grade	硬度 Hardness HRA	抗弯强度 TRS N/mm <sup>2</sup>	密度 Density g/cm <sup>3</sup>	推荐用途 Applications recommended
YG6X	92	1800	14.9	可用于应力不大的条件下，控制直径6.0mm以下的钢丝，有色金属线材或棒材。 It can be used for the steel wire, non-ferrous metal wire or rod die under the condition of less stress.
YG6	90.5	2000	14.9	可用于较大应力条件下，控制直径20mm以下的钢丝、有色金属及合金棒材，也可用于控制直径10mm以下的管材。 It can be used for steel wire, non-ferrous metal and alloy bars under 20mm diameter under greater stress condition, and can also be used to pull tubing with a diameter of less than 10mm.
YG8	90	2200	14.7	可用于钢、有色金属及合金棒材和管材的拉丝，也可用于制造机械零件、工具及易损零件。 Can be used in steel, non-ferrous metal and alloy bars and pipes, also can be used in manufacturing machinery parts, tools and vulnerable parts.
YG8.2	89	2000	14.6	
YG8L	89	2000	14.6	
YG11	88.5	2600	14.4	可用于高压压缩率钢棒和钢管拉伸，在较大应力下工作顶锤，穿孔及冲压模具。 It can be used for high compression steel rod and steel tube drawing, working top hammer, perforation and stamping die under greater stress.
YG15	87	2600	14	
YL50	87	2600	14.4	
YG20	85	2800	13.6	可用于制冲压模具，如冲压手表零件等，冲压电池壳，牙膏皮的模具，小尺寸的钢球、螺钉、螺帽等的冲压模具等。 It can be used to make punching film tools, such as punching watch parts, stamping battery shell, tooth paste mould, small size steel ball, screw, nut, etc.
YG20C	83.5	2800	13.6	可用于标准件，轴承，工具等行业用的冷锻，冷冲，冷压模具，弹头和弹壳的冲压模具。 It can be used in standard parts, bearings, tools and other industries for cold forging, cold pressing, cold pressing mould, warhead and shell stamping die.
TL40.5	82	2800	13.3	
YB50	90.5	2600	14	具有很高的硬度和强度，优越的耐磨性能，可用于制作IC线框、密封胶、拉伸模、喷嘴、超薄刀片等模具，高精度切削工具等。 It has high hardness and strength, excellent wear resistance, and can be used in the production of IC wireframe, plastic sealing film, drawing die, nozzle, ultra-thin blade, etc.
YB20	92	2200	14.5	具有极高的硬度和较高的强度，优越的耐磨性能，适用于低、中速电子类级进模、凸模的制作，适合铜、铝材薄片冲压。 With high hardness and high strength, superior wear-resisting property, suitable for low, medium-speed electronic class progressive die and punch, suitable for copper and aluminum thin sheet stamping.

◎ 板材、长条产品系列

Plank, long line product series

板材、长条产品型号规格

Type and plates and strips



型号 type	公差 (mm) tolerance			型号 type	公差 (mm) tolerance		
	L	B	H		L	B	H
7×5×2.4	±0.5	±0.3	±0.4	44×40×17	±0.8	±1.2	±0.7
9×5×2.4	±0.5	±0.3	±0.4	45×40×2	±0.8	±1.2	±0.3
9×6×1.5	±0.5	±0.5	±0.3	45×45×4	±0.8	±1.2	±0.4
12×5×2.4	±0.6	±0.3	±0.4	50×3.5×4	±0.8	±0.3	±0.4
12×6×1.5	±0.6	±0.5	±0.3	50×13×3	±0.8	±0.6	±0.4
12×10×2.2	±0.6	±0.5	±0.4	50×45×4	±0.8	±1.2	±0.4
12×12×5	±0.6	±0.6	±0.4	50×50×10	±0.8	±1.2	±0.5
14×10.5×2	±0.6	±0.6	±0.3	55×10×10	±1.2	±0.5	±0.5
15×8×2	±0.6	±0.5	±0.3	60×3.5×2.5	±1.2	±0.3	±0.4
17×5×2.4	±0.6	±0.3	±0.4	60×45×4	±1.2	±1.2	±0.4
17×8.2×25	±0.6	±0.5	±0.8	61×5×5	±1.2	±0.3	±0.4
20×5×5	±0.6	±0.3	±0.4	63×4×4	±1.2	±0.3	±0.4
20×8×6	±0.6	±0.5	±0.5	64×5×5	±1.2	±0.3	±0.4
25×20.5×5.2	±0.8	±0.8	±0.5	70×65×15	±1.2	±1.5	±0.7
25.3×6.3×4	±0.8	±0.5	±0.4	72×11×11	±1.2	±0.6	±0.7
27×6×4	±0.8	±0.5	±0.4	73×4×4	±1.2	±0.3	±0.4
27×9×4	±0.8	±0.5	±0.4	74×5×5	±1.2	±0.3	±0.4
27×14.5×14	±0.8	±0.6	±0.7	74×10.8×11.8	±1.2	±0.6	±0.7
28×9.3×4	±0.8	±0.6	±0.4	80×11.5×4	±1.2	±0.6	±0.4
30×12×5	±0.8	±0.6	±0.4	80×40×3	±1.2	±1.2	±0.4
32×26×4	±0.8	±0.8	±0.4	80×62×4	±1.2	±1.5	±0.4
35×5×3.5	±0.8	±0.3	±0.4	80×80×50	±1.2	±1.5	±0.8

除以上规格外，还可提供其他尺寸板材。具体事宜，欢迎垂询！  
Besides the specifications mentioned above, special specifications can be supplied according to your requirements.

板材、长条产品型号规格

Type and plates and strips

型号 type	公差 (mm) tolerance			型号 type	公差 (mm) tolerance		
	L	B	H		L	B	H
90×70×15	±1.2	±1.5	±0.7	140×10×4	±2.0	±0.5	±0.4
93×6×6	±1.2	±0.5	±0.5	140×12×3	±2.0	±0.6	±0.4
96×8×3	±1.2	±0.5	±0.4	140×13×6	±2.0	±0.6	±0.5
98×7×4	±1.2	±0.5	±0.4	140×14×5	±2.0	±0.6	±0.5
100×9×4	±1.2	±0.5	±0.4	140×15×3.8	±2.0	±0.6	±0.4
100×10×5	±1.2	±0.5	±0.4	140×18×4.5	±2.0	±0.6	±0.4
100×15×5	±1.2	±0.6	±0.4	140×22×4.5	±2.0	±0.8	±0.4
100×20×5	±1.2	±0.6	±0.4	140×25×5	±2.0	±0.8	±0.4
100×30×5	±1.2	±0.8	±0.4	147×85×10	±2.0	±2.0	±0.5
100×60×40	±1.2	±1.5	±0.8	150×7×7	±2.0	±0.5	±0.5
100×80×50	±1.2	±1.5	±0.8	150×8×5	±2.0	±0.5	±0.4
100×100×50	±1.2	±2.0	±0.8	150×25×20.5	±2.0	±0.8	±0.8
108×20×5	±1.2	±0.6	±0.4	150×45×20	±2.0	±1.2	±0.8
120×5×4	±1.5	±0.3	±0.4	150×100×50	±2.0	±2.0	±0.8
120×6×3	±1.5	±0.5	±0.4	150×120×15	±2.0	±2.0	±0.7
120×8×4	±1.5	±0.5	±0.4	150×150×13.8	±2.0	±2.2	±0.7
120×10×4	±1.5	±0.5	±0.4	152×13×5	±2.2	±0.6	±0.4
120×12×4	±1.5	±0.6	±0.4	165×20×5.2	±2.2	±0.6	±0.5
120×16×4	±1.5	±0.6	±0.4	167×20×11	±2.2	±0.6	±0.7
120×40×12	±1.5	±1.2	±0.7	170×140×15	±2.2	±2.2	±0.7
125×8×5	±2.0	±0.5	±0.4	175×8×5	±2.2	±0.5	±0.4
125×25×5	±2.0	±0.8	±0.4	180×90×13.8	±2.2	±2.0	±0.7
126×120×10	±2.0	±2.0	±0.5	180×120×15	±2.2	±2.0	±0.7
130×15×5	±2.0	±0.6	±0.4	185×110×10	±2.2	±2.0	±0.5
130×35×5	±2.0	±1.2	±0.4	200×4×4	±2.2	±0.3	±0.4
130×100×50	±2.0	±2.0	±1.2	200×5×3	±2.2	±0.3	±0.4
130×110×15	±2.0	±2.0	±0.7	200×6×3	±2.2	±0.5	±0.4
136×9×8	±2.0	±0.5	±0.5	200×7×3	±2.2	±0.5	±0.4
140×5×5	±2.0	±0.4	±0.4	200×9×3	±2.2	±0.5	±0.4
140×6×5	±2.0	±0.4	±0.4	200×10×3	±2.2	±0.5	±0.4
140×8×5	±2.0	±0.5	±0.4	200×12×3	±2.2	±0.6	±0.4

除以上规格外，还可提供其他尺寸板材。具体事宜，欢迎垂询！  
Besides the specifications mentioned above, special specifications can be supplied according to your requirements.

