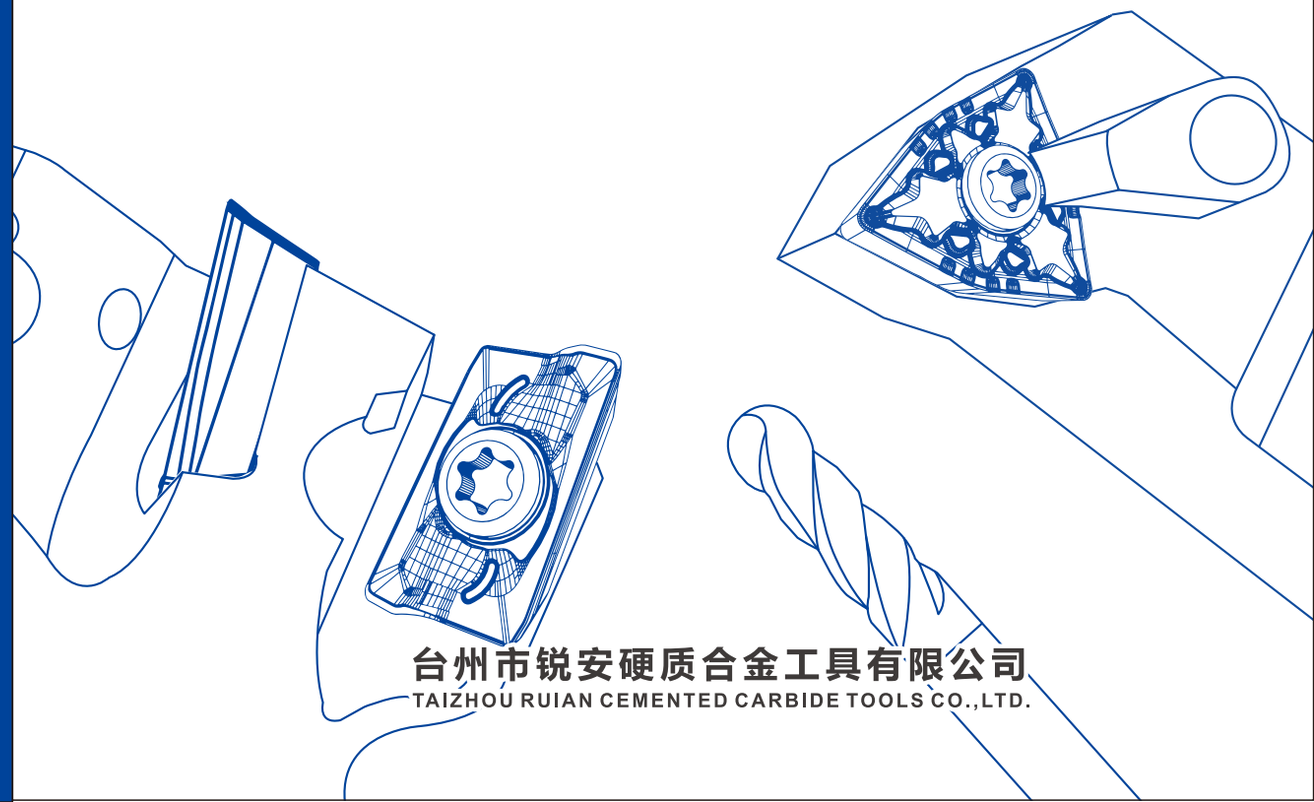
锐不可挡
安全高效

台州市锐安硬质合金工具有限公司
TAIZHOU RUIAN CEMENTED CARBIDE TOOLS CO.,LTD.

官方网址:www.tzruian.com
服务热线:0576-8165 1888转 8017/8018
公司地址:浙江省温岭市城西街道兴安路28号

RUIAN

2025
切削刀具产品册
CUTTING TOOLS PRODUCT BOOK



台州市锐安硬质合金工具有限公司
TAIZHOU RUIAN CEMENTED CARBIDE TOOLS CO.,LTD.

COMPANY PROFILE

公司简介

16000
占地面积
Cover an area

200+
先进设备
Advanced equipment

60+
国家专利
National patent

400+
专业人员
Professional person

1000+
服务全球
Serving the world

台州市锐安硬质合金工具有限公司是一家国家级高新技术企业，公司创建于2013年，坐落在温岭市省级高新工业园区，公司现有员工400余人，技术人员约占15%，工程师20余名，公司拥有现代化的标准厂房，先后从日本、德国、瑞士、澳大利亚等国家引进了高性能精密金属切削刀具生产设备、检测设备及软件系统200多台（套），总价值近3亿元，建成了高性能硬质合金数控刀片生产线及高精密硬质合金整体刀具生产线。锐安刀具采用国际先进的生产工艺流程，综合装备水平国际一流，是一家以自主知识产权为依托，专注材料研发，致力刀具设计，服务机械加工行业的综合型企业。

国家高新技术企业
National High-tech Enterprise

国家专精特新“小巨人"企业
National Specialized and Innovative "Little Giant" Enterprise

公司于2015年通过了ISO9001-2008国际质量体系认证、环境管理体系认证，拥有国家授权专利超过60余项,居同行业前列，专利技术涵盖公司现行生产的所有刀片系列。目前，锐安刀具已具备年产7000万片高性能涂层刀片及100万支高精度整体硬质合金刀具的生产能力，同时公司自主知识产品实现了基体材质开发和涂层技术的多项重大突破和进展，产品性能达到国际先进水平，广泛应用于汽车、船舶、航空航天、轨道交通、发电设备、模具制造，石油，矿山，冶金，军工等机械加工行业，为全球企业提供优质、高效的金属切削刀具。

Taizhou ruian Cemented Carbide Tools Co.,Ltd, a high-tech enterprise on a national level, was founded in 2013. It is located in provincial high-tech industrial park in Wenling. Currently, the company owns more than 400 employees, among which technicians account for about 15% and engineers account for more than 20 people. The company owns modernized standard factories and acquired more than 200 sets of high performance precision metal cutting tool production equipment, inspection equipment and software system worth nearly 300 million yuan from countries such as Japan, Germany, Switzerland, Australia, etc. It also built production line for cemented carbide inserts , high precision end mills and drills. The company applies world-class advanced production technique procedure and the comprehensive equipment level of the company belongs to the top level in the world. It is a comprehensive enterprise which relies on independent intellectual property rights, focuses on material research and tool design and services for the processing industries.

The company got ISO9001-2008 international quality system certification, environmental management system certification. It owns more than 60 nationally authorized patents, ranks in the front row within the industry. All the inserts series manufactured by company own the corresponding patent technology. Currently, Ruian Tools owns annual production capacity of 70 million high performance coating inserts and 1 million high precision integration carbide tool. At the same time, the independent knowledge product manufactured by the company achieves multiple major breakthrough and progress in substrate material development and coating technology, its products performance reaches internationally advanced level. Products are widely used in automobile, shipping, aerospace, rail transport, electric power-generating equipment, mould manufacturing, oil, mine, metallurgy, military industry etc. Ruian Tools is providing excellent,efficient metal cutting tools for global enterprises.

高硬铣削新产品

HIGH HARDNESS MILLING NEW PRODUCTS

纳米多层结构涂层
Nano multilayer structure coating

RP1205推荐用于HRC45-60
RP1205 is recommended for HRC45-60

RP1215推荐用于HRC35-45
RP1215 is recommended for HRC35-45

全新HM高硬铣削专用槽型
New HM high hardness milling special chip-breaker

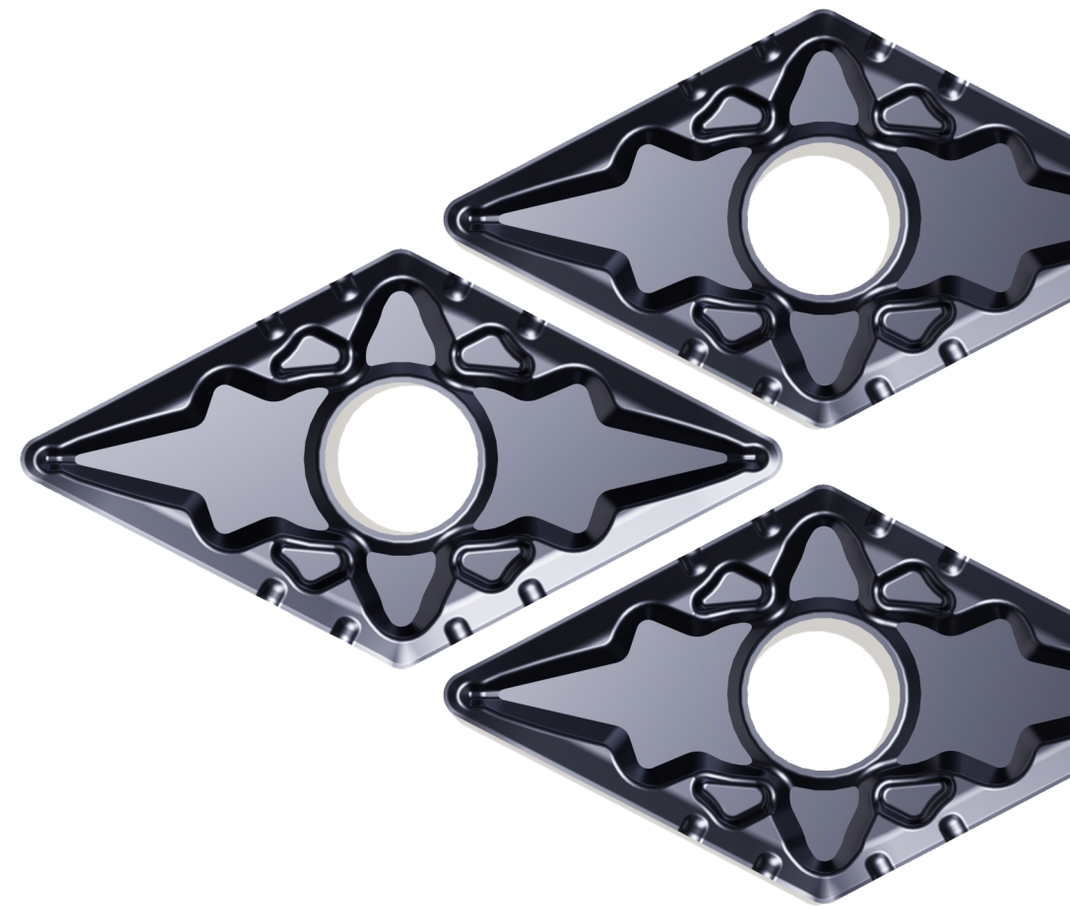
高硬车削新产品

HIGH HARD TURNING NEW PRODUCTS

GS槽型+RP1201
GS +RP1201

适用于热处理后高硬度40-55HRC钢
Suitable for high hardness 40-55HRC steel after heat treatment

半精至精加工。
semi-finish to finish.



切断切槽刀片

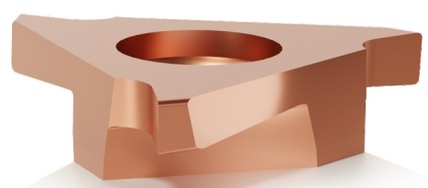
PARTING AND GROOVING INSERTS

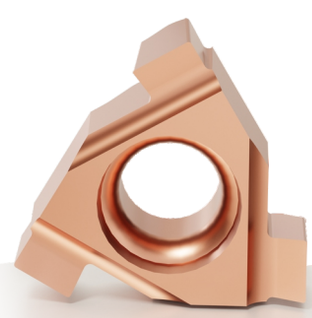
全新刃口处理工艺搭配优化纳米涂层带来

New cutting g edge processing with optimized nano coating

更优的切槽体验

Bring a better cutting experience





重载车削刀片

HEAVY DUTY TURNING INSERTS

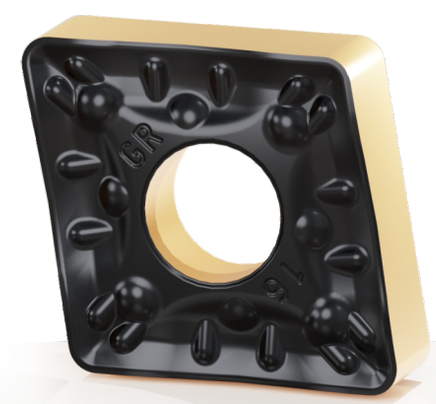
MR槽型 重载车削,适应高强度工况

MR chip-breaker heavy-duty turning, suitable for high-strength working conditions

GR槽型 通用材料轻载粗加工,排屑流畅

GR chip-breaker universal material light load rough machining, smooth chip removal

-MR



-GR

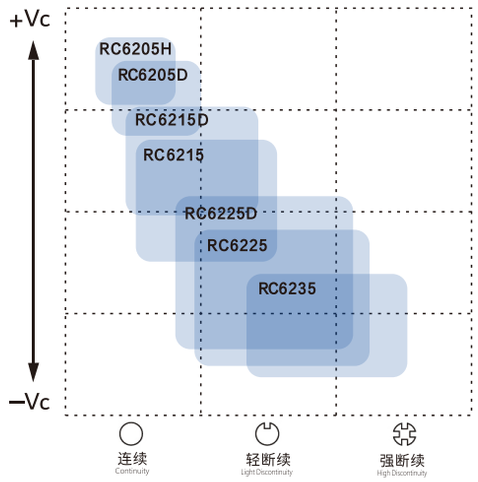
目 录
CONTENTS

钢件车削刀片
STEEL TURNING INSERTS

牌号一览
Coating Grade

RP1201 PVD

- 全新纳米晶超高硬度WC-Co基体，独特的烧结工艺，保证超高硬度和组织均匀性，优化的表面处理工艺，提高膜基结合力。
- 整体双层涂层结构，TiAlN高韧性和高结合力TiAlN/TiAlSiN纳米多层结构，具备高硬度、超高抗氧化性、高热稳定性。
- 适用于热处理后高硬度HRC55-60钢半精至精加工。
- A brand new nanocrystalline ultra-high hardness WC Co matrix, with a unique sintering process to ensure ultra-high hardness and tissue uniformity, optimized surface treatment process to improve membrane substrate bonding strength.
- The overall double-layer coating structure is TiAlN with high toughness and high bonding strength. The TiAlN/TiAlSiN nano multilayer structure has high hardness, ultra-high oxidation resistance, and high thermal stability.
- Suitable for semi-finishing to finishing of high hardness HRC55-60 steel after heat treatment.



RC6205H CVD

- 采用具有高耐热性的低Co高固溶体含量的梯度硬质合金基体，搭配增厚的新一代高性能α-Al2O3/MT-TiCN化学涂层，具有极高的硬度、耐磨性和抗高温塑性变形能力。
- 适用于硬度HRC45-60度高硬度钢材以及铸铁精加工。
- Adopting a gradient hard alloy matrix with high heat resistance and low Co high solid solution content, combined with a thickened new generation of high-performance materials α-Al2O3/MT TiCN chemical coating has extremely high hardness, wear resistance, and resistance to high-temperature plastic deformation.
- Suitable for finishing of high hardness steel with a hardness of HRC45-60 degrees and cast iron.

RC6215 CVD

- 较高立方相含量梯度硬质合金基体，具有高强度和良好的抗冲击性能，搭配较厚α-Al2O3/MT-TiCN涂层，具有良好耐磨性和抗高温塑性变形能力;
- 推荐用于钢件材料的半精加工到粗加工。
- The gradient hard alloy substrate with high cubic phase content has high strength and good impact resistance, and is thick α- Al2O3 / MT-TiCN coated, with good abrasion resistance and high temperature plastic deformation resistance.
- It is recommended for semi finishing and roughing of steel materials.

