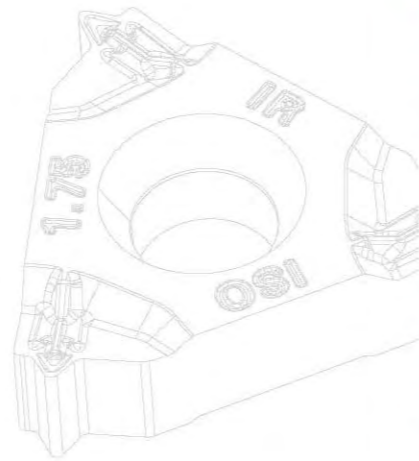
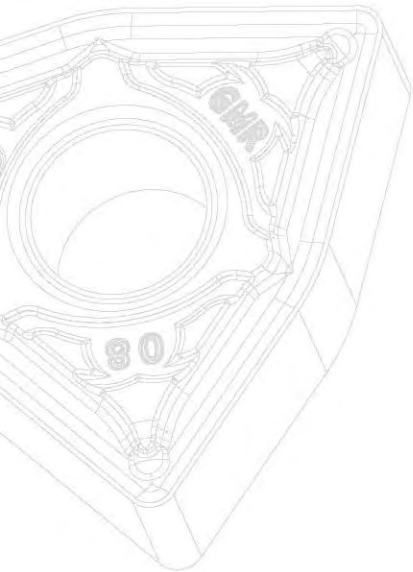


Ingenuity Quality ; Stable and Efficient .

► 匠心品质 稳定高效



KELITE  
综合产品目录

2024



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株洲科而诺新材料有限公司  
Zhuzhou Kerno Advanced Materials Co.,Ltd.

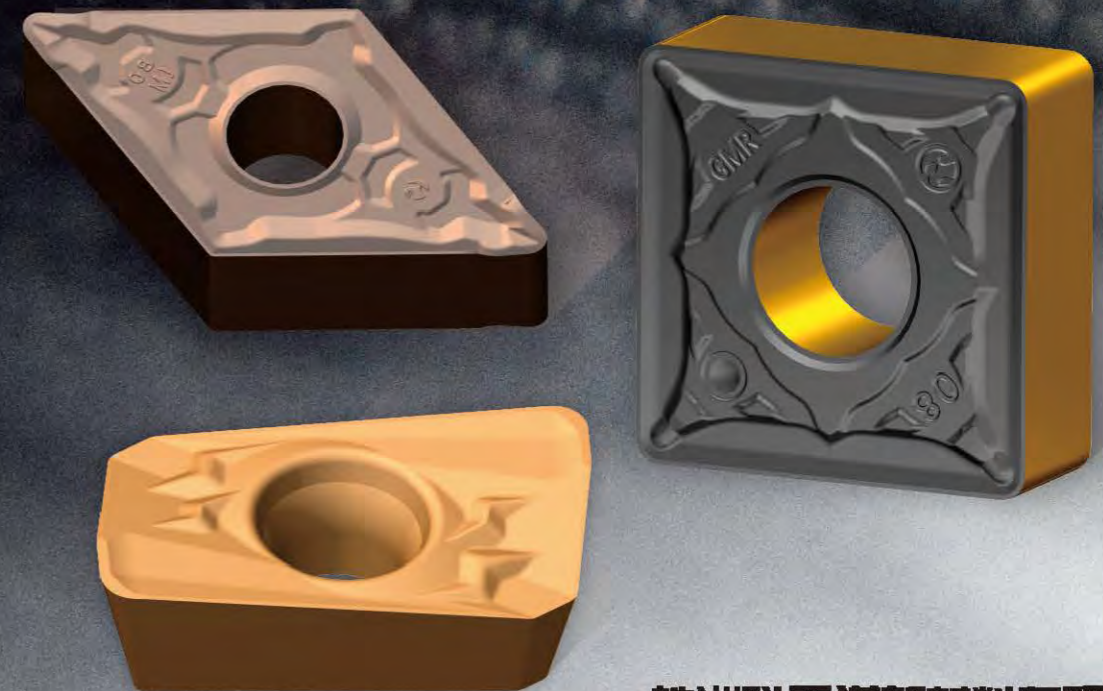
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Add: Building C4-A, Automobile Parts Industrial Park, Zhongda R.D,  
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2024



科力特切削刀具  
**PRODUCTS CATALOG**  
综合产品目录



株洲科而诺新材料有限公司  
Zhuzhou Kerno Advanced Materials Co.,Ltd.



为机械加工制造行业提供完备的刀具解决方案  
Provide complete tool solutions for the machining and manufacturing industry

# Company Profile

## 公司简介

株洲科而诺新材料有限公司坐落于中国硬质合金之乡—湖南省株洲市。公司成立于2021年9月，注册资本3亿元人民币，系苏州阿诺集团的全资子公司。2022年10月，山特维克集团投资阿诺的协议正式签署，双方在技术运营上开展合作，将进一步提升公司实力和产品竞争力。

公司前身为株洲科力特新材料有限公司，是国家专精特新小巨人企业、高新技术企业。经营18年间，一直致力于可转位数控刀片的研发和生产，产品类型覆盖数控车削、铣削、钻削、螺纹加工、切断切槽刀片，金属陶瓷刀片和棒材等，同时接受来图来样的非标产品定做，为机械加工制造行业提供完备的刀具解决方案。

经过多年的努力，公司拥有完善的质量控制体系、先进的技术生产实力以及强大的产品研发能力。株洲科而诺致力于实现高性能、高精度可转位数控刀片的国产化，为您提供最为优质的产品和服务！2022~2024年，株洲科而诺将投资5亿元建设阿诺株洲新材料产业园，产业园占地5.6万平方米，用于生产高性能、精密可转位数控切削刀片，项目建成后公司将具备年产8000万片数控刀片的生产能力。



办公大楼 Office Building

**世界领先**  
金属加工行业巨头  
山特维克集团旗下企业

**实力雄厚**  
国家专精特新小巨人企业  
高新技术企业

**技术先进**  
为机械加工制造行业  
提供完备的刀具解决方案



Zhuzhou Kerno Advanced Materials Co., Ltd is located in the hometown of Tungsten Carbide of China -- Zhuzhou City, Hunan Province. Founded in September 2021 with a registered capital of 300 million RMB, the company is a subsidiary of Suzhou Ahno Group. In October 2022, Sandvik Group officially signed an agreement to invest in Ahno Group, and two parties have been developing a cooperation in technology and operation ,which will further enhance the company's strength and product competitiveness.

The predecessor of our company is Zhuzhou Kelite Advanced Materials Co., Ltd., which has won the certificates of National Specialized and Sophisticated "Little Giant" High-tech Enterprise. In the past 18 years, we have been specializing in the production, R&D, and sales of indexable CNC carbide tools. Products including turning and milling inserts, hole machining inserts, threading inserts, parting & grooving inserts, cermet inserts and rods. Besides, we also make design and manufacture to the customized & non-standard products with drawings and samples, providing a complete solution for the machining and manufacturing industries. With years of persistent efforts, our team has perfect quality

control system, advanced technology production strength and strong product research & development capabilities. Zhuzhou Kerno is committed to realizing the localization of high-performance , high-precision indexable CNC Carbide Inserts with top quality products and good services!

From 2022 to 2024, Zhuzhou Kerno will invest 500 million RMB in the construction of Ahno Zhuzhou Advanced Materials Industrial Park, which covers 56,000 square meters, for producing high-performance, high-precision indexable CNC Carbide inserts. After completion of the project , our company will have an annual production capacity of 80 million pieces of CNC carbide inserts.



标准厂房 Standard Workshop

# Company Development

## History 发展历程

Ingenuity Quality, Stable and Efficient.  
匠心品质 稳定高效

### 2005年

株洲科力特新材料有限公司成立，  
注册资金人民币50万元，  
地址位于株洲市荷塘区中南机电工业园内

**In 2005:**  
Located in Zhongnan Electromechanical Industrial Park,  
Hetang District, Zhuzhou City,  
Zhuzhou Kelite Advanced Materials co., Ltd. was founded  
with a registered capital of RMB 500,000.

### 2009年

以“科力特”及Logo注册自主品牌商标；  
获批科技部创新基金项目

**In 2009:**  
We registered our own brand “Kelite” trademark and logo,  
and was approved innovation fund project of  
ministry science and technology.

### 2012年

公司搬迁至  
株洲市天元区中达路汽配园内，  
完成主要生产设备的升级和扩产

**In 2012:**  
Our company moved to Automobile Parts  
Industrial Park, Zhongda Road , Tianyuan District,  
Zhuzhou City, at the same time, we completed  
the upgrading of main equipment  
and expanded production line.

### 2015年

引进国内第一台进口  
多向成型电动压机，用于生产高性能  
可转位数控刀片

**In 2015:**  
Imported full automatic multi-directional  
forming electric press machine from Switzerland to  
produce high-performance indexable  
CNC carbide inserts. at that time,  
it was the first imported full automatic press  
equipment in China.

### 2018年

调整总体战略布局，  
增加投产产区，完成分厂的开工投产，  
用于模具制作和周边磨制

**In 2018:**  
Adjusted the overall strategic layout and  
increased the production area ,  
completed the start up and production of the  
branch factory, which is used for mold making  
and peripheral grinding.

### 2021年

21年7月，构建新事业部-PVD涂层，提升产能产量，  
完善生产线布局  
21年9月，与阿诺集团合并，成立“株洲科而诺新材料有限公司”  
注册资金人民币3亿元，公司业绩首次突破亿元销售额。

**In 2021:**  
In July 2021, we built a new business department -PVD coating center,  
to increase production capacity and improve production line layout.  
In September 2021, merged with Ahno Group,  
we founded “Zhuzhou Kerno Advanced Materials Co., Ltd.”  
with a registered capital of 300 million RMB . Our company's  
sales performance exceeded 100 million RMB for the first time.

### 2023年

新马工业园阿诺株洲新材料产业园项目  
开工建设，占地面积82亩，预计年底投  
产使用

**In 2023:**  
Ahno Zhuzhou New Materials Industrial Park project  
in Xinma Industrial Park is under construction,  
covering an area of above 56,000 square meters  
and is expected to be operation  
by the end of this year.

### 2022年

22年7月，公司荣获国家级专精特新“小巨人”企业  
等多项奖项  
22年10月，公司与山特维克缔结战略合作关系，  
聚焦发力硬质合金行业。  
22年11月，公司构建新事业部-CVD涂层，稳产保链、  
布局多条新产线，完善产业链结构

**In 2022:**  
In July 2022, our company won many awards such as National  
Specialized and Sophisticated “Little Giant” enterprises.  
In October 2022, our company established a strategic  
cooperation relationship with Sandvik , together focusing on  
the cemented carbide industry.  
In November 2022, we built a new business department - CVD  
coating center and ensure stable production line and chain  
maintenance; several new production lines laid out and improved  
the industrial chain structure.

## A

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高温合金车削	Superalloy Turning Inserts	086
铸铁车削	General Turning Inserts for Cast Iron	099
铝合金车削	General Turning Inserts for Aluminum	115
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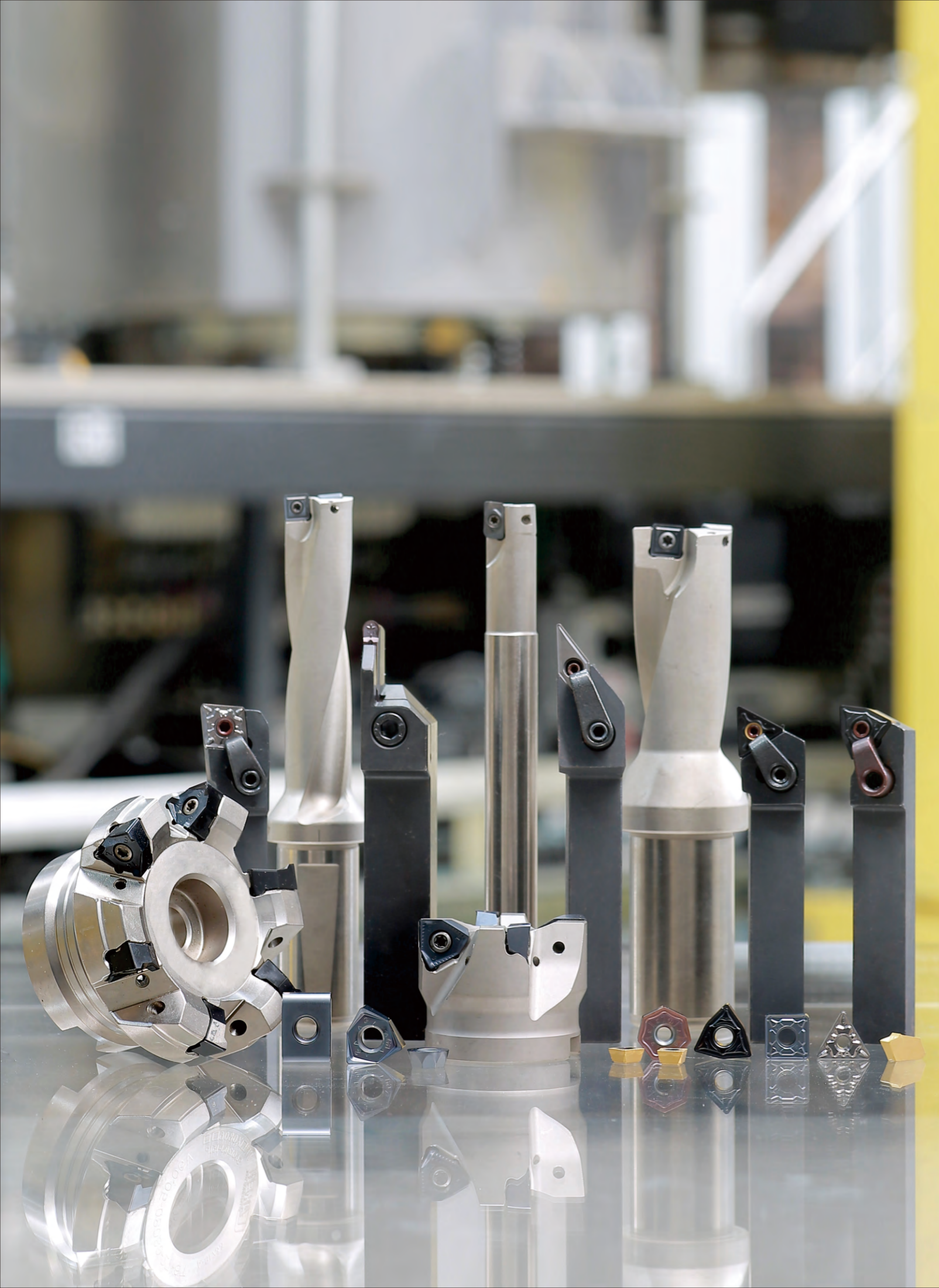
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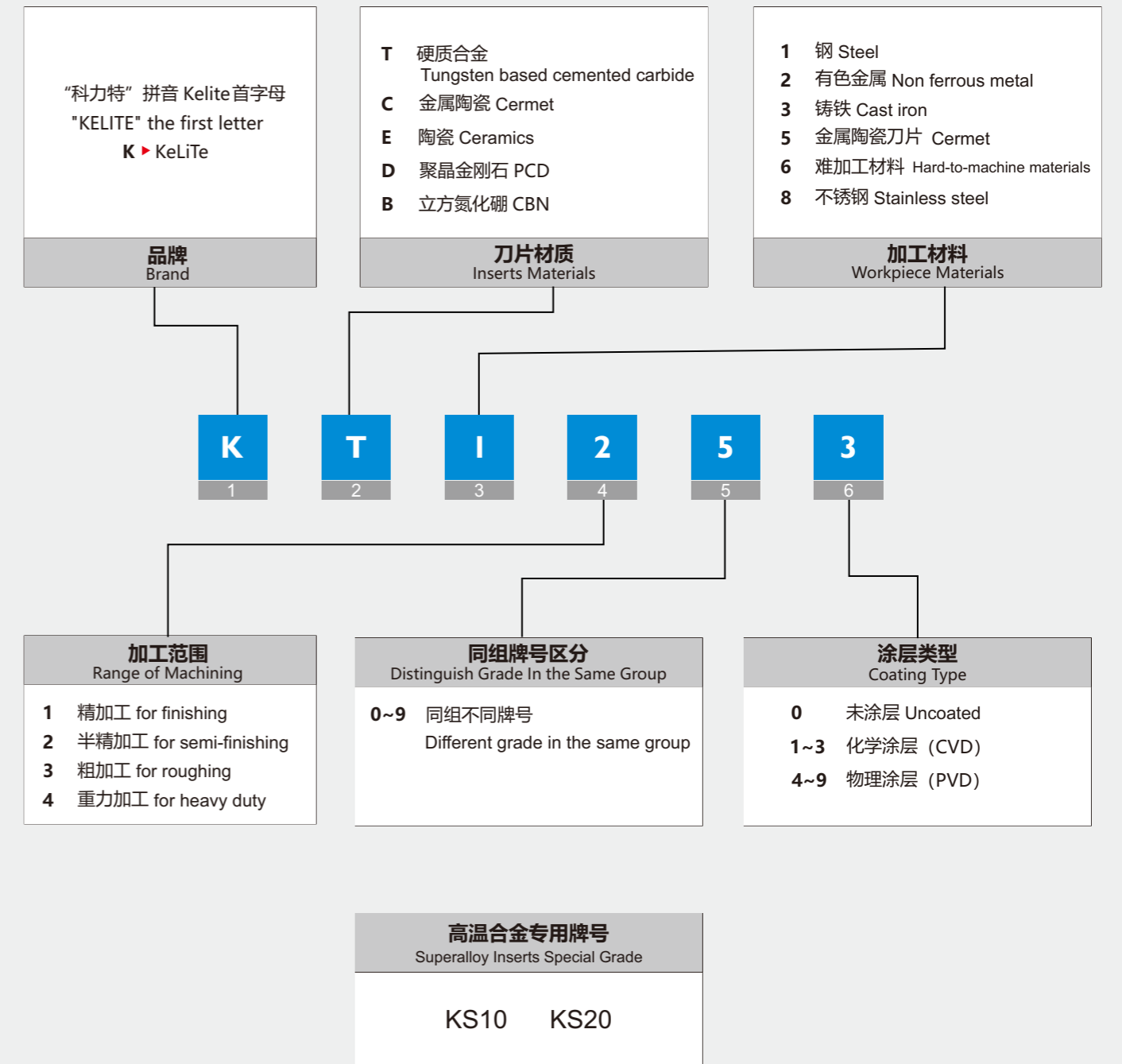
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## 科力特牌号命名规则

## Inserts Grade Naming Rules



## 新品推出

New Products Launches

# MJ (射手系列)

不锈钢、耐热合金精加工槽型，刀尖自带刃倾角，  
使得切削轻快，卷屑变得更容易。

变截面槽型设计，小切深下可实现良好断屑，  
较大切深时刀片强度高，去除黑皮时可保护刀尖。

## MJ (Archer series)

Chipbreaker for the finishing processing of stainless steel & heat-resistant alloy, the design of inclination angle on the tip of insert, makes the cutting light and faster, and curling chips become easier.

With its variable cross-section design, good chip breaking can be achieved at small depth of cut, meanwhile got well strength at large depth of cut, protect the tip of the insert when removing surface metal layer.



## 新品推出

New Products Launches

# MB (蝎子系列)

变截面槽型，独特的刃倾角刃线结构，

可完美控制铁屑的流向，断屑台部位的“筋须”通过切屑模拟  
控制设计，可实现0.5~3.5mm宽广切深范围覆盖，

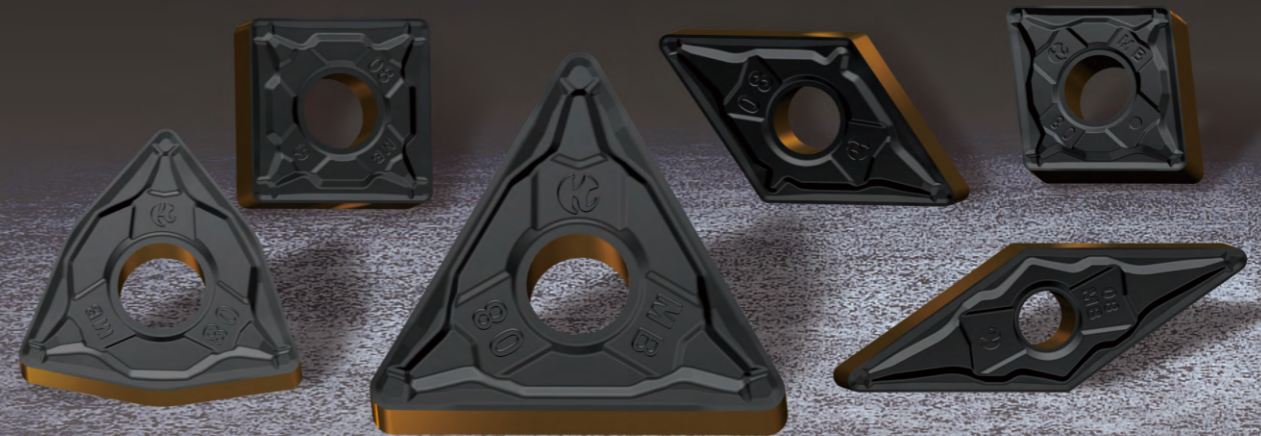
良好刃型结构设计可实现P、M、K三大类材料通用加工。

## MB (Scorpion series)

Chipbreaker for the general processing of P, M and K materials.

It has variable cross-section design, and unique inclination angle & edge line structure, which makes perfect control of the flow direction of iron chippings and shavings.

The "beard" of the chipbreaker is designed through chip simulation control, which can cover a wide range of depth of cut from 0.5 to 3.5mm.

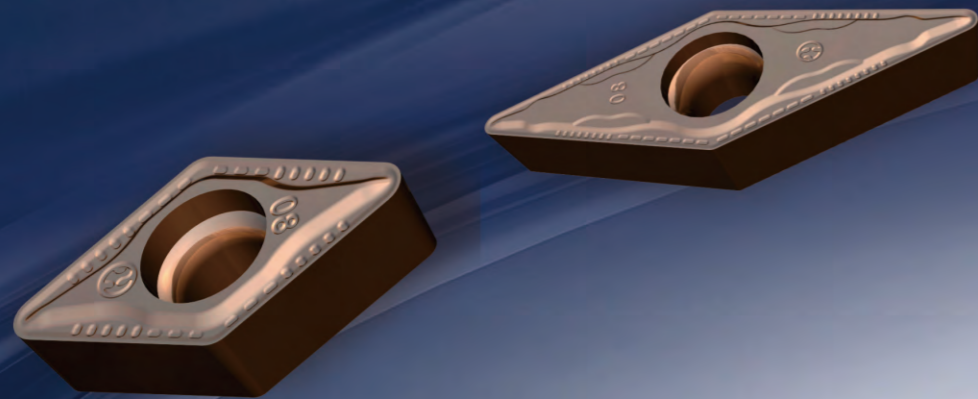


## 新品推出

New Products Launches

### GM系列

作为原内孔车削PMK槽型的升级版，  
改良的刃型结构和断屑设计，使其切削力降低，排屑效果  
优异，大幅提升刀片的应用范围和使用寿命。



### GM (PMK Upgrade Series)

As an upgraded version of the original internal hole turning PMK chipbreaker, the improved cutting edge structure and chip breaking design reduce the cutting force, excellent chip removal effect, greatly improve the application range and service life of the insert.



## 新品推出

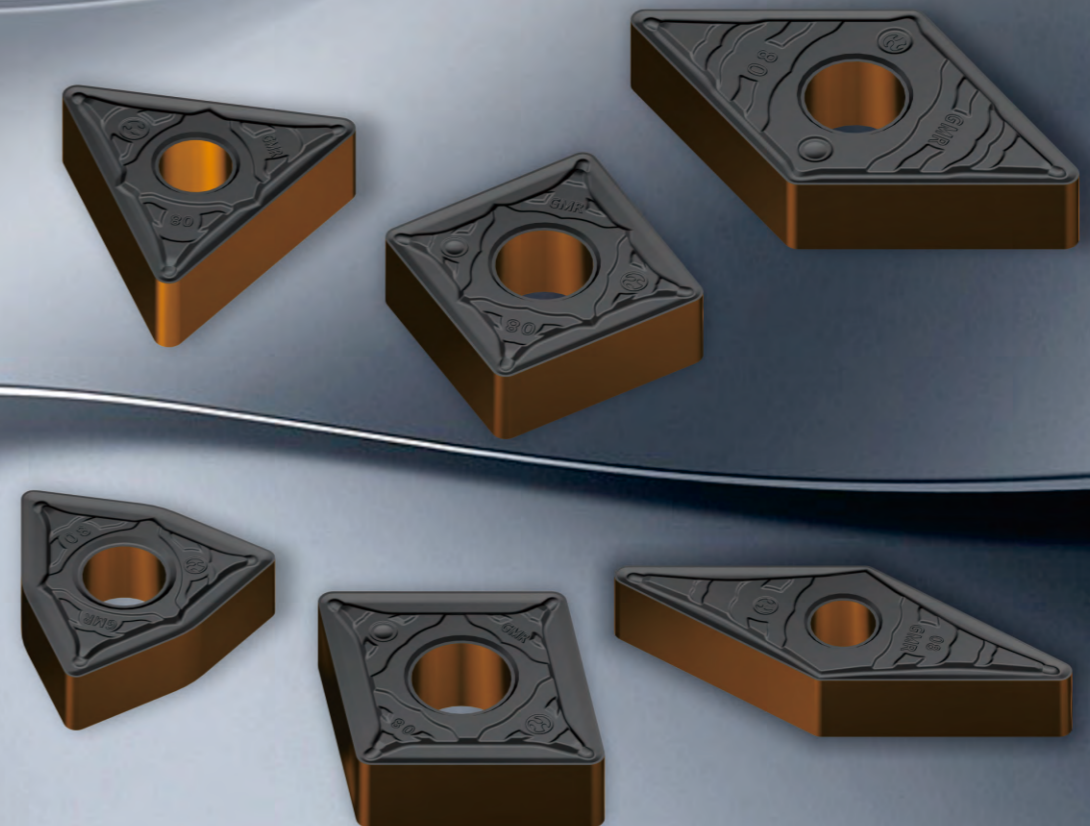
New Products Launches

### GMR (神弓系列)

P、M、K三大类材料通用半精加工，其槽型专门  
针对国内工况进行针对性设计，刃口结构兼顾锋利和强度，  
可实现一个很宽的切深范围覆盖，断屑效果优异，  
稳定工况和不稳定工况均可胜任。

### GMR (Magical Bow Series)

P, M, K three major types of materials general semi-finishing, the chipbreaker is specially designed for domestic working conditions, cutting edge structure balanced sharpness and strength. It can achieve a wide range of cutting depth, excellent chip breaking effect, stable working conditions and unstable working conditions both can be competent.





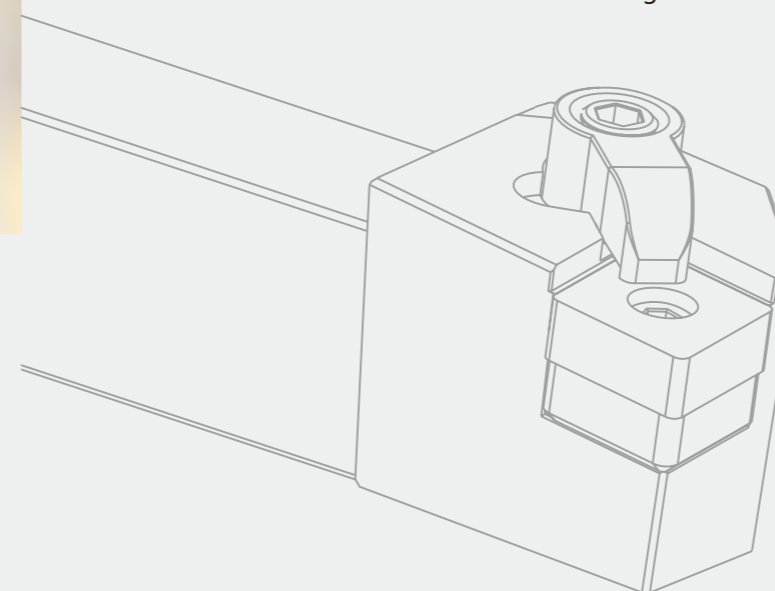
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## 车削刀片 Turning Inserts

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PCBN 刀片 PCBN Inserts	143
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## TURNING INSERTS

车削刀片

### 车削刀片牌号介绍

### Grade Informations

产品牌号 Grade	ISO	涂层类型 Types of Coating	涂层组成 Coating Composition	特点及应用 Features and Applications
KT1153	P10~P25	CVD 双色 Bicolor	MT-TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	1.梯度结构的高硬度专用基体, 结合中温TiCN和超细Al <sub>2</sub> O <sub>3</sub> 涂层, 刀片具备优异的耐磨性能。 2.适用于稳定工况下钢件的精加工, 连续车削, 追求高耐磨性场合。 1. Using the special high-hardness substrate of gradient structure, combined with medium temperature TiCN and ultra-fine Al <sub>2</sub> O <sub>3</sub> coating, it has excellent performance of wear resistance. 2. It is suitable for finishing processing and continuous turning of steel under stable working conditions and in pursuit of high wear-resistant occasions.
KT1253	P15~P35	CVD 双色 Bicolor	MT-TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	1.全新的纳米柱状结构MT-TiCN和厚Al <sub>2</sub> O <sub>3</sub> 涂层, 与韧性、强度兼备的中钴梯度硬质合金基体相结合。 2.适用于碳钢、合金钢等材料的半精加工到粗加工, 亦可用于断续加工, 是钢件车削加工的首选牌号。 1. Using new nano-columnar structure of MT-TiCN and thick Al <sub>2</sub> O <sub>3</sub> coating, combined with medium Cobalt gradient cemented carbide substrate with both toughness and strength. 2. It is suitable for semi-finishing to roughing processing of carbon steel, alloy steel and other materials. It can also be used for interrupted processing, and is the preferred grade for steel turning.
KT1373	P20~P40	CVD 双色 Bicolor	MT-TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	1.高韧性基体搭配合适厚度的MT-TiCN和Al <sub>2</sub> O <sub>3</sub> 涂层, 使得材质在强冲击力工况下仍能兼顾耐磨性和稳定性。 2.适用于碳钢、合金钢等材料的车削粗加工。 1. High toughness substrate with suitable thickness of MT-TiCN and Al <sub>2</sub> O <sub>3</sub> coating, which makes the material keep the wear resistance and stability under strong impact conditions. 2. It is suitable for roughing processing of carbon steel, alloy steel and other materials turning.
KT3221	P20~P35	CVD 黄色 Yellow	MT-TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	1.采用中钴含量的韧性硬质合金基体, 结合中温TiCN和厚的Al <sub>2</sub> O <sub>3</sub> 涂层, 具有优良的耐磨性和抗崩缺性能。 2.适用于软钢、低碳钢、低合金钢的广泛车削加工。 1. It uses medium Cobalt content tough cemented carbide substrate, combined with medium temperature TiCN and thick Al <sub>2</sub> O <sub>3</sub> coating, which has excellent performance of wear resistance and chipping resistance. 2. It is suitable for a wide range of turning of soft steel, low carbon steel and low carbon alloy steel.
KT2252	P15~P35; M10~M30	CVD 双色 Bicolor	MT-TiCN+Al <sub>2</sub> O <sub>3</sub>	1.采用中钴成分的高韧性梯度合金基体, 搭配细晶柱状TiCN和超细的薄的Al <sub>2</sub> O <sub>3</sub> 涂层, 具有优异的抗崩缺能力和高温强度。 2.适用于钢件、不锈钢材料的半精、粗车削加工, 亦可用于恶劣工况下的大切深、大进给加工。 1. Using high toughness gradient cemented carbide substrate with medium Cobalt content, matched with fine crystalline columnar TiCN and ultra-fine Al <sub>2</sub> O <sub>3</sub> coating, it has excellent performance of chipping resistance and high temperature resistance. 2. It is suitable for semi-finishing and roughing processing of steel and stainless steel turning. It can also be used for large depth of cut and large feed machining under severe working conditions.
KT1331	P25~P45	CVD 黄色 Yellow	MT-TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	1.采用良好韧性的高钴基体, 结合专用CVD涂层, 在强断续加工时稳定可靠。 2.适用于钢件的车削粗加工, 常用于刮管、去毛刺等应用场合。 1. Using high Cobalt content substrate with good toughness, combined with special CVD coating, it is stable and reliable in strong interrupted machining. 2. It is suitable for roughing processing of steel turning, and is commonly used in applications such as pipe scraping and burring.
KT3123	K10~K25	CVD 双色 Bicolor	MT-TiCN+Al <sub>2</sub> O <sub>3</sub>	1.高耐磨性细晶粒基体, 搭配细晶柱状中温TiCN和加厚Al <sub>2</sub> O <sub>3</sub> 涂层, 具有高的耐磨性和热稳定性。 2.适用于球墨铸铁的连续加工和高耐磨性场合, 尤其适合灰口铸铁的加工。 1. Using high wear resistance fine crystalline substrate, combined with the newly upgraded MT-TiCN and Al <sub>2</sub> O <sub>3</sub> coating, it has excellent performance of wear resistance and thermal stability. 2. It is suitable for continuous processing of nodular cast iron and high wear resistance occasions, especially applicable to the processing of gray cast iron.
KT3263	K15~K35	CVD 双色 Bicolor	MT-TiCN+Al <sub>2</sub> O <sub>3</sub>	1.中等晶粒的强韧性基体, 搭配全新升级的MT-TiCN和Al <sub>2</sub> O <sub>3</sub> 涂层工艺, 经特殊后处理工艺, 刃口强度高, 表面光滑。 2.适用于铸铁的半精加工到粗加工, 亦可用于断续切削, 是铸铁车削加工的首选牌号。 1. The strong and tough matrix of medium grain, combined with the newly upgraded MT-TiCN and Al <sub>2</sub> O <sub>3</sub> coating process, after special post-treatment process, has good cutting edge strength and smooth surface. 2. It is suitable for semi-finishing to roughing processing of cast iron, and can also be used for interrupted cutting. It is the preferred grade for cast iron turning.

### 车削刀片牌号介绍

### Grade Informations

产品牌号 Grade	ISO	涂层类型 Types of Coating	涂层组成 Coating Composition	特点及应用 Features and Applications
KT3126	M05~M25 S05~S25	PVD 灰黑色 Gray-black	TiAlN	1.高耐磨性的细晶粒低钴基体, 搭配通用性好的TiAlN涂层, 具有优异的耐磨性能。 2.适用于不锈钢、高温合金、钛合金等的连续精加工场合。 1. Using fine-grain low-cobalt substrate with high wear resistance, combined with high universality of TiAlN coating, it has excellent wear resistance. 2. It is suitable for continuous finishing of stainless steel, superalloy, titanium alloy, etc.
KT8204	M10~M25 S10~S25	PVD 古铜色 Copper	TiAlSiN	1.采用亚微晶粒的中钴基体, 搭配极高热稳定性的含硅PVD涂层, 具有耐磨性好, 耐高温性能优异的特点。 2.适用于不锈钢、高温合金、钛合金等的连续车削场合, 半精加工、偏精加工。 1. Using the submicron grain medium cobalt substrate, combined with silicon-containing PVD coating with extremely high thermal stability, the inserts have characteristics of good wear resistance and high temperature resistance. 2. It is suitable for continuous turning of stainless steel, superalloy, titanium alloy, etc, semi-finishing and partial finishing.
KT8206	P10~P25 M05~M25 S05~S25	PVD 灰黑色 Gray-black	TiAlN	1.采用亚微晶粒的中钴基体, 结合纳米结晶TiAlN涂层, 具有良好的强韧性和通用性能。 2.适用于合金钢、不锈钢、高温合金等的连续车削场合, 半精加工。 1. The submicron grain medium cobalt substrate combined with nanocrystal TiAlN coating, which makes it has high-toughness and good generality. 2. It is suitable for continuous turning of alloy steel, stainless steel, superalloy, semi-finishing.
KT8207	S15~S30	PVD 银色 Silver	TiB2	1.采用亚微晶粒的中钴基体, 搭配极具润滑性的纳米TiB2涂层, 具有提供优异的涂层附着能力, 极度光滑的涂层表面, 可有效避免积屑瘤的产生。 2.适用于钛合金的车削加工。 1. Using the submicron grain medium cobalt substrate, combined with strong lubricity of nano-TiB2 coating. The coating surface has excellent coating adhesion and is extremely smooth, which can effectively avoid the formation of debris accumulation. 2. It is suitable for turning titanium alloy.
KT8284	M15~M30 S15~S30	PVD 古铜色 Copper	TiAlSiN	1.中钴含量的细晶粒硬质合金基体, 结合热稳定性优异的TiAlSiN涂层, 兼具耐磨性和韧性, 且耐高温性能优异。 2.适用于不锈钢、耐热合金的半精车削加工。 1. The fine grain cemented carbide substrate with medium cobalt combined with excellent thermal stability of TiAlSiN coating, which makes inserts have good wear resistance and toughness, and excellent high temperature resistance. 2. It is suitable for semi-finishing turning of stainless steel and heat-resistant alloy.
KT8286	P15~P30 M15~M30 S15~S30	PVD 灰黑色 Gray-black	TiAlN	1.中钴含量的细晶粒硬质合金基体, 具有良好的刃口强度, 搭配全新的TiAlN涂层, 具有良好的耐磨和通用性能。 2.适用于合金钢、不锈钢等的半精车削加工, 是不锈钢车削加工的通用牌号。 1. Using medium cobalt fine-grained cemented carbide substrate with good edge strength, combined with the new TiAlN coating, it has both good wear resistance and generality. 2. It is applicable to semi-finishing turning of alloy steel, stainless steel, etc. and it is a general grade of stainless steel turning.
KT8296	P15~P30 M15~M30 S15~S30	PVD 灰黑色 Gray-black	TiAlN	1.较高耐磨性的细晶粒中钴基体, 搭配通用性好的TiAlN涂层, 具有良好的膜基结合力、耐磨性和抗氧化性能。 2.适用于合金钢、不锈钢、高温合金等的半精车削加工。 1. The fine-grain medium cobalt substrate with high wear resistance is match with high universality of TiAlN coating, it has good film-based adhesion, wear resistance and oxidation resistance. 2. It is suitable for semi-finishing turning of alloy steel, stainless steel, superalloy, etc.
KT8326	P20~P30 M20~M35	PVD 灰黑色 Gray-black	TiAlN	1.在韧性和耐磨性较高的硬质合金基体上, 沉积纳米TiAlN涂层, 具有优异的抗崩刃性, 加工稳定性好, 可获得了较好的刀具寿命。 2.适用于合金钢、不锈钢等的半精加工和切槽加工, 可用于断续车削加工。 1. Both high toughness and wear resistance of cemented carbide substrate is match with the deposition of nano-TiAlN coating, it has excellent edge collapse resistance, good processing stability and good tool life. 2. It is applicable to semi-finishing and grooving of alloy steel and stainless steel, and can be used for intermittent turning processing.

### 车削刀片牌号介绍

### Grade Informations

产品牌号 Grade	ISO	涂层类型 Types of Coating	涂层组成 Coating Composition	特点及应用 Features and Applications
KT8216	M10~M25 S10~S25	PVD 灰黑色 Gray-black	TiAlN	1. 采用中钴含量的亚微晶粒硬质合金基体, 搭配纳米结构的TiAlN涂层, 具有优异的涂层结合力, 高耐磨性和抗氧化性能。 2. 适用于不锈钢、高温合金的精加工, 小零件加工和螺纹加工。 1.The submicrograin cemented carbide matrix with medium Cobalt content combined with the nanostructures TiAlN coating, it has excellent coating adhesion, high wear resistance and oxidation resistance. 2. Suitable for finishing of stainless steel, high temperature alloy, small parts processing and thread processing.
KT6109	H05~H25	PVD 七彩色 Multiple-Color	AlTiCrSiN	1. 采用低钴含量的超细晶粒硬质合金基体, 搭配全新升级的纳米结构PVD涂层, 获得较强的涂层结合力、高耐磨性和高抗氧化性能。 2. 适用于淬硬钢的连续车削加工。 1.The ultra-fine grain cemented carbide matrix with low Cobalt content is used with the newly upgraded nanostructure PVD coating to obtain strong coating adhesion, high wear resistance and high oxidation resistance. 2.It is suitable for continuous turning processing of hardened steel.
KT6259	H15~H30	PVD 七彩色 Multiple-Color	AlTiCrSiN	1. 采用低钴含量的超细晶粒硬质合金基体, 结合优异性能的纳米结构PVD涂层, 具有优异的耐磨性和耐高温性能。 2. 适用于淬硬钢的车削半精加工, 轻断续加工场合。 1.The fine grain cemented carbide matrix with low Cobalt content is used, combined with excellent performance nanostructure PVD coating to obtain wear resistance and high temperature resistance. 2.It is suitable for turning semi-finishing of hardened steel, light intermittent processing occasions.
KC5280	P10~P25 M15~M25 K10~K25	无涂层 Uncoated	\	1. TiCN基金属陶瓷牌号, 细小弥散的硬质相颗粒、粘结相强化和环形相结构控制三者结合, 使之表现出优异的耐磨性、红硬性和抗月牙洼磨损性能。 2. 适用于钢件、不锈钢、铸铁等材料的精、半精加工。 1.TiCN-based cermet grade, fine dispersion hard phase particles, bonded phase reinforcement and annular phase structure control are combined to show excellent wear resistance, red hardness and crescent hole wear resistance. 2.It is suitable for finishing and semi-finishing of steel, stainless steel, cast iron etc.
KC5280L	P15~P25 M15~M25 K10~K25	无涂层 Uncoated	\	1. TiCN基金属陶瓷牌号, 特殊成分的添加, 在耐磨性不降低的前提下, 进一步增强了材质的抗弯强度和热稳定性, 极大地提高了金属陶瓷牌号的使用安全性。 2. 适用于钢件、不锈钢、铸铁等材料的精、半精加工。 1.TiCN-based cermet grade, the addition of special components, under the premise of no reduction in wear resistance, further enhances the bending strength and thermal stability of the material, and greatly improves the safety of the use of cermet grades. 2.It is suitable for finishing and semi-finishing of steel, stainless steel, cast iron etc.
KT3100	N05~N20	无涂层 Uncoated	\	1. 低钴的亚微晶粒硬质合金材质, 结合特殊的后处理工艺, 具有优异的耐磨性和抗黏结性。 2. 适用于有色金属的车削精加工。 1.Low Cobalt submicrograin cemented carbide grade, combined with a special post-treatment process, has excellent wear resistance and adhesion resistance. 2.It is suitable for turning finishing processing of non-ferrous metals.
KT3120	N10-N30	无涂层 Uncoated	\	1. 低钴含量的超细晶粒硬质合金材质, 结合特殊的后处理工艺, 具有优异的耐磨性和抗黏结性。 2. 适用于有色金属的车削加工。 1. The fine grain carbide grade with low cobalt content, combined with a special post-treatment process, has excellent wear resistance and adhesion resistance. 2.It is suitable for turning of non-ferrous metals.

### 车削产品牌号一览表

### Recommended Grade Table

工件材料 Workpiece materials	ISO代号 ISO Code	CVD	PVD	金属陶瓷 Cermet	硬质合金 Cemented carbide	超硬材料 Superhard materials
P	P01					
	P10	KT1153	KT8206	KC5280	KC5280L	
	P20	KT1253	KT8286			
	P30	KT1373				
	P40	KT3221				
M	M01					
	M10		KT3126	KC5280	KC5280L	
	M20	KT2252	KT8216			
	M30		KT8206			
	M40		KT8284			
K	K01					
	K10	KT3123		KC5280	KC5280L	
	K20	KT3263				
	K30					
N	N01					
	N10				KT3100	
	N20					KT3120
	N30					
S	S01		KT3126			
	S10		KT8204			
	S20		KT8206			
	S30		KT8296			
H	H01					
	H10		KT6109			
	H20					
	H30		KT6259			

普通车削刀片命名规则

General Turning Inserts Naming Rules

形状代号 Shape

T N M G I6 04 08 — MB

<b>A</b>	<b>B</b>	<b>C</b>
<b>D</b>	<b>E</b>	<b>H</b>
<b>K</b>	<b>L</b>	<b>M</b>
<b>O</b>	<b>P</b>	<b>R</b>
<b>S</b>	<b>T</b>	<b>T</b>
<b>V</b>	<b>W</b>	<b>Z</b>
		其它

断屑槽及夹固形式代号 Chip Breaker and Hole

T N M G I6 04 08 — MB

代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile	代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile
<b>B</b>	有(Y)	无(N)		<b>N</b>	无(N)	无(N)	
<b>H</b>	有(Y)	单面(S)		<b>R</b>	无(N)	单面(S)	
<b>C</b>	有(Y)	无(N)		<b>F</b>	无(N)	双面(D)	
<b>J</b>	有(Y)	双面(D)		<b>A</b>	有(Y)	无(N)	
<b>W</b>	有(Y)	无(N)		<b>M</b>	有(Y)	单面(S)	
<b>T</b>	有(Y)	单面(S)		<b>G</b>	有(Y)	双面(D)	
<b>Q</b>	有(Y)	无(N)		<b>X</b>			
<b>U</b>	有(Y)	双面(D)					

后角代号 Clearance Angle

T N M G I6 04 08 — MB

<b>A</b>	<b>B</b>
<b>C</b>	<b>D</b>
<b>E</b>	<b>F</b>
<b>G</b>	<b>N</b>
<b>P</b>	<b>O</b>
	其它后角 Others

精度代号 Tolerance

T N M G I6 04 08 — MB

代号 Symbol	刀片高度m 公差 (mm) m(mm)	内接圆φI.C 公差 (mm) d=I.C. (mm)	厚度S 公差 (mm) s (mm)	(参考) M级精度详细情况 (按形状、大小分) ●刀片高度公差(mm) (reference) M grade tolerance detail (according to shape, size.) Tolerance of insert nose height							
				内切圆 Inscribed Circle	正三角形 Regular Triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round	
				6.35	±0.08	±0.08	±0.08	±0.11	±0.16	...	
				9.525	±0.08	±0.08	±0.08	±0.11	±0.16	...	
				12.7	±0.13	±0.13	±0.13	±0.15	...	...	
<b>A</b>	±0.005	±0.025	±0.025	15.875	±0.15	±0.15	±0.15	±0.18	...	...	
<b>F</b>	±0.005	±0.013	±0.025	19.05	±0.15	±0.15	±0.15	±0.18	...	...	
<b>C</b>	±0.013	±0.025	±0.025	25.4	...	±0.18	...	...	...	...	
<b>H</b>	±0.013	±0.013	±0.013	●内切圆φI.C公差 (mm) ●Tolerance of Inscribed Circle							
<b>E</b>	±0.025	±0.025	±0.025	内切圆 Inscribed Circle	正三角形 Regular Triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round	
<b>G</b>	±0.025	±0.025	±0.13	6.35	±0.05	±0.05	±0.05	±0.05	±0.05		
<b>J</b>	±0.005	±0.05-±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05		
<b>K</b>	±0.013	±0.05-±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05	
<b>L</b>	±0.025	±0.05-±0.13	±0.025	12.7	±0.08	±0.08	±0.08	±0.08	...	±0.08	
<b>M</b>	±0.08-±0.18	±0.05-±0.13	±0.13	15.875	±0.1	±0.1	±0.10	±0.10	...	±0.1	
<b>N</b>	±0.08-±0.18	±0.05-±0.13	±0.025	19.05	±0.1	±0.1	±0.10	±0.10	...	±0.1	
<b>U</b>	±0.13-±0.38	±0.08-±0.25	±0.13	25.4	...	...	±0.13	...	...	±0.13	

普通车削刀片命名规则

General Turning Inserts Naming Rules

切削刃长度代号 Cutting Edge Length

T N M G I6 04 08 — MB

内切圆直径 Inscribed Circle diameter(mm)	刀片外形 Insert Shape							
	<b>C</b>	<b>D</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>V</b>	<b>W</b>	<b>K</b>
3.97					06			
5			05					
5.56					09			
6			06					
6.35	06	07			11	11		
8			08					
9.525	09	11	09	09	16	16	06	16
10			10					
12			12					
12.7	12	15	12	12	22	22	08	
15.875	16		15	15	27			
16			16	16				
19.05	19		19	19	33			
20			20					
25	25	25	25					
25.4			25	25				
31.75			31					
32			32					

刀片厚度代号 Thickness

T N M G I6 04 08 — MB

代号 Symbol	刀片厚度 Thickness(mm)
<b>00</b>	0.79
<b>T0</b>	0.99
<b>01</b>	1.59
<b>T1</b>	1.98
<b>02</b>	2.38
<b>T2</b>	2.58
<b>03</b>	3.18
<b>T3</b>	3.97
<b>04</b>	4.76
<b>T4</b>	4.96
<b>05</b>	5.56
<b>T5</b>	5.95
<b>06</b>	6.35
<b>T6</b>	6.75
<b>07</b>	7.94
<b>09</b>	9.52
<b>T9</b>	9.72
<b>11</b>	11.11
<b>12</b>	12.7

厚度指刀片底面与切削刃最高部分之间的高度  
The Height Between Insert Bottom And Nose

刀尖圆弧代号 Corner Radius

T N M G I6 04 08 — MB

代号 Symbol	刀尖圆弧半径 (mm) Corner Radius (mm)
<b>00</b>	无圆角
<b>02</b>	0.2
<b>04</b>	0.4
<b>08</b>	0.8
<b>12</b>	1.2
<b>16</b>	1.6
<b>20</b>	2
<b>24</b>	2.4
<b>32</b>	3.2
<b>X</b>	其它 Special

刀片直径尺寸mo (公制)  
Diameter Dimension

圆形刀片  
Round Insert

断屑槽型代号 Chip Breaker

T N M G I6 04 08 — MB

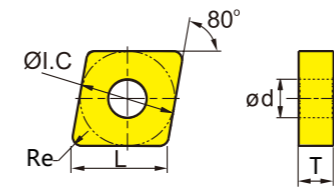
GMR	PMK	GM	PR
MJ	MF	GM	MM-B
GH	ZT		

Ingenuity Quality, Stable and Efficient.  
匠心品质 稳定高效

Turning Inserts - Negative  
CNMG / CNMA (80° Negative)

车削刀片 - 负角型  
CNMG/CNMA (80°负角型)

钢件车削 General Turning Inserts for Steel



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢	√	√	√	○	○	○	○	×	×	×	○	○	×	×	√							
M	不锈钢												√	√	√	○	○	○	×	×	×	√		
K	铸铁																					×	×	
N	有色金属																							
S	耐热合金、钛合金																						×	×
H	淬硬钢																							

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层							PVD涂层					金陶 Cermet								
		L	ØI.C	T	Ød	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284		KT8286	KT8288	KT8294	KT8296	KT8298	KC5280		
	CNMG090304-MB	9.7	9.525	3.18	3.81	0.4			●																●	●	●	
	CNMG090308-MB	9.7	9.525	3.18	3.81	0.8			●																	●	●	●
	CNMG120404-MB	12.9	12.7	4.76	5.16	0.4			●			▲														●	●	▲
	CNMG120408-MB	12.9	12.7	4.76	5.16	0.8			●			▲														●	●	▲
	CNMG120412-MB	12.9	12.7	4.76	5.16	1.2			●			▲														●	●	▲
	CNMG120416-MB	12.9	12.7	4.76	5.16	1.6			●			●														●	●	●
	CNMG160608-MB	16.1	15.875	6.35	6.35	0.8			●			●														●	●	●
	CNMG160612-MB	16.1	15.875	6.35	6.35	1.2			●			●														●	●	●
	CNMG160616-MB	16.1	15.875	6.35	6.35	1.6			●			●														●	●	●
	CNMG190608-MB	19.3	19.05	6.35	7.94	0.8			●			●														●	●	●
半精加工-精加工 Semi-finishing to Finishing	CNMG190612-MB	19.3	19.05	6.35	7.94	1.2			●		●															●	●	●
	CNMG190616-MB	19.3	19.05	6.35	7.94	1.6			●		●															●	●	●

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MB**

科学、合理的断屑筋须设计，具有非常好得断屑效果，可用于钢件的半精到精加工。

**GMR**

通用槽型，兼顾锋利性和强度，覆盖范围宽广，半精到粗加工槽型。

**PMK**

双面断屑槽，适合钢、不锈钢、铸铁等的内孔及外圆半精加工。

**PR**

超强碎屑能力，主要适用于产品的粗加工。

**通槽**

刃口强度高，适合半精加工。

**L/R-X**

大前角设计，适合粗加工。

# TURNING INSERTS FOR STEEL

## 钢件车削









**钢件车削** General Turning Inserts for Steel

产品 Inserts Shape	型号 Type	工件材料 Workpiece Material																											
		√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions																											
		P	M	K	N	S	H																						
	DNMG110404-GMR	√	√	√	○	○	○	×	×	×													○	○	×	×	√		
	DNMG110408-GMR										√	√	√	○	○	○	×	×	×	√								√	
	DNMG110412-GMR																												
	DNMG150404-GMR																												
	DNMG150408-GMR																												
	DNMG150412-GMR																												
	DNMG150604-GMR																												
	DNMG150608-GMR																												
	DNMG150612-GMR																												

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**钢件车削** General Turning Inserts for Steel

产品 Inserts Shape	型号 Type	工件材料 Workpiece Material																														
		√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions																														
		P	M	K	N	S	H																									
	DNMG110404-PMK	√	√	√	○	○	○	×	×	×																	○	○	×	×	√	
	DNMG110408-PMK										√	√	√	○	○	○	×	×	×	√											√	
	DNMG110412-PMK																															
	DNMG150404-PMK																															
	DNMG150408-PMK																															
	DNMG150412-PMK																															
	DNMG150604-PMK																															
	DNMG150608-PMK																															
	DNMG150612-PMK																															

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

<p><b>MB</b></p> <p>科学、合理的断屑筋须设计，具有非常好得断屑效果，可用于钢件的半精到粗加工。</p>	<p><b>GMR</b></p> <p>通用槽型，兼顾锋利性和强度，覆盖范围宽广，半精到粗加工槽型。</p>	<p><b>PMK</b></p> <p>双面断屑槽，适合钢、不锈钢、铸铁等的内孔及外圆半精加工。</p>
<p><b>PR</b></p> <p>超强碎屑能力，主要适用于产品的粗加工。</p>	<p><b>通槽</b></p> <p>刃口强度高，适合半精加工。</p>	<p><b>L/R-X</b></p> <p>大前角设计，适合粗加工。</p>

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Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

车削刀片 - 负角型  
DNMG / DNMA (55°负角型)

Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

车削刀片 - 负角型  
DNMG / DNMA (55°负角型)

钢件车削 General Turning Inserts for Steel

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)																											
		CVD涂层					PVD涂层													金陶 Cermet									
		L	ΦL.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KC5280				
	DNMG110404-PR	11.6	9.525	4.76	3.81	0.4	●	▲	●	▲																			
	DNMG110408-PR	11.6	9.525	4.76	3.81	0.8	●	▲	●	▲																			
	DNMG110412-PR	11.6	9.525	4.76	3.81	1.2	●	▲	●	▲																			
	DNMG150404-PR	15.5	12.7	4.76	5.16	0.4	●	▲	●	▲																			
	DNMG150408-PR	15.5	12.7	4.76	5.16	0.8	●	▲	●	▲																			
	DNMG150412-PR	15.5	12.7	4.76	5.16	1.2	●	▲	●	▲																			
	DNMG150604-PR	15.5	12.7	6.35	5.16	0.4	●	▲	●	▲																			
	DNMG150608-PR	15.5	12.7	6.35	5.16	0.8	●	▲	●	▲																			
DNMG150612-PR	15.5	12.7	6.35	5.16	1.2	●	▲	●	▲																				

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

钢件车削 General Turning Inserts for Steel

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)																											
		CVD涂层					PVD涂层													金陶 Cermet									
		L	ΦL.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KC5280				
	DNMG150604	15.5	12.7	6.35	5.16	0.4	●	▲	●	▲																			
	DNMG150608	15.5	12.7	6.35	5.16	0.8	●	▲	●	▲																			
	DNMG150612	15.5	12.7	6.35	5.16	1.2	●	▲	●	▲																			
	DNMG150616	15.5	12.7	6.35	5.16	1.6	●	▲	●	▲																			
	DNMG190608	19.3	15.875	6.35	7.94	0.8	●	▲	●	▲																			
	DNMG190612	19.3	15.875	6.35	7.94	1.2	●	▲	●	▲																			
	左右手 L/R	DNMG150604L/R-X	15.5	12.7	6.35	5.16	0.4	●	▲	●	▲																		
	DNMG150608L/R-X	15.5	12.7	6.35	5.16	0.8	●	▲	●	▲																			

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通用槽型，兼顾锋利性和强度，覆盖范围宽广，半精到粗加工槽型。

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双面断屑槽，适合钢、不锈钢、铸铁等的内孔及外圆半精加工。

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**通槽**

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**L/R-X**

大前角设计，适合粗加工。

Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

钢件车削 General Turning Inserts for Steel

		√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions																							
		尺寸 Dimensions (mm)						CVD涂层						PVD涂层						金陶 Cermat					
产品 Inserts Shape	型号 Type	L	ΦI.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KC5280
		工件材料 Workpiece Material		P	钢	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
		M	不锈钢													√	√	√	○	○	○	○	○	○	○
		K	铸铁																						
		N	有色金属																						
		S	耐热合金、钛合金																						
		H	淬硬钢																						

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层						PVD涂层						金陶 Cermat						
		L	ΦI.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KC5280	
	SNMG090304-MB	9.525	9.525	3.18	3.81	0.4			●	●					●								●	●	●	
	SNMG090308-MB	9.525	9.525	3.18	3.81	0.8			●	●					●									●	●	●
	SNMG090312-MB	9.525	9.525	3.18	3.81	1.2			●	●					●									●	●	●
	SNMG120404-MB	12.7	12.7	4.76	5.16	0.4			●	▲					●									●	●	▲
	SNMG120408-MB	12.7	12.7	4.76	5.16	0.8			●	▲					●									●	●	▲
	SNMG120412-MB	12.7	12.7	4.76	5.16	1.6			●	▲					●									●	●	▲
	SNMG120416-MB	12.7	12.7	4.76	5.16	1.6			●	●					●									●	●	●
	半精加工-精加工 Semi-finishing to Finishing	SNMG150608-MB	15.875	15.875	6.35	6.35	0.8			●	●					●								●	●	●
		SNMG150612-MB	15.875	15.875	6.35	6.35	1.2			●	●					●								●	●	●

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

钢件车削 General Turning Inserts for Steel

		√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions																							
		尺寸 Dimensions (mm)						CVD涂层						PVD涂层						金陶 Cermat					
产品 Inserts Shape	型号 Type	L	ΦI.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KC5280
		工件材料 Workpiece Material		P	钢	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
		M	不锈钢													√	√	√	○	○	○	○	○	○	○
		K	铸铁																						
		N	有色金属																						
		S	耐热合金、钛合金																						
		H	淬硬钢																						

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层						PVD涂层						金陶 Cermat						
		L	ΦI.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KC5280	
	SNMG120404-GMR	12.7	12.7	4.76	5.16	0.4			●						●								●	●	●	
	SNMG120408-GMR	12.7	12.7	4.76	5.16	0.8			●						●									●	●	●
	SNMG120412-GMR	12.7	12.7	4.76	5.16	1.2			●						●									●	●	●
	SNMG150608-GMR	15.875	15.875	6.35	6.35	0.8			●						●									●	●	●
	SNMG150612-GMR	15.875	15.875	6.35	6.35	1.2			●						●									●	●	●
	SNMG150616-GMR	15.875	15.875	6.35	6.35	1.6			●						●									●	●	●
	半精加工-粗加工 Semi-finishing to Roughing	SNMG190612-GMR	19.05	19.05	6.35	6.35	1.2			●						●								●	●	●
		SNMG190616-GMR	19.05	19.05	6.35	6.35	1.6			●						●								●	●	●

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

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<p><b>PR</b></p> <p>超强碎屑能力，主要适用于产品的粗加工。</p>	<p><b>通槽</b></p> <p>刃口强度高，适合半精加工。</p>	<p><b>L/R-X</b></p> <p>大前角设计，适合粗加工。</p>

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Turning Inserts - Negative
VNMG / VNMA (35° Negative)

车削刀片 - 负角型
VNMG / VNMA (35°负角型)

Turning Inserts - Negative
WNMG / WNMA (80° Trigonal Negative)

车削刀片 - 负角型
WNMG/WNMA (80° 桃形负角型)

钢件车削 General Turning Inserts for Steel

Table with 14 columns: Workpiece Material (P, M, K, N, S, H), Dimensions (L, ΦI.C, T, Φd, r), and Coatings (CVD, PVD, Cermet). Includes a diagram of the 35-degree insert.

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

Technical diagrams for MB, GMR, PMK, PR, 通槽, and L/R-X inserts, showing chip formation and application notes.

钢件车削 General Turning Inserts for Steel

Table with 14 columns: Workpiece Material (P, M, K, N, S, H), Dimensions (L, ΦI.C, T, Φd, r), and Coatings (CVD, PVD, Cermet). Includes a diagram of the 80-degree insert.

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Technical diagrams for MB, GMR, PMK, PR, 通槽, and L/R-X inserts, showing chip formation and application notes.



Turning Inserts - Negative  
WNMG / WNMA (80° Trigonal Negative)

车削刀片 - 负角型  
WNMG/WNMA (80° 桃形负角型)

钢件车削 General Turning Inserts for Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢	√	√	√	○	○	○	○	×	×	×	○	○	×	×	√	
	M	不锈钢											√	√	√	○	○	○
K	铸铁																	×
N	有色金属																	×
S	耐热合金、钛合金																	×
H	淬硬钢																	×

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层						PVD涂层						金陶 Cermet								
		L	ΦI.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284		KT8286	KT8288	KT8294	KT8296	KT8298	KC5280		
	WNMG060408-PMK	6.5	9.525	4.76	3.81	0.8			●																			
	WNMG060412-PMK	6.5	9.525	4.76	3.81	1.2			●																			
	WNMG080404-PMK	8.7	12.7	4.76	5.16	0.4			●																			
	WNMG080408-PMK	8.7	12.7	4.76	5.16	0.8			●																			
	WNMG060408-PR	6.5	9.525	4.76	3.81	0.8		●	●	●	●																	
	WNMG060412-PR	6.5	9.525	4.76	3.81	1.2		●	●	●	●																	
	WNMG080404-PR	8.7	12.7	4.76	5.16	0.4		●	▲	●	▲																	
	WNMG080408-PR	8.7	12.7	4.76	5.16	0.8		●	▲	●	▲																	
	WNMG080412-PR	8.7	12.7	4.76	5.16	1.2		●	▲	●	▲																	
	WNMG080416-PR	8.7	12.7	4.76	5.16	1.6		●	●	●	●																	

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

<p><b>MB</b></p> <p>科学、合理的断屑筋设计，具有非常好得断屑效果，可用于钢件的半精到粗加工。</p>	<p><b>GMR</b></p> <p>通用槽型，兼顾锋利性和强度，覆盖范围宽广，半精到粗加工槽型。</p>	<p><b>PMK</b></p> <p>双面断屑槽，适合钢、不锈钢、铸铁等的内孔及外圆半精加工。</p>
<p><b>PR</b></p> <p>超强碎屑能力，主要适用于产品的粗加工。</p>	<p><b>通槽</b></p> <p>刃口强度高，适合半精加工。</p>	<p><b>L/R-X</b></p> <p>大前角设计，适合粗加工。</p>

Turning Inserts - Negative  
WNMG / WNMA (80° Trigonal Negative)

车削刀片 - 负角型  
WNMG/WNMA (80° 桃形负角型)

钢件车削 General Turning Inserts for Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢	√	√	√	○	○	○	○	×	×	×	○	○	×	×	√	
	M	不锈钢											√	√	√	○	○	○
K	铸铁																	×
N	有色金属																	×
S	耐热合金、钛合金																	×
H	淬硬钢																	×

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层						PVD涂层						金陶 Cermet									
		L	ΦI.C	T	Φd	r	KT1151	KT1152	KT1153	KT1251	KT1252	KT1253	KT1371	KT1372	KT1373	KT8204	KT8206	KT8208	KT8284		KT8286	KT8288	KT8294	KT8296	KT8298	KC5280			
	WNMG080404	8.7	12.7	4.76	5.16	0.4		●	●	●	●																		
	WNMG080408	8.7	12.7	4.76	5.16	0.8		●	●	●	●																		
	WNMG080412	8.7	12.7	4.76	5.16	1.2		●	●	●	●																		
	WNMG080404L/R-X	8.7	12.7	4.76	5.16	0.4		●	●	▲	●																		
	WNMG080408L/R-X	8.7	12.7	4.76	5.16	0.8		●	●	▲	●																		
	WNMG080412L/R-X	8.7	12.7	4.76	5.16	1.2		●	●	●	●																		

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

<p><b>MB</b></p> <p>科学、合理的断屑筋设计，具有非常好得断屑效果，可用于钢件的半精到粗加工。</p>	<p><b>GMR</b></p> <p>通用槽型，兼顾锋利性和强度，覆盖范围宽广，半精到粗加工槽型。</p>	<p><b>PMK</b></p> <p>双面断屑槽，适合钢、不锈钢、铸铁等的内孔及外圆半精加工。</p>
<p><b>PR</b></p> <p>超强碎屑能力，主要适用于产品的粗加工。</p>	<p><b>通槽</b></p> <p>刃口强度高，适合半精加工。</p>	<p><b>L/R-X</b></p> <p>大前角设计，适合粗加工。</p>







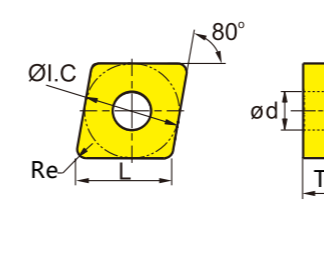
Ingenuity Quality, Stable and Efficient.

