

## IS车削 IS Turning

### 钢件加工 Turning Steel

#### > P2115

低C高立方相含量硬质合金基体搭配较厚TiCN和较厚Al<sub>23</sub>涂层·经特殊后处理工艺·具有极好的耐磨性能；

钢类材料精加工及连续工况半精加工首选牌号。

Low Cobalt content, and high cubic content carbide substrate combine with thick TiCN and Al<sub>23</sub>, treated by special after coating treatment, which gives insert wonderful wearing resistance. Preferred grade for semifinishing to finishing steel machining.

#### > P2125

中C高立方相含量硬质合金基体搭配较厚TiCN和较厚Al<sub>23</sub>涂层·经特殊后处理工艺·具有较好的耐磨性能；

钢件材料半精加工及粗加工的首选牌号。

Low Cobalt content, and high cubic content carbide substrate combine with thick TiCN and Al<sub>23</sub>, treated by special after coating treatment, which gives insert wonderful wearing resistance. Preferred grade for semifinishing to finishing steel machining.

#### > P2325

耐高温性和抗塑性变形能力优异的梯度硬质合金基体材质；均匀致密的强组织CVD氧化铝涂层·具有优异的耐磨性能；

黄色的涂层外观·兼具磨痕识别。

Gradient cemented carbide substrate with excellent high temperature resistance and plastic deformation resistance, uniform and dense strong textured CVD alumina coating, with excellent wear resistance. Yellow coating appearance, also wear identification.

#### > P2325S

富立方相含量的梯度硬质合金基体·具有更好的高温性能、抗塑性变形能力；均匀致密细晶涂层·具有优异的耐磨性·特殊的过渡层结构·保证涂层抗剥落性能；

独特的后处理技术·实现了双色标识层及均匀的压应力分布·确保更高的耐磨性和稳定性；

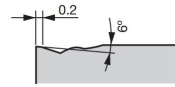
适用于各种钢材的车削加工·注重耐磨性的首选牌号。

Gradient hard alloy substrate with rich cubic phase content has better high temperature performance and plastic deformation resistance.

The uniform dense and fine-grained coating has excellent wear resistance, and the special transition layer structure ensures the anti-peeling performance of the coating;

The unique post-processing technology realizes a two-color marking layer with uniform thickness and stress distribution, ensuring it is suitable for turning of various steels and is the first choice for wear resistance.

#### TM (M)



#### -TM

#### 碳钢合金钢切削中第一推荐槽型，

经典碳钢合金钢槽型，具有宽范围的排屑槽的通用性槽型，独特的设计和大前角，使断屑槽保持锋利切削性能和低阻力。

#### The first recommended geometry in carbon steel alloy steel cutting,

Classic carbon steel alloy steel geometry with a wide range of common grooves for general geometry, unique design and large rake angle, the chip breaker maintains sharp cutting performance and low resistance.

#### > P2425

富含立方相的硬质合金基体·保证良好的高温性能、抗塑性变形能力；致密均匀超细晶涂层·提供优异的耐磨性·特有的过渡层结构·保证涂层抗剥落性能·独特的后处理技术·实现双色标识层及有益的压应力分布·达到更高的耐磨性和稳定性·基体刃口部分采用独特的“骨架”结构·实现了优异的切削性能及良好的刃口安全性·通过优化调整固溶体内原料配比及原料粒度·进一步提高基体的红硬性；

适用于P10-P20(中碳钢、低合金钢)高效率、轻断续加工·拥有更宽的应用范围和更佳稳定性。

High cubic content gradient carbide substrate, gives good anti-deformation resistance and excellent high temperature performance.

Dense and uniform ultra-fine-grained coating, providing excellent wear resistance, unique transition layer structure, to ensure the anti-peeling performance of the coating; unique post-processing technology, realizing two-color marking and beneficial compressive stress distribution, to achieve higher resistance to abrasiveness and stability.

The substrate edge part adopts a unique "skeleton" structure, which achieves excellent cutting performance and good safety.

The red hardness of the substrate is further improved by optimizing and adjusting the ratio of raw materials in the solid solution and the particle size of the raw materials.

It is suitable for high-efficiency, light-interrupted machining of P10-P20 (medium and high carbon steel, low alloy steel), with a wider application range and better stability.



## 专业的槽型设计 Professional Chip Breaker Design

### 精加工 Finishing

#### -PF

独特的槽型能有效控制切屑的卷曲和断屑；刃口锋利，切削轻快；可获得良好的表面质量。

Special designed for steel finishing;

Unique design efficiently controls the form of chip and breaks chip; Sharp cutting edge, smooth cutting; Excellent surface quality.



#### -TF

刃口锋利，切削轻快；独特的槽型结构，小切深具有优秀的断屑处理能力。

Special chip breaker structure makes excellent chip breaking even at small cutting depth. Sharp cutting edge, cutting smoothly and quickly.

### 半精加工 Semi-Finishing

#### -PM

负倒棱设计，增强刀片刃口强度和抗冲击性能；双断屑台设计，扩大断屑范围。

Negative chamfer design gives blade good strength; Double chipbreaker lands, makes bigger chip control range.



#### -TM

平刃设计，有较好的耐磨性和耐破损性；刃倾角组合结构，能很好的控制切屑流向。

Flat cutting edge design, good wear-resistance and breakage resistance. Inclination angle combination structure can control the chip breaking direction efficiently.



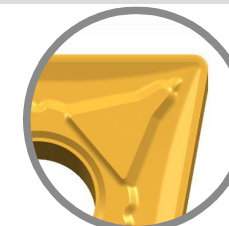
### 粗加工 Rughing

#### -PR

特殊的双前角和宽刃带及负倒棱三维断屑槽设计；具有很好的刃口强度，延长切削寿命；适用于钢类材料的粗加工和断续加工。

Three-dimensional design with double rake angle, wide margin and negative chamfer;

Wonderful blade intensity gives a longer life time; Suitable for steel roughing machining.







#### -TR





平刃大前角设计，较好的耐磨性；变槽深设计，良好的控屑能力。

Flat cutting edge with big rake angle, gives good wear-resistance. Varying chip breaker depth design, good performance in chip breaking control.



