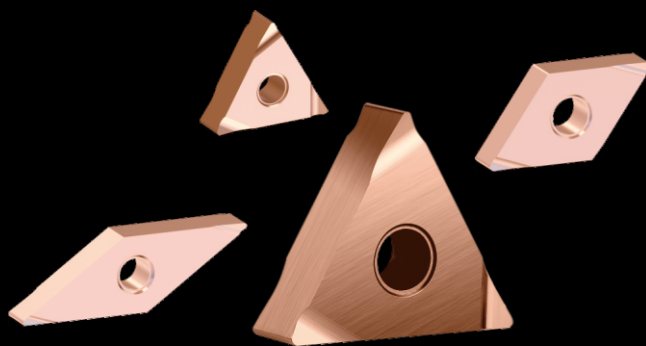




# G级产品系列

## Ground Carbide Inserts

精加工用涂层硬质合金刀片



 4006 816 028

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### 国家专精特新“小巨人”

成都美奢锐新材料有限公司成立于2012年，是一家专注于粉末冶金新材料领域，集研发、生产、销售为一体的国家专精特新“小巨人”企业、“科创中国”新锐企业、国家高新技术企业。

公司属于战略新兴产业，主营各类金属陶瓷数控刀具、高性能硬质合金等新材料及其应用产品。融合工业互联网、人工智能等，现已建成金属陶瓷及硬质合金低碳、智能生产线。产品广泛应用于航空航天、通用机械、精密电子、石油化工、汽车制造、模具加工等多个领域，业务范围遍及全球多个工业发达国家和地区。

公司致力于解决金属陶瓷新材料“卡脖子”技术问题，实现进口产品的国产化替代。通过整合新材料行业技术和产业链资源，建立粉末冶金新材料研产基地，打造全球领先的材料科技共赢平台，并力争在“十四五”期间于科创板上市。

### 坚持创新发展

公司始终秉持“科技创新驱动经济高质量发展”理念，建有四川省钛基金属陶瓷工程技术研究中心、四川省新材料工业设计研究院、成都市院士（专家）工作站，聚集了一批由贺跃辉教授领衔的精锐研发团队，具备极强的科研制造与成果转化实力。

公司碳氮化钛基金属陶瓷材料制备技术经评定，碳氮化钛固氮技术已达国际领先水平。

将技术成果进行产业化转化，生产的金属陶瓷及硬质合金材料，成功入选国家工信部《重点新材料首批次应用示范指导目录（2021年版）》。

### 10年卓越璀璨

作为转型期“中国制造”的践行者，公司已构建完善的知识产权保护体系，授权专利50余项，主导或参与制定国家标准、行业标准6项。

荣获国家工信部创客中国创新创业大赛一等奖、中国有色金属工业科技进步二等奖、国家专精特新“小巨人”、“科创中国”新锐企业、国家高新技术企业、四川省首批瞪羚企业等多项硬核荣誉。

从新材料研发到绿色低碳生产线建设，从高端装备引进到数字化研产基地打造，公司助力粉末冶金行业向“数字化、智能化”发展，催生新材料制造业与工业互联网融合发展的新模式、新业态，共步赋能工业4.0时代。

**精加工用PVD涂层硬质合金**

被削材	钢 (碳钢/合金钢)					不锈钢/不锈钢铸钢					铸铁 (灰口铸铁/球墨铸铁)			
切削领域	精加工 ←————→ 粗加工					精加工 ←————→ 粗加工					精加工 ←————→ 粗加工			
使用分类	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	K01	K10	K20	K30
PVD涂层硬质合金														

**PVD涂层硬质合金**

材质符号	比重	母材硬度		抗崩韧性 (MPa·m <sup>1/2</sup> )	抗折强度 (MPa)
		HV30	HRA		
MF810	14.4	1600	92.5	12	4500
MF412	14.2	1700	93.5	11	4800

