硬质合金

机夹 焊接刀片

Cemented carbide Indexable inserts & Brazed tips



株洲钻石切削刀具股份有限公司

ZHUZHOU CEMENTED CARBIDE CUTTING TOOLS CO., LTD.

CEMENTED CARBIDE

本样本提供的产品全部采用全新设计理念进行产品设计、模具设计和加工编程，所有模具由具有世界一流制作水平的数控可转位模具制作中心制作，使用喷雾干燥、自动压机、脱腊一真空烧结一体炉等先进工艺装备进行生产，使产品的内部性能在稳定中提升，使用寿命提高，牌号的适用领域更广。

株洲钻石切削刀具股份有限公司保留对本样本产品进行技术更新的权利，更改前不预先通知。

样本上提供的切削参数仅供参考。

ZCCCT embraces new ideas to design products, die and process programming. All the dies are produced in the CNC die center with world class technique, and the products are manufactured by advanced equipment such as spay drying tower, automatic press and dewaxing-vacumn sintering integrated furnace, for more stable performance with continual improvement, longer tool life and wider application range of grades.

ZCCCT preserves the right to update the technology information of the products without prior notice.

The cutting data in this catalog is for reference only.





质量保证 Quality guarantee

- 公司已通过GB/T19001–IS09001质量体系认证
- 公司出厂的每件产品都经过严格的检查
- We have passed GB/T19001-IS09001 quality system certificate.
- All our products are inspected strictly.





株洲钻石切削刀具股份有限公司拥有世界一流的可转位刀具、刀片生产线、硬质合金孔加工刀具和整体立铣刀生产线，并成立了集科研、应用研究为一体的研发中心。

Zhuzhou Cemented Carbide Cutting Tools Co,.Ltd(ZCCCT)have the best indexable cuttingholders and insets producing line. cemented carbide holing tools and end mills producing line. We also established R&D center for scientific researching.



研发中心
Research & Development center











01 焊接机夹刀片生产线
Indexable inserts & Brazed tips production line

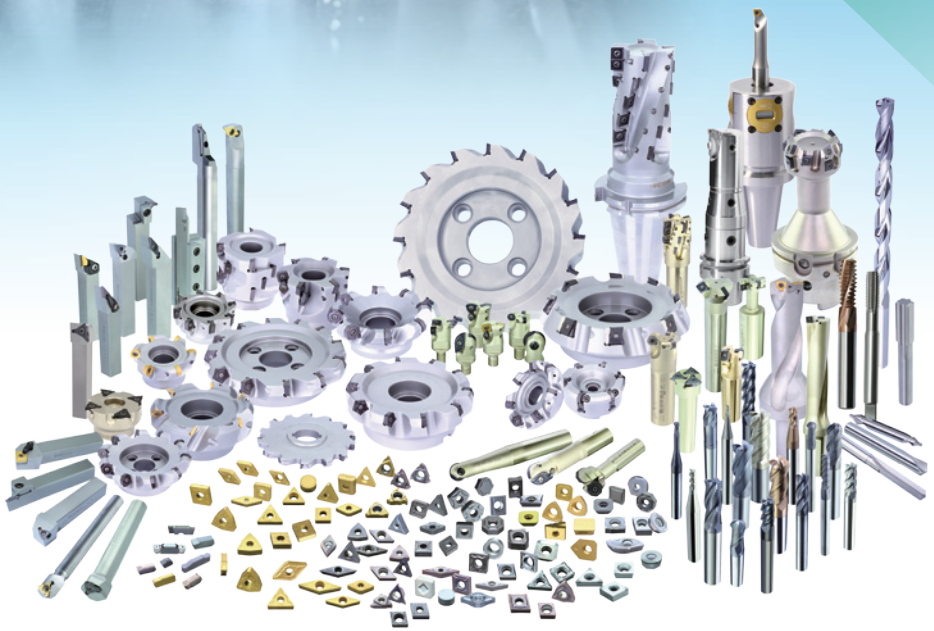
02 数控硬质合金切削刀片生产线
High precision cemented carbide indexable inserts production line

03 陶瓷刀片生产线
Ceramic inserts production line

04 数控切削刀具及工具系统生产线
Cutting tools and toolholding system production line

05 整体硬质合金孔加工刀具及立铣刀生产线
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面向高效数控加工的解决方案



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凹圆弧成型车刀和轮毂车刀 Forming tools for machining concave radii and forming turning tools for railway wheels. B47

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硬质合金机夹刀片 *Cemented Carbide Indexable Inserts*

车削刀片 Turning inserts

3-A ——  B05

3-C ——  B06

3-D ——  B07

3-F ——  B08

3-H ——  B09

3-N ——  B10

3-V ——  B11

3-W ——  B12

T3-A ——  B13

T3-F ——  B14

T3-V ——  B15

T3-W ——  B16

T3-Y ——  B17

4-D ——  B18

4-A ——  B19

4-F ——  B20

4-H ——  B21

4-L ——  B22

4-N ——  B23

4-V ——  B24

4-W ——  B25

4-Y ——  B26

C-H ——  B27

铣削刀片 Milling inserts

X3-0 ——  B28

X3-8 ——  B29

X3-11 ——  B30

X4-0 ——  B31

X4-8 ——  B32

X4-11 ——  B33

X4-11-ZC  B34

XC-8 ——  B34

G3-0 ——  B35

G3-8 ——  B36

G3-11 ——  B37

G4-0 ——  B38

G4-8 ——  B39

G4-11 ——  B40

3X-Y ——  B41

3XH ——  B42

4XH ——  B43

4X —— B44

螺纹、切断刀片 Threading, Parting inserts

JCL —— B45

JCQ —— B46

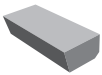
凹圆弧成型车刀和轮毂车刀

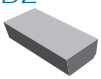
Forming tools for machining concave radii and forming turning tools for railway wheels.

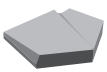
B4 —— B47

硬质合金焊接刀片 *Cemented Carbide Brazed Tips*

国家标准焊接刀片 Brazed tips up to GB/

A1	A2	A3	A4	B1	B2	B3
						
C01	C02	C02	C03	C03	C04	C04

C1	C1-A	C2	C3	C4	D1	D2
						
C05	C05	C06	C06	C07	C07	C08

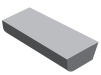
E1	E2	E3	E4	E5	A5	A6
						
C09	C10	C11	C11	C12	C12	C13

C5	F1	F2	F3	S-A	S-B
					
C13	C14	C15	C15	C16	C16

国际标准焊接刀片 Brazed tips up to ISO

A	B	C	D	E
				
C17	C18	C18	C19	C19

73系列 Series 73

73-0/1	73-2	73-3	73-4	73-5	73-6	73-7
						
C20	C21	C21	C22	C22	C23	C23

73-8	73-9	73-10	73-11	73-12	73-13	73-14
						
C24	C24	C25	C26	C26	C27	C27

硬质合金焊接刀片 *Cemented Carbide Brazed Tips*

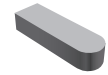
81系列 Series 81

81-F —  C28

81-G —  C29

81-K —  C29

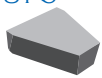
81-L —  C30

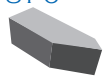
81-1 —  C30

81-2 —  C31

81-3 —  C31

81-4 —  C32

81-5 —  C32

81-6 —  C33

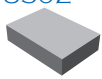
81-7 —  C33

81-8 —  C34

81-9 —  C34

83系列 Series 83

8301 —  C35

8302 —  C35

8303 —  C36

8304 —  C36

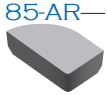
8305 —  C37

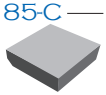
8306 —  C37

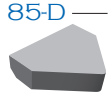
8307 —  C38

8308 —  C38

85系列 Series 85

85-AR —  C39

85-C —  C40

85-D —  C40

85-ER —  C41

85-EL —  C41

89系列 Series 89

89-0000  C42

89-1000  C42

89-1000  C43

89-2000  C43

89-3000/4000  C44

89-5000  C45

89-6000  C45

89-7000  C45

刀片牌号物理力学性能及用途推荐 —— Grade

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^3	硬度 Hardness HRA	抗弯强度 TRS MPa	
P10	YT05	12.6	92.5	1260	适用于钢、铸钢的精加工，宜采用较高的切削速度和低进给低切深 It is suitable for finishing of steel and casting steel machining, high cutting speed, small feed rate and low depth is recommended.
	YT15	11.3	91	1300	适用于钢、铸钢的半精加工，宜采用中等进给量和较高的切削速度 It is suitable for semi-finishing of steel and casting steel machining, high cutting speed, medium feed rate is recommended.
P20	YC201	11.79	91.8	1400	适用于钢、铸钢、不锈钢的半精加工和轻载粗加工，是适用性较好的通用牌号 It is suitable for semi-finishing and light roughing machining of steel, casting steel and stainless steel. It is a suitable grade for a wide application.
	YT14	11.4	90.5	1400	适用于钢、铸钢的半精加工 It is suitable for semi-finishing of steel and casting steel.
P30	YT5	12.8	89.5	1570	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.
P40	YC40	13.15	89.5	1650	适用于钢、铸铁的重力切削，可采用大切削用量，亦用于不锈钢、合金钢的半精加工和轻载粗加工 It is suitable for the heavy duty turning of steel and also for semi-finifishing and light roghing of stainless steel and alloy steel.
	YC45	12.75	90	2250	适用于钢、铸钢的重力切削，可采用大切削用量，亦用于端面铣削。 Suitable for the heavy duty turning of steel and cast steel with a big feed rate and also for face milling.

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^3	硬度 Hardness HRA	抗弯强度 TRS MPa	
M05	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，亦适用于冷硬铸铁、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 hardening steel.
M10	YW3	12.9	92	1390	适用于不锈钢、普通合金钢的精加工和半精加工。 Suitable for the finishing and semi-finishing of stainless steel and conventional alloy steel.
	YW1	13	91.5	1290	适用于不锈钢、普通合金钢的半精加工。 It is suitable for semi-finishing of stainless steel and general alloy steel machining.
M20	YM201	13.9	93.0	1600	适用于铁基、镍基高温合金、高强度钢、冷硬铸铁、耐热不锈钢、高锰钢、淬火钢的半精加工，是适用性较广的通用牌号。 It is suitable for semi-finishing of Fe, Ni high temperature alloy, cold hard cast irons, stainless steel with good heat-resistance and nonferrous metal. It is a wide application.
	YS2T	14.4	91.5	1960	适用于不锈钢、低合金钢、铁基合金的精加工和半精加工。 It is suitable for finishing and semi-finishing of stainless steel, alloy steel, Fe alloy.
	YW2	12.9	90.5	1460	适用于不锈钢、合金钢的半精加工和轻载粗加工。 It is suitable for semi-finishing and light roughing of stainless steel and alloy steel.
M30	YS25	13.0	90.5	1780	专用于不锈钢、钢、铸钢的铣削加工 It is used for milling machining of stainless steel, steel and casting steel.
	YS30	12.8	90	1650	适用于不锈钢、合金钢的轻载粗加工 It is suitable for semi-finifishing and light roghing of stainless steel and alloy steel.

刀片牌号物理力学性能及用途推荐 —— Grade

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

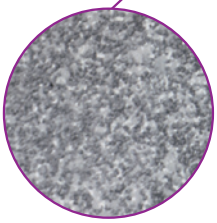
ISO 分类分组代号 ISO Code	牌号 Grade	物理力学性能 Physical and mechanical properties			推荐用途 Applications recommended
		密度 Density g/cm^3	硬度 Hardness HRA	抗弯强度 TRS MPa	
K05	YG3X	15.1	91.5	1300	适用于铸铁、有色金属、耐热合金、钛合金的精加工。 It is suitable for finishing of casting iron, nonferrous metal, heat-resistance alloy and Ti alloy.
	YG3	15.0	90.5	1300	适用于铸铁、有色金属、耐热合金、钛合金的半精加工。 It is suitable for semi-finishing of casting iron, nonferrous metal, heat-resistance alloy and Ti alloy.
K10	YM201	13.9	93.0	1600	适用于铁基、镍基高温合金、高强度钢、冷硬铸铁、耐热不锈钢、高锰钢、淬火钢的半精加工，是适用性较广的通用牌号。 It is suitable for semi-finishing of Fe, Ni high temperature alloy, cold hard cast irons, stainless steel with good heat-resistance and nonferrous metal. It is a wide application.
	YG6A	14.92	91	1510	适用于铸铁、有色金属、耐热合金、钛合金的半精加工到轻载粗加工 It is suitable for semi-finifishing and light roghing of casting iron,nonferrous metel,heat-resistance alloy,Ti alloy.
	YG6X	14.8	91	1560	适用于铸铁、有色金属、耐热合金、钛合金的精加工到轻载粗加工。 It is suitable for semi-finishing to light roughing of casting iron, nonferrous metal, heat-resistance alloy and Ti alloy.
K15	YD15	14.94	91	1650	适用于铸铁、有色金属、耐热合金、钛合金的半精加工 It is suitable for semi-finifishing and light roghing of casting iron,nonferrous metel,heat-resistance alloy,Ti alloy.

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^3	硬度 Hardness HRA	抗弯强度 TRS MPa	
K20	YD201	14.89	91.0	1800	适用于耐热合金、钛合金、铸铁和铝合金的粗加工到半精加工。 It is suitable for roughing to finishing machining of heat-resistance alloy, Ti alloy, casting iron and aluminum alloy.
	YG6	14.9	89.5	1670	适用于铸铁、有色金属、耐热合金、钛合金的半精加工和轻载粗加工。 It is suitable for light roughing and semi-finishing of casting iron, nonferrous metal, heat-resistance alloy and Ti alloy.
	YG8N	14.6	89.5	1840	适用于铸铁、有色金属、耐热合金、钛合金的半精加工和粗加工，较高的耐冲击性，适合于连续和断续切削。 It is suitable for semi-finifishing and roghing of casting iron,nonferrous metel,heat-resistance alloy and Ti alloy at continuous and intermittent machining conditions.
	YG8	14.6	89	1840	适用于铸铁、有色金属、耐热合金、钛合金的半精加工和粗加工，较高的耐冲击性，适合于连续和断续切削。 It is suitable for semi-finishing and roughing of casting iron, nonferrous metal, heat-resistance alloy and Ti alloy at continuous and intermittent machining conditions.
K30	YL10.2	14.5	91	2000	适用于铸铁、有色金属、不锈钢、耐热合金、钛合金的半精加工。 It is suitable for semi-finishing of casting iron, nonferrous metal,stainless steel, heat-resistance alloy and Ti alloy .

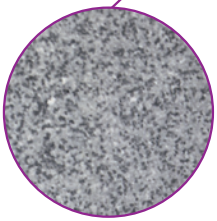
YC201



针对钢和不锈钢的加工特点，科学选择合金成分和结构，并辅以生产工艺优化，使合金的通用性能更好，适用范围更宽，可作钢、不锈钢的半精加工和轻载粗加工。

According to characters of machining steel and cast stainless steel, carbide construction and combination is scientific, optimizing technique of production, current capability of he produces is better, application of the grade is wider, it is suitable for semi-finishing and light roughing of steel and stainless steel.

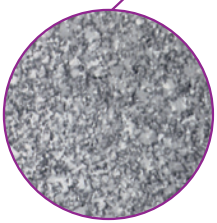
YM201



针对不锈钢和铸铁的加工特点，选用优质的超细WC粉，科学选择合金成分和结构，使合金的耐磨性、抗冲击性、抗热震性获得良好结合。

According to characters of machining stainless steel and cast iron, using micro WC powder, carbide construction and combination is scientific,make carbide get better wear-resistant,impact-trsistant and heating-vibratility-resistant.

YD201

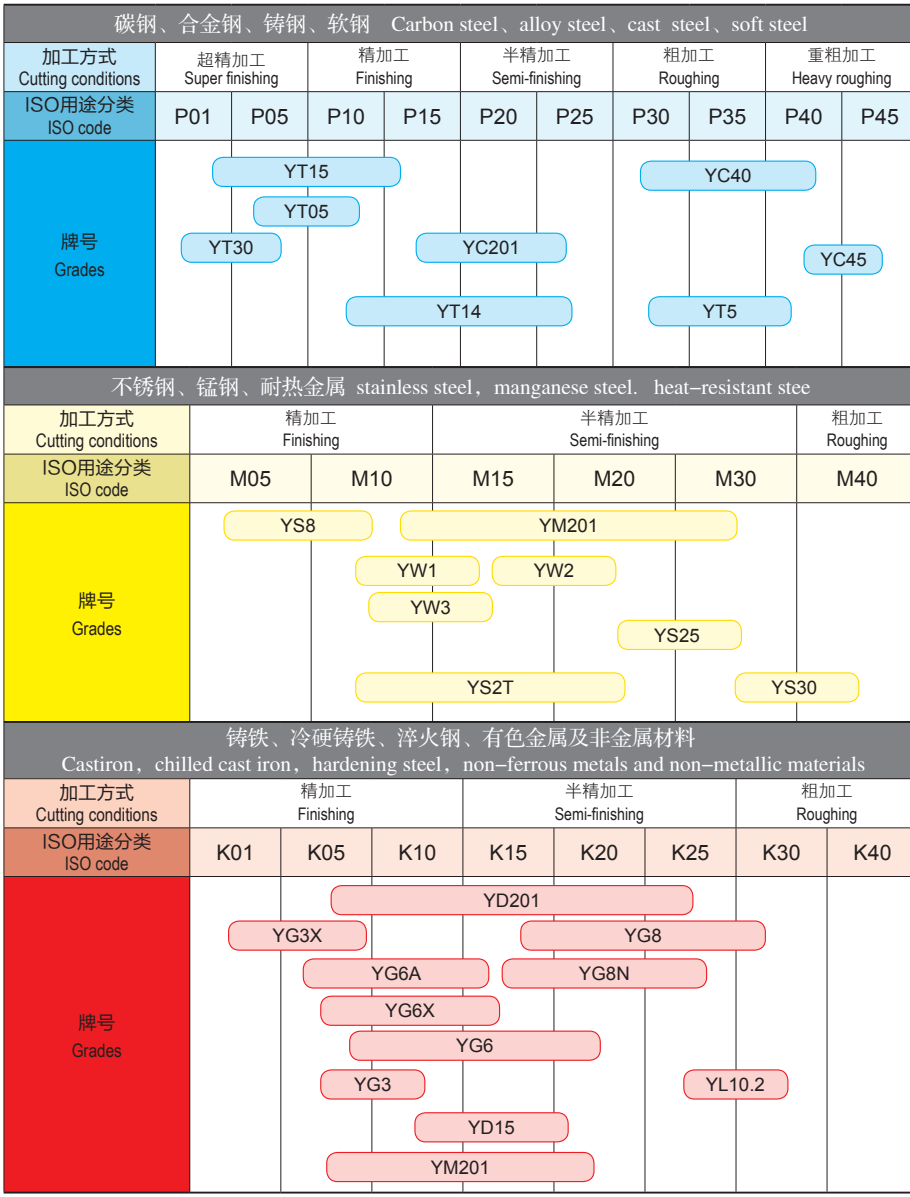


采用了比YG6和YG8更为细小的原料粉末，保证了产品的耐磨性，是铸铁及有色金属精加工和半精加工的首选牌号。耐磨性和允许的切削速度高于YG6和YG8。

More micro grain WC than YG6 and YG8 is used to assure the wear-resistant of the product, YD201 is the first choice for finishing and semi-finishing of cast iron and nonferrous, Wear-resistant is better and Vc is higher than YG6 and YG8.

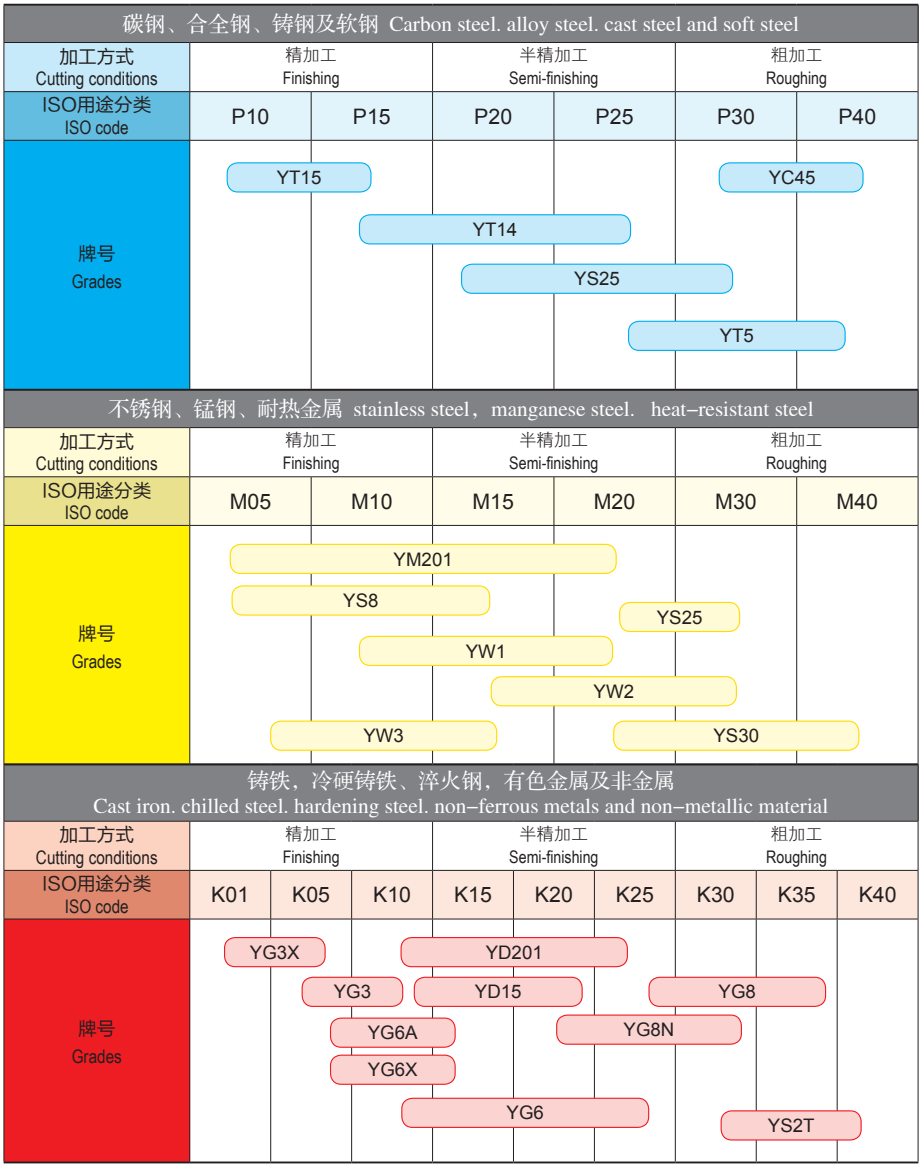
车削用刀片材质的选择要领及推荐材质与适用范围

Guide to the selection of grades for inserts for turning & recommended grades and range of applications



铣削用刀片材质选择的选择要领及推荐材质与适用范围

Guide to the selection of grades for inserts for milling Recommended grades and range of applications



A 硬质合金机夹刀片毛坯分下列两类

(1)带孔机夹刀片毛坯
(2)无孔机夹刀片毛坯

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

(1)Insert blanks with holes
(2)InserL blanks without holes

B 机夹刀片毛坯按下列方法表示：

The inserts blanks are indicated with the following desianations:

(1) 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。

(1) The code for indexable inserts blanks with holes consists of type. basic parameters and chipb reakers.