## 产品型号 Product Model




刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	CNMG120404-TM	●	●		▲	
	CNMG120408-TM	●	●		▲	
	CNMG120404-PF	●	●		▲	
	CNMG120408-PF	●	●		▲	
	CNMG120404-PM		●	●	▲	
	CNMG120408-PM		●	●	▲	
	CNMG120412-PM		●	●	▲	
	CNMG120416-PM		●	●	▲	
	CNMG160608-PM		●	●	▲	
	CNMG160612-PM		●	●	▲	
	CNMG160616-PM		●	●	▲	
	CNMG190608-PM		●	●	▲	▲
	CNMG190612-PM		●	●	▲	▲
	CNMG190616-PM		●	●	▲	▲
	CNMG120408-PR		●	●	▲	
	CNMG120412-PR		●	●	▲	
	CNMG120416-PR		●	●	▲	
	CNMG160608-PR		●	●	▲	
	CNMG160612-PR		●	●	▲	
	CNMG160616-PR		●	●	▲	
	CNMG190608-PR		●	●	▲	▲
	CNMG190612-PR		●	●	▲	▲
	CNMG190616-PR		●	●	▲	▲
	CNMM190616-PR		●	●	▲	
	CNMM250924-PR					▲
	CNMM250724-PR					▲

刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	CNMG120404		●	●	▲	
	CNMG120408		●	●	▲	
	CNMG120412		●	●	▲	
	CNMG160608		●	●	▲	
	CNMG160612		●	●	▲	
	CNMG160616		●	●	▲	
	CNMG190608		●	●	▲	
	CNMG190612		●	●	▲	
	CNMG190616		●	●	▲	
		CNMG190616		●	●	▲
	DNMG110404PF/TM		●	●	▲	
	DNMG110408PF/TM		●	●	▲	
	DNMG150404PF/TM		●	●	▲	
	DNMG150408PF/TM		●	●	▲	
	DNMG150604-PF		●	●	▲	
	DNMG150608-PF		●	●	▲	
		DNMG110404-PM		●		▲
		DNMG110408-PM		●		▲
		DNMG110412-PM		●		▲
		DNMG150404-PM		●		▲
	DNMG150408-PM		●		▲	
	DNMG150412-PM		●		▲	
	DNMG150604-PM		●		▲	
	DNMG150608-PM		●		▲	
	DNMG150612-PM		●		▲	
		DNMG150408-PR		●	●	▲
		DNMG150412-PR		●	●	▲
		DNMG150608-PR		●	●	▲
		DNMG150612-PR		●	●	▲
		DNMG150616-PR		●	●	▲
	DNMG110408		●	●	▲	
	DNMG150404		●	●	▲	
	DNMG150408		●	●	▲	
	DNMG150412		●	●	▲	
	DNMG150608		●	●	▲	
	DNMG150612		●	●	▲	

▲主推牌号 ●可选牌号 ▲Featured grade ●ptinal grade

## 产品型号 Product Model

刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	SNMG120404-PF		●	●	▲	
	SNMG120404-TM		●	●	▲	
	SNMG120404-PM		●		▲	
	SNMG120408-PM		●		▲	
	SNMG120412-PM		●		▲	
	SNMG150608-PM		●		▲	
	SNMG150612-PM		●		▲	
	SNMG190612-PM		●		▲	
	SNMG120408-PR		●	●	▲	
	SNMG120412-PR		●	●	▲	
	SNMG150608-PR		●	●	▲	
	SNMG150612-PR		●	●	▲	
	SNMG150616-PR		●	●	▲	
	SNMG190612-PR		●	●	▲	
	SNMM190624-PR		●	●	▲	
	SNMM250724-PR					▲
	SNMM250924-PR					▲
	SNMG120404		●	●	▲	
	SNMG120408		●	●	▲	
	SNMG120412		●	●	▲	
	SNMG120416		●	●	▲	
	SNMG150608		●	●	▲	
	SNMG150612		●	●	▲	
	SNMG190612		●	●	▲	
	SNMG190616		●	●	▲	
	SNMG250724		●	●	▲	
	SNMG250924		●	●	▲	

刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	TNMG160404-PF		●	●	▲	
	TNMG160408-PF		●	●	▲	
	TNMG160404-TM		●	●	▲	
	TNMG160408-TM		●	●	▲	
	TNMG160404-PM		●		▲	
	TNMG160408-PM		●		▲	
	TNMG160412-PM		●		▲	
	TNMG220404-PM		●		▲	
	TNMG220408-PM		●		▲	
	TNMG220412-PM		●		▲	
	TNMG220416-PM		●		▲	
	TNMG160408-PR		●	●	▲	
	TNMG160412-PR		●	●	▲	
	TNMG220408-PR		●	●	▲	
	TNMG220412-PR		●	●	▲	
	TNMG220416-PR		●	●	▲	
	TNMG270612-PR		●	●	▲	
	TNMG160404		●	●	▲	
	TNMG160408		●	●	▲	
	TNMG160412		●	●	▲	
	TNMG220408		●	●	▲	
	TNMG220412		●	●	▲	
	TNMG220416		●	●	▲	
	VNMG160404-TM		●	●	▲	
	VNMG160408-TM		●	●	▲	
	VNMG160404-PF		●	●	▲	
	VNMG160408-PF		●	●	▲	
	VNMG160404-PM		●		▲	
	VNMG160408-PM		●		▲	
	VNMG160412-PM		●		▲	
	VNMG160408-PR		●	●	▲	
	VNMG160412-PR		●	●	▲	

▲主推牌号 ●可选牌号 ▲Featured grade ●ptinal grade

## 产品型号 Product Model

刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	VNMG160404	●	●	▲		
	VNMG160408	●	●	▲		
	VNMG160412	●	●	▲		
	WNMG060404-PF	●	●	▲		
	WNMG060408-PF	●	●	▲		
	WNMG060404-TM					
	WNMG060404-TM					
	WNMG060408-PM	●		▲		
	WNMG080404-PM	●		▲		
	WNMG080408-PM	●		▲		
	WNMG080412-PM	●		▲		
	WNMG080408-PR	●	●	▲		
	WNMG080412-PR	●	●	▲		
	WNMG080404	●	●	▲		
	WNMG080408	●	●	▲		
	WNMG080412	●	●	▲		
	CCMT060202-TF	▲				
	CCMT060204-TF	▲				
	CCMT09T304-TF	▲				
	CCMT09T308-TF	▲				
	CCMT120404-TF	▲				

刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	CCMT060204-TM	●	●	●	▲	
	CCMT060208-TM	●	●	●	▲	
	CCMT09T304-TM	●	●	●	▲	
	CCMT09T308-TM	●	●	●	▲	
	CCMT120404-TM	●	●	●	▲	
	CCMT120408-TM	●	●	●	▲	
	CPMT090308-TM	●	●	●	▲	
	CCMT060208-TR	●	●	●	▲	
	CCMT09T304-TR	●	●	●	▲	
	CCMT09T308-TR	●	●	●	▲	
	CCMT120408-TR	●	●	●	▲	
	CCMT120412-TR	●	●	●	▲	
	DCMT070204-TF	▲				
	DCMT11T302-TF	▲				
	DCMT11T304-TF	▲				
	DCMT070204-TM	●	●	●	▲	
	DCMT070208-TM	●	●	●	▲	
	DCMT11T304-TM	●	●	●	▲	
	DCMT11T308-TM	●	●	●		
	DCMT11T304-TR	●	●	●	▲	
	DCMT11T308-TR	●	●	●	▲	
	SCMT09T304-TF	▲				
	SCMT09T308-TF	▲				
	SCMT120404-TF	▲				
	SCMT09T304-TM	●	●	●	▲	
	SCMT09T308-TM	●	●	●	▲	
	SCMT120404-TM	●	●	●	▲	
	SCMT120408-TM	●	●	●	▲	
	SCMT120412-TM	●	●	●	▲	

