晶须陶瓷切削刀具

Whisker Ceramics Cutting Tools

NewCermets®
新陶新材

株洲新陶新材料有限公司
ZHUZHOU NEW CERMETS MATERIAL CO.,LTD

公司简介/Company Profile

株洲新陶新材料有限公司坐落于株洲市国家级高新技术开发区内，公司专门从事于金属陶瓷新材料的研发与生产，是一家集合研发、生产、销售于一体的的高新技术企业。我们产品专注于晶须陶瓷、碳氮化钛基(TiCN)金属陶瓷圆棒、切削刀片等耐磨耐高温材料的研发和生产，还可以针对客户特殊需求提供多种定制化服务。金属陶瓷材料适用于制作车刀、铣刀、铰刀、钻头等机械加工使用刀具。公司产品覆盖众多生产应用领域，其中包括汽车工业、航空航天、军工、医疗、机械、石油化工、IT等众多领域。

公司拥有经验丰富的生产技术及管理人才，由知名高校教授和多名博士研究生组成的研发团队，具备很强的自主研发能力，先进的技术力量保证了产品的品质和稳定性，产品质量在同行业中处于领先地位，并建立起了一套完整的质量管理体系和完善的售后服务网络，深受国内外用户的信赖和好评！

Zhuzhou Newcermets Materials Co., Ltd. is located in Zhuzhou national high-tech Development Zone, the company specializes in the research and development and production of new metal ceramic materials, is a research and development, production, sales in one of the high-tech enterprises. We specialize in the development and production of whisker ceramics , titanium carbon nitride (TiCN) cermet round rods, cutting blades, wear resistant and high temperature materials, and can also provide a variety of customized services for customers' special needs. Cermet materials are suitable for making machining tools such as turning tools, milling cutters, reamers and drill bits. The company's products cover many application fields, including automotive, aerospace, military, medical, machinery, petrochemical, IT and many other fields.

The company has experienced production technology and management personnel, a research and development team composed of well-known university professors and a number of doctoral students, with strong independent research and development capabilities, advanced technical force to ensure product quality and stability, product quality in the industry in the leading position, and established a complete set of quality management system and perfect after-sales service network. By domestic and foreign users trust and praise!

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

目录/Contents

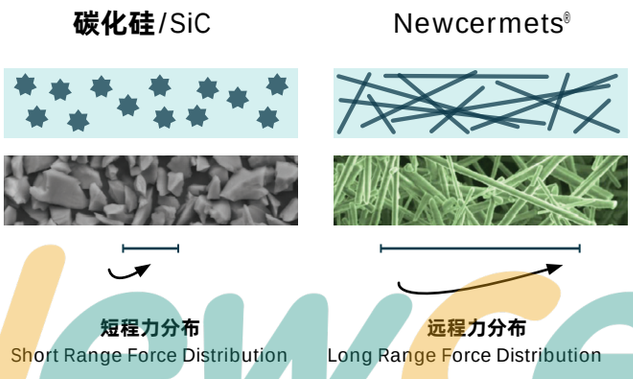
晶须陶瓷/Whisker Ceramics

Newcermets的碳化硅（SiC）晶须增韧陶瓷刀片，提供世界级的硬度和断裂韧性。

Newcermets's silicon carbide (SiC) whiskers reinforce ceramic inserts to deliver world-class hardness and fracture toughness.

SiC的加入提供了仅次于金刚石的硬度。由于纤维提供了远程力分布，我们能够在保持卓越韧性的同时实现这一结果。

The inclusion of SiC provides hardness second only to diamond. Due to long range force distribution provided by the fibre, we are able to achieve this result while maintaining exceptional toughness.



在规划一个成功的金属切削操作时，刀具基材料和等级的选择是一个需要考虑的关键因素。

高切削力和高热量导致金属塑化，而Newcermets®的陶瓷基材保持不变。

晶须增韧切削刀具提供更高的韧性和耐磨性，使其成为加工各种工件材料的理想选择，包括镍基合金，钴基合金，高硬钢，灰铸铁，球墨铸铁以及轧辊。

The selection of cutting tool substrate and grade is a key factor to consider when planning a successful metal cutting operation.

High cutting forces and high heat cause the metal to plasticize while the Newcermets® ceramic substrate remains in-tact.

Whisker-reinforced cutting tools offer both increased toughness and wear resistance, making them ideal for machining a variety of workpiece materials including Ni-based alloys, cobalt-based alloys, hardened steels, gray cast, ductile, and nodular irons, and mill rolls.

增强型切削刀具
Enhanced Cutting Tools

Newcermets正在为航空航天，轧机轧辊车削和汽车等一系列行业应用制造下一代切削工具。

Newcermets is manufacturing the next generation of cutting tools for a range of applications in aerospace, steel mill roll turning and automotive.

我们的晶须增韧切削刀具使用Newcermets®碳化硅晶须制造并提供增强功能包括:

Our SiC whisker-reinforced cutting tools are manufactured using Newcermets® silicon carbide whiskers and offer enhanced features including:

- 与传统硬质合金刀具相比，金属去除率提高了10倍以上
  More than 10x the metal removal rate compared to traditional tungsten carbide cutting tools
- 优异的抗断裂性能
  Excellent fracture resistance
- 硬度和韧性增强
  Increased hardness and toughness
- 极高的耐热性和耐磨性
  Extreme heat and wear resistance
- 尺寸稳定性
  Dimensional stability
- 全新的CT-10级刀具，与传统晶须刀具相比，提供更加卓越的表面光洁度
  New and novel CT-10 grade of whiskered tools that delivers superior surface finish compared to traditional whiskered tools

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

Uses

Aerospace – Jet Engine Cases & Components (Nozzles, Vanes, Shafts, Turbines, Cases, etc.).

Energy – Machining of Steam Turbines & Components for Power Generation.

Heavy Turning – Steel Mill Work Rolls, Back-up Rolls, Paper Machine Rolls, Calendar Rolls, Super-Calendar Rolls, Tube & Pipe Forming Rolls, etc.

Automotive – Cast Iron, Ductile Iron, CGI, Hardened Steels, White Iron, Chilled Iron, and Powdered Metals.

Cutting Tools for Aerospace

The Need for Speed – Aerospace Inserts

Our Newcermets® whisker reinforced ceramic cutting tools are designed for heavy material removal in roughing and semi-finishing applications
They offer the perfect solution for high-speed machining of heat resistant super alloys (HRSA) – Inconel, Waspaloy, Haynes, Monel, Rene, Incoloy A-286, Nimonic, Udimet, etc.