板材、长条产品型号规格

Type and plates and strips

型号 type	公差 (mm) tolerance		
	L	B	H
200×14×3.5	±2.2	±0.6	±0.4
200×16×3	±2.2	±0.6	±0.4
200×20×10	±2.2	±0.6	±0.5
200×50×30	±2.2	±1.2	±0.8
200×150×30	±2.2	±2.2	±0.8
200×180×15	±2.2	±2.2	±0.7
200×200×10	±2.2	±2.2	±0.5
220×185×13.8	±2.5	±2.2	±0.7
240×15×5	±2.5	±0.6	±0.4
300×300×20	±2.8	±2.2	±0.7
310×20×4.5	±2.8	±0.6	±0.4
320×10×4	±2.8	±0.6	±0.4



除以上规格外，还可提供其他尺寸板材。具体事宜，欢迎垂询！  
Besides the specifications mentioned above, special specifications can be supplied according to your requirements.

五、矿用硬质合金系列 Cemented carbide for mining

地矿工具类硬质合金牌号性能及使用推荐

The performance and recommendation of the hard alloy plate number of underground mining tools

牌号 Grade	硬度 Hardness HRA	抗弯强度 TRS N/mm <sup>2</sup>	密度 Density g/cm <sup>3</sup>	推荐用途 Applications recommended
YK06	90	2200	14.9	主要用于中等或小规格硬质合金球齿，镶制牙轮钻和冲击钻具，钻进软和中硬岩层。 It is mainly used for medium or small hard alloy ball teeth, insert the cone drilling and impact drill, and get into the soft and medium hardrock.
JK05	89.5	2400	14.8	
JK10	89	2200	14.4	可用于地质勘探钻具，煤矿采用轻型电钻钻头，作软岩层，煤层及无硅化岩层钻进钻具。 It can be used for geological exploration and drilling tools, and coal mining can be used as soft rock, coal seam and non-silicified rock drilling tools.
YG8C	88.5	2500	14.7	
YG9C	87.5	2600	14.5	
YG11C	87	2600	14.4	
YK20	86.5	2600	14.4	适用于矿山采用钻具钎片，合金柱齿镶制牙轮钻等柱齿钻具，钻进中硬和硬岩层。 It is suitable for drilling tools, drilling tools, drilling tools, drilling tools and drilling tools.
YK25	87	2600	14.4	
YG13C	86	2800	14.2	
YK30	86.5	2800	14.35	适用于硬质合金煤截齿，截齿，掘进齿，钻进中硬岩层和硬岩层。 Suitable for hard alloy coal cutting teeth, turning teeth, tunneling, drilling in hard rock and hard rock.
YK40	86	2800	14.35	
YG11CN	88	2500	14.4	具有较高的硬度和耐磨性，适用于铲雪片铲雪路面冰雪。 With high hardness and wear resistance, it is suitable for snow and snow shovel snow.
ZS10	87	2800	14.35	强度高，韧性好，耐磨性稍差，适用于破碎直径小于50毫米坚硬的砂岩，石英岩，致密硅化白云岩，硅化石英岩，铁矿石，闪长岩，花岗岩，砂岩，玄武石，鹅卵石等。 High strength, good toughness and wear resistance is a bit poor, is suitable for crushing a diameter of less than 50 mm hard sandstone, quartzite, tightly silicified dolomite, silicified quartzite, iron ore, diorite, granite, sandstone, basalt stones, pebbles, etc.
ZS20	88	2600	14.45	硬度和耐磨一般，适用于破碎直径小于45毫米变质砂岩，花岗岩，花岗岩，普通石灰岩，花岗斑岩，露天矿花岗岩，白云岩，磁铁矿等 The hardness and wear-resisting are generally applicable to the crushing diameter of less than 45mm metamorphic sandstone, granite porphyry, granite, common limestone, granite porphyry, open-pit granite, dolomite, magnetite and so on
ZS30	89	2500	14.6	硬度高，耐磨性较好，适用于破碎直径小于40毫米中硬及坚硬的花岗岩，角闪岩，硅质板岩，含铜黄铁矿，大理石，砂岩等。 High hardness, good abrasion resistance, suitable for hard and hard granite with crushing diameter less than 40mm, hornite, siliceous SLATE, copper pyrite, marble, sandstone etc.
ZS40	90	2400	14.7	硬度高，耐磨性好，适用于破碎直径小于40毫米石灰岩，砂岩，砂质页岩，贫铁矿，硅化泥质砂岩等。 High hardness, good wear resistance, suitable for crushing diameter less than 40mm limestone, sandstone, sandy shale, poor iron ore, silicified clay sandstone, etc.

### 索引INDEX

#### 矿用硬质合金

K0, K10	K1, K20	K21	K30	K31	T10
P 103-105	P 106-107	P 108	P 109	P 109	P 109

T11	T12	T20	T21	T30	T40
P 110	P 110	P 110	P 111	P 111	P 112

T50	M10 左	M10 右	M11	M12	M14 左
P 112	P 113	P 113	P 114	P 114	P 115

M14 右	M20	M21	M22	M23	M24
P 115	P 115	P 116	P 116	P 117	P 117

截煤齿	截煤齿	球形齿	锥形齿
P 117	P 117	P 120-121	P 121-122

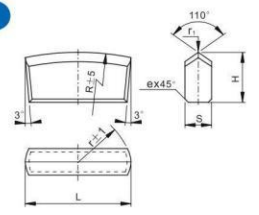
楔形齿	边楔齿	勺形齿	平顶齿	抛物线形齿	尖爪齿
P 123	P 123	P 124	P 124	P 125	P 125

挖路齿
P 126

#### K0型 用于镶制一字型硬质合金钻头

Type K0 For making chisel cemented carbide drill bits



型号 Type	尺寸 Dimension								
	L		H		S		R	r	r <sub>1</sub>
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K026D	26		12		8		50	13	0.5-1.0
K026B	26		15		8		50	13	
K026	26		18		8		180	13	
K028D	28		12		6		80	14	
K028B	28		15		8		80	14	
K028	28		18		8		180	14	
K030D	30		13		8		80	15	
K030B	30		15		8		80	15	
K030	30	±0.6	18		8		180	15	
K032E	32		12		8		80	16	
K032D1	32		12.5		8		180	16	
K032D	32		13		8		80	16	
K032B	32		15	±0.5	8	0 -0.6	180	16	
K032	32		18		8		180	16	
K034E	34		12		8		80	17	
K034D	34		13		8		80	17	
K034B	34		15		10		180	17	
K034	34		18		10		180	17	
K036E	36		12.5		8		120	18	
K036D	36		13.5		9.2		80	18	
K036A	36	±0.6	15		8		80	18	
K036B	36		15		10		180	18	
K036	36		18		10		180	18	
K038H	38		12		10		180	19	
K038E	38	±0.7	13		9		180	19	

型号 Type	尺寸 Dimension						mm		
	L		H		S		R	r	r <sub>1</sub>
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K038D1	38		13.5		8		180	19	
K038D	38		13.5		9.2		120	19	
K038D2	38		13.5		9.2		180	19	
K038A	38		15		8		120	19	
K038B	38		15		10		180	19	
K038	38		18		10		180	19	
K040H	40		12		10		180	20	
K040D	40		13.5		9.2		120	20	
K040D1	40		13.5		9.2		180	20	
K040F	40		14		9		120	20	
K040F1	40		17		9		120	20	
K040A	40		15		8		120	20	
K040B	40		15		10		180	20	
K040	40		18		10		180	20	
K042E	42		12		7		150	21	
K042H	42	±0.7	12	±0.5	10	0 -0.6	180	21	0.5-1.0
K042D	42		13.5		9.2		120	21	
K042D1	42		13.5		9.2		180	21	
K042B1	42		14		10		180	21	
K042B	42		15		10		180	21	
K042	42		18		10		180	21	
K043H	43		12		10		180	21.5	
K043D	43		13.5		9.2		120	21.5	
K043A	43		15		8		120	21.5	
K043B	43		15		10		180	21.5	
K044B	44		15		10		120	22	
K044	44		18		10		180	22	
K046B	46		15		10		160	23	
K046	46		18		10		180	23	
K049B	49		15		10		160	24.5	
K049	49		18		10		1800	24.5	

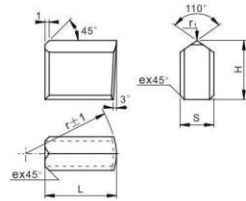
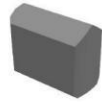
K10型 用于镶制一字型硬质合金钎头