代号 Code	外型 Shape
M	85° 菱形 Rhombus 85°
C	80° 菱形 Rhombus 80°
3	正三边形 Equilateral triangle
T3	凸三边形 Convex triangle
4	正四边形 Square
5	正五边形 Equilateral pentahedron

代号 Code	直径，mm Dia.mm
10	10
13	13
16	16
19	19
25	25

代号 Code	半径r Radius
03	0.3
05	0.5
10	1.0
15	1.5
20	2.0

代号 Code
A
B
C
D

Z	左 Left
	右 right

(2) 无孔机夹刀片毛坯的代号由型式和基本参数构成

(2) The code for indexable inserts blanks without holes consists of type and basic parameters

X 4 16 05 11

制品形式 Produce type

代号 Code	制品形式 Produce type
X	毛坯 Blanks
G	加工品 Ground inserts

型式 Type

代号 Code	外型 Shape
0	圆形 Round
1	长方形 Rectangular
3	正三边形 Equilateral triangle
T3	凸三边形 Convex triangle
4	正四边形 Square
5	正五边形 Equilateral pentahedron

内切圆直径ØD IC(ØD)

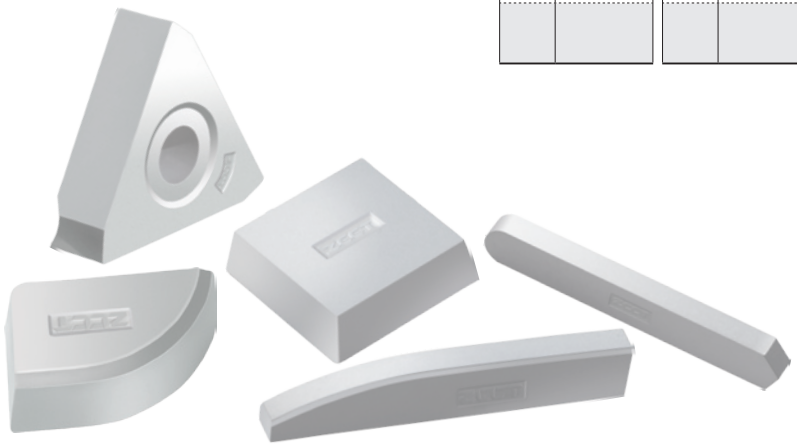
代号 Code	直径，mm Dia.mm
04	4
07	7
10	10
13	13
16	16
19	19
25	25

刀尖圆弧半径r Edge radius

代号 Code	半径r(mm) Radium
03	0.3
05	0.5
10	1.0
15	1.5
20	2.0

后角α°

代号 Code	α°
0	0°
8	8°
11	11°



(3) 机夹刀片毛坯厚度的尺寸系列

(3) 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				
正三边形 Equilateral triangle	4.5	5.5	7.0	8.5	----
凸三边形 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	25
	刀片厚度mm Thickness of inserts mm					
正三边形 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	7.3

(4) 各类机夹刀片毛坯内孔直径系列按表3规定

(4) 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

研磨铣刀片的表示

Code key for ground milling inserts

研磨铣刀片型号由型式代号，铣刀片代号（包括切削刃后角代号）和内切圆直径数字代号组成必要时再缀以左切刀(z)或右切刀(Y)

The code for ground milling inserts consists of the code for the type. code for milling inserts (including code for the clearance angle of the cutting edge)and the IC code.When necessary.Z or Y is added to represent left hand or right hand inserts



精磨刀片表面粗糙度不低于1.25μm.

The surface finish of the ground inserts shall be l.25 microns minimum.

刀片毛坯内孔（固定孔）尺寸允许偏差±0.13mm。

The tolerance of the inner hole(fixation hole)of the blanks is+/-0.13mm

法向后角允许偏差≤1°

The tolerance of the clearance angle is≤1°

刀片毛坯底面允许内凹0 .1mm。

A concave of O.1mm is allowed on the bosom of the insert blank.

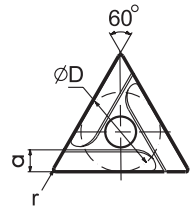
毛坯工作刃部毛刺不得大于0.2mm，其它部位不得大于0.3mm.

The chip on the cutting edge should be no more than 0.2mm and 0.3mm is allowed in other places.

毛坯工作刃部不允许粘料，其他部位允许轻度粘料。

No lump material should stick to the cutting edge of the blanks and a light adhesion is allowed in other places.



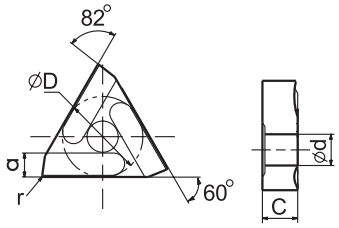


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标记 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
31005A	31005AZ	10±0.08	4.5	4.2	0.5	2.4	○	○	●	●			●	○	●	●	●	○		●	●	●	●	○	*
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		○	●	●			●	○	○	●	●	○		●	●	●	●	○	*
31905A	31905AZ	19±0.18	8.5	7.2	0.5	5.4		○	●	●			●	○	○	●	●	○		●	○	●	●	○	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭断屑槽，前角为20°左右，适用于切削用量变化不大的外圆车削。
- 主要用于钢材的半精加工。
- 切削用量推荐：f_n=(0.15~0.6)mm/rev a_p=(1.0~6.0)mm
- It is semi closed chipbreakers with an rake angle of approx 20° .It is suitable for turning peripheries where there are no big variations of cutting parameters.
- It is mainly used for the semi–finishing of steel.
- Recommended cutting parameters: f_n=(0.15~06)mm/rev a_p=(I.0~6.0)mm



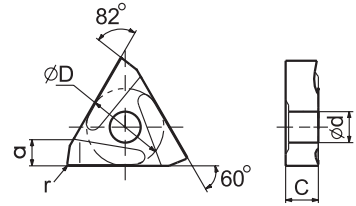


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																				防伪标识 Anti-forgery
							P						M					K									
右 Right	左 left	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
31003C	31003CZ	10±0.08	4.5	4.2	0.3	2.4		●	●	●			●	●			●	○	●		●		○	○		*
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		●	○	●			●	●			●	○	○		●		○	○		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭断屑槽，前角为20° 左右，车削径向切削力较小，适用于系统刚性较差的加工条件。
- 主要用于钢材的精加工和半精加工。
- 切削用量推荐：f_n=(0.08~0.5)mm/rev a_p=(l.0~5.0)mm
- It is closed chipbreakers with a rake angle of approx. 20° , The radial force in turning is rather small and it is suitable for the working conditions of poor rigid systems.
- It is mainly used for the semi–finishing and finishing of steel.
- Recommended cutting parameters: f_n=(0.08–0.5)mm/rev a_p=(1.0–5.0)mm

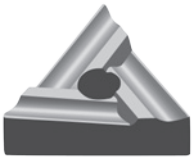


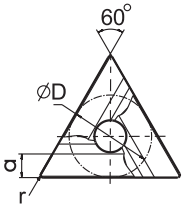


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																				防伪标识 Anti-forgery
							P						M						K								
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8		
31003D	31003DZ	10±0.08	4.5	4.2	0.3	3.4			●	●				●	○		●	●			●	○	●	●	●		*
31303D	31303DZ	13±0.13	5.5	5.2	0.3	4.4			●	●				●	○		●	●			●	○	●	●	●		*
31303D5	31303D5Z	13±0.13	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			○	●	●				○		●	●				○	○	○	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属前宽后窄半封闭断屑槽，切削较轻快，排屑流畅，多是管形或锥形螺旋切屑。
- 主要用于钢材的半精加工和粗加工。
- 切削用量推荐：f_n=(0.15~0.8)mm/rev a_p=(2.0~8.0)mm
- It is semi closed chipbreakers that are wide in the front and narrow in the rear.The cutting is light with a good flow of chippings and the chippings are mainly spiral chippings of tubular or conical shape.
- It is mainly used for the roughing and semi–finishing of steel.
- Recommended cutting parameters: f_n=(0.15~0.8)mm/rev a_p=(2.0~8.0)mm



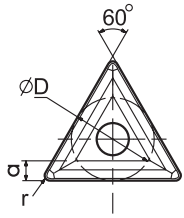


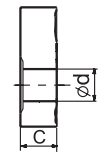
型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标记 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
31005F	**31005FZ**	10±0.08	4.5	4.2	0.5	2.3~2.8		●	●	●			●				●		○	●	●	○			*
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		●	○	●			○	●			●		○	●	●	○			*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭断屑槽，并带有正刃倾角，切削力较小，排屑流畅。
- 主要用于钢材的精加工和半精加工。
- 切削用量推荐：f_n=(0.1~0.5)mm/rev a_p=(0.5~6.0)mm
- It is semi closed chipbreakers with a positive edge inclined angle. The cutting force is light with good flow of chippings.
- It is mainly used for the semi–finishing and finishing of steel.
- Recommended cutting parameters: f_n=(0.1~0.5)mm/rev a_p=(0.5~6.0)mm



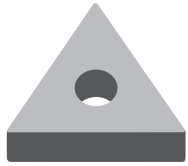


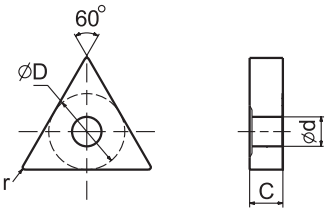


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																				防伪标记 Anti-forgery
						P						M						K								
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8		
31005H	10±0.08	4.5	4.2	0.5	2.4		●	○	●			●		○	○	●	●		○	○	●	●	○			*
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		●	●	●			○	●	○	○	●	●		○	●	●	●	●			*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属封闭式槽形、前角为20° 左右，切削力较小，适用于端面外圆45° 、75° 车刀。
- 主要用于钢材以及其它塑性材料的精加工和半精加工。
- 切削用量推荐：f_n=(0.1~0.6)mm/rev a_p=(0.5~6.0)mm
- It is closed chipbreakers with a positive rake angle of 20° . The cutting force is light & it is suitable for tools of 45° & 75° for turning peripheries.
- It is mainly used for the semi–finishing and finishing of steel& other plastic materials.
- Recommended cutting parameters: f_n=(0.1~0.6)mm/rev a_p=(0.5~6.0)mm



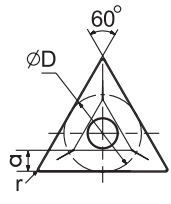


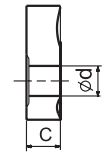
型号 Type	基本尺寸 Dimension(mm)				基本牌号 Basic grades																				防伪标识 Anti-forgery
					P						M						K								
	ØD Tol.	C ±0.13	Ød ±0.13	r	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
31005N	10±0.08	4.5	4.2	0.5	●						●	○	○		●	●	●		●		○	○	●	*
31305N	13±0.13	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	●		○				○	●	○		●	●	●		●		○	○	●	*
31910N	19±0.18	8.5	7.2	1.0	●		○				○	●	○		●	●	●		●		○	●	●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 无断屑槽型。
- 加工中均采用负前角，进行淬硬钢和冷硬铸铁的精加工和半精加工。
- 切削用量推荐：f_n=(0.05~0.6)mm/rev a_p=(0.5~3.0)mm
- No chipreakers.
- The negative rake angle is used& it is used for semi–finishing & finishing of hardened steel & chilled cast iron.
- Recommended cutting parameters: f_n=(0.05~0.6)mm/rev a_p=(0.5~3.0)mm





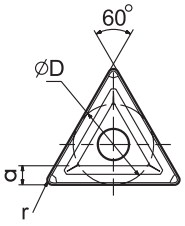


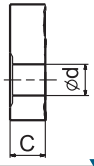
型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标记 Anti-forgery
						P						M						K						
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
31005V	10±0.08	4.5	4.2	0.5	2.4	●	●	●	●	●		●		●	●	●	●	●	●	●	●	●	●		*
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			●	●	●	●	○	●			○				○				●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为等宽的封闭式槽型，切削刃强度较好，断屑范围较宽。
- 主要用于外圆、端面、内孔的精加工、半精加工和粗加工。
- 切削用量推荐：f_n=(0.05~1.2)mm/rev a_p=(0.5~10.0)mm
- It is closed chipbreakers with an even width. The cutting edge has rather good strength and a wide rangeof chipping.
- It can be used for roughing, semi–finishing and finishing of peripheries, ends and inner holes.
- Recommended cutting parameters: f_n=(0.05~1.2)mm/rev a_p=(0.5~10.0)mm





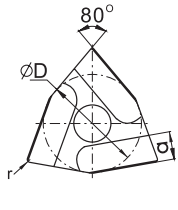


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																				防伪标记 Anti-forgery
						P						M						K								
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8		
31005W	10±0.08	4.5	4.2	0.5	2.3		●	●	●			●		●	●	●		●	●	●	●	●				*
31305W	13±0.13	5.5	5.2	0.5	3.0		●	●	●			●		●	●	●		●	●	●	●	●				*
31310W	13±0.13	5.5	5.2	1.0	3.0		●	●	●			●	●	●	●	●	●	●	●	●	●	●				*
31605W	16±0.18	7.0	6.2	0.5	4.1		●	●	●			●	●	●	●	●	●	●	●	●	●	●	●			*
31610W	16±0.18	7.0	6.2	1.0	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				●				●			●				○			●			*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为封闭式三级断屑槽型，断屑范围较宽．在进给量和吃刀量很小时也能获得良好的断屑效果，但切削力较大。
- 用于切削用量变化较大，机床刚性较好的场合，主要用于精加工、半精加工。
- 切削用量推荐：fn=(0.08~0.6)m m/rev　a_p=(0.5~6.0)mm
- It is closed 3–step chipbreakers with a wide chipping range.When the feed & cutis very small, it will have good chippings.
- It is suitable for the operations when the cutting parameters change drastically and the rigidity of the machines is good. It is mainly used for semi–finishing and finishing operations.
- Recommended cutting parameters:　f_n=(0.08~0.6)mm/rev　a_p=(0.5~6.0)mm

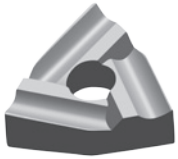


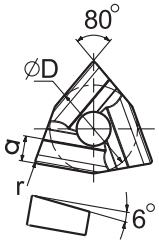


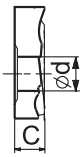
型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标记 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
T31005A	T31005AZ	10±0.08	3.5	4.2	0.5	2.4		○	●	●			●	●	●	●	●	●			●		●	●	●	*
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		○	●	●			●	●	●	●	●	●			●		●	●	●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭断屑槽，前角为20° 左右. 适用于切削用量变化不大的外圆车削。
- 主要用于钢材的半精加工。
- 切削用量推荐： f_n=(0.15~0.6)mm/rev a_p=(1.0~6.0)mm
- It is semi closed chipbreakers with e rake angle of approx 20° It is suitable for turning peripheries where there are no big variations of cutting parameters.
- It is mainly used for the semi–finishing of steel.
- Recommended cutting parameters: f_n=(0.15~0.6)mm/rev a_p=(1.0~6.0)mm





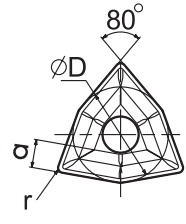


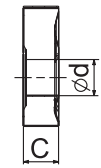
型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标识 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
T31005F	T31005FZ	10±0.08	3.5	4.2	0.5	2.4		●	●	●			●		●	●	●	○	●		●	●				*
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		●	●	●			●	○	●	●	●	○	●		●	●				*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭断屑槽，并带有正刃倾角，切削力较小，排屑流畅。
- 主要用于钢材的精加工和半精加工。
- 切削用量推荐：f_n=(0.1~0.5)mm/rev a_p=(0.5~6.0)mm
- It is semi closed chipbreakers with a positive edge inclined angle The cutting force is light with a good flow of chippings.
- It is mainly used for the semi–finishing and finishing of steel.
- Recommended cutting parameters: f_n=(0.1~0.5)mm/rev a_p=(0.5~6.0)mm





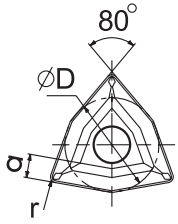


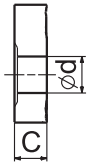
型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																				防伪标记 Anti-forgery
						P						M						K								
	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
T31005V	10±0.08	3.5	4.2	0.5	2.4	●	●	●	●			●		●	●	●	●	●	●	●	●	●	●	●	*
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											○				○				●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为等宽的封闭式槽型，切削刃强度较好，断屑范围较宽，是最常用的一种粗加工槽型。
- 主要用于外圆、端面、内孔的精加工、半精加工和粗加工。
- 切削用量推荐：f_n=(0.05~1.2)mm/rev a_p=(0.5~10.0)mm
- It is closed chipbreakers with an even width. The cutting edge has rather good strength and a wide range of chipping and it is most commonly used chipbreakers for roughing.
- It can be used for roughing, semi–finishing and finishing of peripheries, ends and inner holes.
- Recommended cutting parameters: f_n=(0.05~1.2)mm/rev a_p=(0.5~10.0)mm





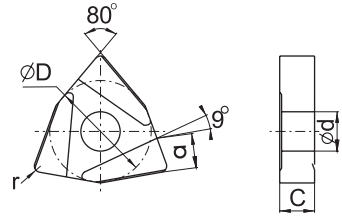


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																			防伪标记 Anti-forgery
						P						M						K							
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
T31005W	10±0.08	3.5	4.2	0.5	2.4		●	●	●			●		●	●	●		●	●	●		●	●		*
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				●			●				●				●					*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为封闭式三级断屑槽型，断屑范围较宽，在进给量和吃刀量很小时也能获得良好的断屑效果，但切削力较大。
- 用于切削用量变化较大，机床刚性较好的场合，主要用于精加工、半精加工。
- 切削用量推荐：f_n=(0.08~0.6)mm/rev a_p=(0.5~6.0)mm
- It is closed 3–step chipbreakers with a wide chipping range. When the feed & cut is very small. it will have good chipping but with a big cutting force.
- It is suitable for operations when the cutting parameters change drastically and the rigidity of the machines is good, It is mainly used for semi–finishing and finishing operations.
- Recommended cutting parameters: f_n=(0.08~0.6)mm/rev a_p=(0.5~6.0)mm



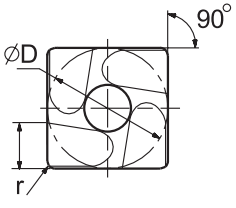


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标识 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
T31610Y5	T31610Y5Z	16±0.13	5.5	6.2	1.0	5.0				●	●				○	○	●	●			●				●	*
T31920Y6	T31920Y6Z	19±0.18	7.0	7.2	2.0	6.0				●	●				○	○	●	●			●				●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为前宽后窄外斜式半封闭槽型。
- 主要用于半粗加工。
- 切削用量推荐：f_n=(0.25~1.0)mm/rev a_p=(2.0~8.0)mm
- It is semi closed chipbreakers with a wide front and a narrow rear which inclined outward.
- It is mainly used for semi–roughing.
- Recommended cutting parameters: f_n=(0.25~1.0)mm/rev a_p=(2.0~8.0)mm



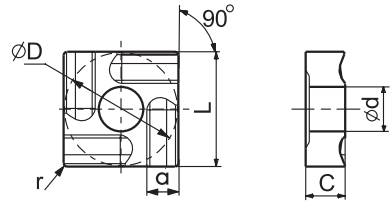


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																			防伪标记 Anti-forgery
							P						M						K							
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41610D6	**41610D6Z**	16±0.18	5.5	6.2	1.0	6.0				●	●	●		●			●	●			●				●	*
41920D7	**41920D7Z**	19±0.18	7.0	7.2	2.0	7.0				●	●	●		●			○	●			○				●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属前宽后窄外斜式半封闭断屑槽，切削较轻快，排屑流畅，多是管形或锥形螺旋切屑。
- 主要用于钢材的半精加工和粗加工。
- 切削用量推荐：f_n=(0.15~0.8)mm/rev a_p=(2.0~8.0)mm
- It is semi closed chipbreakers inclining outward that ere wide in the front end narrow in the rear. The cutting is light with good flow of chippings and the chippings are mainly spiral chippings of tubular or conical shape.
- It is mainly used for the roughing and semi–finishing of steel.
- Recommended cutting parameters: f_n=(0.15~0.8)mm/rev a_p=(2.0~8.0)mm