The Newcermets® CT-25 Grade offers a comprehensive and advanced range of high-speed cutting tool solutions for:

- Increased speed capability (more than ten times compared to carbide cutting tools) for higher throughput and shorter cycle times
- Increased toughness and fracture resistance for higher feed rate capability
- Increased variety and sharper edge preparation
- Efficient cutting
- Longer tool life
- Superior performance in continuous cutting conditions
- Capable of both wet and dry machining
- Ideal for heavily interrupted cutting

As demand for lightweight materials in the aerospace industry increases, Newcermets can manufacture new grades and tooling that specialize in machining hard-to-cut materials.

With higher speed and feed rates, Newcermets® cutting tools deliver consistent results and longer tool life in applications for:

- Rough turning (O.D. & I.D.)
- Semi finishing (O.D. & I.D.)
- Milling
- Grooving

应用方向

航空航天 –喷气发动机外壳和部件(喷嘴、叶片、轴涡轮机、外壳等)。
能源 – 发电用汽轮机及部件的加工。
重型车削 – 轧钢工作辊，支撑辊，纸机辊，压延辊，超级压延辊，管材成型辊等。
汽车行业 – 铸铁、球墨铸铁、蠕墨铸铁、高硬钢、白口铁、冷硬铁和粉末冶金钢。

航空航天用切削刀具

对速度的需求 – 航天刀片

我们的Newcermets®晶须增韧陶瓷刀具专为粗加工和半精加工应用中的重型材料去除而设计。

它们为耐热超级合金（HRSA）的高速加工提供了完美的解决方案——铬镍铁合金、Waspaloy、Haynes、Monel、Rene、Incoloy A-286、Nimonic、Udimet等。

Newcermets® CT-25级可以提供全面而先进的高速切削刀具解决方案：

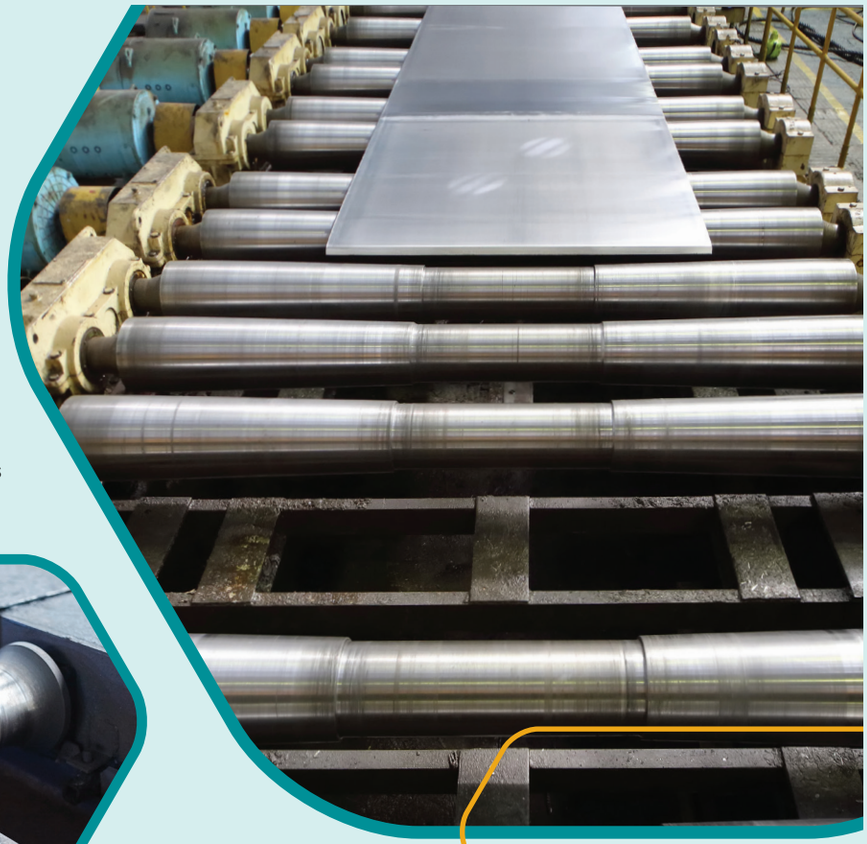
- 提高了速度能力(比硬质合金刀具快十倍以上)，实现更高的产量和更短的周期时间
- 提高韧性和抗断裂能力，提高进给速度
- 增加多样性锋利边缘的处理
- 高效切削
- 更长的刀具寿命
- 在连续切削下有优越的性能
- 可以干湿加工
- 理想的重型中断切削

随着航空航天工业对轻质材料需求的增加， Newcermets®可以制造专门用于加工难切削材料的新材质和刀具。

凭借更高的速度和进给率，Newcermets®刀具在以下应用中提供了一致的结果和更长的刀具寿命：

- 粗加工（外径和内径）
- 半精加工（外径和内径）
- 铣削
- 切槽

Cutting Tools for the Steel Mill Industry



The quality of inserts is as important as the machinery and workpiece.

Designed to protect your workpiece from damage caused by extreme heat and force and ensuring longer tool life, Newcermets's steel mill inserts offer an optimal choice for milling fracking blocks and for milling flats on mill roll necks.

Steel mill geometries are used to remove heavy material in the most demanding rough turning conditions. Inserts are available for:

- Nodular iron mill rolls
- Hardened steel mill rolls
- Ductile iron mill rolls
- Stainless steel weld overlays / repair work on mill rolls
- Back up rolls
- D2 hardened tool steel

An alternative milling option to cermet and carbide tools, steel mill inserts are the first choice for:

- High speed hard milling
- High speed milling of mild steels commonly used for mill roll necks
- High speed milling of mild steels widely used in fracking block manufacturing
- Positive geometries for burr reduction in hard milling
- Unique edge prep geometries
- Increased productivity due to high speed and feed rates
- Rough turning (30 HRC +)
- Milling (30 HRC +)
- Tube milling scarfing tools for a wide range of pipe diameters, mill roll turning (both work rolls and back up rolls)