RC6215D CVD

- 较高立方相含量梯度硬质合金基体，具有高强度和良好的抗冲击性能，搭配优化的具有特定织构的α-Al2O3层和超细耐磨MT-TiCN涂层，经过特殊的后处理工艺，具有良好耐磨性和抗高温塑性变形能力;
- 推荐用于钢件材料的高速半精加工。
- The gradient hard alloy substrate with high cubic phase content has high strength and good impact resistance, and is matched with the optimized cemented carbide matrix with specific texture α- Al2O3 layer and ultra-fine wear-resistant MT TiCN coatings, after special post-treatment process, have good wear resistance and high temperature plastic deformation resistance.
- It is recommended for high-speed semi-finishing of steel materials.

RC6315 CVD

- 采用功能梯度硬质合金基体，涂覆超耐磨α-Al2O3涂层；
- 推荐用于正角刀片的精加工。
- Adopting functional gradient hard alloy substrate, coated with super wear-resistant α- Al2O3 coatings.
- It is recommended for finishing of positive angle insert.

牌号一览
Coating Grade

RC6125 CVD

- 较高立方相和粘结相含量的高韧性梯度硬质合金基体，具有高强度和良好的抗冲击性能，搭配混合型α-Al2O3/MT-TiCN涂层，具有很好的可靠性;
- 推荐用于钢件材料的半精加工到粗加工。
- The high toughness gradient hard alloy substrate with high content of cubic phase and bonding phase has high strength and good impact resistance. It has good reliability when combined with the mixed α-Al2O3/MT-TiCN coatings.
- It is recommended for semi-finishing and roughing of steel materials.

RC6225 CVD

- 较高立方相和粘结相含量的高韧性梯度硬质合金基体，具有高强度和良好的抗冲击性能，搭配中等厚度的α-Al2O3/MT-TiCN涂层，具有杰出的可靠性和耐磨性；
- 推荐用于钢件材料的半精加工到粗加工。
- High toughness gradient hard alloy substrate with high content of cubic phase and bonding phase, high strength and good impact resistance, matched with medium thickness α-Al2O3/MT-TiCN coatings, with excellent reliability and wear resistance.
- It is recommended for semi-finishing and roughing of steel materials.

RC6225D CVD

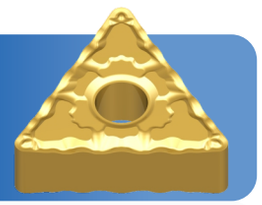
- 较高立方相和粘结相含量的高韧性梯度硬质合金基体，具有高强度和良好的抗冲击性能，搭配优化的具有特定织构的α-Al2O3层和超细耐磨MT-TiCN涂层，经过特殊的后处理工艺，具有杰出的可靠性和耐磨性；
- 推荐用于钢件材料的高速半精加工到粗加工。
- High toughness gradient hard alloy substrate with high content of cubic phase and bonding phase, high strength and good impact resistance, and optimized α- Al2O3 layer and ultra-fine wear-resistant MT-TiCN coatings, after special post-treatment process, have outstanding reliability and wear resistance.
- It is recommended for high-speed semi-finishing and roughing of steel materials.

RC6235 CVD

- 高立方相含量和高粘结相含量的超高韧性梯度硬质合金基体，搭配较薄厚度的α-Al2O3和高韧性MT-TiCN涂层，具有极高的刃口强度和抗冲击性能；
- 用于钢件材料粗加工。
- Super high toughness gradient hard alloy substrate with high cubic phase content and high binder phase content, matched with thin α- Al2O3 and high toughness MT-TiCN coatings, with extremely high edge strength and impact resistance.
- It is used for roughing of steel materials.

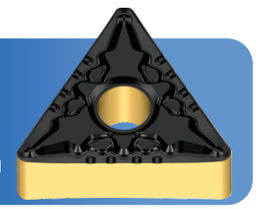
槽型一览
Chip Breakers

PF
精加工
Finishing



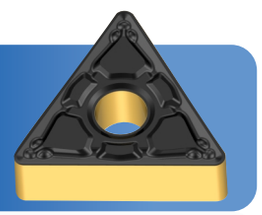
- 刀片刃口锋利，切削阻力低，工件表面精度高；
- 三维凸点断屑结构，在小切深、小进给条件下具备出色的断屑控制性能。
- The insert edge is sharp; the cutting resistance is low; and the workpieces have precise surfaces;
- The 3D bump chip breaking structure has excellent chip control performance under the conditions of small cutting depth and small feed.

GS
精/半精加工
Finishing/Semi-Finishing



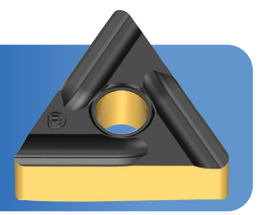
- 曲线刃设计，锋利变前角结构，切削流畅。
- 特殊的刃口处理工艺，获得较好的加工表面光洁度。
- Curved blade design, sharp and variable front angle structure, removing chip smoothly.
- Special cutting edge treatment process to obtain better surface.

GM
半精加工
Semi-Finishing



- 刀片刃口强度高，正前角结构，切削阻力低；
- 独特的断屑槽结构，排屑范围宽，槽型通用性高。
- High cutting edge strength; positive rake angle structure; low cutting resistance;
- Unique chip breaking groove structure; wide chip removal range; high universality .

R/L-S
半精加工
Semi-Finishing



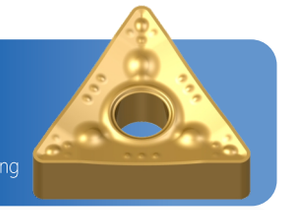
- 有切削方向，能有效控制切屑排除；
- 切削锋利性好，前刀面耐磨损性强的槽型结构。
- With cutting direction, it can effectively control chip removal;
- The chip breakers structure with good cutting sharpness and strong wear resistance of the rake face.

槽型一览
Chip Breakers

GR
粗加工
Roughing

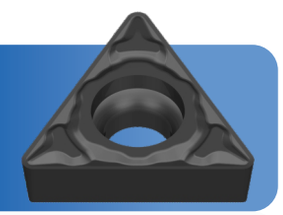
- 切削刃强度高，用于断续切削，锻造表皮或氧化皮材料的加工；
- 大切深和高进给条件下切屑控制性能出色。
- High cutting edge strength. It is used for intermittent cutting, forging skin or oxide skin material processing;
- The chip control performance is excellent under the conditions of large cutting depth and high feed.

HR
重载加工
Heavy Duty Processing



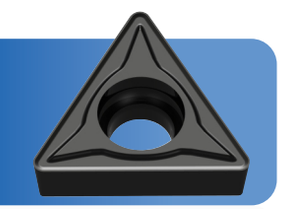
- 切削刃坚固，可用于高切削负荷的粗加工应用，金属切除率高；
- 曲线形切削刃使切削力降低，配合独特的断屑台设计，切屑排出性能良好。
- The cutting edge is solid, which can be used for rough processing applications with high cutting load, and the metal removal rate is high;
- The curved cutting edge reduces the cutting force. With the unique chip breaker design, the chip removal performance is good.

PF
精加工
Finishing



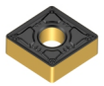
- 大前角结合直棱边刃口，切削锋利性高；
- 小切深、低进给工况下，断屑性能优异，可获得良好的加工表面质量。
- Large front angle combined with straight edge, high cutting sharpness;
- Under the working conditions of small cutting depth and low feed, the chip breaking performance is excellent, and good processing surface quality can be obtained.

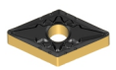
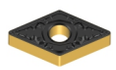
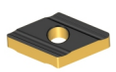
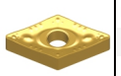
—
半精加工
Semi-Finishing



- 扁平棱边与大前角组合，刀片同时兼备优良的刀刃强度与切削锋利性；
- 刀尖部位凸点断屑槽结合大容屑槽设计，实现广泛领域的稳定切削。
- The combination of flat edge and large front angle make the insert have excellent edge strength and cutting sharpness at the same time;
- The convex chip breaker at the insert nose is combined with the design of large chip holding space to achieve stable cutting in a wide range of fields.

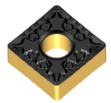
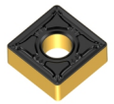
产品型号
Product Model

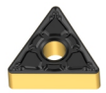
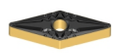
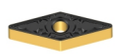
形状 Shape	型号 Type	RP1201	RC6205H	RC6215D	RC6315	RC6125	RC6225	RC6225D	RC6235
	CNMG120404-PF					●			
	CNMG120408-PF					●			
	CNMG120404-GS			●					
	CNMG120408-GS			●					
	CNMG090304-GM								
	CNMG090308-GM								
	CNMG120404-GM						●	○	
	CNMG120408-GM						●	○	
	CNMG120412-GM						●	○	
	CNMG120416-GM								
	CNMG160608-GM								
	CNMG160612-GM								
	CNMG160616-GM								
	CNMG120404R-S								
	CNMG120404L-S								
	CNMG120408R-S						●	○	
	CNMG120408L-S						●	○	
	CNMG120408-GR						●		○
	CNMG120412-GR						●		○
	CNMG120416-GR						●		○
	CNMM120412-HR								
	CNMM120416-HR								
	CNMM190612-HR						●		○
	CNMM190616-HR						●		○
	CNMM160616-GR								
	CNMM190608-GR								
	CNMM190612-GR								
	CNMM190616-GR							●	
	CNMM190624-GR							●	
	CNMM190924-GR								
	CNMM190932-GR								

形状 Shape	型号 Type	RP1201	RC6205H	RC6215D	RC6315	RC6125	RC6225	RC6225D	RC6235
	DNMG150404-PF					●			
	DNMG150408-PF					●			
	DNMG150404-GS			●					
	DNMG150408-GS			●					
	DNMG150404-GM						●	○	
	DNMG150408-GM						●	○	
	DNMG150412-GM						●	○	
	DNMG150604-GM								
	DNMG150608-GM								
	DNMG150612-GM								
	DNMG150404R-S								
	DNMG150404L-S								
	DNMG150408R-S						●	○	
	DNMG150408L-S						●	○	
	DNMG150408-GR						●		○
	DNMG150412-GR						●		○
	DNMG150416-GR						●		○
	DNMG150608-GR								
	DNMG150612-GR								
	DNMG150616-GR								
	DNMM150612-HR						○		○
	DNMM150616-HR						○		○

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

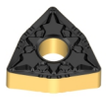
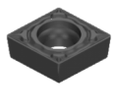
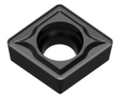
产品型号
Product Model

形状 Shape	型号 Type	RP1201	RC6205H	RC6215D	RC6315	RC6125	RC6225	RC6225D	RC6235
	SNMG120404-PF					●			
	SNMG120408-PF					●			
	SNMG120404-GS			●					
	SNMG120408-GS			●					
	SNMG120404-GM						●	○	
	SNMG120408-GM						●	○	
	SNMG120412-GM						●	○	
	SNMG120416-GM								
	SNMG150608-GM								
	SNMG150612-GM								
	SNMG150616-GM								
	SNMG120404R-S								
	SNMG120404L-S								
	SNMG120408R-S						●	○	
	SNMG120408L-S						●	○	
	SNMG120408-GR						●		○
	SNMG120412-GR						●		○
	SNMG120416-GR						●		○
	SNMM120412-HR								
	SNMM120416-HR								
	SNMM190612-HR								
	SNMM190616-HR						●		○
	SNMM190624-HR						●		○
	SNMM150612-GR								
	SNMM190608-GR								
	SNMM190612-GR								
	SNMM190616-GR						●		
	SNMM190624-GR						●		
	SNMM250924-GR								
	SNMM250932-GR								

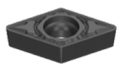
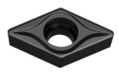
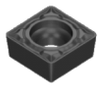
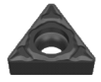
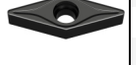
形状 Shape	型号 Type	RP1201	RC6205H	RC6215D	RC6315	RC6125	RC6225	RC6225D	RC6235
	TNMG160404-PF					●			
	TNMG160408-PF					●			
	TNMG160404-GS			●					
	TNMG160408-GS			●					
	TNMG160404-GM						●	○	
	TNMG160408-GM						●	○	
	TNMG160412-GM						●	○	
	TNMG220408-GM								
	TNMG220412-GM								
	TNMG220416-GM								
	TNMG160404R-S								
	TNMG160404L-S								
	TNMG160408R-S						●	○	
	TNMG160408L-S						●	○	
	TNMG160408-GR						●		○
	TNMG160412-GR						●		○
	TNMG220412-GR								
	TNMG220416-GR								
	TNMM160408-HR								
	TNMM160412-HR								
	TNMM220408-HR								
	TNMM220412-HR						●		○
	TNMM220416-HR						●		○
	VNMG160404-PF					●			
	VNMG160408-PF					●			
	VNMG160412-PF								
	VNMG160404-GS			●					
	VNMG160408-GS			●					
	VNMG160404-GM						●	○	
	VNMG160408-GM						●	○	
	VNMG160412-GM						●	○	

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

产品型号
Product Model

形状 Shape	型号 Type	RP1201	RC6205H	RC6215D	RC6315	RC6125	RC6225	RC6225D	RC6235
	WNMG060404-PF								
	WNMG060408-PF								
	WNMG080404-PF					●			
	WNMG080408-PF					●			
	WNMG080412-PF								
	WNMG080404-GS			●					
	WNMG080408-GS			●					
	WNMG060404-GM								
	WNMG060408-GM								
	WNMG080404-GM						●	○	
	WNMG080408-GM						●	○	
	WNMG080412-GM						●	○	
	WNMG080416-GM								
	WNMG080404R-S								
	WNMG080404L-S								
	WNMG080408R-S						●	○	
	WNMG080408L-S						●	○	
	WNMG080408-GR						●		○
	WNMG080412-GR						●		○
	WNMG080416-GR						●		○
	CCMT060204-PF								
	CCMT060208-PF								
	CCMT09T304-PF				●				
	CCMT09T308-PF				●				
	CCMT120404-PF				●				
	CCMT120408-PF				●				
	CCMT120412-PF								
	CCMT060204								
	CCMT060208						●		
	CCMT09T304						●		
	CCMT09T308						●		
	CCMT120404						●		
	CCMT120408						●		
	CCMT120412								

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

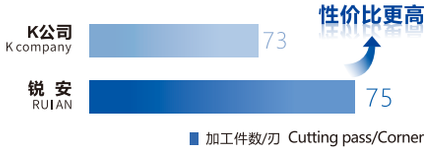
形状 Shape	型号 Type	RP1201	RC6205H	RC6215D	RC6315	RC6125	RC6225	RC6225D	RC6235
	DCMT070204-PF								
	DCMT070208-PF								
	DCMT11T304-PF				●				
	DCMT11T308-PF				●				
	DCMT11T312-PF								
	DCMT070204								
	DCMT070208						●		
	DCMT11T304						●		
	DCMT11T308						●		
	DCMT11T312								
	SCMT09T304-PF								
	SCMT09T308-PF				●				
	SCMT120404-PF				●				
	SCMT120408-PF				●				
	SCMT09T304						●		
	SCMT09T308						●		
	SCMT120404						●		
	SCMT120408						●		
	SCMT120412								
	TCMT090204-PF								
	TCMT090208-PF				●				
	TCMT110204-PF				●				
	TCMT110208-PF				●				
	TCMT16T304-PF				●				
	TCMT16T308-PF								
	TCMT090204								
	TCMT090208						●		
	TCMT110204						●		
	TCMT110208						●		
	TCMT16T304						●		
	TCMT16T308						●		
	TCMT16T312								
	VBMT110304-PF								
	VBMT110308-PF								
	VBMT160404-PF				●				
	VBMT160408-PF				●				
	VBMT110304								
	VBMT110308								
	VBMT160404						●		
	VBMT160408						●		
	VBMT160412						●		