匠心品质 稳定高效

### Turning Inserts - Negative CNMG / CNMA (80° Negative)

### 车削刀片 - 负角型 CNMG/CNMA (80°负角型)

#### 不锈钢车削 General Turning Inserts for Stainless Steel



√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H	PVD涂层 Cermet																							
钢							○																							√
不锈钢		√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																														
有色金属																														
耐热合金、钛合金																														
淬硬钢																														

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						PVD涂层														金陶 Cermet									
		L	ØI.C	T	Φd	r		KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280				
 精加工 Finish Machining	CNMG090304-MF	9.7	9.525	3.18	3.81	0.4	●	●							●																
	CNMG090308-MF	9.7	9.525	3.18	3.81	0.8	●	●							●																
	CNMG120404-MF	12.9	12.7	4.76	5.16	0.4	●	▲							●																
	CNMG120408-MF	12.9	12.7	4.76	5.16	0.8	●	▲							●																
	CNMG120412-MF	12.9	12.7	4.76	5.16	1.2	●	●							●																
 精加工 Finish Machining	CNMG090304-MJ	9.7	9.525	3.18	3.81	0.4	●	●							●																
	CNMG090308-MJ	9.7	9.525	3.18	3.81	0.8	●	●							●																
	CNMG120404-MJ	12.9	12.7	4.76	5.16	0.4	●	●							●																
	CNMG120408-MJ	12.9	12.7	4.76	5.16	0.8	●	●							●																
	CNMG120412-MJ	12.9	12.7	4.76	5.16	1.2	●	●							●																

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

刀片部分

主切削刃部分

**MJ**

切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

刀片部分

主切削刃部分

**MM-B**

刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果，适用于半精偏精加工。

刀片部分

主切削刃部分

**L/R-M**

双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

刀片部分

主切削刃部分

**MB**

科学、合理的断屑筋设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

刀片部分

主切削刃部分

## TURNING INSERTS FOR STAINLESS STEEL

### 不锈钢车削



Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

车削刀片 - 负角型  
DNMG / DNMA (55°负角型)

Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

车削刀片 - 负角型  
DNMG / DNMA (55°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel



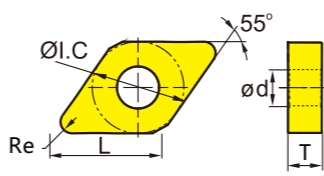
√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
P 钢																											√	
M 不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K 铸铁																												
N 有色金属																												
S 耐热合金、钛合金																												
H 淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
精加工 Finishing	DNMG110404-MF	11.6	9.525	4.76	3.81	0.4	●	●																			
	DNMG110408-MF	11.6	9.525	4.76	3.81	0.8	●	●																			
	DNMG110412-MF	11.6	9.525	4.76	3.81	1.2	●	●																			
	DNMG150404-MF	15.5	12.7	4.76	5.16	0.4	●	●																			
	DNMG150408-MF	15.5	12.7	4.76	5.16	0.8	●	▲																			
	DNMG150412-MF	15.5	12.7	4.76	5.16	1.2	●	●																			
	DNMG150604-MF	15.5	12.7	6.35	5.16	0.4	●	▲																			
	DNMG150608-MF	15.5	12.7	6.35	5.16	0.8	●	●																			
DNMG150612-MF	15.5	12.7	6.35	5.16	1.2	●	●																				

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

不锈钢车削 General Turning Inserts for Stainless Steel



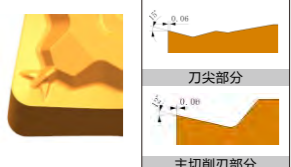
√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
P 钢																											√	
M 不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K 铸铁																												
N 有色金属																												
S 耐热合金、钛合金																												
H 淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
精加工 Finishing	DNMG110404-MJ	11.6	9.525	4.76	3.81	0.4	●	●																			
	DNMG110408-MJ	11.6	9.525	4.76	3.81	0.8	●	●																			
	DNMG110412-MJ	11.6	9.525	4.76	3.81	1.2	●	●																			
	DNMG150404-MJ	15.5	12.7	4.76	5.16	0.4	●	●																			
	DNMG150408-MJ	15.5	12.7	4.76	5.16	0.8	●	●																			
	DNMG150412-MJ	15.5	12.7	4.76	5.16	1.2	●	●																			
	DNMG150604-MJ	15.5	12.7	6.35	5.16	0.4	●	▲																			
	DNMG150608-MJ	15.5	12.7	6.35	5.16	0.8	●	▲																			
DNMG150612-MJ	15.5	12.7	6.35	5.16	1.2	●	▲																				

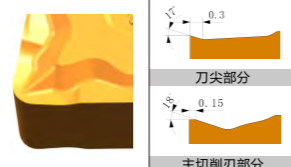
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**



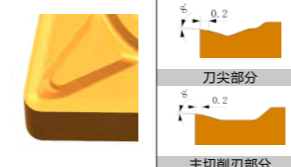
有效解决不锈钢小余量、粘刀等加工难点。

**MJ**



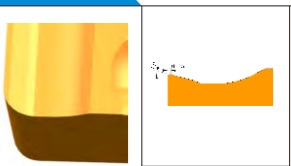
切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

**MM-B**



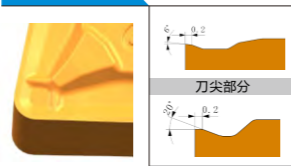
刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

**L/R-M**



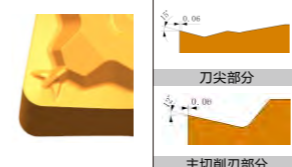
双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

**MB**



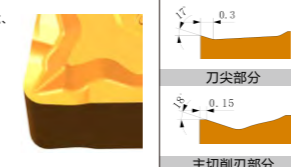
科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

**MF**



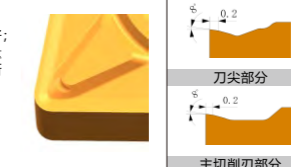
有效解决不锈钢小余量、粘刀等加工难点。

**MJ**



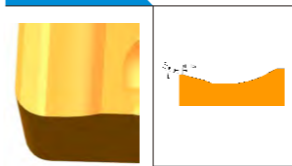
切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

**MM-B**



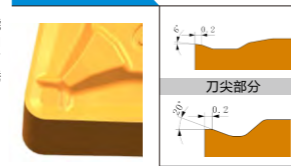
刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

**L/R-M**



双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

**MB**



科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

车削刀片 - 负角型  
DNMG / DNMA (55°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
钢																												√
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																												
有色金属																												
耐热合金、钛合金																												
淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet					
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280	
	DNMG110404-MM-B	11.6	9.525	4.76	3.81	0.4																						
	DNMG110408-MM-B	11.6	9.525	4.76	3.81	0.8																						
	DNMG110412-MM-B	11.6	9.525	4.76	3.81	1.2																						
	DNMG150404-MM-B	15.5	12.7	4.76	5.16	0.4																						
	DNMG150408-MM-B	15.5	12.7	4.76	5.16	0.8																						
	DNMG150412-MM-B	15.5	12.7	4.76	5.16	1.2																						
	DNMG150604-MM-B	15.5	12.7	6.35	5.16	0.4																						
	DNMG150608-MM-B	15.5	12.7	6.35	5.16	0.8																						
	DNMG150612-MM-B	15.5	12.7	6.35	5.16	1.2																						

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

车削刀片 - 负角型  
DNMG / DNMA (55°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
钢																												√
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																												
有色金属																												
耐热合金、钛合金																												
淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet					
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280	
	DNMG110404-MB	11.6	9.525	4.76	3.81	0.4																						
	DNMG110408-MB	11.6	9.525	4.76	3.81	0.8																						
	DNMG110412-MB	11.6	9.525	4.76	3.81	1.2																						
	DNMG150404-MB	15.5	12.7	4.76	5.16	0.4																						
	DNMG150408-MB	15.5	12.7	4.76	5.16	0.8																						
	DNMG150412-MB	15.5	12.7	4.76	5.16	1.2																						
	DNMG150604-MB	15.5	12.7	6.35	5.16	0.4																						
	DNMG150608-MB	15.5	12.7	6.35	5.16	0.8																						
	DNMG150612-MB	15.5	12.7	6.35	5.16	1.2																						

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet					
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280	
	DNMG150604L/R-M	15.5	12.7	6.35	5.16	0.4																						
	DNMG150608L/R-M	15.5	12.7	6.35	5.16	0.8																						

左右手 R/L

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

刀尖部分

主切削刃部分

**MJ**

切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

刀尖部分

主切削刃部分

**MM-B**

刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

刀尖部分

主切削刃部分

**L/R-M**

双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

主切削刃部分

**MB**

科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

刀尖部分

主切削刃部分

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

刀尖部分

主切削刃部分

**MJ**

切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

刀尖部分

主切削刃部分

**MM-B**

刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

刀尖部分

主切削刃部分

**L/R-M**

双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

主切削刃部分

**MB**

科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

刀尖部分

主切削刃部分



Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
P 钢																											√	
M 不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K 铸铁																												
N 有色金属																												
S 耐热合金、钛合金																												
H 淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
	SNMG090304-MF	9.53	9.525	3.18	3.81	0.4	●	▲																			
	SNMG090308-MF	9.53	9.525	3.18	3.81	0.8	●	▲																			
	SNMG090312-MF	9.53	9.525	3.18	3.81	1.2	●	▲																			
	SNMG120404-MF	12.7	12.7	4.76	5.16	0.4	●	▲																			
	SNMG120408-MF	12.7	12.7	4.76	5.16	0.8	●	▲																			
精加工 Finishing	SNMG120412-MF	12.7	12.7	4.76	5.16	1.2	●	▲																			
	SNMG150608-MF	15.9	15.875	6.35	6.35	0.8	●	▲																			
	SNMG150612-MF	15.9	15.875	6.35	6.35	1.2	●	▲																			

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**MJ**

切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

**MM-B**

刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

**L/R-M**

双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

**MB**

科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
P 钢																											√	
M 不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K 铸铁																												
N 有色金属																												
S 耐热合金、钛合金																												
H 淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
	SNMG090304-MJ	9.53	9.525	3.18	3.81	0.4	●	●																			
	SNMG090308-MJ	9.53	9.525	3.18	3.81	0.8	●	●																			
	SNMG120404-MJ	12.7	12.7	4.76	5.16	0.4	●	▲																			
	SNMG120408-MJ	12.7	12.7	4.76	5.16	0.8	●	▲																			
	SNMG120412-MJ	12.7	12.7	4.76	5.16	1.2	●	▲																			
	SNMG090304-MM-B	9.53	9.525	3.18	3.81	0.4		●					●	●													
	SNMG090308-MM-B	9.53	9.525	3.18	3.81	0.8		●					●	●													
	SNMG120404-MM-B	12.7	12.7	4.76	5.16	0.4		●					●	▲													
半精加工-精加工 Semi-finishing to Finishing	SNMG120408-MM-B	12.7	12.7	4.76	5.16	0.8		●				●	▲														
	SNMG120412-MM-B	12.7	12.7	4.76	5.16	1.2		●				●	▲														

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**MJ**

切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

**MM-B**

刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

**L/R-M**

双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

**MB**

科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
钢																											√	
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																												
有色金属																												
耐热合金、钛合金																												
淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
半精加工-粗加工 Semi-finishing to Roughing	SNMG120404-MB	12.7	12.7	4.76	5.16	0.4																					
	SNMG120408-MB	12.7	12.7	4.76	5.16	0.8																					
	SNMG120412-MB	12.7	12.7	4.76	5.16	1.2																					
	SNMG150612-MB	15.9	15.875	6.35	6.35	1.2																					
	SNMG150616-MB	15.9	15.875	6.35	6.35	1.6																					
左右手 R/L	SNMG120404L/R-M	12.7	12.7	4.76	5.16	0.4																					
	SNMG120408L/R-M	12.7	12.7	4.76	5.16	0.8																					
	SNMG120412L/R-M	12.7	12.7	4.76	5.16	1.2																					
	SNMG150608L/R-M	15.9	15.875	6.35	6.35	0.8																					

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

Turning Inserts - Negative  
TNMG / TNMA (60° Negative)

车削刀片 - 负角型  
TNMG / TNMA (60°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet											
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280	
钢																											√	
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																												
有色金属																												
耐热合金、钛合金																												
淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet					
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280	
精加工 Finishing	TNMG110304-MF	11	6.35	3.18	2.26	0.4																						
	TNMG110308-MF	11	6.35	3.18	2.26	0.8																						
	TNMG160404-MF	16.5	9.525	4.76	3.81	0.4																						
	TNMG160408-MF	16.5	9.525	4.76	3.81	0.8																						
	TNMG160412-MF	16.5	9.525	4.76	3.81	1.2																						
	TNMG220404-MF	22	12.7	4.76	5.16	0.4																						
	TNMG220408-MF	22	12.7	4.76	5.16	0.8																						
	TNMG220412-MF	22	12.7	4.76	5.16	1.2																						

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

<p><b>MF</b></p> <p>有效解决不锈钢小余量、粘刀等加工难点。</p>	<p><b>MJ</b></p> <p>切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。</p>	<p><b>MM-B</b></p> <p>刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。</p>
<p><b>L/R-M</b></p> <p>双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。</p>	<p><b>MB</b></p> <p>科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。</p>	

<p><b>MF</b></p> <p>有效解决不锈钢小余量、粘刀等加工难点。</p>	<p><b>MJ</b></p> <p>切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。</p>	<p><b>MM-B</b></p> <p>刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。</p>
<p><b>L/R-M</b></p> <p>双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。</p>	<p><b>MB</b></p> <p>科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。</p>	



Turning Inserts - Negative  
TNMG / TNMA (60° Negative)

车削刀片 - 负角型  
TNMG / TNMA (60°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet										
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280
P 钢																											√
M 不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K 铸铁																											
N 有色金属																											
S 耐热合金、钛合金																											
H 淬硬钢																											

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
	TNMG110304-MB	11	6.35	3.18	2.26	0.4																					
	TNMG110308-MB	11	6.35	3.18	2.26	0.8																					
	TNMG160404-MB	16.5	9.525	4.76	3.81	0.4																					
	TNMG160408-MB	16.5	9.525	4.76	3.81	0.8																					
	TNMG160412-MB	16.5	9.525	4.76	3.81	1.2																					
半精加工-粗加工 Semi-finishing to Roughing	TNMG220404-MB	22	12.7	4.76	5.16	0.4																					
	TNMG220408-MB	22	12.7	4.76	5.16	0.8																					
	TNMG220412-MB	22	12.7	4.76	5.16	1.2																					
	TNMG160404L/R-M	16.5	9.525	4.76	3.81	0.4																					
	TNMG160408L/R-M	16.5	9.525	4.76	3.81	0.8																					
	TNMG160412L/R-M	16.5	9.525	4.76	3.81	1.2																					

左右手  
R/L

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

<p><b>MF</b></p> <p>有效解决不锈钢小余量、粘刀等加工难点。</p> <p>刀尖部分</p> <p>主切削刃部分</p>	<p><b>MJ</b></p> <p>切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。</p> <p>刀尖部分</p> <p>主切削刃部分</p>	<p><b>MM-B</b></p> <p>刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果，适用于半精偏精加工。</p> <p>刀尖部分</p> <p>主切削刃部分</p>
<p><b>L/R-M</b></p> <p>双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。</p> <p>主切削刃部分</p>	<p><b>MB</b></p> <p>科学、合理的断屑筋须设计，具有非常好得断屑效果，可用于不锈钢的半精到精加工。</p> <p>刀尖部分</p> <p>主切削刃部分</p>	

Turning Inserts - Negative  
VNMG / VNMA (35° Negative)

车削刀片 - 负角型  
VNMG / VNMA (35°负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet										
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280
P 钢																											√
M 不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K 铸铁																											
N 有色金属																											
S 耐热合金、钛合金																											
H 淬硬钢																											

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
	VNMG160404-MF	16.6	9.525	4.76	3.81	0.4																					
	VNMG160408-MF	16.6	9.525	4.76	3.81	0.8																					
	VNMG160412-MF	16.6	9.525	4.76	3.81	1.2																					
精加工 Finishing	VNMG160404-MJ	16.6	9.525	4.76	3.81	0.4																					
	VNMG160408-MJ	16.6	9.525	4.76	3.81	0.8																					
	VNMG160412-MJ	16.6	9.525	4.76	3.81	1.2																					

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

<p><b>MF</b></p> <p>有效解决不锈钢小余量、粘刀等加工难点。</p> <p>刀尖部分</p> <p>主切削刃部分</p>	<p><b>MJ</b></p> <p>切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。</p> <p>刀尖部分</p> <p>主切削刃部分</p>	<p><b>MM-B</b></p> <p>刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果，适用于半精偏精加工。</p> <p>刀尖部分</p> <p>主切削刃部分</p>
<p><b>L/R-M</b></p> <p>双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。</p> <p>主切削刃部分</p>	<p><b>MB</b></p> <p>科学、合理的断屑筋须设计，具有非常好得断屑效果，可用于不锈钢的半精到精加工。</p> <p>刀尖部分</p> <p>主切削刃部分</p>	



Turning Inserts - Negative  
WNMG / WNMA (80° Trigonal Negative)

车削刀片 - 负角型  
WNMG/WNMA (80° 桃形负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

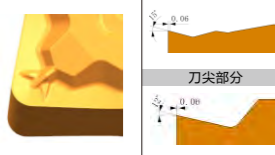
√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H
钢						
不锈钢	√	√	√	√	○	○
铸铁						
有色金属						
耐热合金、钛合金						√
淬硬钢						

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层												金陶 Cermet											
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295		KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280			
精加工 Finishing	WNMG06T304-MJ	6.5	9.525	3.97	3.81	0.4	●	●																						
	WNMG06T308-MJ	6.5	9.525	3.97	3.81	0.8	●	●																						
	WNMG06T312-MJ	6.5	9.525	3.97	3.81	1.2	●	●																						
	WNMG060404-MJ	6.5	9.525	4.76	3.81	0.4	●	●																						
	WNMG060408-MJ	6.5	9.525	4.76	3.81	0.8	●	●																						
半精加工-精加工 Semi-finishing to Finishing	WNMG060412-MJ	6.5	9.525	4.76	3.81	1.2	●	●																						
	WNMG080404-MJ	8.7	12.7	4.76	5.16	0.4	●	▲																						
	WNMG080408-MJ	8.7	12.7	4.76	5.16	0.8	●	▲																						
	WNMG080412-MJ	8.7	12.7	4.76	5.16	1.2	●	▲																						

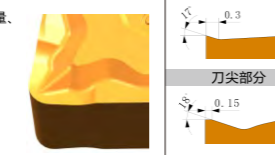
▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

### MF




有效解决不锈钢小余量、粘刀等加工难点。

### MJ



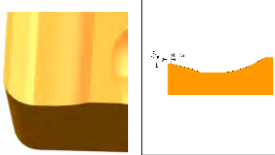
切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

### MM-B



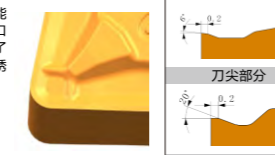
刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

### L/R-M



双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

### MB



科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

Turning Inserts - Negative  
WNMG / WNMA (80° Trigonal Negative)

车削刀片 - 负角型  
WNMG/WNMA (80° 桃形负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

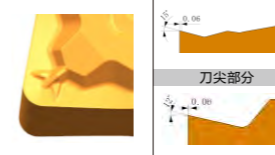
√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H
钢						
不锈钢	√	√	√	√	○	○
铸铁						
有色金属						
耐热合金、钛合金						√
淬硬钢						

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层												金陶 Cermet												
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295		KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280				
半精加工-粗加工 Semi-finishing to Roughing	WNMG060408-MM-B	6.5	9.525	4.76	3.81	0.8			●																						
	WNMG060412-MM-B	6.5	9.525	4.76	3.81	1.2			●																						
	WNMG080404-MM-B	8.7	12.7	4.76	5.16	0.4			●																						
	WNMG080408-MM-B	8.7	12.7	4.76	5.16	0.8			●																						
半精加工-粗加工 Semi-finishing to Roughing	WNMG060408-MB	6.5	9.525	4.76	3.81	0.8			●																						
	WNMG060412-MB	6.5	9.525	4.76	3.81	1.2			●																						
	WNMG080404-MB	8.7	12.7	4.76	5.16	0.4			●																						
	WNMG080408-MB	8.7	12.7	4.76	5.16	0.8			●																						
半精加工-粗加工 Semi-finishing to Roughing	WNMG080412-MB	8.7	12.7	4.76	5.16	1.2			●																						
	WNMG080416-MB	8.7	12.7	4.76	5.16	1.6			●																						


▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

### MF




有效解决不锈钢小余量、粘刀等加工难点。

### MJ



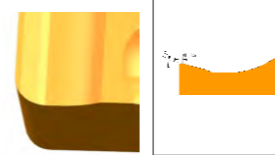
切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。

### MM-B



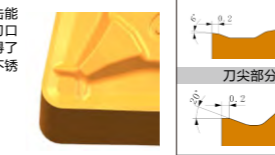
刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。

### L/R-M



双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。

### MB



科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。

Turning Inserts - Negative  
WNMG / WNMA (80° Trigonal Negative)


车削刀片 - 负角型  
WNMG/WNMA (80° 桃形负角型)

不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																金陶 Cermet										
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280
钢																											√
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																											
有色金属																											
耐热合金、钛合金																											
淬硬钢																											

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet					
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280	
	WNMG080404L/R-M	8.7	12.7	4.76	5.16	0.4																						
	WNMG080408L/R-M	8.7	12.7	4.76	5.16	0.8																						
	WNMG080412L/R-M	8.7	12.7	4.76	5.16	1.2																						

左右手 R/L

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

Turning Inserts - Positive  
CCMT / CCGT (80° Positive)

车削刀片 - 正角型  
CCMT/CCGT (80° 正角型)

不锈钢车削 General Turning Inserts for Stainless Steel

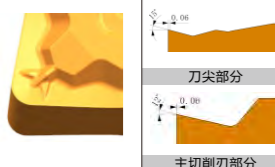
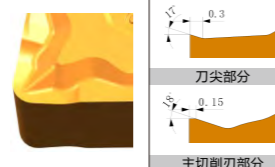
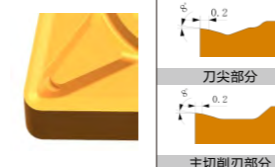
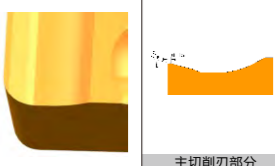
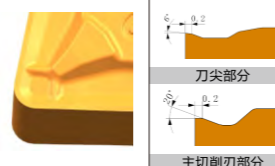
√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

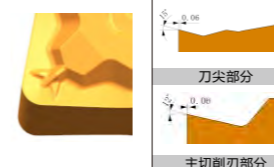
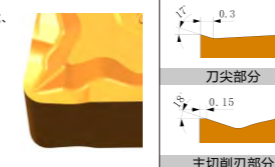
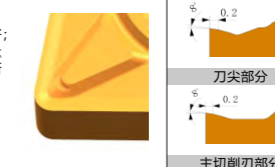
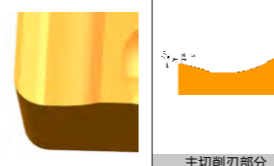
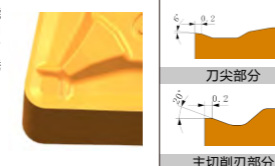
工件材料 Workpiece Material	PVD涂层																金陶 Cermet										
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288		KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280
钢																											√
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																											
有色金属																											
耐热合金、钛合金																											
淬硬钢																											

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																金陶 Cermet				
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056		KT8456	KT8318	KT8326	KC5280
	CCMT060202-MF	6.4	6.35	2.38	2.8	0.2																					
	CCMT060204-MF	6.4	6.35	2.38	2.8	0.4																					
	CCMT060208-MF	6.4	6.35	2.38	2.8	0.8																					
	CCMT09T302-MF	9.7	9.525	3.97	4.4	0.2																					
	CCMT09T304-MF	9.7	9.525	3.97	4.4	0.4																					
	CCMT09T308-MF	9.7	9.525	3.97	4.4	0.8																					
精加工 Finishing	CCMT120404-MF	12.9	12.7	4.76	5.56	0.4																					
	CCMT120408-MF	12.9	12.7	4.76	5.56	0.8																					
	CCMT120412-MF	12.9	12.7	4.76	5.56	1.2																					

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

<p><b>MF</b></p>  <p>有效解决不锈钢小余量、粘刀等加工难点。</p>	<p><b>MJ</b></p>  <p>切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。</p>	<p><b>MM-B</b></p>  <p>刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。</p>
<p><b>L/R-M</b></p>  <p>双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。</p>	<p><b>MB</b></p>  <p>科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。</p>	

<p><b>MF</b></p>  <p>有效解决不锈钢小余量、粘刀等加工难点。</p>	<p><b>MJ</b></p>  <p>切削刃锋利，阻力小；带刃倾角设计，导屑好；断屑台前移可在小余量加工状况下实现良好断屑。</p>	<p><b>MM-B</b></p>  <p>刀尖刃口同时兼具锋利性和强度。具有良好的排屑效果。适用于半精偏精加工。</p>
<p><b>L/R-M</b></p>  <p>双面断屑槽，抗冲击能力强。槽型设计在刃口安全性和锋利性取得了最佳平衡点，解决不锈钢粗加工等问题。</p>	<p><b>MB</b></p>  <p>科学、合理的断屑筋须设计，具有非常好得断屑效果。可用于不锈钢的半精到精加工。</p>	





## Turning Inserts - Positive DCMT / DCGT (55° Positive)

## 车削刀片 - 正角型 DCMT/DCGT (55° 正角型)

## Turning Inserts - Positive DCMT / DCGT (55° Positive)

## 车削刀片 - 正角型 DCMT/DCGT (55° 正角型)

### 不锈钢车削 General Turning Inserts for Stainless Steel

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																						√
	M	不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
K	铸铁																							
N	有色金属																							
S	耐热合金、钛合金																							
H	淬硬钢																							

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																	金陶 Cermet			
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456		KT8318	KT8326	KC5280
精加工 Finishing	DCMT070202-MF	7.8	6.35	2.38	2.8	0.2				●																	
	DCMT070204-MF	7.8	6.35	2.38	2.8	0.4				●			▲														
	DCMT070208-MF	7.8	6.35	2.38	2.8	0.8				●			●														
	DCMT11T302-MF	11.6	9.525	3.97	4.4	0.2				●			●														
	DCMT11T304-MF	11.6	9.525	3.97	4.4	0.4				●			●														
DCMT11T308-MF	11.6	9.525	3.97	4.4	0.8				●			●															
半精加工 Semi-finishing	DCMT070202-MM	7.8	6.35	2.38	2.8	0.2				●			●														
	DCMT070204-MM	7.8	6.35	2.38	2.8	0.4				●			●														
	DCMT070208-MM	7.8	6.35	2.38	2.8	0.8				●			●														
	DCMT11T302-MM	11.6	9.525	3.97	4.4	0.2				●			●														
	DCMT11T304-MM	11.6	9.525	3.97	4.4	0.4				●			●														
DCMT11T308-MM	11.6	9.525	3.97	4.4	0.8				●			●															

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																							√
	M	不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
K	铸铁																								
N	有色金属																								
S	耐热合金、钛合金																								
H	淬硬钢																								

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																	金陶 Cermet		
		L	ØI.C	T	Φd	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456		KT8318	KT8326
通用加工 General Machining	DCMT070202-GM	7.8	6.35	2.38	2.8	0.2				●																
	DCMT070204-GM	7.8	6.35	2.38	2.8	0.4				●			●													
	DCMT070208-GM	7.8	6.35	2.38	2.8	0.8				●			●													
	DCMT11T304-GM	11.6	9.525	3.97	4.4	0.4				●			●													
	DCMT11T308-GM	11.6	9.525	3.97	4.4	0.8				●			●													
DCMT11T312-GM	11.6	9.525	3.97	4.4	1.2				●			●														

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**GM**

单面断屑槽，适用于P、M、K类通用加工。

**MM**

有效解决不锈钢中等余量加工难点。

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**GM**

单面断屑槽，适用于P、M、K类通用加工。

**MM**

有效解决不锈钢中等余量加工难点。

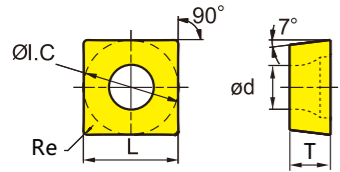
Turning Inserts - Positive  
SCMT (Square Positive)

车削刀片 - 正角型  
SCMT (正方形)

Turning Inserts - Positive  
SCMT (Square Positive)

车削刀片 - 正角型  
SCMT (正方形)

不锈钢车削 General Turning Inserts for Stainless Steel



√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H														
钢													○						√	
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																				
有色金属																				
耐热合金、钛合金																		√		
淬硬钢																				

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层														金陶 Cermet						
		L	ØI.C	T	Ød	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KT3056	KT8456	KT8318	KT8326	KC5280
精加工 Finishing	SCMT09T302-MF	9.53	9.525	3.97	4.4	0.2			●			●	●														
	SCMT09T304-MF	9.53	9.525	3.97	4.4	0.4			●			●	●														
	SCMT09T308-MF	9.53	9.525	3.97	4.4	0.8			●			●	●														
	SCMT120404-MF	12.7	12.7	4.76	5.56	0.4			●			●	●														
	SCMT120408-MF	12.7	12.7	4.76	5.56	0.8			●			●	●														
半精加工 Semi-finishing	SCMT120412-MF	12.7	12.7	4.76	5.56	1.2			●			●	●														
	SCMT09T302-MM	9.53	9.525	3.97	4.4	0.2			●			●	●														
	SCMT09T304-MM	9.53	9.525	3.97	4.4	0.4			●			●	●														
	SCMT09T308-MM	9.53	9.525	3.97	4.4	0.8			●			●	▲														
	SCMT120404-MM	12.7	12.7	4.76	5.56	0.4			●			●	●														
通用加工 General Machining	SCMT120408-MM	12.7	12.7	4.76	5.56	0.8			●			●	▲														
	SCMT120412-MM	12.7	12.7	4.76	5.56	1.2			●			●	●														

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

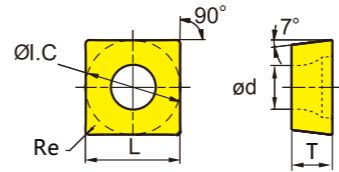
**GM**

单面断屑槽，适用于P、M、K类通用加工。

**MM**

有效解决不锈钢中等余量加工难点。

不锈钢车削 General Turning Inserts for Stainless Steel



√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H														
钢																				√
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	√
铸铁																				
有色金属																				
耐热合金、钛合金																			√	
淬硬钢																				

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层														金陶 Cermet						
		L	ØI.C	T	Ød	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KT3056	KT8456	KT8318	KT8326	KC5280
通用加工 General Machining	SCMT09T304-GM	9.53	9.525	3.97	4.4	0.4				▲				●													
	SCMT09T308-GM	9.53	9.525	3.97	4.4	0.8				▲				●													
	SCMT120404-GM	12.7	12.7	4.76	5.56	0.4				▲				●													
	SCMT120408-GM	12.7	12.7	4.76	5.56	0.8				▲				●													
	SCMT120412-GM	12.7	12.7	4.76	5.56	1.2				▲				●													

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**GM**

单面断屑槽，适用于P、M、K类通用加工。

**MM**

有效解决不锈钢中等余量加工难点。

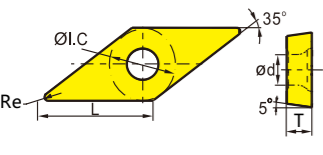


### Turning Inserts - Positive VBMT (35° Positive)

### 车削刀片 - 正角型 VBMT (35°正角型)

#### 不锈钢车削 General Turning Inserts for Stainless Steel

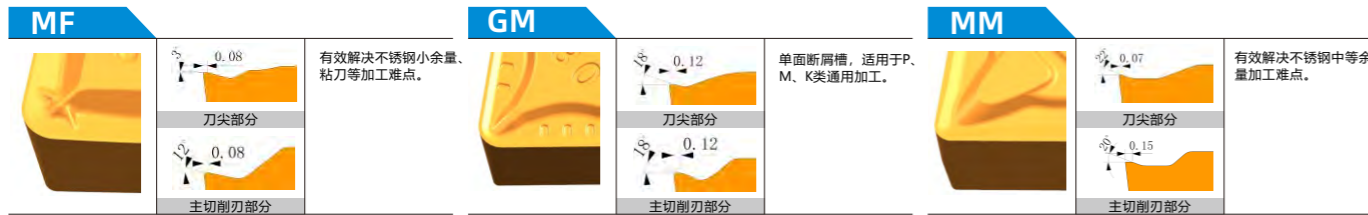
√ 良好工况 Good working conditions   ◦ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions



工件材料 Workpiece Material	
P	钢
M	不锈钢
K	铸铁
N	有色金属
S	耐热合金、钛合金
H	淬硬钢

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																	金陶 Cermet					
		L	ØI.C	T	Ød	r	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT3056	KT8456	KT8318	KT8326	KC5280			
	VBMT110304-MF	11	6.35	3.18	2.8	0.4				•			•															√	
	VBMT110308-MF	11	6.35	3.18	2.8	0.8				•			•															√	
	VBMT160404-MF	16.5	9.525	4.76	4.4	0.4				•			•															√	
	VBMT160408-MF	16.5	9.525	4.76	4.4	0.8				•			•															√	
	VBMT160412-MF	16.5	9.525	4.76	4.4	1.2				•			•															√	
	VBMT110304-MM	11	6.35	3.18	2.8	0.4				•			•																
	VBMT110308-MM	11	6.35	3.18	2.8	0.8				•			•																
	VBMT160404-MM	16.5	9.525	4.76	4.4	0.4				•			•																
	VBMT160408-MM	16.5	9.525	4.76	4.4	0.8				•			•																
	VBMT160412-MM	16.5	9.525	4.76	4.4	1.2				•			•																
	VCMT160404-GM	16.5	9.525	4.76	4.4	0.4				•			•																
	VCMT160408-GM	16.5	9.525	4.76	4.4	0.8				•			•																
	VBMT160404-GM	16.5	9.525	4.76	4.4	0.4				•			▲																
	VBMT160408-GM	16.5	9.525	4.76	4.4	0.8				•			▲																
	VBMT160412-GM	16.5	9.525	4.76	4.4	1.2				•			•																

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order



### 高温合金车削 Superalloy Turning Inserts



# KS10

S10~S15

#### 特点及应用 Features and Applications

#### 稳定工况，精加工领域

Suitable for stable work conditions and finishing machining

1. 高的合金基体硬度和韧性，提高抗塑性变形能力，降低了产生凹槽磨损的风险
2. 适用于稳定的加工条件下，高温合金、不锈钢的精加工和半精加工

1. The high hardness and toughness of the alloy substrate improves plastic deformation resistance and reduces the risk of groove wear.
2. Under stable working conditions, it is suitable for finishing and semi-finishing machining of super-alloy and stainless steel.

# KS20

S10~S15

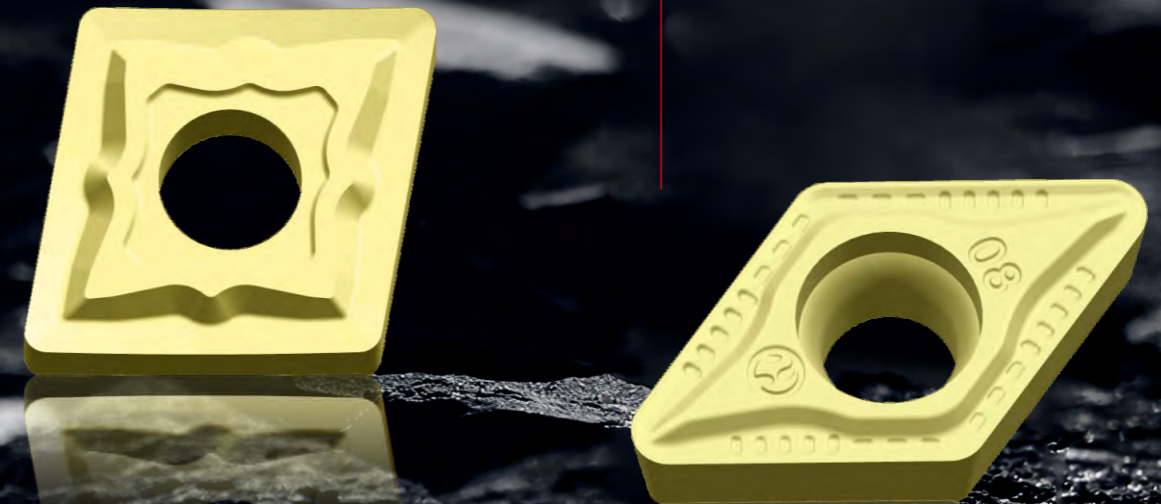
#### 特点及应用 Features and Applications

#### 升级牌号，综合性能优异

Updated grade and excellent comprehensive performance

1. 添加特殊组元的强韧性基体，红硬性和强度提升明显，超细合金颗粒和PVD涂层提高了抗崩性，又不失刀片的锋利性
2. 适用于对高温合金、不锈钢精加工和半精加工，有着极高寿命要求和稳定性的场合

1. The high toughness substrate with special component significantly improves red hardness and strength. The ultra-fine alloy particles and PVD coating improve chipping resistance while maintaining the sharpness of insert.
2. It is suitable for finishing and semi-finishing machining of super-alloy and stainless steel, and also suitable for applications that require long service life and high stability.









Turning Inserts - Positive  
CCMT / CCGT (80° Positive)

车削刀片 - 正角型  
CCMT/CCGT (80° 正角型)

Turning Inserts - Positive  
DCMT / DCGT (55° Positive)

车削刀片 - 正角型  
DCMT/DCGT (55° 正角型)

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

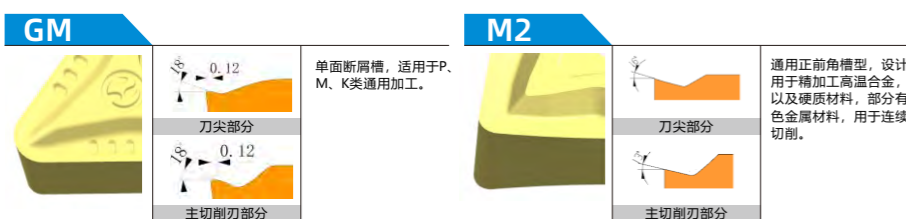
H 加工案例

I 通用技术信息

高温合金车削 Superalloy Turning Inserts

		√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions																										
		工件材料 Workpiece Material	P	钢										×	×													
			M	不锈钢	√	√	√	×	×					×	×	×	√	√	√									
			K	铸铁										×	×													
			N	有色金属																								
			S	耐热合金、钛合金										×	×					√	√							
			H	淬硬钢																								
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																					
		L	ΦI.C	T	Φd	r	KT8204	KT8206	KT8208	KT8254	KT8256	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KT8325	KT8326	KT8455	KT8456	KT6109	KS10	KS20				
	CCMT060202-GM	6.4	6.35	2.38	2.8	0.2																			•	•	•	
	CCMT060204-GM	6.4	6.35	2.38	2.8	0.4																				•	•	•
	CCMT060208-GM	6.4	6.35	2.38	2.8	0.8																				•	•	•
	CCMT09T304-GM	9.7	9.525	3.97	4.4	0.4																				▲	▲	▲
	CCMT09T308-GM	9.7	9.525	3.97	4.4	0.8																				▲	▲	▲
	CCMT120404-GM	12.9	12.7	4.76	5.56	0.4																				•	•	•
	CCMT120408-GM	12.9	12.7	4.76	5.56	0.8																				▲	▲	▲
	CCMT120412-GM	12.9	12.7	4.76	5.56	1.2																				•	•	•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

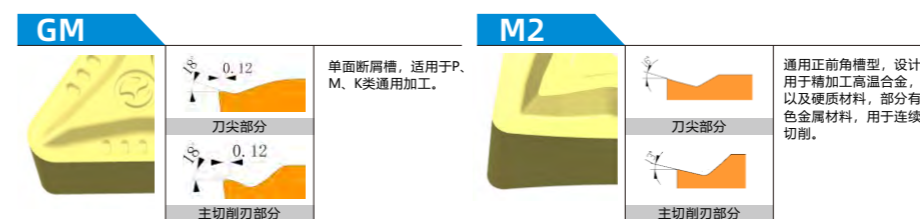
H 加工案例

I 通用技术信息

高温合金车削 Superalloy Turning Inserts

		√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions																										
		工件材料 Workpiece Material	P	钢															×	×								
			M	不锈钢	√	√	√	×	×										×	×	×	√	√	√				
			K	铸铁															×	×								
			N	有色金属																								
			S	耐热合金、钛合金																×	×							
			H	淬硬钢																					√	√		
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																					
		L	ΦI.C	T	Φd	r	KT8204	KT8206	KT8208	KT8254	KT8256	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KT8325	KT8326	KT8455	KT8456	KT6109	KS10	KS20				
	DCMT070202-GM	7.8	6.35	2.38	2.8	0.2																				•	•	•
	DCMT070204-GM	7.8	6.35	2.38	2.8	0.4																				•	•	•
	DCMT070208-GM	7.8	6.35	2.38	2.8	0.8																				•	•	•
	DCMT11T302-GM	11.6	9.525	3.97	4.4	0.2																				•	•	•
	DCMT11T304-GM	11.6	9.525	3.97	4.4	0.4																				•	•	•
	DCMT11T308-GM	11.6	9.525	3.97	4.4	0.8																				•	•	•
	DCMT11T312-GM	11.6	9.525	3.97	4.4	1.2																				•	•	•

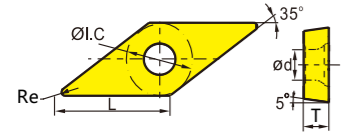
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order







### 高温合金车削 Superalloy Turning Inserts



√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料	P	M	K	N	S	H																			
钢																		×	×						
不锈钢	√	√	√	×	×													×	×	×	√	√	√		
铸铁																			×	×					
有色金属																									
耐热合金、钛合金																		×	×					√	√
淬硬钢																									

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																		
		L	ØI.C	T	Ød	r	KT8204	KT8206	KT8208	KT8254	KT8256	KT8284	KT8286	KT8288	KT8294	KT8296	KT8298	KT8325	KT8326	KT8455	KT8456	KT6109	KS10	KS20	
	VBMT110304-GM	11	6.35	3.18	2.8	0.4					●												●	●	●
	VBMT110308-GM	11	6.35	3.18	2.8	0.8					●												●	●	●
粗加工 Roughing	VBMT160404-GM	16.5	9.525	4.76	4.4	0.4					●													▲	▲
	VBMT160408-GM	16.5	9.525	4.76	4.4	0.8					●													▲	▲
	VBMT160412-GM	16.5	9.525	4.76	4.4	1.2					●													●	●

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**GM**

单面断屑槽, 适用于P、M、K类通用加工。

**M2**

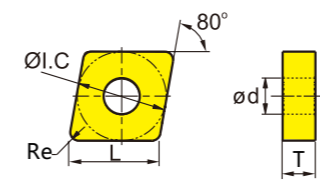
通用正前角槽型, 设计用于精加工高温合金, 以及硬质材料, 部分有色金属材料, 用于连续切削。

Ingenuity Quality, Stable and Efficient.  
匠心品质 稳定高效

Turning Inserts - Negative  
CNMG / CNMA (80° Negative)

车削刀片 - 负角型  
CNMG/CNMA (80°负角型)

铸铁车削 General Turning Inserts for Cast Iron



√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

Workpiece Material	P	M	K	N	S	H																	
钢	√	○	○																	√	×	×	×
不锈钢				√	√	√	√	○	○	×	×	×	×	√	√	×	×	×	×	×	×	×	√
铸铁																						×	×
有色金属																							
耐热合金、钛合金																							
淬硬钢																							

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层								PVD涂层				金陶 Cermet								
		L	ØI.C	T	Φd	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB	KT8204		KT8294	KT8295	KT8296	KT8297	KT8298	KC5280		
	CNMG120404-UC	12.7	12.7	4.76	5.16	0.4							▲	●														
	CNMG120408-UC	12.7	12.7	4.76	5.16	0.8							▲	●														
	CNMG120412-UC	12.7	12.7	4.76	5.16	1.2							▲	●														
	CNMG120416-UC	12.7	12.7	4.76	5.16	1.6							▲	●														
	CNMG160608-UC	16.1	15.875	6.35	6.35	0.8							●	●														
	CNMG160612-UC	16.1	15.875	6.35	6.35	1.2							●	●														
	CNMG160616-UC	16.1	15.875	6.35	6.35	1.6							●	●														
	CNMG190608-UC	19.3	19.05	6.35	7.94	0.8							●	●														
半精加工 Semi-finishing	CNMG190612-UC	19.3	19.05	6.35	7.94	1.2						●	●															
	CNMG190616-UC	19.3	19.05	6.35	7.94	1.6						●	●															

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产 可选牌号 Maker-to-order

**UC**

双面断屑槽，刃口强度高，适合半精加工。

**GH**

M级双面断屑槽，轻载粗加工首选槽型，金属切除率和刃口经济性可兼得。

**ZT**

宽棱边与大容量槽组合，实现高进给量加工。适用于断续切削、黑皮切削。

**平板**

双面加工，刃口强度高，是克服铸铁加工中砂眼、尖渣等不良加工因素的刀片结构的解决方案。

# TURNING INSERTS FOR CAST IRON

## 铸铁车削

Turning Inserts - Negative  
**CNMG / CNMA (80° Negative)**

车削刀片 - 负角型  
**CNMG/CNMA (80°负角型)**

Turning Inserts - Negative  
**CNMG / CNMA (80° Negative)**

车削刀片 - 负角型  
**CNMG/CNMA (80°负角型)**

铸铁车削 General Turning Inserts for Cast Iron

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层								PVD涂层					金陶 Cermet						
		L	ØI.C	T	Ød	r		KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB	KT8204		KT8294	KT8295	KT8296	KT8297	KT8298	KC5280
半精加工-粗加工 Semi-finishing to Roughing	CNMG120408-GH	12.7	12.7	4.76	5.16	0.8							•	▲	•	▲											
	CNMG120412-GH	12.7	12.7	4.76	5.16	1.2							•	▲	•	▲											
	CNMG160608-GH	16.1	15.875	6.35	6.35	0.8							•	•	•	•											
	CNMG160612-GH	16.1	15.875	6.35	6.35	1.2							•	•	•	•											
粗加工 Roughing	CNMG120408-ZT	12.7	12.7	4.76	5.16	0.8							•	▲													
	CNMG120412-ZT	12.7	12.7	4.76	5.16	1.2							•	▲													
	CNMG160608-ZT	16.1	15.875	6.35	6.35	0.8							•	•													
	CNMG160612-ZT	16.1	15.875	6.35	6.35	1.2							•	•													
	CNMG160616-ZT	16.1	15.875	6.35	6.35	1.6							•	•													
	CNMG190612-ZT	19.3	19.05	6.35	7.94	1.2							•	•													
CNMG190616-ZT	19.3	19.05	6.35	7.94	1.6							•	•														

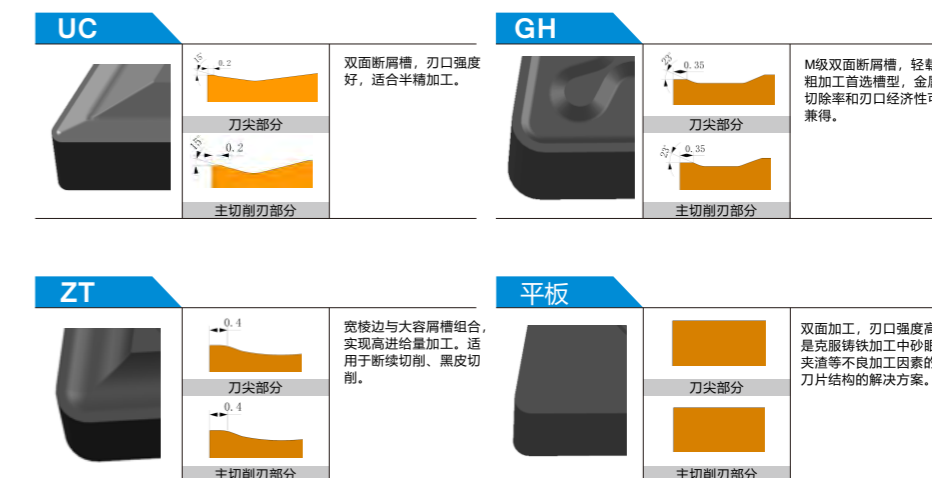
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



铸铁车削 General Turning Inserts for Cast Iron

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						CVD涂层								PVD涂层					金陶 Cermet						
		L	ØI.C	T	Ød	r		KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB	KT8204		KT8294	KT8295	KT8296	KT8297	KT8298	KC5280
平板 Flat	CNMA120404	12.7	12.7	4.76	5.16	0.4						•	•	•	▲												
	CNMA120408	12.7	12.7	4.76	5.16	0.8						•	•	•	▲												
	CNMA120412	12.7	12.7	4.76	5.16	1.2						•	•	•	▲												
	CNMA120416	12.7	12.7	4.76	5.16	1.6						•	•	•	▲												
	CNMA160612	16.1	15.875	6.35	6.35	1.2						•	•	•	▲												
	CNMA160616	16.1	15.875	6.35	6.35	1.6						•	•	•	•												
	CNMA190612	19.3	19.05	6.35	7.94	1.2						•	•	•	▲												
CNMA190616	19.3	19.05	6.35	7.94	1.6						•	•	•	▲													

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order





Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

铸铁车削 General Turning Inserts for Cast Iron

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions																	
	P	M	K	N	S	H												
钢	√	○	○										√		×	×	×	√
不锈钢				√	√	√	√	○	○	×	×	×	√	√	×	×	×	√
铸铁																×		
有色金属																		
耐热合金、钛合金																		
淬硬钢																		

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层								PVD涂层					金陶 Cermet										
		L	ØI.C	T	ϕd	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB	KT8204		KT8294	KT8295	KT8296	KT8297	KT8298	KC5280				
	SNMG090304-UC	9.525	9.525	3.18	3.81	0.4																								
	SNMG090308-UC	9.525	9.525	3.18	3.81	0.8																								
	SNMG120404-UC	12.7	12.7	4.76	5.16	0.4																								
	SNMG120408-UC	12.7	12.7	4.76	5.16	0.8																								
	SNMG120412-UC	12.7	12.7	4.76	5.16	1.2																								
	SNMG120416-UC	12.7	12.7	4.76	5.16	1.6																								
	SNMG150608-UC	15.875	15.875	6.35	6.35	0.8																								
	SNMG150612-UC	15.875	15.875	6.35	6.35	1.2																								
	SNMG190612-UC	19.05	19.05	6.35	7.94	1.2																								
	SNMG190616-UC	19.05	19.05	6.35	7.94	1.6																								

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

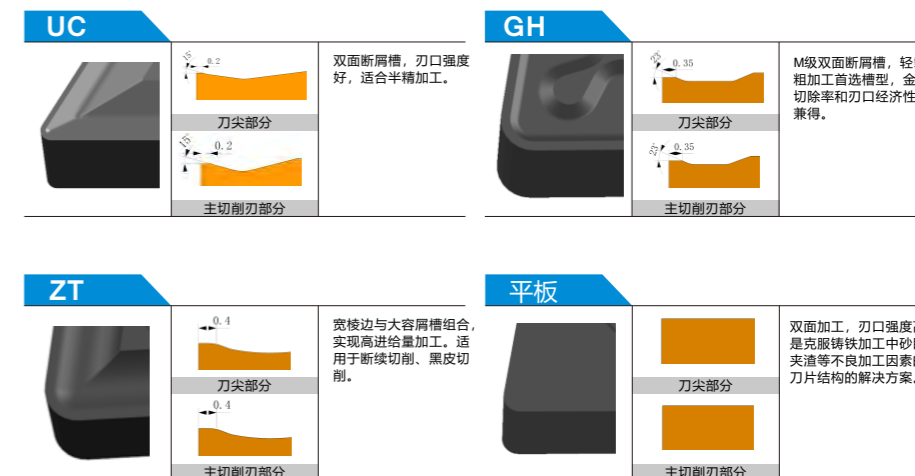
铸铁车削 General Turning Inserts for Cast Iron

√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions																							
	P	M	K	N	S	H																		
钢	√	○	○															√		×	×	×	×	√
不锈钢				√	√	√	√	○	○	×	×	×	√	√	×	×	×	√	√	×	×	×	×	√
铸铁																						×		×
有色金属																								
耐热合金、钛合金																								
淬硬钢																								

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层								PVD涂层					金陶 Cermet										
		L	ØI.C	T	ϕd	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB	KT8204		KT8294	KT8295	KT8296	KT8297	KT8298	KC5280				
	SNMG120408-GH	12.7	12.7	4.76	5.16	0.8																								
	SNMG120412-GH	12.7	12.7	4.76	5.16	1.2																								
	SNMG120416-GH	12.7	12.7	4.76	5.16	1.6																								
	SNMG150612-GH	15.875	15.875	6.35	6.35	1.2																								
	SNMG150616-GH	15.875	15.875	6.35	6.35	1.6																								
	SNMG120404-ZT	12.7	12.7	4.76	5.16	0.4																								
	SNMG120408-ZT	12.7	12.7	4.76	5.16	0.8																								
	SNMG120412-ZT	12.7	12.7	4.76	5.16	1.2																								

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order



Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

车削刀片 - 负角型  
SNMG/SNMA (90°负角型)

Turning Inserts - Negative  
TNMG / TNMA (60° Negative)

车削刀片 - 负角型  
TNMG/TNMA (60°负角型)

铸铁车削 General Turning Inserts for Cast Iron

√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions



工件材料 Workpiece Material	√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions																		
	P	M	K	N	S	H	钢	不锈钢	铸铁	有色金属	耐热合金、钛合金	淬硬钢	钢	不锈钢	铸铁	有色金属	耐热合金、钛合金	淬硬钢	
P	√	○	○										√	×	×	×	×	√	
M				√	√	√	√	○	○	×	×	×	√	√	×	×	×	×	√
K																	×	×	
N																			
S																			
H																			

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层								PVD涂层				金陶 Cermet						
		L	ØI.C	T	ød	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB		KT8204	KT8294	KT8295	KT8296	KT8297	KT8298
平板 Flat	SNMA090304	9.525	9.525	3.18	3.8	0.4				●	●	●	●	●				●	●						●
	SNMA090308	9.525	9.525	3.18	3.8	0.8				●	●	●	●	●				●	●						●
	SNMA120408	12.7	12.7	4.76	5.16	0.8				●	●	●	●	▲				●	●						●
	SNMA120412	12.7	12.7	4.76	5.16	1.2				●	●	●	●	▲				●	●						●
	SNMA120416	12.7	12.7	4.76	5.16	1.6				●	●	●	●	▲				●	●						●
	SNMA150612	15.875	15.875	6.35	6.35	1.2				●	●	●	●	▲				●	●						●
	SNMA150616	15.875	15.875	6.35	6.35	1.6				●	●	●	●	▲				●	●						●
	SNMA190612	19.05	19.05	6.35	7.94	1.2				●	●	●	●	▲				●	●						●
	SNMA190616	19.05	19.05	6.35	7.94	1.6				●	●	●	●	▲				●	●						●

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**UC**



双面断屑槽，刃口强度高，适合半精加工。

**GH**



M级双面断屑槽，轻载粗加工首选槽型，金属切除率和刃口经济性可兼得。

**ZT**



宽棱边与大容量槽组合，实现高进给量加工。适用于断续切削、黑皮切削。

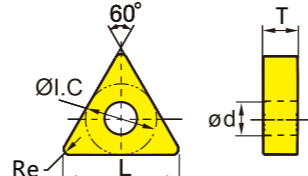
**平板**



双面加工，刃口强度高，是克服铸铁加工中砂眼、尖渣等不良加工因素的刀片结构的解决方案。

铸铁车削 General Turning Inserts for Cast Iron

√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

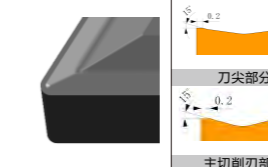


工件材料 Workpiece Material	√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions																								
	P	M	K	N	S	H	钢	不锈钢	铸铁	有色金属	耐热合金、钛合金	淬硬钢	钢	不锈钢	铸铁	有色金属	耐热合金、钛合金	淬硬钢							
P	√	○	○																√	×	×	×	×	√	
M				√	√	√	√	○	○	×	×	×	√	√	×	×	×	×	√	√	×	×	×	×	√
K																							×	×	
N																									
S																									
H																									

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层								PVD涂层				金陶 Cermet						
		L	ØI.C	T	ød	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB		KT8204	KT8294	KT8295	KT8296	KT8297	KT8298
半精加工 Semi-finishing	TNMG110304-UC	11	6.35	3.18	2.26	0.4																			●
	TNMG110308-UC	11	6.35	3.18	2.26	0.8																			●
	TNMG160304-UC	16.5	9.525	3.18	3.81	0.4																			●
	TNMG160308-UC	16.5	9.525	3.18	3.81	0.8																			●
	TNMG160404-UC	16.5	9.525	4.76	3.81	0.4																			●
	TNMG160408-UC	16.5	9.525	4.76	3.81	0.8																			●
	TNMG160412-UC	16.5	9.525	4.76	3.81	1.2																			●
	TNMG160416-UC	16.5	9.525	4.76	3.81	1.6																			●
	TNMG220404-UC	22	12.7	4.76	3.81	0.4																			●
	TNMG220408-UC	22	12.7	4.76	3.81	0.8																			●
	TNMG220412-UC	22	12.7	4.76	3.81	1.2																			●
	TNMG220416-UC	22	12.7	4.76	3.81	1.6																			●
	TNMG270608-UC	27.5	15.875	6.35	6.35	0.8																			●
	TNMG270612-UC	27.5	15.875	6.35	6.35	1.2																			●
	TNMG270616-UC	27.5	15.875	6.35	6.35	1.6																			●
	TNMG330924-UC	33	19.05	9.53	7.94	2.4																			●

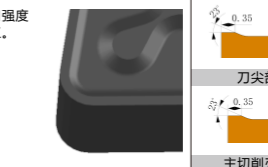
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**UC**



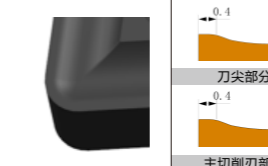
双面断屑槽，刃口强度高，适合半精加工。

**GH**



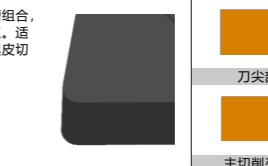
M级双面断屑槽，轻载粗加工首选槽型，金属切除率和刃口经济性可兼得。

**ZT**



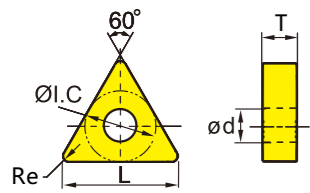
宽棱边与大容量槽组合，实现高进给量加工。适用于断续切削、黑皮切削。

**平板**



双面加工，刃口强度高，是克服铸铁加工中砂眼、尖渣等不良加工因素的刀片结构的解决方案。

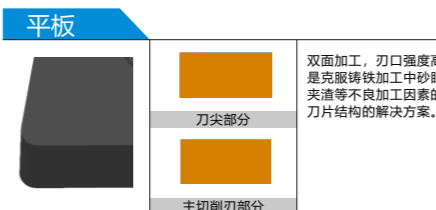
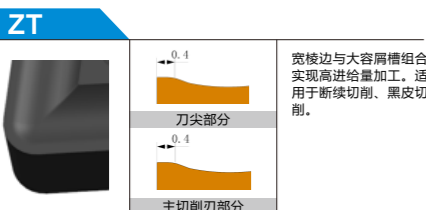
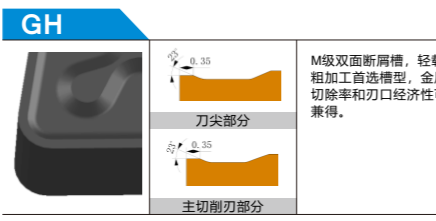
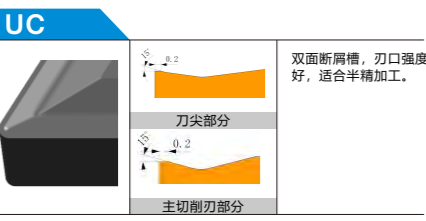
铸铁车削 General Turning Inserts for Cast Iron



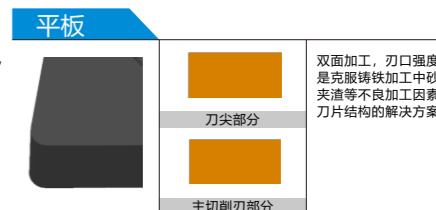
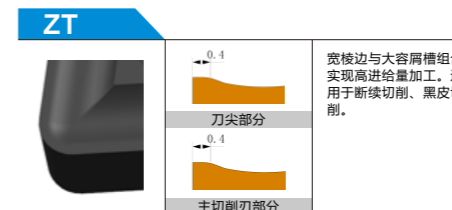
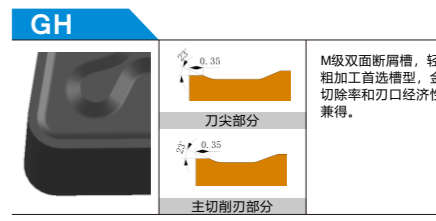
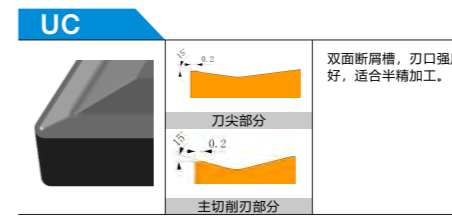
Material compatibility table for cast iron inserts. Legend: ✓ Good working conditions, ○ General working conditions, × Unstable working conditions. Rows include materials like Steel (P), Stainless Steel (M), Cast Iron (K), etc.

Main product table for cast iron inserts. Columns: Product Shape, Type, Dimensions (L, ØI.C, T, Ød, r), CVD Coatings (KT1153 to KT3263QB), PVD Coatings (KT8204 to KT8298), and Cermet (KC5280).

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



Wide edge with large chamfered edge combination, achieving high feed rate processing. Suitable for interrupted cutting, black chip cutting.



Wide edge with large chamfered edge combination, achieving high feed rate processing. Suitable for interrupted cutting, black chip cutting.