▲主推牌号 ●可选牌号 ▲Featured grade ●pinial grade

## 产品型号 Product Model

刀片外形 Insert Shape	型号 Type	P				
		P2115	P2125	P2325	P2325S	P2425
	SCMT09T304-TR	●	●	●	▲	
	SCMT09T308-TR	●	●	●	▲	
	SCMT120404-TR	●	●	●	▲	
	SCMT120408-TR	●	●	●	▲	
	SCMT120412-TR	●	●	●	▲	
	TCMT110202-TF	▲				
	TCMT110204-TF	▲				
	TCMT16T304-TF	▲				
	TCMT16T308-TF	▲				
	TCMT090204-TM	●	●	●	▲	
	TCMT090208-TM	●	●	●	▲	
	TCMT110204-TM	●	●	●	▲	
	TCMT110208-TM	●	●	●	▲	
	TCMT16T304-TM	●	●	●	▲	
	TCMT16T308-TM	●	●	●	▲	
	TCMT16T312-TM	●	●	●	▲	
	TCMT16T308-TR	●	●	●	▲	
	TCMT220408-TR	●	●	●	▲	
	VBMT160404-TF	▲				
	VBMT160408-TF	▲				
	VBMT110304-TM	●	●	●	▲	
	VBMT160404-TM	●	●	●	▲	
	VBMT160408-TM	●	●	●	▲	
	VBMT160412-TM	●	●	●	▲	
	VCMT110302-TF	▲				
	VCMT110304-TF	▲				
	VCMT160404-TF	▲				
	VCMT160404-TM	●	●	●	▲	
	VCMT160408-TM	●	●	●	▲	

刀片外形 Insert Shape	型号 Type	P					
		P2115	P2125	P2325	P2325S	P2425	P1205H
	VBMT160404-TR	●	●	●	▲		
	VBMT160408-TR	●	●	●	▲		
	RCMX0803M			▲	●		
	RCMX1003M			▲	●		
	RCMX1204M-Q			▲	●		
	RCMX1606M-Q			▲	●		
	RCMX2006M-Q			▲	●		
	RCMX2507M-Q			▲	●		
	RCMX3209M-Q			▲	●		
	RCMT0803M			▲	●		
	RCMT1606M-Q			▲	●		
	TBGH060202L						▲
	TPGH080202L						▲
	TPGH080204L						▲
	TPGH090202L						▲
	TPGH090204L						▲
	TPGH110302L						▲
	TPGH110304L						▲
	175.32-191940-22						▲
	175.32-191940-28						▲
	KNUX160405L11		▲	●			
	KNUX160405R11		▲	●			

▲主推牌号 ●可选牌号 ▲Featured grade ●pinial grade



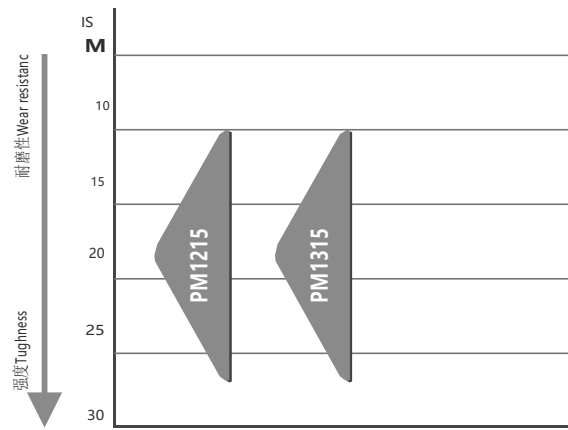
ISO车削 ISO Turning

# 不锈钢加工



## > PM1215

高C含量细晶粒的硬质合金基体·具有很好的刃口强度·搭配热稳定性好的PVD含硅涂层·具有摩擦系数小·纳米硬度高等特点；  
连续工况下不锈钢材料的半精车削加工及切槽加工；  
适用于钢·不锈钢材料的铣削及钻削加工。  
High C content and fine WC grain substrate, gives wonderful cutting edge strength, combines with good thermal stability silicon coating, it has very small coefficient of friction, and good nanohardness.  
Good at stainless steel semi-finishing turning, parting and grooving processing, preferred grade for steel and stainless steel milling and drilling.

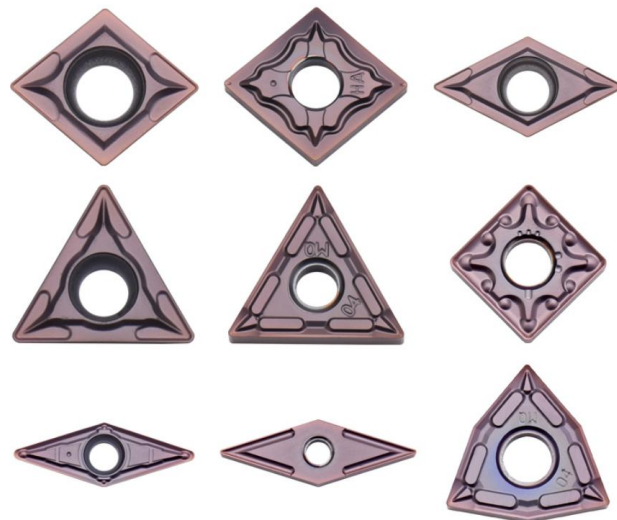


## > PM1315

高C含量细晶粒硬质合金基体·具有很好的刃口强度·搭配全新的PVD AlTiN涂层·具有摩擦系数小·抗氧化温度高·纳米硬度高·突出的耐磨和通用性能等优点；适用于钢·不锈钢材料的铣削加工。  
High C content and fine WC grain substrate, gives wonderful cutting edge strength, combines with new AlTiN coating, it has very small coefficient of friction, high antioxidant temperature, and good nanohardness.  
Preferred grade for steel and stainless steel milling and drilling.



中C高立方相含量硬质合金基体搭配薄的MT-TiCN和薄的Al<sub>2</sub>O<sub>3</sub>涂层·经特殊后处理工艺·具有较好的耐磨性能和特殊的外观·大大降低的摩擦阻力·并易于加工识别。  
适用于不锈钢材料的高速连续车削加工。  
Medium cubic phase content, and high cubic content carbide substrate combine with thin TiCN and Al<sub>2</sub>O<sub>3</sub> treated by special after coating treatment, which gives insert wonderful wearing resistance.  
Preferred grade for stainless steel turning at high speed.