**涂层牌号说明**






牌号	颜色	涂层硬度(HV)	抗氧化温度(°C)	摩擦系数	涂层厚度(μm)	应用推荐
PV8110	紫黑	3500	900	0.3	2.5-3	钢、不锈钢、铸铁、钛合金多种工况
PV4112						
PV8210	灰黑色	4000	1200	0.3	3-4	通用不锈钢加工用
PV4212						
PV8310	古铜色	4200	1000	0.3	2-3	HRC55度难加工材质、高温合金、钛合金
PV4312						

**PVD涂层硬质合金(车削用)**

\* 本表基于各公司的样本及公开刊物制作、未获得各公司的承认。

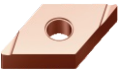




使用分类符号		美奢锐	京瓷	三菱综合材料	日本特殊陶业	山特维克
分类	符号					
P(钢用)	P01	PV4112	/	/	/	/
	P10	PV4112	/	/	/	/
	P20	PV4112 PV8110	PR930 PR1225	VP15TF		GC1125
	P30	PV8110	PR1225	VP15TF	ZM3 QM3	GC1125
M(不锈钢用)	M10	PV4112	PR930	VP10MF	/	/
	M20	PV4112 PV8110	PR930 PR1225	VP15TF	/	GC1125
	M30	PV8110	PR1225	VP15TF	ZM3 QM3	GC1125

外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	CCGT060202R/L-S1	6.35	2.38	0.2	●	●	●	●	●	●
	CCGT060204R/L-S1	6.35	2.38	0.4	●	●	●	●	●	●
	CCGT09T302R/L-S1	9.525	3.97	0.2	●	●	●	●	●	●
	CCGT09T304R/L-S1	9.525	3.97	0.4	●	●	●	●	●	●
	DCGT070202R/L-C	6.35	2.38	0.2	●	●	●	●	●	●
	DCGT070204R/L-C	6.35	2.38	0.4	●	●	●	●	●	●
	DCGT070201R/L-S1	6.35	2.38	0.1	●	●	●	●	●	●
	DCGT070202R/L-S1	6.35	2.38	0.2	●	●	●	●	●	●
	DCGT070204R/L-S1	6.35	2.38	0.4	●	●	●	●	●	●
	DCGT11T302R/L-S1	9.525	3.97	0.2	●	●	●	●	●	●
	DCGT11T304R/L-S1	9.525	3.97	0.4	●	●	●	●	●	●
	TBGH060102R/L-S1	3.97	1.59	0.2	●	●	●	●	●	●
	TBGH060104R/L-S1	3.97	1.59	0.4	●	●	●	●	●	●
	TPGH080202R/L-S1	4.76	2.38	0.2	●	●	●	●	●	●
	TPGH080204R/L-S1	4.76	2.38	0.4	●	●	●	●	●	●
	TPGT080202R/L-S1	4.76	2.38	0.2	●	●	●	●	●	●
	TPGT080204R/L-S1	4.76	2.38	0.4	●	●	●	●	●	●
	TPGH090202R/L-S1	5.56	2.38	0.2	●	●	●	●	●	●
	TPGH090204R/L-S1	5.56	2.38	0.4	●	●	●	●	●	●
	TPGH110302R/L-S1	6.35	3.18	0.2	●	●	●	●	●	●
	TPGH110304R/L-S1	6.35	3.18	0.4	●	●	●	●	●	●
	TBGT060102R/L-S1	3.97	1.59	0.2	●	●	●	●	●	●
	TBGT060104R/L-S1	3.97	1.59	0.4	●	●	●	●	●	●
	TPGT090202R/L-S1	5.56	2.38	0.2	●	●	●	●	●	●