加工案例
Application Cases

案例一：细长轴精车外圆
Finish Turning External Of Slender Shaft

刀片型号 Insert Model	DNMG150404-PF RC6215
被加工材料 Processed Materials	20CrMo
加工方式 Processing Method	连续加工 Continuously processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=150m/min f=0.2mm/r ap=0.25mm

已加工工件

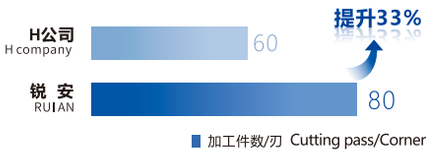


案例二：半精车外圆/端面
Semi-finish Turning External /End Face

刀片型号 Insert Model	WNMG080408-GM RC6225
被加工材料 Processed Materials	55#钢 Steel 55#
加工方式 Processing Method	连续、断续加工 Continuously and intermittent processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=220m/min f=0.25mm/r ap=1.0mm

未加工工件

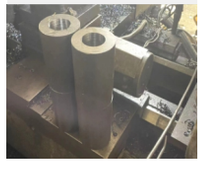
已加工工件



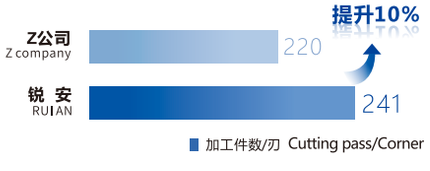
案例三：车外圆——齿轮件
Turning External——Gear Parts

刀片型号 Insert Model	TNMG160408R-S RC6125
被加工材料 Processed Materials	20CrMnTi
加工方式 Processing Method	连续加工 Continuously processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=190m/min f=0.25mm/r ap=1.5mm

未加工工件



已加工工件



不锈钢车削刀片
STAINLESS STEEL TURNING INSERTS

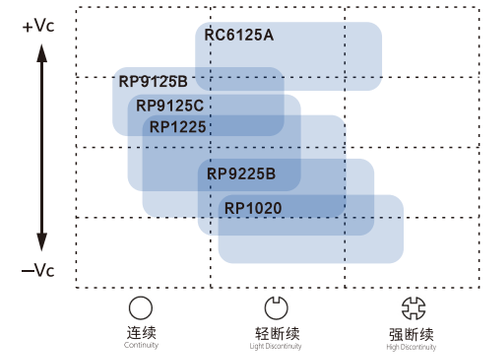
牌号一览
Coating Grade

RP1020 PVD
- 超细微晶合金基体与多层纳米TiAlN涂层结合。
- 具有高耐磨性和适中的抗崩刃。
- 适用于钢、不锈钢等材料的断续、连续加工。
- Ultra-fine microcrystal alloy substrate combines with multiple nanometer TiAlN coating, it owns higher abrasion resistance and middle anti-collapse blade.
- It is suitable for intermittent and continuous processing of steel and stainless steel etc. Materials.

RP1225 PVD
- TiAlN/TiAlSiN纳米多层梯度结构涂层,Si含量适中，摩擦系数低、纳米硬度高、抗剥落性能好。
- 搭配高Co超细晶硬质合金基体,具有摩擦系数小，抗氧化温度高，纳硬度高，突出的耐磨和通用性等优点。
- 适合不锈钢粗加工/半精加工。
- TiAlN/TiAlSiN nanometer coating with multiple-layer gradient structure. Its Si content is middle with lower friction coefficient,higher nanometer hardness, good anti-stripping performance.
- It is suitable for roughing/semi-finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained.

RP9125B PVD
- TiAlN/TiAlSiN复合多层结构涂层，涂层表层高Si含量，具有极高的耐热和抗氧化性能。
- 搭配高Co超细晶高硬度硬质合金基体。
- 适合不锈钢精加工。
- TiAlN/TiAlSiN composite multilayer structure coating, with high Si content on the surface layer, has extremely high heat resistance and oxidation resistance.
- Paired with a high Co ultrafine grain high hardness hard alloy matrix.
- Suitable for stainless steel finishing.

RP9225B PVD
- TiAlN/TiAlSiN复合多层结构涂层,Si含量适中,纳米硬度高、耐热抗氧化性能强。
- 搭配高Co超细晶硬质合金基体,保持良好耐磨性的同时提高抗冲击性。
- 适合不锈钢粗加工/半精加工。
- TiAlN/TiAlSiN composite multilayer structure coating with moderate Si content, high nano hardness, and strong heat resistance and oxidation resistance.
- Paired with a high Co ultrafine grain hard alloy matrix, it maintains good wear resistance while improving impact resistance.
- Suitable for roughing/semi finishing of stainless steel.

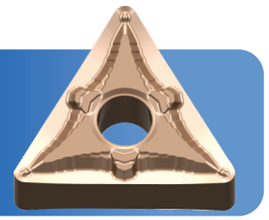


RC6125A CVD
- 薄MT-TiCN和超薄K-Al_2O_3涂层搭配。
- 较高Co含量和适中立方相含量的梯度结构合金基体。
- 具有优良抗冲击性和抗塑性变形能力。
- 独特的后处理工艺使刀片前刀面和刃线表面具有极低的粗糙度，有效阻止积屑瘤的产生。
- 适用于不锈钢的高速断续/连续加工。
- Gradient structure alloy substrate with higher Co content and appropriately cubic phase content,covers thinner MT-TiCN and super thinner κ-Al2O3 coating.It owns good impact resistance and capability of resistance to plastic.The unique post-processing technique makes the front tool face of the blade and the edge line own the lowest roughness, which can prevent the production of welding.
- It is suitable for high speed intermittent processing to stainless steel.

RP9125C PVD
- TiAlN/TiAlSiN纳米多层梯度结构涂层,Si含量适中摩擦系数低、纳米硬度高、耐热抗氧化性能强。
- 搭配高Co超细晶硬质合金基体,保持良好耐磨性的同时提高抗冲击性。
- 适合不锈钢半精/精加工。
- TiAlN/TiAlSiN nano multilayer gradient structure coating with moderate Si content, low friction coefficient, high nano hardness, and strong heat resistance and oxidation resistance.
- Paired with a high Co ultrafine grain hard alloy matrix, it maintains good wear resistance while improving impact resistance.
- Suitable for semi finishing/finishing of stainless steel.

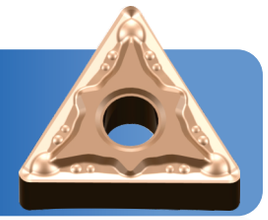
槽型一览
Chip Breakers

TS
精加工
Finishing



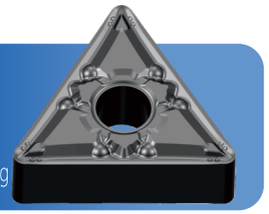
- 小切深，实现卷曲切屑；
- 刃口锋利，切削阻力低，获得良好的工件表面质量。
- Curling chips in small cutting depth condition.
- Sharp cutting edge, low cutting resistance, achieving good workpiece surface quality.

TM
半精加工
Semi-Finishing



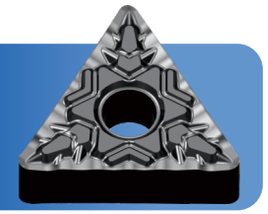
- 切削刃坚固，可用于高切削负荷的粗加工应用，金属切除率高；
- 曲线形切削刃使切削力降低，配合独特的断屑台设计，切屑排出性能良好。
- The cutting edge is solid, which can be used for roughing applications with high cutting load, and the metal removal rate is high;
- The curved cutting edge reduces the cutting force. With the unique chip breaker design, the chip discharge performance is good.

TF
精/半精加工
Finishing/Semi-Finishing



- 大前角设计，小切深加工亦能获得较好的卷屑效果；
- 正前角刃口结构，兼具强度与锋利性，实现较广泛的切削范围。
- Large rake design and smaller cutting depth process also can acquire better chip curling effect;
- The structure of positive rake angle edge both owns strength and sharpness to realize more widely cutting range.

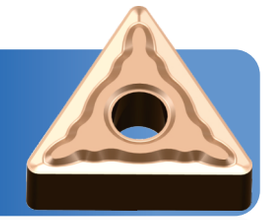
TG
精/半精加工
Finishing/Semi-Finishing



- 切削刃锋利，切削轻快，低阻力，切层处理能力优异；
- 独特的刃口处理技术，获得优秀的加工光洁度。
- The cutting edge is sharp with rapid cutting.ower resistance. Its cutting layer treatmentcapability is excellent;
- The unique edge treatment technique canacquire excellent process smoothness.

槽型一览
Chip Breakers

AMP
半精加工
Semi-Finishing

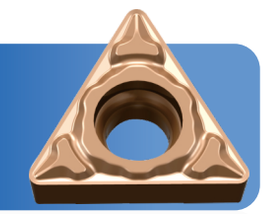


- 高强度的刃口结构，适用于不稳定工况加工；
- 较大的前角设计，获得较低的切削阻力。
- The edge structure with high strength is suitable for processing of unstable working condition;
- Larger rake design can acquire lower cutting resistance.

TR
粗加工
Roughing

- 刃口优化设计，兼具锋利性与强度；
- 推荐用于不锈钢断续加工及轻载粗加工。
- The cutting edge applies optimization design and owns both sharpness and strength;
- It is promoted to use for intermittent process and light loaded roughing of stainless steel.

PF
精加工
Finishing

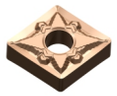
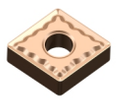


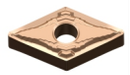
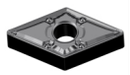
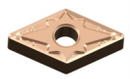
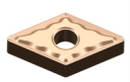
- 大前角结合直棱边刃口，切削锋利性高；
- 小切深、低进给工况下，断屑性能优异，可获得良好的加工表面质量。
- Large front angle combined with straight edge, high cutting sharpness;
- Under the working conditions of small cutting depth and low feed, the chip breaking performance is excellent, and good processed surface quality can be obtained.

—
半精加工
Semi-Finishing

- 扁平棱边与大前角组合，刀片同时兼备优良的刃刃强度与切削锋利性；
- 刀尖部位凸点断屑槽结合大容屑槽设计，实现广泛领域的稳定切削。
- The combination of flat edge and large front angle makes the blade have excellent edge strength and cutting sharpness at the same time;
- The convex chip breaker at the insert nose is combined with the design of large chip holding space to achieve stable cutting in a wide range of fields.

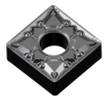
产品型号
Product Model

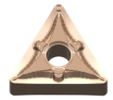
形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	CNMG120404-TS	○						
	CNMG120408-TS	○						
	CNMG120404-TF		○		●			
	CNMG120408-TF		○		●			
	CNMG120404-TG		○		●			
	CNMG120408-TG		○		●			
	CNMG090304-TM							
	CNMG090308-TM							
	CNMG120404-TM			○			○	
	CNMG120408-TM			○			●	
	CNMG120412-TM			○			●	
	CNMG160608-TM							
	CNMG160612-TM							
	CNMG160616-TM							
	CNMG090304-AMP							
	CNMG090308-AMP							
	CNMG120404-AMP			○			○	
	CNMG120408-AMP			○			●	
	CNMG120412-AMP			○			●	
	CNMG160608-AMP							
	CNMG160612-AMP							
	CNMG160616-AMP							
	CNMG120408-TR						○	●
	CNMG120412-TR						○	●
	CNMG160612-TR							
	CNMG160616-TR							

形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	DNMG150404-TS	○						
	DNMG150408-TS	○						
	DNMG150404-TF		○		●			
	DNMG150408-TF		○		●			
	DNMG150404-TG		○		●			
	DNMG150408-TG		○		●			
	DNMG110404-TM							
	DNMG110408-TM							
	DNMG110412-TM							
	DNMG150404-TM				○			○
	DNMG150408-TM				○			●
	DNMG150412-TM				○			●
	DNMG150416-TM							
	DNMG150604-TM							
	DNMG150608-TM							
	DNMG150612-TM							
	DNMG150616-TM							
	DNMG110404-AMP							
	DNMG110408-AMP							
	DNMG110412-AMP							
	DNMG150404-AMP				○			○
	DNMG150408-AMP				○			●
	DNMG150412-AMP				○			●
	DNMG150604-AMP							
	DNMG150608-AMP							
	DNMG150612-AMP							
	DNMG150408-TR						○	●
	DNMG150412-TR						○	●
	DNMG150608-TR							
	DNMG150612-TR							

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

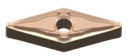
产品型号
Product Model

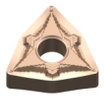
形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	SNMG120404-TS	○						
	SNMG120408-TS	○						
	SNMG120404-TF		○		●			
	SNMG120408-TF		○		●			
	SNMG120404-TG		○		●			
	SNMG120408-TG		○		●			
	SNMG090304-TM							
	SNMG090308-TM							
	SNMG120404-TM			○			○	
	SNMG120408-TM			○			●	
	SNMG120412-TM			○			●	
	SNMG120416-TM							
	SNMG150608-TM							
	SNMG150612-TM							
	SNMG150616-TM							
	SNMG090304-AMP							
	SNMG090308-AMP							
	SNMG120404-AMP			○			○	
	SNMG120408-AMP			○			●	
	SNMG120412-AMP			○			●	
	SNMG150608-AMP							
	SNMG150612-AMF							
	SNMG150616-AMP							
	SNMG120408-TR						○	●
	SNMG120412-TR						○	●
	SNMG150608-TR							
	SNMG150612-TR							

形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	TNMG160404-TS	○						
	TNMG160408-TS	○						
	TNMG160404-TF		○		●			
	TNMG160408-TF		○		●			
	TNMG160404-TG		○		●			
	TNMG160408-TG		○		●			
	TNMG110304-TM							
	TNMG110308-TM							
	TNMG160404-TM			○			○	
	TNMG160408-TM			○			●	
	TNMG160412-TM			○			●	
	TNMG160416-TM							
	TNMG220408-TM							
	TNMG220412-TM							
	TNMG220416-TM							
	TNMG110304-AMP							
	TNMG110308-AMP							
	TNMG160404-AMP			○			○	
	TNMG160408-AMP			○			●	
	TNMG160412-AMP			○			●	
	TNMG220408-AMP							
	TNMG220412-AMP							
	TNMG220416-AMP							
	TNMG160408-TR						○	●
	TNMG160412-TR						○	●
	TNMG220408-TR							
	TNMG220412-TR							

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

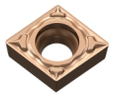
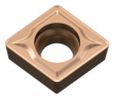
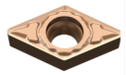
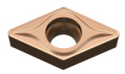
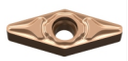
产品型号
Product Model

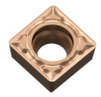
形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	VNMG160404-TS	○						
	VNMG160408-TS	○						
	VNMG160404-TF		○		●			
	VNMG160408-TF		○		●			
	VNMG160404-TG		○		●			
	VNMG160408-TG		○		●			
	VNMG110404-TM							
	VNMG110408-TM							
	VNMG160404-TM			○			○	
	VNMG160408-TM			○			●	
	VNMG160412-TM			○			●	
	VNMG160404-AMP			○			○	
	VNMG160408-AMP			○			●	
	VNMG160412-AMP			○			●	