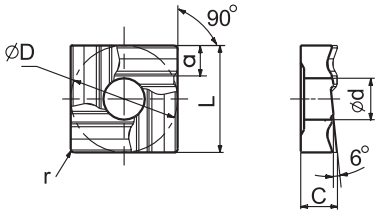


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																				防伪标记 Anti-forgery
							P						M						K								
右 Right	左 left	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8		
41005A	41005AZ	10±0.08	3.5	4.2	0.5	2.4		○	●	●			●				●				●	○	●	●	●		*
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			●						●	●	●				●	○	●		●		*
61905A	41905AZ	19±0.18	7.0	7.2	0.5	5.4			●						●	○	●				●				●		*
42510A	42510AZ	25±0.25	8.5	8.2	1.0	8.2			●						●	○	●				●				●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭断屑槽，前角为20° 左右，适用于切削用量变化不大的外圆车削。
- 主要用于钢材的半精加工。
- 切削用量推荐：f_n=(0.1 5~0.6)mm/rev a_p=(1 .0~6.0)mm
- It is semi closed chipbreakers with a rake angle of approx 20° . It is suitable for turning peripheries where there are no big variations of cutting parameters.
- It is mainly used for the semi–finishing of steel.
- Recommended cutting parameters: f_n=(0.15~0.6)mm/rev a_p=(1.0~6.0)mm

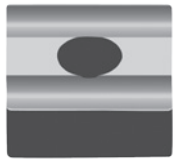


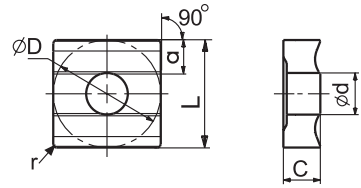


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																			防伪标识 Anti-forgery
							P						M					K								
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41005F	41005FZ	10±0.08	3.5	4.2	0.5	2.4	○	●	●	●	●		●	○			●	●	●	●	●		●	●		*
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	○	●	●	●	●		●	●			●	●	○	●	●		●	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属半封闭式断屑槽，并带有正刃倾角，切削力较小，排屑流畅。
- 主要用于钢材的精加工和半精加工。
- 切削用量推荐：f_n=(0.1~0.5)mm/rev a_p=(0.5~6.0)mm
- It is semi closed chipbreakers with a positive edge inclined angle. The cutting force is light with good flow of chippings.
- It is mainly used for the semi–finishing and finishing of steel.
- Recommended cutting parameters: f_n=(0.1~0.5)mm/rev a_p=(0.5~6.0)mm



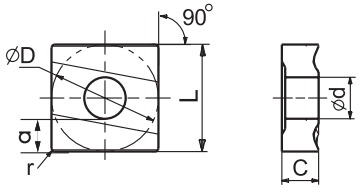


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标识 Anti-forgery
						P						M						K						
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41005H	10±0.08	3.5	4.2	0.5	2.4		●	●	●			●				●				●				●	*
41305H	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							●				○								●	*
42510H7	25±0.25	8.5	8.2	1.0	7.0							●												●	*
42510H8	25±0.25	8.5	8.2	1.0	8.0							●												●	*
42510H10	25±0.25	8.5	9.12	1.0	10.0							●												●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属开启式通槽，前角为20° 左右，切削力较小，适用于端面外圆45° 、75° 车刀。
- 主要用于钢材以及其它塑性材料的精加工和半精加工。
- 切削用量推荐：f_n=(0.1~0.6)mm/rav a_p=(0.5~6.0)mm
- It is open straight chipbreakers with a rake angle of approx. 20° with a light cutting force and it is suitable for tunrning tools of 45° & 75°
- It is mainly used for the semi–finishing and finishing of steel and other plastic materials.
- Recommended cutting parameters: f_n=(0.1–0.6)mm/rev a_p=(0.5–6.0)mm

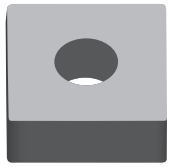


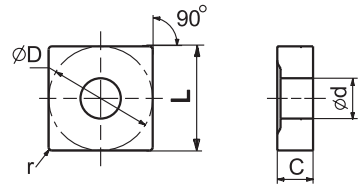


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标识 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41305L	**41305LZ**	13±0.13	4.5	5.2	0.5	4.4				○	●	●			○	○	○	●			○					*
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						●					○				○					*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 该槽型类似于H型槽，但槽为前宽后窄，适合于钢材的切削加工，断屑范围较宽。
- 主要用于粗车。
- 切削用量推荐：f_n=(0.2~0.8)mm/rev a_p=(2.0~8.0)mm
- The chipreakers are similar to H,but the chipbreakers are wide in the front and narrow in the rear and it is suitable for the turning of steel with a wide chipping range.
- It is mainly used for roughing operations.
- Recommended cutting parameters: f_n=(0.2~0.8)mm/rev a_p=(2.0~8.0)mm



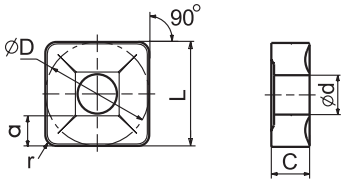


型号 Type	基本尺寸 Dimension(mm)				基本牌号 Basic grades																					防伪标记 Anti-forgery
					P								M						K							
	ØD Tol.	C ±0.13	Ød ±0.13	r	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8			
41305N	13±0.13	4.5	5.2	0.5	●		●	●					○	○	●	●	●		●		○	●	●	*		
41310N	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	●		●	●					○	○	●	●	●		●		○		●	*		
41910N	19±0.18	7.0	7.2	1.0			●	●					○	○	●	●	○		○		○		●	*		
41920N	19±0.18	7.0	7.2	2.0			●	●					○	○	●	●	○		○		○		●	*		

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 无断屑槽型。
- 加工中均采用负前角，进行淬硬钢和冷硬铸铁的精加工和半精加工。
- 切削用量推荐：f_n=(0.05~0.5)mm/rev； a_p=(0.5~3.0)mm
- No chipreakers.
- The negative rake angle is used & it is used for semi finishing & finishing of hardened steel & chilled cast iton.
- Recommended cutting parameters: f_n=(0.05~0.5)mm/rev a_p=(0.5~3.0)mm



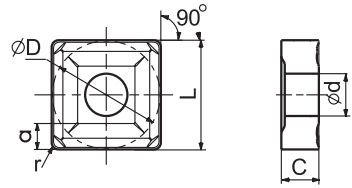


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标记 Anti-forgery
						P						M						K						
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41005V	10±0.08	3.5	4.2	0.5	2.4	●	●	●	●					●	●	●		●		●	●	○	●		*
41305V	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				●	●			●				●					○		●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为等宽的封闭式槽型，切削刃强度较好，断屑范围较宽，是最常用的一种粗加工槽型。
- 主要用于外圆、端面、内孔的精加工、半精加工和粗加工。
- 切削用量推荐：f_n=(0.05~1.2)mm/rev a_p=(0.5~10.0)mm
- It is closed chipbreakers with an even width The cutting edge has rather good strength and a wide range of chipping and it is a most commonly used chipbreakers for roughing.
- It is mainly used for roughing, semi–finishing and finishing of peripheries, ends and inner holes.
- Recommended cutting parameters: f_n=(0.05~1.2)mm/rev a_p=(0.5~10.0)mm



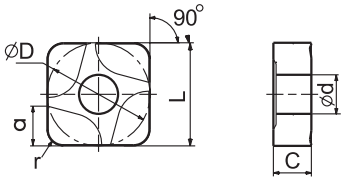


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标记 Anti-forgery
						P						M						K						
	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41310W	13±0.13	4.5	5.2	1.0	3.0	○	●	●	●			●				●	●		○	●		●	●	○	*
41605W	16±0.13	5.5	6.2	0.5	4.1	○	●	●	●			●				●	●		○	○		●	●	○	*
41610W	16±0.18	5.5	6.2	1.0	4.1		●		●			●				●	●		○	○		●	●	○	*
41910W	19±0.18	7.0	7.2	1.0	5.1		●		●								●		○			●		○	*
41920W	19±0.18	7.0	7.2	2.0	5.1				●								●								*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为封闭式三级断屑槽型，断屑范围较宽，在进给量和吃刀量很小时也能获得良好的断屑效果，但切削力较大。
- 用于切削用量变化较大，机床刚性较好的场合，主要用于精加工、半精加工。
- 切削用量推荐：f_n=(0.08~0.6)mm/rev a_p=(0.5~6.0)mm
- It is closed 3–step chipbreakem with a wide chipping range. When the feed & cut is very small, it will also have good chipping but with a big cutting force.
- It is suitable for the operations when the cutting parameters change drastically and the rigidity of the machines is good. It is mainly used for semi–finishing and finishing operations.
- Recommended cutting parameters: f_n=(0.08~0.6)mm/rev a_p=(0.5~6.0)mm



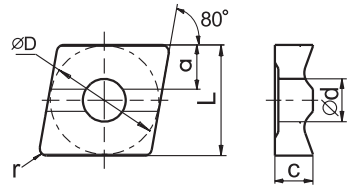


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标识 Anti-forgery
							P						M						K						
右 Right	左 left	ØD Tol.	C ±0.13	Ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
41620Y	41620YZ	16±0.18	5.5	6.2	2.0	6.4					●	●											○	○	●	*
41930Y	41930YZ	19±0.18	7.0	7.2	3.0	7.4					●	●											○	○	●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 槽型为前宽后窄的半封闭槽型。
- 用于半精加工和粗加工。
- 切削用量推荐：f_n=(0.25~1.0)mm/rev a_p=(2.0~8.0)mm
- It is semi closed chipbreakers with a wide front and a narrow rear.
- It is mainly used for semi–finishing and roughing operations.
- Recommended cutting parameters: f_n=(0.25~1.0)mm/rev a_p=(2.0~8.0)mm



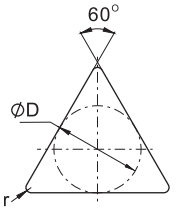


型号 Type		基本尺寸 Dimension(mm)					基本牌号 Basic grades																		防伪标识 Anti-forgery
							P						M					K							
右 Right	左 left	ØD Tol.	C ±0.13	ød ±0.13	r	a≈	YT05	YT15	YC201	YT14	YT5	YC45	YS8	YS2T	YW1	YW3	YM201	YW2	YG3X	YG3	YM201	YG6X	YG6	YD201	YG8	
C1305H4	C1305H4Z	13±0.13	4.5	5.2	0.5	4.5	○	●	●				●	●			●	●	●		●		○			*
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								●			●									*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

- 属开启式通槽，前角为20° 左右，切削力较小，适用于端面外圆45° 、75° 车刀。
- 主要用于钢材以及其它塑性材料的精加工和半精加工。
- 切削用量推荐：f_n=(0.1~0.6)mm/rev a_p=(0.5~6.0)mm
- It is open straight chipbreakers with a rake angle of approx 20° with a light cutting force and is suitable for tunrning tools with 45° & 75° .
- It is mainly used for the semi–finishing and finishing of steel and other plastic materials.
- Recommended cutting parameters: f_n=(0.1~0.6)mm/rev a_p=(0.5~6.0)mm

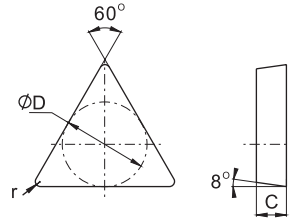




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标记 Anti-forgery
				P						M						K				
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
X307050	7.34±0.08	3.3	0.5	○	●					●		●						○	●	●		*
X310050	10.34±0.08	3.85	0.5	○	●					●		●						○	●	●		*
X313050	13.45±0.13	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	○	●							●						○	●	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

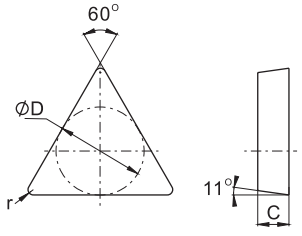




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标识 Anti-forgery
				P						M						K				
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
X307058	7.34±0.08	3.3	0.5	○	●	●						●	●					○	●	●	*
X310058	10.34±0.08	3.85	0.5	○	●	●						●	●					○	●	●	*
X313058	13.34±0.13	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	○	●	○						●	●					○	●	●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

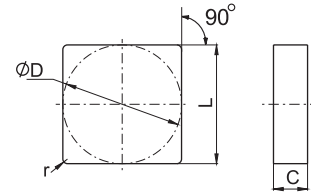




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																	防伪标记 Anti-forgery
				P						M					K						
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2		YD05	YG6X	YG6	YG8	YS2T		
X3070511	7.34±0.08	3.3	0.5	○	●	★				●			●				○	●	●		*
X3100511	10.34±0.08	3.85	0.5	○	●	★				●			●				○	●	●		*
X3130511	13.45±0.13	4.85	0.5	○	●	○				●			●				○	●	●		*
X3131011	13.45±0.13	4.85	1.0	○	●	○				●			●				○	●	●		*
X3160511	16.50±0.18	5.85	0.5	○	●	○				○			●				○	●	○		*
X3161011	16.50±0.18	5.85	1.0	○	●	○				○			●				○	●	○		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

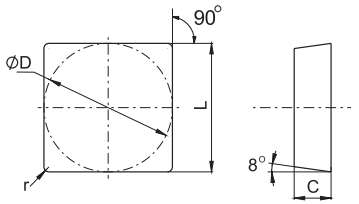




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标记 Anti-forgery
				P						M					K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2		YD05	YG6X	YG6	YG8	YS2T	
X410050	10.4±0.08	3.85	0.5	○	●	●				●							○	●	●	*
X413050	13.4±0.13	4.85	0.5	○	●	●				●							○	●	●	*
X413100	13.4±0.13	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	25.6±0.25	7.35	1.0		●													●	○	*
X425200	25.6±0.25	7.35	2.0		●													●	○	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

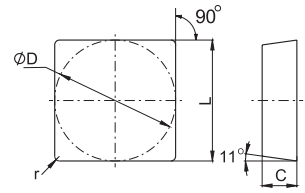




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标记 Anti-forgery
				P						M						K				
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
X410058	10.4±0.08	3.3	0.5	○	●	●												●	●	●	*
X413058	13.4±0.13	3.85	0.5	○	●	●												●	●	●	*
X413058T	13.4±0.13	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	○	●													●	●	○	*

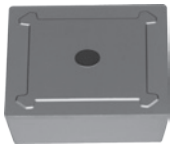
*表示该型号产品压有防伪标识 Anti-forgery in the product mould

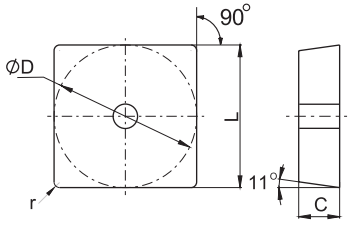




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																	防伪标记 Anti-forgery
				P						M						K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
X4100511	10.4±0.08	3.3	0.5	○	●	●				●		○	●			●		●	●		*
X4130511	13.4±0.13	3.85	0.5	○	●	●				●		○	●			●		●	●		*
X4130511T	13.4±0.13	4.85	0.5	○	●	●				●		○	●			●		●	●		*
X4131011T	13.4±0.13	4.85	1.0	○	●	●				●		○	●			●		●	●		*
X4160511	16.5±0.18	4.85	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	○	●							○	●					●	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

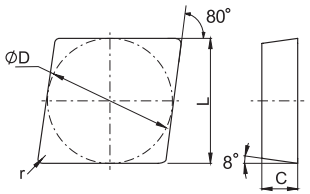




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标记 Anti-forgery
				P						M					K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2		YD05	YG6X	YG6	YG8	YS2T	
X4160511-ZC	16.5±0.18	4.85	0.5	○	●	●				●		○	●		●		●	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

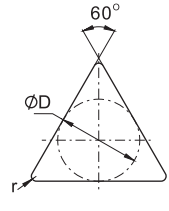




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标记 Anti-forgery
				P						M					K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2		YD05	YG6X	YG6	YG8	YS2T	
XC161008	16.5±0.13	4.8	1.0	●									●				●			*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

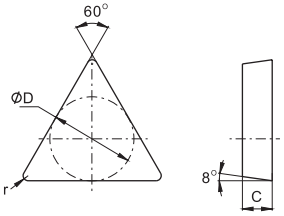




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标识 Anti-forgery
				P						M						K				
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
G307050	7.0±0.05	3.0	0.5	○	●					●		●						○	●	●	*
G310050	10.0±0.05	3.5	0.5	○	●					●		●						○	●	●	*
G313050	13.0±0.08	4.5	0.5	○	●							●						○	●	●	*
G313100	13.0±0.08	4.5	1.0	○	●							●						○	●	●	*
G316050	16.0±0.10	5.5	0.5	○	●							●						○	●	●	*
G316100	16.0±0.10	5.5	1.0	○	●							●						○	●	●	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

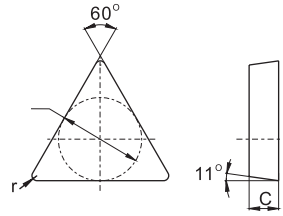




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标识 Anti-forgery
				P						M					K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2		YD05	YG6X	YG6	YG8	YS2T	
G307058	7.0±0.05	3.0	0.5	○	●					●		●					○	●		*
G310058	10.0±0.05	3.5	0.5	○	●					●		●					○	●		*
G313058	13.0±0.08	4.5	0.5	○	●	●				●		●					○	●		*
G313108	13.0±0.08	4.5	1.0	○	●	●				●		●					○	●		*
G316058	16.0±0.10	5.5	0.5	○	●	●				●		●					○	●		*
G316108	16.0±0.10	5.5	1.0	○	●	●				●		●					○	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

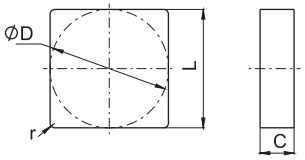




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																防伪标识 Anti-forgery
				P						M						K				
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T
G3070511	7.0±0.05	3.0	0.5	○	●								●					○	●	○		*
G3100511	10.0±0.05	3.5	0.5	○	●	●							●					○	●	○		*
G3130511	13.0±0.08	4.5	0.5	○	●	●							●					○	●	○		*
G3131011	13.0±0.08	4.5	1.0	○	●	●							●					○	●	○		*
G3160511	16.0±0.10	5.5	0.5	○									●					○	●			*
G3161011	16.0±0.10	5.5	1.0																●			*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

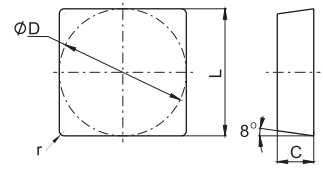




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																	防伪标记 Anti-forgery
				P						M						K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
G410050	10.0±0.05	3.5	0.5	○	●													○	●	●	*
G413050	13.0±0.08	4.5	0.5	○	●													○	●	●	*
G413100	13.0±0.08	4.5	1.0	○	●	○												○	●	●	*
G416050	16.0±0.10	4.5	0.5	○	●	○												○	●	●	*
G416100	16.0±0.10	4.5	1.0		●	○												○	●	●	*
G419100	19.0±0.10	5.5	1.0		●	●													●	○	*
G419200	19.0±0.10	5.5	2.0		●	●													●	○	*
G425100	25.0±0.13	7.0	1.0			●													●	○	*
G425200	25.0±0.13	7.0	2.0			●													●	○	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

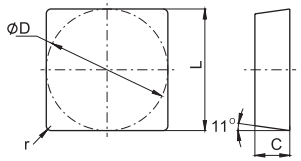




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																	防伪标记 Anti-forgery
				P						M						K					
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
G410058	10.0±0.05	3.0	0.5	○	●													●	●	●	*
G413058	13.0±0.08	3.5	0.5	○	●													●	●	●	*
G413058T	13.0±0.08	4.5	0.5	○	●	●												●	●	●	*
G413108	13.0±0.08	3.5	1.0	○	●	●												●	●	●	*
G413108T	13.0±0.08	4.5	1.0	○	●	●												●	●	●	*
G416058	16.0±0.10	4.5	0.5	○	●	●												●	●	●	*
G416108	16.0±0.10	4.5	1.0	○	●	●												●	●	●	*
G416158	16.0±0.10	4.5	1.5	○	●													●	●	●	*
G419108	19.0±0.10	5.5	1.0	○	●													●	●	●	*
G419208	19.0±0.10	5.5	2.0	○	●													●	●	●	*
G425108	25.0±0.13	7.0	1.0	○	●													●	●	○	*
G425208	25.0±0.13	7.0	2.0	○	●													●	●	○	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

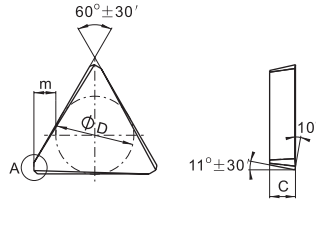




型号 Type	基本尺寸 Dimension(mm)			基本牌号 Basic grades																		防伪标记 Anti-forgery
				P						M						K						
	ØD Tol.	C ±0.13	r	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T		
G4100511	10.0±0.05	3.0	0.5	○	●	●				●		○	●					●	●			*
G4130511	13.0±0.08	3.5	0.5	○	●	●				●		○	●					●	●			*
G4130511T	13.0±0.08	4.5	0.5	○	●	●				●		○	●					●	●			*
G4131011	13.0±0.08	3.5	1.0	○	●	●				●		○	●					●	●			*
G4131011T	13.0±0.08	4.5	1.0	○	●	●				●		○	●					●	●			*
G4160511	16.0±0.10	4.5	0.5	○	●	●				●		○	●					●	●			*
G4161011	16.0±0.10	4.5	1.0	○	●					○		○	●					●	●			*
G4161511	16.0±0.10	4.5	1.5	○	●					○		○	●					●	●			*
G4191011	19.0±0.10	5.5	1.0	○	●					○		○	●					●	●			*
G4192011	19.0±0.10	5.5	2.0	○	●					○		○	●					●	●			*
G4251011	25.0±0.13	7.0	1.0	○	●					○		○	●					●	●			*
G4252011	25.0±0.13	7.0	2.0	○	●					○		○	●					●	●			*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