外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	TPGT090204R/L-S1	5.56	2.38	0.4	●	●	●	●	●	●
	TCGT110202R/L-S1	6.35	2.38	0.2	●	●	●	●	●	●
	TCGT110204R/L-S1	6.35	2.38	0.4	●	●	●	●	●	●
	TPGT110302R/L-S1	6.35	3.18	0.2	●	●	●	●	●	●
	TPGT110304R/L-S1	6.35	3.18	0.4	●	●	●	●	●	●
	VBGT110301R/L-S1	6.35	3.18	0.1	●	●	●	●	●	●
	VBGT110302R/L-S1	6.35	3.18	0.2	●	●	●	●	●	●
	VBGT110304R/L-S1	6.35	3.18	0.4	●	●	●	●	●	●
	VBGT160402R/L-S1	9.525	4.76	0.2	●	●	●	●	●	●
	VBGT160404R/L-S1	9.525	4.76	0.4	●	●	●	●	●	●
	VBGT160408R/L-S1	9.525	4.76	0.8	●	●	●	●	●	●
	VCGT160402R/L-S1	9.525	4.76	0.2	●	●	●	●	●	●
	VCGT160404R/L-S1	9.525	4.76	0.4	●	●	●	●	●	●
	VCGT160408R/L-S1	9.525	4.76	0.8	●	●	●	●	●	●
	VBGT110301R/L-Y	6.35	3.18	0.1	●	●	●	●	●	●
	VBGT110302R/L-Y	6.35	3.18	0.2	●	●	●	●	●	●
	VBGT110304R/L-Y	6.35	3.18	0.4	●	●	●	●	●	●
	VBGT160402R/L-Y	9.525	4.76	0.2	●	●	●	●	●	●
	VBGT160404R/L-Y	9.525	4.76	0.4	●	●	●	●	●	●
	VBGT160408R/L-Y	9.525	4.76	0.8	●	●	●	●	●	●
	VBGT110302R/L-C	6.35	3.18	0.2	●	●	●	●	●	●
	VBGT110304R/L-C	6.35	3.18	0.4	●	●	●	●	●	●
	VCGT110301R/L-C	6.35	3.18	0.1	●	●	●	●	●	●
	VCGT110302R/L-C	6.35	3.18	0.2	●	●	●	●	●	●

外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	VCGT110304R/L-C	6.35	3.18	0.4	●	●	●	●	●	●
	VBGT160402R/L-C	9.525	4.76	0.2	●	●	●	●	●	●
	VBGT160404R/L-C	9.525	4.76	0.4	●	●	●	●	●	●
	VBGT160408R/L-C	9.525	4.76	0.8	●	●	●	●	●	●
	VCGT160402R/L-C	9.525	4.76	0.2	●	●	●	●	●	●
	VCGT160404R/L-C	9.525	4.76	0.4	●	●	●	●	●	●
	VCGT160408R/L-C	9.525	4.76	0.8	●	●	●	●	●	●
	VBGT160402R/L-H	9.525	4.76	0.2	●	●	●	●	●	●
	VBGT160404R/L-H	9.525	4.76	0.4	●	●	●	●	●	●
	VBGT160408R/L-H	9.525	4.76	0.8	●	●	●	●	●	●
	WBGTO60102R/L-S1	3.97	1.59	0.2	●	●	●	●	●	●
	WBGTO60104R/L-S1	3.97	1.59	0.4	●	●	●	●	●	●

外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	CNGG120402R/L-C	12.7	4.76	0.2	●	●	●	●	●	●
	CNGG120404R/L-C	12.7	4.76	0.4	●	●	●	●	●	●
	CNGG120408R/L-C	12.7	4.76	0.8	●	●	●	●	●	●
	CNGG120402R/L-H	12.7	4.76	0.2	●	●	●	●	●	●
	CNGG120404R/L-H	12.7	4.76	0.4	●	●	●	●	●	●
	CNGG120408R/L-H	12.7	4.76	0.8	●	●	●	●	●	●
	CNGG120402R/L-S	12.7	4.76	0.2	●	●	●	●	●	●
	CNGG120404R/L-S	12.7	4.76	0.4	●	●	●	●	●	●
	CNGG120408R/L-S	12.7	4.76	0.8	●	●	●	●	●	●
	DNGG110402R/L-C	9.525	4.76	0.2	●	●	●	●	●	●
	DNGG110404R/L-C	9.525	4.76	0.4	●	●	●	●	●	●
	DNGG110408R/L-C	9.525	4.76	0.8	●	●	●	●	●	●
	DNGG110402R/L-H	9.525	4.76	0.2	●	●	●	●	●	●
	DNGG110404R/L-H	9.525	4.76	0.4	●	●	●	●	●	●
	DNGG110408R/L-H	9.525	4.76	0.8	●	●	●	●	●	●
	DNGG150402R/L-H	12.7	4.76	0.2	●	●	●	●	●	●
	DNGG150404R/L-H	12.7	4.76	0.4	●	●	●	●	●	●
	DNGG150408R/L-H	12.7	4.76	0.8	●	●	●	●	●	●
	DNGG110402R/L-S	9.525	4.76	0.2	●	●	●	●	●	●
	DNGG110404R/L-S	9.525	4.76	0.4	●	●	●	●	●	●
	DNGG110408R/L-S	9.525	4.76	0.8	●	●	●	●	●	●
	DNGG150402R/L-S	12.7	4.76	0.2	●	●	●	●	●	●
	DNGG150404R/L-S	12.7	4.76	0.4	●	●	●	●	●	●
	DNGG150408R/L-S	12.7	4.76	0.8	●	●	●	●	●	●