Type K10 For making chisel cemented carbidedrill bits

型号 Type	尺寸 Dimension						mm		
	L		H		S		R	r	r <sub>1</sub>
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K1013	13	±0.4	10	±0.25	4	±0.15	40	8	
K1016A	16	±0.4	12	±0.25	5	±0.15	30	8	
K1016	16	±0.4	12	±0.35	6	±0.25	30	8	
K1020B	20	±0.4	11.5	±0.35	6	±0.25	70	10	
K1020A	20	±0.4	12	±0.35	5	±0.25	40	10	
K1020	20	±0.4	12	±0.35	6	±0.25	40	10	
K1026	26	±0.4	12	±0.35	6	±0.25	50	13	
K030	30	±0.45	15	±0.35	8	±0.25	80	15	
K1032	32	±0.45	15	±0.35	8	±0.25	80	16	
K1034	34	±0.45	15	±0.35	8	±0.25	80	17	
K1036	36	±0.5	15	±0.35	8	±0.25	80	18	
K1036A	36	±0.5	15	±0.35	10	±0.25	120	18	0.5-1.0
K1038	38	±0.5	15	±0.35	8	±0.25	120	19	
K1038A	38	±0.5	15	±0.35	10	±0.25	120	19	
K1040	40	±0.5	15	±0.35	8	±0.25	120	20	
K1040A	40	±0.5	15	±0.35	10	±0.25	120	20	
K1040B	40	±0.5	18	±0.35	10	±0.25	120	20	
K1043	43	±0.5	15	±0.35	10	±0.25	120	21.5	
K1043A	43	±0.5	18	±0.35	8	±0.25	120	21.5	
K1043B	43	±0.5	18	±0.35	10	±0.25	120	21.5	
K1046	46	±0.6	15	±0.35	10	±0.25	160	23	
K1046A	46	±0.6	18	±0.35	10	±0.25	160	23	
K1049	49	±0.6	18	±0.35	10	±0.25	160	24.5	
K1054	54	±0.6	18	±0.	10	±0.25	1	27	

**K1型 用于镶制十字型和X型硬质合金钎头**

Type K1 For making cross and X-shaped cemented carbide drill bits



型号 Type	尺寸 Dimension						r	r <sub>1</sub>	e
	L		H		S				
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K106	6	±0.25	12	±0.35	6	0 -0.6	0.5-1.0	0.5	
K107	7	±0.25	12	±0.35	6			20	
K108	8	±0.25	12	±0.35	6			20	
K109	9	±0.25	12	±0.35	8			20	
K110	10	±0.25	12	±0.35	8			20	
K111	11	±0.35	12	±0.35	8			20	
K112	12	±0.35	12	±0.35	8			20	
K113	13	±0.5	12	±0.35	8			20	
K114	14	±0.5	12	±0.35	8			20	
K115	15	±0.5	12	±0.35	8			20	
K115H	15	±0.5	14	±0.5	8			20	
K116D	16	±0.5	9	±0.35	8			20	
K116	16	±0.5	14	±0.5	8			20	
K117	17	±0.5	14	±0.5	8			20	
K117H	17	±0.5	16	±0.5	10			20	
K118	18	±0.5	12	±0.35	8			20	
K119	19	±0.6	14	±0.5	8			22	
K119H	19	±0.6	16	±0.5	10			22	
K120	20	±0.6	16	±0.5	10			23	
K121	21	±0.6	16	±0.5	10			24	
K122D	22	±0.6	12	±0.35	8			25	
K122	22	±0.6	16	±0.5	10			25	
K124	24	±0.6	16	±0.5	10			27	
K126	26	±0.6	16	±0.5	10			290	

(续表) Run-on Table

型号 Type	尺寸 Dimension						r	r <sub>1</sub>	e
	L		H		S				
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K128	28	±0.6	16	±0.5	10	0 -0.6	0.5-1.0	1	
K130	30	±0.8	12	±0.35	8			31	
K131	31	±0.8	16	±0.5	10			32	
K133	33	±0.8	12	±0.35	8			34	
K134	34	±0.8	12	±0.35	10			36	
K135	35	±1.0	13	±0.35	10			37	
K136	36	±1.0	16	±0.5	10			35	
K140	40	±1.0	24	±0.5	13			39	
								51	1

**K20型 用于镶制十字型和X型硬质合金钎头**

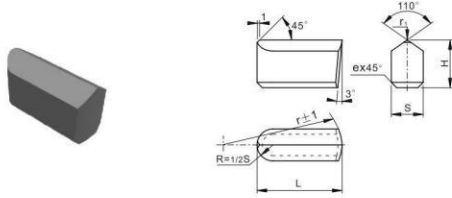
Type K20 For making chisel and X-shaped cemented carbide drill bits

型号 Type	尺寸 Dimension						r	r <sub>1</sub>	e
	L		H		S				
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K2012	12	±0.35	12	±0.35	8	±0.25	0.5-1.0	16	1
K2013	13	±0.4	12	±0.35	8	±0.25		16	
K2014	14	±0.4	12	±0.35	8	±0.25		17	
K2015	15	±0.4	12	±0.35	8	±0.25		20	
K2017	17	±0.4	14	±0.4	8	±0.25		20	
K2019	19	±0.4	14	±0.4	8	±0.25		22	
K2020	20	±0.4	16	±0.4	10	±0.25		23	
K2020A	20	±0.4	18	±0.4	10	±0.25		23	
K2022	22	±0.4	16	±0.4	10	±0.25		25	
K 2024	24	±0.4	16	±0.4	10	±0.25		27	
K2026	26	±0.5	16	±0.4	10	±0.25		29	
K2028	28	±0.5	16	±0.4	10	±0.25		31	
K2030	30	±0.5	18	±0.4	12	±0.25		35	
K2032	32	±0.5	18	±0.4	12	±0.25		38	
K2035	35	±0.5	20	±0.4	15	±0.4		45	
K2041	41	±0.5	22	±0.4	17	±0.4		51	
K2045	45	±0.5	25	±0.4	19	±0.4		57.5	
K2053	53	±0.6	25	±0.4	20	±0.4		59	



**K21型 用于镶制十字型和X字型硬质合金钎头**

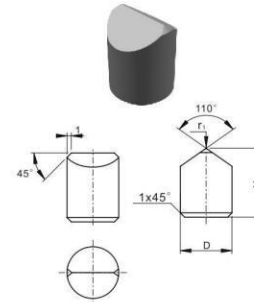
Type K21 For making cross and X-shaped cemented carbide drill bits



型号 Type	尺寸 Dimension								
	L		H		S		r	e	r <sub>i</sub>
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
K2114	14	±0.35	12	±0.35	8	±0.25	20	1.0	0.5-1.0
K2116	16	±0.35	12	±0.35	8	±0.25	22	1.0	
K2116H	16	±0.35	20	±0.40	12	±0.25	45	1.0	
K2118	18	±0.35	14	±0.35	10	±0.25	22.5	1.0	
K2120	20	±0.4	16	±0.35	10	±0.25	28.5	1.0	
K2126	26	±0.4	16	±0.35	10	±0.25	35	1.5	
K2126A	26	±0.4	18	±0.35	10	±0.25	35	1.5	
K2128	28	±0.45	16	±0.35	10	±0.25	35	1.5	
K2128A	28	±0.45	18	±0.35	10	±0.25	35	1.5	
K2130	30	±0.45	16	±0.35	12	±0.35	38	1.5	
K2130A	30	±0.45	18	±0.35	12	±0.35	38	1.5	
K2132	32	±0.45	16	±0.35	12	±0.35	44.5	2.0	
K2132A	32	±0.45	18	±0.35	12	±0.35	44.5	2.0	
K2135	35	±0.5	16	±0.35	12	±0.35	51	2.0	
K2135A	35	±0.5	18	±0.35	12	±0.35	51	2.0	
K2139	39	±0.5	18	±0.35	14	±0.35	57.5	2.0	
K2143	43	±0.5	20	±0.4	14	±0.35	63.5	2.0	

**K30型 用于镶制一字型和十字型硬质合金钎头**

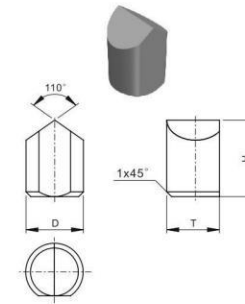
Type K30 For making cross cemented carbide drill bits



型号 Type	尺寸 Dimension				
	D		H		r <sub>i</sub>
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	
K3008	8	±0.25	14	±0.35	0.5-1.0
K3010	10	±0.25	16	±0.35	
K3012	12	±0.35	16	±0.35	
K3014	14	±0.35	18	±0.35	
K3016	16	±0.35	20	±0.4	
K3016A	16	±0.35	22	±0.4	
K3018	18	±0.35	20	±0.4	

**K31型 用于镶制一字型和十字型硬质合金钎头**

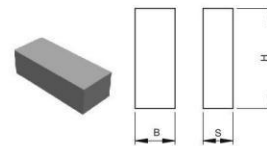
Type K31 For making cross cemented carbide drill bits