轧钢行业用切削工具

刀片的质量与机械和工件一样重要。

为了保护您的工件免受极端高温和外力造成的损坏，并确保更长的刀具寿命，Newcermets®的轧钢刀片为铣削压裂块和铣削轧辊颈上的平面提供了最佳选择。

轧钢曲轴用于在最苛刻的粗车削条件下去除重型材料。可用于：

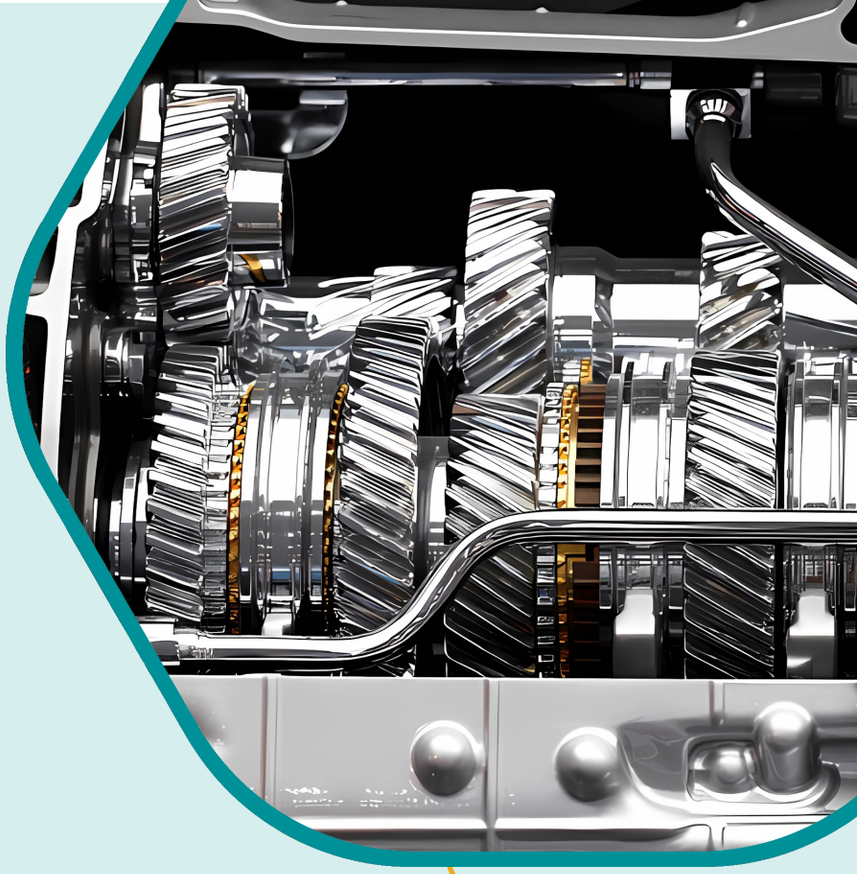
- 球墨铸铁轧辊
- 高硬钢轧辊
- 球墨铸铁轧辊
- 不锈钢焊接覆盖/修复工作轧辊
- 承压辊
- 淬火工具钢

作为金属陶瓷和硬质合金刀具的替代铣削选项，轧钢铣削刀片是以下方面的首选：

- 高速硬质铣削
- 低碳钢轧辊轴颈的高速铣削
- 用于压裂块制造的软钢的高速铣削
- 正角刀片在高硬铣削中减少毛刺
- 特殊曲轴的边缘处理
- 由于高转速和高进给提高了生产率
- 粗车削（30 HRC+）
- 铣削（30 HRC +）
- 管材铣削工具，适用于各种管径，轧辊车削(包括工作辊和支撑辊)

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

Cutting Tools for Automotive Applications



It is essential for turning and milling tools in automotive applications to wear evenly with minimal maintenance in the most demanding applications.

To meet the workflow and high output demands, Newcermets has a range of inserts for the automotive industry using SiC whiskers that are long-lasting and deliver consistent and reliable results as well as

- High Fracture resistance for consistent cutting in interrupted andcontinuous operations
- High DOC capability (Max .100 ”)
- Speed capability of 2,400+ SFM in cast iron
- Feed rate capability of .018 ” + IPR

Our Newcermets® inserts are designed for heavy DOC material removal in cast iron, compacted graphite iron (CGI), ductile iron, nodular iron, hardened steels (transmission components), white iron , chilled iron,and powdered metals. Our high hardness allows us to machine these extremely abrasive materials with extended tool life vs. traditional ceramics. We offer several types and grades of materials for a range of products to suit specific automotive applications including:

- Brake rotors and ductile iron brake drums
- Carriers
- Dampers
- Pulleys
- Gear boxes
- Transmission covers
- Cylinder liner sleeves
- Flywheels, etc.

汽车行业用切削工具

汽车应用中的车削和铣削刀具必须在最苛刻的应用中以最少的维护实现均匀磨损。

为了满足工作流程和高输出要求，Newcrsmets®为汽车行业提供了一系列使用SiC晶须的刀片，这些晶须刀片持久耐用，并提供可信赖的结果，以及:

- 在间断和连续作业中，具有高抗断裂性，可实现连续切削
- 高DOC能力(最高可达100 ")
- 加工铸铁时可加速达到2400 + SFM
- 进给量可达0.018 ” + IPR

我们的Newcrsmets®刀片专为铸铁，蠕墨铸铁，可锻铸铁球墨铸铁，淬火钢(传动部件)，白口铁，冷硬铁和粉末金属中的重型材料去除而设计。晶须刀片的高硬度能够加工这些极具磨蚀性的材料。与传统陶瓷相比，刀具寿命更长。我们为一系列产品提供多种类型和等级的材料，以适应特定的汽车行业切削应用，包括:

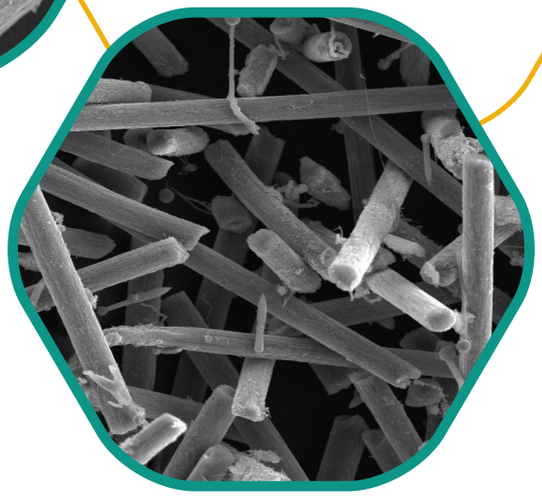
- 制动盘和球墨铸铁制动鼓
- 传送带
- 减震器
- 皮带轮
- 齿轮箱
- 变速箱盖
- 汽缸套
- 飞轮，等一系列产品。

牌号信息/Grade Information

产品/Product*	陶瓷类型/Ceramic Type	描述/Description
CT-10 CT-10C	SiC晶须增强	**新!**优异的断裂韧性，表面光洁度优于CT-25 NEW! Excellent fracture toughness with a superior finish than CT-25
CT-25 CT-25C	SiC晶须增强	卓越的韧性主要用于粗加工 Unsurpassed toughness used primarily for roughing

*所有标有C后缀的产品都有涂层/*All grades designated with a C suffix are coated.