Turning Inserts - Negative  
VNMG / VNMA (35° Negative)

车削刀片 - 负角型  
VNMG/VNMA (35°负角型)

Turning Inserts - Negative  
WNMG / WNMA (80° Negative)

车削刀片 - 负角型  
WNMG/WNMA (80°负角型)

铸铁车削 General Turning Inserts for Cast Iron

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层								PVD涂层				金陶								
		L	ØI.C	T	Ød	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB		KT8204	KT8294	KT8295	KT8296	KT8297	KT8298	KC5280	
半精加工 Semi-finishing	VNMG160404-UC	16.6	9.525	4.76	3.81	0.4																					
	VNMG160408-UC	16.6	9.525	4.76	3.81	0.8																					
	VNMG160412-UC	16.6	9.525	4.76	3.81	1.2																					
精加工 Finishing	VNMG160404-ZT	16.6	9.525	4.76	3.81	0.4																					
	VNMG160412-ZT	16.6	9.525	4.76	3.81	1.2																					
平板 Flat	VNMA160404	16.6	9.525	4.76	3.81	0.4																					
	VNMA160408	16.6	9.525	4.76	3.81	0.8																					
	VNMA160412	16.6	9.525	4.76	3.81	1.2																					

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**UC**

双面断屑槽，刃口强度高，适合半精加工。

**GH**

M级双面断屑槽，轻载粗加工首选槽型，金属切除率和刃口经济性可兼得。

**ZT**

宽棱边与大容量槽组合，实现高进给量加工。适用于断续切削、黑皮切削。

**平板**

双面加工，刃口强度高，是克服铸铁加工中砂眼、尖渣等不良加工因素的刀片结构的解决方案。

铸铁车削 General Turning Inserts for Cast Iron

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层								PVD涂层				金陶								
		L	ØI.C	T	Ød	r	KT1153	KT1251	KT1252	KT3122	KT3123A	KT3123B	KT3123QB	KT3262	KT3263	KT3263A	KT3263B	KT3263QB		KT8204	KT8294	KT8295	KT8296	KT8297	KT8298	KC5280	
半精加工 Semi-finishing	WNMG060408-UC	6.5	9.525	4.76	3.81	0.8																					
	WNMG060412-UC	6.5	9.525	4.76	3.81	1.2																					
	WNMG080404-UC	8.7	12.7	4.76	5.16	0.4																					
	WNMG080408-UC	8.7	12.7	4.76	5.16	0.8																					
	WNMG080412-UC	8.7	12.7	4.76	5.16	1.2																					
半精加工 Semi-finishing	WNMG080416-UC	8.7	12.7	4.76	5.16	1.6																					

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**UC**

双面断屑槽，刃口强度高，适合半精加工。

**GH**

M级双面断屑槽，轻载粗加工首选槽型，金属切除率和刃口经济性可兼得。

**ZT**

宽棱边与大容量槽组合，实现高进给量加工。适用于断续切削、黑皮切削。

**平板**

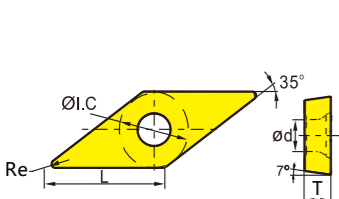
双面加工，刃口强度高，是克服铸铁加工中砂眼、尖渣等不良加工因素的刀片结构的解决方案。







铝合金车削 General Turning Inserts for Aluminum



√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H																						
钢																		○			○	×		×		×	√	
不锈钢			√	√	√	√	√	√	√	○	○	○	○	○	○	○	○	○						×		×	×	√
铸铁																							×		×			
有色金属		○																										
耐热合金、钛合金																												
淬硬钢																												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						无涂层		PVD涂层															陶瓷 Cermat					
		L	ØI.C	T	Ød	r	KT3150	KT3050	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KC5280						
	VCGX110301K -AU	11	6.35	3.18	2.8	0.1	▲	●																						
	VCGX110302K -AU	11	6.35	3.18	2.8	0.2	▲	●																						
	VCGX110304K -AU	11	6.35	3.18	2.8	0.4	▲	●																						
	VCGX110308K -AU	11	6.35	3.18	2.8	0.8	▲	●																						
	VCGX160402K -AU	16.6	9.525	4.76	4.4	0.2	▲	●																						
	VCGX160404K -AU	16.6	9.525	4.76	4.4	0.4	▲	●																						
	VCGX160408K -AU	16.6	9.525	4.76	4.4	0.8	▲	●																						
	VCGX160412K -AU	16.6	9.525	4.76	4.4	1.2	▲	●																						

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**AU**

独特断屑台设计，使刃口更加锋利，保证刀片切削轻快并能有效断屑。  
主切削刃部分



Turning Inserts - Negative  
DNMG / DNMA (55° Negative)

DNMG/DNMA (55°负角型)

Turning Inserts - Negative  
SNMG / SNMA (90° Negative)

SNMG/SNMA (90°负角型)

淬硬钢车削 Turning Inserts for Hardened Steel



√良好工况 Good working conditions    ○一般工况 General working conditions    ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																		
	M	不锈钢		√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○
K	铸铁																			
N	有色金属																			
S	耐热合金、钛合金																			
H	淬硬钢	√	○	√																○

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																					
		L	ØI.C	T	Φd	r	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299		
半精加工 Semi-finishing	DNMG110404 -HJ	11.6	9.525	4.76	3.81	0.4	▲																					
	DNMG110412 -HJ	11.6	9.525	4.76	3.81	1.2	▲																					
	DNMG150404 -HJ	15.5	12.7	4.76	5.16	0.4	▲																					
	DNMG150408 -HJ	15.5	12.7	4.76	5.16	0.8	▲																					
	DNMG150412 -HJ	15.5	12.7	4.76	5.16	1.2	▲																					

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

淬硬钢车削 Turning Inserts for Hardened Steel

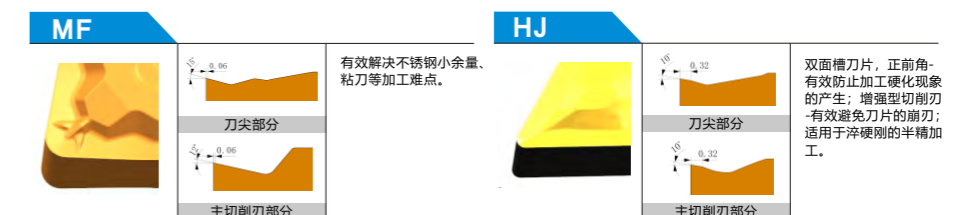


√良好工况 Good working conditions    ○一般工况 General working conditions    ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																		
	M	不锈钢		√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○
K	铸铁																			
N	有色金属																			
S	耐热合金、钛合金																			
H	淬硬钢	√	○	√																○

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																				
		L	ØI.C	T	Φd	r	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299	
半精加工 Semi-finishing	SNMG120408 -HJ	12.7	12.7	4.76	5.16	0.8	▲																				
	SNMG120412 -HJ	12.7	12.7	4.76	5.16	1.2	▲																				

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



Turning Inserts - Negative  
TNMG / TNMA (60° Negative)

车削刀片 - 负角型  
TNMG/TNMA (60°负角型)

Turning Inserts - Negative  
VNMG / VNMA (35° Negative)

车削刀片 - 负角型  
VNMG/VNMA (35°负角型)

淬硬钢车削 Turning Inserts for Hardened Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																		
	M	不锈钢		√	√	√	√	√		○	○	○	○	○	○	○	○	○	○	○
K	铸铁																			
N	有色金属																			
S	耐热合金、钛合金																			
H	淬硬钢	√	○	√																○

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																					
		L	ØI.C	T	Φd	r	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299		
	TNMG160308-HJ	16.5	9.525	3.18	3.81	0.8	▲																					
	TNMG160404-HJ	16.5	9.525	4.76	3.81	0.4	▲																					
	TNMG160408-HJ	16.5	9.525	4.76	3.81	0.8	▲																					
	TNMG160412-HJ	16.5	9.525	4.76	3.81	1.2	▲																					
	TNMG220404-HJ	22	12.7	4.76	5.16	0.4	▲																					
	TNMG220408-HJ	22	12.7	4.76	5.16	0.8	▲																					
半精加工 Semi-finishing	TNMG220412-HJ	22	12.7	4.76	5.16	1.2	▲																					

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

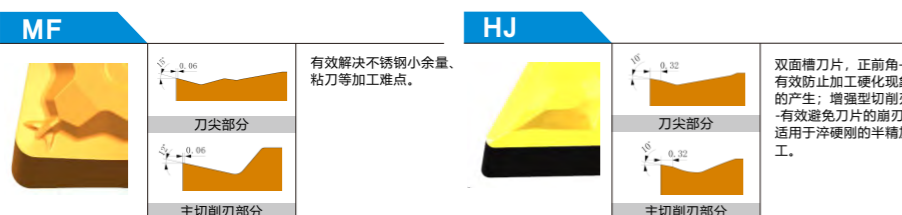
淬硬钢车削 Turning Inserts for Hardened Steel

√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																		
	M	不锈钢		√	√	√	√	√		○	○	○	○	○	○	○	○	○	○	○
K	铸铁																			
N	有色金属																			
S	耐热合金、钛合金																			
H	淬硬钢	√	○	√																○

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																				
		L	ØI.C	T	Φd	r	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299	
	VNMG160408-HJ	16.6	9.525	4.76	3.81	0.8	▲																				
	VNMG160412-HJ	16.6	9.525	4.76	3.81	1.2	▲																				
半精加工 Semi-finishing																											

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order







Turning Inserts - Positive  
DCMT (55° Positive)

车削刀片 - 正角型  
DCMT(55°正角型)

Turning Inserts - Positive  
SCMT (90° Positive)

车削刀片 - 正角型  
SCMT(90°正角型)

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

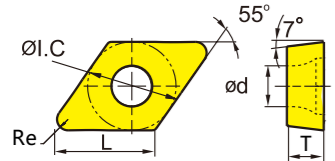
F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

淬硬钢车削 Turning Inserts for Hardened Steel



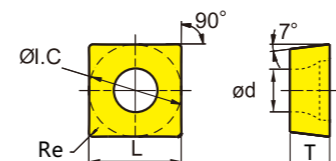
√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																														
	P	M	K	N	S	H	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299					
钢																						○			○	×	×	×	×		
不锈钢		√	√	√	√	√																	○	○	○	○	○	×	×	×	×
铸铁																												×	×		
有色金属																															
耐热合金、钛合金																															
淬硬钢	√		○	√																			○								○

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						PVD涂层																							
		L	ØI.C	T	Φd	r		KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299				
	DCMT070204 -MF	7.8	6.35	2.38	2.8	0.4	▲																								●
	DCMT070208 -MF	7.8	6.35	2.38	2.8	0.8	●																								●
	DCMT11T304 -MF	11.6	9.525	3.97	4.4	0.4	▲																								●
	DCMT11T308 -MF	11.6	9.525	3.97	4.4	0.8	▲																								●
半精加工 Semi-finishing																															

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

淬硬钢车削 Turning Inserts for Hardened Steel



√ 良好工况 Good working conditions   ○ 一般工况 General working conditions   × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	PVD涂层																																					
	P	M	K	N	S	H	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299												
钢																													○	○	○	○	○	×	×	×	×	×
不锈钢																									○	○	○	○	○	○	○	○	○	○	○	○	○	○
铸铁																																				×	×	×
有色金属																																						
耐热合金、钛合金																																						
淬硬钢	√																																			○		

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)						PVD涂层																													
		L	ØI.C	T	Φd	r		KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299										
	SCMT09T304 -MF	9.53	9.525	3.97	2.8	0.4	▲																														●
	SCMT09T308 -MF	9.53	9.525	3.97	2.8	0.8	▲																													●	
	SCMT120404 -MF	12.7	12.7	4.76	5.56	0.4	▲																														●
	SCMT120408 -MF	12.7	12.7	4.76	5.56	0.8	▲																														●
半精加工 Semi-finishing																																					

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**HJ**

双面槽刀片，正前角-有效防止加工硬化现象的产生；增强型切削刃-有效避免刀片的崩刃，适用于淬硬钢的半精加工。

**MF**

有效解决不锈钢小余量、粘刀等加工难点。

**HJ**

双面槽刀片，正前角-有效防止加工硬化现象的产生；增强型切削刃-有效避免刀片的崩刃，适用于淬硬钢的半精加工。

Turning Inserts - Positive  
TCMT (60° Positive)

车削刀片 - 正角型  
TCMT (60° 正角型)

车削刀片

TURNING TOOLS

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

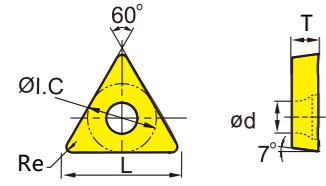
F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

淬硬钢车削 Turning Inserts for Hardened Steel

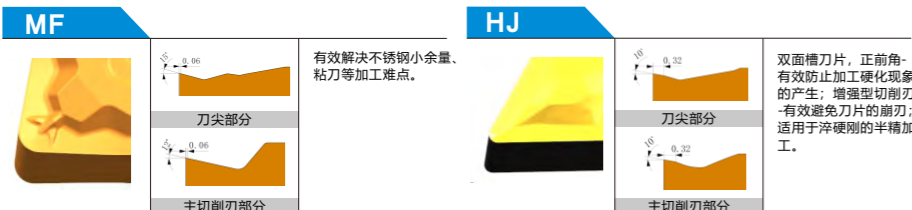


√ 良好工况 Good working conditions    ○ 一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H	PVD涂层																					
	钢	不锈钢	铸铁	有色金属	耐热合金、钛合金	淬硬钢	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299		
P	√																											
M		√	√	√	√		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
K																												
N																												
S																												
H	√	○	√																									

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层																						
		L	ØI.C	T	Φd	r	KT6109	KT6259	KT8109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8209	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298	KT8299			
	TCMT090204 -MF	9.6	5.56	2.38	2.5	0.4	●																						
	TCMT090208 -MF	9.6	6.35	2.38	2.8	0.2	●																						
	TCMT110204 -MF	11	6.35	2.38	2.8	0.4	●																						
	TCMT110208 -MF	11	6.35	2.38	2.8	0.8	●																						
	TCMT16T304 -MF	16.5	9.525	3.97	4.4	0.4	▲																						
	TCMT16T308 -MF	16.5	9.525	3.97	4.4	0.8	▲																						
半精加工 Semi-finishing																													

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order



A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

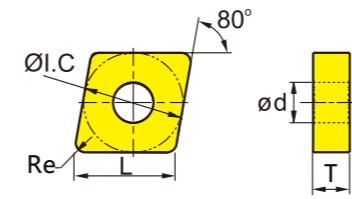
Ingenuity Quality, Stable and Efficient.  
匠心品质 稳定高效



Turning Inserts - Negative  
CNGU (80° Negative)

车削刀片 - 负角型  
CNGU (80°负角型)

小零件加工 Small Parts Processing



√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

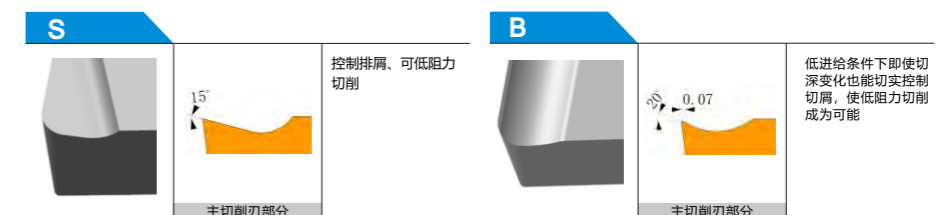
工件材料 Workpiece Material	P	M	K	N	S	H													
钢																			
不锈钢		√	√	√	√														
铸铁																			
有色金属																			
耐热合金、钛合金																			
淬硬钢						√													

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层											金陶					
		L	ØI.C	T	Φd	r	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280	
	CNGU070301L/R-B	7.6	7.5	3.18	3.6	0.2				●	▲				●	▲							▲
	CNGU070302L/R-B	7.6	7.5	3.18	3.6	0.4				●	▲				●	▲							▲
	CNGT070304L/R-B	7.6	7.5	3.18	3.6	0.2				●	▲				●	▲							▲
	CNGU070301L/R-S	7.6	7.5	3.18	3.6	0.2				●	▲				●	▲							▲
	CNGU070302L/R-S	7.6	7.5	3.18	3.6	0.2				●	▲				●	▲							▲
	CNGU070304L/R-S	7.6	7.5	3.18	3.6	0.4				●	▲				●	▲							▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

SMALL PARTS PROCESSING

小零件加工



A 车削刀片  
B 铣削刀片  
C 孔加工刀片  
D 刮管刀片  
E 非标异形刀片  
F 圆棒和立铣刀  
G 刀杆和刀盘  
H 加工案例  
I 通用技术信息

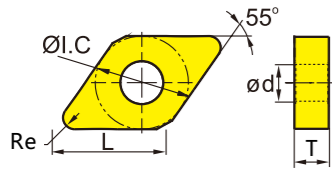
Turning Inserts - Negative  
**DNGU (55° Negative)**

车削刀片 - 负角型  
**DNGU (55°负角型)**

Turning Inserts - Negative  
**TNGU (60° Negative)**

车削刀片 - 负角型  
**TNGU (60°负角型)**

**小零件加工** Small Parts Processing



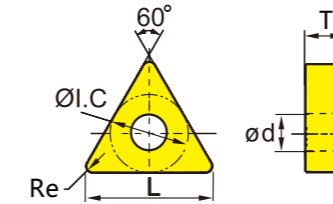
√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

Workpiece Material	Material		PVD涂层											金陶						
	Workpiece Material	Material	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280		
P	钢										○					○	×	×	×	√
M	不锈钢		√	√	√	√	√	√	○	○	○	○	×	×	×	×	×	×	×	√
K	铸铁																	×	×	
N	有色金属																			
S	耐热合金, 钛合金																			
H	淬硬钢	√						√												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层											金陶					
		L	ØI.C	T	ϕd	r	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280	
	DNGU080301L/R-B	8.5	7	3.18	3.6	0.1																	▲
	DNGU080302L/R-B	8.5	7	3.18	3.6	0.2																	▲
	DNGU080304L/R-B	8.5	7	3.18	3.6	0.4																	▲
精加工 Finishing																							
	DNGU080301L/R-S	8.5	7	3.18	3.6	0.1																	▲
	DNGU080302L/R-S	8.5	7	3.18	3.6	0.2																	▲
	DNGU080304R/S	8.5	7	3.18	3.6	0.4																	▲
精加工 Finishing																							

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**小零件加工** Small Parts Processing

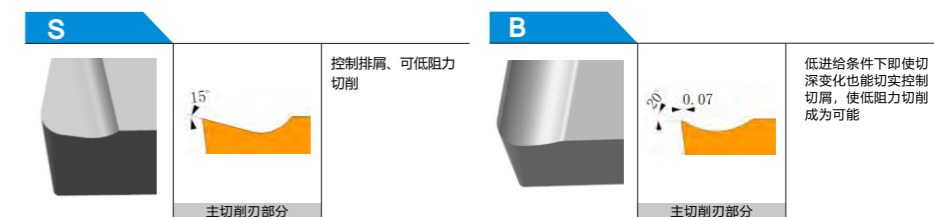
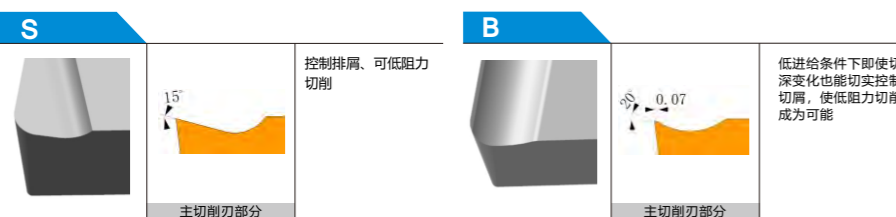


√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

Workpiece Material	Material		PVD涂层											金陶													
	Workpiece Material	Material	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280									
P	钢																			○	○	○	○	×	×	×	√
M	不锈钢			√	√	√	√	√	√	○	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×	√
K	铸铁																								×	×	
N	有色金属																										
S	耐热合金, 钛合金																										
H	淬硬钢		√												√												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层											金陶									
		L	ØI.C	T	ϕd	r	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280					
	TNGU090301L/R-B	9.6	5.56	3.18	3	0.2																					▲
	TNGU090302L/R-B	9.6	5.56	3.18	3	0.2																					▲
	TNGU090304L/R-B	9.6	5.56	3.18	3	0.4																					▲
精加工 Finishing																											
	TNGU090301L/R-S	9.6	5.56	3.18	3	0.2																					▲
	TNGU090302L/R-S	9.6	5.56	3.18	3	0.2																					▲
	TNGU090304R/S	9.6	5.56	3.18	3	0.4																					▲
精加工 Finishing																											

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order





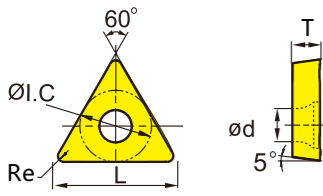
Turning Inserts - Positive  
TBGT (60° Positive)

车削刀片 - 正角型  
TBGT (60°正角型)

Turning Inserts - Positive  
TPGH (60° Positive)

车削刀片 - 正角型  
TPGH (60°正角型)

小零件加工 Small Parts Processing



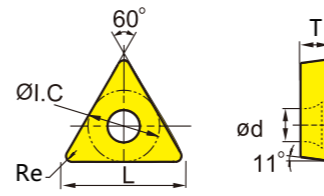
√良好工况 Good working conditions    ◦一般工况 General working conditions    ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢							◦			◦	×	×	×	√
	M	不锈钢	√	√	√	√	√	◦	◦	◦	◦	×	×	×	×	√
	K	铸铁												×	×	
	N	有色金属														
	S	耐热合金、钛合金														
	H	淬硬钢	√				√									

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层											金陶								
		L	ØI.C	T	Φd	r	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280				
精加工 Finishing	TBGT060101L/R	6.4	3.97	1.59	2.3	0.1									●	▲										▲
	TBGT060102L/R	6.4	3.97	1.59	2.3	0.2									●	▲										▲
	TBGT060104L/R	6.4	3.97	1.59	2.3	0.4									●	▲										▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

小零件加工 Small Parts Processing

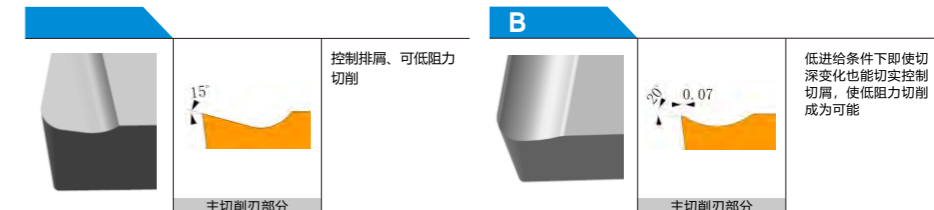
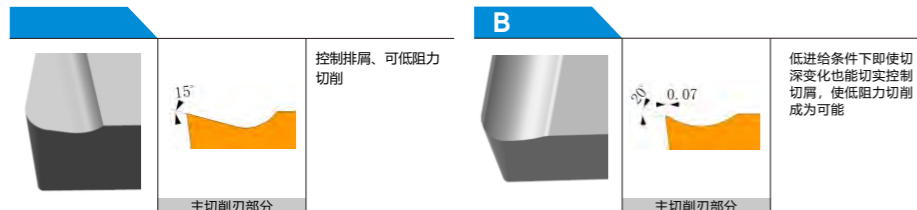


√良好工况 Good working conditions    ◦一般工况 General working conditions    ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢									◦			◦	×	×	×	√
	M	不锈钢	√	√	√	√	√	◦	◦	◦	◦	×	×	×	×	×	√	
	K	铸铁													×	×		
	N	有色金属																
	S	耐热合金、钛合金																
	H	淬硬钢	√				√											

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层											金陶								
		L	ØI.C	T	Φd	r	KT8109	KT8204	KT8205	KT8206	KT8208	KT8209	KT8284	KT8285	KT8286	KT8288	KT8294		KT8295	KT8296	KT8298	KC5280				
精加工 Finishing	TPGH080201L/R	8.2	4.76	2.38	2.3	0.1									●	▲										▲
	TPGH080202L/R	8.2	4.76	2.38	2.3	0.2									●	▲										▲
	TPGH080204L/R	8.2	4.76	2.38	2.3	0.4									●	▲										▲
	TPGH090201L/R	9.6	5.56	2.38	3.2	0.1									●	▲										▲
	TPGH090202L/R	9.6	5.56	2.38	3.2	0.2									●	▲										▲
	TPGH090204L/R	9.6	5.56	2.38	3.2	0.4									●	▲										▲
	TPGH110302L/R	11	6.35	3.18	3.3	0.2									●	▲										▲
	TPGH110304L/R	11	6.35	3.18	3.3	0.4									●	▲										▲
	TPGH110308L/R	11	6.35	3.18	3.3	0.8									●	▲										▲
	TPGH160302L/R	16.5	9.525	3.18	4.7	0.2									●	▲										▲
	TPGH160304L/R	16.5	9.525	3.18	4.7	0.4									●	▲										▲
	TPGH160308L/R	16.5	9.525	3.18	4.7	0.8									●	▲										▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order





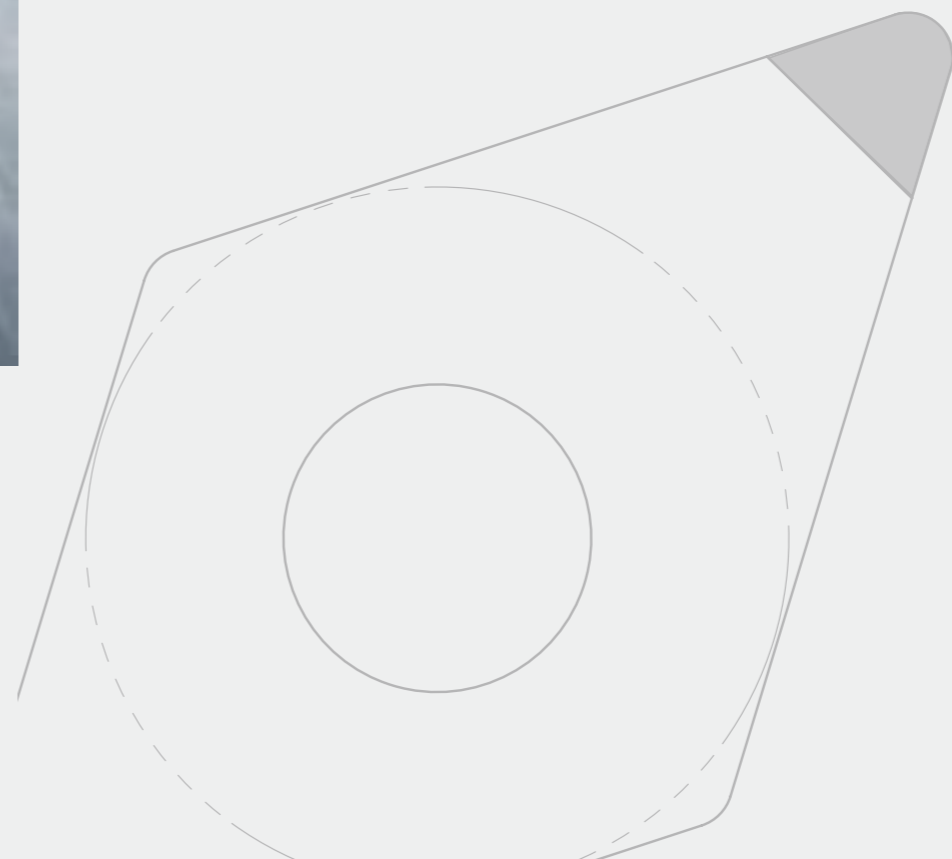


Ingenuity Quality, Stable and Efficient.

匠心品质 稳定高效



PCBN 刀片  
PCBN Inserts



PCBN INSERTS















PCBN 刀片

PCBN刀片命名规则

PCBN Insert Naming Rules







形状代号 Shape

C N G A I2 04 08

 A	 B	 C
 D	 E	 H
 K	 L	 M
 P	 S	 T
 V	 W	其他 Z










断屑槽及夹固形式代号 Chip Breaker and Hole

C N G A I2 04 08

代号 Symbol	有无孔 Center Hole	刀片剖面 Insert Profile
N	无	
B	有	
C	有	
A	有	
W	有	
Q	有	
X	---	特殊

后角代号 Clearance Angle

C N G A I2 04 08

 A	 B
 C	 D
 E	 F
 G	 N
 P	其它后角 Others

精度代号 Tolerance

C N G A I2 04 08

等级	刀尖高度 M 公差(mm)	内接圆ØI.C 公差(mm)	厚度 S 公差(mm)	等级	刀尖高度 M 公差(mm)	内接圆ØI.C 公差(mm)	厚度 S 公差(mm)
A	±0.005	±0.025	±0.025	J	±0.005	±0.05±0.13	±0.025
F	±0.005	±0.013	±0.025	K	±0.013	±0.05±0.13	±0.025
C	±0.013	±0.025	±0.025	L	±0.025	±0.05±0.13	±0.025
H	±0.013	±0.013	±0.025	M	±0.08±0.18	±0.05±0.13	±0.13
E	±0.025	±0.025	±0.025	N	±0.08±0.18	±0.05±0.13	±0.025
G	±0.025	±0.025	±0.13	U	±0.13±0.38	±0.08±0.25	±0.13

PCBN刀片命名规则

PCBN Insert Naming Rules

切削刃长度代号 Cutting Edge Length

C N G A I2 04 08

内切圆直径 Inscribed Circle diameter(mm)	刀片外形 Insert Shape					
	C	D	S	T	V	W
3.97				06		
5						
5.56				09		
6						
6.35	06	07		11	11	
8						
9.525	09	11	09	16	16	06
10						
12						
12.7	12	15	12	22	22	08
15.875	16		15	27		
16			16			
19.05	19		19	33		
20						
25	25	25				
25.4			25			
31.75						
32						

刀片厚度代号 Thickness

C N G A I2 04 08

代号 Symbol	刀片厚度 Thickness(mm)
02	2.38
T2	2.58
03	3.18
T3	3.97
04	4.76
T4	4.96
05	5.56
T5	5.95
06	6.35
T6	6.75
07	7.94
09	9.52
T9	9.72
11	11.11
12	12.7

厚度指刀片底面与切削刃最高部分之间的高度  
The Height Between Insert Bottom And Nose





刀尖圆弧代号 Corner Radius

C N G A I2 04 08

代号 Symbol	刀尖圆弧半径 (mm) Corner Radius (mm)
00	无圆角
02	0.2
04	0.4
08	0.8
12	1.2
16	1.6
20	2
24	2.4
32	3.2
X	其它 Special





刀片直径尺寸mo (公制) Diameter Dimension  
圆形刀片 Round Insert

T 020 20 - 2

刃口形式 Type of edge		
代号 Code	形式 Form	图形 Shape
F	锋利刃口 Sharp edge	
E	钝化 Passivation	
T	倒棱 Chamfering	
S	倒棱+钝化 Chamfering Passivation	

倒棱宽度 Chamfering width			
代号	宽度	代号	宽度
010	0.10	040	0.40
015	0.15	045	0.45
020	0.20	050	0.50
025	0.25	100	1.00
030	0.30	200	2.00
035	0.35		

倒棱角度 Chamfering angle	
代号	角度
05	5°
10	10°
15	15°
20	20°
25	25°
30	30°

刀尖数量 Number of insert tip		
代号 Code	刃数 Number of edge	图形 Shape
未注 N/M	单刃 Single-edged	
2	二刃 Double-edged	
3	三刃 Three-edged	
4	四刃 Four-edged	

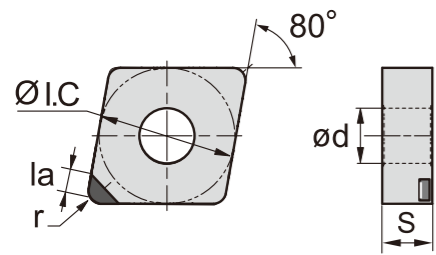
Turning Inserts - Negative  
CNGA(80° Negative)

车削刀片 - 负角型  
CNGA(80°负角型)

Turning Inserts - Negative  
CNGN(80° Negative)

车削刀片 - 负角型  
CNGN(80°负角型)

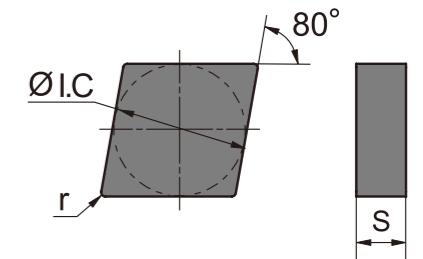
PCD/PCBN刀片 PCD/PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	CNGA120404	12.7	4.76	5.16	0.4	2.5	●	●		
	CNGA120408	12.7	4.76	5.16	0.8	2.4	●	●		
	CNGA120412	12.7	4.76	5.16	1.2	2.3	●	●		
	CNGA120404-2	12.7	4.76	5.16	0.4	2.5	▲	▲		
	CNGA120408-2	12.7	4.76	5.16	0.8	2.4	▲	▲		
	CNGA120412-2	12.7	4.76	5.16	1.2	2.3	●	●		
	CNGA120404-2	12.7	4.76	5.16	0.4	2.5			●	
	CNGA120408-2	12.7	4.76	5.16	0.8	2.4			●	
	CNGA120412-2	12.7	4.76	5.16	1.2	2.3			●	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

PCD/PCBN刀片 PCD/PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)			牌号 Grade			
		ØI.C	S	r	KB4011	KB4012	KD7011	KD7012
	CNGN120404	12.7	4.76	0.4			●	
	CNGN12T608	12.7	6.75	0.8			●	
	CNGN120712	12.7	7.94	1.2			●	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

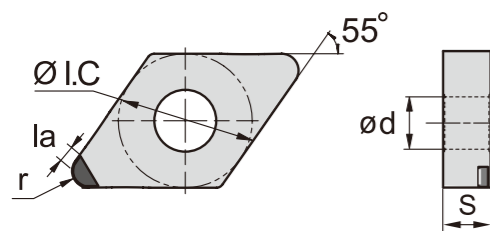
Turning Inserts - Negative  
DNGA(55° Negative)

车削刀片 - 负角型  
DNGA(55°负角型)

Turning Inserts - Negative  
DNGA(55° Negative)

车削刀片 - 负角型  
DNGA(55°负角型)

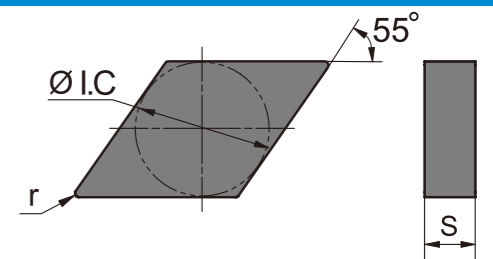
PCD/PCBN刀片 PCD/PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	DNGA150404	12.7	4.76	5.16	0.4	2.5	•	•		
	DNGA150408	12.7	4.76	5.16	0.8	2.1	•	•		
	DNGA150412	12.7	4.76	5.16	1.2	2.0	•	•		
	DNGA150602	12.7	6.35	5.16	0.2	2.7	•	•		
	DNGA150604	12.7	6.35	5.16	0.4	2.5	•	•		
	DNGA150608	12.7	6.35	5.16	0.8	2.1	•	•		
	DNGA150612	12.7	6.35	5.16	1.2	2.0	•	•		
	DNGA150404-2	12.7	4.76	5.16	0.4	2.5	▲	▲		
	DNGA150408-2	12.7	4.76	5.16	0.8	2.1	▲	▲		
	DNGA150412-2	12.7	4.76	5.16	1.2	2.0	•	•		
	DNGA150602-2	12.7	6.35	5.16	0.2	2.7	•	•		
	DNGA150604-2	12.7	6.35	5.16	0.4	2.5	•	•		
	DNGA150608-2	12.7	6.35	5.16	0.8	2.1	•	•		
	DNGA150612-2	12.7	6.35	5.16	1.2	2.0	•	•		
	DNGA150404-2	12.7	4.76	5.16	0.4	2.5			•	
	DNGA150408-2	12.7	4.76	5.16	0.8	2.1			•	
	DNGA150412-2	12.7	4.76	5.16	1.2	2.0			•	
	DNGA150604-2	12.7	6.35	5.16	0.4	2.5			•	
	DNGA150608-2	12.7	6.35	5.16	0.8	2.1			•	
	DNGA150612-2	12.7	6.35	5.16	1.2	2.0			•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

PCD/PCBN刀片 PCD/PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)			牌号 Grade			
		ØI.C	S	r	KB4011	KB4012	KD7011	KD7012
	DNGN110404	9.525	4.76	0.4			•	
	DNGN110408	9.525	4.76	0.8			•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

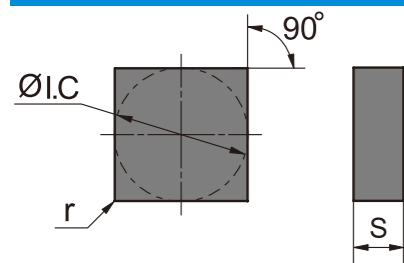
Turning Inserts - Negative  
**SNGN(90° Negative)**

车削刀片 - 负角型  
**SNGN(90°负角型)**

Turning Inserts - Negative  
**TNGA(60° Negative)**

车削刀片 - 负角型  
**TNGA(60°负角型)**

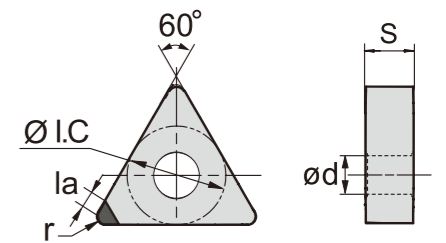
**PCBN刀片** PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)			牌号 Grade			
		ØI.C	S	r	KB4011	KB4012	KD7011	KD7012
	SNGN120404	12.7	4.76	0.4			•	
	SNGN120408	12.7	4.76	0.8			•	
	SNGN12T612	12.7	6.75	1.2			•	
	SNGN150716	15.875	7.94	1.6			•	
	SNGN150720	15.875	7.94	2.0			•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**PCBN刀片** PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	TNGA160402	9.525	4.76	3.81	0.2	2.5	▲	▲		
	TNGA160404	9.525	4.76	3.81	0.4	2.5	▲	▲		
	TNGA160408	9.525	4.76	3.81	0.8	2.2	•	•		
	TNGA160412	9.525	4.76	3.81	1.2	2.0	•	•		
	TNGA160402-3	9.525	4.76	3.81	0.2	2.5	•	•		
	TNGA160404-3	9.525	4.76	3.81	0.4	2.5	•	•		
	TNGA160408-3	9.525	4.76	3.81	0.8	2.2	•	•		
	TNGA160412-3	9.525	4.76	3.81	1.2	2.0	•	•		
	TNGA160404-3	9.525	4.76	3.81	0.4	2.5			•	
	TNGA160408-3	9.525	4.76	3.81	0.8	2.2			•	
	TNGA160412-3	9.525	4.76	3.81	1.2	2.0			•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

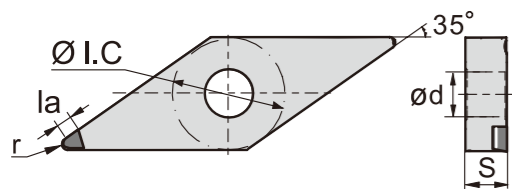
Turning Inserts - Negative  
VNGA(35° Negative)

车削刀片 - 负角型  
VNGA (35°负角型)

Turning Inserts - Negative  
WNGA(80° Negative)

车削刀片 - 负角型  
WNGA (80°负角型)

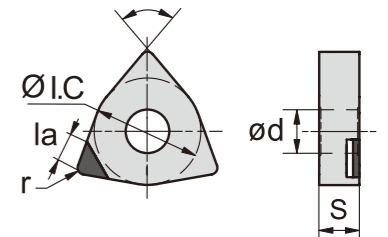
PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	VNGA160402	9.525	4.76	3.81	0.2	3.3	•	•		
	VNGA160404	9.525						•		
	VNGA160408	9.525	4.76	3.81	0.8	2.5	•	•		
	VNGA160412	9.525	4.76	3.81	1.2	2.0	•	•		
	VNGA160402-2	9.525	4.76	3.81	0.2	3.3	•	•		
	VNGA160404-2	9.525	4.76	3.81	0.4	2.8	▲	▲		
	VNGA160408-2	9.525	4.76	3.81	0.8	2.5	▲	▲		
	VNGA160412-2	9.525	4.76	3.81	1.2	2.0	•	•		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	WNGA080404-3	12.7	4.76	5.16	0.4	3.3	▲	▲		
	WNGA080408-3	12.7	4.76	5.16	0.8	2.8	▲	▲		
	WNGA080412-3	12.7	4.76	5.16	1.2	2.8	•	•		
	WNGA080404-3	12.7	4.76	5.16	0.4	3.3			•	
	WNGA080408-3	12.7	4.76	5.16	0.8	2.8			•	
	WNGA080412-3	12.7	4.76	5.16	1.2	2.8			•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

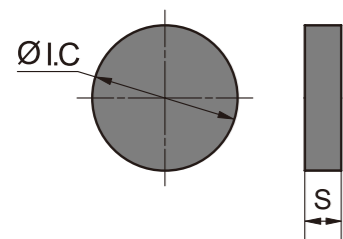
Turning Inserts - Negative  
**RNGN**

车削刀片 - 负角型  
**RNGN 负角型**

Turning Inserts - Positive  
**CCGW (80° Positive)**

车削刀片 - 正角型  
**CCGW (80°正角型)**

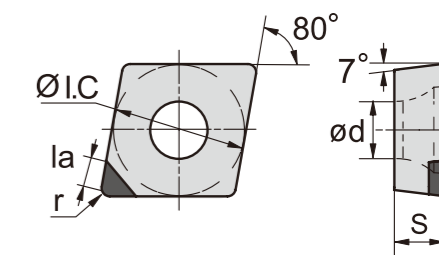
**PCBN刀片** PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)		牌号 Grade			
		ØI.C	S	KB4011	KB4012	KD7011	KD7012
	RNGN090300	9.525	3.18			•	
	RNGN120400	12.7	4.76			•	
	RNGN120700	12.7	7.94			•	
	RNGN150700	15.875	7.94			•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

**PCBN刀片** PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	CCGW060204	6.35	2.38	2.8	0.4	2.5	•	•		▲
	CCGW060208	6.35	2.38	2.8	0.8	2.4	•	•		▲
	CCGW09T304	9.525	3.97	4.4	0.4	2.5	•	•		▲
	CCGW09T308	9.525	3.97	4.4	0.8	2.4	•	•		▲
	CCGW120404	12.7	4.76	5.5	0.4	2.5	•	•		
	CCGW120408	12.7	4.76	5.5	0.8	2.4	•	•		▲
	CCGW120412	12.7	4.76	5.5	1.2	2.3	•	•		
	CCGW120412-2	12.7	4.76	5.5	1.2	2.3	•	•		
	CCGW060204-2	6.35	2.38	2.8	0.4	2.5	•	•		
	CCGW060208-2	6.35	2.38	2.8	0.8	2.4	•	•		
	CCGW09T304-2	9.525	3.97	4.4	0.4	2.5	▲	▲		
	CCGW09T308-2	9.525	3.97	4.4	0.8	2.4	▲	▲		
	CCGW120404-2	12.7	4.76	5.5	0.4	2.5	▲	▲		
	CCGW120408-2	12.7	4.76	5.5	0.8	2.4	▲	▲		
	CCGW120412-2	12.7	4.76	5.5	1.2	2.3	•	•		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

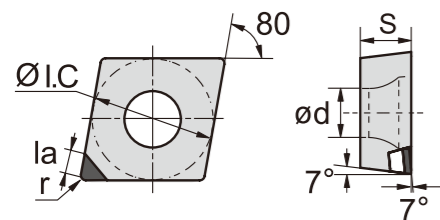
Turning Inserts - Positive  
CCMX (80° Positive)

车削刀片 - 正角型  
CCWX (80° 正角型)

Turning Inserts - Positive  
DCGW (80° Positive)

车削刀片 - 正角型  
DCGW (80° 正角型)

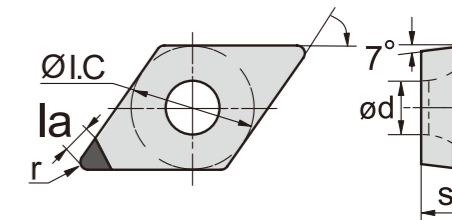
PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	CCMX060202	6.35	2.38	2.8	0.2	2.5				▲
	CCMX060204	6.35	2.38	2.8	0.4	2.5				▲
	CCMX060208	6.35	2.38	2.8	0.8	2.4				▲
	CCMX09T304	9.525	3.97	4.4	0.4	2.5				▲
	CCMX09T308	9.525	3.97	4.4	0.8	2.4				▲
	CCMX120408	12.7	4.76	5.5	0.8	2.4				▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	DCGW070202	6.35	2.38	2.8	0.2	2.7	●	●		▲
	DCGW070204	6.35	2.38	2.8	0.4	2.5	●	●		▲
	DCGW070208	6.35	2.38	2.8	0.8	2.1	●	●		
	DCGW11T304	9.525	3.97	4.4	0.4	2.5	●	●		▲
	DCGW11T308	9.525	3.97	4.4	0.8	2.1	●	●		▲
	DCGW070202-2	6.35	2.38	2.8	0.2	2.7	●	●		
	DCGW070204-2	6.35	2.38	2.8	0.4	2.5	●	●		
	DCGW070208-2	6.35	2.38	2.8	0.8	2.1	●	●		
	DCGW11T304-2	9.525	3.97	4.4	0.4	2.5	▲	▲		
	DCMX070202	6.35	2.38	2.8	0.2	2.7				▲
	DCMX070204	6.35	2.38	2.8	0.4	2.5				▲
	DCMX11T304	9.525	3.97	4.4	0.4	2.5				▲
	DCMX11T308	9.525	3.97	4.4	0.8	2.1				▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



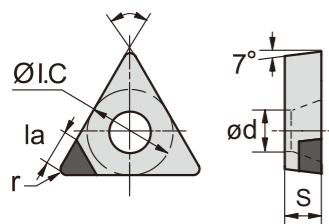
Turning Inserts - Positive  
TCGW(60° Positive)

车削刀片 - 正角型  
TCGW(60° 正角型)

Turning Inserts - Positive  
TCMX (60° Positive)

车削刀片 - 正角型  
TCMX (60° 正角型)

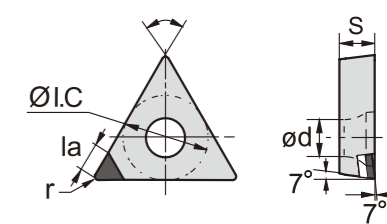
PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	TCGW090204	5.56	2.38	2.5	0.4	2.5	●	●		▲
	TCGW090208	5.56	2.38	2.5	0.8	2.2	●	●		▲
	TCGW110202	6.35	2.38	2.8	0.2	2.5	●	●		▲
	TCGW110204	6.35	2.38	2.8	0.4	2.5	●	●		▲
	TCGW110208	6.35	2.38	2.8	0.8	2.2	●	●		▲
	TCGW110304	6.35	3.18	2.8	0.4	2.5	●	●		▲
	TCGW16T304	9.525	3.97	4.4	0.4	2.5	●	●		▲
	TCGW16T308	9.525	3.97	4.4	0.8	2.2	●	●		▲
	TCGW16T312	9.525	3.97	4.4	1.2	2.0	●	●		▲
	TCGW090204-3	5.56	2.38	2.5	0.4	2.5	●	●		
	TCGW090208-3	5.56	2.38	2.5	0.8	2.2	●	●		
	TCGW110202-3	6.35	2.38	2.8	0.2	2.5	●	●		
	TCGW110204-3	6.35	2.38	2.8	0.4	2.5	▲	▲		
	TCGW110208-3	6.35	2.38	2.8	0.8	2.2	▲	▲		
	TCGW110304-3	6.35	3.18	2.8	0.4	2.5	▲	▲		
	TCGW16T304-3	9.525	3.97	4.4	0.4	2.5	▲	▲		
	TCGW16T308-3	9.525	3.97	4.4	0.8	2.2	▲	▲		
	TCGW16T312-3	9.525	3.97	4.4	1.2	2.0	●	●		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	TCMX090204	5.56	2.38	2.5	0.4	2.5				▲
	TCMX090208	5.56	2.38	2.5	0.8	2.0				▲
	TCMX110202	6.35	2.38	2.8	0.2	2.5				▲
	TCMX110204	6.35	2.38	2.8	0.4	2.5				▲
	TCMX110208	6.35	2.38	2.8	0.8	2.0				▲
	TCMX110304	6.35	3.18	2.8	0.4	2.5				▲
	TCMX16T304	9.525	3.97	4.4	0.4	2.5				▲
	TCMX16T308	9.525	3.97	4.4	0.8	2.0				▲
	TCMX16T312	9.525	3.97	4.4	1.2	2.0				▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

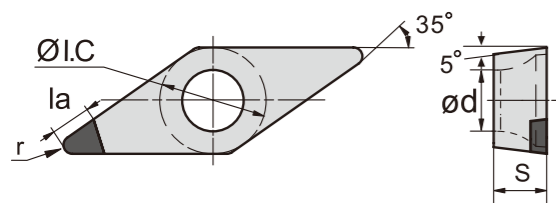
Turning Inserts - Positive  
VBGW (35° Positive)

车削刀片 - 正角型  
VBGW (35° 正角型)

Turning Inserts - Positive  
WCGW (35° Positive)

车削刀片 - 正角型  
VCGW (35° 正角型)

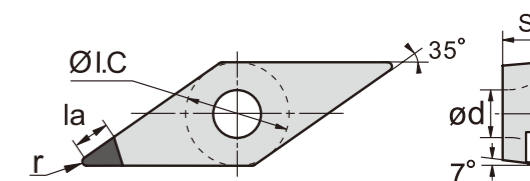
PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	VBGW160404	9.525	4.76	4.4	0.4	2.8	●	●		▲
	VBGW160408	9.525	4.76	4.4	0.8	2.5	●	●		▲
	VBGW160412	9.525	4.76	4.4	1.2	2.0	●	●		▲
	VBGW160404-2	9.525	4.76	4.4	0.4	2.8	▲	▲		
	VBGW160408-2	9.525	4.76	4.4	0.8	2.5	▲	▲		
	VBGW160412-2	9.525	4.76	4.4	1.2	2.0	●	●		
	VBMX160404	9.525	4.76	4.4	0.4	2.8				▲
	VBMX160408	9.525	4.76	4.4	0.8	2.5				▲
	VBMX160412	9.525	4.76	4.4	1.2	2.0				▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

PCBN刀片 PCBN Inserts



刀片外形 Insert shape	型号 Type	尺寸 Dimensions(mm)					牌号 Grade			
		ØI.C	S	ød	r	la	KB4011	KB4012	KD7011	KD7012
	VCGW160404	9.525	4.76	4.4	0.4	2.8				▲
	VCGW160408	9.525	4.76	4.4	0.8	2.5				▲
	VCGW160412	9.525	4.76	4.4	1.2	2.0				▲
	VCMX160404	9.525	4.76	4.4	0.4	2.8				▲
	VCMX160408	9.525	4.76	4.4	0.8	2.5				▲
	VCMX160412	9.525	4.76	4.4	1.2	2.0				▲

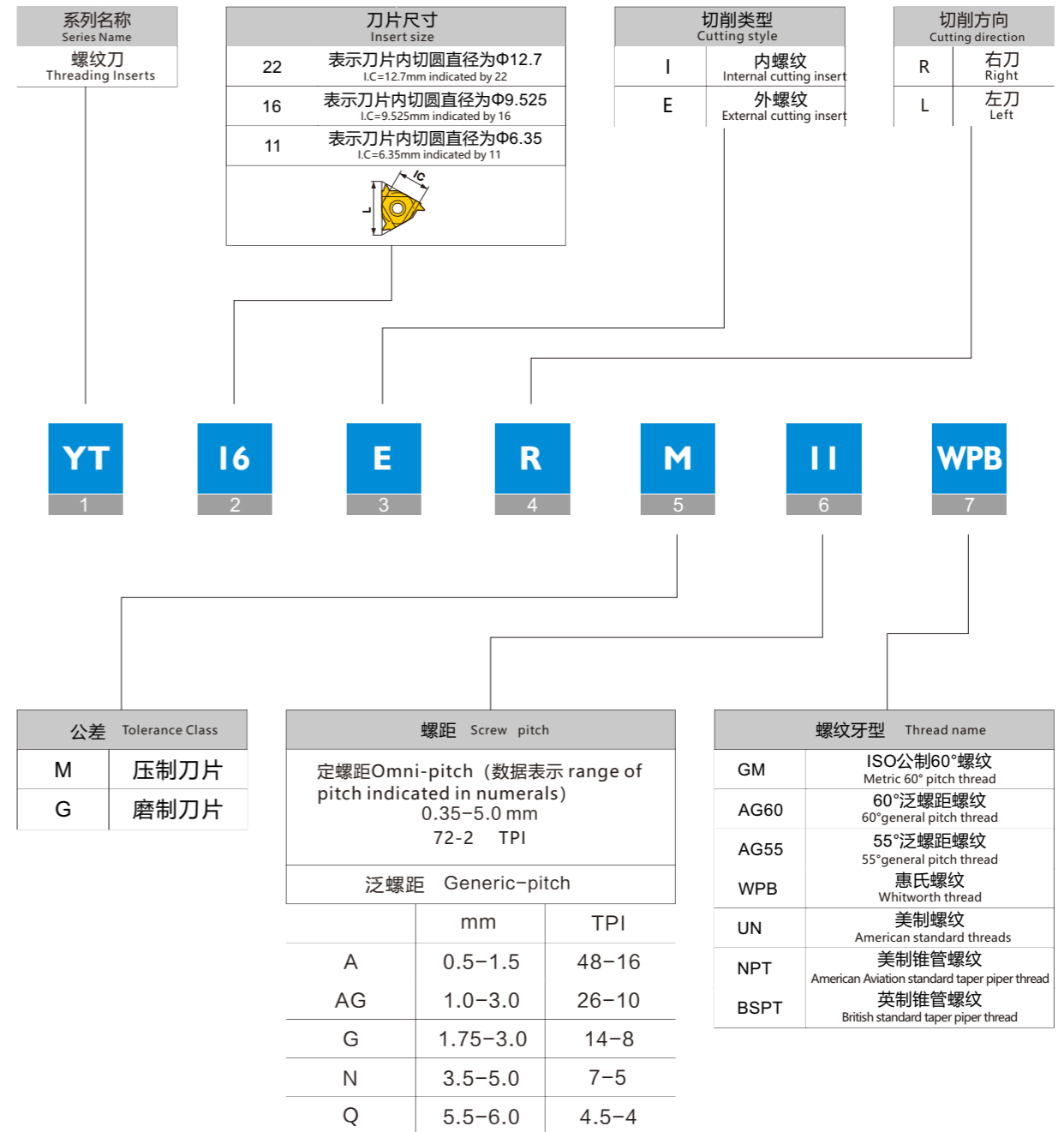
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

Ingenuity Quality, Stable and Efficient.  
匠心品质 稳定高效

## 螺纹车削

## Threading Inserts

### 螺纹刀片型号命名规则 Threading Inserts Naming Rules



# THREADING INSERTS

## 螺纹车削

螺纹车削

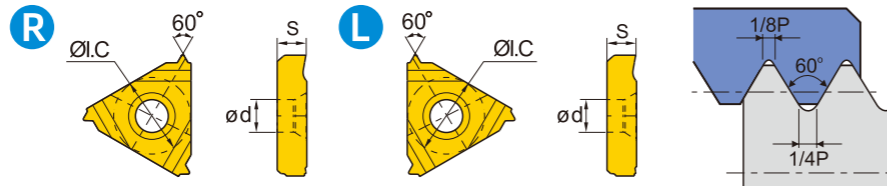
Threading Inserts

螺纹车削

Threading Inserts

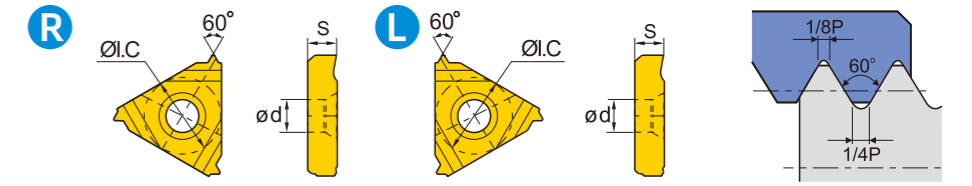
公制 ISO 螺纹 有顶切

ISO 965-1980 DIN 13  
GB/T 197-2003  
公差等级: 6g/6H



公制 ISO 螺纹 有顶切

ISO 965-1980 DIN 13  
GB/T 197-2003  
公差等级: 6g/6H



产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109	
外螺纹 External cutting insert	YT16ERM0.5ISO	YT16ELM0.5ISO	0.5	9.525	3.52	4.0			•	•	•	•	
	YT16ERM0.75ISO	YT16ELM0.75ISO	0.75	9.525	3.52	4.0			•	•	•	•	
	YT16ERM1.0ISO	YT16ELM1.0ISO	1	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM1.25ISO	YT16ELM1.25ISO	1.25	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM1.5ISO	YT16ELM1.5ISO	1.5	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM1.75ISO	YT16ELM1.75ISO	1.75	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM2.0ISO	YT16ELM2.0ISO	2	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM2.5ISO	YT16ELM2.5ISO	2.5	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM3.0ISO	YT16ELM3.0ISO	3	9.525	3.52	4.0			•	•	▲	▲	
	YT22ERM3.5ISO	YT22ELM3.5ISO	3.5	12.7	4.65	5.0			•	•	▲	▲	
	YT22ERM4.0ISO	YT22ELM4.0ISO	4	12.7	4.65	5.0			•	•	▲	▲	
	YT22ERM4.5ISO	YT22ELM4.5ISO	4.5	12.7	4.65	5.0			•	•	▲	▲	
	YT22ERM5.0ISO	YT22ELM5.0ISO	5	12.7	4.65	5.0			•	•	▲	▲	
	YT22ERM5.5ISO	YT22ELM5.5ISO	5.5	12.7	4.65	5.0			•	•	▲	▲	
	YT22ERM6.0ISO	YT22ELM6.0ISO	6	12.7	4.65	5.0			•	•	▲	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109	
内螺纹 Internal cutting insert	YT11IRM0.5ISO	YT11ILM0.5ISO	0.50	6.35	3.05	3.2			•	•	•	•	
	YT11IRM0.75ISO	YT11ILM0.75ISO	0.75	6.35	3.05	3.2			•	•	•	•	
	YT11IRM1.0ISO	YT11ILM1.0ISO	1.00	6.35	3.05	3.2			•	•	•	•	
	YT11IRM1.25ISO	YT11ILM1.25ISO	1.25	6.35	3.05	3.2			•	•	•	•	
	YT11IRM1.5ISO	YT11ILM1.5ISO	1.5	6.35	3.05	3.2			•	•	•	•	
	YT11IRM1.75ISO	YT11ILM1.75ISO	1.75	6.35	3.05	3.2			•	•	•	•	
	YT11IRM2.0ISO	YT11ILM2.0ISO	2	6.35	3.05	3.2			•	•	•	•	
	YT16IRM0.5ISO	YT16ILM0.5ISO	0.50	9.525	3.52	4.0			•	•	•	•	
	YT16IRM0.75ISO	YT16ILM0.75ISO	0.75	9.525	3.52	4.0			•	•	•	•	
	YT16IRM1.0ISO	YT16ILM1.0ISO	1.00	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM1.25ISO	YT16ILM1.25ISO	1.25	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM1.5ISO	YT16ILM1.5ISO	1.50	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM1.75ISO	YT16ILM1.75ISO	1.75	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM2.0ISO	YT16ILM2.0ISO	2.00	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM2.5ISO	YT16ILM2.5ISO	2.50	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM3.0ISO	YT16ILM3.0ISO	3.00	9.525	3.52	4.0			•	•	▲	▲	
	YT22IRM3.5ISO	YT22ILM3.5ISO	3.50	12.70	4.65	5.0			•	•	▲	▲	
	YT22IRM4.0ISO	YT22ILM4.0ISO	4.00	12.70	4.65	5.0			•	•	▲	▲	
	YT22IRM4.5ISO	YT22ILM4.5ISO	4.50	12.70	4.65	5.0			•	•	▲	▲	
	YT22IRM5.0ISO	YT22ILM5.0ISO	5.00	12.70	4.65	5.0			•	•	▲	▲	
	YT22IRM5.5ISO	YT22ILM5.5ISO	5.50	12.70	4.65	5.0			•	•	▲	▲	
	YT22IRM6.0ISO	YT22ILM6.0ISO	6.00	12.70	4.65	5.0			•	•	▲	▲	

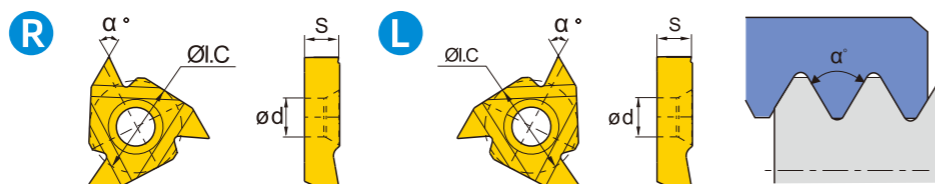
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

螺纹车削

Threading Inserts

泛用螺纹 无顶切

ISO 965-1980 DIN 13  
GB/T 197-2003  
公差等级: 6g/6H



产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶	
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109		KC5280
外螺纹 External cutting insert	55° 	YT16ERMA55	YT16ELMA55	0.5-1.5	9.525	3.52	4			•	•	•	•	
		YT16ERMG55	YT16ELMG55	1.75-3.0	9.525	3.52	4							
		YT16ERMAG55	YT16ELMAG55	0.5-3.0	9.525	3.52	4			▲	▲	▲	▲	
		YT22ERMN55	YT22ELMN55	3.5-5.0	12.7	4.65	5			▲	▲	▲	▲	
		YT11ERMAG60		0.5-1.5	6.35	3.05	3.2			▲	▲	▲	▲	
		YT16ERMA60	YT16ELMA60	0.5-1.5	9.525	3.52	4							
		YT16ERMG60	YT16ELMG60	1.75-3.0	9.525	3.52	4							
		YT16ERMAG60	YT16ELMAG60	0.5-3.0	9.525	3.52	4			▲	▲	▲	▲	
		YT22ERMN60	YT22ELMN60	3.5-5.0	12.7	4.65	5			▲	▲	▲	▲	

产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶	
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109		KC5280
内螺纹 Internal cutting insert	55° 	YT11IRMA55	YT11ILMA55	0.5-1.5	6.350	3.05	3.2			•	•	•	•	
		YT16IRMA55	YT16ILMA55	0.5-1.5	9.525	3.52	4.0			•	•	•	•	
		YT16IRMG55	YT16ILMG55	1.75-3.0	9.525	3.52	4.0			•	•	•	•	
		YT16IRMAG55	YT16ILMAG55	0.5-3.0	9.525	3.52	4.0			•	•	▲	▲	
		YT22IRMN55	YT22ILMN55	3.5-5.0	22.000	4.65	5.0			•	•	▲	▲	
		YT11IRMA60	YT11ILMA60	0.5-1.5	6.350	3.05	3.2			•	•	•	•	
		YT16IRMA60	YT16ILMA60	0.5-1.5	9.525	3.52	4.0			•	•	•	•	
		YT16IRMG60	YT16ILMG60	1.75-3.0	9.525	3.52	4.0			•	•	•	•	
		YT16IRMAG60	YT16ILMAG60	0.5-3.0	9.525	3.52	4.0			•	•	▲	▲	
		YT22IRMN60	YT22ILMN60	3.5-5.0	22.000	4.65	5.0			•	•	▲	▲	

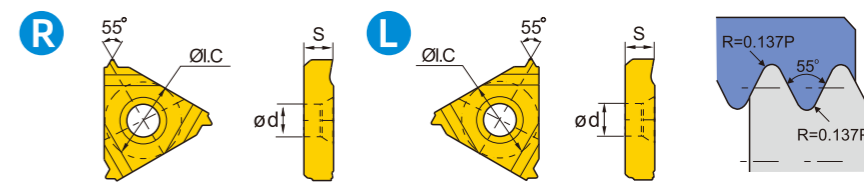
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

螺纹车削

Threading Inserts

惠氏螺纹 无顶切

ISO 228/1:1982  
DIN 259,B.S.84:1956  
公差等级: Medium classA



产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶	
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109		KC5280
外螺纹 External cutting insert		YT16ERM8WPB	YT16ELM8WPB	8	9.525	3.52	4			•	•	▲	▲	
		YT16ERM9WPB	YT16ELM9WPB	9	9.525	3.52	4			•	•	▲	▲	
		YT16ERM10WPB	YT16ELM10WPB	10	9.525	3.52	4			•	•	▲	▲	
		YT16ERM11WPB	YT16ELM11WPB	11	9.525	3.52	4			•	•	▲	▲	
		YT16ERM12WPB	YT16ELM12WPB	12	9.525	3.52	4			•	•	▲	▲	
		YT16ERM14WPB	YT16ELM14WPB	14	9.525	3.52	4			•	•	▲	▲	
		YT16ERM16WPB	YT16ELM16WPB	16	9.525	3.52	4			•	•	▲	▲	
		YT16ERM18WPB	YT16ELM18WPB	18	9.525	3.52	4			•	•	▲	▲	
		YT16ERM19WPB	YT16ELM19WPB	19	9.525	3.52	4			•	•	▲	▲	

产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶	
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109		KC5280
内螺纹 Internal cutting insert		YT16IRM8WPB	YT16ILM8WPB	8	9.525	3.52	4			•	•	•	•	
		YT16IRM9WPB	YT16ILM9WPB	9	9.525	3.52	4			•	•	•	•	
		YT16IRM10WPB	YT16ILM10WPB	10	9.525	3.52	4			•	•	•	•	
		YT16IRM11WPB	YT16ILM11WPB	11	9.525	3.52	4			•	•	▲	▲	
		YT16IRM12WPB	YT16ILM12WPB	12	9.525	3.52	4			•	•	•	•	
		YT16IRM14WPB	YT16ILM14WPB	14	9.525	3.52	4			•	•	▲	▲	
		YT16IRM16WPB	YT16ILM16WPB	16	9.525	3.52	4			•	•	•	•	
		YT16IRM18WPB	YT16ILM18WPB	18	9.525	3.52	4			•	•	•	•	
		YT16IRM19WPB	YT16ILM19WPB	19	9.525	3.52	4			•	•	▲	▲	

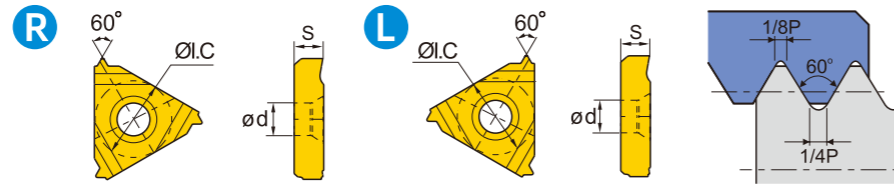
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