- MA
- MS
- MM
- MQ
- MV



### -MA MS MM



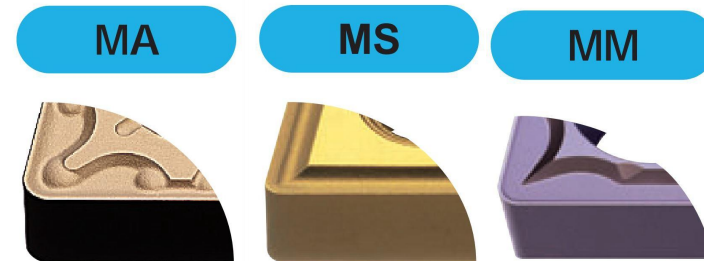
#### 不锈钢切削中第一推荐槽型

经典不锈钢合金钢用槽刀片，刃口扁平棱边刃形，兼备耐磨性耐破损性。

#### The first recommended geometry in stainless steel cutting

Classic stainless steel alloy steel groove, flat edge, and resistance

Abrasion resistance, breakage resistance.



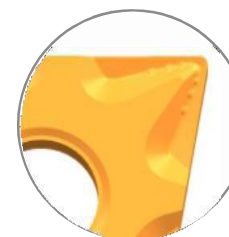
### -MF

特殊前角和刃倾角设计；  
刀片刃口锋利，切削阻力小，可获得很好的表面质量。

Special designed rake angle and cutting edge inclination;

Sharp cutting edge, small cutting force;

Good machining surface quality.



### -SF

双前角三维槽型设计；  
刃口锋利，切削力低；  
有效解决了积屑瘤和加工硬化等加工难点；  
刃倾角的设计，很好地控制了切屑流向，获得高质量的加工表面。

Three-dimensional designed with double rake angle;  
Sharp cutting edge and lower cutting resistance;  
Efficiently solved build up edge, work hardening and other machining problems.

Cutting edge inclination design is good to control chip flow direction and obtains excellent surface quality.



### -TF

刃口锋利，切削轻快；  
独特的槽型结构，小切深具有优秀的断屑处理能力。  
Special chip breaker structure makes excellent chip breaking even at small cutting depth.  
Sharp cutting edge, cutting smoothly and quickly.

### 半精加工 Semi-Finishing

### -MM2

刃口锋利并兼顾了一定的强度；  
具有很好的抗冲击能力；  
切削寿命长。

Special chipbreaker design to keep cutting edge sharp and safe;

Good anti impact resistance;

Excellent tool life time;



### -TM

平刃设计，有较好的耐磨性和耐破损性；  
刃倾角组合结构，能很好的控制切屑流向。

Flat cutting edge design, good wear-resistance and breakage resistance.

Inclination angle combination structure can control the chip breaking direction efficiently.

### -MF

独特的槽型设计；兼顾了刀片刃口的锋利性和强度；有效解决了不锈钢加工中中断屑、切削温度高、粘刀、加工硬化等加工难点，可以获得更高的加工效率。

Special chipbreaker design to keep both sharp cutting edge and increased blade intensity; Efficiently solved chip breaking, high cutting temperature, sticking, work hardening and other machining problems. It has very excellent efficiency



产品型号 Product Model

刀片外形 Insert Shape	型号 Type	M	
		PM1215	PM1315
	CNMG120404-MF	●	
	CNMG120408-MF	●	
	CNMG120404-MF	●	▲
	CNMG120408-MF	●	▲
	CNMG090304-SF	●	▲
	CNMG120404-SF	●	▲
	CNMG090304-MS	●	
	CNMG120404-MS	●	
	CNMG120404-MM	●	▲
	CNMG120408-MM	●	▲
	CNMG160608-MM	●	▲
	CNMG090308-MF	●	▲
	CNMG120404-MF	●	▲
	CNMG120408-MF	●	▲
	CNMG120412-MF	●	▲
	CNMG160612-MF	●	▲
	CNMG120408-MR	●	▲
	CNMG120412-MR	●	▲
	DNMG150604-MF	●	▲
	DNMG150608-MF	●	▲
	DNMG150404-SF	●	▲
	DNMG150604-SF	●	▲
	DNMG110404-MM	●	▲
	DNMG110408-MM	●	▲
	DNMG150404-MM	●	▲
	DNMG150408-MM	●	▲
	DNMG150604-MM	●	▲
	DNMG150608-MM	●	▲
	DNMG150612-MM	●	▲

刀片外形 Insert Shape	型号 Type	M	
		PM1215	PM1315
	DNMG110408-MF	●	▲
	DNMG150408-MF	●	▲
	DNMG150608-MF	●	▲
	SNMG120408-MF	●	▲
	SNMG120404-MM	●	▲
	SNMG120408-MM	●	▲
	SNMG120412-MM	●	▲
	SNMG150608-MM	●	▲
	SNMG120408-MF	●	▲
	TNMG160404-MF	●	▲
	TNMG160408-MF	●	▲
	TNMG160404-MA	●	
	TNMG160408-MA	●	
	TNMG160404-SF	●	▲
	TNMG160408-SF	●	▲
	TNMG160404-MS	●	
	TNMG160408-MS	●	
	TNMG160404-MM	●	▲
	TNMG160408-MM	●	▲
	TNMG220404-MM	●	▲
	TNMG220408-MM	●	▲
	TNMG220412-MM	●	▲
	TNMG160404-MF	●	▲
	TNMG160408-MF	●	▲
	TNMG160412-MF	●	▲
	TNMG220404-MF	●	▲
	TNMG220408-MF	●	▲
	TNMG160408-MR	●	▲

▲主推牌号 ●可选牌号 ▲Featured grade ●Optional grade

产品型号 Product Model

刀片外形 Insert Shape	型号 Type	M	
		PM1215	PM1315
	VNMG160404-SF	●	▲
	VNMG160404-MS	●	
	VNMG160404-MM	●	▲
	VNMG160408-MM	●	▲
	VNMG160408-MF	●	▲
	VNMG160404-MS	●	▲
	VNMG160408-MS	●	▲
	WNMG080404-MA	●	▲
	WNMG080408-MA	●	▲
	WNMG080404-MF	●	▲
	WNMG080408-MF	●	▲
	WNMG080404-SF	●	▲
	WNMG080408-SF	●	▲
	WNMG080404-MS	●	▲
	WNMG080408-MS	●	▲
	WNMG060408-MM	●	▲
	WNMG060412-MM	●	▲
	WNMG080404-MM	●	▲
	WNMG080408-MM	●	▲
	WNMG060408-MF	●	▲
	WNMG080408-MF	●	▲
	WNMG080412-MF	●	▲
	WNMG080408-MR	●	▲
	WNMG080412-MR	●	▲
	CCMT060202-SF	●	▲
	CCMT060204-SF	●	▲
	CCMT09T302-SF	●	▲
	CCMT09T304-SF	●	▲
	CCMT09T308-SF	●	▲
	CCMT120404-SF	●	▲