外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	DNGG150402R/L-S1	12.7	4.76	0.2	●	●	●	●	●	●
	DNGG150404R/L-S1	12.7	4.76	0.4	●	●	●	●	●	●
	DNGG150408R/L-S1	12.7	4.76	0.8	●	●	●	●	●	●
	SNGG090302R/L-P	9.525	3.18	0.2	●	●	●	●	●	●
	SNGG090304R/L-P	9.525	3.18	0.4	●	●	●	●	●	●
	SNGG090308R/L-P	9.525	3.18	0.8	●	●	●	●	●	●
	SNGG120402R/L-P	12.7	4.76	0.2	●	●	●	●	●	●
	SNGG120404R/L-P	12.7	4.76	0.4	●	●	●	●	●	●
	SNGG120408R/L-P	12.7	4.76	0.8	●	●	●	●	●	●
	SNGG090302R/L-C	9.525	3.18	0.2	●	●	●	●	●	●
	SNGG090304R/L-C	9.525	3.18	0.4	●	●	●	●	●	●
	SNGG090308R/L-C	9.525	3.18	0.8	●	●	●	●	●	●
	SNGG120402R/L-C	12.7	4.76	0.2	●	●	●	●	●	●
	SNGG120404R/L-C	12.7	4.76	0.4	●	●	●	●	●	●
	SNGG120408R/L-C	12.7	4.76	0.8	●	●	●	●	●	●
	SNGG120412R/L-C	12.7	4.76	1.2	●	●	●	●	●	●
	TNGG160402R/L-C	9.525	4.76	0.2	●	●	●	●	●	●
	TNGG160404R/L-C	9.525	4.76	0.4	●	●	●	●	●	●
	TNGG160408R/L-C	9.525	4.76	0.8	●	●	●	●	●	●
	TNGG220402R/L-C	12.7	4.76	0.2	●	●	●	●	●	●
	TNGG220404R/L-C	12.7	4.76	0.4	●	●	●	●	●	●
	TNGG220408R/L-C	12.7	4.76	0.8	●	●	●	●	●	●
	TNGG160402R/L-F1	9.525	4.76	0.2	●	●	●	●	●	●
	TNGG160404R/L-F1	9.525	4.76	0.4	●	●	●	●	●	●
	TNGG160408R/L-F1	9.525	4.76	0.8	●	●	●	●	●	●