型号 Type	尺寸 Dimension					
	D		H		T	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
K3108	8	±0.35	16	±0.5	7.6	±0.35
K3110	10	±0.35	16	±0.5	9.3	±0.35
K3112	12	±0.35	16	±0.5	11	±0.35

**T10型 用于镶制旋转钻进刮刀及自磨式取岩心钻头**

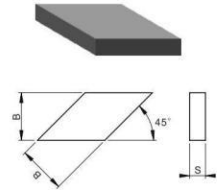
Type T10 For making rotary scraping drill bits and rock core drilling bits



型号 Type	尺寸 Dimension					
	B		H		S	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T1003	3	±0.3	15	±0.5	1.5	±0.2
T1006	6	±0.35	20	±0.6	4	±0.3
T1008	8	±0.35	20	±0.6	6	±0.35

**T11型 用于镶制旋转钻进中软地层取岩心钻头**

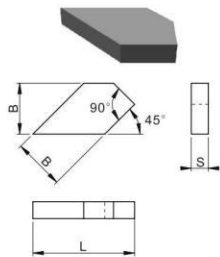
Type T11 For making rotary cemented carbide core drilling bits in drilling medium soft formations



型号 Type	尺寸 Dimension			
	B		S	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T1108	8.5	±0.35	3	±0.3
T1112	12	±0.5	4	±0.3

**T12型 用于镶制旋转钻进中软地层取岩心钻头**

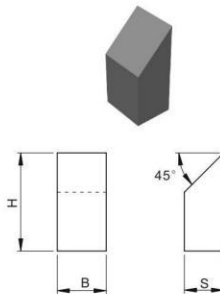
Type T12 For making rotary cemented carbide core drilling bits in drilling medium soft formations



型号 Type	尺寸 Dimension					
	B		L		S	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T1208	8.5	±0.35	17.5	±0.5	3	±0.3
T1212	12	±0.5	24	±0.6	4	±0.3

**T20型 用于镶制旋转钻进乱头钻头**

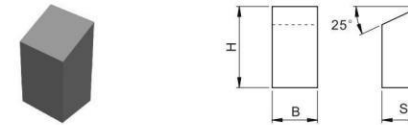
Type T20 For making rotary scraping cemented carbide drill bits



型号 Type	尺寸 Dimension					
	B		H		S	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T2004	4	±0.3	15	±0.5	3.6	±0.3
T2005	5	±0.3	20	±0.6	4	±0.3
T2006	6	±0.35	20	±0.6	6	±0.35
T2008	8	±0.35	20	±0.6	6	±0.35
T2010	10	±0.35	20	±0.6	8	±0.35

**T21型 用于镶制钻进较硬地层取岩心钻头**

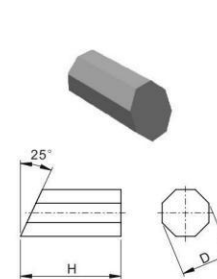
Type T21 For making cemented core drilling bits for drilling soft formations



型号 Type	尺寸 Dimension					
	B		H		S	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T2105	5	±0.3	7	±0.35	3	±0.3
T2105A	5	±0.3	8	±0.35	5	±0.3
T2105B	5	±0.3	10	±0.35	5	±0.3
T2105C	5	±0.3	13	±0.5	5	±0.3
T2107	7.5	±0.35	10	±0.35	3	±0.3
T2107A	7	±0.35	20	±0.6	7	±0.35
T2108	8.5	±0.35	8	±0.35	3	±0.3
T2110	10	±0.35	14	±0.5	4	±0.3
T2114	14	±0.5	25	±0.6	12	±0.5

**T30型 用于镶制钻进硬地层取岩心钻头**

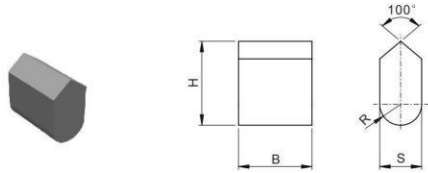
Type T30 For making cemented carbide core drilling bits for drilling soft formations



型号 Type	尺寸 Dimension			
	D		H	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T3005	5	±0.3	10	±0.35
T3007	7	±0.35	10	±0.35
T3007A	7	±0.35	15	±0.5
T3007B	7	±0.35	20	±0.6
T3010	10	±0.35	15	±0.5
T3010B	10	±0.35	16	±0.5
T3010A	10	±0.35	20	±0.6

**T40 用于镶制冲击回转钻进破碎岩层钻头**

Type T40 For making rotary percussive drill bits for breaking rock formations

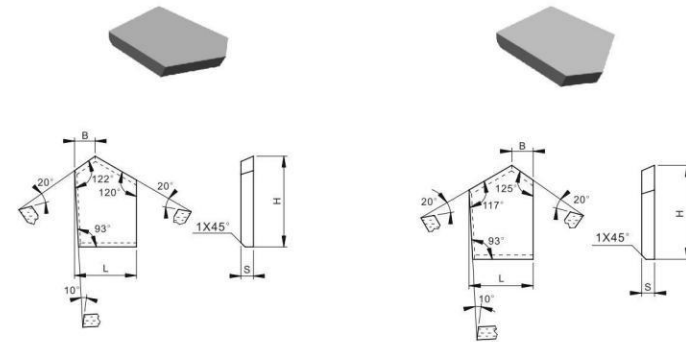


型号 Type	尺寸 Dimension						R
	B		H		S		
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	
T4010	10	±0.35	16	±0.5	8	±0.35	4
T4012	12	±0.5	16	±0.5	8	±0.35	4
T4014	14	±0.5	16	±0.5	8	±0.35	4

mm

**M10型 用于镶制旋转钻进煤层和软岩层钻头**

Type M10 For making rotary drill bits for coal and soft rock formations

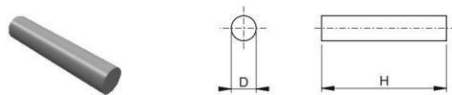


左  
Left

右  
Right

**T50型 用于镶制钻进中硬地层自磨式取岩心钻头**

Type T50 For making cemented carbide core drilling bits for medium hard formations



型号 Type	尺寸 Dimension			
	H		D	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
T5010	10	±0.35	1.8	±0.2
T5015	15	±0.5	1.8	±0.2
T5020	20	±0.6	2.0	±0.2

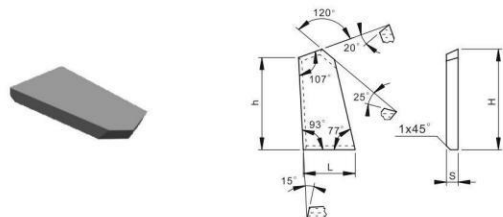
mm

型号 Type	尺寸 Dimension							
	L		H		S		B	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
M1011R	11	±0.35	12	±0.35	2.5	±0.2	4	±0.3
M1011L	11	±0.35	12	±0.35	2.5	±0.2	4	±0.3
M1013R	12.5	±0.5	12	±0.35	3	±0.2	4	±0.3
M1030L	12.5	±0.5	12	±0.35	3	±0.2	4	±0.3
M1014R	14	±0.5	19	±0.4	3.8	±0.3	4	±0.3
M1014L	14	±0.5	19	±0.4	3.8	±0.3	4	±0.3
M1015AR	15	±0.5	19	±0.5	3	±0.3	5	±0.3
M1015AL	15	±0.5	19	±0.5	3	±0.3	5	±0.3
M1015R	15	±0.5	22	±0.5	3.0	±0.3	5	±0.3
M1015L	15	±0.5	22	±0.5	3.0	±0.3	5	±0.3
M1018R	18	±0.5	22	±0.5	6.0	±0.3	5	±0.3
M1018	18	±0.5	22	±0.5	6.0	±0.3	5	±0.3

mm

**M11型 用于镶制旋转钻进煤层和软岩层钻头**

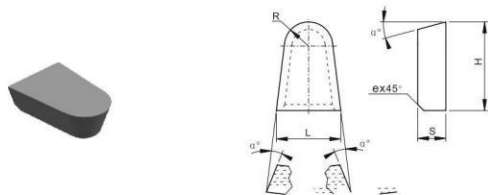
Type M11 For making rotary drill bits for coal and soft rock formations



型号 Type	尺寸 Dimension							
	L		H		h		S	
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.
M1112	12	±0.35	18	±0.5	15.8	±0.5	3	±0.3
M1113	13.4	±0.0	26	±0.5	23.8	±0.5	3	±0.3

**M12型 用于镶制采掘机械截齿**

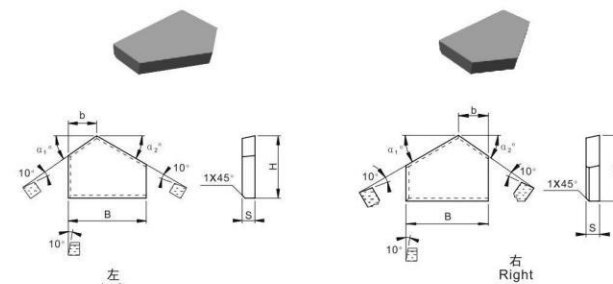
Type M12 For making auger tips in excavators