刀片外形 Insert Shape	型号 Type	M	
		PM1215	PM1315
	CCMT060202-TF	●	▲
	CCMT060204-TF	●	▲
	CCMT09T304-TF	●	▲
	CCMT09T308-TF	●	▲
	CCMT120404-TF	●	▲
	CCMT120408-TF	●	▲
	CCMT060204TM/MM	●	▲
	CCMT060208TM/MM	●	▲
	CCMT09T304TM/MM	●	▲
	CCMT09T308TM/MM	●	▲
	CCMT120404TM/MM	●	▲
	CCMT120408TM/MM	●	▲
	CPMT090308-TM	●	▲
	DCMT070204-SF	●	▲
	DCMT11T304-SF	●	▲
	DCMT070202-MV	●	▲
	DCMT070204-TF	●	▲
	DCMT11T302-TF	●	▲
	DCMT11T304-TF	●	▲
	DCMT070204TM/MM	●	▲
	DCMT070208TM/MM	●	▲
	DCMT11T304TM/MM	●	▲
	DCMT11T308TM/MM	●	▲
	SCMT09T304-TF	●	▲
	SCMT09T308-TF	●	▲
	SCMT120404-TF	●	▲
	SCMT09T304-TM	●	▲
	SCMT09T308-TM	●	▲
	SCMT120404-TM	●	▲
	SCMT120408-TM	●	▲
	SCMT120412-TM	●	▲

▲主推牌号 ●可选牌号 ▲Featured grade ●Optional grade



产品型号 Product Model

刀片外形 Insert Shape	型号 Type	M	
		PM1215	PM1315
	TCMT110202-TF	●	▲
	TCMT110204-TF	●	▲
	TCMT16T304-TF	●	▲
	TCMT16T308-TF	●	▲
	TCMT090204TM/MM	●	▲
	TCMT090208TM/MM	●	▲
	TCMT110204TM/MM	●	▲
	TCMT110208TM/MM	●	▲
	TCMT16T304TM/MM	●	▲
	TCMT16T308TM/MM	●	▲
	TCMT16T312TM/MM	●	▲
	VBMT160404-MM2	●	▲
	VBMT160404-TF	●	▲
	VBMT160408-TF	●	▲
	VBMT110304TM/MM	●	▲
	VBMT160404TM/MM	●	▲
	VBMT160408TM/MM	●	▲
	VBMT160412TM/MM	●	▲
	VCMT110302-TF	●	▲
	VCMT110304-TF	●	▲
	VCMT160404-TF	●	▲
	VCMT160404TM/MM	●	▲
	VCMT160408TM/MM	●	▲

▲主推牌号 ●可选牌号 ▲Featured grade ●Optional grade

# PM1320

PVD不锈钢通用车削新牌号

**New**



IS车削 IS Turning

铸铁加工 Iron Cast

> K3210

细晶和高硬度化的化学涂层，基板具有很好的耐磨性，在广阔的加工领域实现了稳定和长寿命。

灰口铸铁、球墨铸铁加工（连续、轻断续工况）、  
灰口铸铁、球墨铸铁加工（小零件开粗）。

Fine-grained and high-hardened chemical coating, the substrate has good wear resistance, and achieves stability and long life in a wide range of processing fields.

Gray cast iron, ductile iron machining (continuous, light interrupted conditions)

Gray cast iron, ductile iron machining (small parts roughing)

> K3215

中等颗粒的WC晶粒的硬质合金基板搭配厚TiCN和厚的结构化Al<sub>23</sub>涂层，经特殊后处理工艺，具有突出的耐磨性能。

适用于高线速度下铸铁材料的半精加工。

The medium-grained substrate combined with thick TiCN and textured Al<sub>23</sub>, after special after coating treatment, it has outstanding wearing resistance. Suitable for high speed semi-finishing cast iron cutting under stable work conditions.

材料组 Material Group	K3210	K3215	K3220
	切削速度/ Cutting Speed m/min		
K1	200-480	180-450	160-420
K2	180-460	170-430	150-400
K3	160-430	160-400	150-380

> K3220

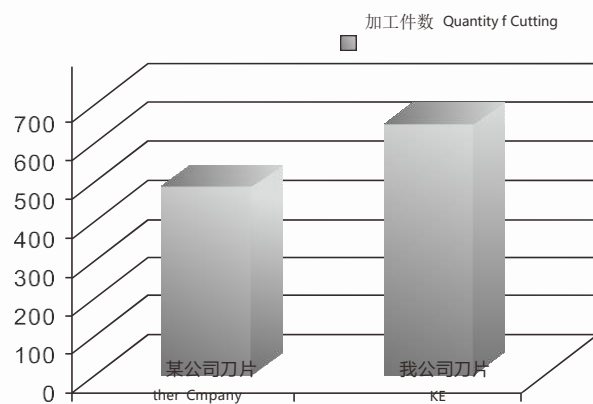
采用细晶α-Al<sub>23</sub>膜强化的MTCVD TiCN-Al<sub>23</sub>涂层，基板为一种韧性很好的硬质合金。

灰口铸铁、球墨铸铁加工（强断续工况）、  
灰口铸铁、球墨铸铁加工（开粗、黑皮工况）。

MTCVD TiCN-Al<sub>23</sub> coating strengthened by fine-grained α-Al<sub>23</sub> film, the substrate is a kind of hard alloy with good toughness

Gray cast iron, ductile iron machining (strong interrupted conditions) Gray cast iron, ductile iron machining (roughing, black skin conditions)

与某公司加工对比 Contrast with the Company



对比试验 Contrast Test

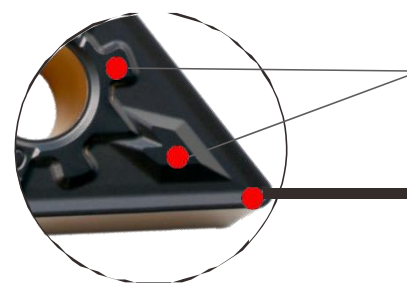
加工数量对比 Processing Quantity Contrast		
对比单位 Unit of Contrast	某公司刀片 Other Company	我公司刀片 KE
加工件数 Quantity of Cutting	420	600

刀片型号/ Insert Type:  
CCMT09T308-TR K3220  
工件/ Material:  
压缩机法兰（车内孔）  
Compressor flange (inner turning)  
材料/ Workpiece: Fc250  
切削参数/ Cutting Parameters:  
Vc=320m/min  
Ap=2mm  
Fn=0.2mm/r