螺纹车削

Threading Inserts

UN统一协定螺纹 有顶切

ASME B1.1-1989  
公差等级: 2A/2B



产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	Φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109	
外螺纹 External cutting insert	YT16ERM8UN	YT16ELM8UN	8	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM10UN	YT16ELM10UN	10	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM12UN	YT16ELM12UN	12	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM14UN	YT16ELM14UN	14	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM16UN	YT16ELM16UN	16	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM18UN	YT16ELM18UN	18	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM20UN	YT16ELM20UN	20	9.525	3.52	4.0			•	•	▲	▲	
	YT16ERM24UN	YT16ELM24UN	24	9.525	3.52	4.0			•	•	▲	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	Φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109	
内螺纹 Internal cutting insert	YT16IRM8UN	YT16ILM8UN	8	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM10UN	YT16ILM10UN	10	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM12UN	YT16ILM12UN	12	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM14UN	YT16ILM14UN	14	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM16UN	YT16ILM16UN	16	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM18UN	YT16ILM18UN	18	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM20UN	YT16ILM20UN	20	9.525	3.52	4.0			•	•	▲	▲	
	YT16IRM24UN	YT16ILM24UN	24	9.525	3.52	4.0			•	•	▲	▲	

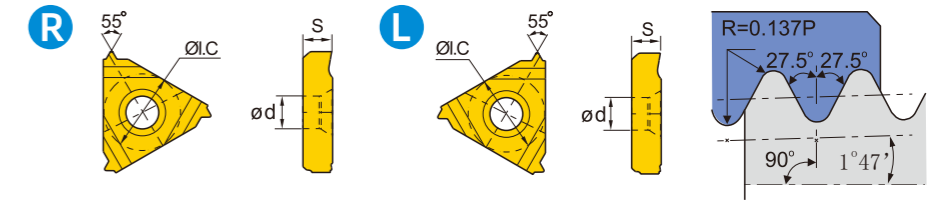
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

螺纹车削

Threading Inserts

BSPT英国标准锥管螺纹 有顶切

ISO 7/1:1994  
B.S.21:1985  
Standard BSPT



产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	Φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109	
外螺纹 External cutting insert	YT16ERM11BSPT	YT16ELM11BSPT	11	9.525	3.52	4			•	•	▲	▲	
	YT16ERM14BSPT	YT16ELM14BSPT	14	9.525	3.52	4			•	•	▲	▲	
	YT16ERM19BSPT	YT16ELM19BSPT	19	9.525	3.52	4			•	•	▲	▲	
	YT16ERM28BSPT	YT16ELM28BSPT	28	9.525	3.52	4			•	•	▲	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层						金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	Φd	KT8204	KT8284	KT8295	KT8298	KT8294	KT6109	
内螺纹 Internal cutting insert	YT16IRM11BSPT	YT16ILM11BSPT	11	9.525	3.52	4			•	•	▲	▲	
	YT16IRM14BSPT	YT16ILM14BSPT	14	9.525	3.52	4			•	•	▲	▲	
	YT16IRM19BSPT	YT16ILM19BSPT	19	9.525	3.52	4			•	•	▲	▲	
	YT16IRM28BSPT	YT16ILM28BSPT	28	9.525	3.52	4			•	•	▲	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

螺纹车削

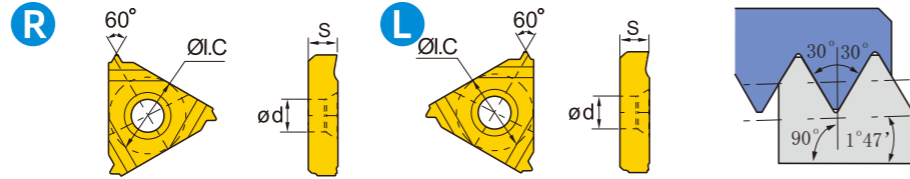
Threading Inserts

螺纹车削

Threading Inserts

NPT美国标准锥管螺纹 有顶切

ASME B1.20.1-1983  
Standard NPT



产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层					金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	Φd	KT8204	KT8284	KT8295	KT8298	KT8294	
外螺纹 External cutting insert	YT16ERM8NPT	YT16ELM8NPT	8	9.525	3.52	4			•	•	▲	▲
	YT16ERM11.5NPT	YT16ELM11.5NPT	11.5	9.525	3.52	4			•	•	▲	▲
	YT16ERM14NPT	YT16ELM14NPT	14	9.525	3.52	4			•	•	▲	▲
	YT16ERM18NPT	YT16ELM18NPT	18	9.525	3.52	4			•	•	▲	▲
	YT16ERM27NPT	YT16ELM27NPT	27	9.525	3.52	4			•	•	▲	▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

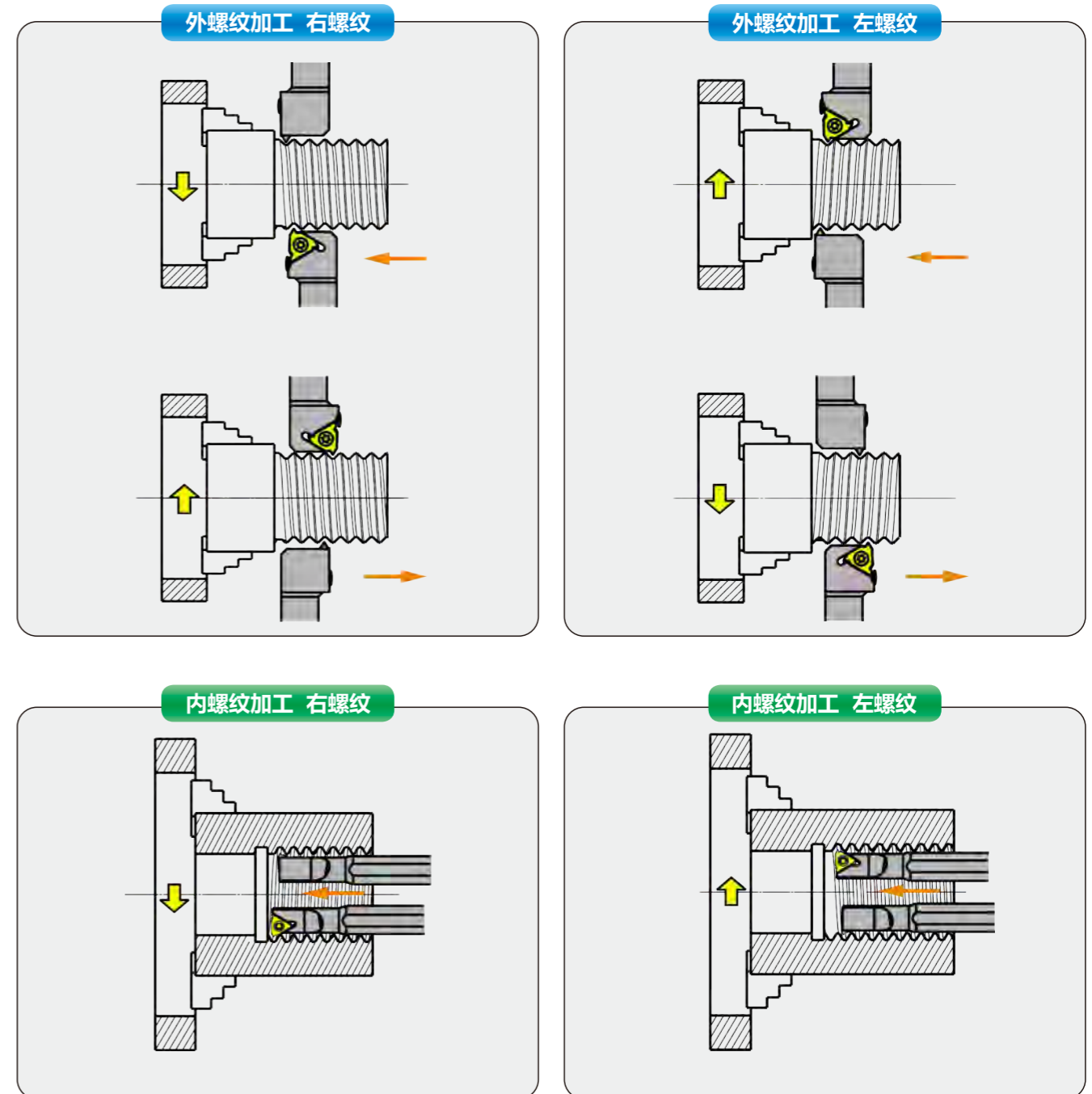
产品 Inserts Shape	型号 Type		尺寸 Dimensions (mm)				PVD涂层					金陶
	右手型 Right	左手型 Left	螺距 Screw pitch	ØI.C	S	Φd	KT8204	KT8284	KT8295	KT8298	KT8294	
内螺纹 Internal cutting insert	YT16IRM8NPT	YT16ILM8NPT	8	9.525	3.52	4			•	•	▲	▲
	YT16IRM11.5NPT	YT16ILM11.5NPT	11.5	9.525	3.52	4			•	•	▲	▲
	YT16IRM14NPT	YT16ILM14NPT	14	9.525	3.52	4			•	•	▲	▲
	YT16IRM18NPT	YT16ILM18NPT	18	9.525	3.52	4			•	•	▲	▲
	YT16IRM27NPT	YT16ILM27NPT	27	9.525	3.52	4			•	•	▲	▲

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

螺纹加工应用资料 为获得最好的螺纹加工效果, 请按照以下步骤:

- 1 选择恰当的螺纹加工方式
- 2 决定螺旋升角, 选择刀垫
- 3 选择合适的刀片和刀杆尺寸
- 4 参照标准螺纹的加工程序编制用参数表, 选择合适的螺纹切削走刀数据
- 5 选择进刀方法

螺纹刀具加工方式



螺纹车削

Threading Inserts

决定螺旋升角，选择刀垫

螺纹车削后角基本上是顺着刀边（后刀面）。这将对散热、刀具磨损扩展以及后续的刀具寿命、生产安全性和切削的螺纹质量产生显著影响。刀片螺纹牙型后刀面的后角取决于螺纹的螺旋升角。因为两者有些相似。如果刀片的刃倾角与螺旋升角不一样，则刀片的后角亦会不同。

螺纹的螺旋升角必须与刀片的刃倾角一致，以尽可能地避免在一个后刀面上过多的磨损而导致刀具寿命缩短。螺旋升角按照下式计算：

$$e = \arctan \frac{P}{d_2 \times \pi}$$

P=螺距

d<sub>2</sub>=螺纹中径

最常用的刃倾角为1°，MT标准刀垫其倾角也为1°。

后角的计算：

刀具的后角β按照下式计算：

$$\beta = \arctan (\tan \theta \times \tan \alpha)$$

2θ=螺纹牙型角

α=刀具的前角，标准刀具外螺纹为10°，内螺纹为15°

当螺纹的螺旋升角≤刀具后角时，刀片侧面会产生干涉，必须更换刀垫。

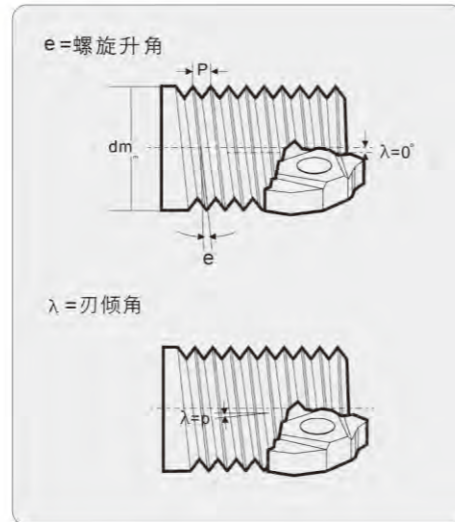
请通过更换刀垫将螺纹螺旋升角与刀垫刃倾角差值调整至2°~0°之内。

例如：对于P=1.5、d<sub>2</sub>=24mm  
螺旋升角1.14°-(2°~0°)=刃倾角(-0.86°~1.14°)  
使用标准刀垫1°即可切削。

刀垫规格表如下：

螺距范围	刀片尺寸	倾斜角	刀垫
0.5-3.0	16	0	MT16-00MN
		1	MT16-01MN
		2	MT16-02MN
		3	MT16-03MN
3.5-6.0	22	0	MT22-00MN
		1	MT22-01MN
		2	MT22-02MN
		3	MT22-03MN

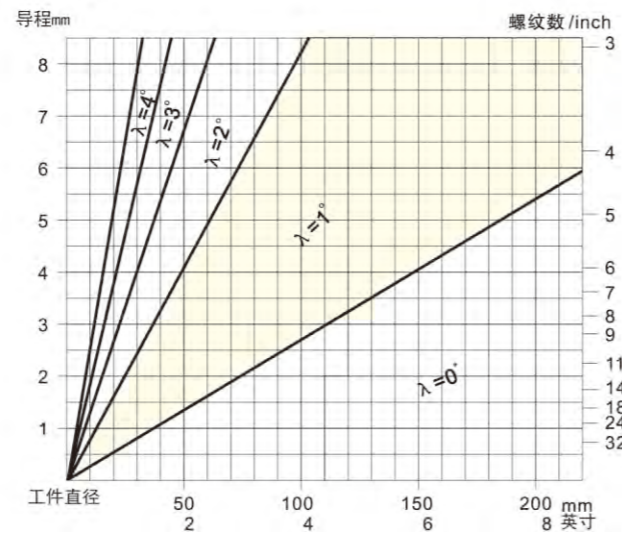
注：我公司螺纹刀具刀垫标准配置为1度。(MT16-01MN或MT22-01MN)



具体值参考下表：

螺纹牙型角2θ	β	
	外螺纹	内螺纹
60°	5.8°	8.79°
55°	5.24°	7.94°
30°	2.7°	4.1°
29°	2.6°	3.96°

选择刀垫：



螺纹车削

Threading Inserts

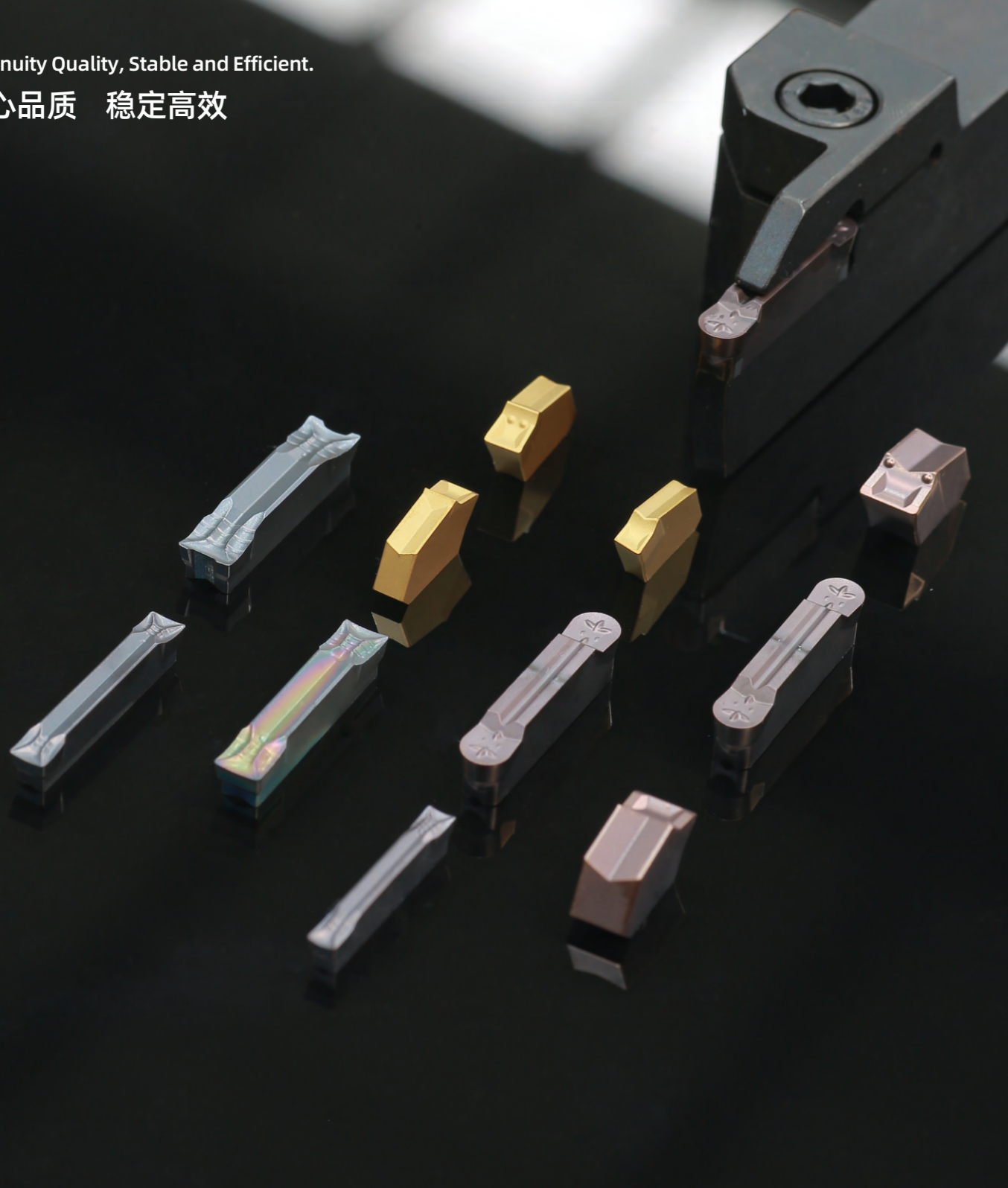
切削用量推荐表

ISO	材料		单位切削力 Kc0.4 N/mm <sup>2</sup>	硬度 HB	牌号	
					YBG202 YBG203 YBG205	
					切削速度m/min	
P	碳素钢	C=0.15%	1900	125	150-175	
		C=0.35%	2100	150	140-155	
		C=0.60%	2250	200	130-145	
	合金钢	退火	2100	180	110-130	
		淬硬	2600	275	80-100	
		淬硬	2700	300	70-90	
	高合金钢	退火	2600	200	90-115	
		淬硬	3900	325	70-90	
	铸钢	非合金	2000	180	180-210	
		低合金	2500	200	90-115	
		高合金	2700	225	90-115	
		马氏体钢12%Mn	3600	250	40-50	
M	不锈钢	奥氏体	2450	180	110-130	
		马素体 / 铁素体	2300	200	130-170	
K	可锻铸铁	铁素体	1100	130	110-140	
		珠光体	1100	230	85-105	
	灰口铸铁	低拉伸强度	1100	180	110-140	
高拉伸强度		1500	260	90-115		
球墨铸铁	铁素体	1100	160	110-130		
	珠光体	1800	250	80-100		
N	铝合金	未时效处理	500	60	1300-1450	
		时效处理	800	100	450-500	
铸铝合金	未时效处理	750	75	430-470		
	时效处理	900	90	250-290		
S	耐热合金	镍基	退火	3000	200	35-50
		时效	3050	280	25-35	
	镍基或钴基	退火	3500	250	15-25	
		时效	4150	350	10-20	
铸造	4150	320	10-15			
H	淬火钢	淬火钢	4500	HRC55	40-50	

- ◆上表为范围值，实际切削时，可适当取高值，当试用新切削速度时，应仔细查看切削刃的状况。
- ◆进行不锈钢螺纹切削时，应使用足够高的切削速度，以避免“积屑瘤”的形成。
- ◆当切削小螺距螺纹和使用小刀尖半径刀具时，应适当减小切削参数。



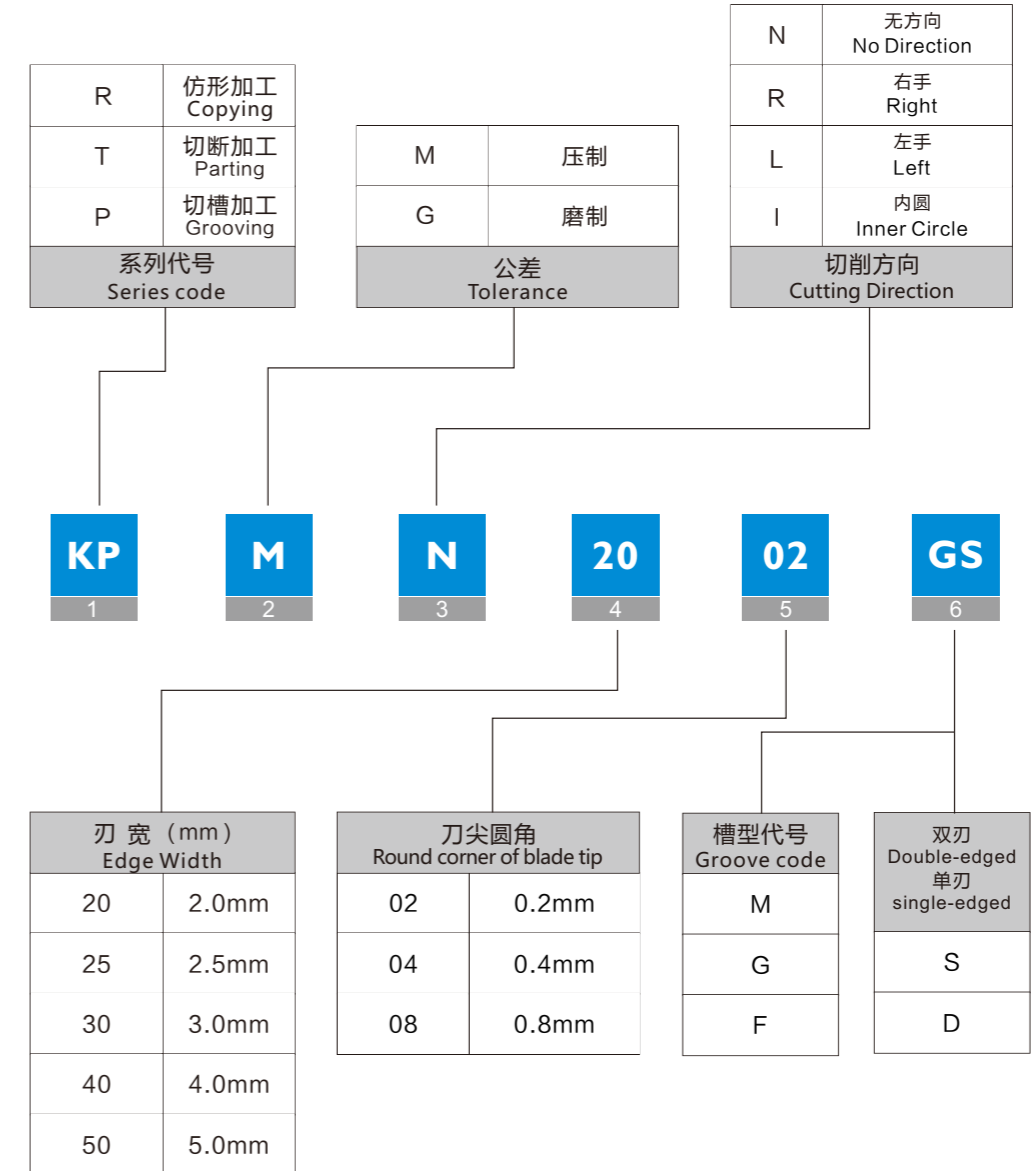
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Parting and Grooving Inserts

切断切槽刀片

切断切槽刀片型号命名规则 Parting and Grooving Inserts Naming Rules



PARTING AND GROOVING INSERTS

切断切槽刀片

A 车削刀片  
B 铣削刀片  
C 孔加工刀片  
D 刮管刀片  
E 重切削刀片  
F 非标异形刀片  
G 圆棒和立铣刀  
H 刀杆和刀盘  
I 通用技术信息

Parting and Grooving Inserts

切断切槽刀片

Parting and Grooving Inserts

切断切槽刀片

切断切槽车削 Parting and Grooving Inserts



型号 Type	尺寸 Dimensions (mm)			CVD涂层 KT3262	PVD涂层														金陶 Cermet KC5280	
	La max	W	R		KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296		KT8297
双刃 Double-edged	KPMN1502-GD	12	1.5	0.2	•	•											▲			•
	KPMN2002-GD	14	2	0.2	•	•											▲			•
	KPMN2502-GD	17	2.5	0.2	•	•											▲			•
	KPMN3002-GD	17	3	0.2	•	•											▲			•
	KPMN4002-GD	22	4	0.2	•	•											▲			•
	KPMN5003-GD	22	5	0.3	•	•											▲			•
	KPMN6004-GD	22	6	0.4	•	•											▲			•
单刃 single-edged	KPMN2502-GS		2.5	0.2	•	•											▲			•
	KPMN3002-GS		3	0.2	•	•											▲			•
	KPMN4002-GS		4	0.2	•	•											▲			•
	KPMN5003-GS		5	0.3	•	•											▲			•
	KPMN6004-GS		6	0.4	•	•											▲			•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

切断切槽车削 Parting and Grooving Inserts



型号 Type	尺寸 Dimensions (mm)			CVD涂层 KT3262	PVD涂层														金陶 Cermet KC5280		
	La max	W	R		KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296		KT8297	KT8298
双刃 Double-edged	KTMN2503-GD	17	2.5	0.3	•	•														▲	•
	KTMN3003-GD	17	3	0.3	•	•														▲	•
	KTMN4004-GD	22	4	0.4	•	•														▲	•
	KTMN5004-GD	22	5	0.4	•	•														▲	•
	KTMN6008-GD	22	6	0.8	•	•														▲	•
单刃 single-edged	KTMN5004-GS		5	0.4	•	•														▲	•
	KTMN6008-GS		6	0.8	•	•														▲	•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



型号 Type	尺寸 Dimensions (mm)			CVD涂层 KT3262	PVD涂层														金陶 Cermet KC5280		
	La max	W	R		KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296		KT8297	KT8298
双刃 Double-edged	KTMN1502-MD	12	1.5	0.2	•	•														▲	•
	KTMN2002-MD	14	2	0.2	•	•														▲	•
	KTMN2503-MD	17	2.5	0.3	•	•														▲	•
	KTMN3003-MD	17	3	0.3	•	•														▲	•
	KTMN4004-MD	22	4	0.4	•	•														▲	•
	KTMN5004-MD	22	5	0.4	•	•														▲	•
	KTMN6008-MD	22	6	0.8	•	•														▲	•
KTMN8008-MD	28	8	0.8	•	•														▲	•	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

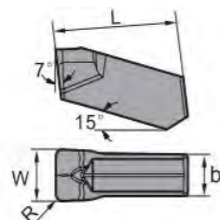
Parting and Grooving Inserts

切断切槽刀片

Parting and Grooving Inserts

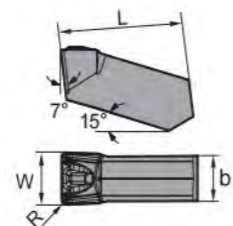
切断切槽刀片

切断切槽车削 Parting and Grooving Inserts



型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层														金陶 Cermet			
	b	W	R	L	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280	
KTMN3004-MM	2.4	3	0.4	15.3	•	•														▲				•
KTMN4006-MM	3.2	4	0.6	15.3	•	•														▲				•
KTMN5006-MM	4	5	0.6	15.3	•	•														▲				•
KTMN6008-MM	4	6	0.8	15.3	•	•														▲				•

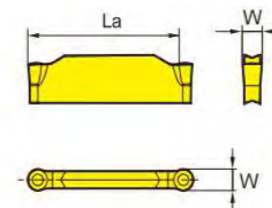
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层														金陶 Cermet			
	b	W	R	L	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280	
KTMN3004-SM	2.4	3	0.4	15.3	•	•														▲				•
KTMN4006-SM	3.2	4	0.4	15.3	•	•														▲				•
KTMN5006-SM	4	5	0.4	15.3	•	•														▲				•
KTMN6008-SM	5.1	6	0.4	15.3	•	•														▲				•

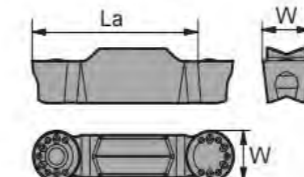
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

切断切槽车削 Parting and Grooving Inserts



型号 Type	尺寸 Dimensions (mm)		CVD涂层		PVD涂层														金陶 Cermet					
	La max	W	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280			
双刃 Double-edged	KRMN25-GD	17.5	2.5	•	•															▲				•
	KRMN30-GD	17	3	•	•															▲				•
	KRMN40-GD	21	4	•	•															▲				•
	KRMN50-GD	20	5	•	•															▲				•
	KRMN60-GD	19	6	•	•															▲				•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



型号 Type	尺寸 Dimensions (mm)		CVD涂层		PVD涂层														金陶 Cermet					
	La max	W	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280			
双刃 Double-edged	KRMN30-MM	17	3	•	•															▲				•
	KRMN40-MM	21	4	•	•															▲				•
	KRMN50-MM	20	5	•	•	▲				•														•
	KRMN60-MM	19	6	•	•	▲				•														•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

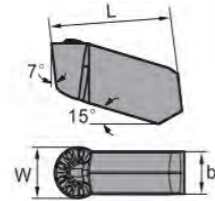
Copying Turning Inserts

仿形车削刀片

Difficult-to-cut Single end Copying Inserts

难加工材料单头仿形车削刀片

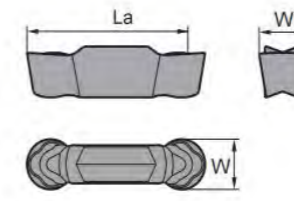
切断切槽车削 Parting and Grooving Inserts



型号 Type	尺寸 Dimensions (mm)			CVD涂层		PVD涂层														金陶 Cermat			
	b	W	L	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280	
KTMN30-MM	2.4	3	15.3	•	•														▲				•
KTMN40-MM	3.2	4	15.3	•	•														▲				•
KTMN50-MM	4	5	15.3	•	•	▲			•														
KTMN60-MM	5	6	15.3	•	•	▲			•														

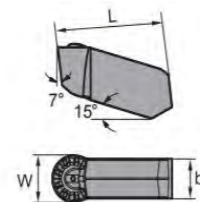
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

切断切槽车削 Parting and Grooving Inserts



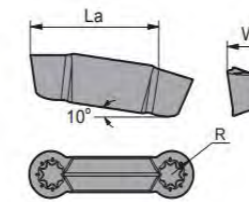
型号 Type	尺寸 Dimensions (mm)			CVD涂层		PVD涂层														金陶 Cermat					
	Lamax	W	R	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280			
KRMN60-AU	19	6		•	•																		▲	•	
KRMN80-AU	22	8		•	•																			▲	•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



型号 Type	尺寸 Dimensions (mm)			CVD涂层		PVD涂层														金陶 Cermat			
	b	W	L	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280	
KTMN30-MF	2.4	3	15.3	•	•														▲				•
KTMN40-MF	3.2	4	15.3	•	•														▲				•
KTMN50-MF	4	5	15.3	•	•	▲			•														
KTMN60-MF	5	6	15.3	•	•	▲			•														

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



型号 Type	尺寸 Dimensions (mm)			CVD涂层		PVD涂层														金陶 Cermat				
	Lamax	W	R	KT3262	KT6109	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297		KT8298	KC5280		
KTMN80-AU	22	8	4	•	•																		▲	•

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮削刀片

E 重切削刀片

F 非标异形刀片

G 圆棒和立铣刀

H 刀杆和刀盘

I 通用技术信息

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮削刀片

E 重切削刀片

F 非标异形刀片

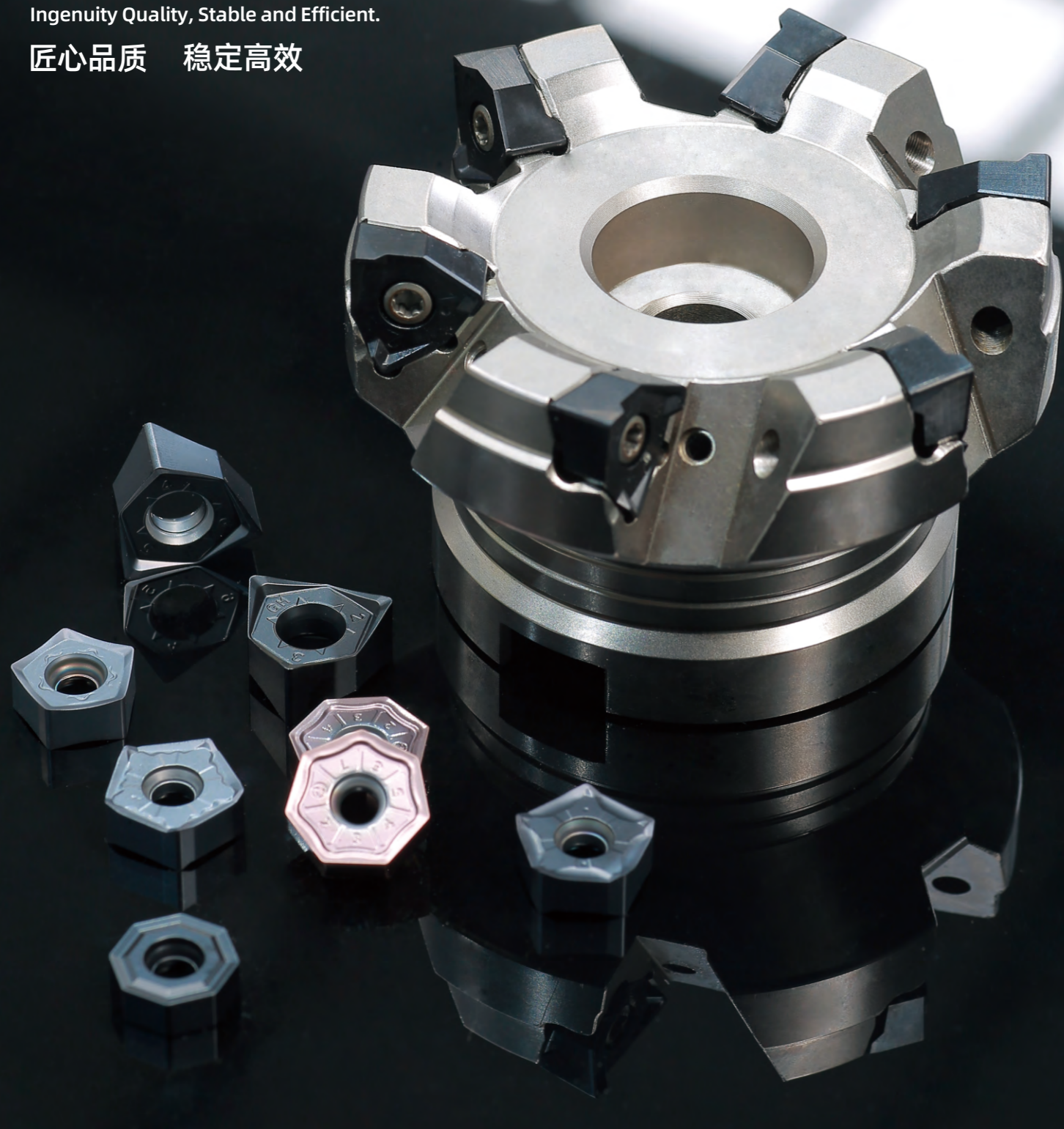
G 圆棒和立铣刀

H 刀杆和刀盘

I 通用技术信息

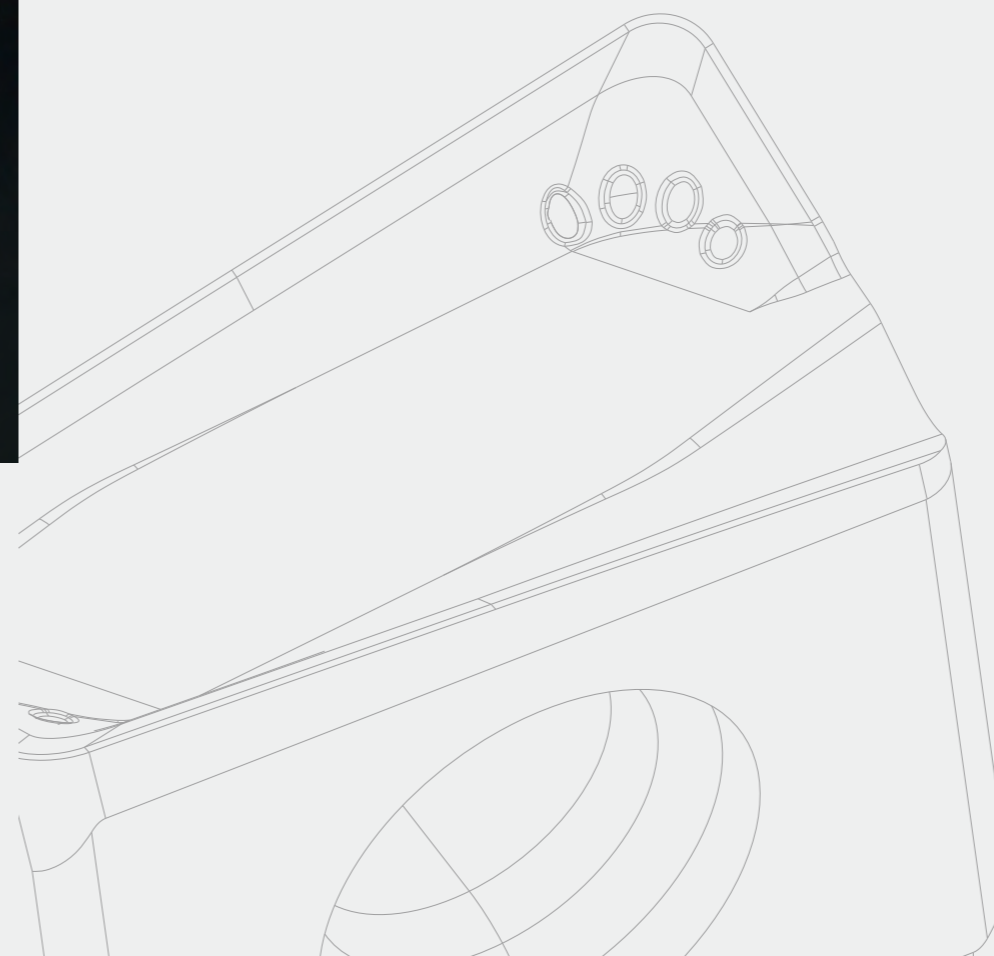
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## 铣削刀片 Milling Inserts

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## MILLING INSERTS

### 铣削刀片

铣削刀片型号命名规则

Milling Insert Naming Rules

形状代号 Shape

A P M T II 35 PD E R - GM

<b>A</b> 	<b>B</b> 	<b>C</b> 
<b>D</b> 	<b>E</b> 	<b>H</b> 
<b>K</b> 	<b>L</b> 	<b>M</b> 
<b>O</b> 	<b>P</b> 	<b>R</b> 
<b>S</b> 	<b>T</b> 	<b>T</b> 
<b>W</b> 		其它

断屑槽及夹固形式代号 Chip Breaker and Hole

A P M T II 35 PD E R - GM

代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile	代号 Symbol	有无孔 Center Hole	有无断屑槽 Chip Breaker	刀片剖面 Insert Profile
<b>B</b>	有(Y)	无(N)		<b>N</b>	无(N)	无(N)	
<b>H</b>	有(Y)	单面(S)		<b>R</b>	无(N)	单面(S)	
<b>C</b>	有(Y)	无(N)		<b>F</b>	无(N)	双面(D)	
<b>J</b>	有(Y)	双面(D)		<b>A</b>	有(Y)	无(N)	
<b>W</b>	有(Y)	无(N)		<b>M</b>	有(Y)	单面(S)	
<b>T</b>	有(Y)	单面(S)		<b>G</b>	有(Y)	双面(D)	
<b>Q</b>	有(Y)	无(N)		<b>X</b>			
<b>U</b>	有(Y)	双面(D)					

后角代号 Clearance Angle

A P M T II 35 PD E R - GM

<b>A</b> 	<b>B</b> 
<b>C</b> 	<b>D</b> 
<b>E</b> 	<b>F</b> 
<b>G</b> 	<b>N</b> 
<b>P</b> 	其它后角 Others

精度代号 Tolerance

A P M T II 35 PD E R - GM

代号 Symbol	刀尖高度m 公差 (mm) m(mm)	内接圆ΦI.C 公差 (mm) d=I.C. (mm)	厚度S 公差 (mm) s (mm)	(参考) M级精度详细情况 (按形状、大小分) ●刀尖高度公差(mm) (reference) M grade tolerance detail (according to shape, size.) Tolerance of insert nose height						
				内切圆 Inscribed Circle	正三角形 Regular Triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round
				6.35	±0.08	±0.08	±0.08	±0.11	±0.16	...
				9.525	±0.08	±0.08	±0.08	±0.11	±0.16	...
				12.7	±0.13	±0.13	±0.13	±0.15	...	...
<b>A</b>	±0.005	±0.025	±0.025	15.875	±0.15	±0.15	±0.15	±0.18	...	...
<b>F</b>	±0.005	±0.013	±0.025	19.05	±0.15	±0.15	±0.15	±0.18	...	...
<b>C</b>	±0.013	±0.025	±0.025	25.4	...	±0.18	...	...	...	...
<b>H</b>	±0.013	±0.013	±0.013	●内接圆ΦI.C公差 (mm) ●Tolerance of Inscribed Circle						
<b>E</b>	±0.025	±0.025	±0.025	内切圆 Inscribed Circle	正三角形 Regular triangle	正方形 Square	80° 菱形 80° Rhombus	55° 菱形 55° Rhombus	35° 菱形 35° Rhombus	圆形 Round
<b>G</b>	±0.025	±0.025	±0.13	6.35	±0.05	±0.05	±0.05	±0.05	±0.05	
<b>J</b>	±0.005	±0.05~±0.13	±0.025	6.35	±0.05	±0.05	±0.05	±0.05	±0.05	
<b>K</b>	±0.013	±0.05~±0.13	±0.025	9.525	±0.05	±0.05	±0.05	±0.05	±0.05	±0.05
<b>L</b>	±0.025	±0.05~±0.13	±0.025	12.7	±0.08	±0.08	±0.08	±0.08	...	±0.08
<b>M</b>	±0.08~±0.18	±0.05~±0.13	±0.13	15.875	±0.1	±0.1	±0.10	±0.10	...	±0.1
<b>N</b>	±0.08~±0.18	±0.05~±0.13	±0.025	19.05	±0.1	±0.1	±0.10	±0.10	...	±0.1
<b>U</b>	±0.13~±0.38	±0.08~±0.25	±0.13	25.4	...	...	±0.13	...	...	±0.13

铣削刀片型号命名规则

Milling Insert Naming Rules

切削刃长度代号 Cutting Edge Length

A P M T II 35 PD E R - GM

内切圆直径 Inscribed Circle diameter(mm)	刀片外形 Insert Shape							
	C	D	R	S	T	V	W	K
3.97					06			
5			05					
5.56					09			
6			06					
6.35	06	07			11	11		
8			08					
9.525	09	11	09	09	16	16	06	16
10			10					
12			12					
12.7	12	15	12	12	22	22	08	
15.875	16		15	15	27			
16			16	16				
19.05	19		19	19	33			
20			20					
25	25	25	25					
25.4			25	25				
31.75			31					
32			32					

刀片厚度代号 Thickness

A P M T II 35 PD E R - GM

代号 Symbol	刀片厚度 Thickness(mm)
<b>00</b>	0.79
<b>T0</b>	0.99
<b>01</b>	1.59
<b>T1</b>	1.98
<b>02</b>	2.38
<b>T2</b>	2.58
<b>03</b>	3.18
<b>T3</b>	3.97
<b>04</b>	4.76
<b>T4</b>	4.96
<b>05</b>	5.56
<b>T5</b>	5.95
<b>06</b>	6.35
<b>T6</b>	6.75
<b>07</b>	7.94
<b>09</b>	9.52
<b>T9</b>	9.72
<b>11</b>	11.11
<b>12</b>	12.7

厚度指刀片底面与切削刃最高部分之间的高度  
The Height Between Insert Bottom And Nose

修光刃代号 Wiper Code

A P M T II 35 PD E R - GM

	$Kr^\circ$		$\alpha n_1$
<b>A</b>	45°	<b>A</b>	3°
<b>D</b>	60°	<b>B</b>	5°
<b>E</b>	75°	<b>C</b>	7°
<b>F</b>	85°	<b>D</b>	15°
<b>P</b>	90°	<b>E</b>	20°
<b>Z</b>	其它	<b>F</b>	25°
		<b>G</b>	30°
		<b>N</b>	0°
		<b>P</b>	11°
		<b>Z</b>	其它

切削刃倒棱代号 Cutting Edge Chamfering

A P M T II 35 PD E R - GM

F	E	T	S	K	P	W	不标
0	5°	0	0.1				
1	10°	1	0.15				
2	15°	2	0.2				
3	20°	3	0.25				
4	25°	4	0.3				
5	30°	5	0.35				
		6	0.4				
		7	0.45				

切削方向代号 Cutting Direction

A P M T II 35 PD E R - GM

R	L	N
右 Right		
左 Left		
双向 Neutral		

断屑槽型代号 Chip Breaker Code

A P M T II 35 PD E R - GM

GM	KM	SM
GH	K	GL

### 铣削刀片牌号介绍

### Grade Informations

产品牌号 Grade	ISO	涂层类型 Types of Coating	涂层组成 Coating Composition	特点及应用 Features And Applications
KT1311	P15~P35	CVD 黄色 Yellow	MT-TiCN+Al <sub>2</sub> O <sub>3</sub> +TiN	1.采用高强度和高韧性的硬质合金基体, 结合薄的氧化铝CVD涂层, 具有优异耐磨性和抗冲击性能。 2.适用于钢件材料的半精铣削加工。 1. Using high strength and toughness cemented carbide substrate, combined with thin Al <sub>2</sub> O <sub>3</sub> CVD coating, it has excellent performance of wear resistance and impact resistance. 2. It is suitable for semi-finish processing of steel milling.
KT2252	P15~P35 M10~M30	CVD 黑色 Black	MT-TiCN+Al <sub>2</sub> O <sub>3</sub>	1.采用中钴成分的高韧性梯度合金基体, 搭配细晶柱状TiCN和超细的薄的Al <sub>2</sub> O <sub>3</sub> 涂层, 具有优异的抗崩缺能力和高温强度。 2.适用于合金钢、碳素钢、不锈钢材料的半精铣和粗铣加工。 1. Using high toughness gradient cemented carbide substrate with medium Cobalt content, matched with fine crystalline columnar TiCN and ultra-fine Al <sub>2</sub> O <sub>3</sub> coating, it has excellent performance of chipping resistance and high temperature resistance. 2. It is suitable for semi-finish and roughing processing of alloy steel, carbon steel and stainless steel milling.
KT2302	P25~P40 M20~M35	CVD 黑色 Black	MT-TiCN+Al <sub>2</sub> O <sub>3</sub>	1.高韧性的硬质合金基体与TiCN、薄Al <sub>2</sub> O <sub>3</sub> 涂层的结合, 最大强度保证刃口强度和抗冲击性能。 2.适用于钢件、不锈钢材料的粗铣加工。 1. The combination of high toughness carbide substrate with TiCN and thin Al <sub>2</sub> O <sub>3</sub> coating highly ensures the edge strength and performance of impact resistance. 2. It is suitable for roughing processing of steel and stainless steel milling.
KT3262	K15~K35	CVD 黑色 Black	MT-TiCN+Al <sub>2</sub> O <sub>3</sub>	1.中等晶粒的强韧性基体, 结合MT-TiCN和厚的Al <sub>2</sub> O <sub>3</sub> 涂层工艺, 具备良好的刃口强度和优异的耐磨性能。 2.适用于铸铁的粗铣及半精铣削加工。 1. Using strong toughness substrate of medium crystal grain, combined with MT-TiCN and thick Al <sub>2</sub> O <sub>3</sub> coating process, it has excellent edge strength and performance of wear resistance. 2. It is suitable for roughing and semi-finish processing of cast iron milling.
KT8206	P10~P25 M05~M25 S05~S25	PVD 灰黑色 Gray-black	TiAlN	1.采用亚微晶粒的中钴基体, 结合纳米结晶TiAlN涂层, 具有良好的强韧性和通用性能。 2.适用于合金钢、不锈钢、高温合金等材料的半精、精铣加工。 1. Using sub-micro crystalline substrate with medium Cobalt content, combined with nano-crystalline TiAlN coating, it has good strong toughness and general processing performance. 2. It is suitable for semi-finish and finishing processing of alloy steel, stainless steel, high temperature alloy and other materials milling.
KT8296	P15~P30 M15~M30 S15~S30	PVD 灰黑色 Gray-black	TiAlN	1.较高耐磨性的细晶粒中钴基体, 搭配通用性好的TiAlN涂层, 具有良好的膜基结合力、耐磨性和抗氧化性能。 2.适用于合金钢、不锈钢、高温合金等材料的半精铣削加工, 为钢件、不锈钢铣削首选牌号。 1. The fine-grain medium cobalt substrat with high wear resistance is match with high universality of TiAlN coating, it has good film-based adhesion, wear resistance and oxidation resistance. 2. It is suitable for semi-finish milling of alloy steel, stainless steel, superalloy and other materials, and is the preferred brand for steel and stainless steel milling.
KT8298	P10~P30 M10~M30 S10~S25	PVD 紫红色 Purple	TiAlN	1.采用中钴含量的高耐磨性细晶硬质合金基体, 搭配超细TiAlN纳米涂层, 具有高的涂层硬度、优良的耐高温性能, 为切削刃提供有效保护。 2.适用于合金钢、不锈钢、高温合金等材料的半精铣削加工。 1. Using the fine-grain medium cobalt cemented carbide substrat, combined with high wear resistance ultrafine TiAlN nanometer coating, providing effective protection for cutting edge. it has good film-based adhesion, wear resistance and oxidation resistance. 2. It is applicable to semi-finish milling of alloy steel, stainless steel, superalloy and other materials.
KT8326	P20~P35 M20~M35	PVD 灰黑色 Gray-black	TiAlN	1.在韧性和耐磨性较高的硬质合金基体上, 沉积纳米TiAlN涂层, 具有优异的抗崩刃性, 加工稳定性好, 可获得了较好的刀具寿命。 2.适用于钢件、不锈钢的半精、粗铣加工, 亦可用于不稳定工况下的铣削加工。 1. Both high toughness and wear resistance of cemented carbide substrat is match with the deposition of nano-TiAlN coating, it has excellent edge collapse resistance, good processing stability and good tool life. 2. It is suitable for semi-finish and rough milling of steel and stainless steel, and also for milling under unstable working conditions.

### 铣削刀片牌号介绍

### Grade Informations

产品牌号 Grade	ISO	涂层类型 Types of Coating	涂层组成 Coating Composition	特点及应用 Features And Applications
KT1456	P25~P40 M25~M40 S10~S25	PVD 灰黑色 Gray-black	TiAlN	1.采用高韧性的硬质合金基体, 结合纳米结构TiAlN涂层, 具有优异的抗崩刃性和热稳定性。 2.适用于钢和不锈钢的半精、粗铣加工, 以及耐热合金的低速、半精铣削加工。 1. The high toughness cemented carbide substrat is match with nanometer TiAlN coating, it has excellent edge collapse resistance and thermal stability. 2. It is applicable to semi-finish and rough milling of steel and stainless steel, and low-speed and semi-finish milling of heat-resistant alloy.
KT6259	P20~P35 M20~M35	PVD 七彩色 Multiple-Color	AlTiCrSiN	1.采用低钴含量的细晶粒硬质合金基体, 结合优异性能的纳米结构PVD涂层, 具有优异的耐磨性和耐高温性能。 2.适用于淬硬钢的半精和精铣削加工。 1. Using the fine-grained cemented carbide substrat with low cobalt content, combined with high excellent performance of PVD nano-coating, it has excellent wear resistance and high temperature resistance. 2. It is suitable for semi-finish and finish milling of hardened steel.
KC5100	P15~P30 M15~M30 K15~K30	无涂层 Uncoated	\	1.TiCN基金属陶瓷牌号, 具有较高的韧性、热导率和抗热震性能。 2.适用于钢件、不锈钢、铸铁材料的精铣、半精铣削加工。 2. It is suitable for finishing milling and semi-finish milling of steel, stainless steel and cast iron materials.
KC5280	P10~P25 M15~M25 K10~K25	无涂层 Uncoated	\	1.TiCN基金属陶瓷牌号, 细小弥散的硬质相颗粒、粘结相强化和环形相结构控制三者结合, 使之表现出优异的耐磨性、红硬性和抗月牙洼磨损性能。 2.适用于钢件、不锈钢、铸铁等材料的精、半精加工。 1. TiCN-based cermet grade, fine dispersion hard phase particles, bonded phase reinforcement and annular phase structure control are combined to show excellent wear resistance, red hardness and crescent hole wear resistance. 2. It is suitable for finishing and semi-finish of steel, stainless steel, cast iron etc.
KC5230	P10~P25 M10~M25 K10~K25	无涂层 Uncoated	\	1.TiCN基金属陶瓷牌号, 具有均匀、晶粒细化组织, 环形相结构, 提高了材料的强度和耐磨性。 2.适用于钢件、不锈钢、铸铁材料的精铣、半精铣削加工。 1. TiCN-based cermet grade, with uniform, grain refinement structure, annular phase structure, improve the strength and wear resistance of the material. 2. It is suitable for finishing milling and semi-finish milling of steel, stainless steel and cast iron materials.
KT3100	N05~N20	无涂层 Uncoated	\	1.低钴的亚微晶粒硬质合金材质, 结合特殊的后处理工艺, 具有优异的耐磨性和抗黏结性。 2.适用于有色金属的精铣加工。 1. Low Co submicro grain cemented carbide grade, combined with a special post-treatment process, it has excellent wear resistance and adhesion resistance. 2. It is suitable for finishing milling processing of non-ferrous metals.
KT3120	N10~N30	无涂层 Uncoated	\	1.低钴含量的细晶粒硬质合金材质, 结合特殊的后处理工艺, 具有优异的耐磨性和抗黏结性。 2.适用于有色金属的精铣、半精铣削加工。 1. The fine grain carbide grade with low cobalt content, combined with a special post-treatment process, it has excellent wear resistance and adhesion resistance. 2. It is suitable for finishing milling and semi-finish milling processing of non-ferrous metals.

铣削产品牌号一览表

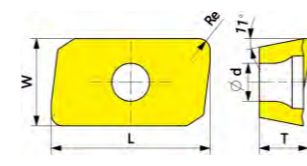
Recommend Grade Table

工件材料 Workpiece materials	ISO代号 ISO Code	CVD	PVD	金属陶瓷 Cermet	硬质合金 Cemented carbide	超硬材料 Superhard materials
<b>P</b>	P01					
	P10	KT1311	KT8206	KC5280		
	P20	KT2252	KT8296	KC5230		
	P30	KT2302	KT8326	KC5100		
	P40		KT1456			
<b>M</b>	M01					
	M10		KT8206	KC5280		
	M20	KT2252	KT8296	KC5230		
	M30	KT2302	KT8298	KC5100		
	M40		KT8326			
<b>K</b>	K01					
	K10	KT3262				
	K20					
	K30					
<b>N</b>	N01					
	N10				KT3100	KT3120
	N20					
<b>S</b>	S01					
	S10		KT8206			
	S20		KT8296			
<b>H</b>	H01					
	H10					
	H20		KT6259			
	H30					

Square Shoulder Milling Inserts  
方肩铣削刀片

APKT

铣削刀片 Milling Tools



√良好工况 Good working conditions    ○一般工况 General working conditions    ×不稳定工况 Unstable working conditions

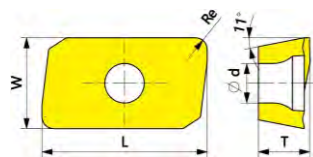
工件材料 Workpiece Material	P	M	K	N	S	H
	钢 Stainless Steel		○	×	√	√
不锈钢 Stainless Steel	○	×	√	√	√	○
铸铁 Cast Iron						○
有色金属 Non-ferrous metal						○
耐热合金、钛合金 Heat resistant alloy, Titanium alloy						×
淬硬钢 Hardened steel						×

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层		PVD涂层										金陶 Cermet				
		L	W	T	Φd	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280		
	APKT1003PDER-GL	11.6	6.76	3.5	2.8	0.8	▲			●	▲												
	APKT1003PDER-GM	11.6	6.76	3.5	2.8	0.8	▲			●	▲												
	APKT1003PDER-GH	11.6	6.76	3.5	2.8	0.8	▲			●	▲												
	APKT100304PDER-GM	11.6	6.76	3.5	2.8	0.4	▲			●	▲												
	APKT1003012PDER-GM	11.6	6.76	3.5	2.8	1.2	▲			●	▲												
	APKT100316PDER-GM	11.6	6.76	3.5	2.8	1.6	▲			●	▲												
	APKT100325PDER-GM	11.6	6.76	3.5	2.8	2.5	▲			●	▲												
	APKT100330PDER-GM	11.6	6.76	3.5	2.8	3	▲			●	▲												

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量				
			V(m/min)	f(mm/z)			ae
				GL	GM	GH	
P	低碳钢、软钢 ≤180	KT8206	320(240-400)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D
		KT8295	320(200-400)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	
		KT8296	300(320-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	
	高碳钢、合金钢 180-280	KT8206	280(210-380)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D
		KT8295	280(180-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	
		KT8296	260(150-380)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	
合金工具钢 280-350	KT8206	260(150-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
	KT8295	260(160-330)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
	KT8296	220(150-280)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
M	不锈钢 ≤270	KT8206	200(110-300)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D
K	铸铁 180-250	KT8296	180(150-250)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D
		KT8296	200(150-250)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D
S	难加工材料 ≤400	KT8296	100(60-120)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D



**铣削刀片** Milling Tools


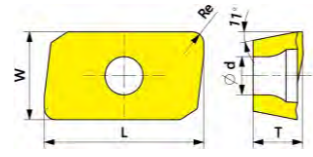
√良好工况 Good working conditions   ○一般工况 General working conditions   ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																
	M	不锈钢	○	×	√	√	√	○	○	○	×	×	×	×	×	×	×	×
K	铸铁																	
N	有色金属																	
S	耐热合金、钛合金																	
H	淬硬钢																	

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					涂层														金陶 Cement
		L	W	T	Φd	Re	CVD涂层				PVD涂层										
		L	W	T	Φd	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298	KC5280	
	APMT113504PDER-GL	11.25	6.2	3.5	2.8	0.4	▲			●	▲						●	▲			
	APMT113508PDER-GL	11.25	6.2	3.5	2.8	0.8	▲			●	▲							●	▲		
	APMT113512PDER-GL	11.25	6.2	3.5	2.8	1.2	▲			●	▲							●	▲		
	APMT113516PDER-GL	11.25	6.2	3.5	2.8	1.6	▲			●	▲							●	▲		
	APMT113504PDER-GM	11.25	6.2	3.5	2.8	0.4	▲			●	▲							●	▲		
	APMT113508PDER-GM	11.25	6.2	3.5	2.8	0.8	▲			●	▲							●	▲		
	APMT113512PDER-GM	11.25	6.2	3.5	2.8	1.2	▲			●	▲							●	▲		
	APMT113516PDER-GM	11.25	6.2	3.5	2.8	1.6	▲			●	▲							●	▲		
	APMT113504PDER-GH	11.25	6.2	3.5	2.8	0.4	▲			●	▲							●	▲		
	APMT113508PDER-GH	11.25	6.2	3.5	2.8	0.8	▲			●	▲							●	▲		
	APMT113512PDER-GH	11.25	6.2	3.5	2.8	1.2	▲			●	▲							●	▲		
	APMT113516PDER-GH	11.25	6.2	3.5	2.8	1.6	▲			●	▲							●	▲		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量					ae
			V(m/min)	f(mm/z)				
				GL	GM	GH		
P 低碳钢、软钢	≤180	KT8206	320(240-400)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
		KT8295	320(200-400)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8296	300(320-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
	180-280	KT8206	280(210-380)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8295	280(180-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8296	260(150-380)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
合金工具钢	280-350	KT8206	260(150-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8295	260(160-330)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8296	220(150-280)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
M 不锈钢	≤270	KT8206	200(110-300)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
		KT8296	180(150-300)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
K 铸铁	180-250	KT3262	180(150-250)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
		KT8296	200(150-250)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
S 难加工材料	≤400	KT8296	100(60-120)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
			100(60-120)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		

**铣削刀片** Milling Tools


√良好工况 Good working conditions   ○一般工况 General working conditions   ×不稳定工况 Unstable working conditions

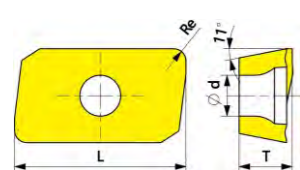
工件材料 Workpiece Material	P	钢																
	M	不锈钢	○	×	√	√	√	○	○	○	×	×	×	×	×	×	×	×
K	铸铁																	
N	有色金属																	
S	耐热合金、钛合金																	
H	淬硬钢																	

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					涂层														金陶 Cement
		L	W	T	Φd	Re	CVD涂层				PVD涂层										
		L	W	T	Φd	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298	KC5280	
	APMT160404PDER-GL	17.8	9.3	4.76	4.4	0.4	▲			●	▲							●	▲		
	APMT160408PDER-GL	17.8	9.3	4.76	4.4	0.8	▲			●	▲							●	▲		
	APMT160412PDER-GL	17.8	9.3	4.76	4.4	1.2	▲			●	▲							●	▲		
	APMT160416PDER-GL	17.8	9.3	4.76	4.4	1.6	▲			●	▲							●	▲		
	APMT160404PDER-GM	17.8	9.3	4.76	4.4	0.4	▲			●	▲							●	▲		
	APMT160408PDER-GM	17.8	9.3	4.76	4.4	0.8	▲			●	▲							●	▲		
	APMT160412PDER-GM	17.8	9.3	4.76	4.4	1.2	▲			●	▲							●	▲		
	APMT160416PDER-GM	17.8	9.3	4.76	4.4	1.6	▲			●	▲							●	▲		
	APMT160404PDER-GH	17.8	9.3	4.76	4.4	0.4	▲			●	▲							●	▲		
	APMT160408PDER-GH	17.8	9.3	4.76	4.4	0.8	▲			●	▲							●	▲		
	APMT160412PDER-GH	17.8	9.3	4.76	4.4	1.2	▲			●	▲							●	▲		
	APMT160416PDER-GH	17.8	9.3	4.76	4.4	1.6	▲			●	▲							●	▲		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量					ae
			V(m/min)	f(mm/z)				
				GL	GM	GH		
P 低碳钢、软钢	≤180	KT8206	320(240-400)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
		KT8295	320(200-400)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8296	300(320-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
	180-280	KT8206	280(210-380)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8295	280(180-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8296	260(150-380)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
合金工具钢	280-350	KT8206	260(150-350)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8295	260(160-330)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
		KT8296	220(150-280)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
M 不锈钢	≤270	KT8206	200(110-300)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
		KT8296	180(150-300)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
K 铸铁	180-250	KT3262	180(150-250)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
		KT8296	200(150-250)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		
S 难加工材料	≤400	KT8296	100(60-120)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)	≤0.5D	
			100(60-120)	0.1(0.08-0.15)	0.2(0.1-0.25)	0.25(0.12-0.3)		

铣削刀片 Milling Tools

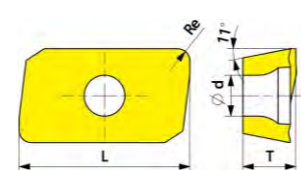


Workpiece Material compatibility table for ADMT inserts. Legend: √良好工况 Good working conditions, ○一般工况 General working conditions, ×不稳定工况 Unstable working conditions. Rows: P (钢), M (不锈钢), K (铸铁), N (有色金属), S (耐热合金、钛合金), H (淬硬钢).

Main product table for ADMT inserts. Columns: Product/Shape, Model, Dimensions (L, T, Φd, Re), Coatings (CVD, PVD), and Cermet (KC5280). Lists various models like ADMT080302R-GL, ADMT10T304R-GL, etc.

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

铣削刀片 Milling Tools



Workpiece Material compatibility table for ADMT inserts. Legend: √良好工况 Good working conditions, ○一般工况 General working conditions, ×不稳定工况 Unstable working conditions. Rows: P (钢), M (不锈钢), K (铸铁), N (有色金属), S (耐热合金、钛合金), H (淬硬钢).

Main product table for ADMT inserts. Columns: Product/Shape, Model, Dimensions (L, T, Φd, Re), Coatings (CVD, PVD), and Cermet (KC5280). Lists various models like ADMT120408R-GL, ADMT120412R-GL, etc.

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

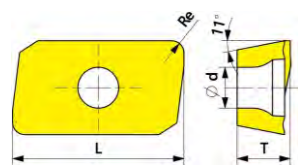
Technical data table for ADMT inserts. Columns: Material (P, M, K, S), Hardness (HB), Chipload (V, f, ae).

Technical data table for ADMT inserts. Columns: Material (P, M, K, S), Hardness (HB), Chipload (V, f, ae).

Square Shoulder Milling Inserts  
方肩铣削刀片

ADMT

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

Workpiece Material compatibility table with columns for P (Steel), M (Stainless Steel), K (Cast Iron), N (Aluminum), S (Titanium), and H (Hardened Steel), and rows for various grades like KT3262, KT2252, etc.

Main table for ADMT inserts listing product shapes, types, dimensions (L, T, Φd, Re), coatings (CVD, PVD), and grades (KT3262, KT2252, etc.).

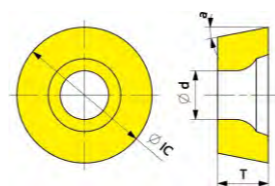
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

Table for cutting parameters (cutting speed V, feed rate f, and axial depth of cut ae) for different materials and grades.