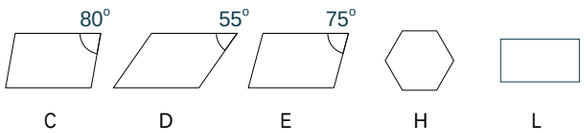
氮化硅,赛隆陶瓷和碳化钛铝陶瓷可按照客户要求定制
Silicon Nitride, Sialon, and Alumina-TiC Ceramics are available upon request.



编码系统/Identification System

ISO	C	N	G	A	12	04	08	Z	015	20	
ANSI	C	N	G	A	4	3	2	T	006	20	E1
	1	2	3	4	5	6	7	8	9	10	11

1. 形状 Shape

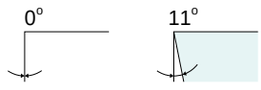


C D E H L

R S T V W

2. 后角 Clearance Angle

B C D E

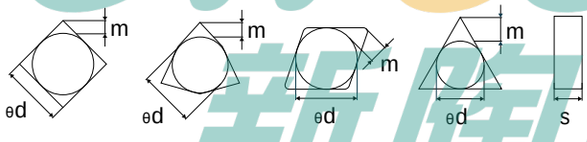


N P

其他需要说明的间隙角
Other clearance angles requiring descriptions

O

3. 公差 Tolerance

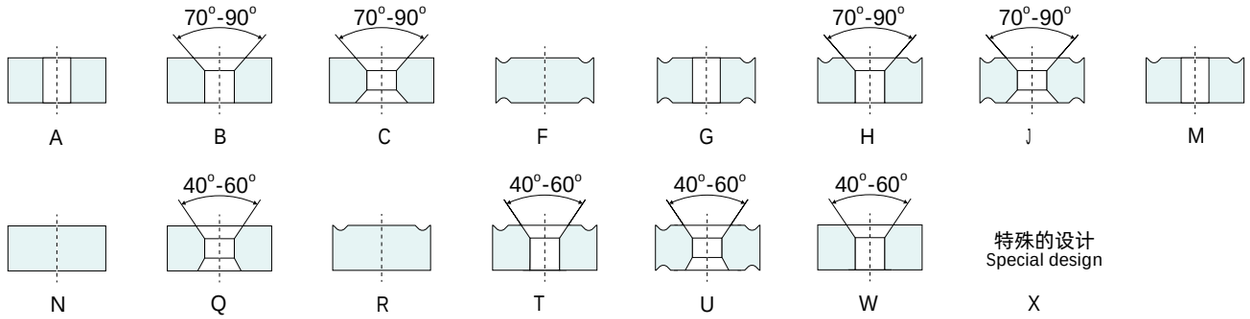


*见下表
* See tables below

代号 Symbol	内切圆直径 d (mm)	刀尖圆弧半径 m (mm)	刀片厚度 s (mm)
A	+0.025	+0.005	+0.025
C	+0.025	+0.013	+0.025
E	+0.025	+0.025	+0.025
F	+0.013	+0.005	+0.025
G	+0.025	+0.025	+0.130
H	+0.013	+0.013	+0.025
J	*	+0.005	+0.025
K	*	+0.013	+0.025
L	*	+0.025	+0.025
M	*	*	+0.127
U	*	*	+0.127
N	*	*	+0.025

Symbol	D		C, E, H, O, S, T, R, W			
	d (mm)	m (mm)	d (mm)		m (mm)	
	M, N	M, N	J, K, L, M, N	U	M, N	U
5.56	±0.05	±0.11	±0.05	±0.08	±0.08	±0.13
6.35	±0.05	±0.11	±0.05	±0.08	±0.08	±0.13
7.94	±0.05	±0.11	±0.05	±0.08	±0.08	±0.13
9.52	±0.05	±0.11	±0.05	±0.08	±0.08	±0.13
12.70	±0.08	±0.15	±0.08	±0.13	±0.13	±0.20
15.87	±0.10	±0.18	±0.10	±0.18	±0.15	±0.27
19.05	±0.10	±0.18	±0.10	±0.18	±0.15	±0.27
25.40	-	-	±0.13	±0.25	±0.18	±0.38

4. 型号Type



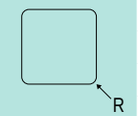
5. 刀片尺寸和边长 Insert size and edge length

ANSI (in)		ISO					
内切圆 Inscribed circle		C	D	R S	T	V	W
1/4 ”	2	06	07	06	11	11	04
3/8 ”	3	09	11	09	16	16	06
1/2 ”	4	12	15	12	22	22	08
5/8 ”	5	16	19	15	27	27	10
3/4 ”	6	19	23	19	33	33	13
1 ”	8	25	31	25	44	44	17

6. 厚度 Thickness

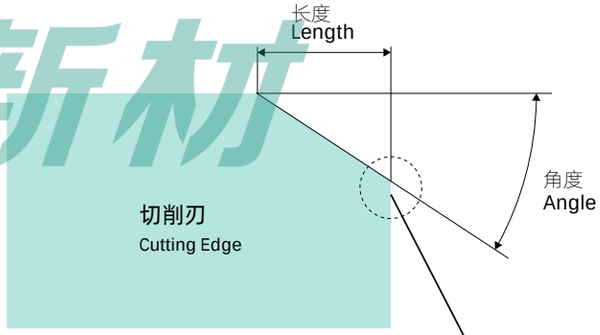
Tickness (in)	ANSI	ISO
3/32 ”	1.5	02
1/8 ”	2	03
5/32 ”	2.5	T3
3/16 ”	3	04
1/4 ”	4	06
5/16 ”	5	07
3/8 ”	6	09
1/2 ”	8	12

7. 刀尖半径 Nose radius



内半径Radius (in)	ANSI	ISO
1/64 ”	1	04
1/32 ”	2	08
3/64 ”	3	12
1/16 ”	4	16
5/64 ”	5	20
3/32 ”	6	24
1/8 ”	8	32