形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	WNMG080404-TS	○						
	WNMG080408-TS	○						
	WNMG080404-TF		○		●			
	WNMG080408-TF		○		●			
	WNMG080404-TG		○		●			
	WNMG080408-TG		○		●			
	WNMG060404-TM							
	WNMG060408-TM							
	WNMG080404-TM			○			○	
	WNMG080408-TM			○			●	
	WNMG080412-TM			○			●	
	WNMG080416-TM							
	WNMG060404-AMP							
	WNMG060408-AMP							
	WNMG080404-AMP			○			○	
	WNMG080408-AMP			○			●	
	WNMG080412-AMP			○			●	
	WNMG080416-AMP							
	WNMG080408-TR						○	●
	WNMG080412-TR						○	●

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

产品型号
Product Model

形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	CCMT060204-PF							
	CCMT060208-PF	●						
	CCMT09T304-PF	●						
	CCMT09T308-PF	●						
	CCMT120404-PF	●						
	CCMT120408-PF							
	CCMT120412-PF							
	CCMT060204							
	CCMT060208	●						
	CCMT09T304	●						
	CCMT09T308	●						
	CCMT120404	●						
	CCMT120408	●						
	CCMT120412							
	DCMT070204-PF							
	DCMT070208-PF							
	DCMT11T304-PF	●						
	DCMT11T308-PF	●						
	DCMT11T312-PF							
	DCMT070204							
	DCMT070208	●						
	DCMT11T304	●						
	DCMT11T308	●						
	DCMT11T312							
	VBMT110304-PF							
	VBMT110308-PF							
	VBMT160404-PF	●						
	VBMT160408-PF	●						
	VBMT160412-PF							
	VBMT110304							
	VBMT110308							
	VBMT160404	●						
	VBMT160408	●						
	VBMT160412							

形状 Shape	型号 Type	RP9125B	RP9125C	RP9225B	RP1020	RP1120A	RP1225	RC6125A
	SCMT09T304-PF	●						
	SCMT09T308-PF	●						
	SCMT120404-PF							
	SCMT120408-PF							
	SCMT120412-PF							
	SCMT09T304	●						
	SCMT09T308	●						
	SCMT120404							
	SCMT120408							
	SCMT120412							
	TCMT090204-PF							
	TCMT090208-PF							
	TCMT110204-PF							
	TCMT110208-PF	●						
	TCMT16T304-PF	●						
	TCMT16T308-PF							
	TCMT16T312-PF							
	TCMT090204							
	TCMT090208							
	TCMT110204							
	TCMT110208							
	TCMT16T304	●						
	TCMT16T308	●						
	TCMT16T312							

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

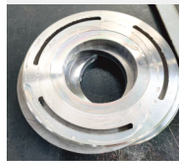
加工案例
Application Cases

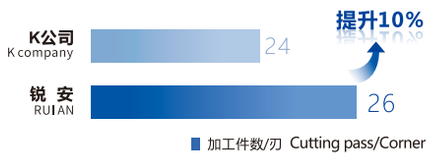
案例一：半精车端面-- 法兰盘
Semi-finish Turning End Surface -- Flange Plate

刀片型号 Insert Model	WNMG080412-TM RP1225
被加工材料 Processed Materials	SUS201不锈钢 SUS201 stainless steel
加工方式 Processing Method	连续、断续加工 Continuously and intermittent processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=150m/min f=0.18mm/r ap=1.0mm

未加工工件

已加工工件



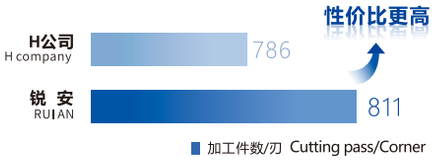


案例二：半精车外圆-- 水暖接头
Semi-finish Turning External -- Plumbing Joint

刀片型号 Insert Model	TNMG160408-TG RP1020
被加工材料 Processed Materials	SUS304不锈钢 SUS304 stainless steel
加工方式 Processing Method	连续加工 Continuously processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=131m/min f=0.15mm/r ap=0.3mm

未加工工件

已加工工件

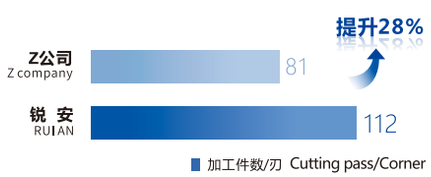


案例三：半精车外圆-- 流体接头
Semi-finish Turning External -- Fluit Joint

刀片型号 Insert Model	WNMG080412-AMP RP9125B
被加工材料 Processed Materials	SUS304不锈钢 SUS304 stainless steel
加工方式 Processing Method	连续加工 Continuously processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=180m/min f=0.21mm/r ap=1.5mm

未加工工件

已加工工件

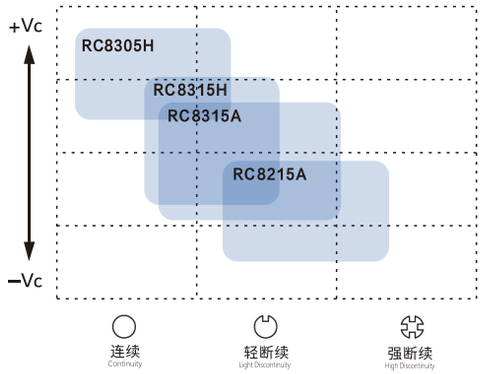


铸铁车削刀片
CAST IRON TURNING INSERTS

牌号一览
Coating Grade

RC8305H CVD

- 超细晶WC-Co合金基体搭配厚的α-Al2O3/MT-TiCN涂层，赋予刀片超强的耐磨性。
- 用于稳定工况铸铁高速精加工。
- Ultra-fine grained WC Co alloy with thick substrate α- Al2O3/MT-TiCN coating endows the insert with super abrasion resistance.
- Used for high-speed finishing of cast iron under stable working conditions.



RC8215A CVD

- 中等粒度的WC-Co合金基体搭配中等厚度α-Al2O3和低内应力MT-TiCN涂层，具有优良的抗冲击性能。
- Medium particle size WC-Co substrate matching with, medium thickness α-Al2O3 and low internal stress MT-TiCN coating has excellent impact resistance.

RC8315A CVD

- 中等粒度的WC-Co合金基体搭配中等厚度α-Al2O3/MT-TiCN涂层，兼顾耐磨性和韧性，适用于铸铁的通用加工。
- Medium grained WC Co alloy substrate matching with medium thickness α-Al2O3/MT-TiCN coating gives consideration to abrasion resistance and toughness, and is suitable for general processing of cast iron.

RC8315H CVD

- 中等粒度的WC-Co合金基体，搭配优化的具有特定结构的α-Al2O3层和超细耐磨MT-TiCN涂层，经过特殊的后处理工艺，使刀片具有极佳耐磨性和稳定性，适用于铸铁的高速通用加工。
- Medium grained WC Co alloy substrate matching with optimized α-Al2O3 layer and ultra-fine wear-resistant MT-TiCN coating, through special post-treatment process, makes the insert have excellent abrasion resistance and stability, which is suitable for high-speed general processing of cast iron.

槽型一览
Chip Breakers

KM
半精/粗加工
Semi-Finishing/Roughing

- 扁平棱边刃形结构，刃口强度高，切削通用性好。
- Flat edge structure; high cutting edge strength; good cutting versatility.

KG
半精/粗加工
Semi-Finishing/Roughing

- 高强度刃口结构，大容屑槽设计，适用于大余量切削。
- With high strength cutting edge structure and large chip holding space design, it is suitable for large margin cutting.

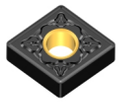
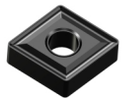
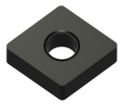
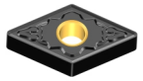
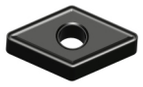
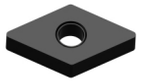
平板
粗加工
Roughing

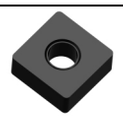
- 高强度结构，装配刀杆稳固，适合脆硬材料不稳定切削。
- With high strength structure and stable assembly with shank, it is suitable for unstable cutting of brittle hard materials.

—
半精加工
Semi-Finishing

- 扁平棱边与大前角组合，刀片同时兼备优良的刀刃强度与切削锋利性；
- 刀尖部位凸点断屑槽结合大容屑槽设计，实现广泛领域的稳定切削。
- The combination of flat edge and large front angle makes the blade have excellent edge strength and cutting sharpness at the same time;
- The convex chip breaking groove at the tool tip is combined with the design of large chip holding groove to achieve stable cutting in a wide range of fields.

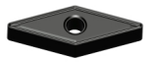
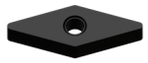
产品型号
Product Model

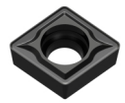
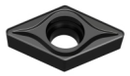
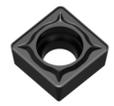
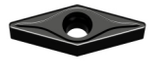
形状 Shape	型号 Type	RC8305H	RC8215A	RC8315A	RC8315H
	CNMG120408-KG			○	●
	CNMG120412-KG			○	●
	CNMG120416-KG				
	CNMG120404-KM			●	
	CNMG120408-KM			●	
	CNMG120412-KM			●	
	CNMG120416-KM				
	CNMG160608-KM				
	CNMG160612-KM				
	CNMG160616-KM				
	CNMA120408				
	CNMA120412			●	
	CNMA120416			●	
	CNMA160608				
	CNMA160612				
	CNMA160616				
	CNMA190612				
	CNMA190616				
	DNMG150408-KG			○	●
	DNMG150412-KG			○	●
	DNMG150404-KM				
	DNMG150408-KM			●	
	DNMG150412-KM			●	
	DNMG150416-KM				
	DNMG150608-KM				
	DNMG150612-KM				
	DNMG150616-KM				
	DNMA150404				
	DNMA150408			●	
	DNMA150412			●	
	DNMA150604				
	DNMA150608				
	DNMA150612				

形状 Shape	型号 Type	RC8305H	RC8215A	RC8315A	RC8315H
	SNMG120408-KG			○	●
	SNMG120412-KG			○	●
	SNMG120408-KM				
	SNMG120412-KM			●	
	SNMG120416-KM			●	
	SNMA120404				
	SNMA120408				
	SNMA120412				●
	SNMA120416				●
	TNMG160408-KG				
	TNMG160412-KG			○	●
	TNMG160416-KG			○	●
	TNMG160404-KM				
	TNMG160408-KM			●	
	TNMG160412-KM			●	
	TNMA160404				
	TNMA160408			●	
	TNMA160412			●	
	TNMA160416				
	TNMA220408				
	TNMA220412				
	TNMA220416				

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

产品型号
Product Model

形状 Shape	型号 Type	RC8305H	RC8215A	RC8315A	RC8315H
	VNMG160408-KG			○	●
	VNMG160412-KG			○	●
	VNMG160404-KM				
	VNMG160408-KM			●	
	VNMG160412-KM			●	
	VNMA160404				
	VNMA160408			○	
	VNMA160412			○	
	WNMG080404-KG				
	WNMG080408-KG			○	●
	WNMG080412-KG			○	●
	WNMG080404-KM				
	WNMG080408-KM			●	
	WNMG080412-KM			●	
	WNMG080416-KM				
	WNMA080404				
	WNMA080408			●	
	WNMA080412			●	
	WNMA080416				

形状 Shape	型号 Type	RC8305H	RC8215A	RC8315A	RC8315H
	CCMT060204				
	CCMT060208				
	CCMT09T304			○	
	CCMT09T308			○	
	CCMT120404				
	CCMT120408				
	CCMT120412				
	DCMT070204				
	DCMT070208				
	DCMT11T304				
	DCMT11T308			○	
	DCMT11T312			○	
	SCMT09T304				
	SCMT09T308				
	SCMT120404			○	
	SCMT120408			○	
	SCMT120412				
	TCMT090204				
	TCMT090208				
	TCMT110204				
	TCMT110208				
	TCMT16T304			○	
	TCMT16T308			○	
	TCMT16T312				
	VBMT110304				
	VBMT110308				
	VBMT160404			○	
	VBMT160408			○	
	VBMT160412				

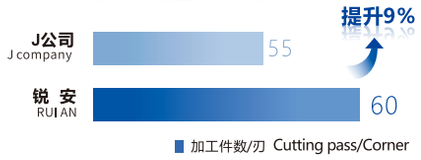
○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

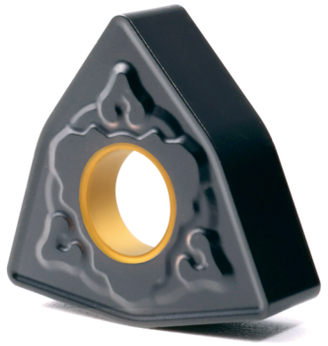
加工案例
Application Cases

案例一：粗车外圆、端面—— 法兰
Rough Turning External And End Surface -- Flange

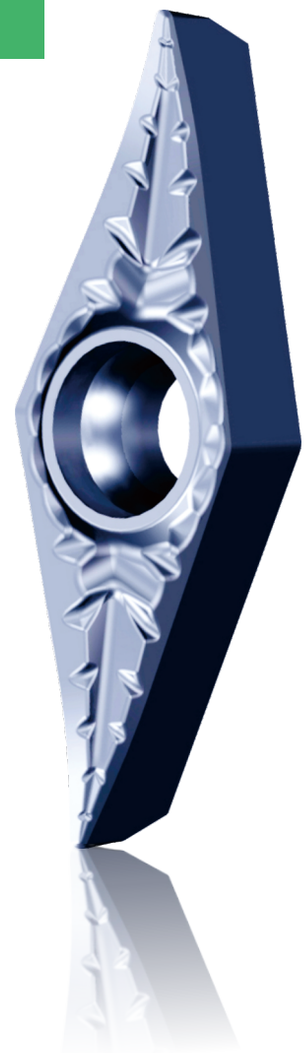
刀片型号 Insert Model	WNMG080412-KM RC8315A
被加工材料 Processed Materials	HT450
加工方式 Processing Method	连续加工 Continuously processing
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=520m/min f=0.3mm/r ap=1.5mm

已加工工件





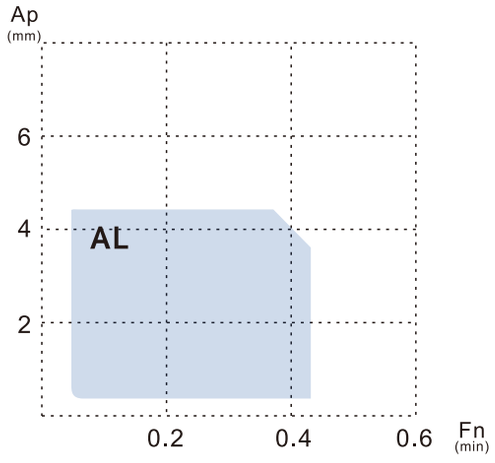
铝用车削刀片
ALUMINIUM TURNING INSERTS



牌号一览
Coating Grade

RN100

- 无涂层细晶粒硬质合金牌号，特殊表面处理技术，耐磨性与韧性兼具。
- 推荐用于铜、铝合金等有色金属加工。
- Uncoated fine-grained hard alloy grade, special surface treatment technology, with both wear resistance and toughness.
- Recommended for processing non-ferrous metals such as copper and aluminium alloys.



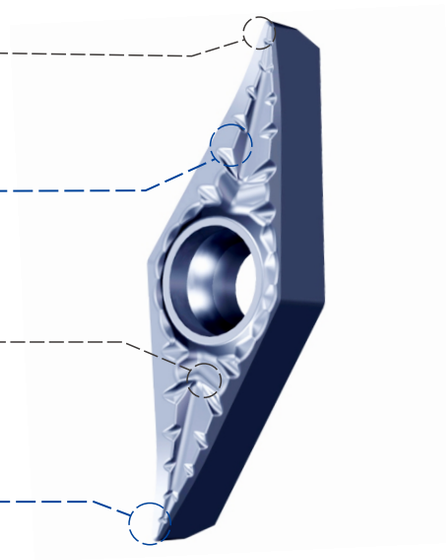
槽型一览
Chip Breakers

大前角设计，切削阻力小，提高刀具寿命。
Large front angle design, low cutting resistance, improves tool life.