RPMW RDKW

Face Milling Inserts  
平面铣削刀片

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

Workpiece Material compatibility table for RPMW/RDKW inserts, similar to the ADMT table.

Main table for RPMW/RDKW inserts listing product shapes, types, dimensions (ØI.C, T, Φd, a), coatings (CVD, PVD), and grades (RPMW08T2MOT, etc.).

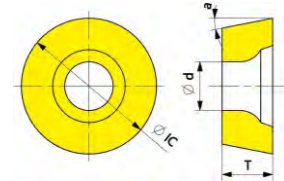
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

Table for cutting parameters (cutting speed V, feed rate f, and axial depth of cut ae) for different materials and grades.

Face Milling Inserts  
平面铣削刀片

RDKW

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料	P	M	K	N	S	H							
钢					○	○					×	×	
不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×
铸铁											×	×	
有色金属													
耐热合金、钛合金											×	×	
淬硬钢													

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层								金陶 Cermet				
		ØI.C	T	Φd	a	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298	KC5280	
	RDKW1204MOE	12	4.76	4.4	15°	▲				●	▲									
	RDKW1605MOE	16	5.56	5.5	15°	▲				●	▲									
	RDKW2006MOE	20	6.35	5.5	15°	▲				●	▲									
	RDKW0702MOT	7	2.38	3.35	15°	▲				●	▲									
	RDKW0803MOT	8	3.18	3.35	15°	▲				●	▲									
	RDKW10T3MOT	10	3.97	4.4	15°	▲				●	▲									
	RDKW1204MOT	12	4.76	4.4	15°	▲				●	▲									
	RDKW1605MOT	16	5.56	5.5	15°	▲				●	▲									
	RDKW2006MOT	20	6.35	5.5	15°	▲				●	▲									

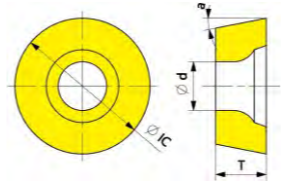
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量				
			V(m/min)	f(mm/z)			
				RPMW	RDMT	RDKT	
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	220(180-350)	0.25(0.1-0.5)		
			KT8296	270(200-360)	0.2(0.1-0.5)		
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	200(160-280)	0.25(0.1-0.5)		
			KT8296	240(180-350)	0.2(0.1-0.5)		
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.1-0.5)			
		KT8296	220(170-340)	0.2(0.1-0.4)			
M	不锈钢	≤270	KT8206	150(120-240)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)
			KT8296	150(100-220)	0.2(0.1-0.4)		
K	铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8296	240(180-300)	0.2(0.1-0.3)		

RPMT

Face Milling Inserts  
平面铣削刀片

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料	P	M	K	N	S	H						
钢					○	○					×	×
不锈钢	○	×	√	√	√	√	○	○	○	×	×	×
铸铁											×	×
有色金属												
耐热合金、钛合金											×	×
淬硬钢												

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层								金陶 Cermet				
		ØI.C	T	Φd	a	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298	KC5280	
	RPMT0803MO-GL	8	3.18	3.35	11°	▲			●	▲										
	RPMT10T3MO-GL	10	3.97	4.4	11°	▲			●	▲										
	RPMT1204MO-GL	12	4.76	4.4	11°	▲			●	▲										
	RPMT1604MO-GL	16	4.76	5.5	11°	▲			●	▲										
	RPMT0803MO-GM	8	3.18	3.35	11°	▲			●	▲										
	RPMT10T3MO-GM	10	3.97	4.4	11°	▲			●	▲										
	RPMT1204MO-GM	12	4.76	4.4	11°	▲			●	▲										
	RPMT1604MO-GM	16	4.76	5.5	11°	▲			●	▲										

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量				
			V(m/min)	f(mm/z)			
				RPMW	RDMT	RDKT	
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	220(180-350)	0.25(0.1-0.5)		
			KT8296	270(200-360)	0.2(0.1-0.5)		
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	200(160-280)	0.25(0.1-0.5)		
			KT8296	240(180-350)	0.2(0.1-0.5)		
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.1-0.5)			
		KT8296	220(170-340)	0.2(0.1-0.4)			
M	不锈钢	≤270	KT8206	150(120-240)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)
			KT8296	150(100-220)	0.2(0.1-0.4)		
K	铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8296	240(180-300)	0.2(0.1-0.3)		

Face Milling Inserts  
平面铣削刀片

Face Milling Inserts  
平面铣削刀片

RPMT

RDMT PDKT

铣削刀片 Milling Tools

铣削刀片 Milling Tools

√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢							○	○				×	×
	M	不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×
K	铸铁													×	×
N	有色金属														
S	耐热合金、钛合金													×	×
H	淬硬钢														

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层										金陶 Cermet					
		ØI.C	T	Φd	a	KT3262	KT252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280			
	RPMT0803MO-GH	8	3.18	3.35	11°	▲						●	▲										
	RPMT10T3MO-GH	10	3.97	4.4	11°	▲						●	▲										
	RPMT1204MO-GH	12	4.76	4.4	11°	▲						●	▲										
	RPMT1604MO-GH	16	4.76	5.5	11°	▲						●	▲										
	RPMW1003MO-K	10	3.18	4.4	11°	▲						●	▲										
	RPMW1204MO-K	12	4.76	4.4	11°	▲						●	▲										
	RPMW10T3MO-K	10	3.97	4.4	11°	▲						●	▲										
	RPMW1204MO-K	12	4.76	4.4	11°	▲						●	▲										

√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢							○	○					×	×
	M	不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×	×
K	铸铁													×	×	
N	有色金属															
S	耐热合金、钛合金													×	×	
H	淬硬钢															

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层										金陶 Cermet					
		ØI.C	T	Φd	a	KT3262	KT252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280			
	RDMT0602MOTN	6	2.38	3.35	15°	▲						●	▲										
	RDMT0803MOTN	6	3.18	3.35	15°	▲						●	▲										
	RDMT1003MOTN	10	3.18	4.4	15°	▲						●	▲										
	RDMT10T3MOTN	10	3.97	4.4	15°	▲						●	▲										
	RDMT1204MOTN	12	4.76	4.4	15°	▲						●	▲										
	RDMT1604MOTN	16	4.76	5.5	15°	▲						●	▲										
	RDKT0803MO-K	8	3.18	3.35	15°	▲						●	▲										
	RDKT10T3MO-K	10	3.97	4.4	15°	▲						●	▲										
	RDKT1204MO-K	12	4.76	4.4	15°	▲						●	▲										
	RDKT1605MO-K	16	5.56	5.5	15°	▲						●	▲										
	RDKT2006MO-K	20	6.35	5.5	15°	▲						●	▲										

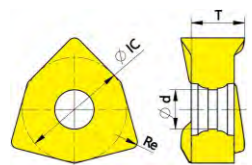
▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量				
			V(m/min)	f(mm/z)			
				RPMW	RDMT	RDKT	
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	220(180-350)	0.25(0.1-0.5)		
			KT8296	270(200-360)	0.2(0.1-0.5)		
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	200(160-280)	0.25(0.1-0.5)		
			KT8296	240(180-350)	0.2(0.1-0.5)		
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.1-0.5)			
		KT8296	220(170-340)	0.2(0.1-0.4)			
M	不锈钢	≤270	KT8206	150(120-240)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)
K	铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8296	240(180-300)	0.2(0.1-0.3)		

被加工材料	硬度HB	刀片牌号	切削用量				
			V(m/min)	f(mm/z)			
				RPMW	RDMT	RDKT	
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	220(180-350)	0.25(0.1-0.5)		
			KT8296	270(200-360)	0.2(0.1-0.5)		
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8295	200(160-280)	0.25(0.1-0.5)		
			KT8296	240(180-350)	0.2(0.1-0.5)		
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.1-0.5)			
		KT8296	220(170-340)	0.2(0.1-0.4)			
M	不锈钢	≤270	KT8206	150(120-240)	0.2(0.1-0.4)	0.3(0.2-0.6)	0.2(0.1-0.4)
K	铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.5)	0.3(0.2-0.8)	0.2(0.1-0.5)
			KT8296	240(180-300)	0.2(0.1-0.3)		

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

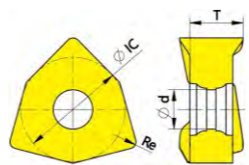
工件材料 Workpiece Material	P	M	K	N	S	H
钢						
不锈钢		○	×	√	√	√
铸铁						○
有色金属						○
耐热合金、钛合金						○
淬硬钢						×

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层													
		ØI.C	T	Φd	Re	KT3262	K12252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298			
	WNMU040304EN-GM	6.25	3.1	3.3	0.4	▲		●	▲								●	▲			
	WNMU050408EN-GM	8.8	4.2	3.4	0.8	●			●	●								●	●		
	WNMU060408EN-GM	9.525	4	3.5	0.8	▲			●	▲								●	▲		
	WNMU080608EN-GM	14.02	6.65	6.2	0.8	▲			●	▲									●	▲	
	WNMU040304EN-GH	6.25	3.1	3.3	0.4	●			●	●									●	●	
	WNMU050408EN-GH	8.8	4.2	3.4	0.8	●			●	●									●	●	
	WNMU060408EN-GH	9.525	4	3.5	0.8	●			●	●									●	●	
	WNMU080608EN-GH	14.02	6.65	6.2	0.8	●			●	●									●	●	
	WNMU040304EN-SM	6.25	3.1	3.3	0.4	●			●	●									●	●	
	WNMU050408EN-SM	8.8	4.2	3.4	0.8	●			●	●									●	●	
	WNMU060408EN-SM	9.525	4	3.5	0.8	●			●	●									●	●	
	WNMU080608EN-SM	14.02	6.65	6.2	0.8	▲			●	▲									●	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量						
			V(m/min)	f(mm/z)					AK
				GL	GM	GH	SM		
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8295						
			KT8296						
	高碳钢、合金钢	180-280	KT8206	260(200-320)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8295						
			KT8296						
合金工具钢	280-350	KT8206	240(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)	
		KT8295							
		KT8296							
M	不锈钢	≤270	KT8206	230(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8296						
K	铸铁	180-250	KT3262	270(150-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8296						

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	M	K	N	S	H
钢						
不锈钢		○	×	√	√	√
铸铁						○
有色金属						○
耐热合金、钛合金						○
淬硬钢						×

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层														
		ØI.C	T	Φd	Re	KT3262	K12252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298				
	WNMU040304EN-GL	6.25	3.1	3.3	0.4	▲			●	▲								●	▲			
	WNMU050408EN-GL	8.8	4.2	3.4	0.8	▲			●	▲									●	▲		
	WNMU060408EN-GL	9.525	4	3.5	0.8	▲			●	▲									●	▲		
	WNMU080608EN-GL	14.02	6.65	6.2	0.8	▲			●	▲										●	▲	
	WNMU040304EN-AK	6.25	3.1	3.3	0.4	▲			●	▲										●	▲	
	WNMU050408EN-AK	8.8	4.2	3.4	0.8	▲			●	▲										●	▲	
	WNMU060408EN-AK	9.525	4	3.5	0.8	▲			●	▲										●	▲	
	WNMU080608EN-AK	14.02	6.65	6.2	0.8	▲			●	▲										●	▲	
	WNMU080508	14.02	5.56	6.2	0.8	▲			●	▲										●	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

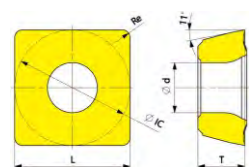
被加工材料	硬度HB	刀片牌号	切削用量						
			V(m/min)	f(mm/z)					AK
				GL	GM	GH	SM		
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8295						
			KT8296						
	高碳钢、合金钢	180-280	KT8206	260(200-320)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8295						
			KT8296						
合金工具钢	280-350	KT8206	240(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)	
		KT8295							
		KT8296							
M	不锈钢	≤270	KT8206	230(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8296						
K	铸铁	180-250	KT3262	270(150-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)
			KT8296						

Face Milling Inserts  
平面铣削刀片

SNMX

铣削刀片 Milling Tools

√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions



工件材料 Workpiece Material	P	M	K	N	S	H													
钢										○							×	×	
不锈钢		○	×	√	√	√	√	○	○	○	×	×	×	×				×	×
铸铁																		×	×
有色金属																			
耐热合金、钛合金																	×	×	
淬硬钢																			

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					涂层															金陶 Cermet
		L	ØI.C	T	r	bs	CVD涂层					PVD涂层										KC5280
	SNMX1205ANN-GM	12.7	12.7	5.59		1.5	▲				●	▲							●	▲		
	SNMX120512-GM	12.7	12.7	5.54	1.2		▲				●	▲							●	▲		
	SNMX120520-GM	12.7	12.7	5.54	2		▲				●	▲							●	▲		
	SNMX160620-GM	16	16	6.38	2		▲				●	▲							●	▲		
	SNMX160640-GM	16	16	6.38	4		▲				●	▲							●	▲		
	SNMX1205ANN-GH	12.7	12.7	5.59		1.5	▲				●	▲							●	▲		
	SNMX120512-GH	12.7	12.7	5.54	1.2		▲				●	▲							●	▲		
	SNMX120520-GH	12.7	12.7	5.54	2		▲				●	▲							●	▲		
	SNMX160620-GH	16	16	6.38	2		▲				●	▲							●	▲		
	SNMX160640-GH	16	16	6.38	4		▲				●	▲							●	▲		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

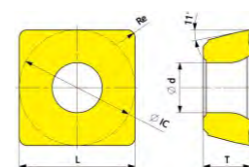
被加工材料	硬度HB	刀片牌号	切削用量							
			V(m/min)	f(mm/z)					SM	AK
				GL	GM	GH				
P 低碳钢、软钢	≤180	KT8206	270(220-350)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8295								
		KT8296								
	180-280	KT8206	260(200-320)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8295								
		KT8296								
	280-350	KT8206	240(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8295								
		KT8296								
M 不锈钢	≤270	KT8206	230(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8296								
K 铸铁	180-250	KT3262	270(150-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8296								
		KT8296								

SNMX

Face Milling Inserts  
平面铣削刀片

铣削刀片 Milling Tools

√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions



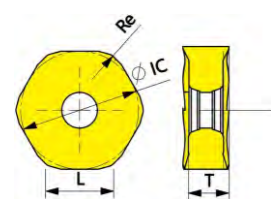
工件材料 Workpiece Material	P	M	K	N	S	H													
钢										○							×	×	
不锈钢		○	×	√	√	√	√	○	○	○	×	×	×	×				×	×
铸铁																		×	×
有色金属																			
耐热合金、钛合金																		×	×
淬硬钢																			

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					涂层															金陶 Cermet
		L	ØI.C	T	r	bs	CVD涂层					PVD涂层										KC5280
	SNMX1205ANN-SM	12.7	12.7	5.59		1.5	▲				●	▲							●	▲		
	SNMX120512-SM	12.7	12.7	5.54	1.2		▲				●	▲							●	▲		
	SNMX120520-SM	12.7	12.7	5.54	2		▲				●	▲							●	▲		
	SNMX160620-SM	16	16	6.38	2		▲				●	▲							●	▲		
	SNMX160640-SM	16	16	6.38	4		▲				●	▲							●	▲		
	SNMX1205ANN-GL	12.7	12.7	5.59		1.5	▲				●	▲							●	▲		
	SNMX120512-GL	12.7	12.7	5.54	1.2		▲				●	▲							●	▲		
	SNMX120520-GL	12.7	12.7	5.54	2		▲				●	▲							●	▲		
	SNMX160620-GL	16	16	6.38	2		▲				●	▲							●	▲		
	SNMX160640-GL	16	16	6.38	4		▲				●	▲							●	▲		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量							
			V(m/min)	f(mm/z)					SM	AK
				GL	GM	GH				
P 低碳钢、软钢	≤180	KT8206	270(220-350)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8295								
		KT8296								
	180-280	KT8206	260(200-320)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8295								
		KT8296								
	280-350	KT8206	240(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8295								
		KT8296								
M 不锈钢	≤270	KT8206	230(180-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8296								
K 铸铁	180-250	KT3262	270(150-300)	0.15 (0.1-0.2)	0.2 (0.1-0.3)	0.3 (0.1-0.3)	0.2 (0.1-0.3)	0.2 (0.1-0.3)		
		KT8296								
		KT8296								

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

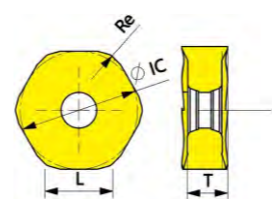
工件材料 Workpiece Material	P	钢	○	×	√	√	√	○	○	×	×	×	×	
	M	不锈钢	○	×	√	√	√	○	○	○	×	×	×	×
	K	铸铁										×	×	
	N	有色金属												
	S	耐热合金、钛合金											×	×
H	淬硬钢													

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层									金陶 Cermet				
		L	ØI.C	T	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295		KT8296	KT8298	KC5280	
	HNGX0604-GH	6.44	12	4.45	1	▲			●	▲							●	▲			
	HNGX0604-GH	6.44	12	4.45	1.6	▲			●	▲								●	▲		
	HNGX0604-GH	6.44	12	4.45	3.2	▲			●	▲								●	▲		
	HNGX0905-GH	9	15.88	5.56	1.2	▲			●	▲								●	▲		
	HNGX0905-GH	9	15.88	5.56	2	▲			●	▲								●	▲		
	HNGX0905-GH	9	15.88	5.56	3.5	▲			●	▲								●	▲		
	HNGX1307-GH	12.83	22.23	7.41	1.2	▲			●	▲								●	▲		
	HNGX1307-GH	12.83	22.23	7.41	2	▲			●	▲								●	▲		
	HNGX1307-GH	12.83	22.23	7.41	3.5	▲			●	▲								●	▲		
	HNGX0604-GL	6.44	12	4.45	1	▲			●	▲								●	▲		
	HNGX0604-GL	6.44	12	4.45	1.6	▲			●	▲								●	▲		
	HNGX0604-GL	6.44	12	4.45	3.2	▲			●	▲								●	▲		
	HNGX0905-GL	9	15.88	5.56	1.2	▲			●	▲								●	▲		
	HNGX0905-GL	9	15.88	5.56	2	▲			●	▲								●	▲		
	HNGX0905-GL	9	15.88	5.56	3.5	▲			●	▲								●	▲		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量		
			V(m/min)	f(mm/z)	
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.4)
			KT8295	220(180-300)	0.2(0.08-0.3)
			KT8296	270(200-360)	0.2(0.1-0.3)
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.4)
			KT8295	200(160-280)	0.2(0.08-0.3)
			KT8296	240(180-350)	0.2(0.1-0.3)
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.08-0.3)	
		KT8296	220(170-340)	0.2(0.1-0.3)	
M	不锈钢	≤270	KT8206	140(100-240)	0.2(0.08-0.3)
			KT8296	140(100-250)	0.2(0.1-0.3)
K	铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.3)
			KT8296	160(120-200)	0.35(0.1-0.4)

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢	○	×	√	√	√	○	○	○	×	×	×	×
	M	不锈钢	○	×	√	√	√	○	○	○	×	×	×	×
	K	铸铁											×	×
	N	有色金属												
	S	耐热合金、钛合金												×
H	淬硬钢													

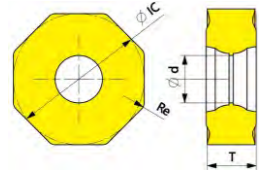
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层									金陶 Cermet				
		L	ØI.C	T	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295		KT8296	KT8298	KC5280	
	HNGX0604-GM	6.44	12	4.45	1	▲			●	▲							●	▲			
	HNGX0604-GM	6.44	12	4.45	1.6	▲			●	▲								●	▲		
	HNGX0604-GM	6.44	12	4.45	3.2	▲			●	▲								●	▲		
	HNGX0905-GM	9	15.88	5.56	1.2	▲			●	▲								●	▲		
	HNGX0905-GM	9	15.88	5.56	2	▲			●	▲								●	▲		
	HNGX0905-GM	9	15.88	5.56	3.5	▲			●	▲								●	▲		
	HNGX1307-GM	12.83	22.23	7.41	1.2	▲			●	▲								●	▲		
	HNGX1307-GM	12.83	22.23	7.41	2	▲			●	▲								●	▲		
	HNGX1307-GM	12.83	22.23	7.41	3.5	▲			●	▲								●	▲		
	HNGX0604-AK	6.44	12	4.45	1	▲			●	▲								●	▲		
	HNGX0604-AK	6.44	12	4.45	1.6	▲			●	▲								●	▲		
	HNGX0604-AK	6.44	12	4.45	3.2	▲			●	▲								●	▲		
	HNGX0905-SM	9	15.88	5.56	1.2	▲			●	▲								●	▲		
	HNGX0905-SM	9	15.88	5.56	2	▲			●	▲								●	▲		
	HNGX0905-SM	9	15.88	5.56	3.5	▲			●	▲								●	▲		

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量		
			V(m/min)	f(mm/z)	
P	低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.4)
			KT8295	220(180-300)	0.2(0.08-0.3)
			KT8296	270(200-360)	0.2(0.1-0.3)
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.4)
			KT8295	200(160-280)	0.2(0.08-0.3)
			KT8296	240(180-350)	0.2(0.1-0.3)
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.08-0.3)	
		KT8296	220(170-340)	0.2(0.1-0.3)	
M	不锈钢	≤270	KT8206	140(100-240)	0.2(0.08-0.3)
			KT8296	140(100-250)	0.2(0.1-0.3)
K	铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.3)
			KT8296	160(120-200)	0.35(0.1-0.4)



铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

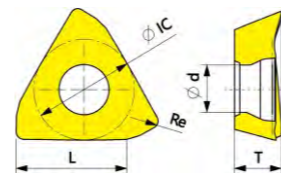
工件材料 Workpiece Material	P	钢											○	○			×	×
	M	不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×			
	K	铸铁															×	×
	N	有色金属																
	S	耐热合金、钛合金															×	×
	H	淬硬钢																

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层											金陶 Cermets				
		ØI.C	T	Φd	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296	KT8298		KC5280			
	ONHU050408-GM	12.7	4.76	4.4	0.8	▲			●	▲										●	▲		
	ONHU060408-GM	15.88	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU08T508-GM	20.2	5.95	5.4	0.8	▲			●	▲											●	▲	
	ONHU050408-GH	12.7	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU060408-GH	15.88	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU08T508-GH	20.2	5.95	5.4	0.8	▲			●	▲											●	▲	
	ONHU050408-GL	12.7	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU060408-GL	15.88	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU08T508-GL	20.2	5.95	5.4	0.8	▲			●	▲											●	▲	
	ONHU050408-SM	12.7	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU060408-SM	15.88	4.76	4.4	0.8	▲			●	▲											●	▲	
	ONHU08T508-SM	20.2	5.95	5.4	0.8	▲			●	▲											●	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量				
			V(m/min)	f(mm/z)	apmad(mm)		
					ONHU06	ONHU08	
P 低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.4)	4	5	
		KT8295					
		KT8296					
	高碳钢、合金钢	180-280	KT8206	260(200-320)	0.2(0.1-0.4)	4	5
			KT8295				
			KT8296				
合金工具钢	280-350	KT8206	240(180-300)	0.2(0.1-0.4)	4	5	
		KT8295					
		KT8296					
M 不锈钢	≤270	KT8206	230(180-300)	0.2(0.1-0.3)	4	5	
		KT8296					
K 铸铁	180-250	KT3262	270(150-300)	0.4(0.1-0.5)	4	5	
		KT8296					

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

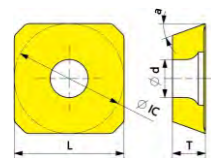
工件材料 Workpiece Material	P	钢																		○	○	○	○	×	×	
	M	不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×											
	K	铸铁																							×	×
	N	有色金属																								
	S	耐热合金、钛合金																							×	×
	H	淬硬钢																								

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层											金陶 Cermets						
		L	ØI.C	T	Φd	Re	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280				
	XPKT100404R-GM	7	6.9	4	3.8	0.4	▲			●	▲												●	▲	
	XPKT150508R-GM	11	10.7	5	4.4	0.8	▲			●	▲												●	▲	
	XPKT190608R-GM	15	13.5	6	5.1	0.8	▲			●	▲												●	▲	
	XPKT100404R-GH	7	6.9	4	3.8	0.4	▲			●	▲												●	▲	
	XPKT150508R-GH	11	10.7	5	4.4	0.8	▲			●	▲												●	▲	
	XPKT190608R-GH	15	13.5	6	5.1	0.8	▲			●	▲												●	▲	
	XPKT100404R-GL	7	6.9	4	3.8	0.4	▲			●	▲												●	▲	
	XPKT150508R-GL	11	10.7	5	4.4	0.8	▲			●	▲												●	▲	
	XPKT190608R-GL	15	13.5	6	5.1	0.8	▲			●	▲												●	▲	
	XPKT100404R-SM	7	6.9	4	3.8	0.4	▲			●	▲												●	▲	
	XPKT150508R-SM	11	10.7	5	4.4	0.8	▲			●	▲												●	▲	
	XPKT190608R-SM	15	13.5	6	5.1	0.8	▲			●	▲												●	▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量		
			V(m/min)	f(mm/z)	
					V(m/min)
P 低碳钢、软钢	≤180	KT8206	270(220-350)	0.2(0.1-0.4)	
		KT8295	220(180-300)	0.2(0.08-0.3)	
		KT8296	270(200-360)	0.2(0.1-0.3)	
	高碳钢、合金钢	180-280	KT8206	240(200-320)	0.2(0.1-0.4)
			KT8295	200(160-280)	0.2(0.08-0.3)
			KT8296	240(180-350)	0.2(0.1-0.3)
合金工具钢	280-350	KT8206	220(180-300)	0.2(0.1-0.4)	
		KT8295	180(150-250)	0.2(0.08-0.3)	
		KT8296	220(170-340)	0.2(0.1-0.3)	
M 不锈钢	≤270	KT8206	140(100-240)	0.2(0.08-0.3)	
		KT8296	140(100-250)	0.2(0.1-0.3)	
K 铸铁	180-250	KT3262	210(120-300)	0.2(0.1-0.3)	
		KT8296	160(120-200)	0.35(0.1-0.4)	

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

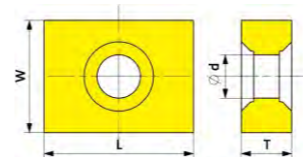
工件材料 Workpiece Material	P											○	○	×	×
	M	钢	○	×	√	√	√	√	○	○	○	×	×	×	×
K	不锈钢													×	×
N	铸铁														
S	有色金属													×	×
H	耐热合金、钛合金														
	淬硬钢														

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层		PVD涂层										金陶 Cermet		
		L	ØI.C	T	Φd	a	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280
	SEKT1204AFTN	12.7	12.7	4.76	5.5	20°	▲			●	▲						●	▲			
	SPKR1504EDR-K	15.875	15.875	4.76	/	11°	▲			●	▲						●	▲			
	SEKR1203AFEN	12.7	12.7	3.18	/	20°	▲			●	▲						●	▲			

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量	
			V(m/min)	f(mm/z)
P	低碳钢、软钢	KT8206	270(220-350)	0.2(0.1-0.4)
		KT8295	220(180-300)	0.25(0.15-0.3)
		KT8296	270(200-360)	0.2(0.1-0.3)
	高碳钢、合金钢	KT8206	240(200-320)	0.2(0.1-0.4)
		KT8295	200(160-280)	0.25(0.15-0.3)
		KT8296	240(180-350)	0.2(0.1-0.3)
合金工具钢	KT8206	220(180-300)	0.2(0.1-0.4)	
	KT8295	180(150-250)	0.25(0.15-0.3)	
	KT8296	220(170-340)	0.2(0.1-0.3)	
M	不锈钢	KT8206	130(100-220)	0.2(0.1-0.4)
		KT8296	140(100-240)	0.25(0.15-0.3)
K	铸铁	KT3262	210(120-300)	0.2(0.1-0.3)
		KT8296	200(150-250)	0.2(0.1-0.4)

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P											○	○	×	×
	M	钢	○	×	√	√	√	√	○	○	○	×	×	×	×
K	不锈钢													×	×
N	铸铁														
S	有色金属														
H	耐热合金、钛合金													×	×
	淬硬钢														

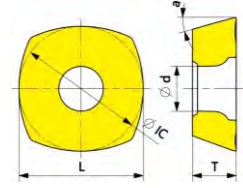
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层										金陶 Cermet		
		L	W	T	Ød	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280
	LSE323R02	15.9	9.5	4.8	5.4	▲			●	▲							●	▲		
	LSE323L02	15.9	9.5	4.8	5.4	▲			●	▲							●	▲		
	LSE434R01	19.0	14.3	6.35	5.4	▲			●	▲							●	▲		
	LSE434L01	19.0	14.3	6.35	5.4	▲			●	▲							●	▲		
	LSE435R10	19	13	5.5	5.4	▲			●	▲							●	▲		
	LSE446R01	28.6	14.3	9.5	5.4	▲			●	▲							●	▲		
	LSE446L01	28.6	14.3	9.5	5.4	▲			●	▲						●	▲			
	SNE33-01	9.525	9.525	4.76	5.4	▲			●	▲						●	▲			
	SNC44-60	12.7	12.7	6.35	5.4	▲			●	▲						●	▲			
	SNC55	15.875	15.875	7.9	5.4	▲			●	▲						●	▲			
	SNC55K08PH10X6	15.875	15.875	7.9	5.4	▲			●	▲						●	▲			

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量	
			V(m/min)	f(mm/z)
P	低碳钢、软钢	KT8206	270(220-350)	0.2(0.1-0.4)
		KT8295	220(180-300)	0.25(0.15-0.3)
		KT8296	270(200-360)	0.2(0.1-0.3)
	高碳钢、合金钢	KT8206	240(200-320)	0.2(0.1-0.4)
		KT8295	200(160-280)	0.25(0.15-0.3)
		KT8296	240(180-350)	0.2(0.1-0.3)
合金工具钢	KT8206	220(180-300)	0.2(0.1-0.4)	
	KT8295	180(150-250)	0.25(0.15-0.3)	
	KT8296	220(170-340)	0.2(0.1-0.3)	
M	不锈钢	KT8206	130(100-220)	0.2(0.1-0.4)
		KT8296	140(100-240)	0.25(0.15-0.3)
K	铸铁	KT3262	210(120-300)	0.2(0.1-0.3)
		KT8296	200(150-250)	0.2(0.1-0.4)

SDMW SDMT

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P								○	○			×	×
	钢	○	×	√	√	√	√	○	○	○	×	×	×	×
M	不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×
K	铸铁											×	×	
N	有色金属													
S	耐热合金、钛合金											×	×	
H	淬硬钢													

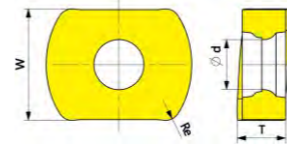
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层		PVD涂层										金陶 Cermet			
		L	ØI.C	T	Φd	a	KT3262	KT2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280	
	SDMW150512-GM	15.88	15.88	5.55	5.5	15°	▲			●	▲						●	▲				
	SDMT150512-GL	15.88	15.88	5.55	5.5	15°	▲			●	▲						●	▲				

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量							
			V(m/min)	中40/中50		中63/中80		中100/φ125/中160		
				轴向切深	每齿进给量	轴向切深	每齿进给量	轴向切深	每齿进给量	
P	碳素钢、软钢 ≤180 180-280	KT8206	170(120-220) 150(100-200)	0.6-1.5	0.8-1.5	0.6-1.5	0.8-1.5	0.6-1.5	0.5-1.5	
		KT8295								
		KT8296								
	合金工具钢 280-350	KT8206	130(80-180)	0.4-1.2	0.6-1.5	0.4-1.3	0.6-1.5	0.4-1.3	0.5-1.5	
		KT8295								
		KT8296								
预硬钢 <HRC35	KT8206	120(80-160)	0.4-1.0	0.5-1.0	0.4-1.3	0.5-1.0	0.4-1.3	0.5-1.0		
	KT8295									
	KT8296									
M	不锈钢 ≤270	KT8206	120(80-160) 120(80-190)	0.8-1.2	0.8-1.2	1.1-1.5	0.9-1.2	1.0-1.5	0.8-1.3	
		KT8296								
K	普通铸铁 张强度	KT3262	150(100-200)	0.6-1.5	0.8-1.6	0.6-1.5	0.8-1.7	0.6-1.5	0.6-1.7	
		KT8296								120(80-160)

XNMP

铣削刀片 Milling Tools



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P								○	○			×	×
	钢	○	×	√	√	√	√	○	○	○	×	×	×	×
M	不锈钢	○	×	√	√	√	√	○	○	○	×	×	×	×
K	铸铁											×	×	
N	有色金属													
S	耐热合金、钛合金											×	×	
H	淬硬钢													

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层										金陶 Cermet			
		W	T	Φd	Re	KT3262	Kt2252	KT8204	KT8205	KT8206	KT8208	KT8284	KT8286	KT8288	KT8294	KT8295	KT8296		KT8298	KC5280	
	XNMP0603R-GM	6.4	3.75	3.2	\	▲			●	▲							●	▲			
	XNMP0904R-GM	9.18	4.8	4.5	\	▲			●	▲							●	▲			
	XNMP1205R-GM	12	5.16	4.6	1.2	▲			●	▲							●	▲			
	XNMP1306R-GM	12.3	6.14	5.5	1.2	▲			●	▲							●	▲			
	XNMP0603R-GL	6.4	3.75	3.2	\	▲			●	▲							●	▲			
	XNMP0904R-GL	9.18	4.8	4.5	\	▲			●	▲							●	▲			
	XNMP1205R-GL	12	5.16	4.6	1.2	▲			●	▲							●	▲			
	XNMP1306R-GL	12.3	6.14	5.5	1.2	▲			●	▲							●	▲			

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度HB	刀片牌号	切削用量		
			V(m/min)	f(mm/z)	
				刀具直径	刀具直径
P	低碳钢、软钢 ≤180	KT8206	200(100-300)	0.5-0.7	0.5-1.0
		KT8295		0.5-1.2	0.5-1.5
		KT8296		0.5-0.7	0.5-1.0
	高碳钢、合金钢 180-280	KT8206	200(100-300)	0.5-0.7	0.5-1.0
		KT8295		0.5-1.2	0.5-1.5
		KT8296		0.5-0.7	0.5-1.0
合金工具钢 280-350	KT8206	150(100-200)	0.5-0.7	0.5-1.0	
	KT8295		0.5-1.2	0.5-1.5	
	KT8296		0.5-0.7	0.5-1.0	
M	不锈钢 ≤270	KT8206	120(100-150)	0.3-0.5	0.3-0.7
		KT8296		0.3-0.8	0.3-0.8
K	铸铁 180-250	KT3262	150(100-300)	0.5-1.2	0.5-1.5
		KT8296		120(80-200)	0.5-1.2

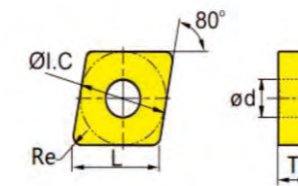


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### CNHX

### 重力切削刀片

#### 重力切削刀片 Heavy Duty Inserts



√ 良好工况 Good working conditions    一般工况 General working conditions    × 不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢																	√	×	×
	M	不锈钢	√	√		×	√	√		√	√		√	×						×	×
K	铸铁																			×	×
N	有色金属																				
S	耐热合金、钛合金																				
H	淬硬钢																				

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD涂层				PVD涂层													
		L	W	S	Φd	r	KT3122	KT3123A	KT3262	KT3263A	KT3124	KT3126	KT3266	KT8204	KT8205	KT8206	KT8207	KT8208	KT8294	KT8295	KT8296	KT8297	KT8298	
	CNHX 100508 K-M	10	5.4	10	4.4	0.8			▲													▲	●	
	CNHX 131108 K-M	12.7	5.4	11	4.5	0.8			▲													▲	●	
	CNHX 160608K-M	22	12	12	6.1	0.8			▲													▲	●	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度	刀片牌号	切削用量	
			V (m/min)	f(mm/z)
P	低碳钢 软钢	KT8295	260(160-300)	0.3(0.1-0.35)
		KT8296	260(160-300)	0.3(0.1-0.35)
	高碳钢 合金钢	KT8295	240(160-240)	0.25(0.1-0.35)
		KT8296	240(160-240)	0.25(0.1-0.35)
	合金工具钢	KT8295	200(120-240)	0.2(0.1-0.35)
		KT8296	200(120-240)	0.2(0.1-0.35)
M	不锈钢	KT8295	180(100-230)	0.15(0.1-0.3)
		KT8296	180(100-230)	0.15(0.1-0.3)
K	铸铁	KT3262	220(140-250)	0.2(0.1-0.3)
		KT8295	220(140-250)	0.2(0.1-0.3)
		KT8296	220(140-250)	0.2(0.1-0.3)

## HEAVY DUTY INSERTS

### 重力切削刀片

A 车削刀片  
B 铣削刀片  
C 孔加工刀片  
D 刮削刀片  
E 非标异形刀片  
F 圆锥和立铣刀  
G 刀杆和刀盘  
H 加工案例  
I 通用技术信息

LNKT/LNKX

重力切削刀片

重力切削刀片 Heavy Duty Inserts

		√ 良好工况 Good working conditions    一般工况 General working conditions    × 不稳定工况 Unstable working conditions																						
		尺寸 Dimensions (mm)					CVD涂层				PVD涂层													
产品 Inserts Shape	型号 Type	L	W	S	Φd	r	KT3122	KT3123A	KT3262	KT3263A	KT3124	KT3126	KT3136	KT8204	KT8205	KT8206	KT8207	KT8208	KT8294	KT8295	KT8296	KT8297	KT8298	
			LNKT1206-R0.8	12.7	6.35	12	4.4	0.8							•	▲								
	LNKT1206-R3.5	12.7	6.35	12	4.4	0.35							•	▲										
	LNKT1507	15	7.6	16.3	5.8	0.8							•	▲										
	LNKX 1005 K-M	10	5.2	9.52	3.4	0.8							•	▲										
	LNKX 1206 K-M	12.7	6	12.2	4.4	0.8							•	▲										
	LNKX 1506 K-M	15	6	13.9	4.6	0.8							•	▲										

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度	刀片牌号	切削用量		
			V (m/min)	f(mm/z)	
P	低碳钢 软钢	≤180	KT8205	260(160-300)	0.3(0.1-0.35)
			KT3136	260(160-300)	0.3(0.1-0.35)
	高碳钢 合金钢	180-280	KT8205	240(160-240)	0.25(0.1-0.35)
			KT3136	240(160-240)	0.25(0.1-0.35)
	合金工具钢	280-350	KT8205	200(120-240)	0.2(0.1-0.35)
			KT3136	200(120-240)	0.2(0.1-0.35)
M	不锈钢	270	KT8205	180(100-230)	0.15(0.1-0.3)
			KT3136	180(100-230)	0.15(0.1-0.3)
K	铸铁	180-250	KT8205	220(140-250)	0.2(0.1-0.3)
			KT3136	220(140-250)	0.2(0.1-0.3)

LNGX

重力切削刀片

重力切削刀片 Heavy Duty Inserts

		√ 良好工况 Good working conditions    一般工况 General working conditions    × 不稳定工况 Unstable working conditions																						
		尺寸 Dimensions (mm)					CVD涂层				PVD涂层													
产品 Inserts Shape	型号 Type	L	W	S	Φd	r	KT3122	KT3123A	KT3262	KT3263A	KT3124	KT3126	KT3136	KT8204	KT8205	KT8206	KT8207	KT8208	KT8294	KT8295	KT8296	KT8297	KT8298	
			LNGX 1505 K-M	15.9	5.5	9.65	4.4	0.8							•	▲								
	LNGX 1905 K-M	19.1	6.35	14.3	5.8	0.8							•	▲										
	LNGX 2008 K-M	20	8	14	5.8	0.8							•	▲										

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

被加工材料	硬度	刀片牌号	切削用量		
			V (m/min)	f(mm/z)	
P	低碳钢 软钢	≤180	KT8205	260(160-300)	0.3(0.1-0.35)
			KT3136	260(160-300)	0.3(0.1-0.35)
	高碳钢 合金钢	180-280	KT8205	240(160-240)	0.25(0.1-0.35)
			KT3136	240(160-240)	0.25(0.1-0.35)
	合金工具钢	280-350	KT8205	200(120-240)	0.2(0.1-0.35)
			KT3136	200(120-240)	0.2(0.1-0.35)
M	不锈钢	270	KT8205	180(100-230)	0.15(0.1-0.3)
			KT3136	180(100-230)	0.15(0.1-0.3)
K	铸铁	180-250	KT8205	220(140-250)	0.2(0.1-0.3)
			KT3136	220(140-250)	0.2(0.1-0.3)

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## 孔加工刀片 Hole Machining Inserts

深孔钻刀片 Deep-hole Drilling Inserts	221
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浅孔钻推荐切削参数表 Table of Recommended Cutting for Shallow Hole Drilling	228

## HOLE MACHINING INSERTS

### 孔加工刀片



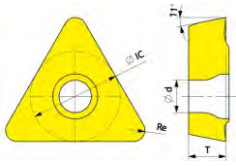




TPMT/TPMX

孔加工刀片

深孔钻刀片 Deep-hole Drilling Inserts

√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

	工件材料	P	钢														○								○	×	×	×	×	×			
		M	不锈钢		○	×	√	√	√	√	√	○	○	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
		K	铸铁																													×	×
		N	有色金属																														
		S	耐热合金、钛合金																														
		H	淬硬钢																														
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层																									
		ØI.C	T	Φd	Re	KT3262	KT8322	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298											
	TPMT16T312R-GM	9.53	3.97	3.40	1.2																												▲
	TPMT220612R-GM	12.70	6.35	4.40	1.2																												▲
	TPMT16T312R-GF	9.53	3.97	3.40	1.2																												▲
	TPMT220612R-GF	12.70	6.35	4.40	1.2																												▲
	TPMX1403-RG	8.50	3.53	2.85	0.8																											▲	
	TPMX1704-RG	10.30	3.97	3.97	0.8																												▲
	TPMX2405-RG	14.20	5.50	4.40	0.8																												▲
	TPMX2807-RG	17.00	7.50	5.65	0.8																												▲

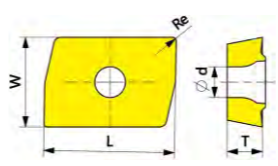

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

XPMT

孔加工刀片

深孔钻刀片 Deep-hole Drilling Inserts

√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

	工件材料	P	钢																○												○	×	×	×	×
		M	不锈钢		○	×	√	√	√	√	√	○	○	○	○	○	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×		
		K	铸铁																															×	×
		N	有色金属																																
		S	耐热合金、钛合金																																
		H	淬硬钢																																
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD涂层		PVD涂层																											
		ØI.C	S	Φd	r	KT3262	KT8322	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8298													
	XPMT13T308-GM	10.00	3.97	3.40	0.8																													▲	
	XPMT180608-GM	11.55	6.35	4.40	0.8																													▲	
	XPMT13T308-GF	10.00	3.97	3.40	0.8																													▲	
	XPMT180608-GF	11.55	6.35	4.40	0.8																													▲	

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



WCMX

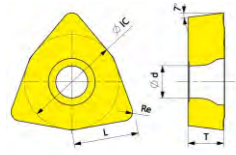
孔加工刀片

孔加工刀片

Hole Machining Inserts

浅孔钻刀片 Shallow hole drilling Inserts

浅孔钻推荐切削参数表 Table of Recommended Cutting for Shallow Hole Drilling



√ 良好工况 Good working conditions ○ 一般工况 General working conditions × 不稳定工况 Unstable working conditions

工件材料	PVD涂层																					
	P	M	K	N	S	H	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8456	
钢	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
不锈钢	√	√	√	√	√	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
铸铁																						
有色金属																						
耐热合金、钛合金																						
淬硬钢																						

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					PVD涂层															
		L	ØI.C	T	Ød	Re	KT8204	KT8205	KT8206	KT8207	KT8208	KT8284	KT8285	KT8286	KT8287	KT8288	KT8294	KT8295	KT8296	KT8297	KT8456	
	WCMX 030208R-LM	3.8	5.56	2.38	2.80	0.8			●					●					▲		●	
	WCMX 040208R-LM	4.3	6.35	2.38	3.10	0.8			●					●					▲		●	
	WCMX 050308R-LM	5.4	7.94	3.18	3.20	0.8			●					●					▲		●	
	WCMX 06T308R-LM	6.5	9.53	3.97	3.70	0.8			●					●					▲		●	
	WCMX 080412R-LM	8.7	12.70	4.76	4.30	1.2			●					●					▲		●	

▲ 为主推荐牌号 Recommended grade (Always stock available) ● 按订单生产可选牌号 Make-to-order

ISO	材料 Material	硬度 HB	直径 Dc mm	进给量 fn mm/r	切削速度 Vc m/min
P	碳钢 Carbon steel	80-200	16.0-23.0	0.05-0.09	200(170-240)
			24.0-30.0	0.05-0.09	
	31.0-38.0	0.06-0.10			
	39.0-46.0	0.07-0.11			
	47.0-58.0	0.08-0.12			
低合金钢 Low alloy steel	150-260	16.0-23.0	0.05-0.09	170(140-220)	
		24.0-30.0	0.05-0.12		
		31.0-38.0	0.06-0.14		
高合金钢 High alloy steel	150-320	16.0-23.0	0.05-0.09	150(120-180)	
		24.0-30.0	0.05-0.12		
		31.0-38.0	0.06-0.16		
铸钢 Cast steel	180-250	16.0-23.0	0.05-0.08	140(120-170)	
		24.0-30.0	0.05-0.08		
		31.0-38.0	0.06-0.10		
M	不锈钢 Stainless steel 铁素体 Ferritic stainless steel 马氏体 Martensitic stainless steel	150-270	16.0-23.0	0.05-0.09	160(110-230)
			24.0-30.0	0.05-0.12	
			31.0-38.0	0.06-0.16	
			39.0-46.0	0.08-0.18	
			47.0-58.0	0.10-0.22	
奥氏体 Austenitic stainless steel	150-275	16.0-23.0	0.05-0.09	140(110-220)	
		24.0-30.0	0.05-0.11		
		31.0-38.0	0.06-0.13		
K	可锻铸铁 Malleable cast iron	150-230	16.0-23.0	0.05-0.10	160(120-220)
			24.0-30.0	0.05-0.14	
			31.0-38.0	0.08-0.16	
			39.0-46.0	0.10-0.20	
			47.0-58.0	0.12-0.24	
灰口铸铁 Grey cast iron	150-220	16.0-23.0	0.05-0.10	200(170-240)	
		24.0-30.0	0.05-0.14		
		31.0-38.0	0.08-0.16		
球墨铸铁 Nodular cast iron	160-250	16.0-23.0	0.05-0.09	160(130-200)	
		24.0-30.0	0.05-0.12		
		31.0-38.0	0.06-0.14		
N	铝合金 Aluminium alloy	60-110	16.0-23.0	0.05-0.10	300(250-350)
			24.0-30.0	0.05-0.14	
			31.0-38.0	0.08-0.16	
			39.0-46.0	0.10-0.20	
			47.0-58.0	0.12-0.24	

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

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I 通用技术信息

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C 孔加工刀片

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F 圆棒和立铣刀

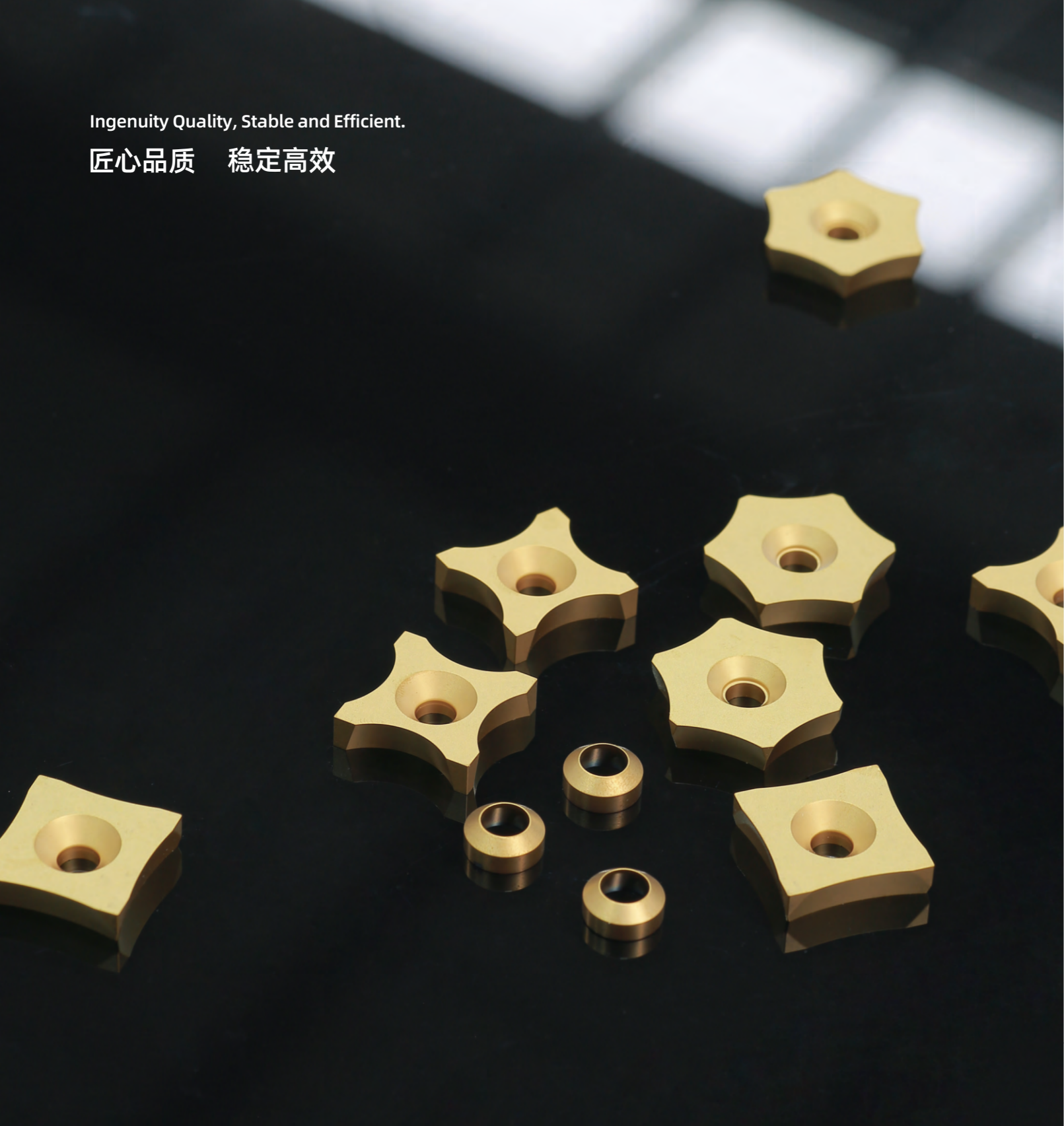
G 刀杆和刀盘

H 加工案例

I 通用技术信息

Ingenuity Quality, Stable and Efficient.

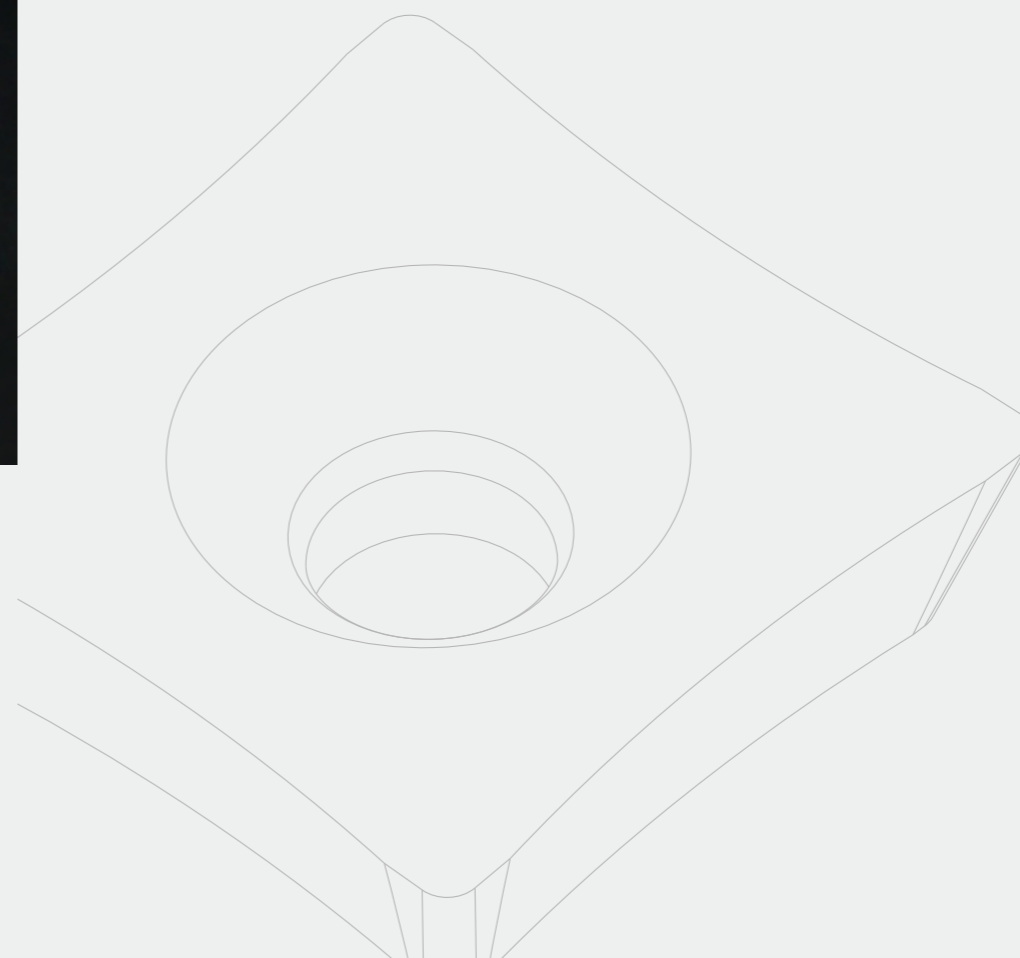
匠心品质 稳定高效



## 刮管刀片 Tube Scraper Inserts

## TUBE SCRAPER INSERTS

### 刮管刀片





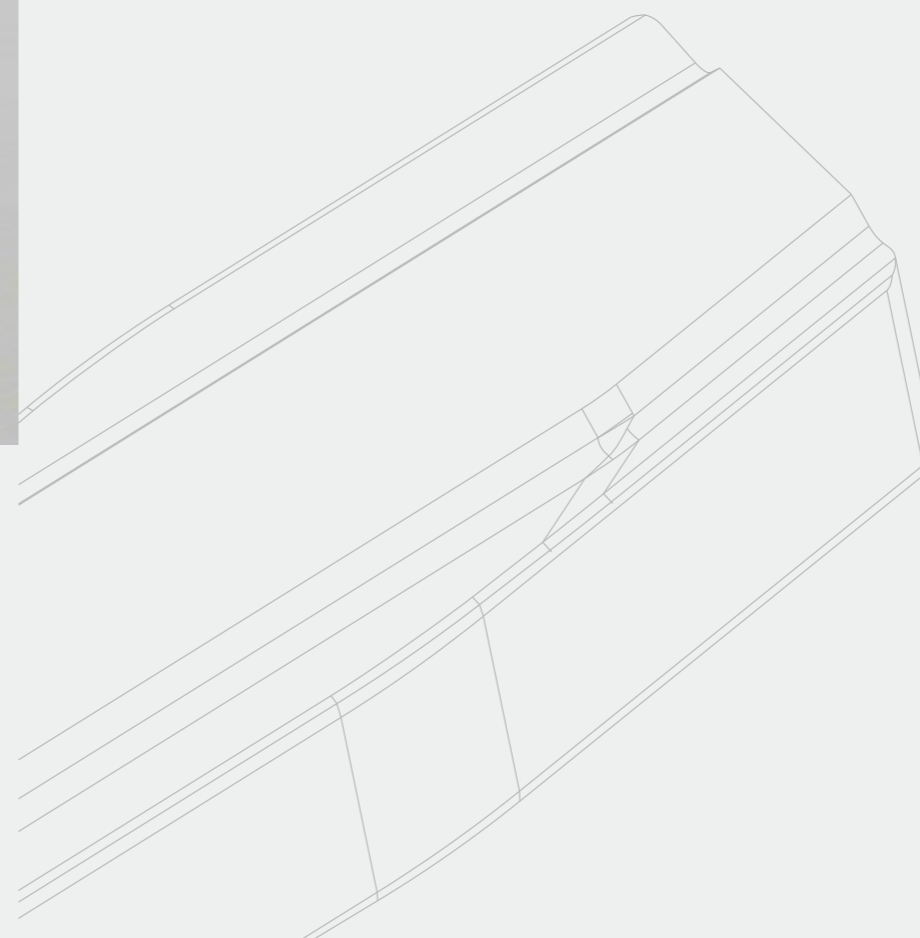
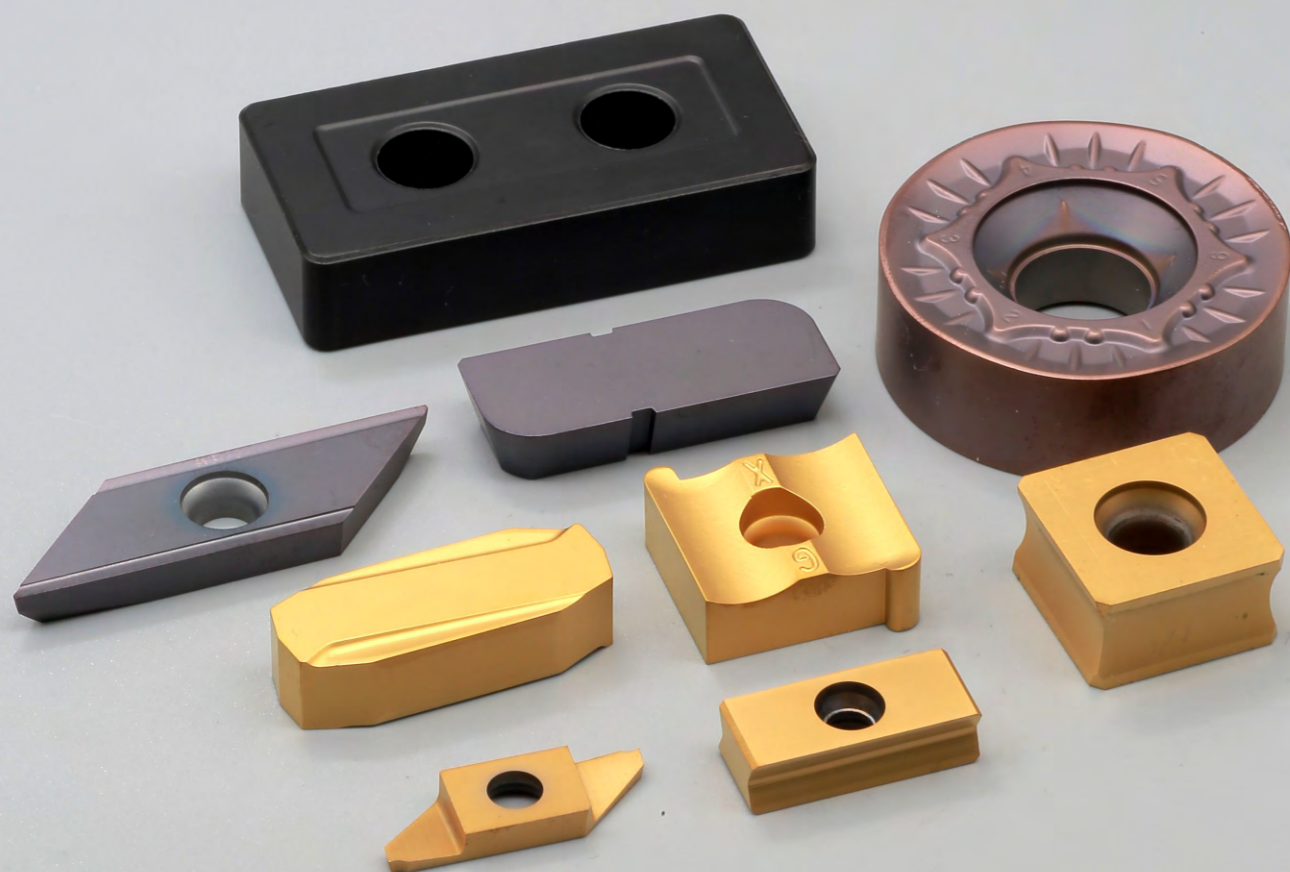


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非标异形刀片  
Special Design Inserts



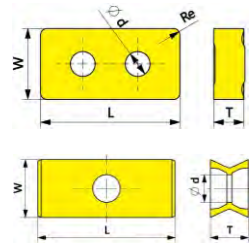
SPECIAL DESIGN INSERTS

非标异形刀片

Special Design Inserts

非标异形刀片

非标异形刀片 Special Design Inserts



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢	○	○	○															
	M	不锈钢								√	√	○	√	×						
K	铸铁					√	√	√												
N	有色金属																			
S	耐热合金 钛合金																			
H	淬硬钢																			

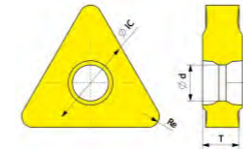
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)					CVD 涂层						PVD 涂层								
		L	W	Φd	T	r	KT1331	KT1332	KT1333	KT3221	KT3222	KT3223	KT8204	KT8205	KT8206	KT8207	KT8208				
	LNMT402514K-SK	40	25.4	9.2	11.2	1.4	▲			●											
	LNMT502514K-SK	50	25.4	9.2	11.2	1.4	▲			●											
	LNKX0912 -V	12	9	4.4	6									▲							
	LNKX0921 -V	21	9	4.4	6									▲							

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

Special Design Inserts

非标异形刀片

非标异形刀片 Special Design Inserts



√良好工况 Good working conditions ○一般工况 General working conditions ×不稳定工况 Unstable working conditions

工件材料 Workpiece Material	P	钢	○	○	○															
	M	不锈钢														√	√	○	√	×
K	铸铁								√	√	√									
N	有色金属																			
S	耐热合金 钛合金																			
H	淬硬钢																			

产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD 涂层						PVD 涂层								
		ΦI.C	Φd	T	r	KT1331	KT1332	KT1333	KT3221	KT3222	KT3223	KT8204	KT8205	KT8206	KT8207	KT8208				
	TNMX1106K-Z	15.875	6.35	6.35	1.6	▲			●											
	TNMX1509K-Z	22.225	7.94	9.52	1.6	▲			●											
	TNMX1509K-C	22.225	7.94	9.72	1.6	▲			●											
	TNMX1108-YP	22	7	8	1.6	▲			●											

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order



Special Design Inserts

非标异形刀片

非标异形刀片 Special Design Inserts																					
		√良好工况 Good working conditions   ○一般工况 General working conditions   ×不稳定工况 Unstable working conditions																			
		工件材料 Workpiece Material																			
		P	M	K	N	S	H	钢	不锈钢	铸铁	有色金属	耐热合金 钛合金	淬硬钢	○	○	○	√	√	○	√	×
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)			CVD 涂层						PVD 涂层										
		L	W	T	KT1331	KT1332	KT1333	KT3221	KT3222	KT3223	KT8204	KT8205	KT8206	KT8207	KT8208						
	LNMG2006K-E	20.5	8	6	▲			●													
	TNMX1106K-Z	31	12	7.5	▲			▲													
	TNMX1509K-Z	37	17.8	12	▲			▲													
	TNMX1509K-C	37	17.8	12	▲			▲													

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

Special Design Inserts

非标异形刀片

非标异形刀片 Special Design Inserts																				
		√良好工况 Good working conditions   ○一般工况 General working conditions   ×不稳定工况 Unstable working conditions																		
		工件材料 Workpiece Material																		
		P	M	K	N	S	H	钢	不锈钢	铸铁	有色金属	耐热合金 钛合金	淬硬钢	○	○	○	√	√	○	√
产品 Inserts Shape	型号 Type	尺寸 Dimensions (mm)				CVD 涂层						PVD 涂层								
		Φc	Φd	T	r	KT1331	KT1332	KT1333	KT3221	KT3222	KT3223	KT8204	KT8205	KT8206	KT8207	KT8208				
	RNMH2509KRR	25.4	9.12	9.5	▲			●												
	RNGH3812KRR	38.1	12.8	12.7	▲			●												

▲为主推荐牌号 Recommended grade (Always stock available) ●按订单生产可选牌号 Make-to-order

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匠心品质 稳定高效



## CARBIDE RODS AND SOLID CARBIDE END MILL

圆棒和立铣刀



## 圆棒和立铣刀

### Carbide Rods and Solid Carbide End Mill

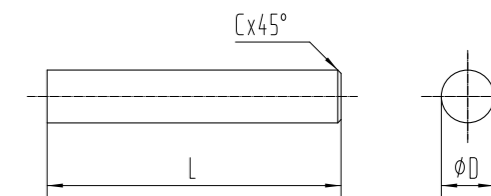
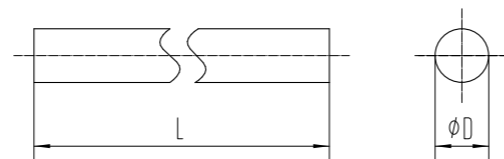
硬质合金圆棒 Carbide Rods 243