9, 10, 11. 刀尖规格 Edge prep



8. 刀尖规格 Edge preperation

刀尖 Edge	ANSI	ISO
倒棱 Honed	E1 E2	E
倒角 Chamfered only	T	T
倒角+倒棱 Chamfered and Honed	T with E1 at end (0.001 ” hone) T with E2 at end (0.002 ” hone)	Z (0.025 mm hone) S (0.050 mm hone)
2段倒角+倒棱 Double Chamfered and Honed	HD	HD

CNGA 120408 Z 015 20

CNGA 432 T 006 20 E1

9 刀尖处理宽度

ANSI Length ISO Length

006 0.006 ” 015 0.15mm

10 刀尖处理角度

20: 20 degrees

11 倒棱 Hone

ANSI Length ISO Length

E1 0.001 ” Z 0.025mm

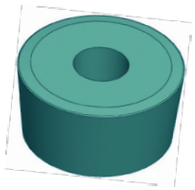
加工各类材料牌号/Grade for Workpiece

车削 Turning							
应用 Application	工件 Workpiece	牌号 Grade	陶瓷刀片 Ceramic	加工方式 Type	切削速度 Speed	进给速度 Feed	切削深度 Depth of Cut
车削 Turning	灰铸铁、冷硬铸铁 Gray Cast Iron, Chilled Cast Iron	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	1,200 – 2,400 sfm	.008 - .024 ipr	.020 ” - .100 ”
		CT-10 CT-10C		精加工 Finish	600 – 1,200 sfm	.004 - .012 ipr	.010 ” - .020 ”
车削 Turning	可锻铸件、球墨铸铁 DUctil Iron, Nodular Iron	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	600 – 1,800 sfm	.006 - .018 ipr	.020 ” - .080 ”
		CT-10 CT-10C		精加工 Finish	600 – 1,600 sfm	.004 - .010 ipr	.010 ” - .020 ”
车削 Turning	模具钢 Tool Steel HRC 30-60	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	300 – 1,000 sfm	.002 - .010 ipr	.010 ” - .040 ”
		CT-10 CT-10C		精加工 Finish	150 – 600 sfm	.002 - .010 ipr	.006 ” - .020 ”
车削 Turning	高温合金 High Temperature Alloys (HTAs)	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	300 – 1,000 sfm	.002 - .010 ipr	.010 ” - .040 ”
		CT-10 CT-10C		精加工 Finish	600 – 1,200 sfm	.004 - .010 ipr	.010 ” - .020 ”

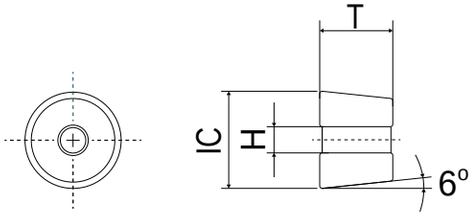
铣削 Milling							
应用 Application	工件 Workpiece	牌号 Grade	陶瓷刀片 Ceramic	加工方式 Type	切削速度 Speed	进给速度 Feed	切削深度 Depth of Cut
铣削 Milling	灰铸铁、冷硬铸铁 Gray Cast Iron, Chilled Cast Iron	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	1,800 – 3,000 sfm	.004 - .010 ipr	.020 ” - .200 ”
	可锻铸件、球墨铸铁 DUctil Iron, Nodular Iron	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	1,200 – 2,400 sfm	.004 - .008 ipr	.010 ” - .020 ”
铣削 Milling	高温合金 High Temperature Alloys (HTAs)	CT-25 CT-25C	碳化硅晶须陶瓷 Sic Whiskered	粗加工 Rough	1,800 – 3,600 sfm	.004 - .010 ipr	.040 ” - .120 ”

参数基于使用½内圆直径的刀片
Parameters based on use of ½ I.C. Insert.

圆形车削刀片/Roll Turning Inserts



Geometry	IC	T	H
CDH 22	1/2	1/4	0.125
CDH 33	3/4	3/8	0.250
CDH 42	1	1/2	0.266
CDH 515	1 1/4	3/8	0.391
CDH 53	1 1/4	3/4	0.391

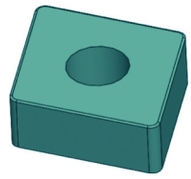


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10(C)	CT-25(C)
CDH 22	HD02810	CDH 22	HD0710	■	■
CDH 33	HD06010E2	CDH 33	HD1510E2	■	■
CDH 42	HD08015E1	CDH 42	HD2015E1	■	■
CDH 515	HD07110	CDH 515	HD1810	■	■

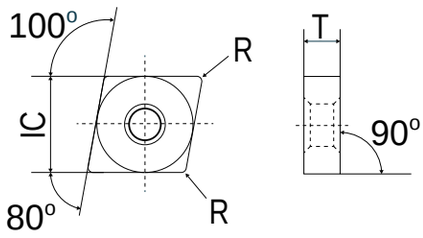
■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

菱形80°负角带孔
Diamond Inserts, 80°, Negative, with hole



Geometry	IC	T	R
CNGA 432	1/2	3/16	0.031
CNGA 433	1/2	3/16	0.047
CNGA 434	1/2	3/16	0.063
CNGA 543	5/8	1/4	0.047
CNGA 544	5/8	1/4	0.063
CNGA 643	3/4	1/4	0.047

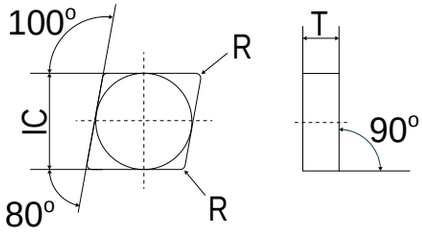


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-25(C)	CT-10(C)
CNGA 432	T00220	CNGA120408	T00520	■	■
CNGA 432	T00425	CNGA 120408	T01025	■	■
CNGA 432	T00825	CNGA 120408	T02025	■	■
CNGA 433	T00220	CNGA 120412	T00520	■	■
CNGA 433	T00425	CNGA 120412	T01025	■	■
CNGA 433	T00825	CNGA 120412	T02025	■	■
CNGA 434	T00220	CNGA 120416	T00520	■	■
CNGA 434	T00425	CNGA 120416	T01025	■	■
CNGA 434	T00825	CNGA 120416	T02025	■	■
CNGA 543	T00220	CNGA 160612	T00520	■	■
CNGA 544	T00425	CNGA 160616	T01025	■	■
CNGA 643	T00620	CNGA 190612	T01520	■	■
CNGA 643	T00620E1	CNGA 190612	Z01520	■	■