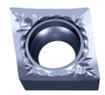
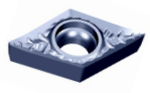
三维曲线切削刃设计具有锋利的切削刃，可得到良好的加工表面。
The design of three-dimensional curved cutting edges has sharp cutting edges, which can achieve a good machining surface.

特殊表面处理工艺，刀片前刀面达到镜面效果，降低摩擦与粘结。
Special surface treatment technology achieves a mirror like effect on the front insert surface, reducing friction and adhesion.

独特的断屑槽设计保证切屑卷曲，平滑排出，防止积屑瘤产生。
The unique chip groove design ensures that the chips are curled and discharged smoothly, preventing the formation of chip lumps.



产品型号
Product Model

形状 Shape	型号 Type	RN100
	CCGT060202-AL	○
	CCGT060204-AL	○
	CCGT09T302-AL	○
	CCGT09T304-AL	●
	CCGT09T308-AL	●
	CCGT120404-AL	○
	CCGT120408-AL	○
	DCGT070201-AL	○
	DCGT070202-AL	○
	DCGT070204-AL	○
	DCGT11T304-AL	●
	DCGT11T308-AL	●
	SCGT09T304-AL	●
	SCGT09T308-AL	●
	SCGT120408-AL	○

形状 Shape	型号 Type	RN100
	TCGT090202-AL	○
	TCGT090204-AL	○
	TCGT110202-AL	○
	TCGT110204-AL	○
	TCGT110208-AL	○
	TCGT16T304-AL	●
	TCGT16T308-AL	●
	VCGT110301-AL	○
	VCGT110302-AL	○
	VCGT110304-AL	○
	VCGT110308-AL	○
	VCGT160404-AL	●
	VCGT160408-AL	●
	VCGT160412-AL	●

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

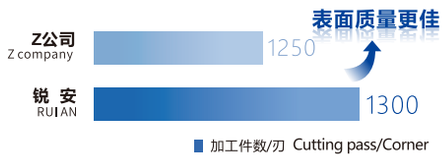
加工案例
Application Cases

案例一：电机支架车内孔加工
Machining Of Motor Bracket Inner Hole

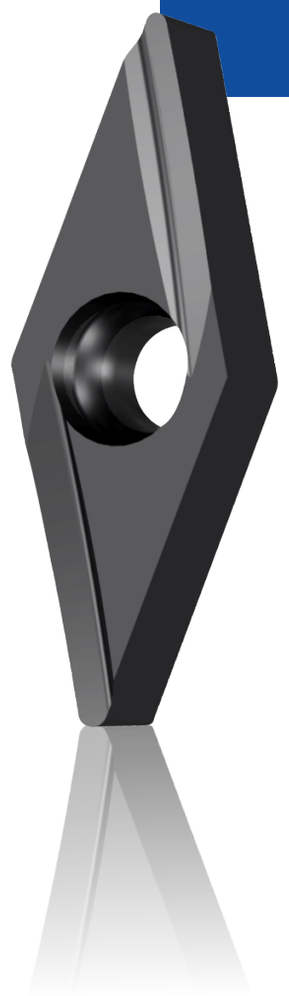
刀片型号 Insert Model	CCGT09T304-AL
刀片牌号 Insert Grade	RN100
被加工材料 Processed Materials	铝 Aluminium
加工方式 Processing Method	连续加工 Continuously processing
切削参数 Cutting Parameters	Vc=185m/min ap=1mm

未加工工件

已加工工件



小零件车削刀片
SMALL PARTS TURNING INSERTS



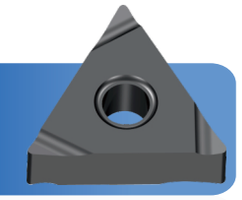
牌号一览
Coating Grade

RP1020 PVD

- 超细微晶合金基体与多层纳米TiALN涂层结合。
- 具有高耐磨性和适中的抗崩刃。
- 适用于钢、不锈钢等材料的断续、连续加工。
- Ultra-fine microcrystal alloy substrate combines with multiple nanometer TiALN coating, it owns higher abrasion resistance and middle anti-collapse edge. It is suitable for intermittent and continuous processing of materials like steel and stainless steel etc.

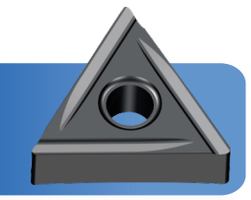
槽型一览
Chip Breakers

XF
精加工
Finishing



- 大前角，光滑前刀面处理，降低切削阻力，排屑顺畅。
- 适用于精加工。
- Large front angle, smooth front cutting surface treatment, reduces cutting resistance, and smooth chip removal.
- Suitable for finishing.

UF
精加工
Finishing



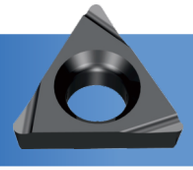
- 磨制平行槽，中、低进给实现良好卷屑。
- 适用于精加工。
- Grinding parallel chipbreaker, medium and low feed to achieve good chip rolling.
- Suitable for finishing.

UM
半精加工
Semi-Finishing

- 大前角锋利刀尖有效防止材料的加工硬化，光洁表面避免粘结；
- 适用于低碳钢、不锈钢等粘性材料中切削。
- The sharp cutting edge with a large front angle effectively prevents material from working hardening, and the smooth surface avoids adhesion;
- Suitable for cutting in viscous materials such as low-carbon steel and stainless steel.

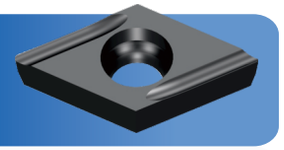
槽型一览
Chip Breakers

XF
精加工
Finishing



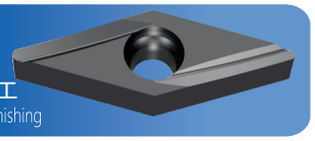
- 控制排屑方向，锋利刀尖加工的表面精度好、光洁度高。
- 适用于精加工。
- Control the direction of chip removal, and the surface precision and smoothness of sharp tool nose processing are good.
- Suitable for finishing.

UF
精加工
Finishing



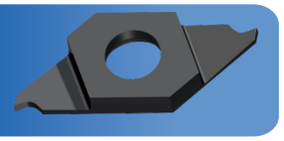
- 低进给条件下切屑控制良好，锋利刀尖实现低阻力加工。
- 适用于精加工。
- Under low feed conditions, chip control is good, and sharp tool nose achieve low resistance machining.
- Suitable for finishing.

UM
精/半精加工
Finishing/Semi-Finishing



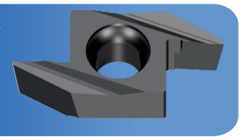
- 切削效果好，可获得良好的完成面。
- 适用于精-半精加工。
- Good cutting effect can achieve a good finished surface.
- Suitable for finishing-semi finishing.

TKF
切断切槽
Cutting



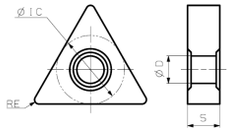
- 大前角的锋利刀尖有效优化工件表面质量；无导程角型号寿命好、不易缠屑，带导程角型号切断时残留少。
- The sharp nose with a large front angle effectively optimizes the surface quality of the workpiece; The model with no lead angle has a good service life and is not prone to chip entanglement. The model with lead angle has less residue when cutting.

ABS/W
后扫加工
Back shoulder processing



- 外形设计可一刀完成后肩面直角加工，小R角减少剩余圆角。
- The shape designing could accomplish back shoulder processing in one step,machining which at right angle. Small nose radius reduces remaining material in corner.

产品型号
Product Model

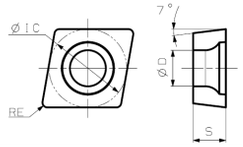


负角型

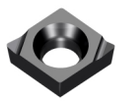
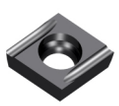
形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精加工 Finishing	TNGG160402R-XF	9.525	4.76	3.81	0.2
	TNGG160402L-XF	9.525	4.76	3.81	0.2
	TNGG160404R-XF	9.525	4.76	3.81	0.4
	TNGG160404L-XF	9.525	4.76	3.81	0.4
	TNGG160408R-XF	9.525	4.76	3.81	0.8
	TNGG160408L-XF	9.525	4.76	3.81	0.8
 半精加工 Semi-Finishing	TNGG160404R-UM	9.525	4.76	3.81	0.4
	TNGG160404L-UM	9.525	4.76	3.81	0.4
	TNGG160408R-UM	9.525	4.76	3.81	0.8
	TNGG160408L-UM	9.525	4.76	3.81	0.8

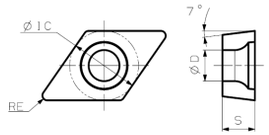
负角型

形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精/半精加工 Finishing/Semi-Finishing	TNGG160402R-UF	9.525	4.76	3.81	0.2
	TNGG160402L-UF	9.525	4.76	3.81	0.2
	TNGG160404R-UF	9.525	4.76	3.81	0.4
	TNGG160404L-UF	9.525	4.76	3.81	0.4
	TNGG160408R-UF	9.525	4.76	3.81	0.8
	TNGG160408L-UF	9.525	4.76	3.81	0.8

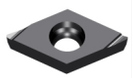
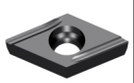


正角型

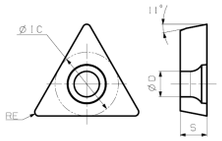
形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精加工 Finishing	CCGT030102R-XF	3.5	1.4	1.9	0.2
	CCGT030102L-XF	3.5	1.4	1.9	0.2
	CCGT030104R-XF	3.5	1.4	1.9	0.4
	CCGT030104L-XF	3.5	1.4	1.9	0.4
	CCGT040102R-XF	4.3	1.8	2.3	0.2
	CCGT040102L-XF	4.3	1.8	2.3	0.2
	CCGT040104R-XF	4.3	1.8	2.3	0.4
	CCGT040104L-XF	4.3	1.8	2.3	0.4
 精加工 Finishing	CCGT060202R-UF	6.35	2.38	2.8	0.2
	CCGT060202L-UF	6.35	2.38	2.8	0.2
	CCGT060204R-UF	6.35	2.38	2.8	0.4
	CCGT060204L-UF	6.35	2.38	2.8	0.4
	CCGT09T302R-UF	9.525	3.97	4.4	0.2
	CCGT09T302L-UF	9.525	3.97	4.4	0.2
	CCGT09T304R-UF	9.525	3.97	4.4	0.4
	CCGT09T304L-UF	9.525	3.97	4.4	0.4



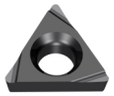
正角型

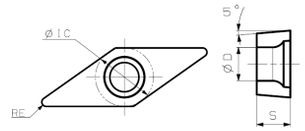
形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精加工 Finishing	DCGT070202R-XF	6.35	2.38	2.8	0.2
	DCGT070202L-XF	6.35	2.38	2.8	0.2
	DCGT070204R-XF	6.35	2.38	2.8	0.4
	DCGT070204L-XF	6.35	2.38	2.8	0.4
	DCGT11T302R-XF	9.525	3.97	4.4	0.2
	DCGT11T302L-XF	9.525	3.97	4.4	0.2
	DCGT11T304R-XF	9.525	3.97	4.4	0.4
	DCGT11T304L-XF	9.525	3.97	4.4	0.4
 精加工 Finishing	DCGT070202R-UF	6.35	2.38	2.8	0.2
	DCGT070202L-UF	6.35	2.38	2.8	0.2
	DCGT070204R-UF	6.35	2.38	2.8	0.4
	DCGT070204L-UF	6.35	2.38	2.8	0.4
	DCGT11T302R-UF	9.525	3.97	4.4	0.2
	DCGT11T302L-UF	9.525	3.97	4.4	0.2
	DCGT11T304R-UF	9.525	3.97	4.4	0.4
	DCGT11T304L-UF	9.525	3.97	4.4	0.4

产品型号
Product Model

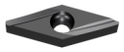


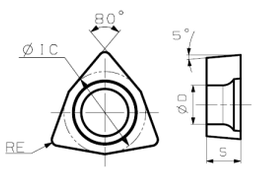
正角型

形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精加工 Finishing	TPGH080202R-XF	4.76	2.38	2.3	0.2
	TPGH080202L-XF	4.76	2.38	2.3	0.2
	TPGH080204R-XF	4.76	2.38	2.3	0.4
	TPGH080204L-XF	4.76	2.38	2.3	0.4
	TPGH090202R-XF	5.56	2.38	3.2	0.2
	TPGH090202L-XF	5.56	2.38	3.2	0.2
	TPGH090204R-XF	5.56	2.38	3.2	0.4
	TPGH090204L-XF	5.56	2.38	3.2	0.4
	TPGH110302R-XF	6.35	3.18	3.3	0.2
	TPGH110302L-XF	6.35	3.18	3.3	0.2
	TPGH110304R-XF	6.35	3.18	3.3	0.4
	TPGH110304L-XF	6.35	3.18	3.3	0.4



正角型

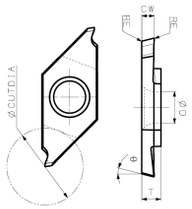
形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精加工 Finishing	VBGT110302R-XF	6.35	3.18	2.8	0.2
	VBGT110302L-XF	6.35	3.18	2.8	0.2
	VBGT110304R-XF	6.35	3.18	2.8	0.4
	VBGT110304L-XF	6.35	3.18	2.8	0.4
 精/半精加工 Finishing/Semi-Finishing	VBGT110302R-UM	6.35	3.18	2.8	0.2
	VBGT110302L-UM	6.35	3.18	2.8	0.2
	VBGT110304R-UM	6.35	3.18	2.8	0.4
	VBGT110304L-UM	6.35	3.18	2.8	0.4
	VBGT160402R-UM	9.525	4.76	4.4	0.2
	VBGT160402L-UM	9.525	4.76	4.4	0.2
	VBGT160404R-UM	9.525	4.76	4.4	0.4
	VBGT160404L-UM	9.525	4.76	4.4	0.4
	VBGT160408L-UM	9.525	4.76	4.4	0.8
	VBGT160408R-UM	9.525	4.76	4.4	0.8



正角型

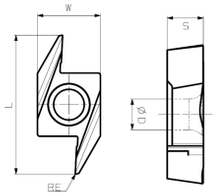
形状 Shape	型号 Type	尺寸（mm） size（mm）			
		ϕIC	S	ϕD	RE
 精加工 Finishing	WBGT060102L-XF	3.97	1.59	2.3	0.2
	WBGT060104L-XF	3.97	1.59	2.3	0.4
	WBGT080202L-XF	4.76	2.38	2.3	0.2
	WBGT080204L-XF	4.76	2.38	2.3	0.4