硬质合金立铣刀 Solid Carbide End Mill 246



### 实心金属陶瓷圆棒毛坯 Blank Solid Cermet Rods

### 精磨实心金属陶瓷小圆棒 Fine Grinding Solid Cermet Rods



规格 Specifications	尺寸范围 Dimensions(mm)			
	直径 Diameter	直径公差 Diameter tolerance	长度 Length	长度公差 Length tolerance
Φ 3*50	3	+0.20~+0.30	50	+1.0/0
Φ 4*50	4	+0.20~+0.30	50	+1.0/0
Φ 4*75	4	+0.20~+0.30	75	+1.0/0
Φ 5*50	5	+0.25~+0.35	50	+1.0/0
Φ 5*75	5	+0.25~+0.35	75	+1.0/0
Φ 6*50	6	+0.25~+0.35	50	+1.0/0
Φ 6*75	6	+0.25~+0.35	75	+1.0/0
Φ 8*60	8	+0.30~+0.40	60	+1.0/0
Φ 8*75	8	+0.30~+0.40	75	+1.0/0
Φ 8*100	8	+0.30~+0.40	100	+2.0/0
Φ 10*75	10	+0.30~+0.40	75	+1.0/0
Φ 10*100	10	+0.30~+0.40	100	+2.0/0
Φ 11*75	11	+0.35~+0.45	75	+1.0/0
Φ 12*75	12	+0.35~+0.45	75	+1.0/0
Φ 12*100	12	+0.35~+0.45	100	+2.0/0
Φ 14*75	14	+0.35~+0.45	75	+1.0/0
Φ 14*100	14	+0.35~+0.45	100	+2.0/0
Φ 16*100	16	+0.35~+0.45	100	+2.0/0

可根据客户需求，定制其他规格的金属陶瓷棒材产品 Customize other specifications cermet rods

规格 Specifications	尺寸范围 Dimensions(mm)			
	直径 Diameter	直径公差 Diameter tolerance	长度 Length	长度公差 Length tolerance
Φ 1.5*15	1.5	0~-0.008	15	+1.0/0
Φ 2.0*15	2	0~-0.008	15	+1.0/0
Φ 2.5*15	2.5	0~-0.008	15	+1.0/0
Φ 3.0*15	3	0~-0.008	15	+1.0/0
Φ 3.5*15	3.5	0~-0.008	15	+1.0/0
Φ 4.0*15	4	0~-0.010	15	+1.0/0
Φ 4.0*20	4	0~-0.010	20	+1.0/0
Φ 4.5*20	4.5	0~-0.010	20	+1.0/0
Φ 5.0*15	5	0~-0.010	15	+1.0/0
Φ 5.0*20	5	0~-0.010	20	+1.0/0
Φ 5.5*15	5.5	0~-0.010	15	+1.0/0
Φ 5.5*20	5.5	0~-0.010	20	+1.0/0
Φ 6.0*15	6	0~-0.010	15	+1.0/0
Φ 6.0*20	6	0~-0.010	20	+1.0/0
Φ 6.5*15	6.5	0~-0.010	15	+1.0/0
Φ 6.5*20	6.5	0~-0.010	20	+1.0/0
Φ 8.0*15	8	0~-0.010	15	+1.0/0
Φ 8.0*20	8	0~-0.010	20	+1.0/0

可根据客户需求，定制其他规格的金属陶瓷棒材产品 Customize other specifications cermet rods

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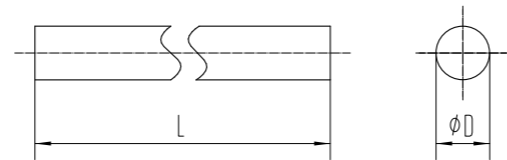
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## 精磨实心金属陶瓷小圆棒

Fine Grinding Solid Cermet Rods



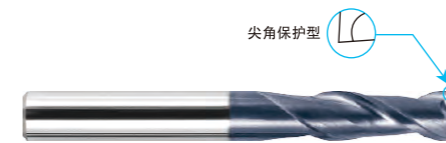
规格 Specifications	尺寸范围 Dimensions(mm)			
	直径 Diameter	直径公差 Diameter tolerance	长度 Length	长度公差 Length tolerance
Φ 3*50	3	0~-0.008	50	+1.0/0
Φ 4*50	4	0~-0.008	50	+1.0/0
Φ 4*75	4	0~-0.008	75	+1.0/0
Φ 5*50	5	0~-0.008	50	+1.0/0
Φ 5*75	5	0~-0.008	75	+1.0/0
Φ 6*50	6	0~-0.010	50	+1.0/0
Φ 6*75	6	0~-0.010	75	+1.0/0
Φ 8*60	8	0~-0.010	60	+1.0/0
Φ 8*75	8	0~-0.010	75	+1.0/0
Φ 8*100	8	0~-0.010	100	+1.0/0
Φ 10*75	10	0~-0.010	75	+1.0/0
Φ 10*100	10	0~-0.010	100	+1.0/0
Φ 11*75	11	0~-0.013	75	+1.0/0
Φ 12*75	12	0~-0.013	75	+1.0/0
Φ 12*100	12	0~-0.013	100	+1.0/0
Φ 14*75	14	0~-0.013	75	+1.0/0
Φ 14*100	14	0~-0.013	100	+1.0/0
Φ 16*100	16	0~-0.013	100	+1.0/0

可根据客户需求, 定制其他规格的金属陶瓷棒材产品 Customize other specifications cermet rods

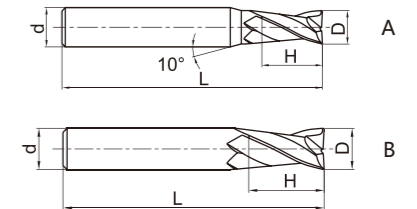
## 二刃直柄平头立铣刀

Two Flutes Square Endmill

KGM-2E



- 最适宜沟槽铣削 Suitable for Groove Milling
- 适用范围广泛 Wide Range of Applications



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-2E-D1.0S	1.0	4	3	50	2	A	●
KGM-2E-D1.5S	1.5	4	4	50	2	A	●
KGM-2E-D2.0S	2.0	4	6	50	2	A	●
KGM-2E-D2.5S	2.5	4	8	50	2	A	●
KGM-2E-D3.0S	3.0	4	8	50	2	A	●
KGM-2E-D4.0S	4.0	4	11	50	2	B	●
KGM-2E-D1.0	1.0	6	3	50	2	A	●
KGM-2E-D1.5	1.5	6	4	50	2	A	●
KGM-2E-D2.0	2.0	6	6	50	2	A	●
KGM-2E-D2.5	2.5	6	8	50	2	A	●
KGM-2E-D3.0	3.0	6	8	50	2	A	●
KGM-2E-D3.5	3.5	6	10	50	2	A	●
KGM-2E-D4.0	4.0	6	11	50	2	A	●
KGM-2E-D4.5	4.5	6	11	50	2	A	●
KGM-2E-D5.0	5.0	6	13	50	2	A	●
KGM-2E-D5.5	5.5	6	16	50	2	A	●
KGM-2E-D6.0	6.0	6	16	50	2	B	●
KGM-2E-D7.0	7.0	8	20	60	2	A	●
KGM-2E-D8.0	8.0	8	20	60	2	B	●
KGM-2E-D9.0	9.0	10	22	75	2	A	●
KGM-2E-D10.0	10.0	10	25	75	2	B	●
KGM-2E-D11.0	11.0	12	26	75	2	A	●
KGM-2E-D12.0	12.0	12	30	75	2	B	●
KGM-2E-D14.0	14.0	14	32	75	2	B	●
KGM-2E-D16.0	16.0	16	45	100	2	B	●
KGM-2E-D18.0	18.0	18	45	100	2	B	●
KGM-2E-D20.0	20.0	20	45	100	2	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

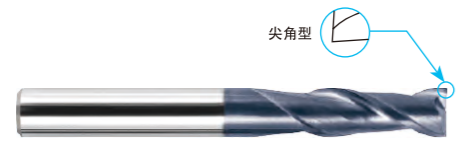
被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○	○				

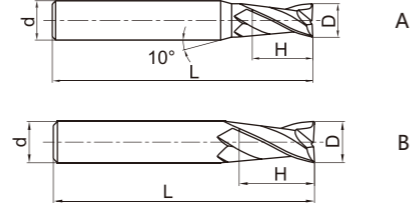
## 二刃直柄平头立铣刀

Two Flutes Square Endmill

KGM-2F



尖角型



- 最适宜沟槽铣削。 Suitable for Groove Milling
- 适用范围广泛。 Wide Range of Applications



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-2F-D1.0S	1.0	4	3	50	2	A	○
KGM-2F-D1.5S	1.5	4	4	50	2	A	○
KGM-2F-D2.0S	2.0	4	6	50	2	A	○
KGM-2F-D2.5S	2.5	4	8	50	2	A	○
KGM-2F-D3.0S	3.0	4	8	50	2	A	○
KGM-2F-D4.0S	4.0	4	11	50	2	B	○
KGM-2F-D1.0	1.0	6	3	50	2	A	○
KGM-2F-D1.5	1.5	6	4	50	2	A	○
KGM-2F-D2.0	2.0	6	6	50	2	A	○
KGM-2F-D2.5	2.5	6	8	50	2	A	○
KGM-2F-D3.0	3.0	6	8	50	2	A	○
KGM-2F-D3.5	3.5	6	10	50	2	A	○
KGM-2F-D4.0	4.0	6	11	50	2	A	○
KGM-2F-D4.5	4.5	6	11	50	2	A	○
KGM-2F-D5.0	5.0	6	13	50	2	A	○
KGM-2F-D5.5	5.5	6	16	50	2	A	○
KGM-2F-D6.0	6.0	6	16	50	2	B	○
KGM-2F-D7.0	7.0	8	20	60	2	A	○
KGM-2F-D8.0	8.0	8	20	60	2	B	○
KGM-2F-D9.0	9.0	10	22	75	2	A	○
KGM-2F-D10.0	10.0	10	25	75	2	B	○
KGM-2F-D11.0	11.0	12	26	75	2	A	○
KGM-2F-D12.0	12.0	12	30	75	2	B	○
KGM-2F-D14.0	14.0	14	32	75	2	B	○
KGM-2F-D16.0	16.0	16	45	100	2	B	○
KGM-2F-D18.0	18.0	18	45	100	2	B	○
KGM-2F-D20.0	20.0	20	45	100	2	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常合适 Very suitable ○ 合适 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○					

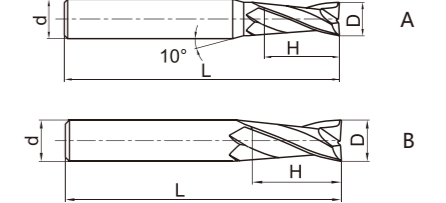
## 二刃直柄长刃平头立铣刀

Two Flutes Long Cutting Length Square End Mill

KGM-2EL



尖角保护型



- GM\*2E的长刃系列° GM-2E Long Cutting Length Series



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-2EL-D3.0	3.0	6	12	75	2	A	●
KGM-2EL-D4.0	4.0	6	15	75	2	A	●
KGM-2EL-D5.0	5.0	6	20	75	2	A	●
KGM-2EL-D6.0	6.0	6	20	75	2	B	●
KGM-2EL-D8.0	8.0	8	25	100	2	B	●
KGM-2EL-D10.0	10.0	10	30	100	2	B	●
KGM-2EL-D12.0	12.0	12	35	100	2	B	●
KGM-2EL-D14.0	14.0	14	40	100	2	B	●
KGM-2EL-D16.0	16.0	16	50	150	2	B	●
KGM-2EL-D20.0	20.0	20	55	150	2	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常合适 Very suitable ○ 合适 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○	○				

## 二刃直柄长刃平头立铣刀

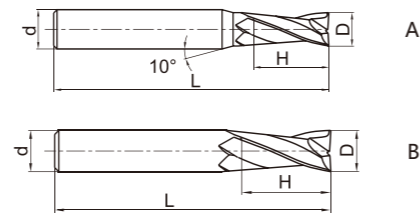
Two Flutes Long Cutting Length Square End Mill

KGM-2FL



尖角型

● GM-2F的长刃系列。  
GM-2F Long Cutting Length Series



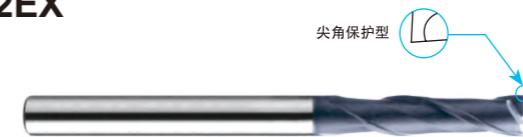
订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-2FL-D3.0	3.0	6	12	75	2	A	○
KGM-2FL-D4.0	4.0	6	15	75	2	A	○
KGM-2FL-D5.0	5.0	6	20	75	2	A	○
KGM-2FL-D6.0	6.0	6	20	75	2	B	○
KGM-2FL-D8.0	8.0	8	25	100	2	B	○
KGM-2FL-D10.0	10.0	10	30	100	2	B	○
KGM-2FL-D12.0	12.0	12	35	100	2	B	○
KGM-2FL-D14.0	14.0	14	40	100	2	B	○
KGM-2FL-D16.0	16.0	16	50	150	2	B	○
KGM-2FL-D20.0	20.0	20	55	150	2	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

## 二刃直柄长刃平头立铣刀

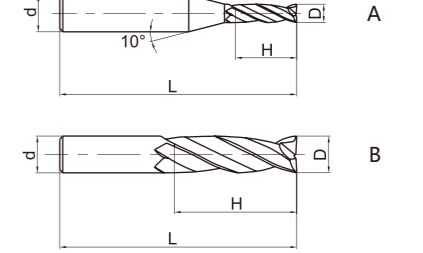
Two Flutes Long Cutting Length Square End Mill

KGM-2EX



尖角保护型

● 超长刃设计，适合深侧壁加工。  
GM-2E Long Cutting Length Series



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-2EX-D3.0	3.0	6	20	75	2	A	○
KGM-2EX-D4.0	4.0	6	25	75	2	A	○
KGM-2EX-D5.0	5.0	6	30	75	2	A	○
KGM-2EX-D6.0	6.0	6	30	75	2	B	○
KGM-2EX-D8.0	8.0	8	40	100	2	B	○
KGM-2EX-D10.0	10.0	10	50	110	2	B	○
KGM-2EX-D12.0	12.0	12	50	110	2	B	○
KGM-2EX-D16.0	16.0	16	70	150	2	B	○
KGM-2EX-D20.0	20.0	20	75	150	2	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

■ 被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

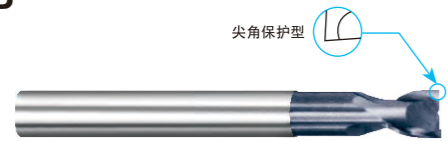
■ 被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

## 二刃直柄长颈短刃平头立铣刀

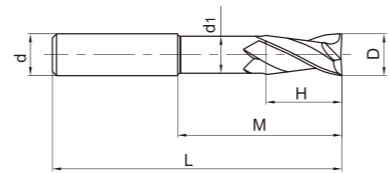
Two Flutes Long Neck Short Cutting Length Square Endmill

### KGM-2EFP



尖角保护型  
35°

- 高刚性短刃设计，适用于重切削，也可用于深型腔的铣削加工。  
Short cutting length design for heavy cutting and deep cavity milling



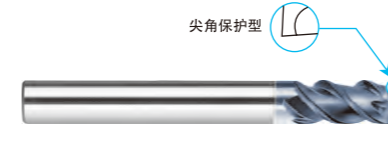
订货号 Specifications	基本尺寸 Dimensions (mm)						齿数 Number of teeth Z	库存 Stock
	D	d	H	M	d <sub>1</sub>	L		
KGM-2EFP-D6.0	6.0	6	9	30	5.8	75	2	○
KGM-2EFP-D8.0	8.0	8	12	40	7.8	100	2	○
KGM-2EFP-D10.0	10.0	10	15	50	9.6	100	2	○
KGM-2EFP-D12.0	12.0	12	18	50	11.5	100	2	○
KGM-2EFP-D16.0	16.0	16	24	50	15.5	150	2	○
KGM-2EFP-D20.0	20.0	20	30	60	19.5	150	2	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

## 三刃直柄平头立铣刀

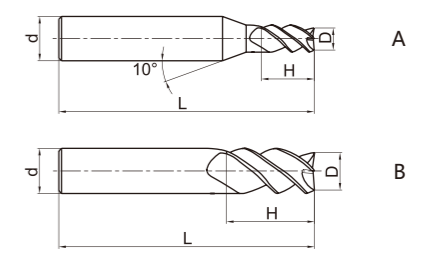
Three Flutes Square Endmill

### KGM-3E



尖角保护型  
45°

- 优异的抗振性能，可实现槽铣、侧铣、钻铣多种加工。  
Excellent anti-vibration performance, suitable for slot milling, side milling and drilling



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-3E-D1.0S	1.0	4	3	50	3	A	○
KGM-3E-D1.5S	1.5	4	4	50	3	A	○
KGM-3E-D2.0S	2.0	4	6	50	3	A	○
KGM-3E-D2.5S	2.5	4	8	50	3	A	○
KGM-3E-D3.0S	3.0	4	8	50	3	A	○
KGM-3E-D4.0S	4.0	4	11	50	3	B	○
KGM-3E-D1.0	1.0	6	3	50	3	A	○
KGM-3E-D1.5	1.5	6	4	50	3	A	○
KGM-3E-D2.0	2.0	6	6	50	3	A	○
KGM-3E-D2.5	2.5	6	8	50	3	A	○
KGM-3E-D3.0	3.0	6	8	50	3	A	○
KGM-3E-D3.5	3.5	6	10	50	3	A	○
KGM-3E-D4.0	4.0	6	11	50	3	A	○
KGM-3E-D4.5	4.5	6	11	50	3	A	○
KGM-3E-D5.0	5.0	6	13	50	3	A	○
KGM-3E-D5.5	5.5	6	16	50	3	A	○
KGM-3E-D6.0	6.0	6	16	50	3	B	○
KGM-3E-D7.0	7.0	8	20	60	3	A	○
KGM-3E-D8.0	8.0	8	20	60	3	B	○
KGM-3E-D9.0	9.0	10	22	75	3	A	○
KGM-3E-D10.0	10.0	10	25	75	3	B	○
KGM-3E-D11.0	11.0	12	26	75	3	A	○
KGM-3E-D12.0	12.0	12	30	75	3	B	○
KGM-3E-D14.0	14.0	14	32	75	3	B	○
KGM-3E-D16.0	16.0	16	45	100	3	B	○
KGM-3E-D18.0	18.0	18	45	100	3	B	○
KGM-3E-D20.0	20.0	20	45	100	3	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

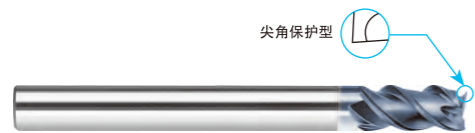
被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

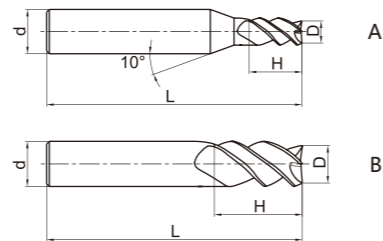
### 三刃直柄长刃平头立铣刀

Three Flutes Long Cutting Length Square Endmill

#### KGM-3EL



尖角保护型



- GM-3E的长刃系列。  
GM-3E Long Cutting Length Series



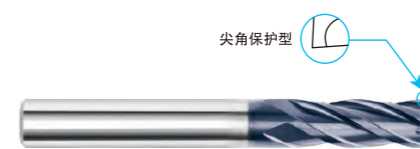
订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-3EL-D3.0	3.0	6	12	75	3	A	○
KGM-3EL-D4.0	4.0	6	15	75	3	A	○
KGM-3EL-D5.0	5.0	6	20	75	3	A	○
KGM-3EL-D6.0	6.0	6	20	75	3	B	○
KGM-3EL-D8.0	8.0	8	25	100	3	B	○
KGM-3EL-D10.0	10.0	10	30	100	3	B	○
KGM-3EL-D12.0	12.0	12	35	100	3	B	○
KGM-3EL-D14.0	14.0	14	40	100	3	B	○
KGM-3EL-D16.0	16.0	16	50	150	3	B	○
KGM-3EL-D20.0	20.0	20	55	150	3	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

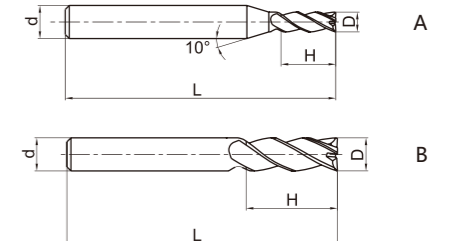
### 四刃直柄平头立铣

Four Flutes Square Endmill

#### KGM-4E-G



尖角保护型



- 最适宜侧面铣削。  
Suitable for Side Milling
- 适用范围广泛。  
Wide range of applications



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4E-D1.0S-G	1.0	4	3	50	4	A	●
KGM-4E-D1.5S-G	1.5	4	4	50	4	A	●
KGM-4E-D2.0S-G	2.0	4	6	50	4	A	●
KGM-4E-D2.5S-G	2.5	4	8	50	4	A	●
KGM-4E-D3.0S-G	3.0	4	8	50	4	A	●
KGM-4E-D4.0S-G	4.0	4	11	50	4	B	●
KGM-4E-D1.0-G	1.0	6	3	50	4	A	●
KGM-4E-D1.5-G	1.5	6	4	50	4	A	●
KGM-4E-D2.0-G	2.0	6	6	50	4	A	●
KGM-4E-D2.5-G	2.5	6	8	50	4	A	●
KGM-4E-D3.0-G	3.0	6	8	50	4	A	●
KGM-4E-D3.5-G	3.5	6	10	50	4	A	●
KGM-4E-D4.0-G	4.0	6	11	50	4	A	●
KGM-4E-D4.5-G	4.5	6	11	50	4	A	●
KGM-4E-D5.0-G	5.0	6	13	50	4	A	●
KGM-4E-D5.5-G	5.5	6	16	50	4	A	●
KGM-4E-D6.0-G	6.0	6	16	50	4	B	●
KGM-4E-D7.0-G	7.0	8	20	60	4	A	●
KGM-4E-D8.0-G	8.0	8	20	60	4	B	●
KGM-4E-D9.0-G	9.0	10	22	75	4	A	●
KGM-4E-D10.0-G	10.0	10	25	75	4	B	●
KGM-4E-D11.0-G	11.0	12	26	75	4	A	●
KGM-4E-D12.0-G	12.0	12	30	75	4	B	●
KGM-4E-D14.0-G	14.0	14	32	75	4	B	●
KGM-4E-D16.0-G	16.0	16	45	100	4	B	●
KGM-4E-D18.0-G	18.0	18	45	100	4	B	●
KGM-4E-D20.0-G	20.0	20	45	100	4	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

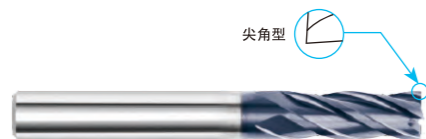
被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					



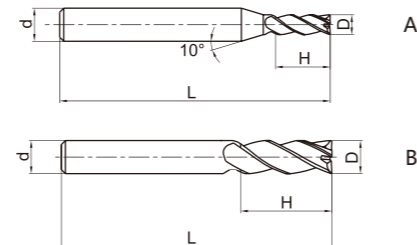
### 四刃直柄平头立铣刀

Four Flutes Square Endmill

#### KGM-4F-G



尖角型



- 最适宜侧面铣削。 Suitable for Side Milling
- 适用范围广泛。 Wide range of applications



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4F-D1.0S-G	1.0	4	3	50	4	A	○
KGM-4F-D1.5S-G	1.5	4	4	50	4	A	○
KGM-4F-D2.0S-G	2.0	4	6	50	4	A	○
KGM-4F-D2.5S-G	2.5	4	8	50	4	A	○
KGM-4F-D3.0S-G	3.0	4	8	50	4	A	○
KGM-4F-D4.0S-G	4.0	4	11	50	4	B	○
KGM-4F-D1.0-G	1.0	6	3	50	4	A	○
KGM-4F-D1.5-G	1.5	6	4	50	4	A	○
KGM-4F-D2.0-G	2.0	6	6	50	4	A	○
KGM-4F-D2.5-G	2.5	6	8	50	4	A	○
KGM-4F-D3.0-G	3.0	6	8	50	4	A	○
KGM-4F-D3.5-G	3.5	6	10	50	4	A	○
KGM-4F-D4.0-G	4.0	6	11	50	4	A	○
KGM-4F-D4.5-G	4.5	6	11	50	4	A	○
KGM-4F-D5.0-G	5.0	6	13	50	4	A	○
KGM-4F-D5.5-G	5.5	6	16	50	4	A	○
KGM-4F-D6.0-G	6.0	6	16	50	4	B	○
KGM-4F-D7.0-G	7.0	8	20	60	4	A	○
KGM-4F-D8.0-G	8.0	8	20	60	4	B	○
KGM-4F-D9.0-G	9.0	10	22	75	4	A	○
KGM-4F-D10.0-G	10.0	10	25	75	4	B	○
KGM-4F-D11.0-G	11.0	12	26	75	4	A	○
KGM-4F-D12.0-G	12.0	12	30	75	4	B	○
KGM-4F-D14.0-G	14.0	14	32	75	4	B	○
KGM-4F-D16.0-G	16.0	16	45	100	4	B	○
KGM-4F-D18.0-G	18.0	18	45	100	4	B	○
KGM-4F-D20.0-G	20.0	20	45	100	4	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

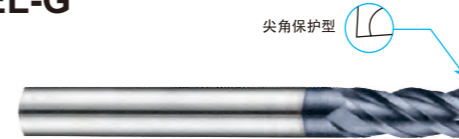
被加工材料适用表 Applicable materials for processing ○ 非常合适 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○	○	○	○	○	

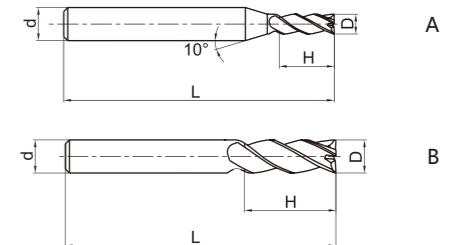
### 四刃直柄长刃平头立铣刀

Four Flutes Long Cutting Length Square Endmill

#### KGM-4EL-G



尖角保护型



- GM-4E-G的长刃系列。 GM-4E-g Long Cutting Length Series



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4EL-D3.0-G	3.0	6	12	75	4	A	○
KGM-4EL-D4.0-G	4.0	6	15	75	4	A	○
KGM-4EL-D5.0-G	5.0	6	20	75	4	A	○
KGM-4EL-D6.0-G	6.0	6	20	75	4	B	○
KGM-4EL-D8.0-G	8.0	8	25	100	4	B	○
KGM-4EL-D10.0-G	10.0	10	30	100	4	B	○
KGM-4EL-D12.0-G	12.0	12	35	100	4	B	○
KGM-4EL-D14.0-G	14.0	14	40	100	4	B	○
KGM-4EL-D16.0-G	16.0	16	50	150	4	B	○
KGM-4EL-D20.0-G	20.0	20	55	150	4	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

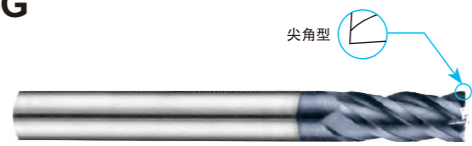
被加工材料适用表 Applicable materials for processing ○ 非常合适 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○	○	○	○	○	

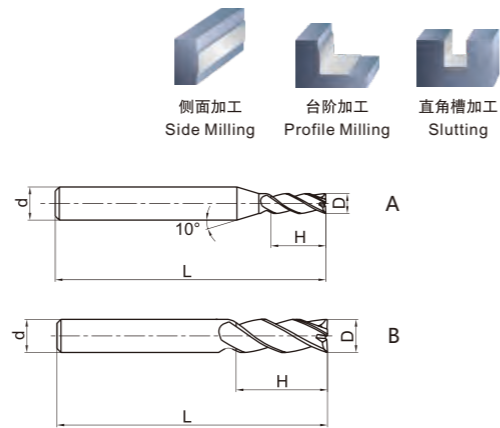
### 四刃直柄长刃平头立铣刀

Four Flutes Long Cutting Length Square Endmill

#### KGM-4FL-G



尖角型



● GM-4F-G的长刃系列。  
GM-4E-G Long Cutting Length Series



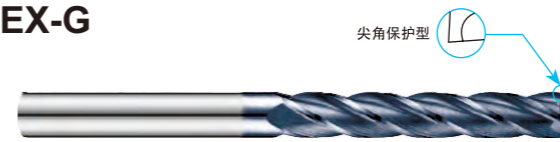
订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4FL-D3.0-G	3.0	6	12	75	4	A	○
KGM-4FL-D4.0-G	4.0	6	15	75	4	A	○
KGM-4FL-D5.0-G	5.0	6	20	75	4	A	○
KGM-4FL-D6.0-G	6.0	6	20	75	4	B	○
KGM-4FL-D8.0-G	8.0	8	25	100	4	B	○
KGM-4FL-D10.0-G	10.0	10	30	100	4	B	○
KGM-4FL-D12.0-G	12.0	12	35	100	4	B	○
KGM-4FL-D14.0-G	14.0	14	40	100	4	B	○
KGM-4FL-D16.0-G	16.0	16	50	150	4	B	○
KGM-4FL-D20.0-G	20.0	20	55	150	4	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

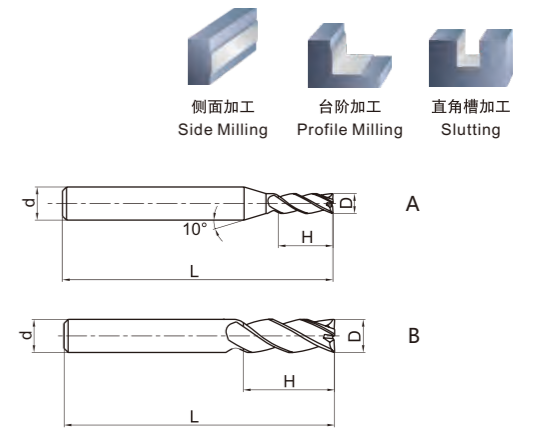
### 四刃直柄特长刃平头立铣刀

Four Flutes Super Long Cutting Length Square Endmill

#### KGM-4EX-G



尖角保护型



● 超长刃设计，适合深侧壁的加工。  
Super long cutting length design, suitable for deep side milling



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4EX-D3.0-G	3.0	6	20	75	4	A	○
KGM-4EX-D4.0-G	4.0	6	25	75	4	A	○
KGM-4EX-D5.0-G	5.0	6	30	75	4	A	○
KGM-4EX-D6.0-G	6.0	6	30	75	4	B	○
KGM-4EX-D8.0-G	8.0	8	40	100	4	B	○
KGM-4EX-D10.0-G	10.0	10	50	110	4	B	○
KGM-4EX-D12.0-G	12.0	12	50	110	4	B	○
KGM-4EX-D16.0-G	16.0	16	70	150	4	B	○
KGM-4EX-D20.0-G	20.0	20	75	150	4	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○					

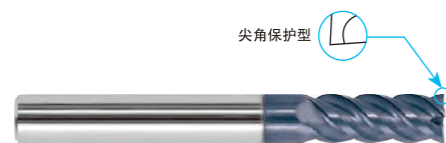
被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○					

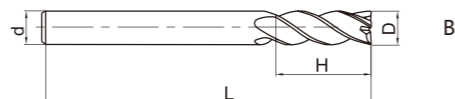
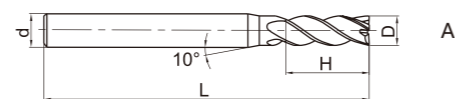
### 四刃直柄平头立铣刀

Four Flutes Square Endmill

KGM-4E



尖角保护型



- 最适宜侧面铣削，浅槽加工。 Suitable for side milling, shallow grooving
- 适用范围广泛。 Wide range of applications



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4E-D1.0S	1.0	4	3	50	4	A	●
KGM-4E-D1.5S	1.5	4	4	50	4	A	●
KGM-4E-D2.0S	2.0	4	6	50	4	A	●
KGM-4E-D2.5S	2.5	4	8	50	4	A	●
KGM-4E-D3.0S	3.0	4	8	50	4	A	●
KGM-4E-D4.0S	4.0	4	11	50	4	B	●
KGM-4E-D1.0	1.0	6	3	50	4	A	●
KGM-4E-D1.5	1.5	6	4	50	4	A	●
KGM-4E-D2.0	2.0	6	6	50	4	A	●
KGM-4E-D2.5	2.5	6	8	50	4	A	●
KGM-4E-D3.0	3.0	6	8	50	4	A	●
KGM-4E-D3.5	3.5	6	10	50	4	A	●
KGM-4E-D4.0	4.0	6	11	50	4	A	●
KGM-4E-D4.5	4.5	6	11	50	4	A	●
KGM-4E-D5.0	5.0	6	13	50	4	A	●
KGM-4E-D5.5	5.5	6	16	50	4	A	●
KGM-4E-D6.0	6.0	6	16	50	4	B	●
KGM-4E-D7.0	7.0	8	20	60	4	A	●
KGM-4E-D8.0	8.0	8	20	60	4	B	●
KGM-4E-D9.0	9.0	10	22	75	4	A	●
KGM-4E-D10.0	10.0	10	25	75	4	B	●
KGM-4E-D11.0	11.0	12	26	75	4	A	●
KGM-4E-D12.0	12.0	12	30	75	4	B	●
KGM-4E-D14.0	14.0	14	32	75	4	B	●
KGM-4E-D16.0	16.0	16	45	100	4	B	●
KGM-4E-D18.0	18.0	18	45	100	4	B	●
KGM-4E-D20.0	20.0	20	45	100	4	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○	○	○	○	○	

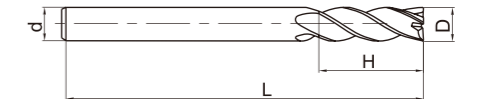
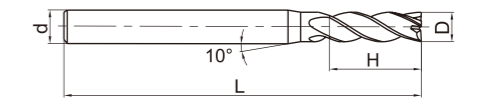
### 四刃直柄长刃平头立铣刀

Four Flutes Long Cutting Length Square Endmill

KGM-4EL



尖角保护型



- GM-4E的长刃系列。 GM-4E Long Cutting Length Series



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4EL-D3.0	3.0	6	12	75	4	A	●
KGM-4EL-D4.0	4.0	6	15	75	4	A	●
KGM-4EL-D5.0	5.0	6	20	75	4	A	●
KGM-4EL-D6.0	6.0	6	20	75	4	B	●
KGM-4EL-D8.0	8.0	8	25	100	4	B	●
KGM-4EL-D10.0	10.0	10	30	100	4	B	●
KGM-4EL-D12.0	12.0	12	35	100	4	B	●
KGM-4EL-D14.0	14.0	14	40	100	4	B	●
KGM-4EL-D16.0	16.0	16	50	150	4	B	●
KGM-4EL-D20.0	20.0	20	55	150	4	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

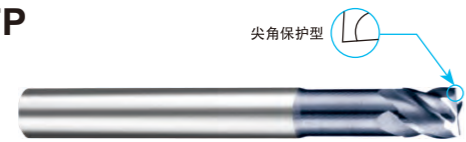
被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○	○	○	○	○	

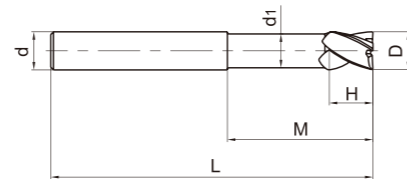
### 四刃直柄长颈短刃平头立铣刀

Four Flutes Long Neck Short Cutting Length Square Endmill

#### KGM-4EFP



尖角保护型



- 高刚性短刃设计，适用于重切削，也可用于深型腔的铣削加工。  
Short cutting length design, suitable for heavy cutting and deep cavity milling



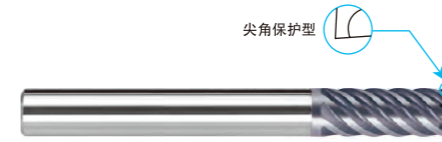
订货号 Specifications	基本尺寸 Dimensions (mm)						齿数 Number of teeth Z	库存 Stock
	D	d	H	M	d <sub>1</sub>	L		
KGM-4EFP-D6.0	6.0	6	9	30	5.8	75	4	○
KGM-4EFP-D8.0	8.0	8	12	40	7.8	100	4	○
KGM-4EFP-D10.0	10.0	10	15	50	9.6	100	4	○
KGM-4EFP-D12.0	12.0	12	18	50	11.5	100	4	○
KGM-4EFP-D16.0	16.0	16	24	50	15.5	150	4	○
KGM-4EFP-D20.0	20.0	20	30	60	19.5	150	4	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

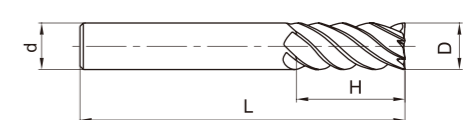
### 六刃直柄平头立铣刀

Six Flutes Square Endmill

#### KGM-6E



尖角保护型



- 刀具刚性好，最适宜侧面精铣加工。 ● 可进行高速，大进给加工。  
Good rigidity, suitable for side finishing milling High speed, high feed milling



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	库存 Stock
	D	d	H	L		
KGM-6E-D6.0	6.0	6	18	60	6	●
KGM-6E-D8.0	8.0	8	20	60	6	●
KGM-6E-D10.0	10.0	10	30	75	6	●
KGM-6E-D12.0	12.0	12	32	75	6	●
KGM-6E-D16.0	16.0	16	40	100	6	●
KGM-6E-D20.0	20.0	20	45	100	6	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

#### 被加工材料适用表 Applicable materials for processing

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○	○	○	○	○	

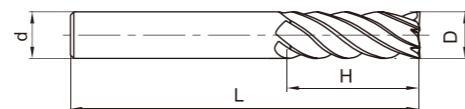
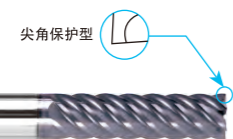
#### 被加工材料适用表 Applicable materials for processing

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○	○	○	○	○	

## 六刃直柄长刃平头立铣刀

Six Flutes Long Cutting Length Square Endmill

KGM-6EL



● GM-6E的长刃系列。  
GM-6E long cutting length series



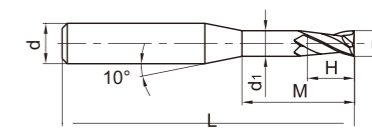
订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	库存 Stock
	D	d	H	L		
KGM-6EL-D6.0	6.0	6	24	75	6	●
KGM-6EL-D8.0	8.0	8	32	75	6	●
KGM-6EL-D10.0	10.0	10	40	100	6	●
KGM-6EL-D12.0	12.0	12	45	100	6	●
KGM-6EL-D16.0	16.0	16	64	150	6	●
KGM-6EL-D20.0	20.0	20	75	150	6	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

## 二刃直柄长颈短刃平头立铣刀

Two Flutes Long Neck Short Cutting Length Square Endmill

KGM-2EP



● 适用于细槽加工或会产生干涉的细微部分的加工。  
Suitable for fine groove processing



订货号 Specifications	基本尺寸 Dimensions (mm)						齿数 Number of teeth Z	库存 Stock
	D	d	H	M	d1	L		
KGM-2EP-D0.5-M04	0.5	4	0.7	4	0.45	50	2	●
KGM-2EP-D0.5-M06	0.5	4	0.7	6	0.45	50	2	●
KGM-2EP-D0.5-M08	0.5	4	0.7	8	0.45	50	2	●
KGM-2EP-D0.8-M04	0.8	4	1.2	4	0.75	50	2	●
KGM-2EP-D0.8-M06	0.8	4	1.2	6	0.75	50	2	●
KGM-2EP-D0.8-M08	0.8	4	1.2	8	0.75	50	2	●
KGM-2EP-D0.8-M10	0.8	4	1.2	10	0.75	50	2	●
KGM-2EP-D1.0-M04	1.0	4	1.5	4	0.95	50	2	●
KGM-2EP-D1.0-M06	1.0	4	1.5	6	0.95	50	2	●
KGM-2EP-D1.0-M08	1.0	4	1.5	8	0.95	50	2	●
KGM-2EP-D1.0-M10	1.0	4	1.5	10	0.95	50	2	●
KGM-2EP-D1.0-M12	1.0	4	1.5	12	0.95	50	2	●
KGM-2EP-D1.0-M14	1.0	4	1.5	14	0.95	50	2	●
KGM-2EP-D1.2-M06	1.2	4	1.8	6	1.15	50	2	●
KGM-2EP-D1.2-M08	1.2	4	1.8	8	1.15	50	2	●
KGM-2EP-D1.2-M10	1.2	4	1.8	10	1.15	50	2	●
KGM-2EP-D1.2-M12	1.2	4	1.8	12	1.15	50	2	●
KGM-2EP-D1.5-M06	1.5	4	2.3	6	1.45	50	2	●
KGM-2EP-D1.5-M08	1.5	4	2.3	8	1.45	50	2	●
KGM-2EP-D1.5-M10	1.5	4	2.3	10	1.45	50	2	●
KGM-2EP-D1.5-M12	1.5	4	2.3	12	1.45	50	2	●
KGM-2EP-D1.5-M14	1.5	4	2.3	14	1.45	50	2	●
KGM-2EP-D2.0-M06	2.0	4	3.0	6	1.95	50	2	●
KGM-2EP-D2.0-M08	2.0	4	3.0	8	1.95	50	2	●
KGM-2EP-D2.0-M10	2.0	4	3.0	10	1.95	50	2	●
KGM-2EP-D2.0-M12	2.0	4	3.0	12	1.95	50	2	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

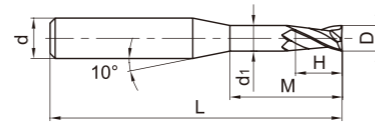
## 二刃直柄长颈短刃平头立铣刀

Two Flutes Long Neck Short Cutting Length Square Endmill

### KGM-2EP

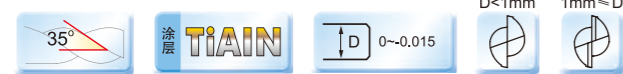


平头深沟加工  
Flat deep groove processing



● 适用于细槽加工或会产生干涉的细微部分的加工。

Suitable for fine groove processing



订货号 Specifications	基本尺寸 Dimensions (mm)						齿数 Number of teeth Z	库存 Stock
	D	d	H	M	d <sub>1</sub>	L		
KGM-2EP-D2.0-M14	2.0	4	3.0	14	1.95	50	2	●
KGM-2EP-D2.0-M16	2.0	4	3.0	16	1.95	50	2	●
KGM-2EP-D2.5-M08	2.5	4	3.7	8	2.4	50	2	●
KGM-2EP-D2.5-M10	2.5	4	3.7	10	2.4	50	2	●
KGM-2EP-D2.5-M12	2.5	4	3.7	12	2.4	50	2	●
KGM-2EP-D2.5-M14	2.5	4	3.7	14	2.4	50	2	●
KGM-2EP-D2.5-M16	2.5	4	3.7	16	2.4	60	2	●
KGM-2EP-D2.5-M18	2.5	4	3.7	18	2.4	60	2	●
KGM-2EP-D2.5-M20	2.5	4	3.7	20	2.4	60	2	●
KGM-2EP-D3.0-M06	3.0	6	4.5	6	2.85	50	2	●
KGM-2EP-D3.0-M08	3.0	6	4.5	8	2.85	50	2	●
KGM-2EP-D3.0-M10	3.0	6	4.5	10	2.85	50	2	●
KGM-2EP-D3.0-M12	3.0	6	4.5	12	2.85	50	2	●
KGM-2EP-D3.0-M14	3.0	6	4.5	14	2.85	60	2	●
KGM-2EP-D3.0-M16	3.0	6	4.5	16	2.85	60	2	●
KGM-2EP-D3.0-M18	3.0	6	4.5	18	2.85	60	2	●
KGM-2EP-D3.0-M20	3.0	6	4.5	20	2.85	60	2	●
KGM-2EP-D4.0-M12	4.0	6	6.0	12	3.85	50	2	●
KGM-2EP-D4.0-M16	4.0	6	6.0	16	3.85	60	2	●
KGM-2EP-D4.0-M20	4.0	6	6.0	20	3.85	60	2	●
KGM-2EP-D4.0-M25	4.0	6	6.0	25	3.85	60	2	●
KGM-2EP-D5.0-M16	5.0	6	7.5	16	4.85	60	2	●
KGM-2EP-D5.0-M25	5.0	6	7.5	25	4.85	70	2	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

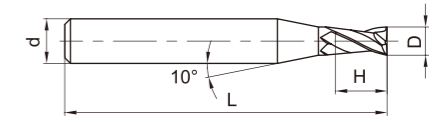
## 二刃直柄微小径平头立铣刀

Two Flutes Miniature Square End Mill

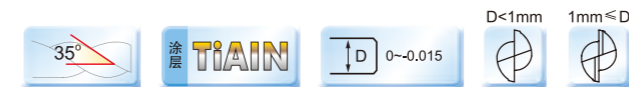
### KGM-2ES



侧面加工 Side Milling 台阶加工 Profile Milling 直角槽加工 Slutting



● 微小径铣刀可充分发挥加工中心高速、高精度性能，常用于电子零件等精密零件的加工。



The high-speed, high-precision performance of the machining center can be fully utilized. Commonly used in the processing of precision parts such as electronic parts

订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	库存 Stock
	D	d	H	L		
KGM-2ES-D0.3	0.3	4	0.6	50	2	●
KGM-2ES-D0.4	0.4	4	0.8	50	2	●
KGM-2ES-D0.5	0.5	4	1.0	50	2	●
KGM-2ES-D0.6	0.6	4	1.2	50	2	●
KGM-2ES-D0.7	0.7	4	1.4	50	2	●
KGM-2ES-D0.8	0.8	4	1.6	50	2	●
KGM-2ES-D0.9	0.9	4	1.8	50	2	●
KGM-2ES-D1.0	1.0	4	2.0	50	2	●
KGM-2ES-D1.1	1.1	4	2.0	50	2	●
KGM-2ES-D1.2	1.2	4	2.5	50	2	●
KGM-2ES-D1.3	1.3	4	2.5	50	2	●
KGM-2ES-D1.4	1.4	4	3.0	50	2	●
KGM-2ES-D1.5	1.5	4	3.0	50	2	●
KGM-2ES-D1.6	1.6	4	3.5	50	2	●
KGM-2ES-D1.7	1.7	4	3.5	50	2	●
KGM-2ES-D1.8	1.8	4	4.0	50	2	●
KGM-2ES-D1.9	1.9	4	4.0	50	2	●
KGM-2ES-D2.0	2.0	4	4.0	50	2	●
KGM-2ES-D2.1	2.1	4	4.0	50	2	●
KGM-2ES-D2.2	2.2	4	4.5	50	2	●
KGM-2ES-D2.3	2.3	4	4.5	50	2	●
KGM-2ES-D2.4	2.4	4	5.0	50	2	●
KGM-2ES-D2.5	2.5	4	5.0	50	2	●
KGM-2ES-D2.6	2.6	4	5.0	50	2	●
KGM-2ES-D2.7	2.7	4	5.5	50	2	●
KGM-2ES-D2.8	2.8	4	5.5	50	2	●
KGM-2ES-D2.9	2.9	4	6.0	50	2	●
KGM-2ES-D3.0	3.0	4	6.0	50	2	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

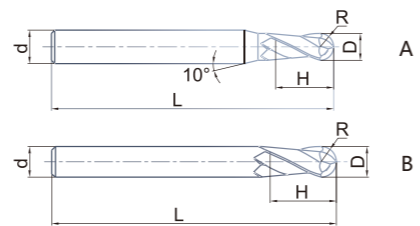
被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

## 二刃直柄球头立铣刀

Two Flutes Ball Nose Endmill

KGM-2B



- 适用于仿形铣削，可作高速加工。  
Suitable for profile milling, high speed machining
- 适用范围广泛。  
Wide range of applications



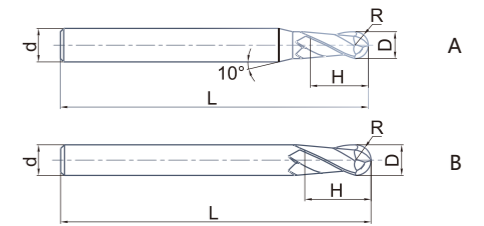
订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	d	H	L			
KGM-2B-R0.5S	1.0	0.5	4	2	50	2	A	●
KGM-2B-R0.75S	1.5	0.75	4	3	50	2	A	●
KGM-2B-R1.0S	2.0	1.0	4	4	50	2	A	●
KGM-2B-R1.25S	2.5	1.25	4	5	50	2	A	●
KGM-2B-R1.5S	3.0	1.5	4	6	50	2	A	●
KGM-2B-R2.0S	4.0	2.0	4	8	50	2	B	●
KGM-2B-R0.5	1.0	0.5	6	2	50	2	A	●
KGM-2B-R0.75	1.5	0.75	6	3	50	2	A	●
KGM-2B-R1.0	2.0	1.0	6	4	50	2	A	●
KGM-2B-R1.25	2.5	1.25	6	5	50	2	A	●
KGM-2B-R1.5	3.0	1.5	6	6	50	2	A	●
KGM-2B-R1.75	3.5	1.75	6	8	50	2	A	●
KGM-2B-R2.0	4.0	2.0	6	8	50	2	A	●
KGM-2B-R2.5	5.0	2.5	6	10	50	2	A	●
KGM-2B-R2.75	5.5	2.75	6	12	50	2	A	●
KGM-2B-R3.0	6.0	3.0	6	12	50	2	B	●
KGM-2B-R3.5	7.0	3.5	8	14	60	2	B	●
KGM-2B-R4.0	8.0	4.0	8	16	60	2	B	●
KGM-2B-R4.5	9.0	4.5	10	18	75	2	B	●
KGM-2B-R5.0	10	5.0	10	20	75	2	B	●
KGM-2B-R6.0	12	6.0	12	24	75	2	B	●
KGM-2B-R7.0	14	7.0	14	28	75	2	B	●
KGM-2B-R8.0	16	8.0	16	32	100	2	B	●
KGM-2B-R10.0	20	10.0	20	40	100	2	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

## 二刃直柄长柄球头立铣刀

Two Flutes Long Shank Ball Nose Endmill

KGM-2BL



- GM-2B的长柄系列。  
GM-2B Long Shank Series



订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	d	H	L			
KGM-2BL-R1.0	2.0	1.0	6	4	75	2	A	●
KGM-2BL-R1.25	2.5	1.25	6	5	75	2	A	●
KGM-2BL-R1.5	3.0	1.5	6	6	75	2	A	●
KGM-2BL-R1.75	3.5	1.75	6	8	75	2	A	●
KGM-2BL-R2.0	4.0	2.0	6	8	75	2	A	●
KGM-2BL-R2.5	5.0	2.5	6	10	75	2	A	●
KGM-2BL-R2.75	5.5	2.75	6	12	75	2	A	●
KGM-2BL-R3.0	6.0	3.0	6	12	75	2	B	●
KGM-2BL-R3.5	7.0	3.5	8	14	75	2	A	●
KGM-2BL-R4.0	8.0	4.0	8	16	100	2	A	●
KGM-2BL-R4.5	9.0	4.5	10	18	100	2	A	●
KGM-2BL-R5.0	10.0	5.0	10	20	100	2	B	●
KGM-2BL-R6.0	12.0	6.0	12	24	100	2	B	●
KGM-2BL-R7.0	14.0	7.0	14	28	100	2	B	●
KGM-2BL-R8.0	16.0	8.0	16	32	150	2	B	●
KGM-2BL-R10.0	20.0	10.0	20	40	150	2	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

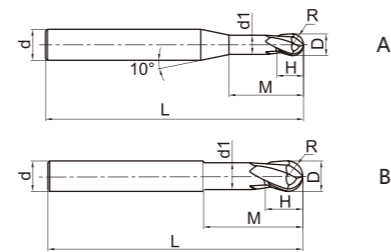
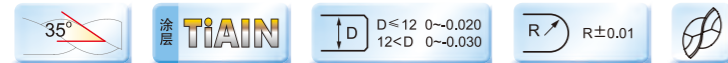
## 二刃直柄长颈短刃球头立铣刀

Two Flutes Long Neck Short Cutting Length Ball Nose Endmill

### KGM-2BFP



- 高刚性短刃设计, 适合重切削。  
Short cutting length design, suitable for heavy cutting



订货号 Specifications	基本尺寸 Dimensions (mm)							齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	H	d <sub>1</sub>	M	d	L			
KGM-2BFP-R0.5	1.0	0.5	1	0.95	2.5	6	75	2	A	○
KGM-2BFP-R0.75	1.5	0.75	1	1.45	3	6	75	2	A	○
KGM-2BFP-R1.0	2.0	1.0	2	1.95	4	6	75	2	A	○
KGM-2BFP-R1.5	3.0	1.5	3	2.85	6	6	75	2	A	○
KGM-2BFP-R2.0	4.0	2.0	4	3.85	8	6	75	2	A	○
KGM-2BFP-R2.5	5.0	2.5	5	4.85	10	6	75	2	A	○
KGM-2BFP-R3.0	6.0	3.0	6	5.8	12	6	75	2	B	○
KGM-2BFP-R4.0	8.0	4.0	8	7.8	16	8	100	2	B	○
KGM-2BFP-R5.0	10.0	5.0	10	9.6	20	10	100	2	B	○
KGM-2BFP-R6.0	12.0	6.0	12	11.5	24	12	100	2	B	○
KGM-2BFP-R8.0	16.0	8.0	16	15.5	32	16	150	2	B	○
KGM-2BFP-R10.0	20.0	10.0	20	19.5	40	20	150	2	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

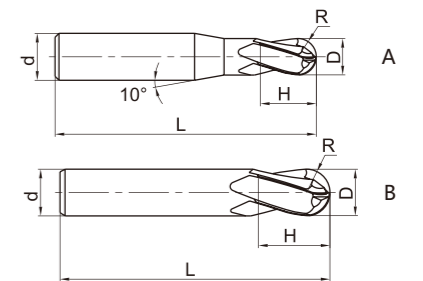
## 四刃直柄球头立铣刀

Four Flutes Ball Nose Endmill

### KGM-4B



- 四刃球头铣刀可实现较高的进给速度, 实现较高的切削加工效率。  
High feed machining, High efficient processing



订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	d	H	L			
KGM-4B-R1.5	3.0	1.5	6	6	50	4	A	●
KGM-4B-R2.0	4.0	2.0	6	8	50	4	A	●
KGM-4B-R2.5	5.0	2.5	6	10	50	4	A	●
KGM-4B-R3.0	6.0	3.0	6	12	50	4	A	●
KGM-4B-R4.0	8.0	4.0	8	16	60	4	A	●
KGM-4B-R5.0	10.0	5.0	10	20	75	4	A	●
KGM-4B-R6.0	12.0	6.0	12	24	75	4	B	●
KGM-4B-R7.0	14.0	7.0	14	28	75	4	B	●
KGM-4B-R8.0	16.0	8.0	16	32	100	4	B	●
KGM-4B-R9.0	18.0	9.0	18	36	100	4	B	●
KGM-4B-R10.0	20.0	10.0	20	40	100	4	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

#### 被加工材料适用表 Applicable materials for processing

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

#### 被加工材料适用表 Applicable materials for processing

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					



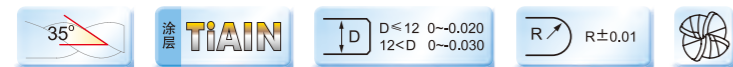
## 四刃直柄长柄球头立铣刀

Four Flutes Long Shank Ball Nose Endmill

KGM-4BL

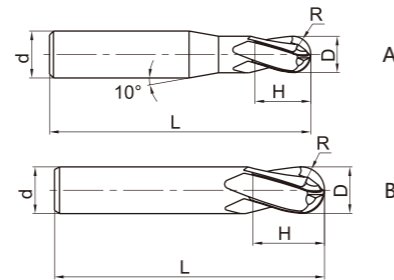


- GM-4B的长柄系列。  
GM-4 Blong Shank Series



订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	d	H	L			
KGM-4BL-R1.5	3.0	1.5	6	6	75	4	A	○
KGM-4BL-R2.0	4.0	2.0	6	8	75	4	A	○
KGM-4BL-R2.5	5.0	2.5	6	10	75	4	A	○
KGM-4BL-R3.0	6.0	3.0	6	12	75	4	B	○
KGM-4BL-R4.0	8.0	4.0	8	16	100	4	B	○
KGM-4BL-R5.0	10.0	5.0	10	20	100	4	B	○
KGM-4BL-R6.0	12.0	6.0	12	24	100	4	B	○
KGM-4BL-R7.0	14.0	7.0	14	28	100	4	B	○
KGM-4BL-R8.0	16.0	8.0	16	32	150	4	B	○
KGM-4BL-R9.0	18.0	9.0	18	36	150	4	B	○
KGM-4BL-R10.0	20.0	10.0	20	40	150	4	B	○

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order



## 二刃直柄微小径球头立铣刀

Two Flutes Miniature Ball Nose Endmill

KGM-2BS



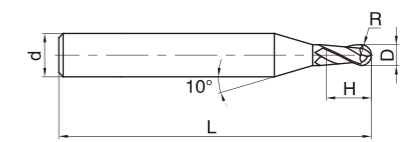
- 微小径铣刀可充分发挥加工中心高速、高精度性能，常用于电子零件等精密零件的加工。



The high-speed, high-precision performance of the machining center can be fully utilized. Commonly used in the processing of precision parts such as electronic parts

订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	库存 Stock
	D	R	d	H	L		
KGM-2BS-R0.15	0.30	0.15	4	0.5	50	2	●
KGM-2BS-R0.20	0.40	0.20	4	0.6	50	2	●
KGM-2BS-R0.25	0.50	0.25	4	0.8	50	2	●
KGM-2BS-R0.30	0.60	0.30	4	0.9	50	2	●
KGM-2BS-R0.35	0.70	0.35	4	1.0	50	2	●
KGM-2BS-R0.40	0.80	0.40	4	1.2	50	2	●
KGM-2BS-R0.45	0.90	0.45	4	1.3	50	2	●
KGM-2BS-R0.50	1.00	0.50	4	1.5	50	2	●
KGM-2BS-R0.60	1.20	0.60	4	1.8	50	2	●
KGM-2BS-R0.70	1.40	0.70	4	2.0	50	2	●
KGM-2BS-R0.75	1.50	0.75	4	2.3	50	2	●
KGM-2BS-R0.80	1.60	0.80	4	2.5	50	2	●
KGM-2BS-R0.90	1.80	0.90	4	2.7	50	2	●
KGM-2BS-R1.00	2.00	1.00	4	3.0	50	2	●
KGM-2BS-R1.25	2.50	1.25	4	3.7	50	2	●
KGM-2BS-R1.50	3.00	1.50	4	4.5	50	2	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order



被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

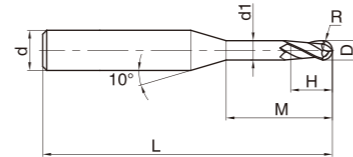
## 二刃直柄长颈短刃球头立铣刀

Two Flutes Long Neck Short Cutting Length Ball Nose Endmill

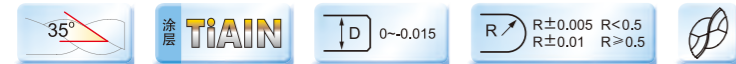


平头深沟加工  
Flat deep groove processing

### KGM-2BP



- 适用于细槽加工以及自由曲面加工。  
Suitable for fine groove machining and freeform machining



订货号 Specifications	基本尺寸 Dimensions (mm)							齿数 Number of teeth Z	库存 Stock
	D	R	H	d <sub>i</sub>	M	d	L		
KGM-2BP-R0.25-M04	0.5	0.25	0.7	0.45	4	4	50	2	●
KGM-2BP-R0.25-M06	0.5	0.25	0.7	0.45	6	4	50	2	●
KGM-2BP-R0.3-M04	0.6	0.3	0.9	0.55	4	4	50	2	●
KGM-2BP-R0.3-M06	0.6	0.3	0.9	0.55	6	4	50	2	●
KGM-2BP-R0.3-M08	0.6	0.3	0.9	0.55	8	4	50	2	●
KGM-2BP-R0.4-M04	0.8	0.4	1.2	0.75	4	4	50	2	●
KGM-2BP-R0.4-M06	0.8	0.4	1.2	0.75	6	4	50	2	●
KGM-2BP-R0.4-M08	0.8	0.4	1.2	0.75	8	4	50	2	●
KGM-2BP-R0.4-M10	0.8	0.4	1.2	0.75	10	4	50	2	●
KGM-2BP-R0.5-M04	1.0	0.5	1.5	0.95	4	4	50	2	●
KGM-2BP-R0.5-M06	1.0	0.5	1.5	0.95	6	4	50	2	●
KGM-2BP-R0.5-M08	1.0	0.5	1.5	0.95	8	4	50	2	●
KGM-2BP-R0.5-M10	1.0	0.5	1.5	0.95	10	4	50	2	●
KGM-2BP-R0.5-M12	1.0	0.5	1.5	0.95	12	4	50	2	●
KGM-2BP-R0.6-M06	1.2	0.6	1.8	1.15	6	4	50	2	●
KGM-2BP-R0.6-M08	1.2	0.6	1.8	1.15	8	4	50	2	●
KGM-2BP-R0.6-M12	1.2	0.6	1.8	1.15	12	4	50	2	●
KGM-2BP-R0.6-M16	1.2	0.6	1.8	1.15	16	4	50	2	●
KGM-2BP-R0.75-M08	1.5	0.75	2.3	1.45	8	4	50	2	●
KGM-2BP-R0.75-M12	1.5	0.75	2.3	1.45	12	4	50	2	●
KGM-2BP-R0.75-M16	1.5	0.75	2.3	1.45	16	4	50	2	●
KGM-2BP-R1.0-M06	2.0	1.0	3.0	1.95	6	4	50	2	●
KGM-2BP-R1.0-M08	2.0	1.0	3.0	1.95	8	4	50	2	●
KGM-2BP-R1.0-M10	2.0	1.0	3.0	1.95	10	4	50	2	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○	○				

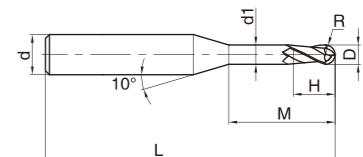
## 二刃直柄长颈短刃球头立铣刀

Two Flutes Long Neck Short Cutting Length Ball Nose Endmill

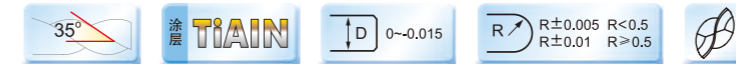


平头深沟加工  
Flat deep groove processing

### KGM-2BP



- 适用于细槽加工以及自由曲面加工。  
Suitable for fine groove machining and freeform machining



订货号 Specifications	基本尺寸 Dimensions (mm)							齿数 Number of teeth Z	库存 Stock
	D	R	H	d <sub>i</sub>	M	d	L		
KGM-2BP-R1.0-M12	2.0	1.0	3.0	1.95	12	4	50	2	●
KGM-2BP-R1.0-M16	2.0	1.0	3.0	1.95	16	4	50	2	●
KGM-2BP-R1.0-M20	2.0	1.0	3.0	1.95	20	4	50	2	●
KGM-2BP-R1.25-M08	2.5	1.25	3.7	2.4	8	4	50	2	●
KGM-2BP-R1.25-M12	2.5	1.25	3.7	2.4	12	4	50	2	●
KGM-2BP-R1.25-M16	2.5	1.25	3.7	2.4	16	4	60	2	●
KGM-2BP-R1.25-M20	2.5	1.25	3.7	2.4	20	4	60	2	●
KGM-2BP-R1.5-M08	3.0	1.5	4.5	2.85	8	6	50	2	●
KGM-2BP-R1.5-M10	3.0	1.5	4.5	2.85	10	6	50	2	●
KGM-2BP-R1.5-M12	3.0	1.5	4.5	2.85	12	6	50	2	●
KGM-2BP-R1.5-M16	3.0	1.5	4.5	2.85	16	6	60	2	●
KGM-2BP-R1.5-M20	3.0	1.5	4.5	2.85	20	6	60	2	●
KGM-2BP-R2.0-M10	4.0	2.0	6.0	3.85	10	6	60	2	●
KGM-2BP-R2.0-M16	4.0	2.0	6.0	3.85	16	6	60	2	●
KGM-2BP-R2.0-M20	4.0	2.0	6.0	3.85	20	6	60	2	●
KGM-2BP-R2.0-M25	4.0	2.0	6.0	3.85	25	6	60	2	●
KGM-2BP-R2.5-M16	5.0	2.5	7.5	4.85	16	6	60	2	●
KGM-2BP-R2.5-M25	5.0	2.5	7.5	4.85	25	6	70	2	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○	○				