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

菱形80°负角/Diamond Inserts, 80º, Negative

Geometry	IC	T	R
CNGN 432	1/2	3/16	0.031
CNGN 433	1/2	3/16	0.047
CNGN 434	1/2	3/16	0.063
CNGN 452	1/2	5/16	0.031
CNGN 453	1/2	5/16	0.047
CNGN 454	1/2	5/16	0.063

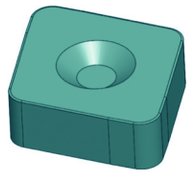


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10(C)	CT-25(C)
CNGN 432	T00220	CNGN 1200408	T00520	■	■
CNGN 432	T00425	CNGN 1200408	T01025	■	■
CNGN 432	T00825	CNGN 1200408	T02025	■	■
CNGN 432	T00820E2	CNGN 1200408	S02020	□	□
CNGN 433	T00220	CNGN 120412	T00520	■	■
CNGN 433	T00425	CNGN 120412	T01025	■	■
CNGN 433	T00825	CNGN 120412	T02025	■	■
CNGN 433	T00820E2	CNGN 120412	S02020	□	□
CNGN 434	T00220	CNGN 120416	T00520	■	■
CNGN 434	T00425	CNGN 120416	T01025	■	■
CNGN 434	T00825	CNGN 120416	T02025	■	■
CNGN 434	T00820E2	CNGN 120416	S02020	□	□
CNGN 437	T00420	CNGN 120428	T01020	■	■
CNGN 452	T00220	CNGN 120708	T00520	■	■
CNGN 453	T00220	CNGN 120712	T00520	■	■
CNGN 454	T00220	CNGN 120716	T00520	■	■
CNGN 543	T00220	CNGN 150612	T00520	■	■
CNGN 643	T00220	CNGN 190612	T00520	■	■
CNGN 644	T00220	CNGN 190616	T00520	■	■ ■
CNGN 654	T00220	CNGN 190716	T00520	■	■ ■

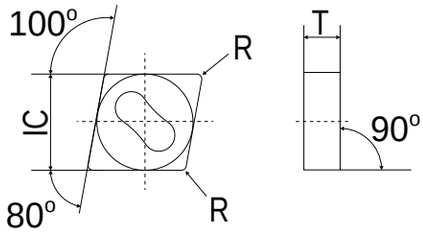
■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

菱形80°负角凹窝形
Diamond Inserts, 80°, Negative, with dimple



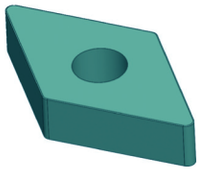
Geometry	IC	T	R
CNGX 432	1/2	3/16	0.031
CNGX 433	1/2	3/16	0.047
CNGX434	1/2	3/16	0.063
CNGX 452	1/2	5/16	0.031
CNGX 453	1/2	5/16	0.047
CNGX 454	1/2	5/16	0.063



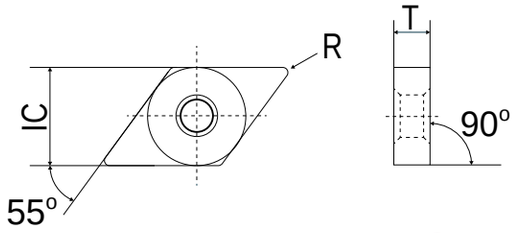
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10(C)	CT-25(C)
CNGX 432	T00820 E2	CNGX 120408	S02020	□	□
CNGX 433	T00820 E2	CNGX 120412	S02020	□	□
CNGX 434	T00820 E2	CNGX 120416	S02020	□	□
CNGX 452	T000825	CNGX 120708	T02025	■	□
CNGX 453	T000825	CNGX 120712	T02025	■	□
CNGX 454	T000825	CNGX 120716	T02025	■	□

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

菱形55°负角带孔
Diamond Inserts, 55°, Negative, with hole



Geometry	IC	T	R
DNGA 432	1/2	3/16	0.031
DNGA 433	1/2	3/16	0.047
DNGA 434	1/2	3/16	0.063

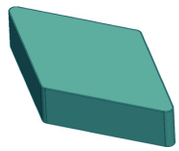


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
DNGA 432	T00220	DNGA 150408	T00520	■	■
DNGA 432	T00425	DNGA 150408	T01025	■	■
DNGA 433	T00220	DNGA 150412	T00520	■	■
DNGA 433	T00425	DNGA 150412	T01025	■	■
DNGA 434	T00220	DNGA 150416	T00520	■	■
DNGA 434	T00425	DNGA 150416	T01025	■	■

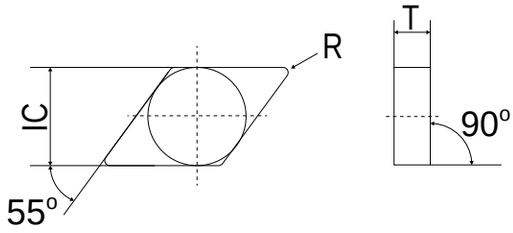
■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

菱形55°负角/Diamond Inserts, 55°, Negative



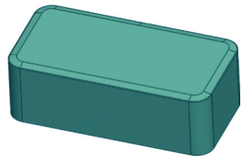
Geometry	IC	T	R
DNGN 432	1/2	3/16	0.031
DNGN 433	1/2	3/16	0.047
DNGN 434	1/2	3/16	0.063



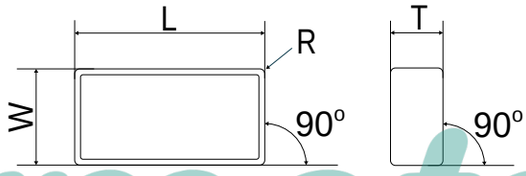
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
DNGN 432	T00220	DNGN 150408	T00520	■	■
DNGN 432	T00425	DNGN 150408	T01025	■	■
DNGN 432	T00820E2	DNGN 150408	S02020	□	□
DNGN 433	T00220	DNGN 150412	T00520	■	■
DNGN 433	T00425	DNGN 150412	T01025	■	■
DNGN 433	T00820E2	DNGN 150412	S02020	□	□
DNGN 434	T00220	DNGN 150416	T00520	■	■
DNGN 434	T00425	DNGN 150416	T01025	■	■
DNGN 433	T00820E2	DNGN 150416	S02020	□	□