产品型号
Product Model



切断切槽

形状 Shape	型号 Type	尺寸（mm） size（mm）					
		CW	ϕ CUTDIA	RE	ϕD	T	ϕ
	TKF12R100-S	1	12	0.03	5	3	0°
	TKF12L100-S	1	12	0.03	5	3	0°
	TKF12R150-S	1.5	12	0.03	5	3	0°
	TKF12L150-S	1.5	12	0.03	5	3	0°
	TKF12R200-S	2	12	0.03	5	3	0°
	TKF12L200-S	2	12	0.03	5	3	0°
	TKF12R100-S16R	1	12	0.03	5	3	16°
	TKF12L100-S16R	1	12	0.03	5	3	16°
	TKF12R150-S16R	1.5	12	0.03	5	3	16°
	TKF12L150-S16R	1.5	12	0.03	5	3	16°
	TKF12R200-S16R	2	12	0.03	5	3	16°
	TKF12L200-S16R	2	12	0.03	5	3	16°
	TKF16R150-S	1.5	16	0.05	5	4	0°
	TKF16L150-S	1.5	16	0.05	5	4	0°
	TKF16R200-S	2	16	0.05	5	4	0°
	TKF16L200-S	2	16	0.05	5	4	0°
	TKF16R150-S16R	1.5	16	0.05	5	4	16°
	TKF16L150-S16R	1.5	16	0.05	5	4	16°
	TKF16R200-S16R	2	16	0.05	5	4	16°
	TKF16L200-S16R	2	16	0.05	5	4	16°



后扫加工

形状 Shape	型号 Type	尺寸（mm） size（mm）				
		W	RE	L	S	ϕD
	ABS15R4005	7	0.05	15.4	3.97	3.4
	ABS15R4015	7	0.15	15.4	3.97	3.4
	ABW15R4005	7	0.05	15.4	3.97	3.4
	ABW15R4015	7	0.15	15.4	3.97	3.4
	ABW23R5005	7	0.05	23.4	3.97	3.4
	ABW23R5015	7	0.15	23.4	3.97	3.4

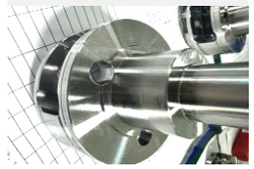
切断切槽刀片
PARTING AND GROOVING

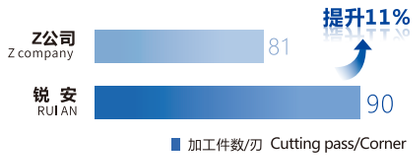
加工案例
Application Cases

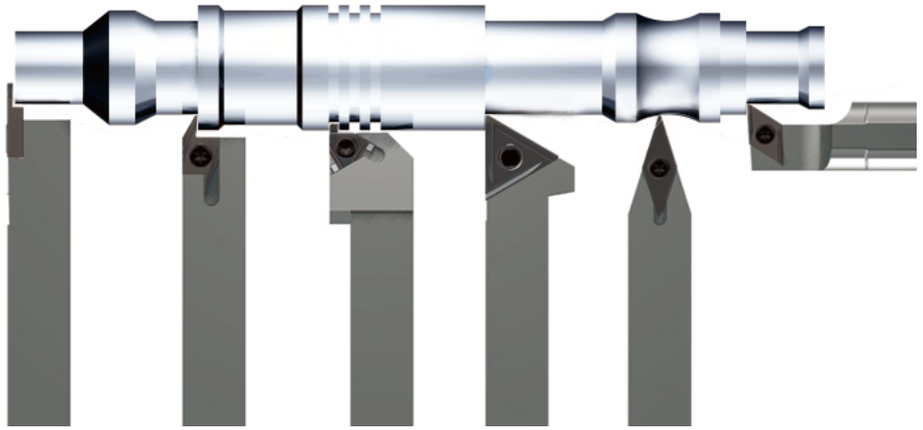
案例一：行星架加工
Planetary Frame Processing

刀片型号 Insert Model	TPGH090204L-XF
被加工材料 Processed Materials	40cr
加工方式 Processing Method	连续、断续加工 Continuously and intermittent processing
冷却方式 Cooling Method	切削液 Cutting Fluid
切削参数 Cutting Parameters	Vc=45m/min f=0.2mm/r

已加工工件



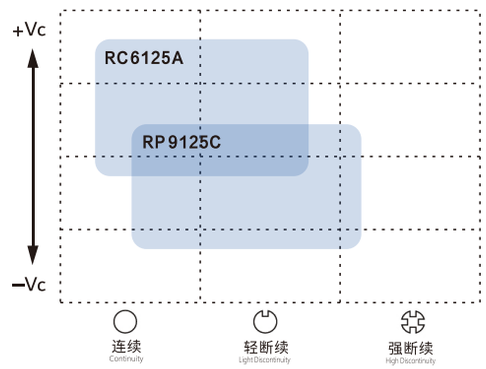




牌号一览
Coating Grade

RP1020 PVD

- 超细微晶合金基体与多层纳米TiALN涂层结合，具有高耐磨性和适中的抗崩刃，适用于钢、不锈钢等材料的断续、连续加工。
- Ultra-fine microcrystal alloy substrate combines with multiple nanometer TiALN coating, it owns higher abrasion resistance and middle anti-collapse blade. It is suitable for intermittent and continuous processing of materials like steel and stainless steel etc.



RC6125A CVD

- 采用韧性更好的双结构合金基体，涂覆中厚MT-TiCN和α-AL203涂层。推荐用于一般断续切削加工碳素钢和低合金钢等材料。
- It applies double structure alloy substrate with better tenacity and covers moderate thickness MT-TiCN and α-AL203 coating. It is promoted to be used for general intermittent cutting and processing of carbon steel and lower alloy steel etc. materials.

RP9125B PVD

- TiAlN/TiAlSiN复合多层结构涂层，高Si含量的表层使涂层具有极高的耐热和抗氧化性能，搭配高Co超细晶高硬度硬质合金基体，适合不锈钢精加工。
- TiAlN/TiAlSiN compounding multiple-layer structure coating. Its surface contains higher Si content and makes the coating own the extremely high heating resistance and antioxidation. It is suitable for fine finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

RP9125C PVD

- TiAlN/TiAlSiN纳米多层梯度结构涂层，Si含量适中，摩擦系数低、纳米硬度高、耐热抗氧化性能强，搭配高Co超细晶硬质合金基体，保持良好耐磨性的同时提高抗冲击性，适合不锈钢/半精/精加工。
- TiAlN/TiAlSiN nanometer coating with multiple-layer gradient structure. Its Si content is appropriate, lower friction coefficient, higher nanometer hardness, good anti-stripping performance. It is suitable for finishing/semi-finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness to improve impact resistance while maintains good abrasion resistance.

槽型一览
Chip Breakers

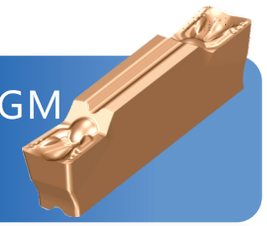
MGMN-M
通用
General

- 正前角的刃口结构可减小切削力，切削过程轻快、流畅；特别设计的槽型结构在横向车削加工中具有更好的切屑控制性能。
- 可实现切断、切槽、车削等各种加工
- The cutting edge structure at the positive rate angle can reduce cutting force with rapid and smooth cutting process.The chipbreaker structure specially designed owns better cutting control performance in transversal turning.
- It can achieve parting, grooving, turning etc. various kinds of machining.

MGMN-TM
不锈钢
Stainless steel

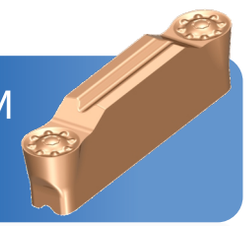
- 锋利的刃口设计，适用于不锈钢、难加工材料切槽、车削加工；
- 多级三维断屑槽设计，获得良好的卷屑、断屑能力。
- Sharpen edge design, which is suitable for stainless steel,grooving of difficult processing material and turning,processing；
- Multiple three-dimensional chip breaker groove design which can acquire a good ship curling and ship breaking capability.

MGMN-GM
通用
General



- 通用型槽型，刀片强度高，适用于广泛的加工材料和加工工况；
- 成V字型内凹刃口结合3D断屑槽设计具备良好的断屑功能。
- The general chipbreaker with strong insert strength, which is widely suitable for a working condition of machining material and machining condition.
- It owns good chip breaking function because of shaping a "V" type inward concave cutting edge combining with 3D chipbreaker design.

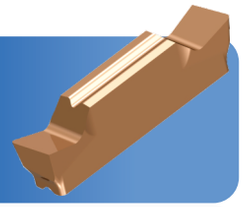
MRMN-M
通用
General



- 优化的刃口结构及断屑槽结构，使得刀片兼具低切削抗力及良好的刀尖强度，同时刀片切削处理性能更优异；
- 适合于轴类、环类零件仿形加工，也适用于车削、切槽和越程槽加工。
- Optimized edge structure and chip breaker structure, which make the insert resisted to cutting resistance and good tool nose strength,simultaneously,the blade owns more excellent cutting treatment performance;
- It is suitable for profiling and processing of axis category,ring category parts, turning, grooving and grinding undercut processing.

槽型一览
Chip Breakers

MGGN
通用
General



- 研磨断屑槽，刃口锋利，切屑流畅，加工阻力低，不易产生积屑瘤；
- 高精密级，可获得较高的槽底质量。
- Grindle chip breaker groove with sharpen edge, smooth cutting, lower processing resistance.It is not easy to produce welding;
- High precision grade which can acquire a higher notch base quality;

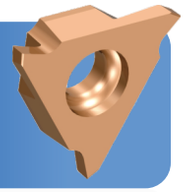
MQMN
切断
Parting

- 采用特殊的槽型，可获得较窄切屑，断屑效果更佳；
- 刀片负前角面设计，确保切削刃更加坚固，刀具寿命得到显著提高；
- 推荐用于合金钢、铸铁、不锈钢等材料切断加工。
- It applies special groove profile which can acquire narrower cutting.Its chip breaking effect is better;
- The insert presents negative angle face design to ensure its cuttings edge is more firmer.The tool lifespan gets obvious improvement;
- It is promoted to be uses for cutting machine of alloy steel,cast iron, stainless steel etc.materials.

TGF

- 立装浅槽刀片；
- 刃口锋利，切削轻快流畅；
- 三个精磨的切削刃，经济性好；
- 刃宽公差控制±0.025mm；
- 槽宽范围0.5 ~ 3.0mm；
- Vertical installed shallow groove insert;
- The edge is sharpen with rapid and smooth cutting;
- Three finish grinded cuttings edges are economical;
- The edge width tolerance shall be controlled within ±0.025mm;
- The groove width range is from 0.5 to 3.00mm;

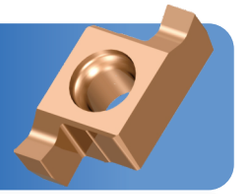
GBA



- 高精密研磨刀片，槽底加工精度高；
- 适用于大切深，高强度加工；
- 大U型排屑槽，排屑流畅；
- 刃宽公差控制±0.025mm；
- 槽宽范围1.25 ~ 4.5mm；
- High precision grinding insert with higher groove bottom processing precision;
- It is suitable for processing with large cutting depth and high strength;
- Large "U" shape flute with smooth chip removal;
- The edge width tolerance is controlled within ±0.025mm;
- Groove width range 1.25 ~ 4.5mm;

槽型一览
Chip Breakers

GE



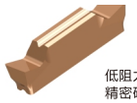
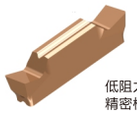
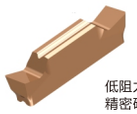
- 精密研磨，可获得较高的尺寸精度；
- 锋利前角，切削轻快；
- 刃宽公差控制±0.025mm；
- 槽宽0.5 ~ 5.0mm；
- 主要用于内孔、小孔切槽加工；
- Precision grinding which can acquire higher dimensional precision;
- Sharpen rake with rapid and smooth cutting;
- Edge width tolerance controlled within ±0.025mm;
- Groove width is from 0.5 to 5.0mm;
- Mainly used for processing of inner hole and small hole grooving;

GT

- 平装浅槽刀片，与外螺纹刀杆通装；
- 刃口锋利，搭配耐磨性极佳PVD涂层，实现长寿命，高效加工；
- 刃宽公差控制±0.025mm；
- 槽宽范围0.5 ~ 3.0mm；
- Flatten stitching shallow groove insert, which is with outer screw cutter bar;
- Sharpen edge which matches with PVD coating owns excellent abrasion resistance to realize long lifeshpan and efficient processing;
- The edge width tolerance is controlled within ±0.025mm;
- Groove width range is 0.5 ~ 3.0mm；

产品型号
Product Model

MGGN系列

形状 Shape	型号 Type	RP9125B	RP9125C	RP1020	RC6125A
 低阻力-精密研磨 Lower resistance(grinding)	MGGN200		●		
	MGGN250		●		
	MGGN300		●		
	MGGN400		●		
	MGGN500		●		
 低阻力-精密模压 Lower resistance(pressing)	MGGN200-M		●		
	MGGN250-M		●		
	MGGN300-M		●		
	MGGN400-M		●		
	MGGN500-M		●		
 低阻力-精密研磨 Lower resistance(grinding)	MGGN200-06R/L		○		
	MGGN250-06R/L		○		
	MGGN300-06R/L		●		
	MGGN400-06R/L		●		
	MGGN500-06R/L		○		

MGMN系列

形状 Shape	型号 Type	RP9125B	RP9125C	RP1020	RC6125A
	MGMN150-TM		○		
	MGMN200-TM		●		
	MGMN250-TM		●		
	MGMN300-TM		●		
	MGMN400-TM		●		
	MGMN500-TM		●		
	MGMN200-M		●		
	MGMN250-M		●		
	MGMN300-M		●		
	MGMN400-M		●		
	MGMN500-M		●		
	MGMN600-M		○		
	MGMN200-GM		●		
	MGMN250-GM		●		
	MGMN300-GM		●		
	MGMN400-GM		●		
	MGMN500-GM		●		
	MGMN600-GM		○		

MRMN系列

形状 Shape	型号 Type	RP9125B	RP9125C	RP1020	RC6125A
	MRMN200-M		○		
	MRMN250-M		○		
	MRMN300-M		●		
	MRMN400-M		●		
	MRMN500-M		○		
	MRMN600-M				

MQMN系列

形状 Shape	型号 Type	RP9125B	RP9125C	RP1020	RC6125A
	MQMN300		○		
	MQMN400		○		
	MQMN500		○		
	MQMN600				

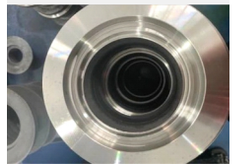
○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

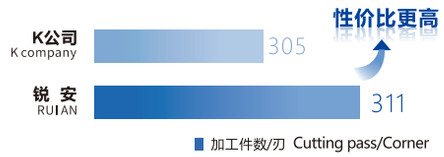
加工案例
Application Cases

案例一：端面切槽——法兰盘
End Surface Grooving -- Flange Plate

刀片型号 Insert Model	MGMN300-TM RP9125C
被加工材料 Processed Materials	SUS316不锈钢 SUS316 stainless steel
加工方式 Processing Method	连续切槽 Continuously grooving
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=180m/min f=0.04mm/r

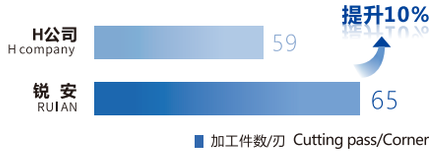
已加工工件





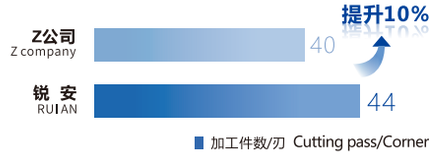
案例二：外径切槽——安全气囊零件
External Grooving -- Air Bag Components

刀片型号 Insert Model	MGMN400-M RP9125C
被加工材料 Processed Materials	SUS304不锈钢 SUS304 stainless steel
加工方式 Processing Method	连续切槽 Continuously grooving
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=150m/min f=0.04mm/r ap=1.6mm



案例三：浅槽加工—— 液压阀体零件
Shallow Groove Process -- Hydraulic Valve Body Components

刀片型号 Insert Model	TGF32R280-015 RP9125C
被加工材料 Processed Materials	SUS201不锈钢 SUS201 stainless steel
加工方式 Processing Method	连续切槽 Continuously grooving
冷却方式 Cooling Method	乳化液 Emulsion
切削参数 Cutting Parameters	Vc=90m/min f=0.07mm/r ap=2.5mm



螺纹车削刀片
THREAD TURNING INSERTS

牌号一览
Coating Grade

RP1020 PVD

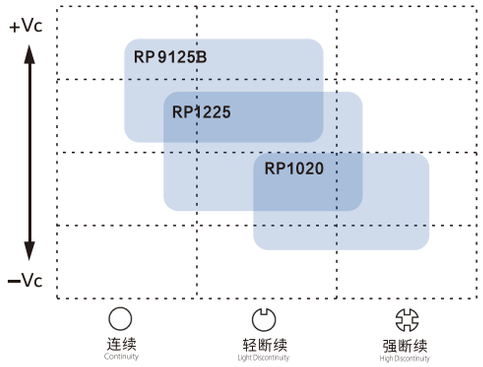
- 超细微晶合金基体与多层纳米TiAlN涂层结合，具有高耐磨性和适中的抗崩刃，适用于钢、不锈钢等材料的断续、连续加工。
- Ultra-fine microcrystal alloy substrate combines with multiple nanometer TiAlN coating, it owns higher abrasion resistance and middle anti-collapse edge. It is suitable for intermittent and continuous processing of materials like steel and stainless steel etc.