## 两刃直柄圆弧立铣刀

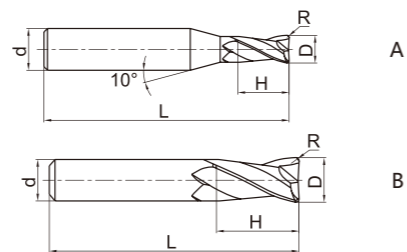
Two Flutes Corner Radius Endmill

### KGM-2R



● 适用范围广泛，可实现多种形态的加工。

Wide range of applications



订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	d	H	L			
KGM-2R-D1.0R0.2	1.0	0.2	4	3	50	2	A	●
KGM-2R-D1.5R0.2	1.5	0.2	4	4	50	2	A	●
KGM-2R-D2.0R0.2	2.0	0.2	4	6	50	2	A	●
KGM-2R-D2.0R0.5	2.0	0.5	4	6	50	2	A	●
KGM-2R-D2.5R0.2	2.5	0.2	4	8	50	2	A	●
KGM-2R-D2.5R0.5	2.5	0.5	4	8	50	2	A	●
KGM-2R-D3.0R0.2	3.0	0.2	4	8	50	2	A	●
KGM-2R-D3.0R0.3	3.0	0.3	4	8	50	2	A	●
KGM-2R-D3.0R0.5	3.0	0.5	4	8	50	2	A	●
KGM-2R-D4.0R0.2	4.0	0.2	4	11	50	2	B	●
KGM-2R-D4.0R0.3	4.0	0.3	4	11	50	2	B	●
KGM-2R-D4.0R0.5	4.0	0.5	4	11	50	2	B	●
KGM-2R-D4.0R1.0	4.0	1.0	4	11	50	2	B	●
KGM-2R-D5.0R0.3	5.0	0.3	6	13	50	2	A	●
KGM-2R-D5.0R0.5	5.0	0.5	6	13	50	2	A	●
KGM-2R-D5.0R1.0	5.0	1.0	6	13	50	2	A	●
KGM-2R-D6.0R0.3	6.0	0.3	6	16	50	2	B	●
KGM-2R-D6.0R0.5	6.0	0.5	6	16	50	2	B	●
KGM-2R-D6.0R1.0	6.0	1.0	6	16	50	2	B	●
KGM-2R-D8.0R0.3	8.0	0.3	8	20	60	2	B	●
KGM-2R-D8.0R0.5	8.0	0.5	8	20	60	2	B	●
KGM-2R-D8.0R1.0	8.0	1.0	8	20	60	2	B	●
KGM-2R-D10.0R0.5	10.0	0.5	10	25	75	2	B	●
KGM-2R-D10.0R1.0	10.0	1.0	10	25	75	2	B	●
KGM-2R-D10.0R1.5	10.0	1.5	10	25	75	2	B	●
KGM-2R-D10.0R2.0	10.0	2.0	10	25	75	2	B	●
KGM-2R-D12.0R0.5	12.0	0.5	12	30	75	2	B	●
KGM-2R-D12.0R1.0	12.0	1.0	12	30	75	2	B	●
KGM-2R-D12.0R1.5	12.0	1.5	12	30	75	2	B	●
KGM-2R-D12.0R2.0	12.0	2.0	12	30	75	2	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

## 四刃直柄圆弧立铣刀

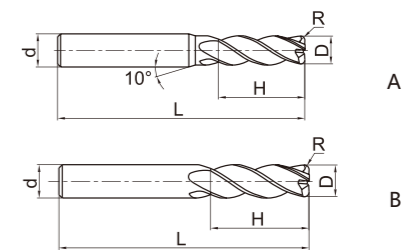
Four Flutes Corner Radius Endmill

### KGM-4R



● 适用范围广泛，可实现多种形态的加工。

Wide range of applications



订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	R	d	H	L			
KGM-4R-D3.0R0.2	3.0	0.2	4	8	50	4	A	●
KGM-4R-D4.0R0.3	4.0	0.3	4	10	50	4	B	●
KGM-4R-D4.0R0.5	4.0	0.5	4	10	50	4	B	●
KGM-4R-D5.0R0.5	5.0	0.5	6	13	50	4	A	●
KGM-4R-D5.0R1.0	5.0	1.0	6	13	50	4	A	●
KGM-4R-D6.0R0.5	6.0	0.5	6	16	50	4	B	●
KGM-4R-D6.0R1.0	6.0	1.0	6	16	50	4	B	●
KGM-4R-D8.0R0.5	8.0	0.5	8	20	60	4	B	●
KGM-4R-D8.0R1.0	8.0	1.0	8	20	60	4	B	●
KGM-4R-D10.0R0.5	10.0	0.5	10	25	75	4	B	●
KGM-4R-D10.0R1.0	10.0	1.0	10	25	75	4	B	●
KGM-4R-D10.0R2.0	10.0	2.0	10	25	75	4	B	●
KGM-4R-D10.0R3.0	10.0	3.0	10	25	75	4	B	●
KGM-4R-D12.0R0.5	12.0	0.5	12	30	75	4	B	●
KGM-4R-D12.0R1.0	12.0	1.0	12	30	75	4	B	●
KGM-4R-D12.0R2.0	12.0	2.0	12	30	75	4	B	●
KGM-4R-D12.0R3.0	12.0	3.0	12	30	75	4	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

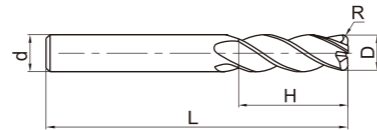
被加工材料适用表 Applicable materials for processing ○ 非常适合 Very suitable ○ 适合 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○	○	○	○					

### 四刃直柄长柄圆弧立铣刀

Four Flutes Long Shank Corner Radius Endmill

KGM-4RL



● GM-4R的长柄系列。  
GM-4R Long shank series



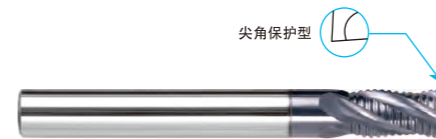
订货号 Specifications	基本尺寸 Dimensions (mm)					齿数 Number of teeth Z	库存 Stock
	D	R	d	H	L		
KGM-4RL-D6.0R0.5	6.0	0.5	6	16	75	4	●
KGM-4RL-D6.0R1.0	6.0	1.0	6	16	75	4	●
KGM-4RL-D8.0R0.5	8.0	0.5	8	20	100	4	●
KGM-4RL-D8.0R1.0	8.0	1.0	8	20	100	4	●
KGM-4RL-D10.0R0.5	10.0	0.5	10	25	100	4	●
KGM-4RL-D10.0R1.0	10.0	1.0	10	25	100	4	●
KGM-4RL-D10.0R2.0	10.0	2.0	10	25	100	4	●
KGM-4RL-D12.0R0.5	12.0	0.5	12	30	100	4	●
KGM-4RL-D12.0R1.0	12.0	1.0	12	30	100	4	●
KGM-4RL-D12.0R2.0	12.0	2.0	12	30	100	4	●
KGM-4RL-D16.0R1.0	16.0	1.0	16	45	150	4	●
KGM-4RL-D16.0R2.0	16.0	2.0	16	45	150	4	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

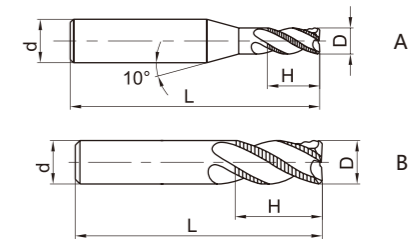
### 四刃直柄平头波形刃立铣

Four Flutes Roughing Endmill

KGM-4W



尖角保护型



● 最适宜高效粗加工。  
Suitable for roughing machining



订货号 Specifications	基本尺寸 Dimensions (mm)				齿数 Number of teeth Z	形式 Inserts Shape	库存 Stock
	D	d	H	L			
KGM-4W-D6.0	6.0	6	16	50	4	B	●
KGM-4W-D7.0	7.0	8	20	60	4	A	●
KGM-4W-D8.0	8.0	8	20	60	4	B	●
KGM-4W-D9.0	9.0	10	22	75	4	A	●
KGM-4W-D10.0	10.0	10	25	75	4	B	●
KGM-4W-D11.0	11.0	12	26	75	4	A	●
KGM-4W-D12.0	12.0	12	30	75	4	B	●
KGM-4W-D16.0	16.0	16	45	100	4	B	●
KGM-4W-D20.0	20.0	20	45	100	4	B	●

● 推荐型号 Recommended type ○ 按订单生产 Make-to-order

被加工材料适用表 Applicable materials for processing ○ 非常合适 Very suitable ○ 合适 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○					

被加工材料适用表 Applicable materials for processing ○ 非常合适 Very suitable ○ 合适 Suitable

被加工材料 Processed Materials											
碳素钢 Carbon steel	合金钢 Alloy steel	预硬钢、淬硬钢 Pre-hardened steel Hardened steel				不锈钢 Stainless steel	铸铁 Cast iron 球墨铸铁 Ductile iron	铜合金 Copper alloy	铝合金 Aluminum alloy	钛合金 Titanium alloy	耐热合金 Heat-resistant alloy
		~40HRC	~50HRC	~55HRC	~68HRC						
○	○	○	○			○					



## 刀杆和刀盘 Holders and Cutter

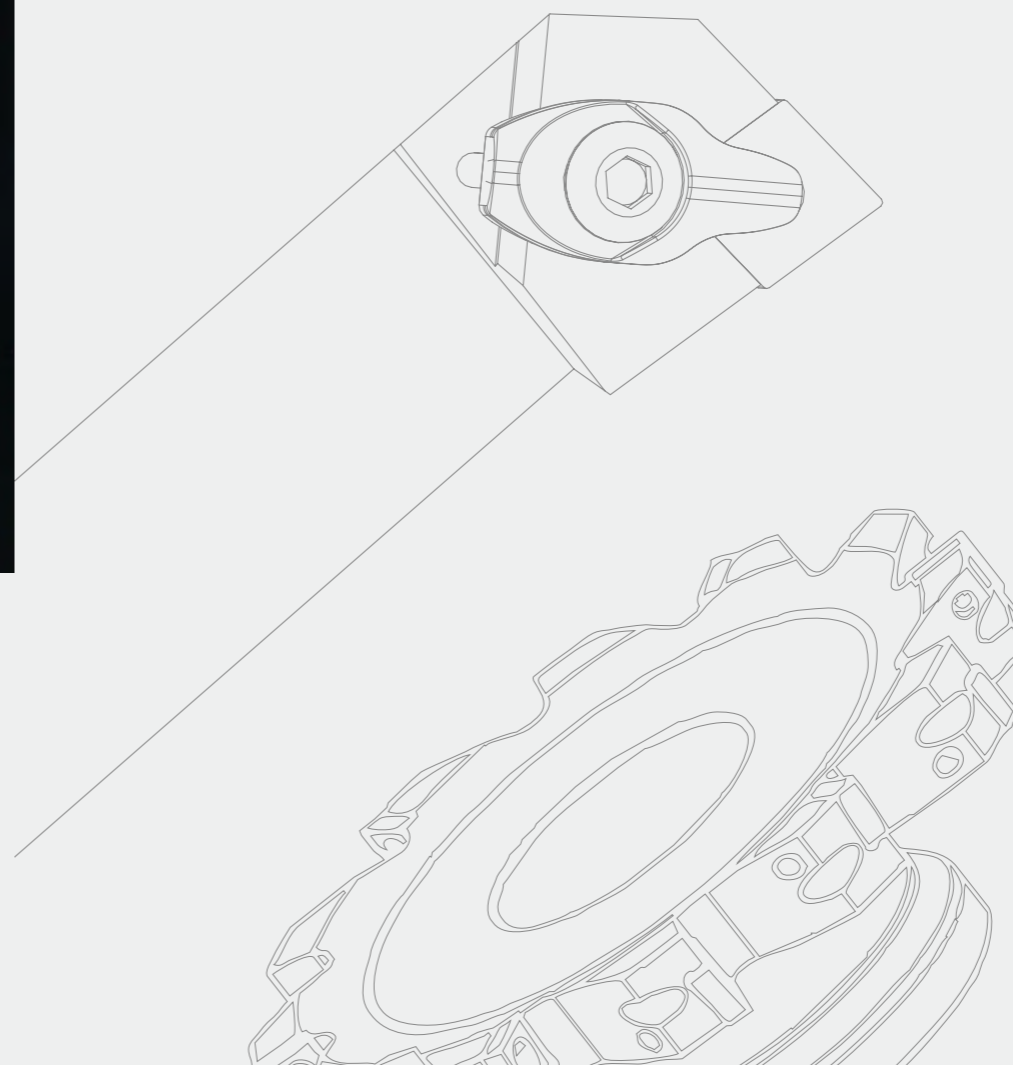
车削刀具 Turning Tools 281

可转位铣削刀具 Indexable Milling Tools 282

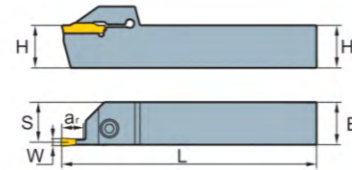


## HOLDERS AND CUTTER

### 刀杆和刀盘



车削刀具 Turning Tools



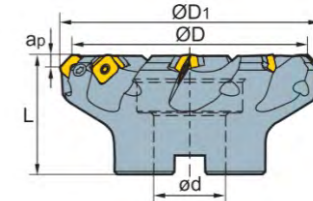
型号 Type	尺寸 Dimensions(mm)					适装刀片 Applicable Inserts
	H*B	L	S	W	ar <sub>max</sub>	
QEFD	1616R/L10	16*16	125	14.8	3	GPMN3004K-M GPMN3004K-G
	1616R/L17	16*16	125	14.8	3	
	2020R/L10	20*20	125	18.8	3	
	2020R/L17	20*20	125	18.8	3	
	2525R/L10	25*25	150	23.8	3	
	2525R/L17	25*25	150	23.8	3	
QEGD	2020R/L13	20*20	140	18.5	4	GPMN4004K-M GPMN4004K-G
	2020R/L22	20*20	140	18.5	4	
	2525R/L13	25*25	150	23.5	4	
	2525R/L22	25*25	150	23.5	4	
	3232R/L13	32*32	170	30.5	4	
QEHD	2525R/L13	25*25	150	23	5	GPMN5005K-M GPMN5008K-G
	2525R/L22	25*25	150	23	5	
QEHS	2525N30	25*25	150	12.5	5	ZrHS05□□
QEHD	3232R/L13	32*32	170	30	5	GPMN50058K-M GPMN5008K-G
	3232R/L22	32*32	170	30	5	
QEHS	3232N30	32*32	170	16	5	GPMN50058K-M GPMN5008K-G

可转位铣削刀具 Indexable Milling Tools

MXA01 P M K N S



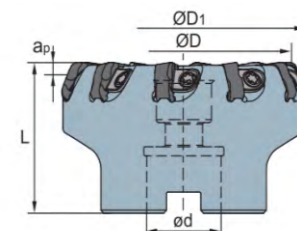
密齿等齿距  
Close Pitch Space



型号 Type	尺寸 Dimensions(mm)					齿数 Number of teeth Z	适装刀片 Applicable Inserts
	ΦD	ΦD <sub>1</sub>	Φd	L	ar <sub>max</sub>		
MXA01	-050-A22-SE12-04	50	61	22	40	6	SEET12T3-□□
	-063-A22-SE12-05	63	74	22	40	6	
	-080-A27-SE12-06	80	91	27	50	6	
	-100-B32-SE12-07	100	107	32	50	6	
	-125-B40-SE12-08	125	136	40	63	6	
	-160-B40-SE12-10	160	170	40	63	6	
	-200-C60-SE12-12	200	210	60	63	6	
	-250-C60-SE12-14	250	260	60	63	6	
	-315-D60-SE12-18	315	325	60	70	6	

可转位铣削刀具 Indexable Milling Tools

MXD02 K



型号 Type	尺寸 Dimensions(mm)					齿数 Number of teeth Z	适装刀片 Applicable Inserts
	ΦD	ΦD <sub>1</sub>	Φd	L	ap <sub>max</sub>		
MXD02	-080-A27-PN11-10	80	90.1	27	50	5/7.5	PNEG1105□□□-X□
	-100-B32-PN11-14	100	110.1	32	50	5/7.5	
	-125-B40-PN11-18	125	135.1	40	63	5/7.5	
	-160-B40-PN11-22	160	170.1	40	63	5/7.5	

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

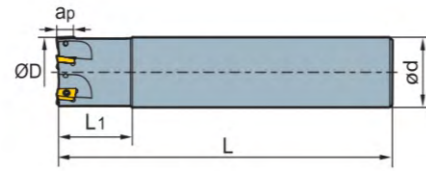
G 刀杆和刀盘

H 加工案例

I 通用技术信息

可转位铣削刀具 Indexable Milling Tools

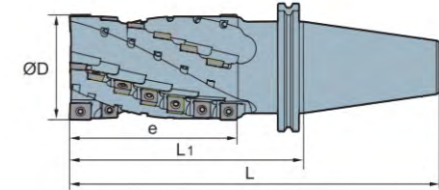
FJP01 P M K N



型号 Type	尺寸 Dimensions(mm)					齿数 Number of teeth Z	适装刀片 Applicable Inserts	
	ΦD	Φd	L	L1	ap <sub>max</sub>			
FJP01	-012-G16-AP11-01	12	16	85	25	10.5	2	APMT1135□□□□-0M
	-016-G16-AP11-02	16	16	90	25	10.5		
	-020-G20-AP11-02	20	20	100	30	10.5		
	-025-G25-AP11-03	25	25	115	35	10.5		
	-032-G32-AP11-04	32	32	125	40	10.5	4	APMT1604□□□□-0M
	-025-G25-AP16-02	25	25	115	35	15.5	2	
	-032-G32-AP16-03	32	32	125	40	15.5	3	
	-040-G32-AP16-04	40	32	130	42	15.5	4	
	-050-G32-AP16-05	50	32	135	45	15.5	5	
	-063-G32-AP16-06	63	32	135	45	15.5	6	

可转位铣削刀具 Indexable Milling Tools

LXP01 P K



型号 Type	尺寸 Dimensions(mm)				齿数 Number of teeth Z	适装刀片 Applicable Inserts	
	ΦD	e	L1	ap <sub>max</sub>			
LXP01	-050*84-JT50-SP12-04	50	84	145	246.75	4	APKT150412K-BM SPMT120408K-BM
	-063*74-JT50-SP12-04	63	74	135	236.75		
	-063*104-JT50-SP12-04	63	104	165	266.75		
	-063*134-JT50-SP12-04	63	134	195	296.75		
	-080*104-JT50-SP12-04	80	104	165	266.75		
	-080*144-JT50-SP12-04	80	144	205	306.75		
	-050*84-BT50-SP12-04	50	84	145	246.8		
	-063*74-BT50-SP12-04	63	74	135	236.8		
	-063*104-BT50-SP12-04	63	104	165	266.8		
	-063*134-BT50-SP12-04	63	134	195	296.8		
	-080*104-BT50-SP12-04	80	104	165	266.8		
	-080*144-BT50-SP12-04	80	144	205	306.8		

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

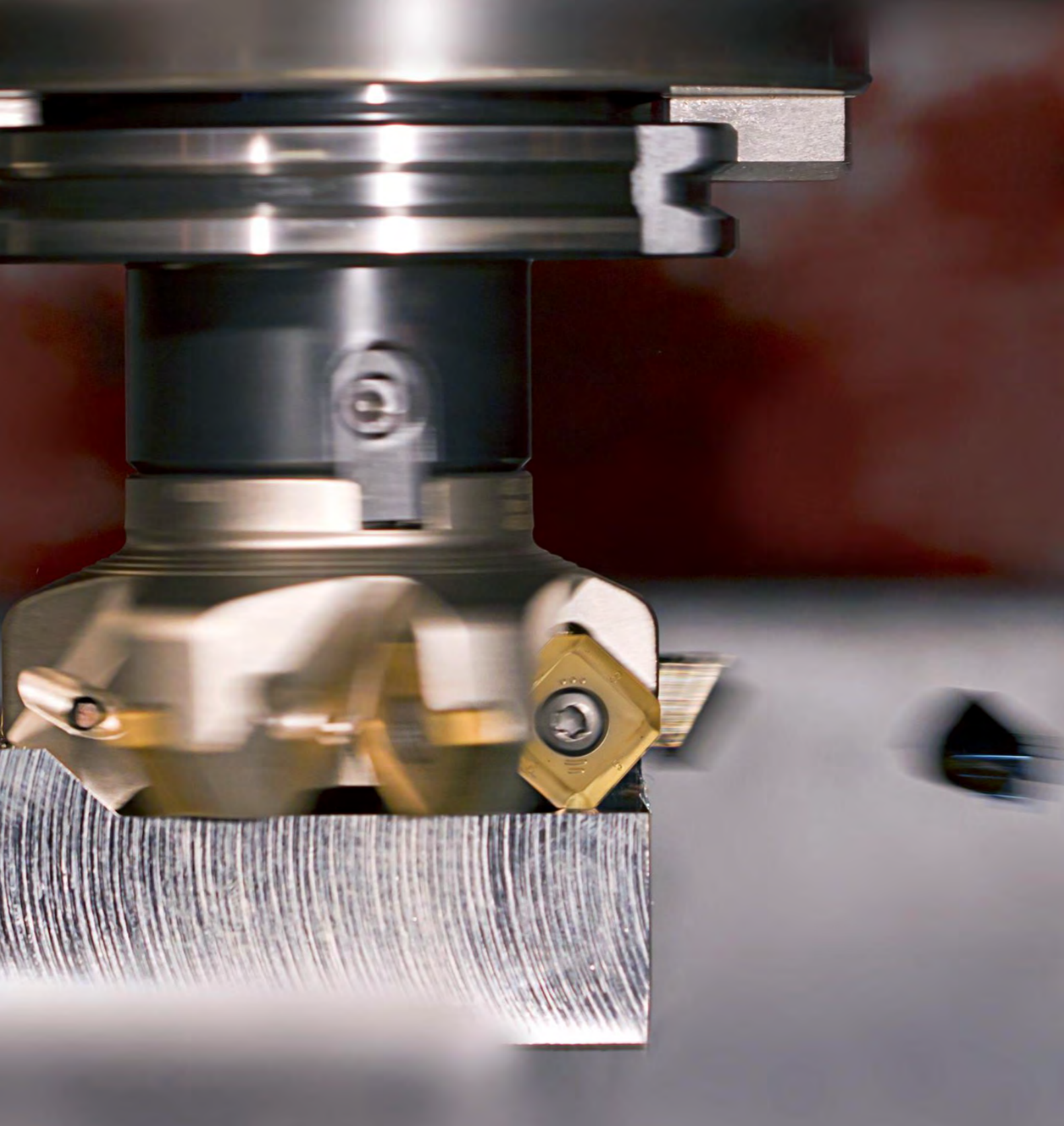
E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

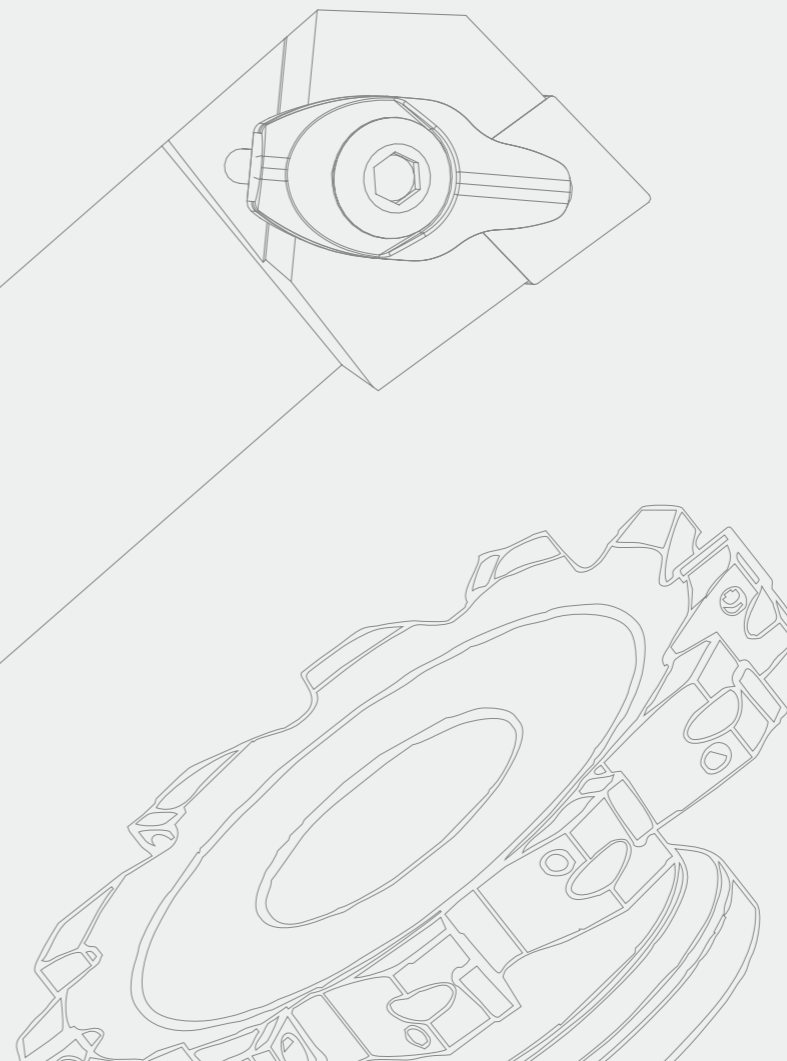


## 加工案例 Application Cases

钢件加工案例	Steel Processing Application Cases	287
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耐热合金加工案例	Heat-resistant Alloy Processing Cases	293

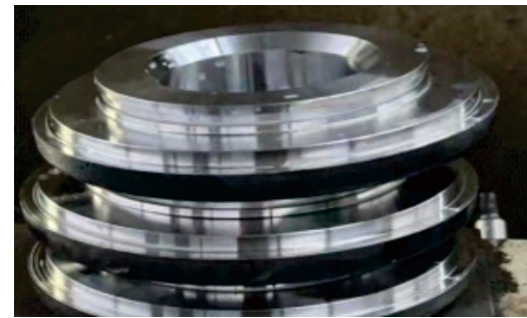
## PROCESSING CASES

### 加工案例

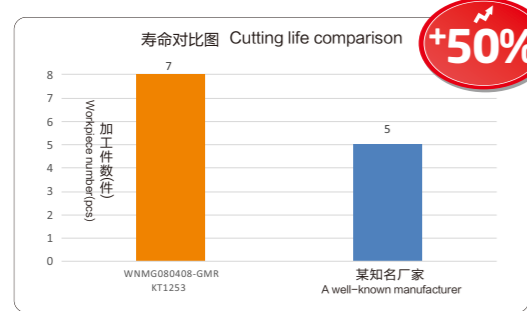




钢件加工案例 Steel Processing Application Cases



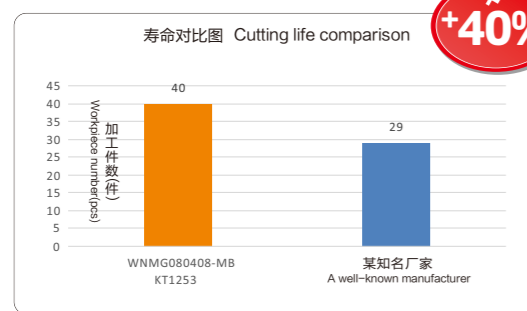
客户名称: \*\*\*\*机械制造有限公司  
 工件名称: 端盖  
 被加工材料: 42CrMo  
 加工设备: 数控车床  
 使用刀片: WNMG080408-GMR/KT1253  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗车外圆  
 加工参数:  $V_c=200\text{m/min}$ ,  $F_n=0.24\text{mm/r}$ ,  $A_p=1.3\text{mm}$



Customer: \*\*\*\*Machinery Manufacturing Co., Ltd  
 Work piece: End bracket  
 Work piece material: 42CrMo  
 Lathe type: CNC lathe  
 Kerno insert: WNMG080408-GMR/KT1253  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: External roughing turning  
 Cutting parameters:  $V_c=200\text{m/min}$ ,  $F_n=0.24\text{mm/r}$ ,  $A_p=1.3\text{mm}$

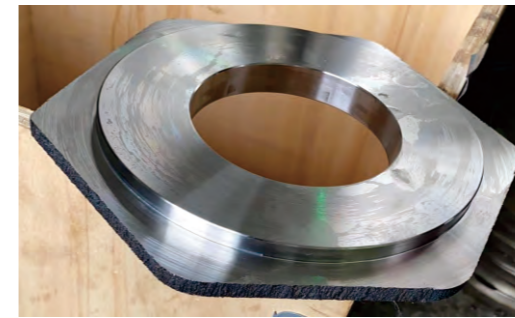


客户名称: \*\*\*\*制造有限公司  
 工件名称: 球笼  
 被加工材料: 钢件  
 加工设备: 数控车床  
 使用刀片: WNMG080408-MB/KT1253  
 对比刀片: 国内某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗车(断续)  
 加工参数:  $V_c=120\text{m/min}$ ,  $F_n=0.14\text{mm/r}$ ,  $A_p=1.2\text{mm}$

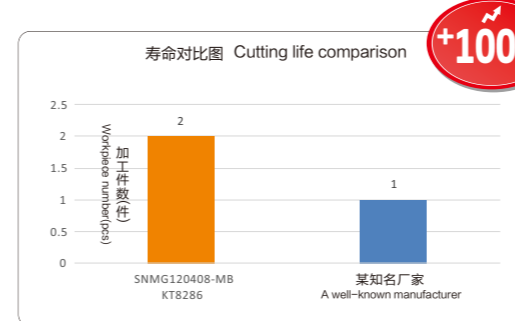


Customer: \*\*\*\*Machinery Manufacturing Co., Ltd  
 Work piece: Ball cage  
 Work piece material: Steel  
 Lathe type: CNC lathe  
 Kerno insert: WNMG080408-MB/KT1253  
 Compare insert: Well-known domestic brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing turning (interrupted cutting)  
 Cutting parameters:  $V_c=120\text{m/min}$ ,  $F_n=0.14\text{mm/r}$ ,  $A_p=1.2\text{mm}$

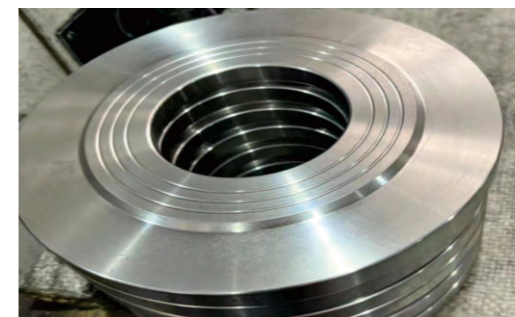
不锈钢加工案例 Stainless Steel Processing Application Cases



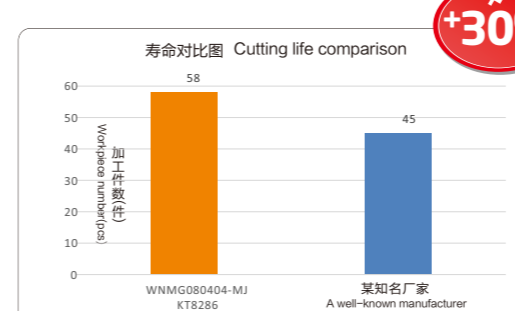
客户名称: \*\*\*\*法兰制造有限公司  
 工件名称: 法兰  
 被加工材料: 不锈钢304  
 加工设备: 数控车床  
 使用刀片: SNMG120408-MB/KT8286  
 对比刀片: 国内某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗车(断续)  
 加工参数:  $V_c=135\text{m/min}$ ,  $F_n=0.12\text{mm/r}$ ,  $A_p=1.5\text{mm}$



Customer: \*\*\*\* Flange Manufacturing Co., Ltd  
 Work piece: Flange  
 Work piece material: Stainless steel 304  
 Lathe type: CNC lathe  
 Kerno insert: SNMG120408-MB/KT8286  
 Compare insert: Well-known domestic brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing turning (interrupted cutting)  
 Cutting parameters:  $V_c=135\text{m/min}$ ,  $F_n=0.12\text{mm/r}$ ,  $A_p=1.5\text{mm}$

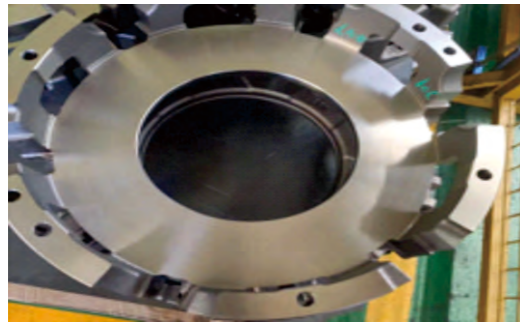


客户名称: \*\*\*\*法兰制造有限公司  
 工件名称: 法兰  
 被加工材料: 不锈钢304  
 加工设备: 数控车床  
 使用刀片: WNMG080404-MJ/KT8286  
 对比刀片: 国内某知名厂家  
 冷却方式: 冷却液  
 加工内容: 精车  
 加工参数:  $V_c=185\text{m/min}$ ,  $F_n=0.1\text{mm/r}$ ,  $A_p=0.5\text{mm}$



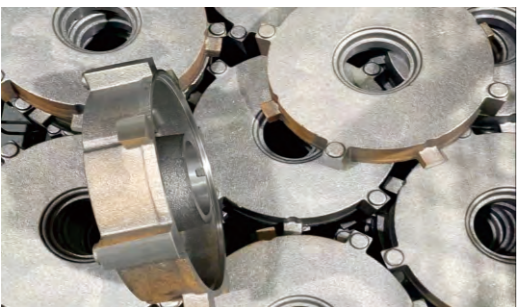
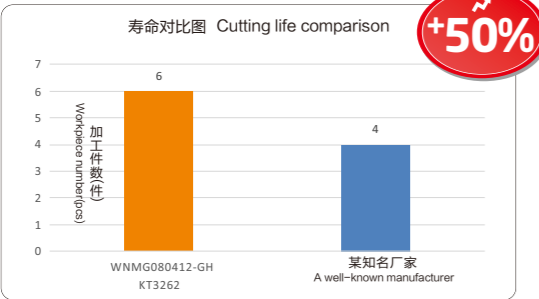
Customer: \*\*\*\* Flange Manufacturing Co., Ltd  
 Work piece: Flange  
 Work piece material: Stainless steel 304  
 Lathe type: CNC lathe  
 Kerno insert: WNMG080404-MJ/KT8286  
 Compare insert: Well-known domestic brand  
 Cooling type: Cooling liquid  
 Processing content: Finishing turning  
 Cutting parameters:  $V_c=185\text{m/min}$ ,  $F_n=0.1\text{mm/r}$ ,  $A_p=0.5\text{mm}$

铸铁加工案例 Cast Iron Processing Application Cases



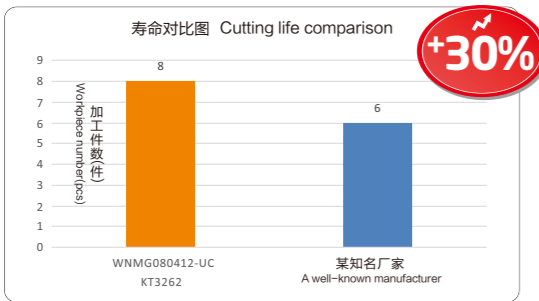
客户名称: 苏州\*\*\*制造有限公司  
 工件名称: 离合器壳体  
 被加工材料: HT250  
 加工设备: 数控车床  
 使用刀片: WNMG080412-GH/KT3262  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗车  
 加工参数:  $V_c=320\text{m/min}$ ,  $F_n=0.25\text{mm/r}$ ,  $A_p=1.5\text{mm}$

Customer: Suzhou \*\*\* Manufacturing Co., Ltd  
 Work piece: Clutch housing  
 Work piece material: HT250  
 Lathe type: CNC lathe  
 Kerno insert: WNMG080412-GH/KT3262  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing turning  
 Cutting parameters:  
 $V_c=320\text{m/min}$ ,  $F_n=0.25\text{mm/r}$ ,  $A_p=1.5\text{mm}$

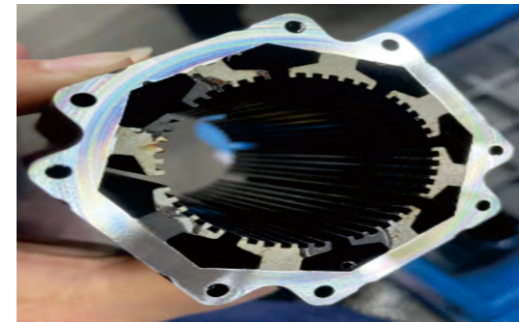


客户名称: 昆山\*\*机械有限公司  
 工件名称: 飞轮壳  
 被加工材料: QT700  
 加工设备: 数控车床  
 使用刀片: WNMG080412-UC/KT3262  
 对比刀片: 国内某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗车  
 加工参数:  $V_c=216\text{m/min}$ ,  $F_n=0.35\text{mm/r}$ ,  $A_p=2-3\text{mm}$

Customer: Kunshan \*\* Machinery Co., Ltd  
 Work piece: Flywheel housing  
 Work piece material: QT700  
 Lathe type: CNC lathe  
 Kerno insert: WNMG080412-UC/KT3262  
 Compare insert: Well-known domestic brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing turning  
 Cutting parameters:  
 $V_c=216\text{m/min}$ ,  $F_n=0.35\text{mm/r}$ ,  $A_p=2-3\text{mm}$

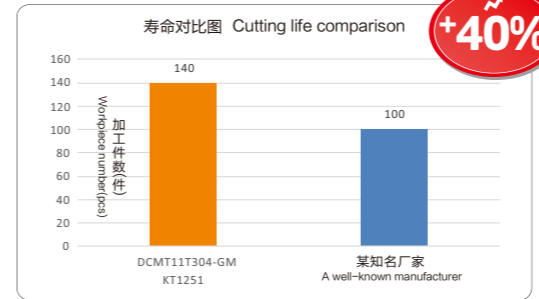


铸铁加工案例 Cast Iron Processing Application Cases



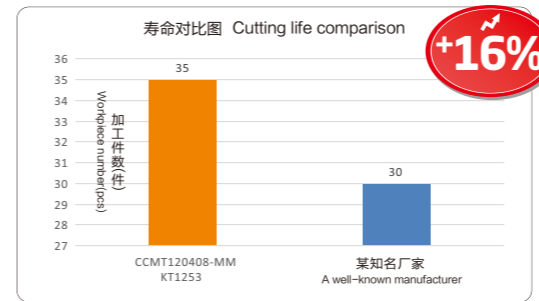
客户名称: 常州\*\*电机有限公司  
 工件名称: 电机壳  
 被加工材料: 夕钢片  
 加工设备: 数控车床  
 使用刀片: DCMT11T304-GM/KT1251  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 精车  
 加工参数:  $V_c=320\text{m/min}$ ,  $F_n=0.1\text{mm/r}$ ,  $A_p=0.3\text{mm}$

Customer: Changzhou \*\* Motor Co., Ltd  
 Work piece: Motor housing  
 Work piece material: Silicon steel sheet  
 Lathe type: CNC lathe  
 Kerno insert: DCMT11T304-GM/KT1251  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Finishing turning  
 Cutting parameters:  
 $V_c=320\text{m/min}$ ,  $F_n=0.1\text{mm/r}$ ,  $A_p=0.3\text{mm}$

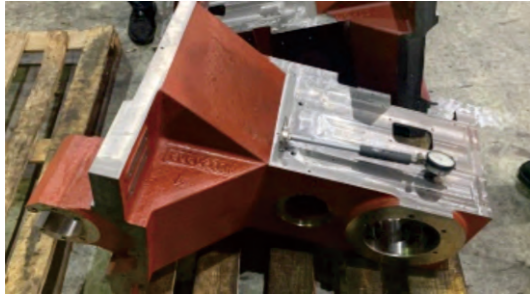


客户名称: \*\*重工有限公司  
 工件名称: 箱体  
 被加工材料: Q345  
 加工设备: 数控车床  
 使用刀片: CCMT120408-MM/KT1251  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗镗  
 加工参数:  $V_c=100\text{m/min}$ ,  $F_n=0.2\text{mm/r}$ ,  $A_p=2.5\text{mm}$

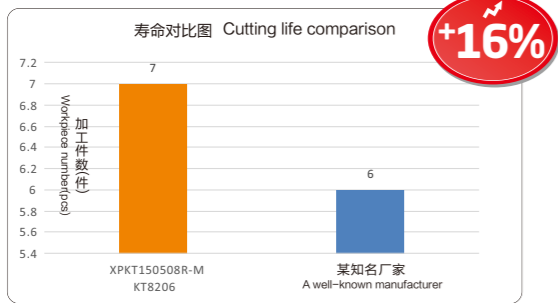
Customer: \*\*Heavy Industry Co., Ltd  
 Work piece: Box  
 Work piece material: Q345  
 Lathe type: CNC lathe  
 Kerno insert: CCMT120408-MM/KT1251  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing boring  
 Cutting parameters:  
 $V_c=100\text{m/min}$ ,  $F_n=0.2\text{mm/r}$ ,  $A_p=2.5\text{mm}$



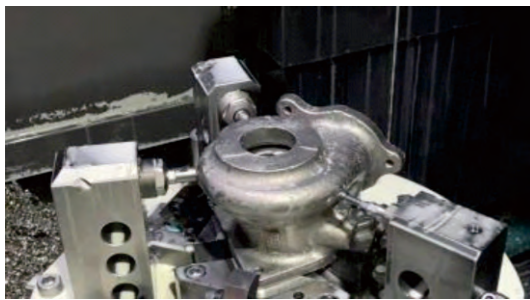
铣削加工案例 Milling Processing Application Cases



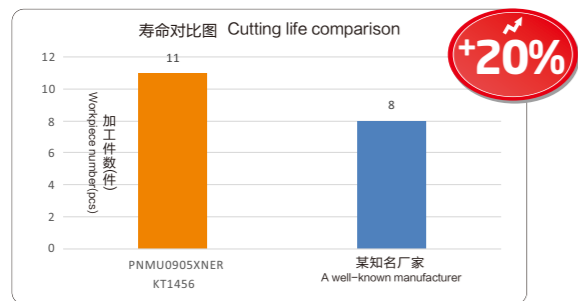
客户名称: 昆山\*\*机械有限公司  
 工件名称: 头部  
 被加工材料: FC30  
 加工设备: 加工中心  
 使用刀片: XPEX150508R-M/KT8206  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗铣端面  
 加工参数:  $V_c=125\text{m/min}$ ,  $F_z=0.15\text{mm/r}$ ,  $A_p=2.5\text{mm}$



Customer: Kunshan \*\* Machinery Co., Ltd  
 Work piece: The head  
 Work piece material: FC30  
 Lathe type: Machining center  
 Kerno insert: XPEX150508R-M/KT8206  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing milling end face  
 Cutting parameters:  
 $V_c=125\text{m/min}$ ,  $F_z=0.15\text{mm/r}$ ,  $A_p=2.5\text{mm}$



客户名称: 江苏\*\*制造有限公司  
 工件名称: 涡轮壳  
 被加工材料: 钢1.4837  
 加工设备: 加工中心  
 使用刀片: PNMU0905XNER/KT1456  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗铣端面  
 加工参数:  $V_c=85\text{m/min}$ ,  $F_z=0.18\text{mm/r}$ ,  $A_p=2.5-3\text{mm}$

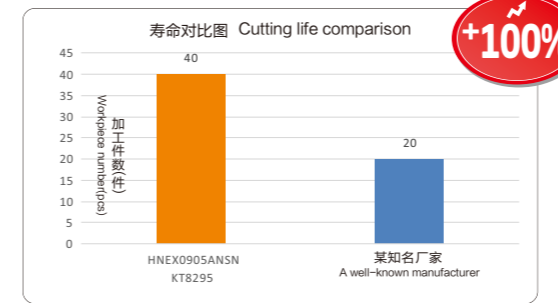


Customer: Jiangsu \*\* Manufacturing Co., Ltd  
 Work piece: Turbine housing  
 Work piece material: Steel 1.4837  
 Lathe type: Machining center  
 Kerno insert: PNMU0905XNER/KT1456  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing milling end face  
 Cutting parameters:  
 $V_c=85\text{m/min}$ ,  $F_z=0.18\text{mm/r}$ ,  $A_p=2.5-3\text{mm}$

铣削加工案例 Milling Processing Application Cases



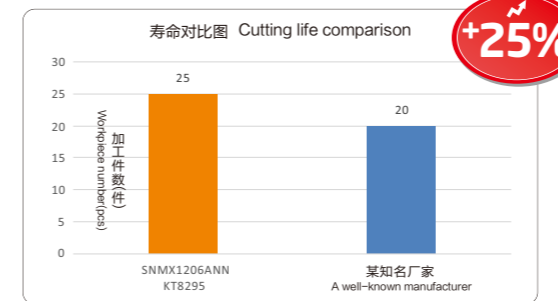
客户名称: 常州\*\*机械有限公司  
 工件名称: 电梯板  
 被加工材料: Q345B  
 加工设备: 加工中心  
 使用刀片: HNEX0905ANSN/KT8295  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗铣端面  
 加工参数:  $V_c=300\text{m/min}$ ,  $F_z=0.42\text{mm/r}$ ,  $A_p=0.7\text{mm}$



Customer: Changzhou \*\* Machinery Co., Ltd  
 Work piece: Elevator board  
 Work piece material: Q345B  
 Lathe type: Machining center  
 Kerno insert: HNEX0905ANSN/KT8295  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing milling end face  
 Cutting parameters:  
 $V_c=300\text{m/min}$ ,  $F_z=0.42\text{mm/r}$ ,  $A_p=0.7\text{mm}$

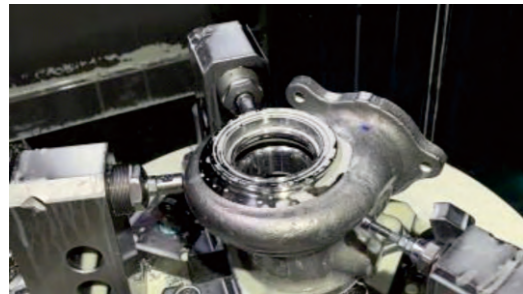


客户名称: 杭州\*\*有限公司  
 工件名称: 电磁铁  
 被加工材料: A3  
 加工设备: 加工中心  
 使用刀片: HNEX0905ANSN/KT8295  
 对比刀片: 国内某知名厂家  
 冷却方式: 冷却液  
 加工内容: 铣面  
 加工参数:  $V_c=180\text{m/min}$ ,  $F_z=0.0.15\text{mm/r}$ ,  $A_p=0.3\text{mm}$



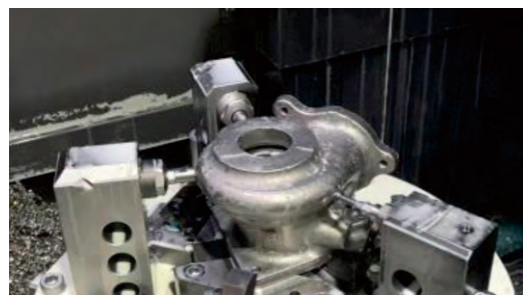
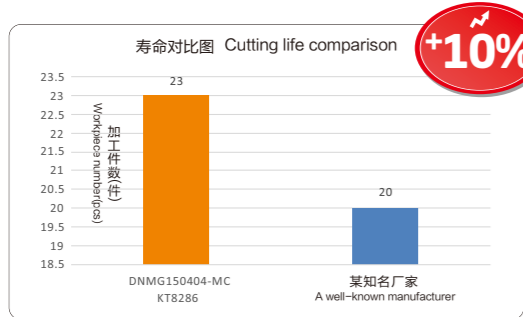
Customer: Hangzhou \*\* Co., Ltd  
 Work piece: Electromagnet  
 Work piece material: A3  
 Lathe type: Machining center  
 Kerno insert: HNEX0905ANSN/KT8295  
 Compare insert: Well-known domestic brand  
 Cooling type: Cooling liquid  
 Processing content: Milling  
 Cutting parameters:  
 $V_c=180\text{m/min}$ ,  $F_z=0.0.15\text{mm/r}$ ,  $A_p=0.3\text{mm}$

耐热合金加工案例 Heat-resistant Alloy Processing Cases



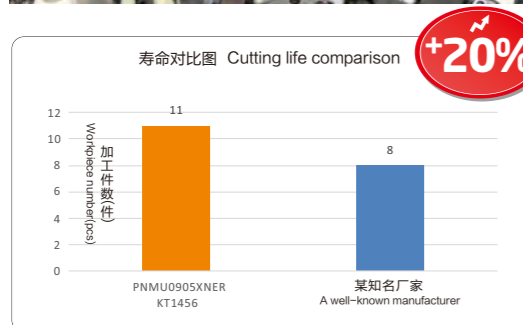
客户名称: 江苏\*\*制造有限公司  
 工件名称: 涡轮壳  
 被加工材料: 钢1.4837  
 加工设备: 加工中心  
 使用刀片: DNMG150404/KT8206  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 精铣内孔  
 加工参数:  $V_c=86\text{m/min}$ ,  $F_z=0.12\text{mm/r}$ ,  $A_p=0.5\text{mm}$

Customer: Jiangsu \*\* Manufacturing Co., Ltd  
 Work piece: Turbine housing  
 Work piece material: Steel 1.4837  
 Lathe type: Machining center  
 Kerno insert: DNMG150404/KT8206  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Inner hole finishing milling  
 Cutting parameters:  
 $V_c=86\text{m/min}$ ,  $F_z=0.12\text{mm/r}$ ,  $A_p=0.5\text{mm}$



客户名称: 江苏\*\*制造有限公司  
 工件名称: 涡轮壳  
 被加工材料: 钢1.4837  
 加工设备: 加工中心  
 使用刀片: PNMU0905XNER/KT1456  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗铣端面  
 加工参数:  $V_c=85\text{m/min}$ ,  $F_z=0.18\text{mm/r}$ ,  $A_p=2.5-3\text{mm}$

Customer: Jiangsu \*\* Manufacturing Co., Ltd  
 Work piece: Turbine housing  
 Work piece material: Steel 1.4837  
 Lathe type: Machining center  
 Kerno insert: PNMU0905XNER/KT1456  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Roughing milling end face  
 Cutting parameters:  
 $V_c=85\text{m/min}$ ,  $F_z=0.18\text{mm/r}$ ,  $A_p=2.5-3\text{mm}$

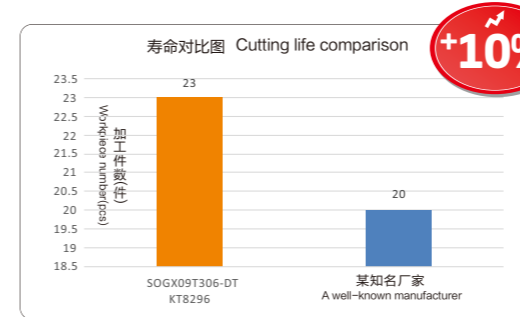


耐热合金加工案例 Heat-resistant Alloy Processing Cases



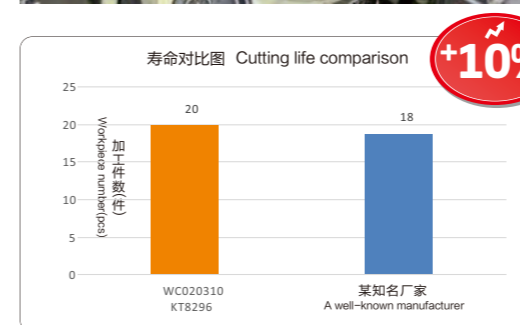
客户名称: 江苏\*\*制造有限公司  
 工件名称: 涡轮壳  
 被加工材料: 钢1.4837  
 加工设备: 加工中心  
 使用刀片: SOGX09T306-DT/KT8296  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 粗铣内孔  
 加工参数:  $V_c=40\text{m/min}$ ,  $F_z=0.08\text{mm/r}$ ,  $A_p=1.5\text{mm}$

Customer: Jiangsu \*\* Manufacturing Co., Ltd  
 Work piece: Turbine housing  
 Work piece material: Steel 1.4837  
 Lathe type: Machining center  
 Kerno insert: SOGX09T306-DT/KT8296  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Inner hole roughing milling  
 Cutting parameters:  
 $V_c=40\text{m/min}$ ,  $F_z=0.08\text{mm/r}$ ,  $A_p=1.5\text{mm}$



客户名称: 江苏\*\*制造有限公司  
 工件名称: 涡轮壳  
 被加工材料: 钢1.4837  
 加工设备: 加工中心  
 使用刀片: WC020310/KT8296  
 对比刀片: 国外某知名厂家  
 冷却方式: 冷却液  
 加工内容: 精铣内孔  
 加工参数:  $V_c=219\text{m/min}$ ,  $F_z=0.05\text{mm/r}$ ,  $A_p=0.2\text{mm}$

Customer: Jiangsu \*\* Manufacturing Co., Ltd  
 Work piece: Turbine housing  
 Work piece material: Steel 1.4837  
 Lathe type: Machining center  
 Kerno insert: WC020310/KT8296  
 Compare insert: Well-known foreign brand  
 Cooling type: Cooling liquid  
 Processing content: Inner hole finishing milling  
 Cutting parameters:  
 $V_c=219\text{m/min}$ ,  $F_z=0.05\text{mm/r}$ ,  $A_p=0.2\text{mm}$

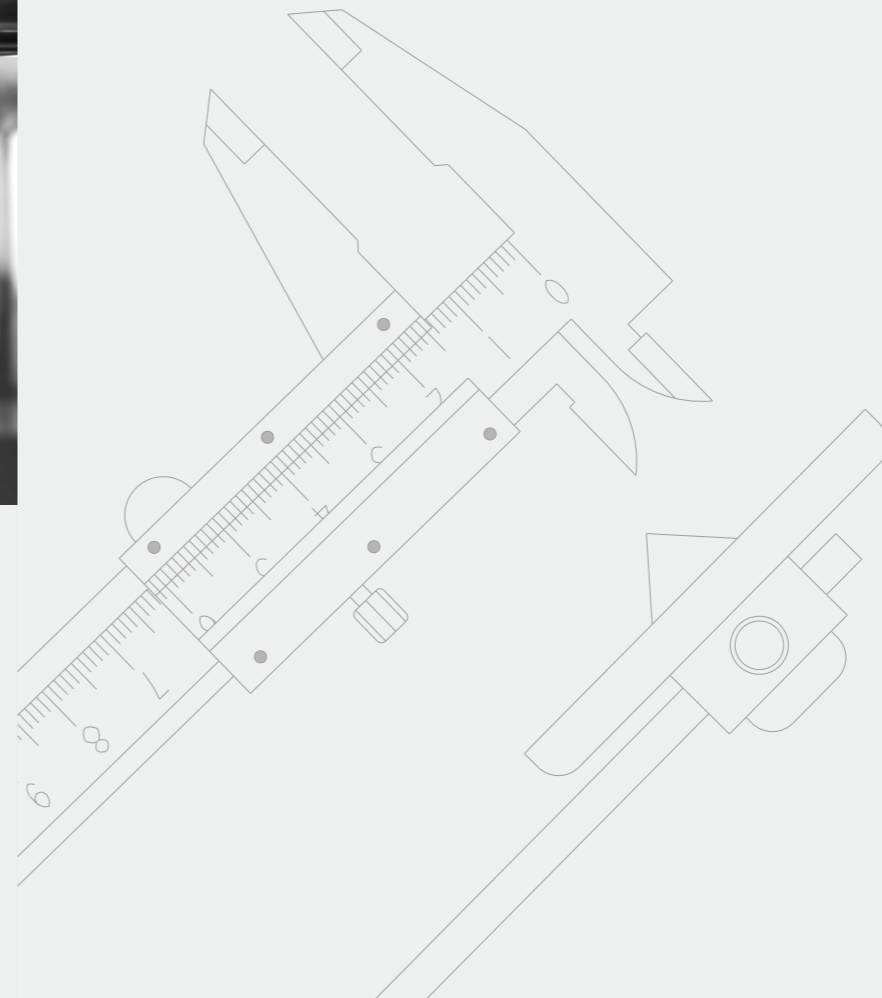






## 通用技术信息 General Technical Informations

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## GENERAL TECHNICAL INFORMATIONS

### 通用技术信息

牌号对照表 Grade Comparison Table

CVD 涂层材料 CVD Coating

牌号对照表 Grade Comparison Table

PVD 涂层材料 PVD Coating

APPLICATION	ISO CODE	KLT	ZCC. CT	SANDVIK	WALTER	KENAMETAL	SECO	ISCAR	MITSUBISHI	KYOCERA	TUNGALOY	TREGUTEC	KORLOY	
Turning	P	P10	KT1153	YBC151 YBC152	GC4015 GC4215	WAP10	KC9110	TP1000	IC9150 IC9015	UE6105 MC6015	CA510 CA5505	T9105 T9005	TT1300	NC3010
		P20	KT1253	YBC251 YBC252 YBC201	GC4025 GC4225	WAP20	KC9125	TP2000	IC9250 IC9025	MC6015 UE6110	CA515 CA5515	T9115 T9125	TT8125 TT1500	NC3215 NC3225
		P30	KT1373	YBC351 YBC352 YBC301	GC4035 GC4235 GC4030	WAP30	KC8050	TP3000	IC9350 IC656	MC6025 UE6020	CA525 CA5525	T9035 T9135	TT3500 TT5100	NC3030
		P40	KT1401	YBC401	GC4035 GC235		KC9140 KC9040	TP400 TP3000	IC635	UE6035 UH6400	CA5535	T9035	TT450	
	M	M10		YBM151	GC2015	WAM10	KU10 K313	TM2000	IC9250 IC6015	MC7015 US7020	CA6515	T9015		
		M20	KT2252	YBM251 YBM253	GC5025	WAM20	KC9225	TM2000	IC9250 IC9025	MC7015 US7025	CA6515 CA6525	T9125 T6020	TT2500	NC9020
		M30	KT2302	YBM351 YBM353	GC2035 GC235	WAM30	KC8050	TM4000	IC9350 IC6025	MC7025	CA6525	T6030	TT3500	NC9025
		M40	KT3221	YBM40			KC9240	TM4000	IC6025 IC9350	US735			TT5100	
	K	K01	KT3122	YBD051 YBD052	GC3205 GC3210		KCK05	TH1500 TK1000	IC5005 IC9007	UC5105 MC5005	CA4505 CA4010	T5105		NC6205
		K10	KT3262	YBD151 YBD152	GC3205 GC3215	WAK10	KCK15 KCK20	TK1001 TK2000	IC5005 IC9150	MC5015 UC5115	CA4515 CA4115	T5115	TT1300	NC6210 NC6215
		K20	KT3263	YBD252	GC3215	WAK20	KCK20 KC9325	TK2000 TK2001	IC5010 IC8150	UC5115 UR6110	CA4515 CA4120	T5115 T5125	TT1500	NC6210 NC6215
Milling	P	P10					MP1500	IC9080						
		P20	KT2252	YBM253	GC4220	WAP25		MP1500 MP2500	IC5100	F7030		T3130		NC5340
		P30	KT2302	YBM353	GC4230	WAP35	KCPK30	MP2500	IC4050	F7030		T3030	TT7300	NC5350 NC5340
		P40			GC4240		KC935M							
	M	M10					TN25M		IC9250					NC5330
		M20	KT2252	YBM253	GC2040		KC925M	MP2500	IC9350	F7030	CA6535	T3130		NC5340 NC5350
		M30	KT2302	YBM353		WTP35	KC930M	MP2500	IC9350	F7030	CA6535	T3130		
		K10	KT3262	YBD152		WAK15				MC5020		T1115		NC5330
	K	K20	KT3262	YBD252	GC3220	WAK25	KC915M	MK2000	IC5100	MC5020		T1115		NC5340 NC5350
		K30			GC3330		KC920M	MK3000	IC4050					

APPLICATION	ISO CODE	KLT	ZCC. CT	SANDVIK	WALTER	KENAMETAL	SECO	ISCAR	MITSUBISHI	KYOCERA	TUNGALOY	TREGUTEC	KORLOY	
Turning	P	P10	KT3126	YBG102			KC5010 KC5510	CP200	IC507	VP10MF	PR915 PR930	AH710		
		P20	KT8206	YBG201 YBG202 YBG205	GC1020 GC1025		KC5025	CP250	IC908	VP15TF VP20MF	PR630 PR915	AH710 AH330	TT9030 TT9080	PC8110
		P30	KT8286	YBG201 YBG202 YBG205	GC1025 GC4125		K7010	CP500	IC928	VP15TF VP20MF	PR630 PR660	AH330 AH740	TT9030 TT9080	PC5300 PC8115
		P40	KT8326	YBG302	GC1020 GC2145		K7030	CP500	IC928 IC1008	VP15TF VP20MF	PR660	AH120		
	M	M10	KT3126	YBG102			KC5010 KC5510	CP200	IC507	VP10MF	PR915 PR930	AH710		
		M20	KT8206	YBG201 YBG205	GC1020 GC1025		KC5025 KC5525	CP250	IC908	VP15TF VP20MF	PR630 PR915	AH710 AH330	TT9030 TT9080	PC8115 PC9030
		M30	KT8326	YBG302	GC1020 GC2145		KC5025 KC5525	CP500	IC928 IC1008	VP15TF VP20MF	PR630 PR660	AH120	TT9080	PC9030 PC5400
		M40			GC2145						PR660			
	K	K10	KT3126	YBG102			KC5010 KC5510	CP200	IC507	VP10MF	PR915	AH110		
		K20	KT8286	YBG201 YBG205	GC1020		KC7015	CP250	IC908	VP15TF	PR915	AH120	TT9030 TT9080	PC5300 PC9030
		K30			GC4125		KC7225	CP500		VP15TF				
	S	S10	KT3126				KC5010 KC5510	CP200				GH110 AH110		PC8105
S20		KT8296		GC1020		KC7015	CP250	IC928 IC1008	VP15TF		AH120	TT9080	PC8115 PC5400	
S30		KT1456		GC4125		KC7225	CP500	IC928 IC908	VP15TF					
Milling	P	P10			GC1025	WXH15 WXM15	KC715M		IC903 IC950		PR830 PR730		PC2025 PC2010	
		P20	KT8296 KT8298	YBG202 YBG205	GC1025	WXM25	KC522M KC525M	F25M	IC928 IC900	VP15TF	PR630 PR730	GH330	TT7080 TT9030	PC3500
		P30	KT8326	YBG302	GC1030	WXM35	KC725M KC735M	F25M F30M	IC928	VP30RT VP15TF	PR630 PR730	AH330 AH120	TT7080 TT9030	PC3500 PC5300
	M	M10	KT8206		GC1025	WXM15	KC715M				PR630 PR730			
		M20	KT8296 KT8298	YBG202 YBG205	GC2030		KC522M KC525M	F25M	IC928 IC908	VP20RT VP15TF	PR630 PR730	GH330	TT7030 TT9030	PC3530
		M30	KT8326	YBG302	GC2030	WXM35	KC725M KC735M	F25M F30M	IC928	VP30RT VP15TF	PR630 PR730	AH330 AH120	TT7030 TT9030	PC5400 PC3530
	K	K10	KT3262	YBG102		WXH15 WXM15	KC510M		IC900 IC910	VP10MF	PR510 PR905	AH110	TT6080	PC8110
		K20	KT3262	YBG201 YBG205		WXM15	KC520M KC525M		IC910 IC950	VP15TF VP20RT	PR510 PR905	AH120	TT9030 TT9080	PC6510 PC5300
		K30	KT8296				KC725M KC735M		IC908 IC928	VP15TF VP20RT				
	S	K10	KT8206				KC510M		IC908	VP15TF	PR660	AH120	TT6030	PC5300
		K20	KT8296		GC1025	WXM35	KC522M KC525M		IC908	VP15TF	PR660		TT8020	PC5400 PC9030
		K30	KT1456		GC2030		KC725M	F40M	IC328 IC928		PR660		TT8030 TT9080	

牌号对照表 Grade Comparison Table

非涂层硬质合金 Cemented carbide material

APPLICATION	ISO CODE	KLT	ZCC. CT	SANDVIK	WALTER	KENAMETAL	SECO	ISCAR	mitsubishi	KYOCERA	TUNGALOY	TREGITEC	KORLOY	
Turning	P	P10		S1P		P10		IC70				P10	ST10	
		P20	KT3220	YC20	SMA		K125M TTM		IC70 IC50M	UTi20T		TX10S	P20	ST20
		P30	KT1330	YC40S	SM30		GK K600 TTR		IC50M IC54	UTi20T	PW30	TX20 TX25	P30	ST30A
		P40	KT1330	YC40	S6		G13		IC54			TX30 UX30		
	M	M10		YW1	H10A		K313	890				TU10	M10	U10
		M20	KT2250	YW2	H13A		K68 KMF	HX 883	IC08	UTi20T		TU20 UX30	M20	U20
		M30	KT2300		H10F SM30		K600 TTR		IC08 IC28	UTi20T		UX30		ST30A
		M40			S5		G13					TU40	M40	U40
	K	K01		YD051	H1P		K605			UTi05T		TH03 KS05F		H02
		K10	KT3120	YD101	H1P H10		K313 K110M	890	IC20	HTi10	KW10	G1F TH10	K10	H01
		K20	KT3260	YD201	H13A		K715 KMF	890 HX	IC20 IC10	UTi20T	GW10	G2F KS15F	K20	G10
		N01					K605					KS05F		
	N	N10	KT3120	YD101		WK10	K313 K110M	890 H15		HTi10		TH10 H10T	K10	K10
		N20	KT3260	YD201			K715 KMF	HX 883				KS15F		K20
	Milling	P	P10		S1P								P10	S1P
P20			KT3220	YC20			K125		IC50M	UTi20T		TX25	P20	
P30			KT1330	YC40S			GX K600		IC50M IC28	UTi20T	PW30	UX30	P30	
P40			KT1330	YC40					IC28		PW30			
M		M10		YW1			K110M						M10	
		M20	KT2250	YW2			K313			UTi20T			M20	
		M30	KT2300				KFM K600		IC28	UTi20T		UX30		
		M40							IC28			TU40	M40	
K		K01		YD051						KTi05T				
		K10	KT3120	YD101	H1P	WK10	K110M		IC20	HTi10	KW10	TH10	K10	H1P
		K20	KT3260	YD201			KFM	HX	IC20 IC10	UTi20T			K20	