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

矩形/Rectangular Inserts



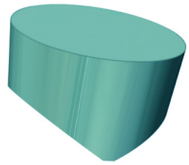
Geometry	W	L	T
LNJ 6688	3/4	1½	1/2



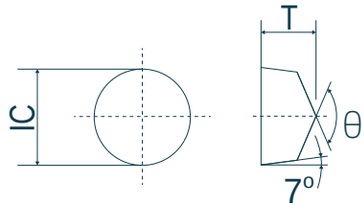
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
LNJ 6688	HD06015E1	LNJ 6688	HD1515E1	■	■
LNJ 6688	HD08015E2	LNJ 6688	HD2015E2	■	■

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

圆形7°V形底/Round Inserts, 7°, V-Bottom



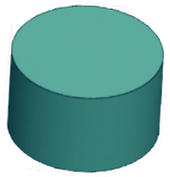
Geometry	IC	T	θ
RCGX 23	1/4	3/16	120°
RCGX 24	1/4	1/4	120°
RCGX 25	1/4	5/16	120°
RCGX 35	3/8	5/16	120°
RCGX 45	1/2	5/16	120°
RCGX 102	1/4	0.309	120°
RCGX 103	3/8	0.309	120°
RCGX 104	1/2	0.312	120°
RCGX 105	5/8	0.388	120°
RCGX 106	3/4	0.388	120°
RCGX 108	1	0.461	140°



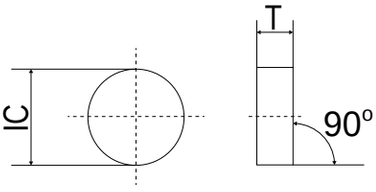
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
RCGX 23	T00220	RCGX060400	T00520	■	■
RCGX 23	T00220E1	RCGX060400	Z00520	■	■
RCGX 23	T00425	RCGX060400	T01025	■	■
RCGX 24	T00220	RCGX060600	T00520	■	■
RCGX 24	T00220E1	RCGX060600	Z00520	■	■
RCGX 24	T00425	RCGX060600	T01025	■	■
RCGX 35	T00220	RCGX090700	T00520	■	■
RCGX 35	T00220E1	RCGX090700	Z00520	■	■
RCGX 35	T00425	RCGX090700	T01025	■	■
RCGX 35	T00425E1	RCGX090700	Z01025	■	■
RCGX 35	T00825	RCGX090700	T02025	■	■
RCGX 35	T00825E1	RCGX090700	Z02025	■	■
RCGX 45	T00220	RCGX120700	T00520	■	■
RCGX 45	T00220E1	RCGX120700	Z00520	■	■
RCGX 45	T00425	RCGX120700	T01025	■	■
RCGX 45	T00425E1	RCGX120700	Z01025	■	■
RCGX 45	T00825	RCGX120700	T02025	■	■
RCGX 45	T00825E1	RCGX120700	Z02025	■	■
RCGX 102	HD04815E1	RCGX102	HD1215E1	■	■
RCGX 102	T02020E2	RCGX 102	S05020	□	□
RCGX 103	HD04815E1	RCGX 103	HD1215E1	■	■
RCGX 103	T02020E2	RCGX 103	S05020	□	□
RCGX 104	HD06015E1	RCGX 104	HD1515E1	■	■
RCGX 104	T02020E2	RCGX 104	S05020	□	□
RCGX 105	HD08015E1	RCGX 105	HD2015E1	■	■
RCGX 105	T02020E2	RCGX 105	S05020	□	□
RCGX 106	HD08015E1	RCGX 106	HD2015E1	■	■
RCGX 106	T02020E2	RCGX 106	S05020	□	□
RCGX 108	HD06015E1	RCGX 108	HD1515E1	■	■
RCGX 108	T02020E2	RCGX 108	S05020	□	□

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

圆形90°负角/Round Inserts, Negative



Geometry	IC	T
RNGN 32	3/8	1/8
RNGN 33	3/8	3/16
RNGN 43	1/2	3/16
RNGN 45	1/2	5/16
RNGN 55	5/8	5/16
RNGN 64	3/4	1/4
RNGN 65	3/4	5/16
RNGN 85	1	5/16
RNGN 86	1	3/8
RNGN 106	1 ¼	3/8

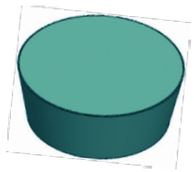


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
RNGN 32	T00220	RNGN 090300	T00520	■	■
RNGN 33	T00220	RNGN 090400	T00520	■	■
RNGN 43	T00220	RNGN 120400	T00520	■	■
RNGN 43	T00425	RNGN 120400	T01025	■	■
RNGN 45	T00220	RNGN 120700	T00520	■	■
RNGN 45	T00620E1	RNGN 120700	Z01520	■	■
RNGN 55	T00220	RNGN 150700	T00520	■	■
RNGN 64	T00825	RNGN 190600	T02025	■	■
RNGN 65	T00220	RNGN 190700	T00520	■	■
RNGN 85	T00220	RNGN 250700	T00520	□	□
RNGN 86	T00220	RNGN 250900	T00520	□	□
RNGN 86	HD090515E2	RNGN 250900	HD2415E2	□	□
RNGN 106	HD090515E2	RNGN 310900	HD2415E2	□	□

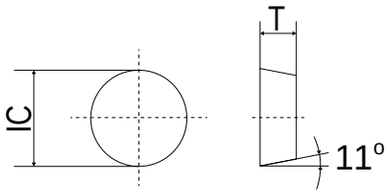
■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

圆形11°正角/Round Inserts, Positive



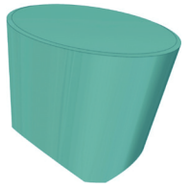
Geometry	IC	T
RPGN 215	1/4	3/32
RPGN 32	3/8	1/8
RPGN 43	1/2	3/16



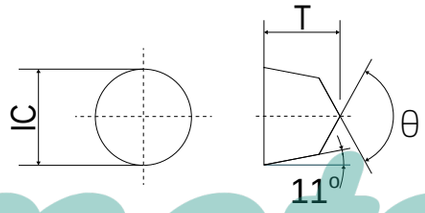
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
RPGN 215	T00220	RPGN 060200	T00520	☐	☐
RPGN 32	T00220	RPGN 090300	T00520	☐	☐
RPGN 43	T00220	RPGN 120400	T00520	■	■
RPGN 43	T00425	RPGN 120400	T01025	☐	☐