型号 Type	尺寸 Dimension								
	L		H		S		R	$\alpha^\circ$	e
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
M1216	16	±0.5	22	±0.5	7	±0.3	6	15	1.0
M1220	20	±0.5	27	±0.5	8	±0.3	7	15	1.0
M1222	22	±0.5	22	±0.5	7.5	±0.3	9	10	1.5
M1230	30	±0.5	35	±0.5	12	±0.3	8	8	1.0

**M14型 用于镶制采掘机械截齿**

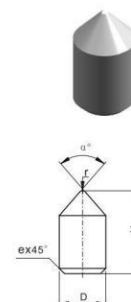
Type M14 For making auger tips in excavators



型号 Type	尺寸 Dimension									
	B		H		S		b		$\alpha_1^\circ$	$\alpha_2^\circ$
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.		
M1427R	27.5	±0.5	22	±0.5	4.5	±0.3	10	±0.35	30	30
M1427L	27.5	±0.5	22	±0.5	4.5	±0.3	10	±0.35	35	35
M1445R	45	±1.0	21	±0.5	9	±0.35	15	±0.5	31	17
M1445L	45	±1.0	21	±0.5	9	±0.35	15	±0.5	17	31

**M20型 用于镶制采掘机械截齿**

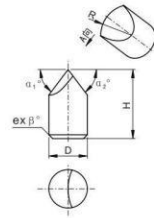
Type M20 For making auger tips in excavators



型号 Type	尺寸 Dimension						
	D		H		r	$\alpha^\circ$	e
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
M2009	9	±0.3	16	±0.5	1.0	90	1.0
M2012A	12	±0.3	18	±0.5	1.5	82	1.0
M2012B	12	±0.3	20	±0.5	1.5	82	1.5
M2018	18	±0.4	32	±0.5	1.5	82	2.0

**M21型 用于镶制采掘机械截齿和单牙钻头齿**

Type M21 For making auger tips in excavators and buttons in tricone bits

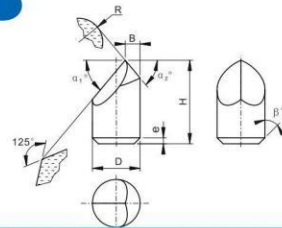


mm

型号 Type	尺寸 Dimension									
	D		H		R		$\alpha_1$	$\alpha_2$	$\phi$	$\beta$
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.				
M2110A	10	±0.30	18	±0.5	8	±0.3	53	53	1.0	30
M2110B	10	±0.30	20	±0.5	5.5	±0.3	50	58	1.0	45
M2112A	12	±0.30	20	±0.5	6.5	±0.3	32	40	1.0	45
M2112B	12.5	±0.40	25	±0.5	10	±0.35	46	46	1.0	30
M2115	15	±0.40	22	±0.5	11	±0.35	45	45	2.5	30
M2118	18	±0.40	20	±0.5	14.4	±0.5	37	37	1.5	45

**M22型 用于镶制采掘机械截齿和联合采煤机械齿**

Type M22 For making auger tips in excavators and coal machinery

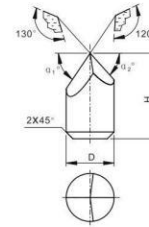


mm

型号 Type	尺寸 Dimension										
	D		H		R		$\alpha_1$	$\alpha_2$	B	$\phi$	$\beta$
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.					
M2210A	10	±0.30	18	±0.5	8	±0.3	48	33	-	1	45
M2210B	10	±0.30	20	±0.5	8	±0.3	48	33	-	1	45
M2212A	12	±0.30	22	±0.5	9	±0.3	50	50	4	1	30
M2212B	12.5	±0.40	25	±0.5	9	±0.35	45	55	4	1	30
M2214	14	±0.40	22	±0.5	10	±0.35	55	49	-	2	45
M2216	16	±0.40	28	±0.5	8	±0.3	50	50	5	2	30
M2218	18	±0.40	21.5	±0.5	11	±0.35	52	52	-	2	30

**M23型 用于镶制采掘机械截齿**

Type M23 For making auger tips in excavators

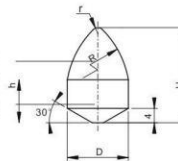


mm

型号 Type	尺寸 Dimension					
	D		H		$\alpha_1$	$\alpha_2$
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.		
M2312A	12	±0.30	22	±0.5	56	48
M2312B	12.5	±0.40	25	±0.5	56	48
M2314A	14	±0.40	22	±0.5	56	48
M2314B	14	±0.40	25	±0.5	56	48

**M24型 用于镶制采掘机械截齿**

Type M24 For making auger tips in excavators

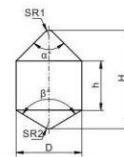


mm

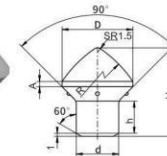
型号 Type	尺寸 Dimension						
	D		H		h	R	r
	基本尺寸 Dim.	允许偏差 Tol.	基本尺寸 Dim.	允许偏差 Tol.			
M2417A	17	±0.50	26.5	±0.5	12	26	1.75
M2417B	17	±0.50	26.5	±0.5	15	26	1.75

**截煤齿**

Auger

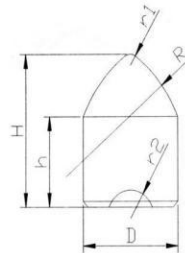


型号 Type	尺寸 dimension						
	D	H	h	SR1	SR2	$\alpha$	$\beta$
T1022178	8.99	16.80	10.80	1.90	1.60	77	140
3T102778B	15.68	25.20	14.10	1.60	1.00	80	140
3T1022178B	8.93	16.80	10.80	1.20	1.00	79	140
3T1021278B	12.40	21.10	12.70	1.50	1.00	80	140



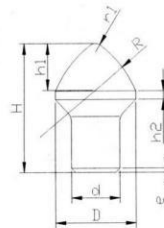
型号 Type	尺寸 Dimension							
	D		d		H	h	R	A
	尺寸 Dim.	公差 Tol.	尺寸 Dim.	公差 Tol.				
JC-Φ1822	18		10		22	8.0	30	1.5
JC-Φ2025	20	-0.1	12	-0.1	25	10.0	35	1.5
JC-Φ2027	20	-0.4	12	-0.4	27	10.5	35	4.0
JC-Φ2228	22		14		28	12.0	40	1.5

截齿  
Cutter tooth



型号 Type	D	H	h	R	r1	e	r2
SZ21227-R26	21.2	27	15.5	26	2	0.5°45°	4.2
SZ2128-R26	21	28	16.5	26	2	0.5°45°	5
SZ18826-R26	18.8	26	16	26	1.5	0.5°45°	4.5
SZ24533-R2	24.5	33	20.5	26	2	1.0°45°	4.2
SZ18.524-R26°R4.2	18.5	24	14	26	2	0.5°45°	4.2
SZ20.524.5-R26°R2	20.5	24.5	13	26	2	0.5°45°	4.2
SZ2023.5-R26°4.5	20	23.5	11.5	26	2	0.5°45°	4.5
ZS18825-R26°R2	18.8	25	15	26	2	0.5°45°	4.2
SZ1823.5-R26°R4.5	18	23.5	11.5	26	2	0.5°45°	4.5
SZ20.526-R26°9-SR4.5	20.5	26	17	26	4.5	0.5°45°	4.2

蘑菇齿  
The mushroom tooth



型号 Type	D	h	H	R	r1	r2	r3	h1	h2	e
Yk16003	17	13	24	26	2	3	4.2	9	2	0.5°45°
SZ21.526-Φ12/R50	21.54	12	26	50	2	6	3	11	2	0.5°45°
SZ21.527.5-Φ12/R50*12.5	21.5	12	27.5	50	2	6	3	12.5	2	0.5°45°
YK16005-Φ30	30	20	34	26	2	4	5	14.5	4	0.5°45°
YK16006-Φ25	25	16	31	26	2	4	4.5	13.5	4	0.5°45°
YK16007-Φ22	22	16	30	26	2	4	4	11.5	4	0.5°45°

S Q 12 17 A - E 15 Q  
1 2 3 4 5 6 7 8

1 S-表示产品精度较高的球齿系列。  
S-The series of buttons with a higher precision standard

2 球齿头部形状。

The shape of the top part of the button

Q: 球形 Z: 锥球形 D: 抛物线形 P: 平顶形 T: 平顶锥形  
Q: Spherical Z: Spherical cone D: Parabolic P: Flat T: Conical flat  
X: 楔形 B: 边楔形 S: 勺形 F: 尖爪形 J: 截煤齿形  
X: Wedge B: Eccentric wedge S: Spoon F: Pointed claw J: Auger tip

3 表示球齿直径, 单位为: mm; 只取两位整数, (不足两位前面添“0”补足两位)。  
The diameter of the button in mm. Only 2 integers are taken.  
(If the diameter is only one integer, then it is preceded by zero).