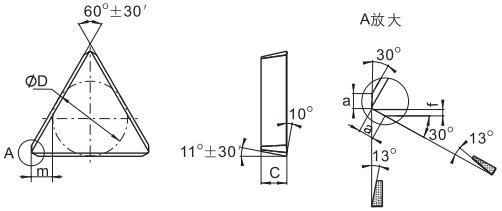




型号 Type			基本尺寸 Dimension(mm)					基本牌号 Basic grades															防伪标识 Anti-forgery
								P						M						K					
右 Right	左 left	ØD ±0.025	C ±0.025	m ±0.025	a	b	f	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
3XH10Y	**3XH10Z**	10.0	3.5	2.766	1.2	0.5	0.2	○	●	●				●			●					○	●	○	*
3XH13Y	**3XH13Z**	13.0	4.5	3.669	1.4	0.7	0.4	○	●								●					○	●	○	*
3XH16Y	**3XH16Z**	16.0	5.5	4.528	1.6	1.0	0.6	○	●								●					○	●	○	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

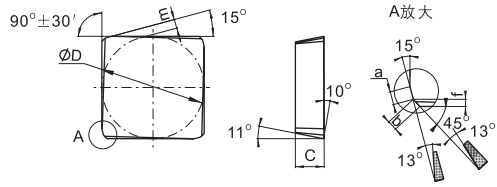




型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																防伪标识 Anti-forgery
						P						M						K				
	ØD ±0.025	C ±0.025	m ±0.025	a	f	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
3XH07	7.0	3.0	1.696	1.0	0.2	○	●								●					○	●	○		*
3XH10	10.0	3.5	2.621	1.2	0.2	○	●								●					○	●	○		*
3XH13	13.0	4.5	3.548	1.4	0.4	○	●								●					○	●	●		*
3XH16	16.0	5.5	4.469	1.6	0.6	○	●								●					○	●	●		*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

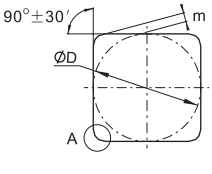




型号 Type			基本尺寸 Dimension(mm)					基本牌号 Basic grades																防伪标记 Anti-forgery
								P						M						K					
右 Right	左 left	ØD ±0.025	C ±0.025	m ±0.025	a	b	f	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
4XH13Y	**4XH13Z**	13.0	3.5	0.926	1.4	1.0	0.2	○	●														○	●	*
4XH16Y	**4XH16Z**	16.0	4.5	1.263	1.4	1.0	0.4	○	●														○	●	*
4XH19Y	**4XH19Z**	19.0	5.5	1.513	1.6	1.2	0.4	○	●														○	●	*
4XH25Y	**4XH25Z**	25.0	7.0	2.186	1.6	1.2	0.6	○	●														○	●	*

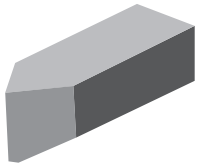
*表示该型号产品压有防伪标识 Anti-forgery in the product mould

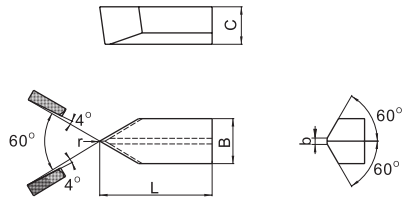




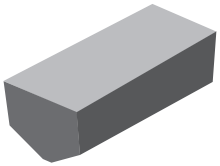
型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																防伪标识 Anti-forgery
						P						M						K					
	ØD ±0.025	C ±0.025	m ±0.025	a	f	YT14	YS25	YT5				YM201	YS8	YW1	YW2			YD05	YG6X	YG6	YG8	YS2T	
4X13	13.0	4.5	0.834	1.4	1.0	○	●														○	●	*
4X16	16.0	4.5	1.170	1.4	1.0	○	●														○	●	*
4X19	19.0	5.5	1.408	1.6	1.2	○	●														○	●	*
4X25	25.0	7.0	2.082	1.6	1.2	○	●														○	●	*

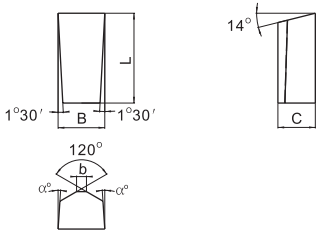
*表示该型号产品压有防伪标识 Anti-forgery in the product mould





型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																
						P						M					K					
	L	B ±0.25	C ±0.25	b	r	YT05	YT15	YT14	YS25	YT5		YS8	YW1	YW2			YS2T	YD05	YG3	YG6X	YG6	YD201	YG8
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	○		●					○	●							●		

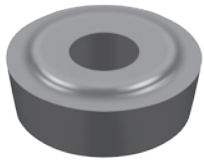


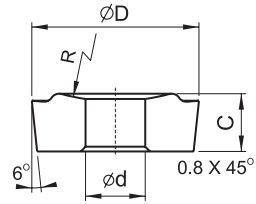


型号 Type	基本尺寸 Dimension(mm)					基本牌号 Basic grades																
						P					M					K							
	B	L	C	b	α°	YT05	YT15	YT14	YS25	YT5	YS8	YW1	YW2		YS2T	YD05	YG3	YG6X	YG6	YD201	YG8	
JCQ3	3.2±0.2	12±0.25	3.5±0.2	0.2	1°30'			●		●			○		●						●	
JCQ3.5	3.5±0.2	14±0.25	4±0.2	0.4	3°			●		●			○		●						●	
JCQ4	4.2±0.5	14±0.25	5.5±0.25	0.5	1°30'			●		●			○		●						●	
JCQ4.5	4.5±0.5	16±0.35	4±0.2	0.5	3°			●		●			○		●						●	
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	3°			●		●			○		●						●	
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	3°			●		●			○		●						●	
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	12.5±0.25	1.5	1°30'			●		●			○		●						●	

凹圆弧成型车刀和轮毂车刀

Forming tools for machining conncave radii and forming turning tools for railway wheels.





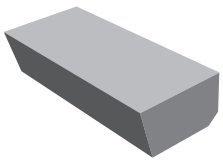
型号 Type	基本尺寸 Dimension(mm)				基本牌号 Basic grades																		防伪标识 Anti-forgery
	ØD Tol.	C ±0.1	Ød ±0.1	r	YM201	YW2	YT5	YT14	YC45														
B428	28.3±0.21	10	10	35	○	●	●	●	○														*
B433	33±0.23	10	12	35	○	●	●	●	○														*

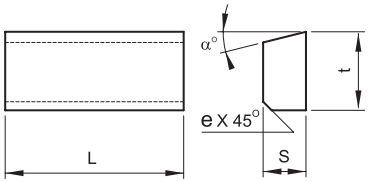
*表示该型号产品压有防伪标识 Anti-forgery in the product mould

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L尺寸允许偏差 Tolerances of L for Types El and E2	
		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型 制造外圆车刀、镗刀和切槽刀
Type Al For making peripherlv turning tools, boring tools and grooving tools.



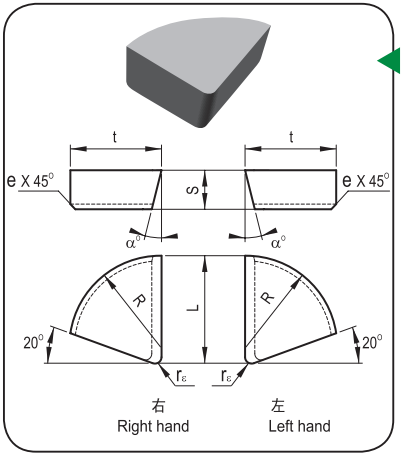


型号 Type	尺寸 Dimensions(mm)					防伪标识 Anti-forgery
	L	t	S	e	α°	
A106	6	5	2.5	-	0	z
A108	8	7	3.0	-	0	*
A110	10	6	3.5	0.8	14	*
A112	12	10	4.0	0.8	14	*
A114	14	12	4.5	0.8	14	*
A116	16	10	5.5	0.8	14	*
A118	18	12	7.0	0.8	14	*
A118A	18	16	6.0	0.8	14	*
A120	20	12	7.0	0.8	14	*
A122	22	15	8.5	0.8	14	*
A122A	22	18	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	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

A2型 制造镗刀和端面车刀

Type A2 For making boring tools and end turning tools

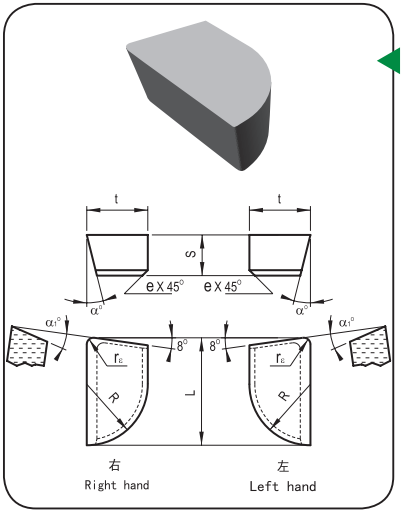


型号Type		尺寸 Dimensions(mm)							防伪标识 Anti-forgery
R.H	L.H	L	t	S	R	rε	e	α°	
A208	—	8	7	2.5	7	0.5	-	0	z
A210	—	10	8	3.0	8	1.0	-	0	*
A212	A212Z	12	10	4.5	10	1.0	0.8	14	*
A216	A216Z	16	14	6.0	14	1.0	0.8	14	*
A220	A220Z	20	18	7.0	18	1.0	0.8	14	*
A225	A225Z	25	20	8.0	20	1.0	0.8	14	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

A3型 制造端面车刀和外圆车刀

Type A3 For making end and periphery turning tools.



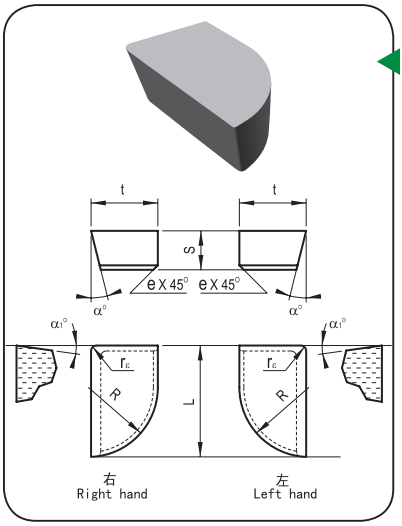
型号Type		尺寸 Dimensions(mm)								防伪标识 Anti-forgery
R.H	L.H	L	t	S	R	rε	e	α°	α_1°	
A310	—	10	6	3	6	1	-	0	0	*
A312	A312Z	12	7	4	7	1	0.8	14	5	*
A315	A315Z	15	9	6	9	1	0.8	14	5	*
A320BP	—	20	11	6.25	11	1	0.8	14	5	*
A320	A320Z	20	11	7	11	1	0.8	14	5	*
A325	A325Z	25	14	8	14	1	0.8	14	5	*
A330	A330Z	30	16	9.5	16	1	0.8	14	5	*
A340	A340Z	40	18	10.5	18	1	1.2	14	5	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

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.

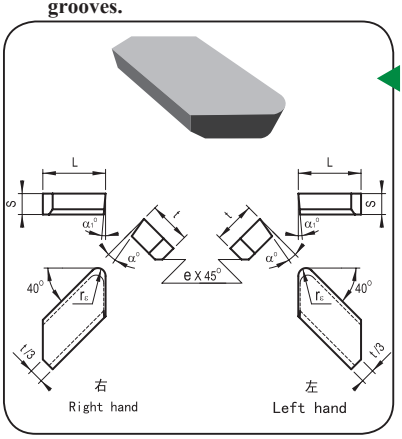


型号Type		尺寸 Dimensions(mm)								防伪标识 Anti-forgery
R.H	L.H	L	t	S	R	rε	e	α°	α_1°	
A406	—	6	5	2.5	5	0.5	-	0	0	z
A408	—	8	6	3	6	0.5	-	0	0	z
A410	A410Z	10	6	3.5	6	1	-	14	8	*
A412	A412Z	12	8	4.5	8	1	0.8	14	8	*
A416	A416Z	16	10	5.5	10	1	0.8	14	8	*
A420	A420Z	20	12	7	12.5	1	0.8	14	8	*
A425	A425Z	25	15	8.5	16	1	0.8	14	8	*
A430	A430Z	30	16	6	16	1	0.8	14	8	*
A430A	A430AZ	30	16	9.5	16	1	0.8	14	8	*
A440	A440Z	40	18	8	18	1	0.8	14	8	*
A440A	A440AZ	40	18	10.5	18	1	1.2	14	8	*
A450	A450Z	50	20	8	20	1.5	0.8	14	8	*
A450A	A450AZ	50	20	12	20	1.5	1.2	14	8	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

B1型 制造成型车刀、燕尾槽刨刀和燕尾槽铣刀

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



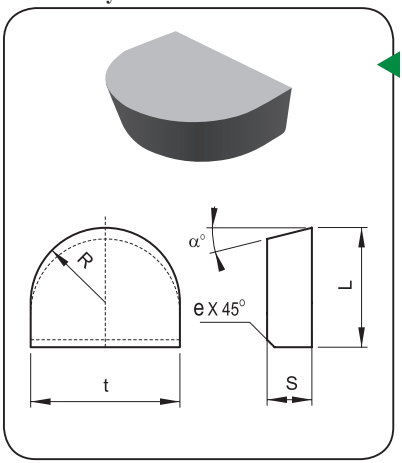
型号Type		尺寸 Dimensions(mm)							防伪标识 Anti-forgery
R.H	L.H	L	t	S	rε	e	α°	α_1°	
B108	—	8	6	3	1.5	-	0	0	z
B112	B112Z	12	8	4	1.5	1	10	5	*
B116	B116Z	16	10	5	1.5	1	10	5	*
B120	B120Z	20	14	5	1.5	1	10	5	*
B120A	B120AZ	20	16	7	1.5	1.5	10	5	*
B125	B125Z	25	14	5	1.5	1.5	10	5	*
B125A	B125AZ	25	18	8	1.5	1.5	10	5	*
B130	B130Z	30	20	8	1.5	1.5	10	5	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

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

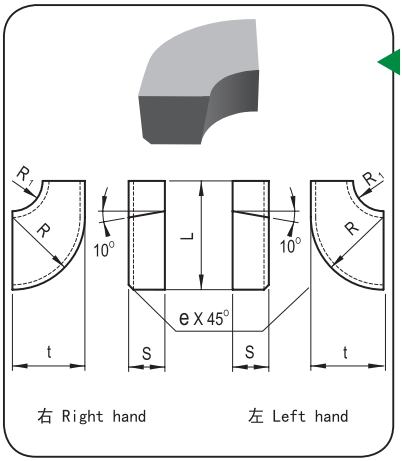


型号 Type	尺寸 Dimensions(mm)						防伪标识 Anti-forgery
	L	t	S	R	e	α°	
B208	8	8	3	4	-	14	z
B210	10	10	3.5	5	0.8	14	*
B212	12	12	4.5	6	0.8	14	*
B214	14	16	5	8	0.8	14	*
B216	16	20	6	10	0.8	14	*
B220	20	25	7	12.5	0.8	14	*
B225	25	30	8	15	0.8	14	*
B228	28	35	9	17.5	0.8	14	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

B3型 制造倒圆角车刀

Tpe B3 For making turning tools for radius machining.



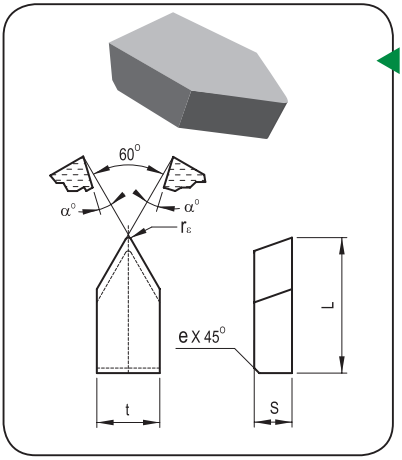
型号Type		尺寸 Dimensions(mm)						防伪标识 Anti-forgery
R.H	L.H	L	t	S	R	e	α°	
B312	B312Z	12	8	4	8	3	0.8	*
B315	B315Z	15	10	5	10	5	0.8	*
B318	B318Z	18	12	6	12	6	0.8	*
B322	B322Z	22	16	7	16	10	0.8	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

C1型 制造螺纹车刀及外圆精车刀

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

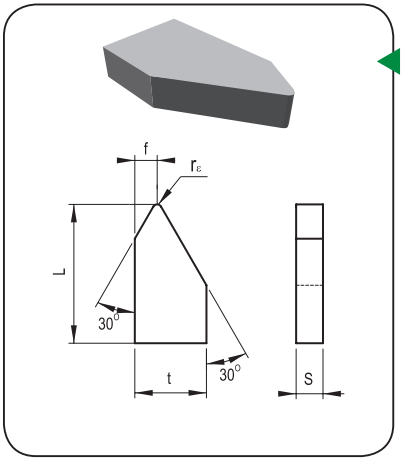


型号 Type	尺寸 Dimensions(mm)						防伪标识 Anti-forgery
	L	t	S	rε	e	α°	
C110A	10	4	3	0.5	-	-	*
C116A	16	6	4	0.5	0.8	10	*
C120A	20	8	5	0.5	0.8	10	*
C122A	22	10	6	0.5	0.8	10	*
C125A	25	12	7	0.8	0.8	10	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

C1-A型 制造螺纹车刀及外圆精车刀

Type Cl-A For making threading turning tools & turning tools for the finishing of peripheries.



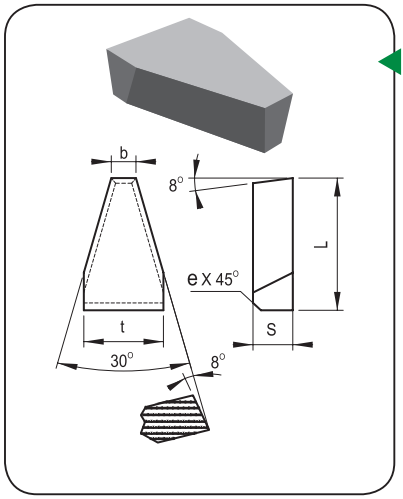
型号 Type	尺寸 Dimensions(mm)					防伪标识 Anti-forgery
	L	t	S	rε	f	
C110A	10	6.5	2.5	0.5	1.6	*
C116A	16	8	3	0.5	2.5	*
C120A	20	10	4	0.5	3.5	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

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.

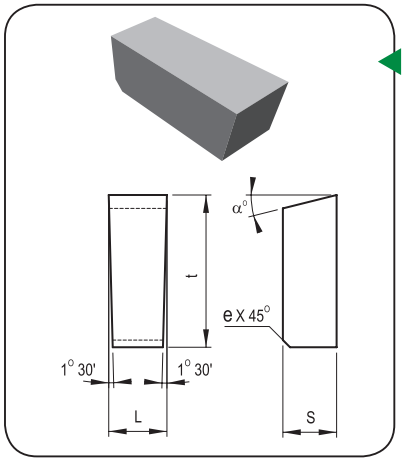


型号 Type	尺寸 Dimensions(mm)					防伪标识 Anti-forgery
	L	t	S	b	e	
C215	15	7	4	1.8	0.8	*
C218	18	10	5	3.1	0.8	*
C223	23	14	5	4.9	0.8	*
C228	28	18	6	7.7	0.8	*
C236	36	28	7	13.1	0.8	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould ZCCT 或 Z

C3型 制造切断刀和切槽刀

Type C3 For making parting tools and grooving tools.