RP1120A PVD

- TiAlN/TiAlSiN复合多层结构涂层，高Si含量的表层使涂层具有极高的耐热和抗氧化性能，搭配高Co超细晶高硬度硬质合金基体，适合不锈钢精加工。
- TiAlN/TiAlSiN compounding multiple-layer structure coating. Its surface contains higher Si content and makes the coating own the extremely high heating resistance and antioxidation. It is suitable for finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

RP1225 PVD

- TiAlN/TiAlSiN纳米多层梯度结构涂层，Si含量适中，摩擦系数低、纳米硬度高、抗剥落性能好，搭配高Co超细晶硬质合金基体，具，适合不锈钢粗加工/半精加工。
- TiAlN/TiAlSiN nanometer coating with multiple-layer gradient structure. Its Si content is appropriate, lower friction coefficient, higher nanometer hardness, good anti-stripping performance. It is suitable for roughing/semi-finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

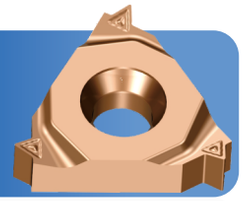


RP9125B PVD

- TiAlN/TiAlSiN复合多层结构涂层，高Si含量的表层使涂层具有极高的耐热和抗氧化性能，搭配高Co超细晶高硬度硬质合金基体，适合不锈钢精加工。
- TiAlN/TiAlSiN compounding multiple-layer structure coating. Its surface contains higher Si content and makes the coating own the extremely high heating resistance and antioxidation. It is suitable for finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

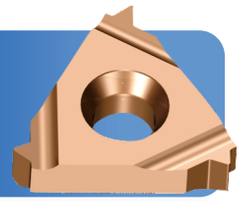
槽型一览
Chip Breakers

三维断屑槽
3D-Chip-Breaking



- 高精度的模具技术，实现了高品质的刀尖；
- 刀片的切屑控制能力优异，排屑顺畅；
- 刀片的刀尖强度好，耐用度高，性价高。
- The mould technology with higher precision realizes the tool nose with high quality
- The insert owns excellent cutting and control capability with smooth chip drainage.
- The insert owns good tool nose strength and higher durability, higher price-performance ratio.

全磨型
Grinding



- 刀片锋利度良好，光洁度高；
- 小零件或细长零件需要低切削阻力加工时使用(全磨型切削阻力小)；
- 重视螺纹精度时，可使用全磨型刀片。
- The insert owns good sharpness and higher smoothness.
- It is necessary to use smaller components or the slim components when carrying out lower cutting resistance process(full grinding model with smaller cutting resistance)
- It can use the full grinding insert when focus on screw thread precision.

产品型号
Product Model

螺纹规格 Screw thread specification		刀片型号 Type	加工螺距范围 Processed pitch range mm	加工螺距范围 Processed pitch range 牙数/英寸 threads per inch /inch	涂层牌号 Coating RP9125B	RP1225	RP1020	RP1120A
ISO公制 ISO metric system	外螺纹 Outer screw thread	16E R/L□□ISOA	1.0-3.0		●	○		
		22ER□□ISOA	3.5-6.0		●	○		
	内螺纹 Inner screw thread	11IR□□ISOA	1.0-2.0		●	○		
		16I R/L□□ISOA	1.0-3.0		●	○		
		22IR□□ISOA	3.5-6.0		●	○		
通用螺纹 Universa thread	外螺纹 Outer screw thread	16ER□□55A	0.5-3.0	48-8	●	○		
		16ER□□60A			●	○		
		22ER□□55A	3.5-5.0	7-5	●	○		
		22ER□□60A			●	○		
	内螺纹 Inner screw thread	11IR□□55A	0.5-1.5	48-16	○	○		
		11IR□□60A			○	○		
		16IR□□55A	0.5-3.0	48-8	●	○		
		16IR□□60A			●	○		
		22IR□□55A	3.5-5.0	7-5	●	○		
		22IR□□60A			●	○		
惠氏螺纹 Whitworth screw thread		16ER□□WA		19-8	●	○		
		16IR□□WA			●	○		
惠氏锥管螺纹 Whitworth cone tube screw thread		16ER□□BSPTA		24-8	●	○		
		16IR□□BSPTA			●	○		
统一协定螺纹 Unified agreement screw thread		16ER□□UNA		27-8	●	○		
		16IR□□UNA			●	○		
美制螺纹 American system screw thread		16ER□□NPTA		27-8	●	○		
		16IR□□NPTA			●	○		
30° 圆螺纹 30°round screw thread	外螺纹 Outer screw thread	16E R/L □□RD		10-6	●	○		
		22E R/L □□RD		6-4	○	○		
	内螺纹 Inner screw thread	16IR/L□□RD		10-6	●	○		
		22IR/L□□RD		6-4	○	○		

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

产品型号
Product Model

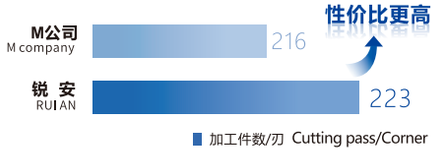
螺纹规格 Screw thread specification		刀片型号 Type	加工螺距范围 Processed pitch range mm	加工螺距范围 Processed pitch range 牙数/英寸 threads per inch /inch	涂层牌号 Coating RP9125B	RP1225	RP1020	RP1120A
30°梯形螺纹 30°trapezoidal screw thread	外螺纹 Outer screw thread	11E R/L 1.50TR	1.5		○	○		
		16E R/L □□TR	1.5-3.0		●	○		
		22E R/L □□TR	4.0-6.0		○	○		
		27E R/L 6.00TR	6					
	内螺纹 Inner screw thread	11I R/L □□TR	1.5		○	○		
		16I R/L □□TR	1.5-3.0		●	○		
		22I R/L □□TR	4.0-6.0		○	○		
		27I R/L 6.00TR	6					
美制ACME梯形螺纹 American system ACME trapezoidal screw thread	外螺纹 Outer screw thread	11E R/L 16ACME		16	○	○		
		16E R/L □□ACME		16-6	●	○		
		22E R/L □□ACME		7-5	○	○		
		27E R/L 4ACME		4				
	内螺纹 Inner screw thread	11I R/L 16ACME		16	○	○		
		16I R/L □□ACME		16-6	●	○		
		22I R/L □□ACME		7-5	○	○		
		27I R/L 4ACME		4				
美制短齿ACME梯形螺纹 American system short toothed ACME trapezoidal screw thread	外螺纹 Outer screw thread	11E R/L 16STACME		16	○	○		
		16E R/L □□STACME		16-6	●	○		
		22E R/L □□STACME		6-4	○	○		
		27E R/L □□STACME		4-3				
	内螺纹 Inner screw thread	11I R/L 16STACME		16	○	○		
		16I R/L □□STACME		16-6	●	○		
		22I R/L □□STACME		6-4	○	○		
		27I R/L □□STACME		4-3				
60°深孔螺纹 60°deep hole screw thread		11UI□□60	0.5-4.0	48-6	○	○		
		16UI□□60	1.75-6.0	16-4	●	○		
		22UIDK60	6.0-8.0	4-3				
55°深孔螺纹 55°deep hole screw thread		11UIDL55	1.5-3.5	28-7	○	○		
		16UIDH55	3.5-6.0	14-4.5	●	○		
		22UIDK55	6.0-8.5	5-3				

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

加工案例
Application Cases

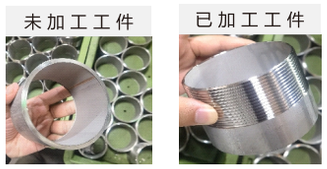
案例一：外螺纹车削——角阀（浇铸件）
Outer screw thread turning -- angle valve (castings)

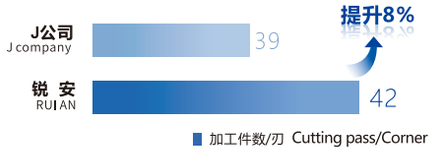
刀片型号 Insert Model	16ER14WA RP1225
被加工材料 Processed Materials	SUS304不锈钢 SUS304 stainless steel
切削参数 Cutting Parameters	Vc=85m/min 走刀次数：7次 Vc=85m/min Feeding times：7



案例二：外螺纹车削——阀门件
Outer Screw Thread Turning -- Valve Parts

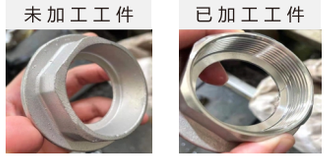
刀片型号 Insert Model	16ER11BSPTA RP1020
被加工材料 Processed Materials	SUS316不锈钢 SUS316 stainless steel
切削参数 Cutting Parameters	Vc=170m/min 走刀次数：19次 Vc=170m/min Feeding times：19

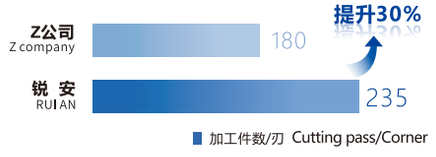




案例三：内螺纹车削——接头
Inner Screw Thread Turning -- Joint

刀片型号 Insert Model	16IR11WA RP1225
被加工材料 Processed Materials	SUS201不锈钢 SUS201 stainless steel
切削参数 Cutting Parameters	Vc=100m/min 走刀次数：17次 Vc=100m/min Feeding times：17



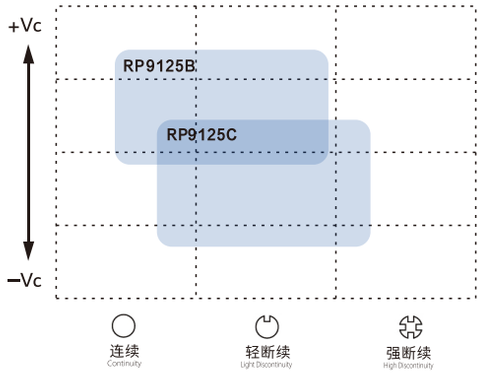


可转位钻削刀片
INDEXABLE DRILLING INSERTS

牌号一览
Coating Grade

RP1020

- 超细微晶合金基体与多层纳米TiAlN涂层结合，具有高耐磨性和适中的抗崩刃，适用于钢、不锈钢等材料的断续、连续加工。
- Ultra-fine microcrystal alloy substrate combines with multiple nanometer TiAlN coating, it owns higher abrasion resistance and middle anti-collapse edge. It is suitable for intermittent and continuous processing of steel and stainless steel etc. materials.



RP9125B

- TiAlN/TiAlSiN复合多层结构涂层，高Si含量的表层使涂层具有极高的耐热和抗氧化性能，搭配高Co超细晶高硬度硬质合金基体，适合不锈钢精加工。
- TiAlN/TiAlSiN compounding multiple-layer structure coating. Its surface contains higher Si content and makes the coating own the extremely high heating resistance and antioxidation. It is suitable for fine finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

RP9125C

- TiAlN/TiAlSiN纳米多层梯度结构涂层，Si含量适中，摩擦系数低、纳米硬度高、耐热抗氧化性能强，搭配高Co超细晶硬质合金基体，保持良好耐磨性的同时提高抗冲击性，适合不锈钢半精/精加工。
- TiAlN/TiAlSiN nanometer coating with multiple-layer gradient structure. Its Si content is appropriate, lower friction coefficient, higher nanometer hardness, good anti-stripping performance. It is suitable for finishing/semi-finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness to improve impact resistance while maintains good abrasion resistance.

产品型号
Product Model

形状 Shape	型号 Type	RP9125B	RP9125C	RP91020
	WCMT030208		●	
	WCMT040208		●	
	WCMT050308		●	
	WCMT06T308		●	
	WCMT080412		●	

形状 Shape	型号 Type	RP9125B	RP9125C	RP91020
	SPMT050204-TG		●	
	SPMT060204-TG		●	
	SPMT07T308-TG		●	
	SPMT090408-TG		●	
	SPMT110408-TG		●	
	SPMT120408-TG		●	
	SPMT140512-TG		●	

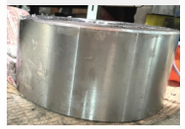
○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

加工案例
Application Cases

案例一：钻孔—— 液压卡盘
Drilling -- Hydraulic Chuck

刀片型号 Insert Model	SPMT07T308-TG RP9125C
被加工材料 Processed Materials	40CrMo
加工方式 Processing Method	连续加工 Continuously processing
切削参数 Cutting Parameters	Vc=90m/min f=0.07mm/z ap=2.5mm

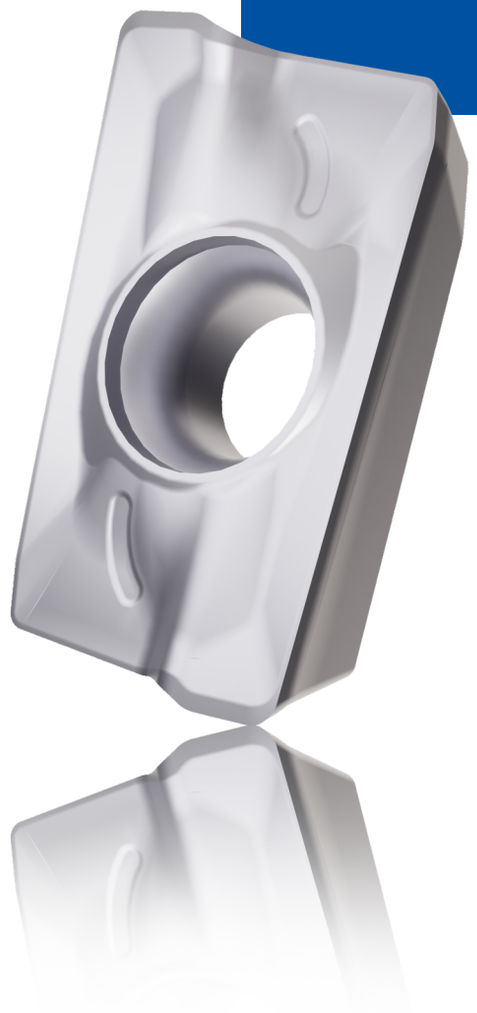
未加工工件



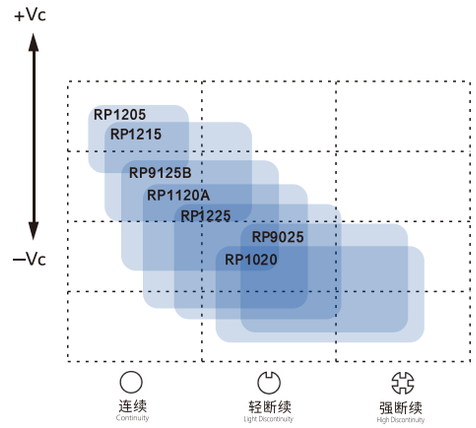
已加工工件

■ 加工件数/刃 Cutting pass/Corner

可转位铣削刀片
INDEXABLE MILLING INSERTS



牌号一览
Coating Grade



RP1205

- 全新超细WC-Co基体，采用独特的烧结工艺，保证高强度，高强度，高硬度。
- 高性能TiALN/ALCrSiN纳米多层结构涂层,经新的表面处理工艺,膜基结合力提高,刃线强度和稳定性突出,具备高硬度,高抗氧化性,高热稳定性,抗冲击性突出的特点。
- 推荐用于HRC55-65硬度模具钢半精-精加工。

- The brand new ultrafine WC-Co matrix adopts a unique sintering process to ensure high strength, high strength, and high hardness.
- High performance TiALN/ALCrSiN nano multilayer structure coating, with a new surface treatment process, improves the film-based bonding force, outstanding edge strength and stability, and has the characteristics of high hardness, high oxidation resistance, high thermal stability, and outstanding impact resistance.
- Recommended for semi precision machining of HRC55-65 hardness mold steel.