4 表示球齿高度, 单位为: mm; 只取两位整数, (不足两位前面添“0”补足两位)。  
The height of the button in mm. Only 2 integers are taken.  
(If it is only one digit, then it is preceded by zero).

5 表示特殊头部结构, 标准头部结构此位缺省。  
Special button top and it is omitted here.

6 表示球齿底部倒角的角度。

The angle of chamfer at the bottom of the button.

E-表示与轴心线夹角为15°~18°。

E-It indicates the included angle in relation to the center line of the axis is 15°-18°.

F-表示与轴心线夹角为30° (特例: F2表示为0.7×30°)

F-It indicates the included angle in relation to the center line of the axis is 30° (Exception:F2 indicates 0.7×30°)

G-表示与轴心线夹角为45°

G-It indicates the included angle in relation to the center line of the axis is 45°

X-表示与轴心线夹角为其它值或其他底部形状。

X-It indicates the included angle in relation to the center line of the axis is other figures or other bottom shapes.

7 表示底部倒角的高度, 数字为高度 (mm) 的10倍, 不足两位前面添“0”补足两位。  
It indicates the height of the chamfer at the bottom and it is 10 times of the height in mm. If it is less than 2 integers, then it is preceded by zero.

8 表示底部容气孔结构。

It indicates air pocket structure at the bottom.

Q: 球形孔 Z: 锥形孔 J: 尖孔 无容气孔此位缺省。

Q: Spherical hole Z: Conical hole J: pointed hole It is omitted if there is no air pocket.

注: 如6、7位缺省, 表示为双倒角的球齿系列。

Note: If there are no positions of 6 and 7 or they are omitted, it belongs to the series of buttons with double chamfers

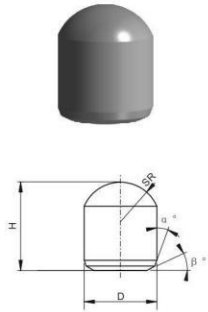
D、H尺寸公差标准

Standard of tolerances of D and H

直径(D) Diameter		高度(H) Height	
公称尺寸 Nominal size	允许偏差 Tolerance	公称尺寸 Nominal size	允许偏差 Tolerance
≤10	±0.10	≤11	
		11~18	±0.15
>10	±0.15	18~25	±0.15
		>25	±0.20

球形齿

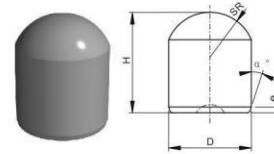
Spherical buttons



型号 Type	尺寸 Dimension				
	D	H	SR	e	$\alpha^\circ$
SQ0610	6.25	9.9	3.4	20	26.5
SQ0812	8.25	12.2	4.4	20	26.5
SQ0914	9.25	13.9	5.0	20	26.5
SQ1019	10.25	18.9	5.5	20	27
SQ1119	11.30	19.0	6.0	20	27
SQ1221	12.35	20.9	6.6	20	28
SQ1220A-X	12.35	20.0	6.3	25	24.75
SQ1320	13.35	19.9	7.0	20	27
SQ1422	14.35	22.1	7.7	20	16
SQ1424A-X	14.35	24.0	7.34	25	25
SQ1625	16.35	24.9	8.8	20	16
SQ1930	19.35	30.4	9.76	20	30
SQ2132	21.65	31.9	11.8	20	30

球形齿

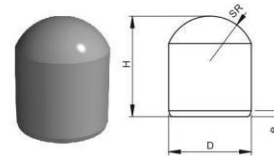
Spherical buttons



型号 Type	尺寸 Dimension				
	D	H	SR	e	$\alpha^\circ$
SQ1314-E15Q	13.35	13.5	7.0	1.5	18
SQ1320-E15Q	13.35	19.9	7.0	1.5	18
SQ1420A-E30Q	14.35	20.0	7.2	3.0	18
SQ1415B-E17Q	14.35	15.0	7.5	1.7	18
SQ1619A-E22Q	16.35	19.0	8.8	2.2	18
SQ1622A-E22Q	16.35	21.9	8.8	2.2	18

球形齿

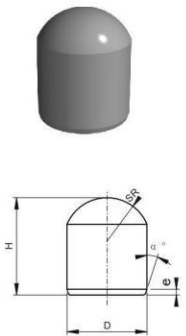
Spherical buttons



型号 Type	尺寸 Dimension			
	D	H	SR	e
SQ1318	13.2	18	7	0.7*30°
SQ1925	19.07	25	9.76	1.5*25°
SQ2028	20.07	28	11.5	1.8*25°

球形齿

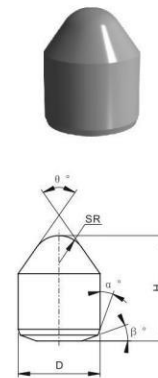
Spherical buttons



型号 Type	尺寸 Dimension				
	D	H	SR	e	$\alpha^\circ$
SQ0810-E15	8.25	10.0	4.4	1.5	18
SQ0812-E15	8.25	12.0	4.4	1.5	18
SQ1827-E15	18.25	27.1	9.2	1.5	18
SQ0812-F2	8.25	12.2	4.4	0.7	30
SQ0915-F2	9.25	14.9	5.0	0.7	30
SQ1013-F2	10.25	13.0	5.5	0.7	30
SQ1114-F2	11.30	14.0	6.0	0.7	30
SQ1216-F2	12.35	16.0	6.6	0.7	30
SQ1318-F2	13.35	18.0	7.0	0.7	30
SQ1418-F2	14.35	18.1	7.7	0.7	30
SQ1625-F2	16.35	24.6	8.8	0.7	30
SQ2030-F2	20.45	30.0	11.5	0.7	30
SQ2230-F2	22.45	30.0	12.0	0.7	30

锥形齿

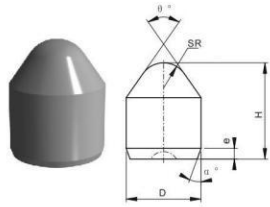
Conical buttons



型号 Type	尺寸 Dimension					
	D	H	$\theta^\circ$	SR	$\alpha^\circ$	$\beta^\circ$
SZ0812	8.25	12.2	70	3.0	20	27
SZ0913	9.25	13.3	70	3.0	20	26.5
SZ0915A	9.25	14.9	55	3.0	20	26.5
SZ1016	10.25	16.2	70	4.0	20	26.5
SZ1016A	10.25	16.2	52	4.0	20	26.5
SZ1116B	11.30	15.9	52	4.0	20	26.5
SZ1117C	11.30	17.4	60	4.0	20	26.5
SZ1118A	11.30	18.0	55	4.0	20	26.5
SZ1218A	12.35	17.9	55	4.8	20	28
SZ1218B	12.35	18.0	55	4.0	20	27
SZ1219	12.35	18.9	70	4.8	20	28
SZ1422A	14.35	21.9	55	5.0	20	14.5
SZ1424	14.35	23.9	67	3.0	20	15.5
SZ1420C	14.35	20.0	71.5	5.0	30	15.5

锥形齿

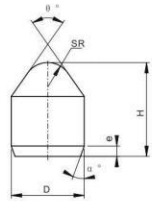
Conical buttons



型号 Type	尺寸 Dimension					
	D	H	$\alpha$	SR	e	$\alpha'$
SZ1420X-G10Q	14.35	20.1	52	5.0	1.0	45
SZ1825A-E12Q	18.23	25.0	55	6.0	1.2	20
SZ1926B-E21Q	19.35	26.0	42	7.5	2.1	18

锥形齿

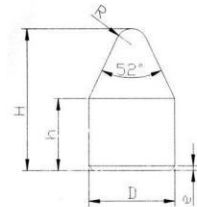
Conical buttons



型号 Type	尺寸 Dimension					
	D	H	$\alpha$	SR	e	$\alpha'$
SZ0711-F2	7.25	11.0	70	2.8	0.7	30
SZ0812-E15	8.25	12.0	70	3.0	1.5	18
SZ0812-F2	8.25	12.0	70	3.0	0.7	30
SZ0914-F2	9.25	14.0	70	3.0	0.7	30
SZ1018C-X	10.25	18.0	72	2.7	1.2	60
SZ1219-F2	12.35	18.9	70	4.8	0.7	30
SZ1222X-G10	12.35	22.0	52	2.0	1.0	45
SZ1320-F2	13.35	19.9	70	4.8	0.7	30
SZ1416B-E20	14.35	16.0	56	5.7	2.0	18
SZ1422C-E15	14.35	22.0	71	5.0	1.5	18

锥形齿

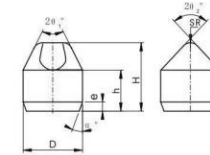
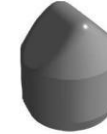
Conical buttons