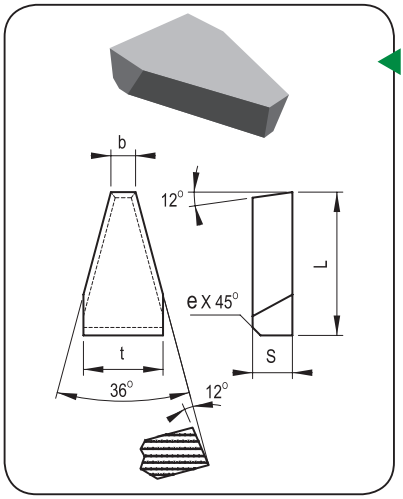
型号 Type	尺寸 Dimensions(mm)					防伪标识 Anti-forgery
	L	t	S	e	α°	
C303	3.5	12	3	-	-	*
C304	4.5	14	4	0.8	14	*
C305	5.5	17	5	0.8	14	*
C306	6.5	17	6	0.8	14	*
C308	8.5	20	7	0.8	14	*
C310	10.5	22	8	0.8	14	*
C312	12.5	22	10	0.8	14	*
C316	16.5	25	11	1.2	14	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould ZCCT 或 Z

公差值 L、t、S允许偏差同C01页

C4型 制造加工三角皮带轮切槽刀

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

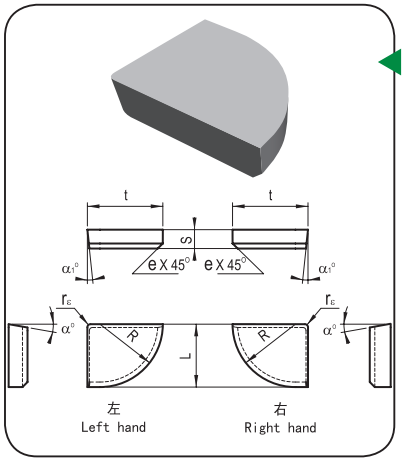


型号 Type	尺寸 Dimensions(mm)					防伪标识 Anti-forgery
	L	t	S	b	e	
C420	20	12	5	3	0.8	*
C425	25	16	5	4	0.8	*
C430	30	20	6	5.5	0.8	*
C435	35	25	6	7.5	0.8	*
C442	42	35	8	12.5	0.8	*
C450	50	42	8	15	0.8	*

（*，z）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

D1型 制造端面铣刀、外圆车刀、镗刀

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



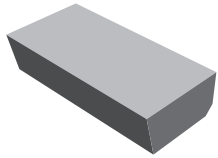
型号Type		尺寸 Dimensions(mm)								防伪标识 Anti-forgery
R.H	L.H	t	L	S	R	r_ε	e	α°	α_1°	
D110	—	10	8	2.5	8	0.5	-	0	0	*
D112	—	12	10	3	10	0.5	-	0	0	*
D115	D115Z	15	12	3.5	12.5	0.5	0.8	10	6	*
D120	D120Z	20	16	4	16	1	0.8	10	6	*
D125	D125Z	25	20	5	20	1	0.8	10	6	*
D130	D130Z	30	20	6	20	1	0.8	10	6	*

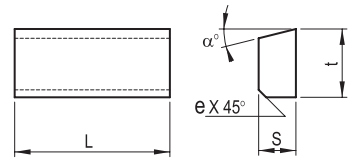
（*，z）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

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	尺寸 Dimensions(mm)					防伪标识 Anti-Forgery
	L	t	S	e	α°	
D206	6	7	3	-	0	z
D208	8	4	3	-	0	*
D210	10	5	3	-	0	*
D210A	10	10	3	-	0	*
D212	12	6	3	-	0	*
D212A	12	12	3.5	-	14	*
D214	14	7	3.5	-	14	*
D214A	14	12	3.5	-	14	*
D216	16	7	3.5	-	14	*
D216A	16	12	3.5	0.8	14	*
D218	18	5	3	-	0	
D218A	18	7	3.5	0.8	14	*
D218B	18	12	3.5	0.8	14	*
D220	20	10	4	0.8	14	*

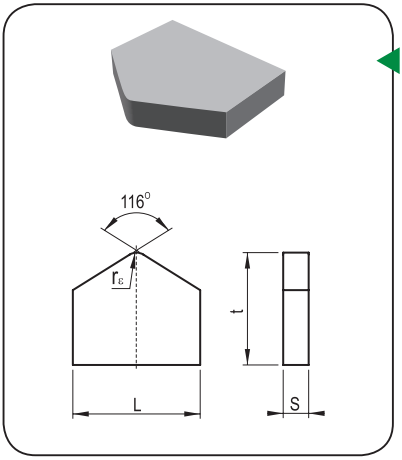
型号 Type	尺寸 Dimensions(mm)					防伪标识 Anti-Forgery
	L	t	S	e	α°	
D222	22	6	3	-	0	*
D222A	22	14	4	0.8	14	*
D224	24	14	4	0.8	14	*
D226	26	10	5	0.8	14	*
D226A	26	14	5	0.8	14	*
D228	28	10	4	0.8	14	*
D228A	28	14	4	0.8	14	*
D230	30	14	5	0.8	14	*
D232	32	12	5	0.8	14	*
D232A	32	14	4	0.8	14	*
D236	36	14	4	0.8	14	*
D238	38	12	5	0.8	14	*
D240	40	14	5	0.8	14	*
D246	46	14	5	0.8	14	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould ZCCT 或 Z

公差值 L、t、S允许偏差同C01页

E1型 制造加工非金属和金属材料直槽钻头

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



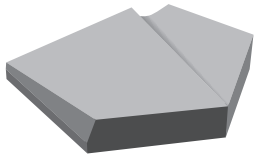
型号 Type	尺寸 Dimensions(mm)				防伪标识 Anti-forgery
	L	t	S	rε	
E105	5	5	1.5	1	z
E106	6	6	1.5	1	z
E107	7	6	1.5	1	z
E108	8	7	1.8	1	z
E109	9	8	2	1	*
E110	10	9	2	1	*

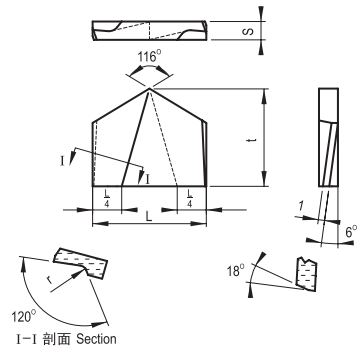
（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

E2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	尺寸 Dimensions(mm) L	t	S	r	防伪标识 Anti-forgery
E210	10.8	9	2	1	*
E211	11.8	10	2.5	1	*
E213	13	11	2.5	1	*
E214	14	12	2.5	1	*
E215	15	13	2.5	1	*
E216	16	14	3	1	*
E217	17	15	3	1.5	*
E218	18	16	3	1.5	*
E219	19	17	3	1.5	*
E220	20	18	3.5	1.5	*
E221	21	18	3.5	1.5	*
E222	22	18	3.5	1.5	*
E223	23	18	4	1.5	*
E224	24	18	4	1.5	*
E225	25	22	4.5	2	*

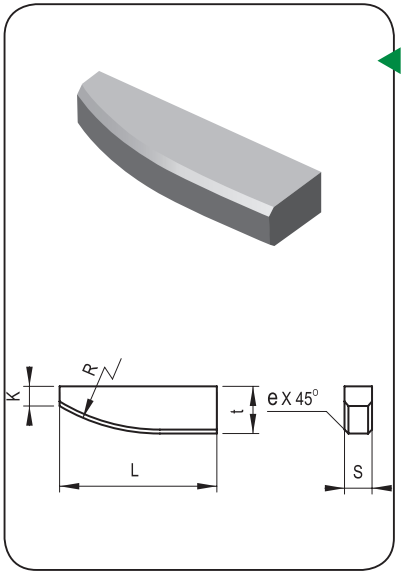
型号 Type	尺寸 Dimensions(mm) L	t	S	r	防伪标识 Anti-forgery
E226	26	22	4.5	2	*
E227	27.5	22	4.5	2	*
E228	28.5	22	4.5	2	*
E229	29.5	24	5	2	*
E230	30.5	24	5	2	*
E231	31.5	24	5	2	*
E233	33.5	26	5	2	*
E236	36.5	26	5	2	*
E239	39.5	26	5	2	*
E242	42	28	6	2	*
E244	44	28	6	2	*
E247	47	28	6	2	*
E250	50	30	6	2	*
E252	52	30	6	2	*

（*，z）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

E3型 制造键槽铣刀 端面铣刀及深扩孔钻

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

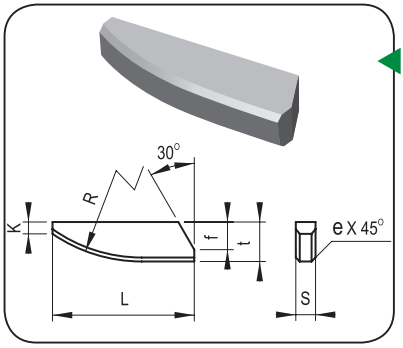


型号 Type	尺寸 Dimensions(mm)						防伪标识 Anti-forgery
	L	t	S	K	R	e	
E312	12	6	1.5	1.5	20	-	z
E315	15	3.5	2	1.5	20	-	z
E315A	15	7	2	1.5	20	-	z
E320	20	4.5	2.5	2.5	25	-	*
E320A	20	6	3.5	2.5	25	0.5	*
E320B	20	9	2.5	2.5	25	-	*
E325	25	8	3	3.5	30	0.5	*
E325A	25	15	3	3.5	30	0.5	*
E330	30	10	4	3.5	30	0.5	*
E330A	30	21	4	3.5	30	0.5	*
E335	35	10	5	3.5	30	0.8	*
E340	40	12	5	3.5	30	0.8	*
E345	45	12	6	3.5	30	0.8	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

E4型 制造扩孔钻

Type E4 For making broaching drill bits.



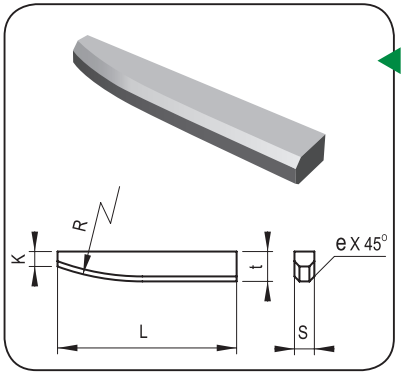
型号 Type	尺寸 Dimensions(mm)							防伪标识 Anti-forgery
	L	t	S	f	K	R	e	
E415	15	4	2	2.5	1.5	15	-	z
E418	18	5	2.5	3.5	1.5	20	-	*
E420	20	6	3	5	1.5	25	0.5	*
E425	25	8	3.5	6	2	25	0.5	*
E430	30	10	4	8	2	30	0.5	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

E5型 制造手动铰刀及机动铰刀

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

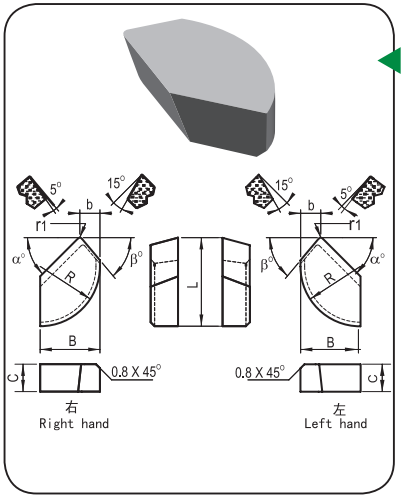


型号 Type	尺寸 Dimensions(mm)						防伪标识 Anti-forgery
	L	t	S	K	R	e	
E515	15	2.5	1.3	1.5	20	-	z
E518	18	3	1.5	1.5	25	-	z
E522	22	3.5	2	1.5	25	-	z
E525	25	4	2.5	2	30	-	*
E530	30	5	3	2	30	0.5	*
E540	40	6	3.5	2	30	0.5	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

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.



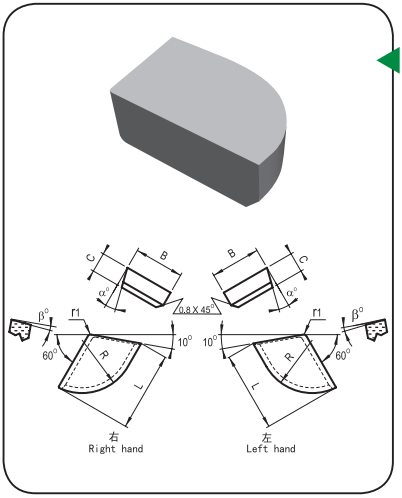
型号Type		尺寸 Dimensions(mm)							防伪标识 Anti-forgery
R.H	L.H	L	B	C	b	R	α°	β°	
A515	A515Z	15	10	4.5	5	10	45	40	*
A518	A518Z	18	12	5.5	4	12	45	50	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

公差值 L、t、S允许偏差同C01页

A6型 制造镗刀、外圆车刀

Type A6 For making boring tools and periphery turning tools.

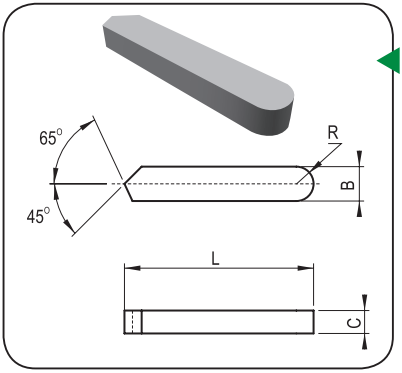


型号Type		尺寸 Dimensions(mm)						防伪标识 Anti-forgery
R.H	L.H	L	B	C	R	α°	β°	
A612	A612Z	12	8	3	8	14	5	*
A615	A615Z	15	10	4	10	14	5	*
A618	A618Z	18	12	4.5	12	14	5	*

（*，z）表示该型号产品压有防伪标识 Anti-forgery in the product mould ZCCT 或 Z

C5型 制造面粉轧辊拉丝刀

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



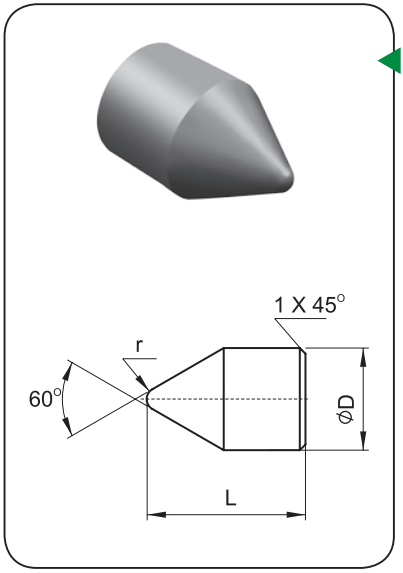
型号 Type	尺寸 Dimensions(mm)				防伪标识 Anti-forgery
	L	B	C	R	
C539	39	4	4	2	*
C545	45	6	4	3	*

（*，z）表示该型号产品压有防伪标识 Anti-forgery in the product mould ZCCT 或 Z

公差值 L、t、S允许偏差同C01页

F1型 制造车床和外圆磨床顶尖

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

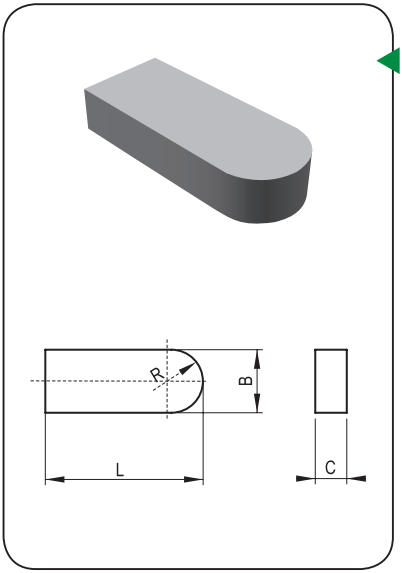


型号 Type	尺寸 Dimensions(mm)		
	ØD	L	r
F108	8	15	1
F112	12	20	1.5
F115	15	24	1.5
F118	18	28	2
F124	24	35	2
F130	30	40	2.5
F136	36	50	2.5
F140	40	60	3

公差值 L、t、S允许偏差同C01页

F2型 制造扩孔钻的导向块

Type F2 For making guides of broaching drill bits.

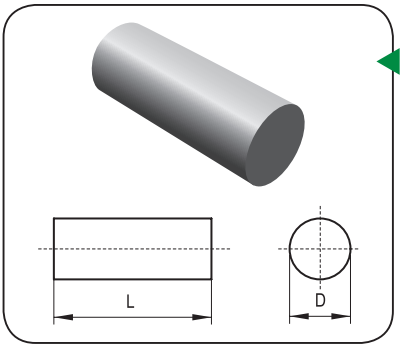


型号 Type	尺寸 Dimensions(mm)				防伪标识 Anti-forgery
	L	B	C	R	
F216	16	8	5	4	*
F216A	16	10	5	5	*
F216B	16	12	6	6	*
F218	18	2.5	2.5	1.25	*
F220	20	3	3	1.5	*
F225	25	5	4	2.5	*
F230	30	6	5	3	*
F230A	30	8	5	4	*
F230B	30	10	5	5	*
F230C	30	12	6	6	*
F209	35	8	5	4	*
F211	40	10	5	5	*
F213	45	12	6	6	*

（*，z ）表示该型号产品压有防伪标识 Anti-forgery in the product mould 或

F3型 制造可卸镗刀及耐磨零件

Type F3 For making dismountable boring tools and wear parts.

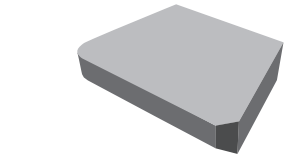


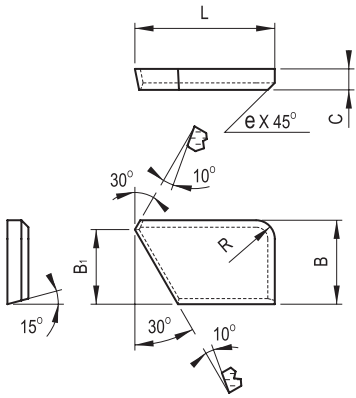
型号 Type	尺寸 Dimensions(mm)	
	D	L
F303	3.5	10
F304	4.5	12
F305	5.5	15
F306	6.5	18
F307	7.5	20
F308	8.5	22

公差值 L、t、S允许偏差同C01页

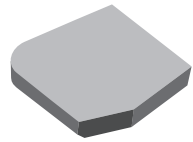
S型 制造扩孔钻钻头

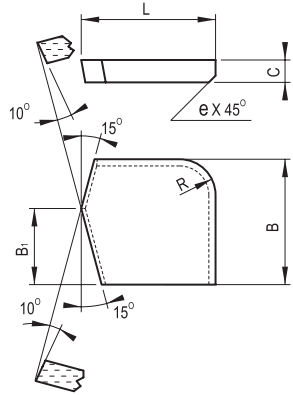
Type S For making broaching drill bits.





A 型 **Model A**





B 型 **Model B**

型号 Type	型式 Model	尺寸 Dimensions(mm)						防伪标识 Anti-forgery
		L	B	B_1	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	

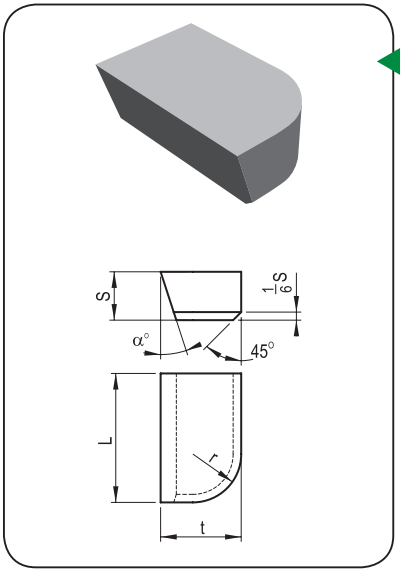
（*，z）表示该型号产品压有防伪标识 Anti-forgery in the product mould ZCCT 或 Z

公差值 L、t、S允许偏差同C01页

L、t、S允许偏差
Tolerances of L, t, S

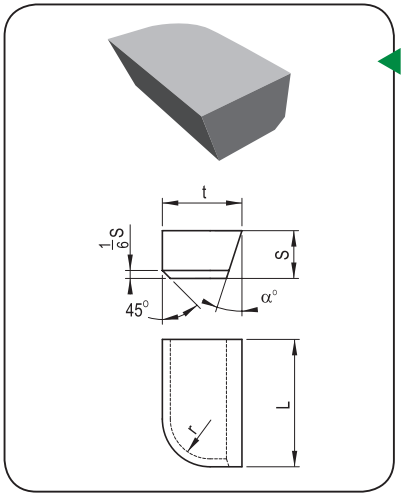
基本尺寸 Dimensions	≤6	>6~12	>12~25	>25~50	>50
允许偏差 Tolerances	+0.3 0	+0.4 0	+0.6 0	+1.0 0	+2.0 0

A型 Type A



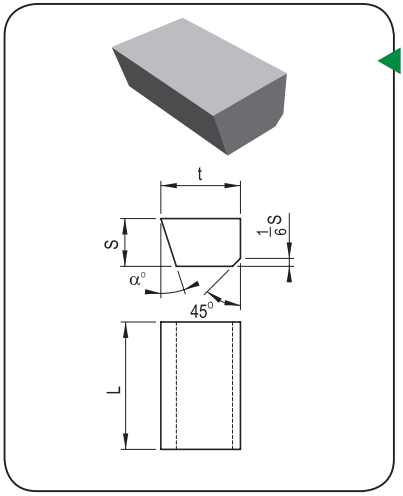
型号 Type	尺寸 Dimensions(mm)				
	L	t	S	r	α°
A5	5	3	2	2	-
A6	6	4	2.5	2.5	-
A8	8	5	3	3	-
A10	10	6	4	4	18
A12	12	8	5	5	18
A16	16	10	6	6	18
A20	20	12	7	7	18
A25	25	14	8	8	18
A32	32	18	10	10	18
A40	40	22	12	12	18
A50	50	25	14	14	18

B型 Type B



型号 Type	尺寸 Dimensions(mm)				
	L	t	S	r	α°
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

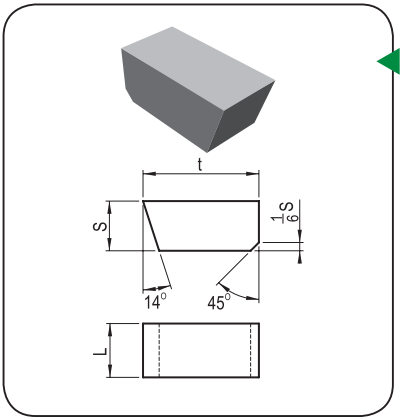
C型 Type C



型号 Type	尺寸 Dimensions(mm)			
	L	t	S	α°
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