专业的槽型设计 Professional Chip Breaker Design

精-半精加工 Finishing & Semi-Finishing



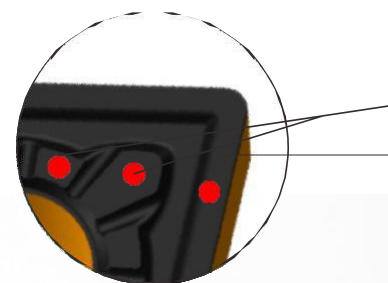
-KM

宽的支撑面，夹持稳定，防止切削崩刃  
Wide support surface for stable clamping and preventing chipping

锋利的刃口，提升工件表面质量；  
连续加工中抗崩刃性能优异；  
高质量的表面粗糙度。

Sharp cutting edge, improve workpiece surface quality  
Excellent chipping resistance in continuous machining  
High quality surface roughness

粗加工 Roughing



-KR

宽的支撑面，夹持稳定，防止切削崩刃  
Wide support surface for stable clamping and preventing chipping

优化刃宽可用于高速、大进给加工；  
断续加工中抗崩刃性能优异；  
提升加工稳定性，延长刀具寿命。

Optimized edge width for high-speed, high-feed machining  
Excellent chipping resistance in interrupted machining  
Improve machining stability and extend tool life

细晶结构柱状TiCN涂层

Columnar TiCN coating with fine grain structure

先进的表面光滑处理技术  
Advanced surface smoothing technology

全新的专用硬质合金基板  
New special carbide substrate

细晶定向生长的Al<sub>23</sub>涂层  
Coating with oriented growth of fine grain



产品型号 Product Model

刀片外形 Insert Shape	型号 Type	K		
		K3210	K3215	K3220
	CNMG120404-KM	▲		▲
	CNMG120408-KM	▲		▲
	CNMG120412-KM	▲		▲
	CNMG120408-KR	▲		▲
	CNMG120412-KR	▲		▲
	CNMG120416-KR	▲		▲
	CNMG160612-KR	▲		▲
	CNMA120404		▲	
	CNMA120408		▲	
	CNMA120412		▲	
	CNMA120416		▲	
	CNMA160608		▲	
	CNMA160612		▲	
	CNMA160616		▲	
	CNMA190612		▲	
	CNMA190616		▲	
	DNMG150404-KM	▲		▲
	DNMG150408-KM	▲		▲
	DNMG150604-KM	▲		▲
	DNMG150608-KM	▲		▲
	DNMG150612-KM	▲		▲
	DNMG150408-KR	▲		▲
	DNMG150412-KR	▲		▲
	DNMG150608-KR	▲		▲
	DNMG150612-KR	▲		▲
	DNMA150404		▲	
	DNMA150408		▲	
	DNMA150604		▲	
	DNMA150608		▲	
	DNMA150612		▲	
	SNMG120404-KM	▲		▲
	SNMG120408-KM	▲		▲
	SNMG120412-KM	▲		▲

刀片外形 Insert Shape	型号 Type	K		
		K3210	K3215	K3220
	SNMG120408-KR	▲		▲
	SNMG120412-KR	▲		▲
	SNMG120416-KR	▲		▲
	SNMG150616-KR	▲		▲
	SNMG190612-KR	▲		▲
	SNMA120408		▲	
	SNMA120412		▲	
	SNMA120416		▲	
	TNMG160404-KM	▲		▲
	TNMG160408-KM	▲		▲
	TNMG160412-KM	▲		▲
	TNMG160408-KR	▲		▲
	TNMG160412-KR	▲		▲
	TNMA160404		▲	
	TNMA160408		▲	
	TNMA160412		▲	
	TNMA220408		▲	
	TNMA220412		▲	
	VNMG160404-KM	▲		▲
	VNMG160408-KM	▲		▲
	VNMG160408-KR	▲		▲
	VNMG160412-KR	▲		▲
	VNMA160408		▲	

▲主推牌号 ●可选牌号 ▲Featured grade ●ptinal grade

产品型号 Product Model

刀片外形 Insert Shape	型号 Type	K		
		K3210	K3215	K3220
	WNMG080404-KM	▲		▲
	WNMG080408-KM	▲		▲
	WNMG080412-KM	▲		▲
	WNMG080408-KR	▲		▲
	WNMG080412-KR	▲		▲
	WNMA080408		▲	
	WNMA080412		▲	
	CNMG120404		▲	
	CNMG120408		▲	
	CNMG120412		▲	
	CNMG160608		▲	
	CNMG160612		▲	
	CNMG160616		▲	
	CNMG190608		▲	
	CNMG190612		▲	
	CNMG190616		▲	
	DNMG110408		▲	
	DNMG150404		▲	
	DNMG150408		▲	
	DNMG150412		▲	
	DNMG150608		▲	
	DNMG150612		▲	
	SNMG120404		▲	
	SNMG120408		▲	
	SNMG120412		▲	
	SNMG120416		▲	
	SNMG150608		▲	
	SNMG150612		▲	
	SNMG190612		▲	
	SNMG190616		▲	
	SNMG250724		▲	
	SNMG250924		▲	

刀片外形 Insert Shape	型号 Type	K		
		K3210	K3215	K3220
	TNMG160404		▲	
	TNMG160408		▲	
	TNMG160412		▲	
	TNMG220408		▲	
	TNMG220412		▲	
	TNMG220416		▲	
	VNMG160404		▲	
	VNMG160408		▲	
	VNMG160412		▲	
	WNMG080404		▲	
	WNMG080408		▲	
	WNMG080412		▲	
	CCMT060208-TR		▲	
	CCMT09T304-TR		▲	
	CCMT09T308-TR		▲	
	CCMT120408-TR		▲	
	CCMT120412-TR		▲	
	DCMT11T304-TR		▲	
	DCMT11T308-TR		▲	
	SCMT09T304-TR		▲	
	SCMT09T308-TR		▲	
	SCMT120404-TR		▲	
	SCMT120408-TR		▲	
	SCMT120412-TR		▲	
	TCMT16T308-TR		▲	
	TCMT220408-TR		▲	
	VBMT160404-TR		▲	
	VBMT160408-TR		▲	