型号 Type	尺寸 Dimension				
	D	H	R	$\phi$	e
SZ0711-F2	7.25	11	2.8	70°	0.7*30°
SZ0812A	8.3	12	3	52°	1.0*15°
SZ0914A	9	14	3	52°	0.8*30°
ZZ1323-R2.5	13	23	2.5	55°	1.5*30°
SZ1232-R2-71°	12	32	2	71°	2.6*60°
SZ1430-SR2-82°	14	30	2	82°	0.5*45°

楔形齿

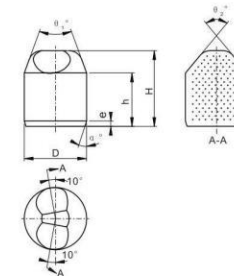
Wedge buttons



型号 Type	尺寸 Dimension							
	D	H	h	$\alpha_1$	$\alpha_2$	SR	e	$\alpha'$
SX0809-E10	8.25	9.0	5.5	22.5	45	1.35	1.0	20
SX1013-E16	10.25	13.0	9.0	22.5	45	2.50	1.6	18
SX1115-E15	11.25	15.0	8.0	22.5	30	2.75	1.5	18
SX1114A-E13	11.30	14.0	8.1	21.5	37.5	3.50	1.3	20
SX1117B-E13	11.30	17.1	9.1	20	26.5	3.00	1.3	20
SX1118C-E11	11.30	17.8	10.1	17.5	25	3.15	1.1	18
Sx1621-E20	16.35	21.0	11.0	22.5	35	2.60	2.0	18
SX1623-E20	16.35	23.0	12.0	18	30	3.00	2.0	18

边楔齿

Eccentric wedge buttons

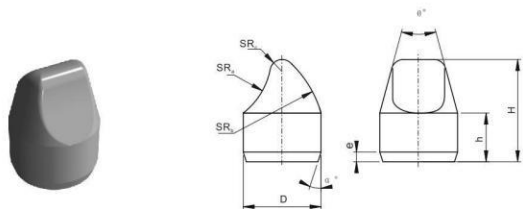


型号 Type	尺寸 Dimension						
	D	H	h	$\alpha_1$	$\alpha_2$	e	$\alpha'$
SB1030-F10	10.25	13.3	7.00	0	12	1.0	30
SB1924-E22	19.35	24.0	15.00	40	70	2.2	18



勺形齿

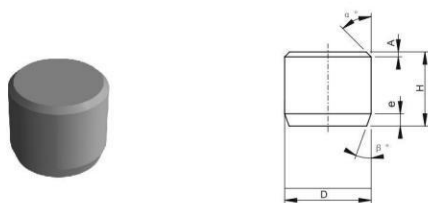
Spoon buttons



型号 Type	尺寸 Dimension								
	D	H	h	e	$\alpha^\circ$	SRa	SRb	SRc	$\beta^\circ$
SS1621-E20	16.35	21.0	9.9	2.0	18	15.0	23.0	2.5	30
SS1623-E20	16.35	23.0	11.9	2.0	18	15.0	23.0	2.5	30
SS1624-E12	16.35	24.2	12.8	1.2	15	15.0	24.0	2.3	30
SS1930-E20	19.35	30.0	17.0	2.0	18	16.0	25.0	3.0	30

平顶齿

Flattop buttons



型号 Type	尺寸 Dimension					
	D	H	A	$\alpha^\circ$	e	$\beta^\circ$
SP0807-E15	8.25	6.9	0.5	45	1.5	18
SP0908-E15	9.25	8.1	0.45	45	1.5	18
SP1010A-G15	10.20	10.0	2.0	45	1.5	45
SP1008-E16	10.25	8.0	0.5	45	1.6	18
SP1010-E16	10.25	9.5	0.5	45	1.6	18
SP1108-E15	11.25	8.0	0.5	45	1.5	18

抛物线形齿

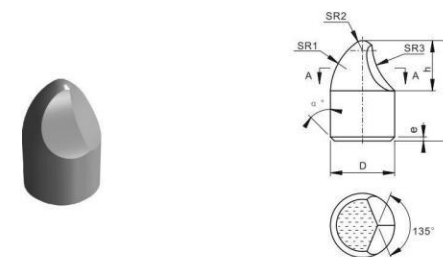
Parabolic buttons



型号 Type	尺寸 Dimension					
	D	H	SR1	SR2	$\alpha^\circ$	$\beta^\circ$
SD1222	12.35	21.9	3.0	16.0	20	63
SD1223A-X	12.35	22.6	4.6	13.3	25	65
SD1223B-X	12.35	23.0	3.0	12.0	25	65
SD1427A-X	14.35	26.7	5.3	15.4	25	65

尖爪齿

Pointed claw buttons

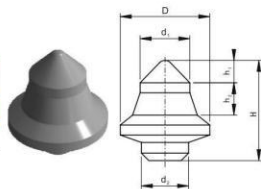


型号 Type	尺寸 Dimension							
	D	H	h	SR1	SR2	2-R3	e	$\alpha^\circ$
SF1420	14.35	20.00	10.00	12.00	2.00	14.00	0.7	30
SF1621	16.35	21.00	10.00	14.00	2.50	16.00	0.7	30
SF1625	16.35	25.00	12.50	16.00	2.50	18.00	0.7	30

挖路齿

Parabolic buttons

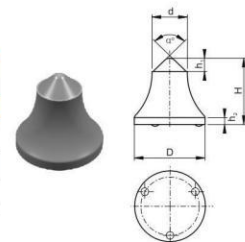
型号 Type	尺寸 Dimension					
	D	d1	d2	H	h1	h2
MP31622	18.0	10.0	9.5	20.15	4.5	6.5



挖路齿

Parabolic buttons

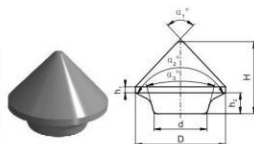
型号 Type	尺寸 Dimension					
	D	d	H	h1	h2	$\alpha^\circ$
3T10416T	16.07	8.0	15.08	3.00	1.8	92
3T10427T	18.75	9.5	17.76	3.75	1.5	83
3T10434T	17.86	9.6	17.16	3.84	1.6	82



挖路齿

Parabolic buttons

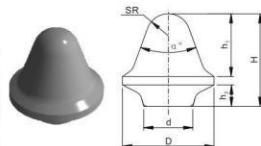
型号 Type	尺寸 Dimension								
	D	d	H	h <sub>1</sub>	h <sub>2</sub>	$\alpha_1^\circ$	$\alpha_2^\circ$	$\alpha_3^\circ$	
JGQ25/61-3	15.0	8.8	11.0	1.0	3.5	95	126	30	



挖路齿

Parabolic buttons

型号 Type	尺寸 Dimension						
	D	d	H	h <sub>1</sub>	h <sub>2</sub>	SR	$\alpha^\circ$
MA97111-2	16.4	8.8	16.6	11.3	3.8	4.0	40



六、金属粉末系列 Metal powder

碳化钨粉

Tungsten carbide powder

1. 产品牌号(Grade)

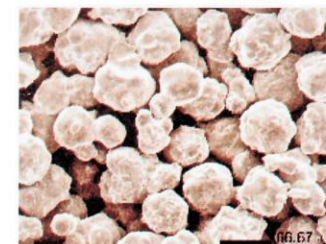
FWC-1 WC≥99.8%按差减法计算 Calculated by the subtractive method

FWC-2 WC≥99.7%按差减法计算 Calculated by the subtractive method

FWC-D WC≥99.6%按差减法计算 Calculated by the subtractive method

2. 产品规格(Specifications)

型号 (Type)	平均粒度 ( Range of particle sizes): $\mu\text{m}$ FSSS: $\mu\text{m}$	氧含量(%) (Oxide content)	
FWC-1 FWC-2	08	0.7 ~ 1.0	≤0.20
	15	1.0 ~ 1.5	≤0.15
	30	2.0 ~ 2.5	≤0.12
	40	3.0 ~ 4.0	≤0.08
	50	4.0 ~ 5.0	≤0.08
	70	6.0 ~ 8.0	≤0.05
	110	9.0 ~ 13	≤0.05
250	20 ~ 30	≤0.05	



型号 / Type: FWC250 X300

3. 产品外观(Appearance): 深灰色粉末(Dark grey powder)

4. 杂质含量(Impurity content): ≤%(%MAX.)

Impurit	Grad	FWC-1	FWC-2	FWC-D
Fe		0.04	0.05	0.15
Al		0.001	0.002	0.002
Si		0.003	0.003	0.005
Mg		0.002	0.004	0.004
Mo		0.005	0.01	0.02
K		0.001	0.0015	0.0015
Na		0.001	0.0015	0.0035
Ca		0.004	0.005	0.005
Cr		0.002	0.003	0.02
Ni		0.008	0.008	0.015
Mn		0.001	0.001	0.0015
S		0.002	0.003	0.003
Co		0.005	0.01	0.15
P		0.005	0.003	0.005
总碳 (Total C)		6.08 ~ 6.18 5.9 ~ 6.0	6.08 ~ 6.18 5.9 ~ 6.0	6.0 ~ 6.2
游离碳 (Free C)		0.08 0.05	0.08 0.05	0.08



5. 如有特殊要求供需双方具体商定

(Special requirements to be agreed upon by the supplier and buyer).