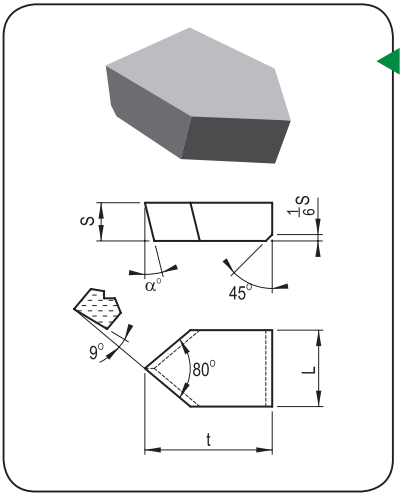
公差值 L、t、S允许偏差同C17页

D型 Type D



型号 Type	尺寸 Dimensions(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



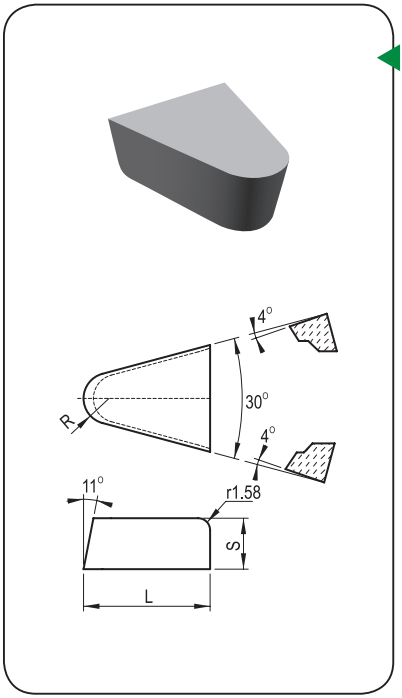
型号 Type	尺寸 Dimensions(mm)			
	L	t	S	α°
E4	4	10	2.5	-
E5	5	12	3	-
E6	6	14	3.5	9
E8	8	16	4	9
E10	10	18	5	9
E12	12	20	6	9
E16	16	22	7	9
E20	20	25	8	9
E25	25	28	9	9
E32	32	32	10	9

公差值 L、t、S允许偏差同C17页

L、W、S允许偏差
Tolerances of L, W, S

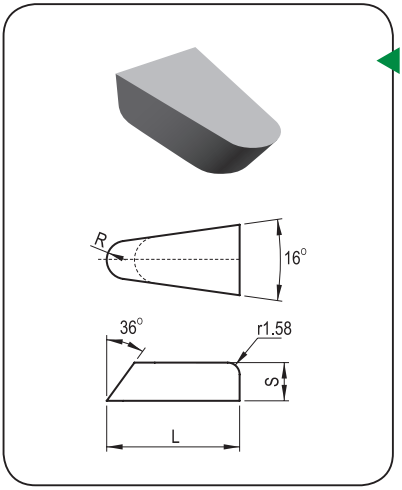
基本尺寸 Dimensions	≤4.8	4.8~9.52	9.52~25.4	25.4~50.8
允许偏差 Tolerances	+0.25 0	+0.38 0	+0.5 0	+1.0 0

73-0/1系列 Series 73-0/1



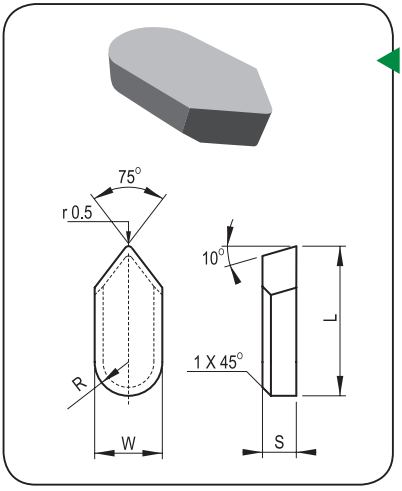
型号 Type	尺寸 Dimensions(mm)					
	L		S		R	
	Inch	mm	Inch	mm	Inch	mm
73-05	7/16	11.1	3/32	2.4	1/16	1.6
73-06	7/16	11.1	5/32	4	1/16	1.6
73-07	1/2	12.7	1/8	3.2	3/32	2.4
73-08	1/2	12.7	3/16	4.8	3/32	2.4
73-09	5/8	15.9	5/32	4	1/8	3.2
73-1	5/8	15.9	1/4	6.4	1/8	3.2
73-11	3/4	19.1	3/16	4.8	5/32	4
73-12	3/4	19.1	1/4	6.4	5/32	4
73-13	3/4	19.1	5/16	7.9	5/32	4
73-14	7/8	22.2	1/4	6.4	3/16	4.8
73-15	7/8	22.2	5/16	7.9	3/16	4.8
73-16	7/8	22.2	3/8	9.5	3/16	4.8
73-17	9/8	28.6	5/16	7.9	7/32	5.6
73-18	5/4	31.8	3/8	9.5	1/4	6.4

73-2系列 Series 73-2



型号 Type	尺寸 Dimensions(mm)					
	L		S		R	
	Inch	mm	Inch	mm	Inch	mm
73-2	21/32	16.7	3/16	4.8	3/32	2.4
73-21	17/32	13.5	5/32	4	1/16	1.6
73-22	15/32	11.9	1/8	3.2	1/16	1.6
73-23	13/32	10.3	3/32	2.4	3/64	1.2
73-24	25/32	19.8	1/4	6.4	5/32	4

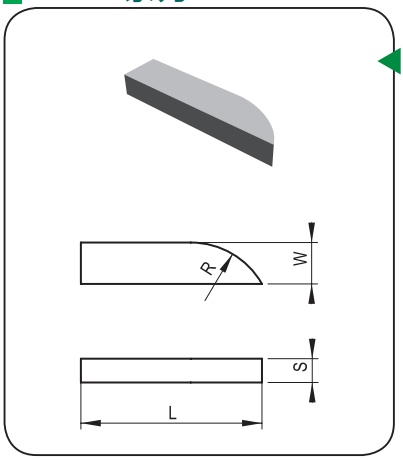
73-3系列 Series 73-3



型号 Type	尺寸 Dimensions(mm)							
	L		W		S		R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
73-3	365/512	18	5/16	8	5/32	4	5/32	4

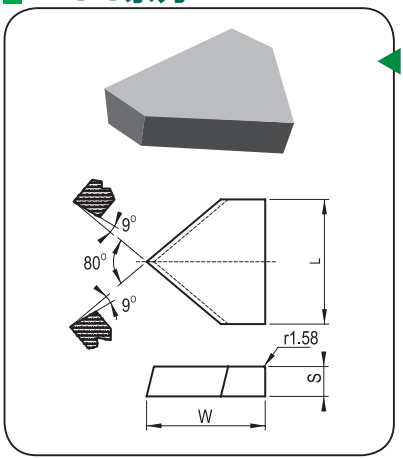
公差值 L、W、S允许偏差同C20页

73-4系列 Series 73-4



型号 Type	尺寸 Dimensions(mm)							
	L		W		S		R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
73-4	7/8	22.2	1/4	6.4	1/8	3.2	3/8	9.5
73-41	3/4	19.1	3/16	4.8	7/64	2.8	5/16	7.9
73-42	11/16	17.5	5/32	4	23/256	2.3	5/16	7.9
73-43	11/16	17.5	1/8	3.2	9/128	1.8	1/4	6.4
73-44	1/2	12.7	3/32	2.4	7/128	1.4	1/4	6.4
73-45	3/4	9.5	1/16	1.6	9/256	0.9	1/4	6.4

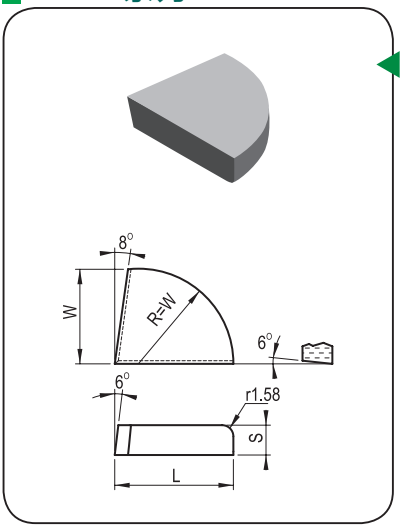
73-5系列 Series 73-5



型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-5	13/32	10.3	3/8	9.5	3/32	2.4
73-51	17/32	13.5	1/2	12.7	1/8	3.2
73-52	21/32	16.7	5/8	15.9	5/32	4
73-53	25/32	19.8	3/4	19.1	3/16	4.8
73-54	33/32	26.2	1	25.4	1/4	6.4
73-55	11/32	8.7	5/16	7.9	5/64	2

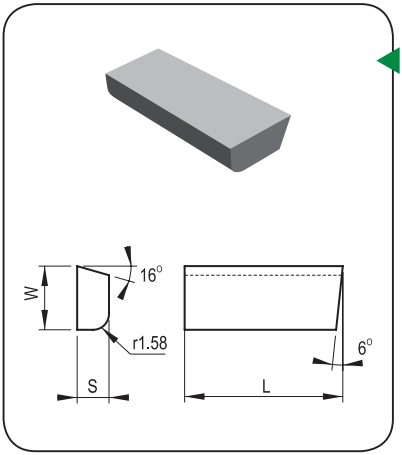
公差值 L、W、S允许偏差同C20页

73-6系列 Series 73-6



型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-6R 73-6L	7/16	11.1	3/8	9.5	1/8	3.2
73-61R 73-61L	5/8	15.9	1/2	12.7	5/32	4
73-62R 73-62L	5/8	15.9	1/2	12.7	3/16	4.8
73-63R 73-63L	7/8	22.2	3/4	19.1	1/4	6.4

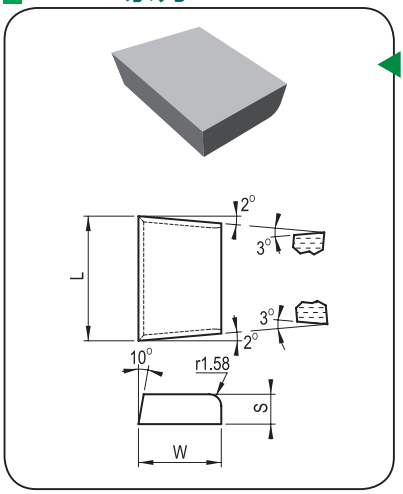
73-7系列 Series 73-7



型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-7	5/8	15.9	1/4	6.4	1/8	3.2
73-71	3/4	19.1	5/16	7.9	5/32	4
73-72	7/8	22.2	3/8	9.5	3/16	4.8

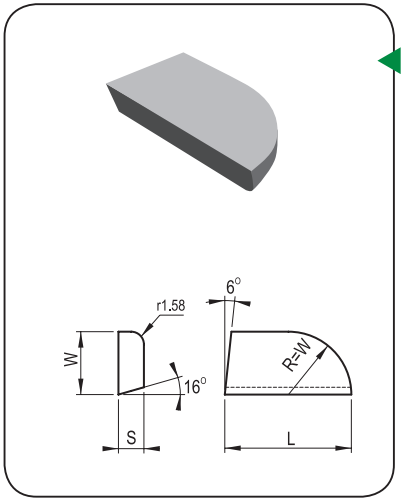
公差值 L、W、S允许偏差同C20页

73-8系列 Series 73-8



型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-8	17/32	13.5	3/8	9.5	1/8	3.2
73-81	21/32	16.7	7/16	11.1	5/32	4
73-82	17/32	13.5	3/8	9.5	3/16	4.8
73-83	25/32	19.8	1/2	12.7	3/16	4.8
73-84	25/32	19.8	1/2	12.7	1/4	6.4
73-85	33/32	26.2	5/8	15.9	1/4	6.4

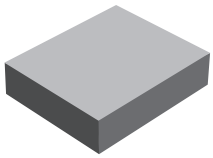
73-9系列 Series 73-9

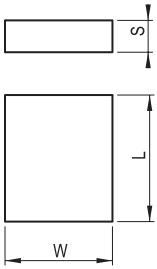


型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-9R 73-9L	1/2	12.7	1/4	6.4	3/32	2.4
73-91R 73-91L	5/8	15.9	5/16	7.9	1/8	3.2
73-92R 73-92L	3/4	19.1	3/8	9.5	5/32	4
73-93R 73-93L	7/8	22.2	1/2	12.7	3/16	4.8
73-94R 73-94L	7/8	22.2	1/2	12.7	1/4	6.4
73-95R 73-95L	19/16	30.2	5/8	15.9	1/4	6.4

公差值 L、W、S允许偏差同C20页

73-10系列 Series 73-10

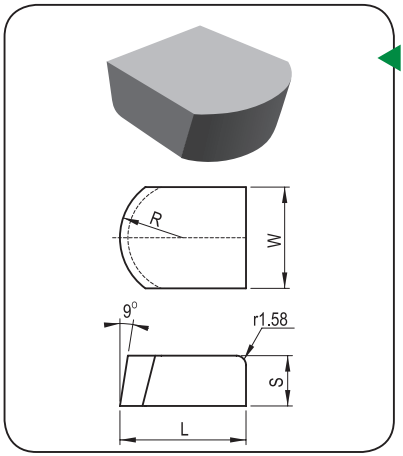




型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-10	3/16	4.8	3/16	4.8	1/16	1.6
73-100	1/4	6.4	1/4	6.4	1/16	1.6
73-101	5/16	7.9	1/4	6.4	3/32	2.4
73-102	3/8	9.5	9/32	7.2	3/32	2.4
73-103	13/32	10.3	13/32	10.3	3/32	2.4
73-104	7/16	11.1	11/32	7.1	1/8	3.2
73-105	1/2	12.7	3/16	4.8	3/32	2.4
73-106	1/2	12.7	13/32	10.3	1/8	3.2
73-107	1/2	12.7	1/2	12.7	5/32	4
73-108	5/8	15.9	3/8	9.5	5/32	4
73-109	5/8	15.9	17/32	13.5	5/32	4
73-1091	3/4	19.1	3/32	2.4	1/16	1.6
73-1092	3/4	19.1	3/8	9.5	5/32	4
73-1093	3/4	19.1	1/2	12.7	3/16	4.8
73-1094	1	25.4	3/16	4.8	3/32	2.4
73-1095	1	25.4	1/4	6.4	3/32	2.4
73-1096	1	25.4	3/8	9.5	3/16	4.8
73-1097	5/4	31.8	3/8	9.5	1/8	3.2
73-1098	5/4	31.8	1/2	12.7	1/4	6.4

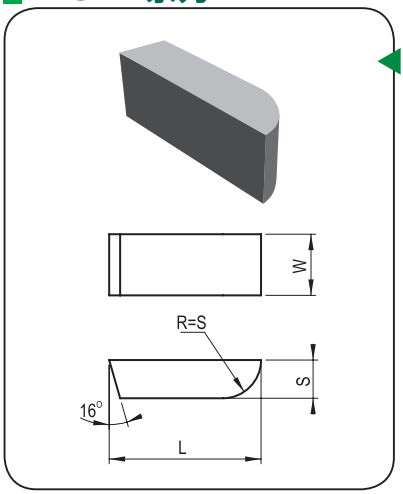
公差值 L、W、S允许偏差同C20页

73-11系列 Series 73-11



型号 Type	尺寸 Dimensions(mm)							
	L		W		S		R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
73-110	25/32	19.8	5/8	15.9	5/16	7.9	25/64	9.9

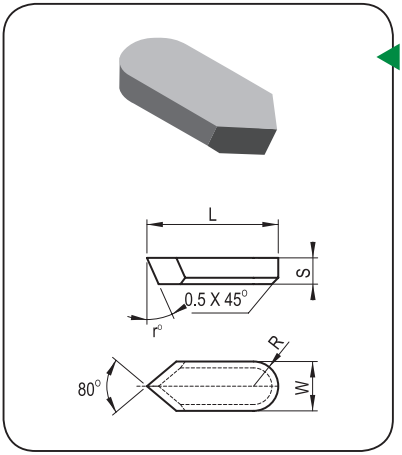
73-12系列 Series 73-12



型号 Type	尺寸 Dimensions(mm)					
	L		W		S	
	Inch	mm	Inch	mm	Inch	mm
73-120	3/8	9.5	3/32	2.4	3/32	2.4
73-121	7/16	11.1	1/8	3.2	1/8	3.2
73-122	9/16	14.3	3/16	4.8	5/32	4
73-123	5/8	15.9	1/4	6.4	5/32	4
73-124	3/4	19.1	5/16	7.9	3/16	4.8
73-125	7/8	22.2	3/8	9.5	1/4	6.4

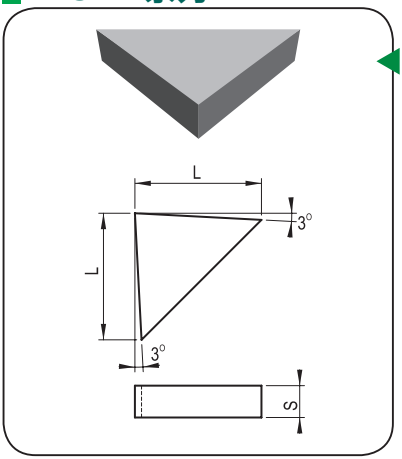
公差值 L、W、S允许偏差同C20页

73-13系列 Series 73-13



型号 Type	尺寸 Dimensions(mm)								
	L		W		S		R		r°
	Inch	mm	Inch	mm	Inch	mm	Inch	mm	
73-130	83/128	16.5	63/256	6.2	33/256	3.3	63/512	3.1	16
73-131	93/128	18.5	21/64	8.3	43/256	4.3	21/128	4.2	21
73-132	207/256	20.5	101/256	10	53/256	5.3	101/512	5	16

73-14系列 Series 73-14



型号 Type	尺寸 Dimensions(mm)			
	L		S	
	Inch	mm	Inch	mm
73-140	5/8	15.9	5/32	4
73-141	3/4	19.1	3/16	4.8

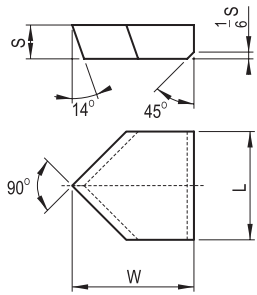
公差值 L、W、S允许偏差同C20页

L、W、S允许偏差
Tolerances of L, W, S

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

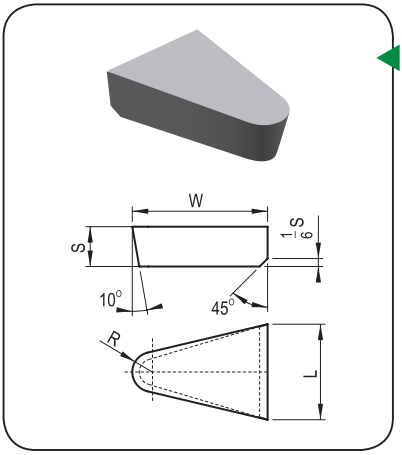
81-F系列 Series 81-F





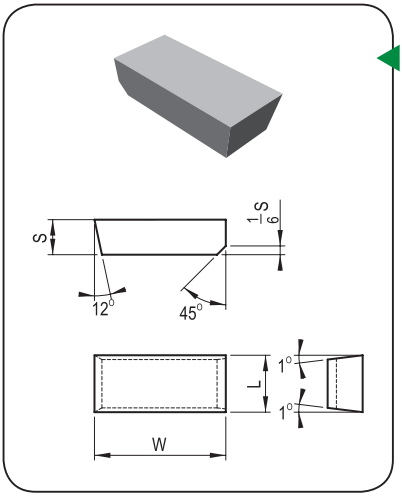
型号 Type	尺寸 Dimensions(mm)		
	L	W	S
81-F10	10	12	4
81-F13	13	15	4
81-F16	16	18	5
81-F20	20	20	7
81-F25	25	25	8
81-F30	30	30	9

81-G系列 Series 81-G



型号 Type	尺寸 Dimensions(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

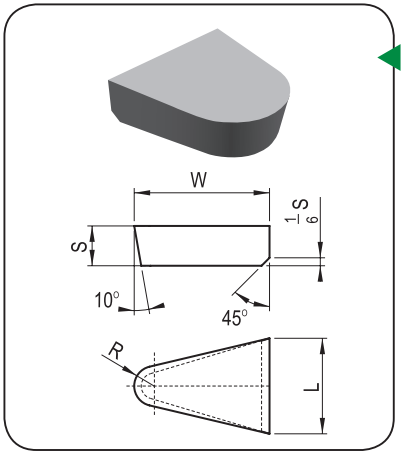
81-K系列 Series 81-K



型号 Type	尺寸 Dimensions(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		

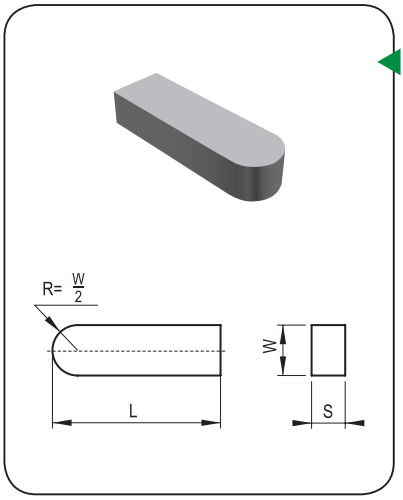
公差值 L、W、S允许偏差同C28页

81-L系列 Series 81-L



型号 Type	尺寸 Dimensions(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

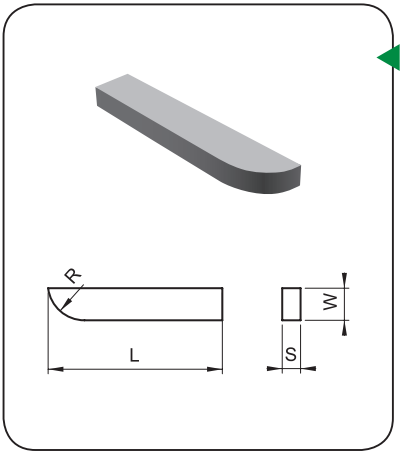


型号 Type	尺寸 Dimensions(mm)			防伪标识 Anti-forgery
	L	W	S	
81-1	20	6	4	*
81-11	25	6	5	*
81-12	30	8	6	*