外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	VNGG160402R/L-C	12.7	4.76	0.2	●	●	●	●	●	●
	VNGG160404R/L-C	12.7	4.76	0.4	●	●	●	●	●	●
	VNGG160408R/L-C	12.7	4.76	0.8	●	●	●	●	●	●
	VNGG160402R/L-H	9.525	3.18	0.2	●	●	●	●	●	●
	VNGG160404R/L-H	9.525	3.18	0.4	●	●	●	●	●	●
	VNGG160408R/L-H	9.525	3.18	0.8	●	●	●	●	●	●
	VNGG160402R/L-S	12.7	4.76	0.2	●	●	●	●	●	●
	VNGG160404R/L-S	12.7	4.76	0.4	●	●	●	●	●	●
	VNGG160408R/L-S	12.7	4.76	0.8	●	●	●	●	●	●
	VNGG160402R/L-S1	9.525	3.18	0.2	●	●	●	●	●	●
	VNGG160404R/L-S1	9.525	3.18	0.4	●	●	●	●	●	●
	VNGG160408R/L-S1	9.525	3.18	0.8	●	●	●	●	●	●
	WNGG060402R/L-C	12.7	4.76	0.2	●	●	●	●	●	●
	WNGG060404R/L-C	12.7	4.76	0.4	●	●	●	●	●	●
	WNGG060408R/L-C	12.7	4.76	0.8	●	●	●	●	●	●
	WNGG080402R/L-C	12.7	4.76	1.2	●	●	●	●	●	●
	WNGG080404R/L-C	9.525	4.76	0.2	●	●	●	●	●	●
	WNGG080408R/L-C	9.525	4.76	0.4	●	●	●	●	●	●
	WNGG060402R/L-S	9.525	4.76	0.8	●	●	●	●	●	●
	WNGG060404R/L-S	12.7	4.76	0.2	●	●	●	●	●	●
	WNGG060408R/L-S	12.7	4.76	0.4	●	●	●	●	●	●
	WNGG060402R/L-S1	12.7	4.76	0.8	●	●	●	●	●	●
	WNGG060404R/L-S1	9.525	4.76	0.2	●	●	●	●	●	●
	WNGG060408R/L-S1	9.525	4.76	0.4	●	●	●	●	●	●

外观	型号	尺寸 (mm)			牌号					
		内切圆 (I.C)	厚度 (S)	刀尖圆弧半径 (Re)	PV8110	PV8210	PV8310	PV4112	PV4212	PV4312
	WNGG080402R/L-S	12.7	4.76	0.2	●	●	●	●	●	●
	WNGG080404R/L-S	12.7	4.76	0.4	●	●	●	●	●	●
	WNGG080408R/L-S	12.7	4.76	0.8	●	●	●	●	●	●
	WNGG080402R/L-S1	12.7	4.76	0.2	●	●	●	●	●	●
	WNGG080404R/L-S1	12.7	4.76	0.4	●	●	●	●	●	●
	WNGG080408R/L-S1	12.7	4.76	0.8	●	●	●	●	●	●

MET CERA 美奢锐



## 成都美奢锐新材料有限公司

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## 金属陶瓷

被削材	钢 (碳钢/合金钢)					不锈钢/不锈钢铸钢					铸铁 (灰口铸铁/球墨铸铁)			
切削领域	精加工 ←————→ 粗加工					精加工 ←————→ 粗加工					精加工 ←————→ 粗加工			
使用分类	P01	P10	P20	P30	P40	M01	M10	M20	M30	M40	K01	K10	K20	K30
金属陶瓷														

## 金属陶瓷

牌号	颜色	涂层硬度(HV)	抗氧化温度(°C)	摩擦系数	涂层厚度(μm)	应用推荐
PV1120	金色	3500	900	0.3	2-2.5	钢、合金钢加工, HRC<50调质钢
PV2110						
PV3115						
PV1220	灰黑色	3500	900	0.3	2-2.5	钢加工用
PV2210						
PV3215						
PV1320	古铜色	4200	1000	0.3	2-2.5	HRC<55调质钢、不锈钢、普通钢
PV2310						
PV3315						

## 金属陶瓷

材质符号	比重	母材硬度		抗折强度(MPa)
		HV30	HRA	
MC1020	6.5	1650	93.0	1800
MC2010	6.8	1550	92.4	2300
MC3015	7.0	1520	92.0	2500

## 金属陶瓷

\* 本表基于各公司的样本及公开刊物制作、未获得各公司的承认。

使用分类符号	美奢锐	京瓷	三菱综合材料	特固克	克洛伊	住友	东芝
P类 M类 K类	MC1020(G级)	TN60	NX2525	/	/	T1000A	/
	PV1120	PV720	NX2525	/	/	T1000A	/
	MC2010	TN60	/	CT3000	CN2000	T1200A	NS740 NS9530
	PV2110	PV720	/	CT3000	/	T1200Z	/
	MC3015	TN60	NX4545	/	CN20 CN30	T1500A	NS530
	PV3115	PV730	/	/	/	/	NS530