▲主推牌号 ●可选牌号 ▲Featured grade ●ptinal grade



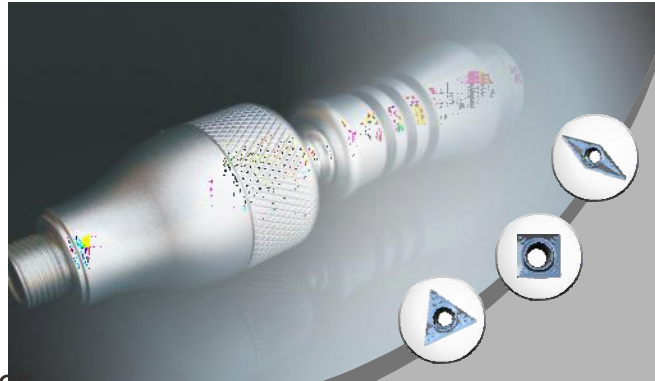
IS车削 IS Turning

有色金属加工 Aluminum Ally

> NK110

细颗粒碳化钨与超细钴粉结合，通过低压烧结实现内部组织的完全致密。具有硬度高、强度高、导热性好等特点，适用于有色金属、铸铁等材料的精、半精加工。

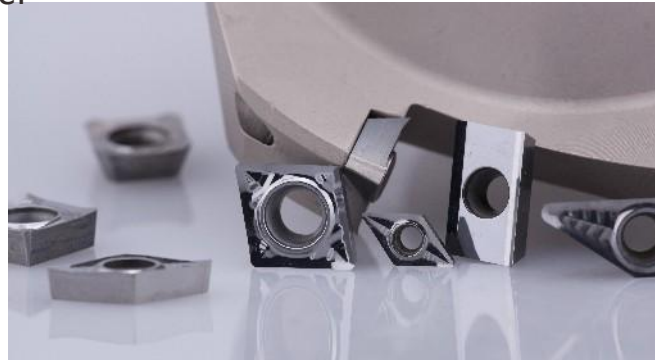
Fine particles of tungsten carbide and ultrafine cobalt powder combined, realize fully dense internal organization by low-pressure sintering. With high hardness, high strength, good thermal conductivity and other characteristics, is suitable for non-ferrous metals, iron and other materials, semi-finish machining precision.



> LH /LHC槽型 LH/LHC Chip Breaker

独一无二的三维断屑槽及大的容屑槽设计，有效保证了刀片的断屑和排屑性能；大前角及后角使刀片刃口更加锋利，切削更加轻松，并有效降低了切削负载；刃倾角的设计有效控制了切屑的流向；刀片前刀面的镜面效果，有效降低了切屑与前刀面发生粘结的可能性，并有效遏制了积屑瘤的产生，从而可以获得高的表面质量及刀片寿命。

Unique three-dimensional chip breaker and sufficient chip pocket design, efficiently guarantee chip break and chip removal performance. Large rake angle and back angle from sharp cutting edge, it's optimized quick cutting and lower cutting loading. Special design in cutting edge inclination can efficiently control flow direction of chip. Mirror effect in rake angle can efficiently reduce the possibility of binding and restrain built-up edge, consequently obtain good surface quality and insert life.



对比试验 Contrast Test

被加工材料：纯铝			
切削参数 Cutting Parameter	Vc=600m/min	Ap=0.3mm	Fn=0.2mm/r
Cutting			
Surface Quality			
某公司同类产品 the Company's Similar Products			
◎ 刀片断屑更好 切屑更流畅，加工表面更光滑。 KE are better in finished surface quality, breaking chip, and controlling chip.			

产品型号 Product Model

刀片外形 Insert Shape	型号 Type	N110
	APGT113502PDER-G2	▲
	APGT113504PDER-G2	▲
	APGT113508PDER-G2	▲
	APGT160408PDER-G2	▲
	APKT160402-LH/LHC	▲
	APKT160404-LH/LHC	▲
	APKT160408-LH/LHC	▲
	CCGT060202-LH/LHC	▲
	CCGT060204-LH/LHC	▲
	CCGT09T302-LH/LHC	▲
	CCGT09T304-LH/LHC	▲
	CCGT09T308-LH/LHC	▲
	CCGT120404-LH/LHC	▲
	CCGT120408-LH/LHC	▲
	DCGT070202-LH/LHC	▲
	DCGT070204-LH/LHC	▲
	DCGT11T302-LH/LHC	▲
	DCGT11T304-LH/LHC	▲
	DCGT11T308-LH/LHC	▲
	RCGT1204M-LH/LHC	▲
	SEKT1204-LH/LHC	▲

刀片外形 Insert Shape	型号 Type	N110
	SCGT09T304-LH/LHC	▲
	SCGT09T308-LH/LHC	▲
	SCGT120408-LH/LHC	▲
	TCGT090204-LH/LHC	▲
	TCGT110202-LH/LHC	▲
	TCGT110204-LH/LHC	▲
	TCGT16T304-LH/LHC	▲
	TCGT16T308-LH/LHC	▲
	VCGT110302-LH/LHC	▲
	VCGT110304-LH/LHC	▲
	VCGT160402-LH/LHC	▲
	VCGT160404-LH/LHC	▲
	VCGT160408-LH/LHC	▲
	VCGT160412-LH/LHC	▲
	VCGT220530-LH/LHC	▲

▲主推牌号 ●可选牌号 ▲Featured grade ●optimal grade



铣削加工 Milling/Pressing



> PM1315 **HOT!**

高C含量细晶粒硬质合金基体·具有很好的刃口强度；  
搭配全新的PVD AlTiN涂层·具有摩擦系数小·抗氧化温度高·纳米硬度高·突出的耐磨和通用性能等优点；

钢、不锈钢材料的铣削加工。

High C content and fine WC grain substrate, gives wonderful cutting edge strength, combines with new AlTiN coating, it has very small coefficient of friction, high antioxidant temperature, and good nan hardness. Preferred grade for steel and stainless steel milling and drilling.

> PM1325

全新的硬质合金基体·具有均匀分布的细晶粒碳化物·均衡材质的耐磨性与抗冲击性能·更具突出的通用性；

纳米复合多层结构涂层·具有更高的耐磨性并兼顾冲击韧性；

特殊的低应力涂层工艺·提高了涂层微观抗崩性·使刀具更具稳定性。

Newly carbide substrate has uniform dense and fine-grained, which balances the wear resistance and impact resistance of the material, and has more outstanding versatility;

Nano-composite multi-layer structural coating with higher wear resistance and impact toughness;

The special low-stress coating process improves the micro-chipping resistance of the coating and makes the tool more stable;

> P1630

全新升级涂层技术·P类铣削新王者；

增强刀尖设计·抗冲击性能优异；

改良性侧面·贴合稳定；

搭配配套开发钢制品·性能更优。

Newly upgraded coating technology, the new king of steel milling;

Enhanced tip design, excellent impact resistance;

Improved side, stable fit;

With supporting development of steel products, the performance is better;

> PK2202

高C含量超细硬质合金基体·具有高的刃口强度·搭配PVD的AlTiN涂层·具有突出的耐磨性能；

钢件及铸铁材料的轻型铣削加工。

High C content and ultra fine WC grain substrate, gives wonderful cutting edge strength, combines with PVD AlTiN coating, it has outstanding wearing resistance.