*表示该型号产品压有防伪标识 Anti-forgery in the product mould

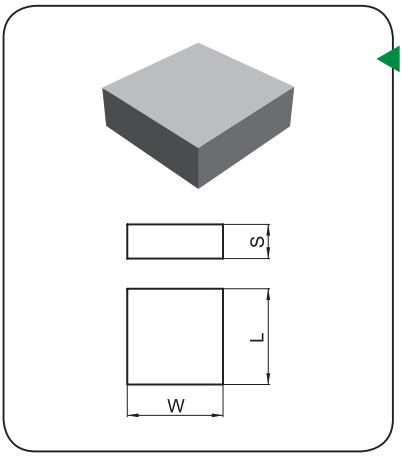
公差值 L、W、S允许偏差同C28页

81-2系列 Series 81-2



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

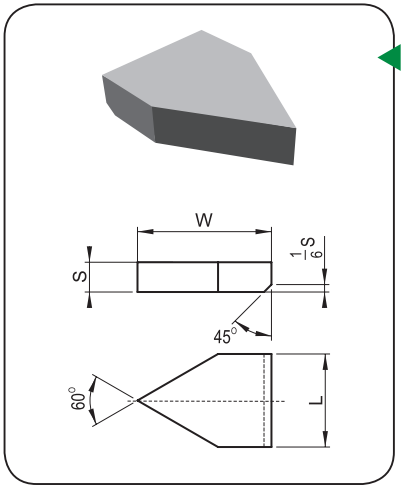
81-3系列 Series 81-3



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

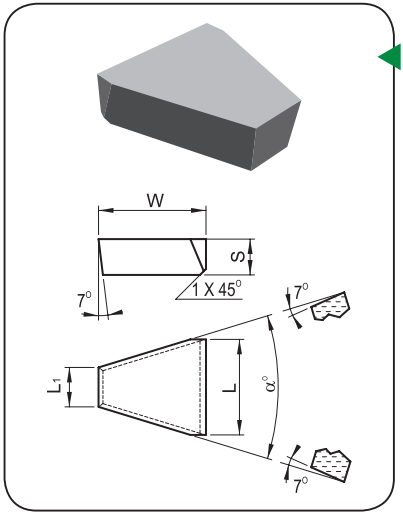
公差值 L、W、S允许偏差同C28页

81-4系列 Series 81-4



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

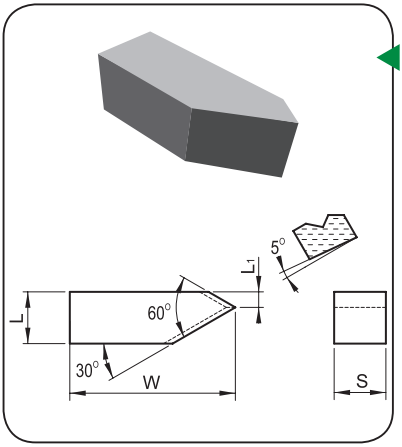
81-5系列 Series 81-5



型号 Type	尺寸 Dimensions(mm)				
	L	W	S	L_1	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

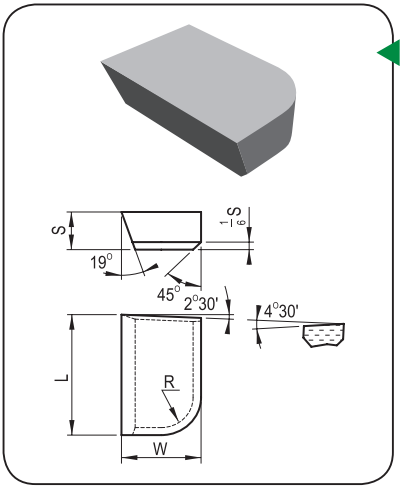
公差值 L、W、S允许偏差同C28页

81-6系列 Series 81-6



型号 Type	尺寸 Dimensions(mm)			
	L	W	S	L_1
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				

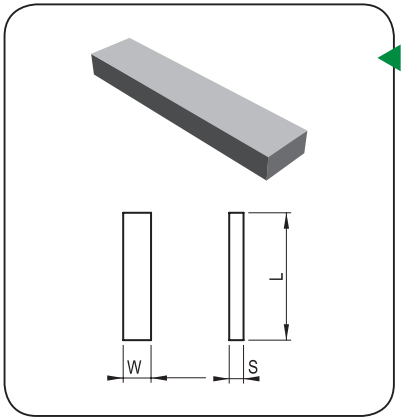
81-7系列 Series 81-7



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

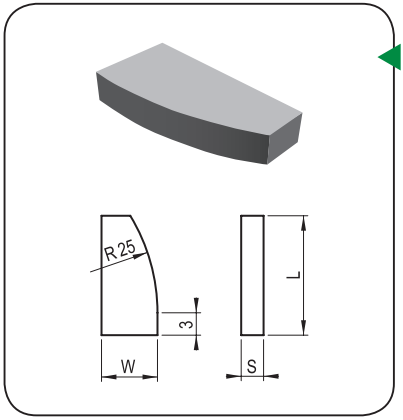
公差值 L、W、S允许偏差同C28页

81-8系列 Series 81-8



型号 Type	尺寸 Dimensions(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



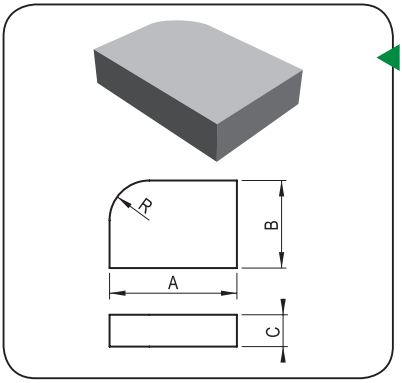
型号 Type	尺寸 Dimensions(mm)		
	L	W	S
81-9	12	5.5	1.5
81-91	16	6.5	1.8
81-92	16	7.5	1.8
81-93	20	8.5	2
81-94	20	9.5	2.3
81-95	20	11	2.3

公差值 L、W、S允许偏差同C28页

A、B、C允许偏差
Tolerances of A, B, C

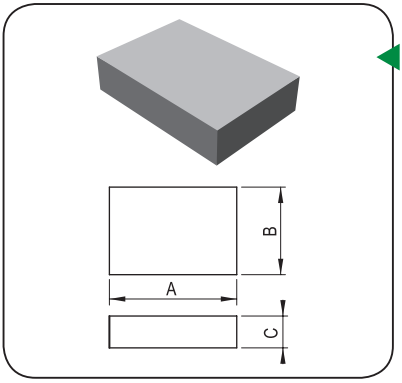
基本尺寸 Dimensions	⩾3~10	10~25	25~50
允许偏差 Tolerances	± 0.3	± 0.4	± 0.5

8301系列 Series 8301



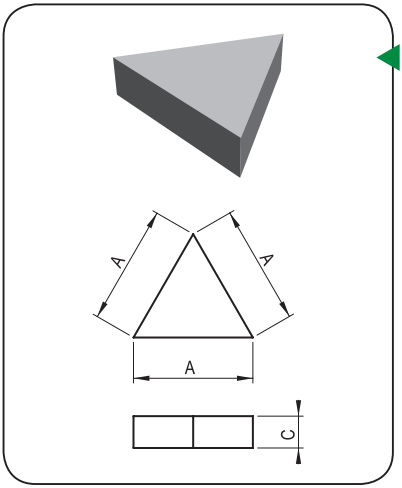
型号 Type	尺寸 Dimensions(mm)			
	A	B	C	R
8301-0	10	6	3	4
8301-1	13	9	3	5
8301-2	16	11	4	5
8301-3	19	13	5	5
8301-4	22	15	6	8
8301-5	25	17	7	8
8301-6	30	20	8	8

8302系列 Series 8302



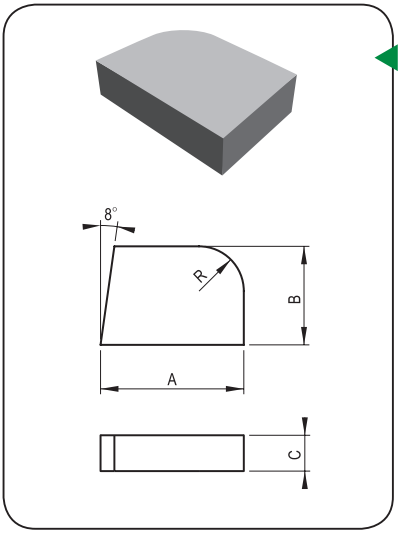
型号 Type	尺寸 Dimensions(mm)		
	A	B	C
8302-0	10	6	3
8302-1	13	9	3
8302-2	16	11	4
8302-3	19	13	5
8302-4	22	15	6
8302-5	25	17	7
8302-6	30	20	8

8303系列 Series 8303



型号 Type	尺寸 Dimensions(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

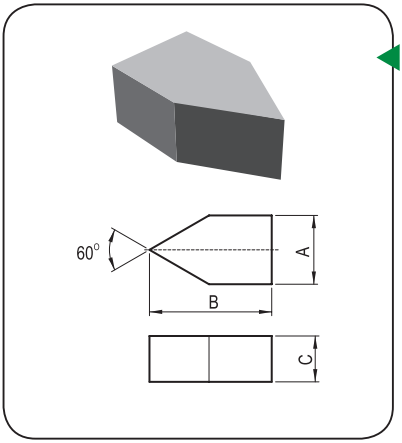
8304系列 Series 8304



型号 Type	尺寸 Dimensions(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
8301-6	30	20	8	8

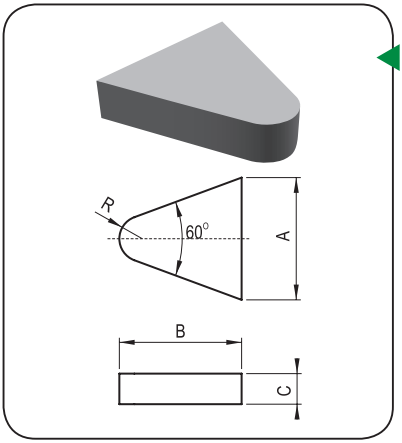
公差值 A、B、C允许偏差同C35页

8305系列 Series 8305



型号 Type	尺寸 Dimensions(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

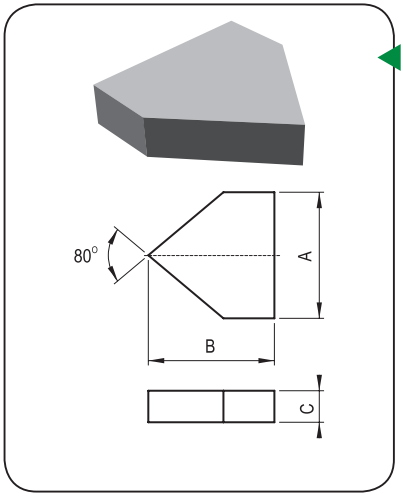
8306系列 Series 8306



型号 Type	尺寸 Dimensions(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

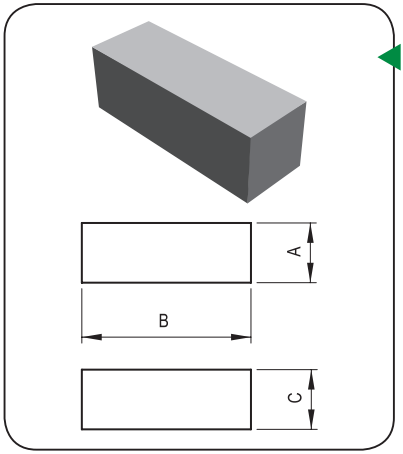
公差值 A、B、C允许偏差同C35页

8307系列 Series 8307



型号 Type	尺寸 Dimensions(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



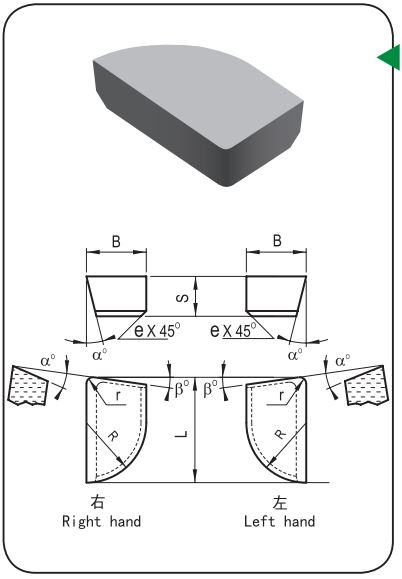
型号 Type	尺寸 Dimensions(mm)		
	A	B	C
8308-1	3	8	3
8308-3	4	13	4
8308-4	5	15	5
8308-5	6	17	6
8308-6	8	20	8

公差值 A、B、C允许偏差同C35页

L、B、S允许偏差
Tolerances of L, B, S

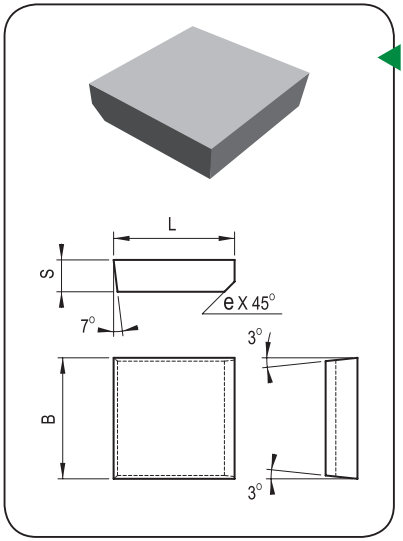
基本尺寸 Dimensions	≤6	>6~12	>12~19	>19~25	>25~50
允许偏差 Tolerances	± 0.25	± 0.3	± 0.4	± 0.5	± 0.6

85-AR/AL系列 Series 85-AR/AL



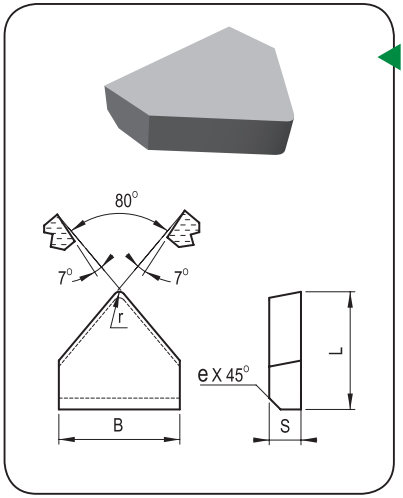
型号 Type		尺寸 Dimensions(mm)							
		L	B	S	R	r	e	α°	β°
85-AR4	85-AL4	8	8	2.6	5	0.4	0.8	7	8
85-AR5	85-AL5	13	6.5	2.6	6.5	0.4	0.8	7	8
85-AR6	85-AL6	13	6.5	2.6	6.5	0.4	0.8	7	8
85-AR7	85-AL7	13	6.5	2.6	6.5	0.8	0.8	7	8
85-AR8	85-AL8	16	8	3.4	8	0.8	1	7	8
85-AR10	85-AL10	19	10	4.2	10	0.8	1	7	8
85-AR12	85-AL12	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	尺寸 Dimensions(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

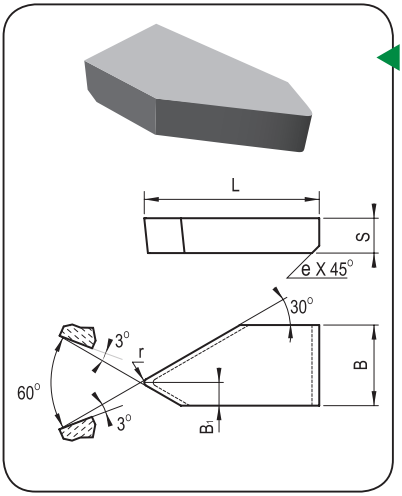
85-D系列 Series 85-D



型号 Type	尺寸 Dimensions(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

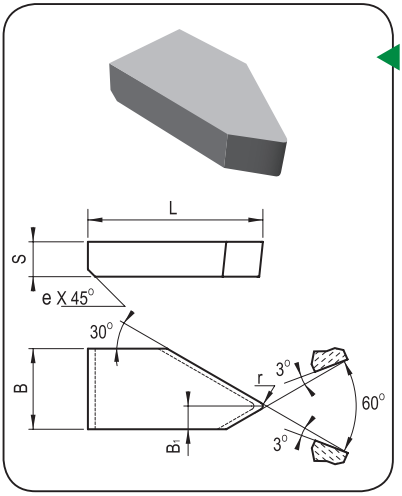
公差值 L、B、S允许偏差同C39页

85-ER系列 Series 85-ER



型号 Type	尺寸 Dimensions(mm)					
	L	B	S	B_1	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	尺寸 Dimensions(mm)					
	L	B	S	B_1	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

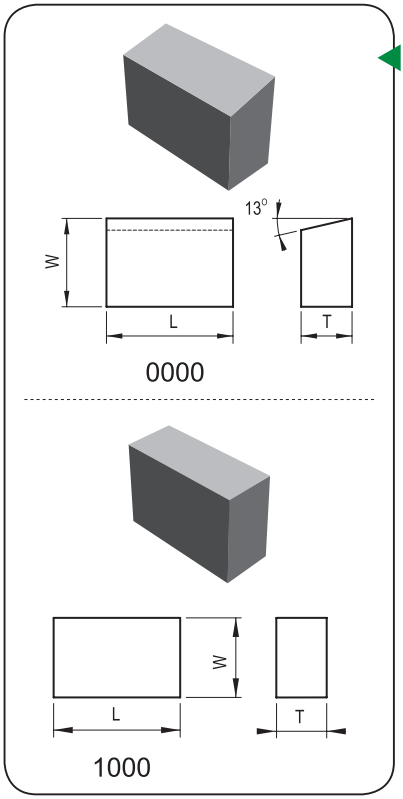
公差值 L、B、S允许偏差同C39页

L、W、T允许偏差
Tolerances of L, W, T

基本尺寸Dimensions		≤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

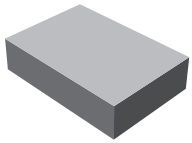
	≤12.7	12.7~25.4	25.4~38.1
弯曲度 Flatness	≤0.08	≤0.13	≤0.16

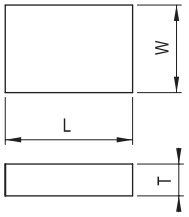
89-0000 1000系列
Series 89-0000 1000



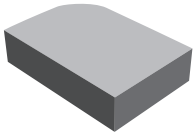
型号 Type		尺寸 Dimensions(mm)					
		L		W		T	
89-1000	89-0000	Inch	mm	Inch	mm	Inch	mm
89-1350	89-0350	9/16	14.3	3/8	9.5	1/4	6.4
89-1360	89-0360	3/4	19.1	3/8	9.5	1/4	6.4
89-1370	89-0370	5/8	15.9	7/16	11.1	1/4	6.4
89-1380	89-0380	3/4	19.1	1/2	12.7	1/4	6.4
89-1390	89-0390	1	25.4	9/16	14.3	1/4	6.4
89-1400	89-0400	5/8	15.9	5/8	15.9	1/4	6.4
89-1405	89-0405	3/4	19.1	3/4	19.1	1/4	6.4
89-1410	89-0410	1	25.4	3/4	19.1	1/4	6.4
89-1420	89-0420	5/8	15.9	7/16	11.1	5/16	7.9
89-1430	89-0430	15/16	23.8	7/16	11.1	5/16	7.9
89-1440	89-0440	3/4	19.1	1/2	12.7	5/16	7.9
89-1450	89-0450	1	25.4	1/2	12.7	5/16	7.9
89-1460	89-0460	1	25.4	5/8	15.9	5/16	7.9
89-1470	89-0470	3/4	19.1	3/4	19.1	5/16	7.9
89-1475	89-0475	1	25.4	3/4	19.1	5/16	7.9
89-1480	89-0480	5/4	31.8	3/4	19.1	5/16	7.9
89-1490	89-0490	3/4	19.1	1/2	12.7	3/8	9.5
89-1500	89-0500	1	25.4	1/2	12.7	3/8	9.5
89-1510	89-0510	1	25.4	5/8	15.9	3/8	9.5
89-1520	89-0520	5/4	31.8	3/4	19.1	3/8	9.5
89-1525	89-0525	3/2	38.1	3/4	19.1	3/8	9.5
89-1530	89-0530	1	25.4	3/4	19.1	1/2	12.7
89-1540	89-0540	5/4	31.8	3/4	19.1	1/2	12.7
89-1550	89-0550	3/2	38.1	3/4	19.1	1/2	12.7