RP1215

- 全新超细WC-Co基体，采用独特的烧结工艺，保证高强度，高强度，高硬度。
- 高性能TiALN/ALCrSiN纳米多层结构涂层,经新的表面处理工艺,膜基结合力提高,刃线强度和稳定性突出,具备高硬度,高抗氧化性,高热稳定性,抗冲击性突出的特点。
- 推荐用于HRC40-60硬度模具钢半精-精加工。

- The brand new ultrafine WC-Co matrix adopts a unique sintering process to ensure high strength, high strength, and high hardness.
- High performance TiALN/ALCrSiN nano multilayer structure coating, with a new surface treatment process, improves the film-based bonding force, outstanding edge strength and stability, and has the characteristics of high hardness, high oxidation resistance, high thermal stability, and outstanding impact resistance.
- Recommended for semi precision machining of HRC40-60 hardness mold steel.

RP1120A PVD

- TiAlN/TiAlSiN复合多层结构涂层，高Si含量的表层使涂层具有极高的耐热和抗氧化性能，搭配高Co超细晶高硬度硬质合金基体，适合不锈钢精加工。
- TiAlN/TiAlSiN compounding multiple-layer structure coating. Its surface contains higher Si content and makes the coating own the extremely high heating resistance and antioxidation. It is suitable for fine finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

RP9125B PVD

- TiAlN/TiAlSiN复合多层结构涂层，高Si含量的表层使涂层具有极高的耐热和抗氧化性能，搭配高Co超细晶高硬度硬质合金基体，适合不锈钢精加工。
- TiAlN/TiAlSiN compounding multiple-layer structure coating. Its surface contains higher Si content and makes the coating own the extremely high heating resistance and antioxidation. It is suitable for fine finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness.

RP1225 PVD

- TiAlN/TiAlSiN纳米多层梯度结构涂层，Si含量适中，摩擦系数低、纳米硬度高、抗剥落性能好，搭配高Co超细晶硬质合金基体，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等优点。适合不锈钢粗加工/半精加工。
- TiAlN/TiAlSiN nanometer coating with multiple-layer gradient structure. Its Si content is appropriate, lower friction coefficient, higher nanometer hardness, good anti-stripping performance. It is suitable for rough processing/semi-finishing of the stainless steel by matching with carbide substrate with higher Co ultra-fine grained higher hardness to maintain good abrasion resistance while improves anti-impacting.

RP9025 PVD

- 耐磨性与韧性优化匹配的微晶硬质合金，结合高粘结性的纳米晶TiAlN涂层，耐磨性极佳，是模具铣削加工首选牌号。
- Microcrystal carbide owns optimized and matched abbrasion resistance and tenacity. To realize the excellent abbrasion resistance by combing with nanometer TiAlN coating with higher cohesiveness. It is the preferred plate No. For mould milling process.

RP1020 PVD

- 超细微晶合金基体与多层纳米TiALN涂层结合，具有高耐磨性和适中的抗崩刃，适用于钢、不锈钢等材料的断续、连续加工。
- Ultra-fine microcrystal alloy substrate combines with multiple nanometer TiALN coating, it owns higher abbrasion resistance and middle anti-collapse blade. It is suitable for intermittent and continuous processing of materials like steel and stainless steel etc.

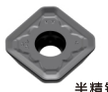
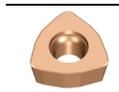
产品型号
Product Model

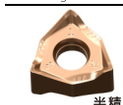
形状 Shape	型号 Type	RP1205	RP1215	RP9025	RP9125B	RP1020	RP1120A	RP1225
半精铣 Semi-finishing milling	APKT100304-PM							
	APKT100308-PM				●			○
	APKT160408-PM				●			○
半精铣 Semi-finishing milling	APMT1135PDER-KA				●			○
	APMT1604PDER-KA				●			○
半精铣 Semi-finishing milling	APMT1135PDER-QM					●		○
	APMT1604PDER-QM					●		○
	APMT1605PDER-QM					●		○
半精铣 Semi-finishing milling	APMT1135PDER-PM				●			○
	APMT160408PDER-PM				●			○
粗硬铣 Roughing hard milling	APMT1135PDER-PR				●			○
	APMT160408PDER-PR				●			○
精/半精铣 Finishing/Semi- finishing milling	AXMT123508PEER-XM					●		○
精/半精铣 Finishing/Semi- finishing milling	AXMT123508PEER-PM					●		○
精/半精铣 Finishing/Semi- finishing milling	APMT1135PDER-HM		●					
	APMT1604PDER-HM		●					

形状 Shape	型号 Type	RP1205	RP1215	RP9025	RP9125B	RP1020	RP1120A	RP1225
通用 General	RPMW08T2MO							
	RPMW1003MO				●			○
	RPMW1204MO				●			○
粗/半精铣 Roughing/Semi-finishing milling	RPMT08T2MO-GM							
	RPMT10T3MO-GM				●			○
	RPMT1204MO-GM				●			○
通用 General	RDKW0803MO							
	RDKW10T3MO				●			○
	RDKW1204MO				●			○
	RDKW1604MO				●			○
	RDKW1605MO				●			○
	RDKW1606MO							
	RDKW2006MO							
半精铣 Semi-finishing milling	RCKT10T3MO-PM							
	RCKT1204MO-PM				●			○
	RCKT1606MO-PM							
粗铣 Roughing milll	RCKT1204MO-PR				●			○
	RCKT1606MO-PR							
	RCKT2006MO-PR							
不锈钢粗铣 Stainless steel roughing milling	RCKT1204MO-MR				●			○
	RCKT1606MO-MR							
	RCKT2006MO-MR							

○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

产品型号
Product Model

形状 Shape	型号 Type	RP1205	RP1215	RP9025	RP9125B	RP1020	RP1120A	RP1225
 半精铣 Semi- finishing milling	SEET12T3-GM					●		○
 大进给 High feed milling	WPMT050315R-HR							
	WPMT060415R-HR				●			○
	WPMT080615R-HR				●			○
	WPMT090725R-HR							
 大进给 High feed milling	WDMW080520ZTR-HH				●			○

形状 Shape	型号 Type	RP1205	RP1215	RP9025	RP9125B	RP1020	RP1120A	RP1225
 通用 General	SDMT120512-HR							
	SDMT150512-HR				●			○
					●			○
 大进给 High feed milling	SDMT06T208-HH							
	SDMT09T312-HH				●			○
	SDMT120412-HH				●			○
	SDMT150520-HH							
 半精铣 Semi- finishing milling	WNMU050408EN-GM							
	WNMU080608EN-GM				●			○
					●			○
					●			○

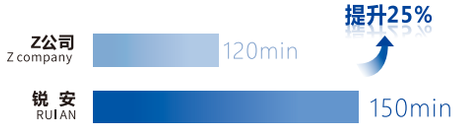
○ 非标准库存 Extraordinary Stock ● 标准库存 Standing Stock

加工案例
Application Cases

案例一：模具型腔铣
Mould Model Cavity Milling

刀片型号 Insert Model	RDKW1204MO RP9025
被加工材料 Processed Materials	P20模具钢 P20 mold steel
加工方式 Processing Method	压缩空气 Compression air
切削参数 Cutting Parameters	Vc=120m/min fz=1mm/z ap=0.6mm

已加工工件

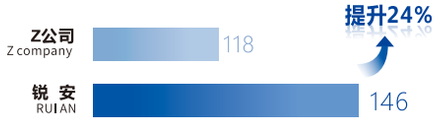


加工时长/刃 Processed duration/Corner

案例二：平面铣
Planar Milling

刀片型号 Insert Model	APMT1135PDER-QM RP9025
被加工材料 Processed Materials	45#钢 45# steel
加工方式 Processing Method	压缩空气 Compression air
切削参数 Cutting Parameters	Vc=140m/min fz=0.4mm/z ap=0.5mm

已加工工件



加工件数/刃 Cutting pass/Corner

硬质合金立铣刀
SOLID CARBIDE END MILLS

槽型一览
Chip Breakers

HT400
钛合金材料加工
Titanium alloy materials

- 适用于钛合金（TA7、TC4、TC18）材料高性能加工；
- 不等分度、不等螺旋，有效抑制振动的产更高的加工表面质量；
- 前后刀面抛光处理，排屑槽和后刀面光洁度更好，减少摩擦，降低切削阻力和温度，减轻粘结磨损；
- 采用难加工材料专用基体，更长的刀具切削寿命。
- It is suitable for high performance processing to titanium alloy(TA7、TC4、TC18) materials.
- Unequal division,unequal spirals can effectively restrains the vibration production to form better processing surface quality.
- Polish treatment to front and rear tool face. It owns better drainage groove and the rear tool face smoothness and reduces friction, cutting resistance and temperature, reduces cohesion abrasion.
- Its substrate specially applies materials of difficult to process which makes the tool own more longer lifespan.

HP500
大进给系列
High feeding series

- 加工硬度在HRC<45
- 铸铁钢件类的侧铣 槽铣 螺旋插补铣 摆线铣等多种高效铣削。
- 采用不等螺旋、不等分、不等齿距、变心径设计，有效抑制高产加工时产生的高频振动，发挥超群的抗震能力，实现大切深，大切宽高效加工。
- 变槽深设计，保证刀具有足够的容屑空间，又能有足够的刚性。
- Process hardness is HRC<45
- Side milling and groove milling of castings iron, steel parts. Spiral interpolation milling, cycloid milling etc. multiple efficient milling.
- It applies design of different spirals, non-uniform, unequal blade spacing, variable diameter, which restains high frequency vibration produced when carrying out high production process. It can exert excellent anti-seismic.
- Design of different groove depth give the knife tools enough space for chip capacity and enough tenacity.

HM450
通用性系列
General series

- 加工硬度在HRC<38
- 双刃带的槽型设计，切削力低，排屑顺畅。
- 刃口稳定性高，不易磨损，大幅提高刀具耐磨损性及韧性。
- 变槽芯径设计，3倍径切削时有足够稳定的刚性。
- Process hardness is HRC<38.
- The groove profile design of the double-blade belt with lower cutting force and smooth chips drainage
- The cutting edge with higher stability and not easy to abrasion,greatly improves abrasion resistance and tenacity of the tool.
- Design of variable groove diameter, it has enough stable rigid when suffering 3 times barrel length cutting.

HA500
铝合金材料加工
Aluminium alloy material

- 精密镜面刃磨工艺，加工效果光滑无毛刺；
- 刃口采用抗振设计，能抑制加工过程中的振颤，提高加工表面质量；
- 适用于铝合金及铜合金的通用加工。
- It applies precision mirror tool grinding technique and the process effect is smooth without blur.
- Its cutting edge applies anti-seiesmic design, which can restrain the vibration occurred in the processing to improve processing surface quality.
- It is suitable for general processing of aluminium and copper alloy.

槽型一览
Chip Breakers

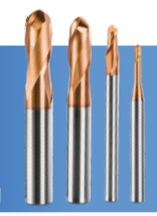
HR700
淬火钢超硬系列
Hardened steel superhard series

- 加工硬度在HRC55~68 。
- 适用于高速切削、高硬淬火材料精加工，半精加工设计。
- 高强度，超韧性的欧洲进口基体材质配合新一代超硬涂层，有效延长刀具使用寿命。
- 专用刀型设计,高精度品控管理，实现卓越的高硬淬火材料加工。
- Process hardness is HRC55~68.
  It is suitable for finishing and semi-finishing design of high-speed cutting, high hardness quenching materials. .
- European imported substrate materials with high strength and super tenacity matched with new generation of super hardness coating effective delays the lifespan of the tool.
- Special tool model design and high precision quality control management realize excellent processing to high hardness quenching materials.

HMS
难切削材料加工
Difficult cutting materials

- 加工硬度在280HB以下 。
- 切削刃锋利，特殊的刃口设计，有效抑制切削热对刀尖的影响，解决刀具刃口积屑问题。
- 涂层耐热良好，高温环境下也能实现稳定加工。
- 适用于不锈钢、耐热合金等难切削材料加工。
- Process hardness is under 280HB.
- Its cutting blade is sharpness and special blade edge design can effectively restrain cutting heating's affection to tool nose. It can solve the problem of tool cutting edge weldings.
- The coating owns good heating resistance, it can realize stable processing under high temperature, too.
- It is suitable for processing of stainless steel, heating resistance alloy etc. difficult cutting materials.

HMH
高硬度材料加工
High hardness materials processing



- 加工硬度在HRC45-55。
- 高强度、高耐磨性超细颗粒基体材料，有效保证刀具超高耐磨性和使用寿命。
- 优异的涂层硬度及耐高温氧化性能，更适合用于高硬材料的加工。
- Process hardness is HRC45-55.
- Ultra-fine grained substrate materials with high strength and high abrasion resistance effective guarantee the ultra high abrasion resistance and lifespan.
- Excellent coating hardness and high temperature oxidization resistance which is more suitable for processing of high hardness materials.

HG900
高温合金材料加工
High temperature alloy material processing

NEW

- 适用高温合金(Incone718、GH4169等）高性能加工。
- 采用超细颗粒硬质合金基体，结合纳米复合涂层（ALTIN/TISIN）,耐高温达1200℃，有效减少切削热导致的刀具磨损。
- Suitable for high-performance machining of high-temperature alloys (Incone718, GH4169, etc.)
- Using ultra-fine particle hard alloy matrix combined with nano composite coating (ALTIN/TISIN), it can withstand high temperatures up to 1200 ℃, effectively reducing tool wear caused by cutting heat.

瑞士OSTERWALDER 全自动数控粉末压机

Swiss OSTERWALDER
full-automation digital control
powder compressor

德国 PVA 真空加压烧结炉

Germany PVA vacuum
pressure sintering fumace

德国CEMECON涂层炉

Germany CEMECON coating furnace

德国WALTER精密数控磨床

Germany WALTER
precision digital-controlling grinder

日本MITUTOYO三坐标
Japan MITUTOYO three coordinates

瑞士STAHLI端面磨床

Swiss STAHLI end surface grinder

瑞士IONBOND涂层炉

Swiss IONBOND coating furnace

欧瑞康BALZERS涂层炉

Oerlikon BALZERS coating furnace

德国ZOLLER精密刀具检测仪

Germany ZOLLER
precision tool inspection instrument