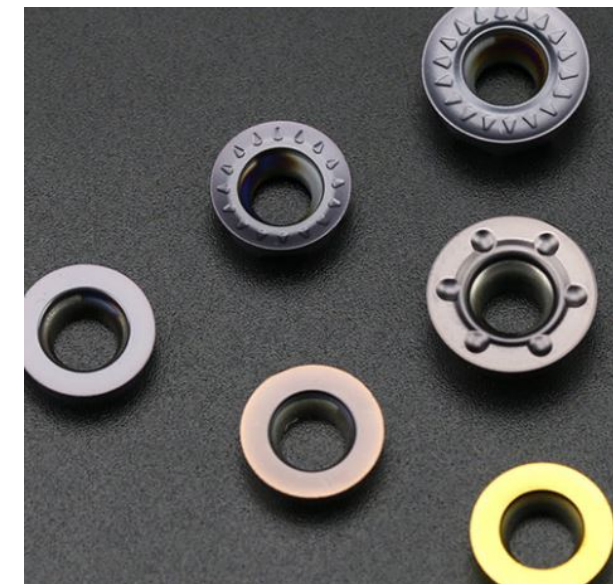
Suitable for steel and cast iron slight milling.

产品型号 Product Model

刀片外形 Insert Shape	型号 Type	涂层牌号 Grade				
		PM1215	PM1315	PM1325	P1630	PK2202
	APKT150412-HT-Q1	●	▲			●
	APKT150412-PM	●	▲			●
	APMT11T308-ZM	●	▲			●
	APMT160408-ZM	●	▲			●
	APMT1135PDER-DU		▲		▲	
	APMT1604PDER-DU		▲		▲	
	APMT1604PDER-M2		▲	▲		
	APMT1604PDER-H2		▲	▲		
	RCKT1606M-PM	●	▲			●
	RCKT1204M-PR	●	▲			●
	RCKT1606M-PR	●	▲			●
	RDMW0803M-QBG		▲	▲		●
	RDKW10T3M-QBG		▲	▲		●
	RDKW1204M-QBG		▲	▲		●
	RDKW1604M-QBG		▲	▲		●
	RDKW1605M-QBG		▲	▲		●
	RDKW2006M-Q		▲	▲		●
	RDKX10T3M-QBG		▲	▲		●
	RDKX1204M-QBG		▲	▲		●
	RDKX1605M-QBG		▲	▲		●

刀片外形 Insert Shape	型号 Type	涂层牌号 Grade				
		PM1215	PM1315	PM1325	P1630	PK2202
	RPEW0802M-QBG	●	▲			●
	RPEW1003M-QBG	●	▲			●
	RPMW1003M-SD	●	▲			●
	RPKT1204M-SD	●	▲			●
	RDMW0501M-SD				▲	
	RDMW0702M-SD				▲	
	RDMW0803M-SD				▲	
	RDMW10T3M-SD				▲	

▲主推牌号 ●可选牌号 ▲Featured grade ●optimal grade



> PM1215

高C含量细晶粒的硬质合金基体·具有很好的刃口强度；

搭配热稳定性好的PVD含硅涂层·具有摩擦系数小·纳米硬度高等特点；







连续工况下不锈钢材料的半精车削加工及切槽加工；钢、不锈钢材料的铣削及钻削加工。

High C content and fine WC grain substrate, gives wonderful cutting edge strength, combines with good thermal stability silicon coating, it has very small coefficient of friction, and good nan hardness.











Good for stainless steel semi-finishing turning, parting and grinding/pressing, preferred grade for steel and stainless steel milling and drilling.

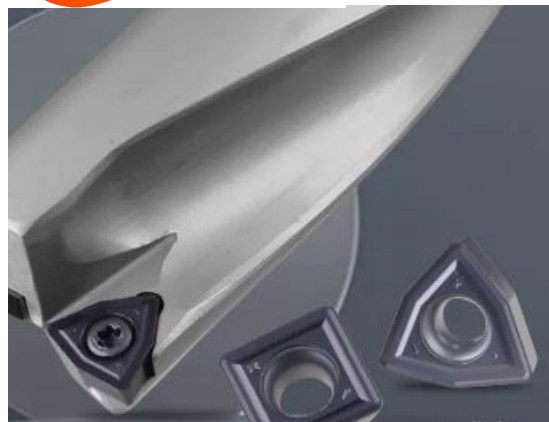


产品型号 Product Model

刀片外形 Insert Shape	型号 Type	涂层牌号 Grade				
		PM1215	PM1315	P1325	P1630	P2202
	SEET09T308PER-PR	●	▲			●
	SEET120308PER-PF	●	▲			●
	SEET120308PER-PM	●	▲			●
	SEKN1203AFTN	●	▲			●
	SEKN1504AFN-Q	●	▲			●
	SEKT1204AFTN-XM	●	▲			●

刀片外形 Insert Shape	型号 Type	涂层牌号 Grade				
		PM1215	PM1315	P1325	P1630	P2202
	SEKT1204-PM	●	▲			●
	SEKT1204-PR	●	▲			●
	SNMX1205ANN-M	●	▲			●
	SNMX1205ANN-R	●	▲			●
	SNMX1205ZNN-M	●	▲			●
	SNMX1205ZNN-R	●	▲			●
	SDMT120412-SM	●	▲			●
	SDMT09T312-PM	●	▲			●
	SDMT120412-PM	●	▲			●
	SEET12T3-QPF	●	▲			●
	SEET12T3-QPM	●	▲			●

	SPMT050204-PM	▲				
	SPMT060204-PM	▲				
	SPMT07T308-PM	▲				
	SPMT090408-PM	▲				
	SPMT110408-PM	▲				
	SPMT140512-PM	▲				
	WCMT030208-ZK	▲				
	WCMT040208-ZK	▲				
	WCMT050308-ZK	▲				
	WCMT06T308-ZK	▲				
	WCMT080412-ZK	▲				



产品型号 Product Model

刀片外形 Insert Shape	型号 Type	涂层牌号 Grade				
		PM1215	PM1315	P1325	P1630	P2202
	SEET12T3-QPR	●	▲			●
	SPKN1203EDSKR	●	▲			●
	SPKN1203EDSKL	●	▲			●
	SPKN1504EDL	●	▲			●
	SPKN1504EDR	●	▲			●
	SPKN1504EDS11PL	●	▲			●
	SPKN1504EDS11PR	●	▲			●
	SPKR1504EDL-YR	●	▲			●
	SPKR1504EDR-YR	●	▲			●
	SPMT090308	●	▲			●
	SPMT120408-HT-1	●	▲			●

刀片外形 Insert Shape	型号 Type	涂层牌号 Grade				
		PM1215	PM1315	P1325	P1630	P2202
	TPKN2204PDSR-Q1	▲	▲			●
	TPKN2204PDTR-Q1	▲	▲			●
	WPGT080615ZSR	●	▲			●

▲主推牌号 ●可选牌号 ▲Featured grade ●ptinal grade