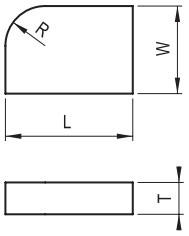
89-1000 2000系列 Series 89-1000 2000





1000



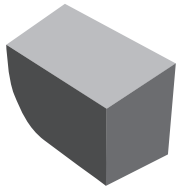


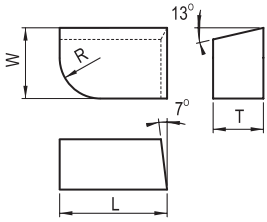
2000

型号 Type		尺寸 Dimensions(mm)							
		L		W		T		R	
89-1000	89-2000	Inch	mm	Inch	mm	Inch	mm	Inch	mm
89-1010	89-2010	5/8	15.9	1/8	3.2	1/16	1.6	1/8	3.2
89-1020	89-2020	1/4	6.4	3/16	4.8	1/16	1.6	1/8	3.2
89-1030	89-2030	5/16	7.9	1/4	6.4	1/16	1.6	1/8	3.2
89-1040	89-2040	5/16	7.9	3/16	4.8	3/32	2.4	1/8	3.2
89-1050	89-2050	1/2	12.7	3/16	4.8	3/32	2.4	1/8	3.2
89-1060	89-2060	3/8	9.5	1/4	6.4	3/32	2.4	1/8	3.2
89-1070	89-2070	1/2	12.7	1/4	6.4	3/32	2.4	1/8	3.2
89-1080	89-2080	3/8	9.5	5/16	7.9	3/32	2.4	3/16	4.8
89-1090	89-2090	3/8	9.5	3/8	9.5	3/32	2.4	3/16	4.8
89-1100	89-2100	1/2	12.7	3/8	9.5	3/32	2.4	1/4	6.4
89-1105	89-2105	1/2	12.7	7/16	11.1	3/32	2.4	1/8	3.2
89-1110	89-2110	3/4	19.1	3/16	4.8	1/8	3.2	1/8	3.2
89-1120	89-2120	1/2	12.7	1/4	6.4	1/8	3.2	1/8	3.2
89-1130	89-2130	5/8	15.9	1/4	6.4	1/8	3.2	1/8	3.2
89-1140	89-2140	3/4	19.1	1/4	6.4	1/8	3.2	3/16	4.8
89-1150	89-2150	7/16	11.1	5/16	7.9	1/8	3.2	3/16	4.8
89-1160	89-2160	1/2	12.7	5/16	7.9	1/8	3.2	3/16	4.8
89-1170	89-2170	5/8	15.9	5/16	7.9	1/8	3.2	3/16	4.8
89-1180	89-2180	1/2	12.7	3/8	9.5	1/8	3.2	3/16	4.8
89-1190	89-2190	3/4	19.1	3/8	9.5	1/8	3.2	3/16	4.8
89-1200	89-2200	1/2	12.7	1/2	12.7	1/8	3.2	1/4	6.4
89-1210	89-2210	3/4	19.1	1/2	12.7	1/8	3.2	1/4	6.4
89-1215	89-2215	3/4	19.1	3/4	19.1	1/8	3.2	1/4	6.4
89-1220	89-2220	9/16	14.3	3/8	9.5	5/32	4	3/16	4.8
89-1230	89-2230	3/4	19.1	3/8	9.5	5/32	4	3/16	4.8
89-1240	89-2240	5/8	15.9	5/8	15.9	5/32	4	1/4	6.4
89-1250	89-2250	7/16	11.1	5/16	7.9	3/16	4.8	3/16	4.8
89-1260	89-2260	5/8	15.9	5/16	7.9	3/16	4.8	3/16	4.8
89-1270	89-2270	1/2	12.7	3/8	9.5	3/16	4.8	3/16	4.8
89-1280	89-2280	5/8	15.9	3/8	9.5	3/16	4.8	3/16	4.8
89-1290	89-2290	3/4	19.1	3/8	9.5	3/16	4.8	3/16	4.8
89-1300	89-2300	5/8	15.9	7/16	11.1	3/16	4.8	1/4	6.4
89-1310	89-2310	13/16	20.6	7/16	11.1	3/16	4.8	1/4	6.4
89-1320	89-2320	1/2	12.7	1/2	12.7	3/16	4.8	1/4	6.4
89-1330	89-2330	3/4	19.1	1/2	12.7	3/16	4.8	1/4	6.4
89-1340	89-2340	3/4	19.1	3/4	19.1	3/16	4.8	1/4	6.4

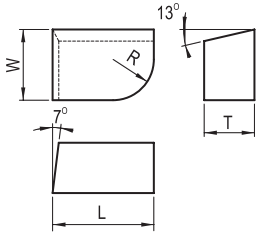
公差值 L、W、T允许偏差同C42页

89-3000 4000系列 Series 89-3000 4000





3000



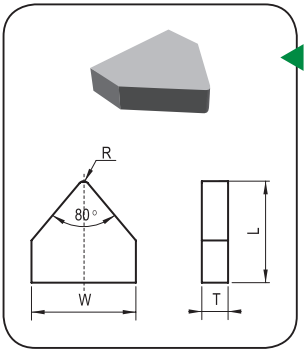
4000

型号 Type		尺寸 Dimensions(mm)							
		L		W		T		R	
89-3000	89-4000	Inch	mm	Inch	mm	Inch	mm	Inch	mm
89-3350	89-4350	9/16	14.3	3/8	9.5	1/4	6.4	3/16	4.8
89-3360	89-4360	3/4	19.1	3/8	9.5	1/4	6.4	3/16	4.8
89-3370	89-4370	5/8	15.9	7/16	11.1	1/4	6.4	1/4	6.4
89-3380	89-4380	3/4	19.1	1/2	12.7	1/4	6.4	1/4	6.4
89-3390	89-4390	1	25.4	9/16	14.3	1/4	6.4	1/4	6.4
89-3400	89-4400	5/8	15.9	5/8	15.9	1/4	6.4	1/4	6.4
89-3405	89-4405	3/4	19.1	3/4	19.1	1/4	6.4	1/4	6.4
89-3410	89-4410	1	25.4	3/4	19.1	1/4	6.4	1/4	6.4
89-3420	89-4420	5/8	15.9	7/16	11.1	5/16	7.9	1/4	6.4
89-3430	89-4430	15/16	23.8	7/16	11.1	5/16	7.9	1/4	6.4
89-3440	89-4440	3/4	19.1	1/2	12.7	5/16	7.9	1/4	6.4
89-3450	89-4450	1	25.4	1/2	12.7	5/16	7.9	1/4	6.4
89-3460	89-4460	1	25.4	5/8	15.9	5/16	7.9	1/4	6.4
89-3470	89-4470	3/4	19.1	3/4	19.1	5/16	7.9	1/4	6.4
89-3475	89-4475	1	25.4	3/4	19.1	5/16	7.9	1/4	6.4
89-3480	89-4480	5/4	31.8	3/4	19.1	5/16	7.9	1/4	6.4
89-3490	89-4490	3/4	19.1	1/2	12.7	3/8	9.5	1/4	6.4
89-3500	89-4500	1	25.4	1/2	12.7	3/8	9.5	1/4	6.4
89-3510	89-4510	1	25.4	5/8	15.9	3/8	9.5	1/4	6.4
89-3520	89-4520	5/4	31.8	3/4	19.1	3/8	9.5	1/4	6.4
89-3525	89-4525	3/2	38.1	3/4	19.1	3/8	9.5	1/4	6.4
89-3530	89-4530	1	25.4	3/4	19.1	1/2	12.7	1/4	6.4
89-3540	89-4540	5/4	31.8	3/4	19.1	1/2	12.7	1/4	6.4
89-3550	89-4550	3/2	38.1	3/4	19.1	1/2	12.7	1/4	6.4

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89-5000系列

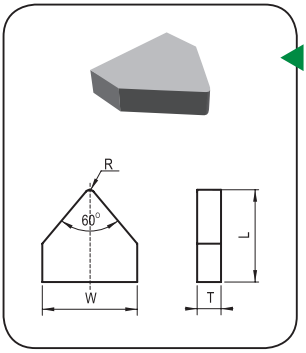
Series 89-5000



型号 Type	尺寸 Dimensions(mm)							
	L		W		T		R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
89-5080	3/8	9.5	5/16	7.9	3/32	2.4	1/64	0.4
89-5100	1/2	12.7	3/8	9.5	3/32	2.4	1/64	0.4
89-5105	1/2	12.7	7/16	11.1	3/32	2.4	1/32	0.8
89-5200	1/2	12.7	1/2	12.7	1/8	3.2	1/32	0.8
89-5240	5/8	15.9	5/8	15.9	5/32	4	1/32	0.8
89-5340	3/4	19.1	3/4	19.1	3/16	4.8	1/32	0.8
89-5410	3/4	19.1	1	25.4	1/4	6.4	1/32	0.8

89-6000系列

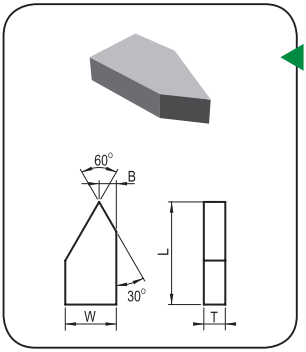
Series 89-6000



型号 Type	尺寸 Dimensions(mm)							
	L		W		T		R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
89-6030	5/16	7.9	1/4	6.4	1/16	1.6	1/16	1.6
89-6080	3/8	9.5	5/16	7.9	3/32	2.4	1/64	0.4
89-6100	1/2	12.7	3/8	9.5	3/32	2.4	1/64	0.4
89-6200	1/2	12.7	1/2	12.7	1/8	3.2	1/32	0.8
89-6205	9/16	14.3	1/2	12.7	1/8	3.2	1/32	0.8
89-6240	5/8	15.9	5/8	15.9	5/32	4	1/32	0.8
89-6340	3/4	19.1	3/4	19.1	3/16	4.8	1/32	0.8

89-7000系列

Series 89-7000



型号 Type	尺寸 Dimensions(mm)							
	L		W		T		R	
	Inch	mm	Inch	mm	Inch	mm	Inch	mm
89-7060	3/8	9.5	1/4	6.4	3/32	2.4	1/16	1.6
89-7160	1/2	12.7	5/16	7.9	1/8	3.2	1/8	3.2
89-7230	3/4	19.1	3/8	9.5	5/32	4	1/8	3.2

公差值 L、W、T允许偏差同C42页

焊接式硬质合金刀片使用说明

1 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。

2 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。

3 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，使焊料与合金焊接面充分接触，无缺焊现象。

4 对焊接用熔剂的要求：

建议采用工业硼砂，在使用前应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钝时，必须进行重磨，重磨后的刀具，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。

A guide to the applications of cemented carbide brazed tips

1 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.

2 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 carbulization 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.

3 There are requirements for the welding materials

In order to endure the toughness of the welding, a suitable welding 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.

4 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 l-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.

刀具寿命的修正参数
CORRECTION FACTOR FOR THE LIFETIME OF TOOLS

1 在切削加工中，为了进一步提高刀具的使用寿命，或者提高金属切除率，可以通过下表对刀具的寿命，及切削速度进行计算和调整：

In order to further increase the lifetime of the tools and the cutting efficiency, the lifetime of the tools and cutting speeds can be calculated & adjusted based on the following table:

刀具寿命（分） Lifetime of tools(min)	10	15	20	25	30	45	60
校正系数 Correction factor	1.11	1.0	0.93	0.87	0.81	0.72	0.66

例如：如果推荐切削速度Vc=214m/min，那么当需保证刀具寿命45分钟时，其计算切削速度为
14x0.72=154m/min
注：当增加进给量时，要根据表中推荐的切削参数应适当降低切削速度。

Example: If the recommended cutting speed is Vc=214mm/min. the cutting speed can be calculated by the formula 214x0.72=154m/min to ensure a lifetime of 45 minutes for the tool
Note: When the feed is increased. the cutting speed should be suitably decreased as per the recommended cutting parameters in the table.

2 工件材料硬度(HB)与切削速度修正系数,如果工件材料的硬度值与表中的硬度值有差异，那么切削速度应乘以表中的修正系数。

The correcion factor of the hardness of the workpiece(HB)and the cutting speed.If the value of hardness of the workpiece is differs from he value of hardness in the table, then the cutting speed should be multiplied by the correction factor.

ISO 分类	HB	-60	-40	-20	0	+20	+40	+60	+80	+100
P	180	1.44	1.25	1.11	1.0	0.91	0.84	0.77	0.72	0.67
M	180	1.42	1.24	1.11	1.0	0.91	0.84	0.78	0.73	0.68
K	200	1.10	1.13	1.06	1.0	0.95	0.90	0.86	0.82	0.79

例如：如用YT14合金刀片切削硬度值HB180的GCr15钢时其切削参数为：Vc=150m/min、f=0.2mm/r、ap=2.0mm. 那么在给定的硬度值HB180与HB200间的差值是+20. 此时表中的值正系数是0.91，那么HB200的调整切削速度应为：150m/minX0.91=136.5m/min.

Example: If inserts of grade YT14 are used to machining GCr15 steel with a hardness of Hb180 & the cutting parameters are: Vc=150mm. min. f=0.2mm. ap=2.0mm. then difference between the given hardness value of HB180 and HB200 is +20. The correction factor in the table is 0.91 and the adjusted cutting speed shall be : 150m/min.x0.91=136.5m/min .

钢材对照表 COMPARISON TABLE OF STEEL

材料类别 Material category	中国	美国		法国	德国	日本	英国
	GB	SAE	AISI	NF	DIN	JIS	B.S
优质碳素结构钢 Super quality carbon structuralsteel							
	05F	1006	C1006				En2A/1
	08	1008	C1008			S9CK	En2A/1
	08F	1006	C1006			SPCH1	En2A
	10	1010	C1012	XC10	C10,CK10	S10C	En2A
	10F	1010	C1010			SPH2	En2E
	15	1015	C1015	XC12	C15,CK15	S15C	En2B
	15F						En3A
	20	1020	C1020	XC18	C20,C22	S20C	En2C
	20F	1020	C1020			SPH3	En3
	25	1025	C1025		C25	S25C	En4
	30	1030	C1030	XC32		S30C	En8A
	35	1035	C1035	XC35	C35,CK35	S35C	En6
	40	1040	C1040	XC42		S40C	En8D
	45	1045	C1045	XC45	C45,CK45	S45C	En43J
	50	1050	C1050	XC48	C50,CK53	S50C	En9K
	55	1055	C1055	XC55	Cf56	S55C	En43D
	60	1060	C1060		C60,DK60		En42B
	65	1065	C1065	XC65	CK67		En42C
	70	1070	C1070	XC70	CK70		En42T
	75	1074	C1074		C75		En32B
	80	1078	C1078	XC80			En3C
	85	1085	C1085				En3B
	15Mn	1016	C1016				En5
	20Mn	1022	C1022				
	25Mn	1026	C1026				En8
	30Mn	1033	C1033				En43B
	35Mn	1037	C1037				En43A
	40Mn	1039	C1039		40Mn4		
	45Mn	1046	C1046				
	50Mn	1050	C1050				
弹簧钢 Spring steel							
	65Mn	1055	1055				En49A
	55MnSi				53MnSi4		
	55SiMn	6254	6254		55Si7		
	60SiMn				65SiMn5		
	55Si2Mn	9255	9255	55S6	55Si7		En45
	60SiMnA	9260	9260		65Si7	SUP7	En45A
	63Si2MnA				66Si7		
	60Si2CrA	9262	9262		67SiCr5		
	50CrMn					SUP9	
	50CrVA	6150	6150	50CV4	50CrV4	SUP10	En47,En50
	50CrMnVA						

钢材对照表 COMPARISON TABLE OF STEEL

材料类别 Material category	中国	美国		法国	德国	日本	英国
	GB	SAE	AISI	NF	DIN	JIS	B.S
合金结构钢 Alloy structural steel	20Mn2	1024,1320	C1024,1320		20M5		En14A
	30Mn2	1330	1330	32M5	30M5		
	35Mn2	1335,1036	1335,C1036	35M5	36M5		En15
	40Mn2	1340,1041	1340,C1041	40M5			En15B
	45Mn2	1345,1047	1345,C1047	45M5	46Mn7		
	50Mn2	1052	C1052				
	42Mn2V				42MnV7		
	15Cr	5115	5115	12C3	15Cr3	Scr21	
	20Cr	5120	5120	13C3		Scr22	En207
	30Cr	5130	5130	32C4	34Cr4	Scr2	En18A
	40Cr	5140	5140	38C4	41Cr4	Scr4	En18
	45Cr	5145	5145	45C4		Scr5	
	50Cr	5150	5150			Scr5	En48
	38CrSi						
	20CrMn	5120	5120	20MC5	20MnCr5		
	40CrMn	5140	5140				
	25CrMnSi						
	30CrMnSi						
	35CrMnSi						
	20CrV	6120	6120	18CV4			
	40CrV	6140	6140	40CV4	42CrV6		
	50CrV	6150	6150	50CV4	50CrV4		En50,En47
	18CrMnTi						
	30CrMnTi						
	16Mo	4015	4015		14Mo3		
	12CrMo			12CD4	13CrMo14		
	15CrMo			12CD4	16CrMo4	SCM21	
	20CrMo	4120	4120	20CD4	20CrMo5	SCM22	
	30CrMo	4130	4130			SCM2	
	35CrMo	4135	4135	35CD4	34CrMo4	SCM3	En19B
	42CrMo	4142	4142	42CD4	42CrMo5	SCM4	En19C
	38CrMoAl				32AlCrMo4		En41B
	40B	10B40					
	45B	10B45					
	40MnB	14B40					
	45MnB	14B45					
	20CrNi	3120	3120	20NG6	18CrNi3		En351
	40CrNi	3140	3140	35NC6	35NiCr6		
	12CrNi2	312	3125	10NG11	14NiCr10	SCM21	
	12CrNi3	3310	3310	14NG12	14NiCr14	SNC22	En36
	12Cr2Ni4	3312	3312	12NG15	14NiCr18		En39
	20CrNi3				22NiCr14		
	20Cr2Ni4	3316,3320	3316,3320	20NC14	20NiCr14		
	30CrNi3	3325,3330	3325,3330	30NC15	28(36)NiCr10	SNC2	En30
	40CrNiMo	4340	4340	35NCD6	36CrNiMO4	SNCM3	En110

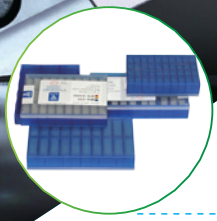
钢材对照表 COMPARISON TABLE OF STEEL

材料类别 Material category	中国	美国		法国	德国	日本	英国
	GB	SAE	AISI	NF	DIN	JIS	B.S
碳素工具钢 Carbon tools steel	T7,T7A	Y7,Y7A		XC56	C70W2,C70W1	SK7	
	T8,T8A	Y8,Y8A		XC85	C85W2,C35W1	SK6	
	T8Mn,T8MnA	Y8Mn,Y8MnA		80M8	C75W3		
	T9,T9A	Y9,Y9A		XC95	C90W3	SK5	
	T10,T10A	Y10,Y10A			C100W2,C100W1	SK4	
	T11,T11A	Y11,Y11A		XC110	C110W1	SK3	
	T12,T12A	Y12,Y12A		XC120	C115W2	SK2	
	T13,T13A	Y13,Y13A		XC150	C113W3	SK1	
合金工具钢 Alloy tools steel							
	6SiCr				60SiCr5		
	9SiCr				90SiCr6		
	SiCr				12SiCr5		
	4SiCrV				45SiCrV6		
	Cr2			150C6			
	Cr	L1		100C6	90Cr3		
	Cr36	W5			110Cr2	SKS8	
	9Cr2	L7		100C6	100Cr6		
	8Cr3						
	Cr12	D3		Z20012	210Cr46	SKD1	
	CrMn			80M8	145Cr6		
	5CrMnMo					SKT5	
	Cr2MnSi						
	CrW5	F3		120WC45-02		SKS1	
	Cr12W				210CrW46	SKD2	
	2Cr2W8V	H21		Z30WC09-03	30WCrW3411	SKD11	
	CrWMn			100WC15-04	105WCr6	SKS31	
	9CrWMn	O1		80M8	45WCrV77	SKS3	
	Cr12MoV	D2		Z200C12	165CrMoV46	SKD11	
	5CrW2Si	S1		45WC20-04	45WCrV77		
	6CrW2Si			45WC20-04	55WCrV7		
	4CrW2Si			40WCDS35-12	35WCrV7	SKS41	
	8CrV						
	Crv				115CrV3		
	5CrNiMo	L6		60NCDV06-02	56NiCrMoV7	SKT4	
	w	W2			120W4	SKS21	
	v			45WC20-04	100W1	SKS43	
	3W4CrSiV				30WCrV15		
	3W4Cr2V				30WCrV179	SKD4	

钢材对照表 COMPARISON TABLE OF STEEL

材料类别 Material category	中国	美国		法国	德国	日本	英国
	GB	SAE	AISI	NF	DIN	JIS	B.S
不锈钢与耐酸钢 Stainless steel&acid resistant steel	Cr13			Z6C13			En56A
	1Cr13	51410	410	Z12C13	X10Cr13	SUS21	En56B
	2Cr13	51403	103	Z20C13	X15Cr13	SUS22	En56C
	3Cr13	51420	420	Z30C13		SUS23	En56D
	4Cr13				X40Cr17		
	Cr14				GX25Cr14		
	Cr17	51430	430	Z8C17	X8Cr17	SUS24	En60
	9Cr18	51440C	440C		X90CrMnV18		
	Cr25Ti	51446	446				
	Cr17Ni2	51431	431	Z15CN16-2	X22CrNi17	SUS44	En57
	0Cr18Ni9	30304	304	Z6CN18-10	X5CrNi189	SUS28	En58E
	1Cr18Ni9	30302	302	Z12CN18-10	X12CrNi188	SUS27	En58A
	2Cr18Ni9			Z12CN18-10		SUS40	
	1Cr18Ni9Ti	30321	321	Z10CN18-10	X12CrNiTi189	SUS29	En58B
	Cr18Ni11Nb	30347	347	Z10CNNb18-10	X10CrNiTi1810	SUS43	En58F
	Cr18Ni12Mo2-Ti	30316	316	Z6CN18-12	GX5CrNi-Mo1713	SUS32	EnJ/En-53-H

防伪提示 Anti-forgery mention



可视化包装 采用塑料盒包装，上下盖为透明的塑料，底盒为蓝色，按片分格包装。

Visual packing: Adopt plastic package, it's a transparent plastic plate in both top and bottom of package, the bottom of package is blue and pack separately with each blank.

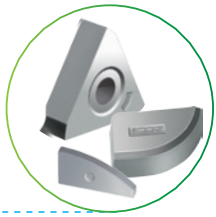
规范性标签 条形码标识；标有“钻石牌”商标企业标识。

Standardized label: batch number, marking "Diamond" trademark and "China famous brand trademark"



字模防伪 刀片上标有凹凸“ZCCT”或“Z”标识，直接压制成形。

Anti-forgery in mould die: Mark "ZCCT" and "Z" in mould die of inserts.





封口防伪 标签和封口贴粘贴在包装盒的接口处，一次性粘贴，撕开后不能再粘贴。

Heal defending against faIse: The label and seal can not paste again after the interface packing a box gets along, pastes, tears open for one time merely closely to sticky.



授权销售 请认准我公司在全国各地的“特约经销商”和“许可经销商”。

Authorized sales: Please contact with our "senior distributor" and "general distributor" in China.



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