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

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牌号对照表 Grade Comparison Table

金属陶瓷 Cermet

APPLICATION	ISO CODE	KLT	ZCC. CT	SANDVIK	WALTER	KENAMETAL	SECO	ISCAR	mitsubishi	KYOCERA	TUNGALOY	TREGITEC	KORLOY	
Turning	P	P10		YNG151 YNG151C		KT315 TT125	CM CMP	IC20N IC520N	AP25N NX2525	TN60 TN6020	NS520 AT520	PV3010	CC105 CN1000	
		P20		YNG151 YNG151C	CT5015 GC1525	KT325	TP1030	IC20N IC520N	AP25N NX2525	TN10 TN6020	NS520 AT530	CT3000	CN1500 CN2000	
		P30		YNG151 YNG151C	GC1525				IC75T IC30N	VP45N		NS530 NS730	CT7000	CN20
		P40												
	M	M10		YNG151 YNG151C	GC1525		KT315	CM CMP		AP25N NX2525	TN60 TN6020	NS520 AT530	PV3010 PV3030	CC105 CN1000
		M20		YNG151 YNG151C	GC1525		KT5020 KT125	TP1030 CMP		NX3035 AP25N NX2525	TN90 TN6020	NS530 GT730	CT3000	CN2000
		M30		YNG151 YNG151C			KT1120 KT175	TP1020 C15M		NX2525			CT7000	CN20
		M40												
	K	K01					KT315			AP25N NX2525	TN30		PV3030	CN1000
		K10		YNG151 YNG151C	CT5015		TT125 KT325			AP25N NX2525	TN60	NS520 AT520	CT3000	CN2000
		K20		YNG151 YNG151C						AP25N NX2525		NS530 GT730		
	Milling	P	P10		YNG151 YNG151C			C15M	IC30N	NX2525	TN60		CT3000	
P20				YNG151 YNG151C	CT530		KT530M HT7	C15M	IC30N	NX2525	TN100M	NS530	CT3000	
P30				YNG151 YNG151C					IC30N	NX4545		NS530 NS540		
M		M10		YNG151 YNG151C					IC30N	NX2525	TN60		CT3000	
		M20		YNG151 YNG151C	CT530		KT530M HT7	C15M	IC30N	NX2525	TN100M	NS530	CT3000	
		M30		YNG151 YNG151C						NX4545		NS540		
K		K10		YNG151 YNG151C						NX2525	TN60	NS530	CT3000	
		K20		YNG151 YNG151C			KT530M HT7			NX2525			CT3000	
		K30		YNG151 YNG151C										

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息



### 切削参数一览表

### Cutting Parameters Table

#### 车削钢件类 Turning Inserts For Steel

ISO代号 ISO Code	工件材质 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)		
P	软钢 Soft Steel	≤180HB	半精-精加工 For Semi-finishing and finishing	MB	KT1153/KT1253/KT1373	275-345	0.25-0.4	1~3		
					KT1153/KT1253/KT1373	235-345	0.25-0.4	1~3		
	KT1153/KT1253/KT1373	205-285			0.25-0.4	1~3				
	KT1153/KT1253/KT1373	255-325			0.25-0.4	1~3				
	KT1153/KT1253/KT1373	205-325			0.25-0.4	1~3				
	KT1153/KT1253/KT1373	205-325			0.25-0.4	1~3				
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB	半精-精加工 For Semi-finishing and finishing	MB	KT1153/KT1253/KT1373	185-265	0.25-0.4	1~3		
		280-350HB			KT1153/KT1253/KT1373	205-285	0.25-0.4	1~3		
	软钢 Soft Steel	≤180HB			半精加工 / 粗加工 For Semi-finish and Rough Machining	GMR	KT1153/KT1253/KT1373	275-345	0.25-0.4	1~3
							KT1153/KT1253/KT1373	235-345	0.25-0.4	1~3
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB					KT1153/KT1253/KT1373	205-285	0.25-0.4	1~3
		280-350HB					KT1153/KT1253/KT1373	255-325	0.25-0.4	1~3
	软钢 Soft Steel	≤180HB	半精加工 / 粗加工 For Semi-finish and Rough Machining	PMK			KT1153/KT1253/KT1373	205-325	0.25-0.4	1~3
							KT1153/KT1253/KT1373	185-265	0.25-0.4	1~3
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB			KT1153/KT1253/KT1373	185-265	0.25-0.4	1~3		
		280-350HB			KT1153/KT1253/KT1373	205-285	0.25-0.4	1~3		
	软钢 Soft Steel	≤180HB			中等加工 For Semi-finish Machining	PR	KT1253	275-345	0.25-0.4	1~3
							KT1253	235-345	0.25-0.4	1~3
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB	KT1253	205-285			0.25-0.4	1~3		
		280-350HB	KT1253	255-325			0.25-0.4	1~3		
	软钢 Soft Steel	≤180HB	中等加工 For Semi-finish Machining	通槽 No chipbreaker			KT1153/KT1253	275-345	0.25-0.4	1~3
							KT1153/KT1253	235-345	0.25-0.4	1~3
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB			KT1153/KT1253	205-285	0.25-0.4	1~3		
		280-350HB			KT1153/KT1253	255-325	0.25-0.4	1~3		
	软钢 Soft Steel	≤180HB			中等加工 For Semi-finish Machining	L/R-X	KT1153/KT1253	205-325	0.25-0.4	1~3
							KT1153/KT1253	185-265	0.25-0.4	1~3
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB	KT1153/KT1253	205-285			0.25-0.4	1~3		
		280-350HB	KT1153/KT1253	175-285			0.25-0.4	1~3		

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### Cutting Parameters Table

#### 车削不锈钢类 Turning Inserts For Stainless Steel

ISO代号 ISO Code	工件材质 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)		
M	奥氏体不锈钢 Austenitic Stainless Steel	≤200HB	半精-精加工 For Semi-finishing and finishing	MF	KT8206	165-260	0.15-0.6	1~4		
					KT8206	100-250	0.15-0.6	1~4		
					KT8206	90-170	0.15-0.6	1~4		
		>200HB			KT8206	150-240	0.15-0.6	1~4		
					双相不锈钢 Duplex Stainless Steel	≤280HB	KT8206	90-230	0.15-0.6	1~4
							马氏体类不锈钢 Martensite Stainless Steel	≤200HB	KT8206	165-260
	KT8206	100-250	0.15-0.6	1~4						
	奥氏体不锈钢 Austenitic Stainless Steel	≤200HB	半精-精加工 For Semi-finishing and finishing	MJ	KT8206	90-170	0.15-0.6	1~4		
					KT8206	150-240	0.15-0.6	1~4		
					KT8206	165-260	0.15-0.6	1~4		
		>200HB			KT8206	100-250	0.15-0.6	1~4		
					双相不锈钢 Duplex Stainless Steel	≤280HB	KT8206	90-230	0.15-0.6	1~4
							马氏体类不锈钢 Martensite Stainless Steel	≤200HB	KT8206	165-260
	KT8206	100-250	0.15-0.6	1~4						
	奥氏体不锈钢 Austenitic Stainless Steel	≤200HB	半精-精加工 For Semi-finishing and finishing	MM-B	KT8206	90-170	0.15-0.6	1~4		
					KT8206	150-240	0.15-0.6	1~4		
					KT8206	165-260	0.15-0.6	1~4		
		>200HB			KT8206	100-250	0.15-0.6	1~4		
					双相不锈钢 Duplex Stainless Steel	≤280HB	KT8206	90-230	0.15-0.6	1~4
							马氏体类不锈钢 Martensite Stainless Steel	≤200HB	KT8206	165-260
	KT8206	100-250	0.15-0.6	1~4						

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#### 车削不锈钢类 Turning Inserts For Stainless Steel

ISO代号 ISO Code	工件材质 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
M	奥氏体不锈钢 Austenitic Stainless Steel	≤200HB	半精加工 / 粗加工 For Semi-finish and Rough Machining	MB	KT8286	165-260	0.15-0.6	1~4
					KT8286	100-250	0.15-0.6	1~4
					KT8286	90-170	0.15-0.6	1~4
		KT8286			150-240	0.15-0.6	1~4	
		KT8286			90-230	0.15-0.6	1~4	
		KT8286			165-260	0.15-0.6	1~4	
	>200HB	双相不锈钢 Duplex Stainless Steel	≤280HB	KT8286	90-170	0.15-0.6	1~4	1~4
	>200HB	KT8286	90-170	0.15-0.6	1~4	1~4		
							KT8286	150-240
	中等加工 For semi-finish Machining	L/R-M	≤200HB	KT8286	165-260	0.15-0.6		
				KT8286	100-250	0.15-0.6	1~4	1~4
				KT8286	90-170	0.15-0.6	1~4	1~4
				KT8286	150-240	0.15-0.6	1~4	1~4
	>200HB	双相不锈钢 Duplex Stainless Steel	≤280HB	KT8286	90-230	0.15-0.6	1~4	1~4
>200HB	KT8286	90-170	0.15-0.6	1~4	1~4			
						KT8286	150-240	0.15-0.6

### 切削参数一览表

### Cutting Parameters Table

#### 车削铸铁类 Turning Inserts For Cast Iron

ISO代号 ISO Code	工件材质 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
K	灰铸铁 Grey Cast Iron	≤350Pa	中等加工 For semi-finish Machining	ZT	KT3262	160-290	0.2-0.6	1.5~4
					KT3262	170-310	0.2-0.6	1.5~4
					KT3262	210-335	0.2-0.6	1.5~4
					KT3262	155-260	0.2-0.6	1.5~4
					KT3262	195-305	0.2-0.6	1.5~4
					KT3262	145-255	0.2-0.6	1.5~4
	球墨铸铁 Nodular Cast Iron	≤450MPa ≤800MPa	中等加工 For semi-finish Machining	GH	KT3262/KT3263A	160-290	0.2-0.6	1.5~4
					KT3262/KT3263A	170-310	0.2-0.6	1.5~4
					KT3262/KT3263A	210-335	0.2-0.6	1.5~4
					KT3262/KT3263A	155-260	0.2-0.6	1.5~4
					KT3262/KT3263A	195-305	0.2-0.6	1.5~4
					KT3262/KT3263A	145-255	0.2-0.6	1.5~4
	灰铸铁 Grey Cast Iron	≤350Pa	中等加工 For semi-finish Machining	UC	KT3262	160-290	0.2-0.6	1.5~5
					KT3262	170-310	0.2-0.6	1.5~5
					KT3262	210-335	0.2-0.6	1.5~5
					KT3262	155-260	0.2-0.6	1.5~5
					KT3262	195-305	0.2-0.6	1.5~5
					KT3262	145-255	0.2-0.6	1.5~5
	球墨铸铁 Nodular Cast Iron	≤450MPa ≤800MPa	中等加工 For semi-finish Machining	UC	KT3262	160-290	0.2-0.6	1.5~5
					KT3262	170-310	0.2-0.6	1.5~5
					KT3262	210-335	0.2-0.6	1.5~5
					KT3262	155-260	0.2-0.6	1.5~5
					KT3262	195-305	0.2-0.6	1.5~5
					KT3262	145-255	0.2-0.6	1.5~5
灰铸铁 Grey Cast Iron	≤350Pa	准重加工 For Heavy Duty Machining	平板 Flat	KT3262	160-290	0.2-0.6	2.5~6	
				KT3262	170-310	0.2-0.6	2.5~6	
				KT3262	210-335	0.2-0.6	2.5~6	
				KT3262	155-260	0.2-0.6	2.5~6	
				KT3262	195-305	0.2-0.6	2.5~6	
				KT3262	145-255	0.2-0.6	2.5~6	
球墨铸铁 Nodular Cast Iron	≤450MPa ≤800MPa	准重加工 For Heavy Duty Machining	平板 Flat	KT3262	160-290	0.2-0.6	2.5~6	
				KT3262	170-310	0.2-0.6	2.5~6	
				KT3262	210-335	0.2-0.6	2.5~6	
				KT3262	155-260	0.2-0.6	2.5~6	
				KT3262	195-305	0.2-0.6	2.5~6	
				KT3262	145-255	0.2-0.6	2.5~6	
KT3262	185-285	0.2-0.6	2.5~6					

#### 车削淬硬钢类 Turning Hardened Steel

ISO代号 ISO Code	工件材质 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
H	淬硬钢 Hardened Steel	≤450HB	精加工 Finishing	HJ	KT6109/KT6259	90-145	0.2-0.6	0.3~1
					KT6109/KT6259	115-160	0.2-0.6	0.3~1

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小零件加工 Small Parts Processing

ISO代号 ISO Code	工件材质 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft Steel	≤180HB	精加工 For Finish Machining	L/R L-B R-B L-S R-H L-2R	KC5280	270-385	0.09-0.22	0.15~0.7
					KT8208	260-410	0.09-0.22	0.15~0.7
					KT3000	255-385	0.08-0.2	0.2~1
					KT3005	260-400	0.09-0.2	0.2~1
					KC5280	190-275	0.1-0.22	0.15~0.7
					KT8208	200-375	0.1-0.2	0.15~0.7
	碳钢、合金钢 Carbon Steel, Alloy Steel	180 - 280HB			KT3000	195-355	0.08-0.2	0.2~1
					KT3005	200-365	0.09-0.2	0.2~1
					KC5280	175-255	0.1-0.2	0.15~0.7
					KT8208	180-290	0.1-0.2	0.15~0.7
					KT3000	175-255	0.08-0.2	0.2~1
					KT3005	180-280	0.09-0.2	0.2~1
		280-350HB						

浅孔加工 Shallow Hole Machining

ISO	Application Range	Chip Breaker	Grade	Cutting Speed (m/min)	Feed (mm/rev)
				120-180	0.04-0.22
通用 (钢件, 不锈钢) Common (Steel, Stainless Steel)	半精加工 For Semi -finish	KP MD LM	KT1456	120-180	0.04-0.22
				120-180	0.04-0.22

深孔加工 Deep Hole Machining

ISO	Application Range	Chip Breaker	Grade	Cutting Speed (m/min)	Feed (mm/rev)	Depth of Cutting (mm)
			KT8206	110-190	0.05-0.25	0.5~2
通用 (钢件, 不锈钢) Common (Steel, Stainless Steel)	半精加工 For Semi -finish	GM RG GF GM	KT8286	90-170	0.05-0.25	0.5~2
			KT8295	70-135	0.05-0.25	0.5~2

切削参数一览表

Cutting Parameters Table

车削7°正角刀片 7°Positive Angle Turning Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)				
P	软钢 Soft Steel	≤180HB	M	MM	KT1153/KT1253/KT1373	210-355	0.08~0.4	0.3-2				
					KT1153/KT1253/KT1373	210-355	0.08~0.4	0.3-2				
					KT1153/KT1253/KT1373	210-355	0.08~0.4	0.3-2				
					碳钢、合金钢 Carbon Steel, Alloy Steel	180 - 280HB	M	GM	KT1253	155-260	0.08~0.4	0.3-2
									KT1253	155-260	0.08~0.4	0.3-2
									KT1253	155-260	0.08~0.4	0.3-2
	碳钢、合金钢 Carbon Steel, Alloy Steel	280-350HB	M	KT1253	110-185	0.08~0.4	0.3-2					
				KT1253	110-185	0.08~0.4	0.3-2					
				KT1253	110-185	0.08~0.4	0.3-2					
	M	奥氏体不锈钢 Austenitic Stainless Steel	≤200HB	M	GM	KT8206	60-105	0.08-0.30	0.30-2.00			
		奥氏体不锈钢 Austenitic Stainless Steel	>200HB	M		KT8286	50-90	0.08-0.30	0.30-2.00			
		双相不锈钢 Duplex Stainless Steel	≤280HB	M		KT8206	40-70	0.08-0.30	0.30-2.00			
马氏体类不锈钢 Martensitic Stainless Steel		≤200HB	M	KT8206		60-105	0.08-0.30	0.30-2.00				
马氏体类不锈钢 Martensitic Stainless Steel		>200HB	M	KT8286		50-90	0.08-0.30	0.30-2.00				
析出硬化系不锈钢 Precipitation Hardening System		<450HB	M	KT8286		35-60	0.08-0.30	0.30-2.00				
H	淬硬钢 Quenched Steel		弱断续 Weak Intermittent	MF	KT6109/KT6259	70-220	0.03-0.15	0.05-0.2				
			连续 Continuous		KT6109/KT6259	150-350	0.03-0.15	0.05-0.2				

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### Cutting Parameters Table

#### 车削5°正角刀片 5°Positive Angle Turning Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	M	GM	KT1153/KT1253/KT1373	210-355	0.08~0.4	0.3-2
					KT1153/KT1253/KT1373	210-355	0.08~0.4	0.3-2
					KT1153/KT1253/KT1373	210-355	0.08~0.4	0.3-2
	碳钢、合金钢 Carbon steel, Alloy Steel	180 - 280HB	M		KT1253	155-260	0.08~0.4	0.3-2
					KT1253	155-260	0.08~0.4	0.3-2
					KT1253	155-260	0.08~0.4	0.3-2
	碳钢、合金钢 Carbon steel, Alloy Steel	280-350HB	M		KT1352	110-185	0.08~0.4	0.3-2
					KT1352	110-185	0.08~0.4	0.3-2
					KT1352	110-185	0.08~0.4	0.3-2

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### Cutting Parameters Table

#### 负角铣削刀片 Negative Angle Milling Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	M	GM	KT8295/KT8296	200-300	0.15-0.25	0.3-2
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	190-290	0.15-0.25	0.3-2
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	M	GM	KT8295/KT8296	150-250	0.15-0.25	0.3-2
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	120-220	0.15-0.25	0.3-2
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	110-210	0.15-0.25	0.3-2
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	100-200	0.15-0.25	0.3-2
K	灰铸铁 Grey Cast Iron	≤350MPa	M	GM	KT8295/KT8296/KT3262	130-250	0.15-0.25	0.3-2
	球墨铸铁 Nodular Cast Iron	≤450MPa			KT8295/KT8296/KT3262	110-240	0.15-0.25	0.3-2
	球墨铸铁 Nodular Cast Iron	≤800MPa			KT8295/KT8296/KT3262	100-200	0.15-0.25	0.3-2

#### 负角铣削刀片 Negative Angle Milling Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	L	GL	KT8295/KT8296	200-300	0.1-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	190-290	0.1-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	L	GL	KT8295/KT8296	150-250	0.1-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	120-220	0.1-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	110-210	0.1-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	100-200	0.1-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	L	GL	KT8295/KT8296/KT3262	130-250	0.1-0.2	0.3-2
	球墨铸铁 Nodular Cast Iron	≤450MPa			KT8295/KT8296/KT3262	110-240	0.1-0.2	0.3-2
	球墨铸铁 Nodular Cast Iron	≤800MPa			KT8295/KT8296/KT3262	100-200	0.1-0.2	0.3-2

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

E 非标异形刀片

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### 切削参数一览表

### Cutting Parameters Table

#### 11°正角铣削刀片 11°Positive Angle Milling Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	M	GM	KT8295/KT8296	100-200	0.15-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	100-200	0.15-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	M	GM	KT8295/KT8296	80-180	0.15-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	80-180	0.15-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	80-150	0.15-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	80-150	0.15-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	M	GM	KT8295/KT8296/KT3262	160-200	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤450MPa			KT8295/KT8296/KT3262	100-160	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤800MPa			KT8295/KT8296/KT3262	80-140	0.15-0.2	0.1-1
P	软钢 Soft steel	≤180HB	L	GL	KT8295/KT8296	100-200	0.15-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	100-200	0.15-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	L	GL	KT8295/KT8296	80-180	0.15-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	80-180	0.15-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	80-150	0.15-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	80-150	0.15-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	L	GL	KT8295/KT8296/KT3262	160-200	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤450MPa			KT8295/KT8296/KT3262	100-160	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤800MPa			KT8295/KT8296/KT3262	80-140	0.15-0.2	0.1-1
P	软钢 Soft steel	≤180HB	H	GH	KT8295/KT8296	200-300	0.1-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	190-290	0.1-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	H	GH	KT8295/KT8296	150-250	0.1-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	120-220	0.1-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	110-210	0.1-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	100-200	0.1-0.2	0.1-1

### 切削参数一览表

### Cutting Parameters Table

#### 15°铣削刀片 15°Milling Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	M	GM	KT8295/KT8296	100-200	0.15-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	100-200	0.15-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	M	GM	KT8295/KT8296	80-180	0.15-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	80-180	0.15-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	80-150	0.15-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	80-150	0.15-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	M	GM	KT8295/KT8296/KT3262	160-200	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤450MPa			KT8295/KT8296/KT3262	100-160	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤800MPa			KT8295/KT8296/KT3262	80-140	0.15-0.2	0.1-1
P	软钢 Soft steel	≤180HB	H	GL	KT8295/KT8296	100-200	0.15-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB			KT8295/KT8296	100-200	0.15-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	H	GL	KT8295/KT8296	80-180	0.15-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8295/KT8296	80-180	0.15-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8295/KT8296	80-150	0.15-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT8295/KT8296	80-150	0.15-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	H	GL	KT8295/KT8296/KT3262	160-200	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤450MPa			KT8295/KT8296/KT3262	100-160	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤800MPa			KT8295/KT8296/KT3262	80-140	0.15-0.2	0.1-1

### 切削参数一览表

### Cutting Parameters Table

#### 负角刮管刀片 Negative Angle Tube Scraper Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	L	R	KT3221	100-200	0.15-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB	L	R	KT3221	100-200	0.15-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	L	R	KT3221	80-180	0.15-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT3221	80-180	0.15-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT3221	80-150	0.15-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT3221	80-150	0.15-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	L	R	KT3221	160-200	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤450MPa	L	R	KT3221	100-160	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤800MPa	L	R	KT3221	80-140	0.15-0.2	0.1-1

#### 15°刮管刀片 15° Tube Scraper Inserts

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	L	AR	KT1332	100-200	0.15-0.2	0.1-1
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB	L	AR	KT1332	100-200	0.15-0.2	0.1-1
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	L	AR	KT1332	80-180	0.15-0.2	0.1-1
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT1332	80-180	0.15-0.2	0.1-1
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT1332	80-150	0.15-0.2	0.1-1
	析出硬化系不锈钢 Precipitation Hardening System	≤450			KT1332	80-150	0.15-0.2	0.1-1
K	灰铸铁 Grey Cast Iron	≤350MPa	L	AR	KT1332	160-200	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤450MPa	L	AR	KT1332	100-160	0.15-0.2	0.1-1
	球墨铸铁 Nodular Cast Iron	≤800MPa	L	AR	KT1332	80-140	0.15-0.2	0.1-1

### 切削参数一览表

### Cutting Parameters Table

#### 负角重力切削刀片刃边10-15 Negative Angle Gravity Cutting Inserts Edge 10-15

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	R	K-M	KT1151/KT1152/KT1153	150-300	0.2-0.8	1-5
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB	R	K-M	KT1151/KT1152/KT1153	120-280	0.2-0.8	1-5
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	R	K-M	KT8206	80-200	0.2-0.6	1-5
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8206	80-200	0.2-0.6	1-5
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8206	80-200	0.2-0.6	1-5
K	灰铸铁 Grey Cast Iron	≤350MPa	R	K-M	KT3262	150-300	0.2-0.8	1-5

#### 负角重力切削刀片刃边15-20 Negative Angle Gravity Cutting Inserts Edge 15-20

ISO代号 ISO Code	工件材料 Workpiece Material	硬度 Hardness	应用范围 Application Range	槽型 Chip Breaker	牌号 Grade	切削速度 Cutting Speed (m/min)	进给 Feed (mm/rev)	切深 Depth of Cutting (mm)
P	软钢 Soft steel	≤180HB	R	K-M	KT8295/KT8296/KT3262	150-300	0.2-0.8	2-6
	碳钢、合金钢 Carbon steel, Alloy Steel	180-350 HB	R	K-M	KT1151/KT1152/KT1153	120-280	0.2-0.8	2-6
M	奥氏体类不锈钢 Austenitic Stainless Steel	≤200HB	R	K-M	KT8206	80-200	0.2-0.6	2-6
	奥氏体类不锈钢 Austenitic Stainless Steel	>200HB			KT8206	80-200	0.2-0.6	2-6
	双相不锈钢 Duplex Stainless Steel	≤280HB			KT8206	80-200	0.2-0.6	2-6
K	灰铸铁 Grey Cast Iron	≤350MPa	R	K-M	KT3262	150-300	0.2-0.8	2-6

内孔车削加工切削用量修正表

Correction Table of Cutting for Internal Hole Turning Machining

P类夹紧内孔车刀 P Type Internal Turning Tool Holders

材料 Material	硬度 Hardness Brinell(HB)	加工形态 Processing Form	L/D≤3		L/D=3-4(刀柄直径≥Φ16mm)	
			进给量 Feed/tooth (mm/rev)	切深 Cut depth (mm)	进给量 Feed/tooth (mm/rev)	切深 Depth of Cutting (mm)
<b>P</b> 碳钢 Carbon steel 合金钢 Alloy steel 45#、42CrMo	HB180-280	半精加工 semi-finishing	0.1-0.25-0.4	< 5.0	0.1-0.2-0.3	< 4.0
<b>M</b> 不锈钢 Stainless steel 1Cr18Ni9Ti 0Cr18Ni9	≤HB220	半精加工 semi-finishing	0.1-0.2-0.3	< 4.0	0.1-0.15-0.25	< 3.0
<b>K</b> 铸铁 Cast iron HT250	HB170-230	半精加工 semi-finishing	0.1-0.25-0.4	< 5.0	0.1-0.2-0.3	< 4.0

S类夹紧内孔车刀 S Type Internal Turning Tool Holders

材料 Material	硬度 Hardness Brinell(HB)	加工形态 Processing Form	L/D≤3		L/D=4		L/D=5		L/D=6	
			进给量 Feed/tooth (mm/rev)	切深 Cut depth (mm)	进给量 Feed/tooth (mm/rev)	切深 Cut depth (mm)	进给量 Feed/tooth (mm/rev)	切深 Cut depth (mm)	进给量 Feed/tooth (mm/rev)	切深 Depth of Cutting (mm)
<b>P</b> 碳钢 Carbon steel 合金钢 Alloy steel 45#、42CrMo	HB180-280	精加工finishing	0.05-0.1-0.15	< 0.2	0.05-0.1-0.15	< 0.2				
		半精加工 semi-finishing	0.15-0.25-0.35	< 3.0	0.1-0.15-0.2	< 1.5				
<b>M</b> 不锈钢 Stainless steel 1Cr18Ni9Ti 0Cr18Ni9	≤HB220	精加工finishing	0.05-0.1-0.15	< 0.2	0.05-0.1-0.15	< 0.2				
		半精加工 semi-finishing	0.15-0.2-0.25	< 2.0	0.1-0.15-0.2	< 1.0				
<b>N</b> 铝合金 Aluminum Alloy	---	精加工finishing	0.05-0.1-0.15	< 0.2	0.05-0.1-0.15	< 0.2	0.05-0.1-0.15	-0.15	0.05-0.1-0.15	< 0.1
		半精加工 semi-finishing	0.05-0.1-0.15	< 2.0	0.05-0.1-0.15	< 1.5	0.05-0.1-0.15	-1.0	0.05-0.1-0.15	< 1.0

刀具磨损与各类损伤

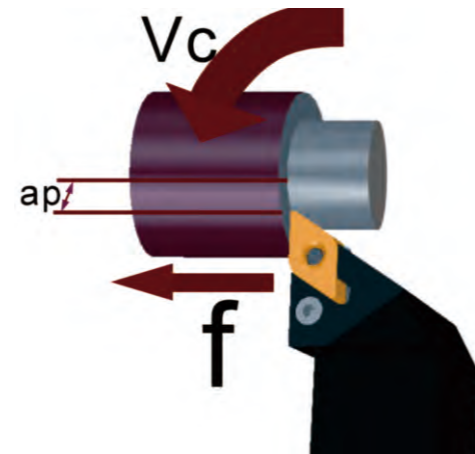
Inserts Wear and All Kinds of Damage

刀具损伤类型	现象	原因	对策
后刀面磨损 Flank wear	切削阻力增加 Increase cutting resistance 在后刀面逐渐形成沟槽磨痕 Form groove abrasive	刀具材料过软 Workpiece material too soft 切削速度过高 Cutting speed too high 后角过小 Clearance angle too small 进给量太小 Feed rate too low	•选用高耐磨性刀具材料 Select a more wear resistant grade •降低切削速度 Reduce cutting speed •增大后角 Increase clearance angle •加大进给量 Increase feed rate
前刀面磨损 (月牙洼磨痕) Crater wear	精加工表面恶化 Cause poor surface finish	刀具材料过软 Workpiece material too hard 切削速度过高 Cutting speed too high 进给量太大 Feed rate too high	•选用高耐磨性刀具材料 Select a more wear resistant grade •降低切削速度 Reduce cutting speed •降低进给量 Reduce feed rate
崩刀 Mechanical fracture	突发性崩刀 Cause insert breakage	刀具材料过硬 Workpiece material too hard 进给量大 Feed rate too high 切削强度不足 Insufficiency of cutting edge strength 刀杆、刀柄刚性不足 tool holders too thin	•选用韧性好的刀具材料 Select tougher grade •降低进给量 Reduce feed rate •加大刃口修磨量 (若是倒圆改为倒棱 Increase edge grinding (If fillet is changed to chamfer) •加大刀杆尺寸 Increase the tool holders' diameter
破损 Insert breakage	切削阻力增大 Increase cutting resistance 表面粗糙度恶化 Causes poor surface finish	刀具材料过硬 Workpiece material too hard 进给量大 Feed rate too high 切削刃强度不足 Insufficiency of cutting edge strength 刀杆、刀柄刚性不足 Tool holders too thin	•选用韧性好的刀具材料 Select tougher grade •降低进给量 Reduce feed rate •加大刃口修磨量 (若是倒圆改为倒棱 Increase edge grinding (If fillet is changed to chamfer) •加大刀杆尺寸 Increase the tool holders' diameter
塑性变形 (刀刃塌下) Plastic deformation	工件尺寸变化 Change the size of workpiece 刀尖磨损 Cutting edge abrasion	刀具材料过软 workpiece material too soft 切削速度过高 Cutting speed too fast 切削深度、进给量太大 Cutting depth、Feed rate too high 切削刃温度过高 Too high cutting temperature on the rake face	•选用高耐磨性刀具材料 Select a more wear resistant grade •降低切削速度 Reduce cutting speed •减小切削深度 进给量 Reduce cutting depth、feed speed
积屑瘤 (粘连) Built-up edge	精加工表面恶化 Cause poor surface finish 切削阻力增加 Increase cutting resistance	切削速度低 cutting speed too low 切削刃不锋利 Cutting edge not sharp 刀具材料不合适 Workpiece material unsuitable	•提高切削速度 Increase cutting speed •增大前角 Select a shaper edge geometry •选用亲和力小的刀具材料 (涂层、金属陶瓷等 Select workpiece material with better adhesion resistance
热龟裂 Thermomechanical failure	由于热循环而崩损 Cause breakage due to thermal cycling 多出现在断续加工中 Appear in intermittent machining	切削热引起的膨胀与收缩 Thermal expansion and contraction caused by cutting heat 刀具材料过硬 Workpiece material too hard	•干式切削 Dry cutting •选用韧性好的刀具材料 Select a tougher grade with better resistance to thermal shocks
边界磨损 Notch wear	工件加工表面恶化 Cause poor surface finish 切削阻力增加 Increase cutting resistance	进给量过大 切削速度过高 Feed rate too high、cutting speed too fast	•选用高耐磨性刀具材料 Select a more wear resistant grade •增大前角使切削刃锋利 Select a sharper edge geometry •降低切削速度 Reduce cutting speed

### 三要素的影响 Effects of Three Main Parameters

我们在切削加工中，通常都希望获得短的加工时间，长的刀具寿命和高的加工精度。因此，必须充分考虑工件材料的材质、硬度、形状状况及机床的性能，选择合适的刀具并使用高效率的切削条件，即我们所说的三要素。

Normally, short machining time, long tool life and high machining precision are expected in machining, so the material quality, hardness, and shape of the workpiece, and properties of machine should be fully considered and then we can select suitable tools and adopt high-efficiency cutting parameters, namely three parameters.



### 切削速度 (Vc) Cutting Speed (Vc)

工件在车床上旋转，我们将其每分钟的转数定义为主轴转速 (n)。由于工件旋转，在其直径的切削点处产生切削速度，称为线速度，单位米/分钟。通常用线速度来考虑切削速度对加工的影响。

When the workpiece is rotating on the machine, the number of its rotation per minute is defined as Rotating speed of main axle (n). Because of its rotation, the cutting speed measured on the contacting point of diameter is defined as linear speed. m/min. Normally, linear, linear speed is considered to measure the effect of cutting speed on machining

### 切削速度的影响 Effect of Cutting Speed

切削速度对刀具寿命有非常大的影响。提高切削速度时，切削温度就上升，而使刀具寿命大大缩短。加工不同种类、硬度的工件，切削速度会有相应的变化。通过大量的切削实验得出：

Cutting speed has significant effect in tool life. When the cutting speed is increased, cutting temperature will increase and tool life will be shortened. Cutting speed varies according to the different types and hardness of work-piece. The below conclusions are reached after many cutting experiments:

- (1) 在通常情况下，切削速度提高20%，刀具耐用度降低1/2；切削速度提高50%，刀具耐用度将降至原来的1/5。  
(1) Normally tool life would be reduced to half when the cutting speed is increased by 20%. Tool life would be 20% of the original life if the cutting speed is raised by 50%.
- (2) 低速 (20-40m/min) 切削易产生振动，使刀具寿命缩短。  
(2) Low speed (20-40m/min) cutting could easily cause vibration and shorten tool life.

### 进给量 (fn) Feed Rate (fn)

进给量是指工件每旋转一周，刀具的移动量，单位为毫米/转。

Feed rate is defined as the moving distance of tool after workpiece rotates for one circle, measured by mm/rotation.

### 进给量的影响 Feed Rate (fn)

进给量是决定被加工表面质量的关键因素，同时也影响加工时切屑形成的范围和切屑的厚度。

在对刀具寿命影响方面，进给量过小，后刀面磨损大，刀具寿命大幅降低；进给量过大，切削温度升高，后刀面磨损也增大，但较之切削速度对刀具寿命的影响要小。

Feed rate is a key factor that determines surface quality. Meanwhile it also affect the range of chip forming and the thickness of chips during machining.

In term of the effect on tool life, small feed rate leads to serious abrasion on clearance face, reducing tool life.

### 切削深度 (ap) Cutting Depth (ap)

切削深度指未加工表面与已加工表面之间的差值，单位毫米。它是工件未加工直径与已加工直径差值的一半。

Cutting depth is defined as the difference between machined surface and unmachined surface. Measured by mm. It is half the difference value between the original diameter and machined diameter.

### 切削深度的影响 Effect of Cutting Depth

切削深度应根据工件的加工余量、形状、机床功率、刚性及刀具的刚性来确定。

切削深度变化对刀具寿命影响不大。切削深度过小时，会造成刮擦，只切削工件表面的硬化层，缩短刀具寿命。当工件表面具有硬化的氧化层时，应在机床功率允许范围内选择尽可能大的切削深度，以避免刀尖只切削工件的表面硬化层，造成刀尖的异常磨损甚至破损。

Cutting depth should be determined by the machining allowance and shape of workpiece, power and rigidity of machine, and tool rigidity.

The change of cutting depth has little effect on tool life. If the cutting depth is too low. The cutting nose only scrapes the hardened layer on the workpiece surface, reducing tool life. When there is hardened oxide layer on workpiece surface, higher cutting depth should be adopted within the possible range of machine's power to avoid cutting nose just cutting the hardened layer of workpiece.



孔加工常见问题及解决办法

Common Problems And Solutions For Drilling

孔加工常见问题及解决办法

Common Problems And Solutions For Drilling

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

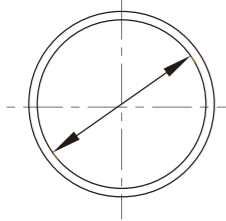
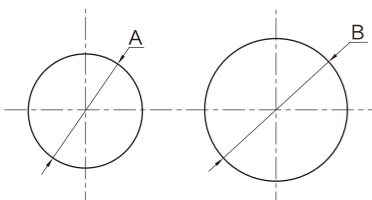
E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

I 通用技术信息

现象 Problem	原因 Cause	解决方法 Solution
 <p>孔径扩大Oversize holes</p>	钻头装夹不好 主轴本身跳动量过大 Poor clamping Large run-out around spindle	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时, 仔细测量与调整 Select the holder and chuch with high Precision calibrating spindle Check and adjust after clamping drill
	顶角不对称 钻头跳动过大 横刃偏心 Non-symmetric point angle Large run-out Chisel edge is off center	修磨刀具 修磨后检查精度 Regrind drill Check the precision after clamping drill
 <p>孔径的一致性较差 Irregular hole size</p>	顶角不对称 钻头跳动过大 横刃偏心 刃带棱面磨损过大 Non-symmetric point angle Large run-out Chisel edge is off center Excessive margin abrasion	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时, 仔细测量与调整 Select the holder and chuch with high Precision Calibrating spindle Check and adjust after clamping drill
	钻头装夹不好 主轴本身跳动量大 工件装夹不牢固 Poor clamping Large run-out around spindle Workpiece is not firmly held	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时, 仔细测量与调整 Select the holder and chuch with high Precision Calibrating spindle Check and adjust after clamping drill
	进给量过大 Feed rate is too high	降低进给速度 Reduce the feed speed
	切削液供给不足 Coolant provide is not enough	改变切削液供给方法, 增加流量 Change the coolant supply method, Or increase coolant volume

A 车削刀片

B 铣削刀片

C 孔加工刀片

D 刮管刀片

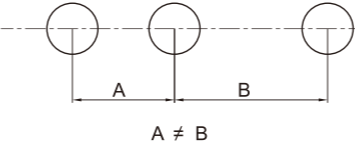
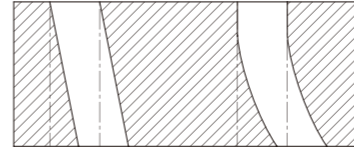
E 非标异形刀片

F 圆棒和立铣刀

G 刀杆和刀盘

H 加工案例

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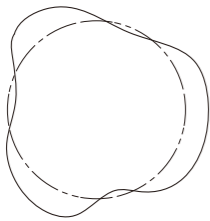
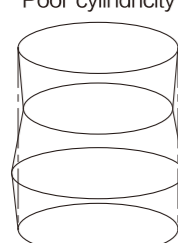
现象 Problem	原因 Cause	解决方法 Solution
 <p>孔的位置精度较差 Low position accuracy</p>	机床主轴重复定位精度低 钻头装夹不好 主轴本身跳动量大 Poor re-positioning of spindle Poor clamping Large run-out around spindle	提高机床重复定位精度 选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时, 仔细测量与调整 Improve the re-positioning precision of Machine select the holder and chuch With high precision Calibrating spindle Check and adjust after clamping drill
	被加工表面进给方向不垂直 The feed direction is not Vertical to the workpiece Surface	将被加工表面调整成与进给方向垂直 Adjust the feed direction vertical to The workpiece
 <p>直线度不良 垂直度不良 Bad linearity bad perpendicularity</p>	刀具磨损过大 Excessive margin abrasion	重新修磨 Regrind
	中心孔精度不好 Poor center hole accuracy	提高中心孔位置精度 Increase the position accuracy of hole
	顶角不对称 钻头跳动过大 横刃偏心 Non-symmetric point angle Large run-out Chisel edge is off center	修磨刀具 修磨后检查精度 Regrind drill Check the precision after regrinding
	钻头刚性不足 Insufficient drill rigidity	提高钻头刚性 Increase drill rigidity
被切削平面不平 顶尖与轴心不重合(车床) Uneven workpiece rigidity Top center not align with the Spindle center (lathe)	调整为水平面或预加工为水平面 预钻中心孔 The workpiece must be horizontal or Premachined to horizontal before drilling Pre-drill a center hole	

孔加工常见问题及解决办法

Common Problems And Solutions For Drilling

材料硬度与切削速度的修正系数表

The Correction Coefficient Table Of Hardness And Cutting Speed

现象 Problem	原因 Cause	解决方法 Solution
圆度较差 Poor roundness 	顶角不对称 钻头跳动过大 横刃偏心 Non-symmetric point angle Large run-out Chisel edge is off center	修磨刀具 修磨后检查精度 Regrind drill Check the precision after regrinding
	钻头装夹不好 主轴本身跳动量大 工件装夹不牢固 Poor clamping Large run-out around spindle Workpiece is not firmly held	选择精度高的刀柄及夹具 校正主轴 每次装夹钻头时, 仔细测量与调整 Select the holder and chuch with high Precision/calibrating spindle check run Out and adjust after clamping drill
	后角过大 Clearance angle is too large	重新修磨切削刃 Regrind drill
	钻头刚性不足 Insufficient drill rigidity	提高钻头刚性 Increase drill rigidity
被加工工件表面质量差 Poor workpiece surface quality	修磨不当 Incorrect regriding	重新修磨校正 Regrind calibration
	切削液供给不足或型号不匹配 Insufficient coolant or Unsuitable coolant type	改变切削液供给方法, 增加流量 采用润滑性好的切削油 Change the coolant supply method, Or increase coolant volume
	钻头装夹不好 主轴本身跳动量大 Poor clamping Large run-out around spindle	选择精度高的刀柄及夹具 校正主轴 Select the holder and chuch with high Precision/calibrating spindle
	进给速度过大 Feed rate is too high	降低进给速度 Decrease the feed rate
	切削刃磨损过大, 刃带棱面粘结严重。 Excessive abrasion on Cuttingedge Excessive build-up on margin	重新修磨切削刃, 使用涂层钻头 Regrind drill Select a coated drill
	切削阻塞 Chip jamming	重选钻头(容屑槽型、螺旋角等) 重选加工方法 (进给速度的调整, 采用分步阶梯方式等) Select a suitable drill(considering flute Geometry, helical angle etc)change the Cutting method (adjust feed rate, use Step feed etc.)
圆柱度较差 Poor cylindricity 	顶角不对称 钻头跳动量过大 横刃偏心 刃带棱面磨损过大 Non-symmetric point angle Large run-out Chisel edge is off center Excessive margin abrasion	重修磨刀具 修磨后检查精度 Regrind drill Check the precision after regrinding
	进给速度过低 Feed rate is too low	提高进给速度 Increase the feed speed

工件材料 Material	理论硬度 Theoretical Hardness	材料硬度与切削速度的修正系数 The Correction Coefficient Table Of Hardness and Cutting Speed									
		硬度降低 Hardness Decrease		硬度差值 (实测值-理论值) Hardness Difference (Measured Difference - Theoretical Difference)						硬度增大 Hardness Increase	
		-60	-40	-20	0	20	40	60	80	100	
P	HB180	1.42	1.24	1.11	1.00	0.91	0.84	0.77	0.72	0.67	
M	HB180	1.44	1.25	1.11	1.00	0.91	0.84	0.78	0.73	0.68	
K	灰口铸铁 Grey Cast Iron	HB220	1.21	1.13	1.06	1.00	0.95	0.9	0.86	0.82	0.79
	球墨铸铁 Nodular Cast Iron	HB250	1.33	1.21	1.09	1.00	0.91	0.84	0.75	0.7	0.65
N	HB75			1.05	1.00	0.95					
S	HB350			1.12	1.00	0.89					
HRC			-6	-3	0.00	3	6	9			
H	HRC60		1.10	1.02	1.00	0.96	0.93	0.9			

实际加工速度=推荐加工速度×切削速度修正系数  
Actual Processing Speed=Recommended Processing Speed\*Correction Factor Of Cutting Speed

推荐的切削参数见刀片包装盒 Recommended Cutting Parameters See Packaging

表格使用举例: 当您要加工的材料为普通的合金钢, 理论硬度为HB180, 选择的刀片为CNMG120404-MM时, 推荐切削速度: V=250m/min。如果实测硬度值为HB220, 则硬度差值为220-180=40, 对照上表查到速度修正系数0.84, 则实际加工速度Vc=250x0.84=210m/min。

i.e. Cutting general alloy steel, hardness HB180, CNMG120404-MM, the recommended cutting speed is V=250m/min. When measured hardness is HB220, the hardness difference is 40(220-180). Find The corresponding speed correction coefficient is 0.84 on above table, and then the actual processing speed Vc=250\*0.84=210mm/min

材料对照表

Material Comparison

钢 Steel

ISO	国家和标准 Nations And Standard										
	中国	德国	美国	英国	意大利	西班牙	瑞典	法国	日本		
	GB (P类)	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
碳素钢 Carbon Steel	15	1.0401	C15	1015	080M15		C15C16	F.111	1350	CC12	
	20	1.0402	C22	1020	050A20	2C	C20C21	F.112	1450	CC20	
	35	1.0501	C35	1035	060A35		C35	F.113	1550	CC35	
	45	1.0503	C45	1045	080M40		C45	F.114	1650	CC45	
	55	1.0535	C55	1055	070M55		C55		1655		
	60	1.0601	C60	1060	080A62	43D	C60			CC55	
	Y15	1.7015	9SMN28	1213	230M07		CF9SMn28	11SMn28	1912	S250	SUM22
锰钢 Manganese Steel	40Mn	1.1157	40Mn4	1039	150M36	15				35M5	
	25	1.1158	Ck25	1025							S25C
	35Mn2	1.1167	36Mn5	1335				36Mn5	2120	40Mn5	SMn438(H)
	30Mn	1.117	28Mn6	1330	150M28	14A	C28Mn			20M5	SCMn1
	35Mn	1.1183	Cf35	1035	060A35		C36		1572	XS38TS	S35C <sup>b</sup>
	1.0718	9SMnPb28	12L13				CF9MnPb28	11SMnPb28	1914	S250Pb	SUM22L
	1.0722	10SPb20					CF10Pb20	10SPb		10PbF2	
	1.0726	35S20	1140	212M36	8M		F210G	1957	35MF4		
Y13	1.0736	9SMn36	1215	240M07	1B	CF9SMn36	12SMn35		S300		
	1.0737	9SMnPb36	12L14				CF9SMnPb36	12SMnPb35	1926	S300Pb	
55Si2Mn	1.0904	55Si9	9255	250A53	45	55Si8	56Si7	2085	55S7		
	1.0961	60SiCr7	9262			60SiCr8	60SiCr8		60SC7		
15	1.1141	Ck15	1015	080M15	32C	C16	C15K	1370	XC12	S15C	
Ck45	1.1191	45	1045	080M46		C45	C45K	1672	XC42	S45C	
55	1.1203	Ck55	1055	070M55		C50	C55K		XC45	S55C	
50	1.1213	Cf53	1050	060A52		C53		1674	XC48TS	S50C	
60Mn	1.1221	Ck60	1060	080A62	43D	C60		1678	XC60	S68C	
	1.1274	Ck101	1095	060A96				1870		SUP4	
	1.3401	X120Mn12		Z120M12		XG120Mn12	X120Mn12		X120M12	SCMnH/1	
Gr15,45Gr	1.3505	100Cr6	52100	534A99	31	100Cr6	F.131	2258	100C6	SUJ2	
	1.5415	15Mo3	ASTMA204Gr,A	1501-240		16Mo3KW	16Mo3	2912	15D3		
	1.5426	16Mo5	4520	1503-245-420		16Mo5	16Mo5				
	1.5622	14Ni6	ASTMA350LF5			14Ni6	15Ni6		16N6		
	1.5662	X8Ni9	ASTM A353	1501-509:510		X10Ni9	XBNi09				

材料对照表

Material Comparison

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	GB (P类)	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS	
镍铬合金 Nickel Chromium Steel		1.5680	12Ni19	2515						Z18N5		
		1.5710	36NiCr6	3135	640A35	111A				35NC6	SNC236	
		1.5732	14NiCr10	3415			16NiCr11	15NiCr11		14NC11	SNC415(H)	
		1.5752	14NiCr14	3415, 3310	655M13 655A12	36A				12NC15	SNC815(H)	
镍铬钼合金 Nickel Chromium Molybdenum Steel		1.6511	36CrNiMo4	9840	816M40	110	38CrNiMo4(KB)	35CrNiMo4		40NCD3		
		1.6523	21NiCrMo2	8620	850M20	362	20NiCrMo2	20NiCrMo2	2503	20NCD2	SNCCM220(H)	
		1.6546	40NiCrMo2	8740	311-Type7		40NiCrMo2(KB)	40NiCrMo2			SNC240	
	40CrNiMoA	1.6582	34CrNiMo6	4340	817M40	24	35CrNiMo6(KB)		2541	35NCD6		
	1.6587	17CrNiMo6		820A16			14CrNiMo13		18NCD6			
铬合金 Chromium Steel	15Cr	1.7015	15Cr3	5015	523M15					12C3	SCr415(H)	
	35Cr	1.7033	34Cr4	5132	530A32	18B	34Cr4(KB)	35Cr4		32C4	SCr430(H)	
	40Cr	1.7035	41Cr4	5140	530M40	18	41Cr4	42Cr4		42C4	SCr440(H)	
	40Cr	1.7045	42Cr4	5140				42Cr4	2245		SCr440	
锰铬合金 Manganese Chromium Steel	18CrMn	1.7131	16MnCr15	5115	527M20		16MnCr15	16MnCr15	2511	16MC5		
	20CrMn	1.7176	55Cr3	5155	527A60	48				55C3	SUP9(A)	
	30CrMn	1.7218	25CrMo4	4130	1717CDS110		25CrMo4(KB)	55Cr3	2225	25CD4	SCM420; SCM430	
	35CrMo	1.722	34CrMo4	4137, 4135	708A37	19B	35CrMo4	34CrMo4	2234	35CD4	SCM432 SCR RM3	
	40CrMoA	1.7223	41CrMo4	4140, 4142	708M40	19A	41CrMo4	41CrMo4	2244	42CD4TS	SCM440	
42CrMo, 42CrMnMo	1.7225	42CrMo4	4140	708M40	19A	42CrMo4	42CrMo4	2244	42CD4	SCM440(H)		
铬钼合金 Chromium Molybdenum Steel		1.7262	15CrMo5						12CrMo4	2216	12CD4	SCM415(H)
		1.7335	13CrMo44	ASTM A182 F11 F12	1501-620Cr. 27		14CrMo44	14CrMo45		15CD3.5; 15CD4.5		
		1.7361	32CrMo12		722M24	40B	32CrMo12	F.124.A	2240	30CD12		
		1.738	10CrMo910	ASTM A182 F22	1501-622Cr.31;45		12CrMo9,10	TU.H	2218	12CD9;10		
		1.7715	14MoV63		1503-660-440			13MoCrV6				
	50CrVA	1.8159	50CrV4	6150	735A50	47	50CrV4	51CrV4	2230	50CV4	SUP10	
		1.8509	41CrAlMo7		905M39	41B	41CrAlMo7	41CrAlMo7	2940	40CAD6,12		
	1.8523	39CrMoV139		897M39	40C	36CrMoV12						

材料对照表

Material Comparison

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Material Comparison

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	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB (P类)	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
T10	1.1545	C105W1	W.110				C98KU C100KU	F.515 F.516	1880	Y1105	
T12A	1.1663	C125W	W.112				C120KU	(C120)		Y2120	SK2
CrV,9SiCr	1.2067	100Cr6	L3	BL3				100Cr6		Y100C6	
Cr12	1.208	X210Cr12	D3	BD3			X210Cr13KU X250Cr12KU	X210Cr12		Z200Cr12	SKD1
4Cr5MoVSi	1.2344	X40CrMoV51	H13	BH13				X40CrMoV5	2242	Z40CDV5	SKD61
Cr6WV	1.2363	X100CrMoV51	A2	BA2			X35CrMoV05KU X40CrMoV51KU	X100CrMoV5	2260	Z100CDV5	SKD12
CrWMo	1.2419	105WCr6					X100CrMoV51KU	105WCr5	2140	105WC13	SKS31 SKS2 SKS3
Cr12W	1.2436	X210CrW12					10WCr6 107WCr5KU	X210CrW12	2312		SKD2
5CrNiMo	1.2542	45WCrV7	S1	BS1			X215CrW121KU	45WCrSi8	2710		
3Cr2W8V	1.2581	X30WCrV93 X30WCrV93KU	H21	BH21			45WCrV8KU	X30WCrV9		Z30WCV9	SKD5
Cr12MoV	1.2601	X165CrMoV12					X28W09KU X30WCrV93KU	X160CrMoV12	2310		SKD11
5CrNiMo	1.2731	55NiCrMoV6	L6				X165CrMoV12KU	F.250.S		55NCDV7	SKT4
V	1.2833	100V1	W210	BW2						Y1105V	SKS43
W6Mo5Cr4V2Co5	1.3243	S6-5-2-5						HS6-5-2-5	2723	Z85WDKCV	SKH55
W18Cr4VCo5	1.3255	S18-1-2-5	T4	BT4			HS6-5-2-5	HS18-1-1-5		Z80WKCV 10-05-04-1	SKH3
W6Mo5Cr4V2	1.3343	S6-5-2S	M2	BM2			X78WCo1805KU	HS6-5-2	2722	Z85WDCV 06-05-04-02	SKH9
	1.3348	S2-9-2	M7		Z		X82WMo0605KU	HS-2-9-2	2782	Z100WCWV 09-02-04-02	
W18Cr4V	1.3355	S18-0-1	T1	BT1			HS2-9-2	HS18-0-1		Z80WCV 18-04-01	SKH2
W6Mo5Cr4V3		S6-5-3	M3				X75W18KU				SKH52
			M42	BM42							SKH59

钢 Steel

ISO	国家和标准 Nations And Standard					
	中国	德国		日本	大同(日本)	美国
	GB (P类)	W-nr	DIN	JIS	DAIDO	AISI/SAE
模型钢类 Die Steel	塑料模具钢					
					PX5N	P20mod
					NAK55	
					NAK80	
	3Cr13			SUS420J2mod	S-STAR	420mod
	冷作模具钢					
				SKS93	YK30	2
	9CrWMn			SKS3mod	GOA	01mod
	Cr12MoV	X165CrMoV12		SKD11	DC11	D2
				SKD11mod	DC53	D2mod
	热作模具钢					
	4Cr5MoSiV1	X40CrMoV51		SKD61	DHA1	H13
					DH21	
					DH31-S	
					DH2F	

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不锈钢 Stainless Steel

ISO	国家和标准 Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB (P类)	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
不锈钢 Stainless Steel	0Cr13;1Cr12	1.4000	X6Cr13	403	403S17		X6Cr13	F.3110	2301	Z6C13	SUS403
		1.4001	X7Cr14					F.8401			
	1Cr13	1.4006	X10Cr13	410	410S21	56A	X12Cr13	F.3401	2302	Z10C14	SUS410
	1Cr17	1.4016	X6Cr17	430	430S15	60	X8Cr17	F.3113	220	Z8C17	SUS430
	2Cr13	1.4021	X20Cr13	410	S62	56B; 56C	X20C13	F.3401		Z20C13	SUS410
		1.4027	G-X20Cr14		420C29	56B				Z20C13M	SCS2
	4Cr13	1.4034	X46Cr13		420S45	56D	X40Cr14	F.3405	2304	Z40CM;Z38C13M	SUS420J2
	1Cr17Ni2	1.4057	X20CrNi172	431	431S29	57	X16CrNi16	F.3427	2321	Z15CNi6.02	SUS431
	Y1Cr17	1.4104	X12CrMoS17	430F			X10CrS17	F.3117	2383	Z10CF17	SUS430F
	1Cr17Mo	1.4113	X6CrMo171	434	434S17		x8CrMo17		2325	Z8CD17.01	SUS434
		1.4313	X5CrNi134		425C11					Z4CND13.4M	SCS5
		1.4408	G-X6CrNiMo1810		316C16			F.8414			SCS14
	4Cr9Si2	1.4718	X45CrSi93	HW3	401S45	52	X45CrSi8	F.322		Z45CS9	SUH1
	0Cr13Al	1.4724	X10CrAl13	405	403S17		X10CrAl12	F.311		Z10C13	SUS405
	Cr17	1.4742	X10CrAl18	430	430S15	60	X8Cr17	F.3113		Z10CAS18	SUS430
8Cr20Si2Ni	1.4757	X80CrNiSi20	HNV6	443S65	59	X80CrSiNi20	F.320V		Z80CSN20.02	SUH4	
2Cr25N	1.4762	X10CrAl24	446			X16Cr26		2322	Z10CAS24	SUH446	
不锈钢 Stainless Steel	0Cr18Ni9	1.4301	X5CrNi1810	304	304S15	58E	X5CrNi1810	F.3551 F.354 F.3504	2332	Z6CN18.09	SUS304
	1Cr18Ni9MoZr	1.4305	X10CrNiS189	303	303S21	58M	X10CrNiS18.09	F.3508	2346	Z10CNF18.09	SUS303
	0Cr19Ni10	1.4306	X2CrNi1911	304L	304S12		X2CrNi18.11	F.3503	2352	Z2CN18.10	SCS19
		1.4308	G-X6CrNi189		304C15					Z6CN18.10M	SCS13
	Cr17Ni7	1.4310	X12CrNi177	301			X12CrNi1707	F.3517	2331	Z12CN17.07	SUS301
		1.4311	X2CrNiN1810	304LN	304S62				2371	Z2CN18.10	SUS304LN
	0Cr19Ni9	1.4350	X5CrNi189	304	304S31	58E	X5CrNi1810			Z6CN18.09	SUS304
	0Cr17Ni11Mo2	1.4401	X5CrNiMo1712	316	316S16	Z6CND17.11	X5CrNiMo1712	F.3543	2347	1.4401	SUS316
	00Cr17Ni13Mo2	1.4429	X2CrNiMoN17133	316LN					2375	Z2CND17.13	SUS316LN
	0Cr27Ni12Mo3	1.4435	X2CrNiMo18143	316L	316S12		X2CrNiMo1713		2353	Z2CDN17.13	SCS16
	00Cr19Ni13Mo3	1.4438	X2CrNiMo17133	317L	317S12		X2CrNiMo18.16		2367	Z2CND19.15	SUS317L
		1.4460	X8CrNiMo275	329L					2324		SUS329L; SCH11 SCS11
	1Cr18Ni9Ti	1.4541	X6CrNiTi1810	321	2337	321S12	X6CrNiTi1811	F.3553	58B	Z6CNT18.10	SUS321
	1Cr18Ni11Nb	1.4550	X6CrNiNb1810	347	347S17	58F	X6CrNiTi1811	F.3552	2338	Z6CNNb18.1	SUS347
	Cr18Ni12Mo2Ti	1.4571	X6CrNiMoTi17122	316Ti	320S17	58J	X6CrNiMoTi17	F.3535	2350	Z6NDT17.12	
不锈钢 Stainless Steel		1.4581	G-X5CrNiMoNb1810		318C7		XG8CrNiMo18			Z4CNDNb1812M	SCS22
	Cr17Ni12Mo3Nb	1.4583	X10CrNiMoNb1812	318			X6CrNiMoTiNb17			Z6CNDNb1713B	
	1Cr23Ni13	1.4828	X15CrNiSi2012	309	309S24					Z15CNS20.1	SUH309
	0Cr25Ni20	1.4845	X12CrNi2521	310S	310S24		X6CrNi2520	F.331	2361	Z12CN2520	SUH310
	Cr15Ni36W3Ti	1.4864	X12NiCrSi3616	330						Z12CN35.1	SUH330
		1.4865	G-X40NiCrSi3818		330C11		XG50NiCr3919				SCH15
5Cr2Mn9Ni4N	1.4871	X53CrMnNiN219	EV8	349S54;321S12	58B	X53CrMnNiN219			Z52CMN21.0	SUH35	
1Cr18Ni9Ti	1.4878	X12CrNiTi189	321	321S320	58C	X6CrNiTi1811	F.3523		Z6CNT18.12	Su321	

材料对照表

Material Comparison

铸铁 Cast Iron

ISO	国家和标准 Nations And Standard										
	中国	德国		美国	英国		意大利	西班牙	瑞典	法国	日本
	GB (P类)	W-nr	DIN	AISI/SAE	BS	EN	UNI	UNE	SS	AFNOR	JIS
球墨铸铁 Nodular Iron	QT400-18		GGG40	60-40-18	400/17		GS370-17	FGE38-17	0717-02	FGS370-17	FCD400
	QT450-10			65-45-12	420/12		GS400-13	FGE42-12		FGS400-12	FCD450
	QT500-7		GGG50	70-50-05	500/7		GS500-7	FGE50-7	0727-02	FGS500-7	FCD500
	QT600-3		GGG60	80-60-03	600/7		GS600-2	FGE60-2	0732-03	FGS600-2	FCD600
	QT700-2		GGG70	100-70-03	700/2		GS700-2	FGE70-2	0737-01	FGS700-2	FCD700
	QT800-2		GGG80	120-90-02	800/2		GS800-2	FGE80-2	0864-03	FGS800-2	FCD800
	QT900-2					900/2					
灰口铸铁 Grey Cast Iron			GG40	NO.60					0140	FGL400	FC350
	HT350		GG35	NO.50	350		G35	FG35	0135	FGL350	FC300
	HT300		GG30	NO.45	300		G30	FG30	0130	FGL300	FC250
	HT250		GG25	NO.35	250		G25	FG25	0125	FGL250	FC200
	HT200		GG20	NO.30	200		G20	FG20	0120	FGL200	FC150
	HT150		GG15	NO.20	150		G15	FG15	0115	FGL150	FC100
	Ht100				100		G10		0110		

### 硬度对照表

### Hardness Comparison

### 硬度对照表

### Hardness Comparison

硬度 Hardness					抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(HV)	布氏 Brinell Hardness(BH)		
HRC	HRA	HV	HB		
70.0	86.6	1037			
69.5	86.3	1017			
69.0	86.1	997			
68.5	85.8	978			
68.0	85.5	959			
67.5	85.2	941			
67.0	85.0	923			
66.5	84.7	906			
66.0	84.4	889			
65.5	84.1	872			
65.0	83.9	856			
64.5	83.6	840			
64.0	83.3	825			
63.5	83.1	810			
63.0	82.8	795			
62.5	82.5	780			
62.0	82.2	766			
61.5	82.0	752			
61.0	81.7	739			
60.5	81.4	726			
60.0	81.2	713			2555
59.5	80.9	700			2500
59.0	80.6	688			2450
58.5	80.3	676			2395
58.0	80.1	664			2345
57.5	79.8	653			2295
57.0	79.5	642			2250
56.5	79.3	631			2205
56.0	79.0	620			2160
55.5	78.7	609			2115
55.0	78.5	599			2075
54.5	78.2	589			2035
54.0	77.9	579			1995
53.5	77.7	570			1955
53.0	77.4	561			1920
52.5	77.1	551			1885
52.0	76.9	543			1850
51.5	76.6	534			1815

硬度 Hardness					抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(HV)	布氏 Brinell Hardness(BH)		
HRC	HRA	HV	HB		
51.0	76.3	501			1780
50.5	76.1	494			1750
50.0	75.8	488			1720
49.5	75.5	481			1690
49.0	75.3	474			1660
48.5	75.0	468			1630
48.0	74.7	461			1605
47.5	74.5	455			1575
47.0	74.2	449			1550
46.5	73.9	442			1525
46.0	73.7	436			1500
45.5	73.4	430			1475
45.0	73.2	424			1450
44.5	72.9	418			1430
44.0	72.6	413			1405
43.5	72.4	407			1385
43.0	72.1	401			1360
42.5	71.8	396			1340
42.0	71.6	391			1320
41.5	71.3	385			1300
41.0	71.1	380			1280
40.5	70.8	375			1260
40.0	70.5	370			1245
39.5	70.3	365			1225
39.0	70.0	360			1210
38.5		355			1190
38.0		350			1175
37.5		345			1160
37.0		341			1140
36.5		336			1125
36.0		332			1110
35.5		327			1095
35.0		323			1080
34.5		318			1065
34.0		314			1050
33.5		310			1035
33.0		306			1020
32.5		302			1010

硬度 Hardness					抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(HV)	布氏 Brinell Hardness(BH)		
HRC	HRA	HV	HB		
32.0		304	298		995
31.5		300	294		980
31.0		296	291		970
30.5		292	287		960
30.0		289	283		950
29.5		285	280		935
29.0		281	276		920
28.5		278	273		910
28.0		274	269		900
27.5		271	266		890
27.0		268	263		880
26.5		264	260		870
26.0		261	257		860
25.5		258	254		850
25.0		255	251		835
24.5		252	248		830

硬度 Hardness					抗拉强度 Tensile Strength
洛氏 Rockwell Hardness(RH)		维氏 Vickers Hardness(HV)	布氏 Brinell Hardness(BH)		
HRC	HRA	HV	HB		
24.0		249	245		820
23.5		246	242		810
23.0		243	240		800
22.5		240	237		790
22.0		237	234		785
21.5		234	232		775
21.0		231	229		765
20.5		229	227		760
20.0		226	225		750
19.5		223	222		745
19.0		221	220		735
18.5		218	218		730
18.0		216	216		725
17.5		214	214		715
17.0		211	211		710

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