合金粉末  
Alloy powder



1. WC-Co类合金粉末  
Alloy powder of WC-Co

牌号 Grade	化学成分Chemical composition(≤%)					
	WC	Co	O	总碳T.C	Fe	游离碳F.C
YG6X	余量 Stock removal	5.8~6.2	0.8	5.4~5.6	0.2	0.1
YG6		5.8~6.2	0.5	5.5~5.6	0.2	
YG8		7.5~8.2	0.5	5.4~5.5	0.2	
YG11		11.0~12.0	0.5	≥5.1	0.2	
YG15		14.0~15.0	0.7	5.0~5.06	0.2	
YG8C		7.8~8.3	0.5	≥5.35	0.2	
YG11C		11.0~12.0	0.7	5.1~5.3	0.2	
YG20C		19.0~20.5	0.8	4.65~4.85	0.2	
YK25	9.5~10.5	0.5	≥5.25	0.2		

2. WC TiC-Co和WC-TiC(TaC)-Co类合金粉末  
Alloy powder of WC TiC Co and WC-TiC(TaC)-Co

牌号 Grade	化学成分Chemical composition(≤%)							
	WC	Co	Ti	Ta	Nb	O	总碳T.C	游离碳F.C
YT5	余量 Stock removal	8.9~9.4	4.6~5.3			0.5	6.2~6.5	0.25
YT14		7.8~8.4	10.9~11.6			0.5	7.3~7.6	
YT15		5.8~6.3	12.3~13.0			0.5	7.8~8.0	
YW1		5.9~6.5	4.4~5.1	3~4		0.6	6.5~6.8	
YW2		7.7~8.3	4.4~5.1	3~4		0.6	6.4~6.7	
YT05		5.7~6.3	5.2~5.9			2.3~3.0	0.6	

3. 粉末料有加成剂和不成剂两种，可按需选择。  
There are two kinds of powders one with lubricant and one without, It is up to the customer.  
如有特殊要求供需双方具体商定  
Special requirements to be agreed upon by the supplier and buyer.

锌熔合金粉末  
Zinc reclaimed cemented carbide powder

1. 产品牌号(Grade)

FZn-YG8 YG8顶锤锌熔合金粉末YG8 Cemented carbide powder reclaimed from anvils  
FZn-YG8-C YG8高碳锌熔合金粉末YG8 Cemented carbide powder reclaimed from scraps with a high carbon content  
FZn-YG-Co YG高钴锌熔合金粉末 YG Cemented carbide powder reclaimed from scraps with a high cobalt content  
FZn-YT YT锌熔合金粉末 Cemented carbide powder reclaimed from YT scraps  
Fzn 杂牌锌熔合金粉末Cemented carbide powder reclaimed from scraps of different grades

2. 化学成分Chemical composition

牌号 Grade	化学成分Chemical composition(≤%)						
	Zn	O	总碳T.C	游离碳F.C	Co	Fe	Ti
FZn-YG8	0.02	0.20	5.4~5.5	0.10	7.2~8.2	0.10	0.30
FZn-YG8-C	0.02	0.20	5.5~5.7	0.10	7.2~8.2	0.10	0.30
FZn-YG-Co	0.02	0.20	5.3~5.5	0.10	8.2~9.8	0.10	0.30
FZn-YT	0.02	0.20	5.3~5.7	0.10	—	0.10	—
Fzn	0.02	0.20	5.3~5.7	0.10	—	0.10	—

注：锌熔混合料Co含量和YT类锌熔混合料Ti含量因原料废合金的牌号不同波动较大  
Note: The cobalt content and the titanium content in reclaimed cemented carbide powder fluctuates considerably due to the big difference of various grades of cemented carbide scraps.

碳化钨-碳化钛固溶体粉末  
Tungsten carbide-Titanium carbide solid solution powder

1. 产品外观(Appearance): 深灰色粉末(Dark grey powder)

2. 用途(Application): 硬质合金原料(For cemented carbide)

牌号Grade		K32	K40	K24	K29	K34	K11	K10
主化学成分 Main Chemical Composition	Ti	31.5~32.5	39.5~40.5	23.5~24.5	28.5~29.5	33.5~34.5	10~11.2	31.5~32.5
	W	55~57	45.5~48.5	64.5~67.5	35~37			
	总碳T.C	11~11.4	12.1~12.7	9.8~11.2	11~11.4	11.8~12.2	7.5~8.5	11.8~12.4
	游离碳F.C	≤0.3	≤0.5	≤0.5	≤0.5	≤0.2	≤0.7	≤0.4
	TaC	—			22.4~23.4	52.5~53.5	17~18	
	NbC							9.5~10.5
杂质含量 Impurity content	Fe	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
	O	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3	≤0.3
	S	≤0.03	≤0.03	≤0.03	≤0.03	≤0.03	≤0.03	≤0.03
粒度 Particulatesizes	F <sub>55</sub> : μm	2.0~5.0	3.0~7.0	2.0~7.0	2.0~5.0	2.0~5.0	2.0~5.0	2.0~5.0

3. 如有特殊要求供需双方具体商定(Special requirements to be agreed upon by the supplier and buyer).

钴粉

Cobalt powder

1. 产品牌号(Grade)

FCo-1 含Co+Ni≥99.3% (Co+Ni Content≥99.3%)

FCo-2 含Co+Ni≥99.0% (Co+Ni Content≥99.0%)

FCo-3 含Co+Ni≥98.8% (Co+Ni Content≥98.8%)

注：表中含Co+Ni采用重量百分数差减法计算，其中不包括气体杂质。

Note: The main content of Co+Ni in the table is calculated by the subtractive method in the percentage of weight not including the gas impurities.

2. 产品规格(Specifications)

型号 (Type)	粒度范围(Particle size specs): μm Fsss: μm	松装密度 g/cm <sup>3</sup> Loose density g/cm <sup>3</sup>
FCo-1	1.1 ~ 1.8	≤0.65
FCo-2	1.1 ~ 2.3	≤0.75
FCo-3	1.1 ~ 2.3	≤0.75



3. 产品外观(Appearance):

深灰色粉末(Dark grey powder)

4. 杂质含量(Impurity content): ≤%(%MAX.)

Impurit	Grad	FCo-1	FCo-2	FCo-3
Ni		0.10	1.0	3.0
Fe		0.10	0.30	0.30
C		0.05	0.10	
O		0.50	0.55	0.60
Ca		0.02	0.03	
Na		0.02	0.03	
Cu		0.02		
Pb		0.02		
Mg		0.02		
Zn		0.02		
Mn		0.02		
S		0.02		
Si		0.02		
Al		0.01		



5. 如有特殊要求供需双方具体商定

(Special requirements to be agreed upon by the supplier and buyer).

钨粉

Tungsten powder

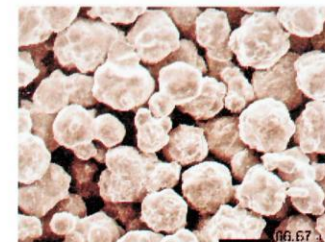
1. 产品牌号(Grade)

FW-1 W≥99.95%按差减法计算 Calculated by the subtractive method

FW-2 W≥99.9%按差减法计算 Calculated by the subtractive method

2. 产品规格(Specifications)

型号 (Type)	平均粒度 ( Range of particle sizes): μm FSSS: μm	氧含量(%) (Oxide content)
08	0.7 ~ 1.0	≤0.35
15	1.0 ~ 1.5	≤0.20
30	1.7 ~ 2.4	≤0.2
40	2.5 ~ 3.5	≤0.10
50	3.5 ~ 4.5	≤0.10
70	6.0 ~ 8.0	≤0.10
110	9.0 ~ 13	≤0.10
250	18 ~ 28	≤0.10



型号 / Type: FW15 X6000

3. 产品外观(Appearance):

深灰色粉末(Dark grey powder)

4. 杂质含量(Impurity content): ≤%(%MAX.)

Impurit	Grad	FW-1	FW-2
Pb		0.0001	0.001
Bi		0.0001	0.001
Sn		0.0001	0.001
AS		0.001	0.002
Fe		0.005	0.005
Ni		0.002	0.003
Mn		0.001	0.001
Cr		0.002	0.003
Al		0.001	0.002
Si		0.002	0.002
Ca		0.0015	0.002
Mg		0.001	0.001
Mo		0.005	0.005
Na		0.003	0.003
P		0.001	0.002
K		0.001	0.002
C		0.005	0.005
Sb		0.001	0.001



5. 如有特殊要求供需双方具体商定

(Special requirements to be agreed upon by the supplier and buyer).