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

圆形11°V形底/Round Inserts, 11°, V-Bottom



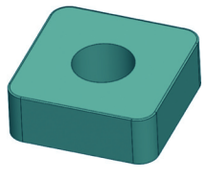
Geometry	IC	T	θ
RPGX 23	1/4	3/16	120°
RPGX 35	3/8	5/16	120°
RPGX 45	1/2	5/16	120°



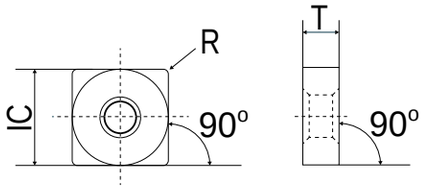
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
RPGX 23	T00220	RPGX 0604	T00520	■	■
RPGX 23	T00420E1	RPGX 0604	Z01020	■	■
RPGX 35	T00220	RPGX 0907	T00520	■	■
RPGX 45	T00220	RPGX 120700	T00520	■	■

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

正方形90°负角带孔
Square Inserts, 90º, Negative, with hole



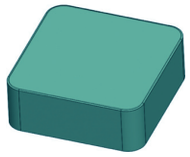
Geometry	IC	T	R
SNGA 432	1/2	3/16	0.031
SNGA 433	1/2	3/16	0.047
SNGA 434	1/2	3/16	0.063
SNGA 434	1/2	3/16	0.063
SNGA 543	5/8	1/4	0.047
SNGA 544	5/8	1/4	0.063
SNGA 644	3/4	1/4	0.064



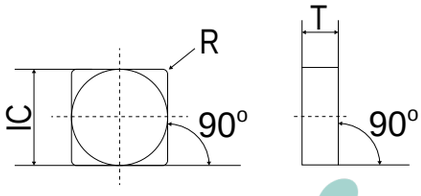
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
SNGA 432	T00220	SNGA 120408	T00520	■	■
SNGA 433	T00220	SNGA 120412	T00520	■	■
SNGA 434	T00220	SNGA 120416	T00520	■	■
SNGA 434	T00825	SNGA 120416	T02025	■	■
SNGA 543	T00220	SNGA 150612	T00520	■	■
SNGA 544	T00220	SNGA 150616	T00520	■	■
SNGA 644	T00825	SNGA 190616	T02025	■	■

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

正方形90°负角/Square Inserts, 90°, Negative



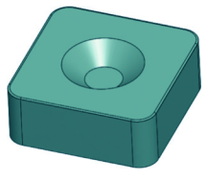
Geometry	IC	T	R
SNGN 432	1/2	3/16	0.031
SNGN 433	1/2	3/16	0.047
SNGN 434	1/2	3/16	0.063
SNGN 434	1/2	3/16	0.063
SNGN 437	1/2	3/16	0.109
SNGN 452	1/2	5/16	0.031
SNGN 453	1/2	5/16	0.047
SNGN 454	1/2	5/16	0.063
SNGN 543	5/8	1/4	0.047
SNGN 544	5/8	1/4	0.063
SNGN 644	3/4	1/4	0.063
SNGN 654	3/4	5/16	0.063



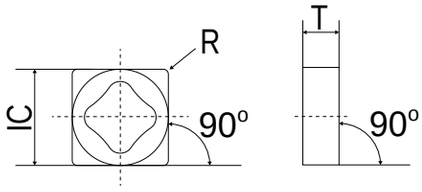
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
SNGN 432	T00220	SNGN 1200408	T00520	■	■
SNGN 432	T00425	SNGN 1200408	T01025	■	■
SNGN 432	T00825	SNGN 1200408	T02025	■	■
SNGN 432	T00820E2	SNGN 1200408	S02020	□	□
SNGN 433	T00220	SNGN 120412	T00520	■	■
SNGN 433	T00425	SNGN 120412	T01025	■	■
SNGN 433	T00825	SNGN 120412	T02025	■	■
SNGN 433	T00820E2	SNGN 120412	S02020	□	□
SNGN 434	T00220	SNGN 120416	T00520	■	■
SNGN 434	T00425	SNGN 120416	T01025	■	■
SNGN 434	T00825	SNGN 120416	T02025	■	■
SNGN 434	T00820E2	SNGN 120416	S02020	□	□
SNGN 437	T00420	SNGN 120428	T01020	■	■
SNGN 452	T00220	SNGN 120708	T00520	■	■
SNGN 453	T00220	SNGN 120712	T00520	■	■
SNGN 454	T00220	SNGN 120716	T00520	■	■
SNGN 543	T00220	SNGN 150612	T00520	■	■
SNGN 643	T00220	SNGN 190612	T00520	■	■
SNGN 644	T00220	SNGN 190616	T00520	■	■
SNGN 654	T00220	SNGN 190716	T00520	■	■

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

正方形90°负角凹窝形
Square Inserts, 90º, Negative, with dimple



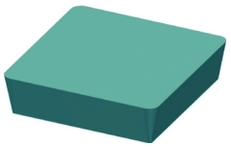
Geometry	IC	T	R
SNGX 432	1/2	3/16	0.031
SNGX 433	1/2	3/16	0.047
SNGX 434	1/2	3/16	0.063
SNGX 452	1/2	5/16	0.031
SNGX 453	1/2	5/16	0.047
SNGX 454	1/2	5/16	0.063



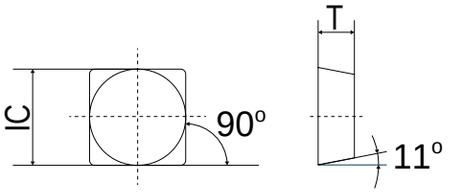
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
SNGX 432	T00820 E2	SNGX 120408	S02020	☐	☐
SNGX 433	T00820 E2	SNGX 120412	S02020	☐	☐
SNGX 434	T00820 E2	SNGX 120416	S02020	☐	☐
SNGX 452	T00825	SNGX 120708	T02025	■	☐
SNGX 453	T00825	SNGX 120712	T02025	■	☐
SNGX 454	T00825	SNGX 120716	T02025	■	☐

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

正方形11°正角 / Square Inserts, Positive



Geometry	IC	T	R
SPGN 322	3/8	1/8	0.031
SPGN 422	1/2	1/8	0.031
SPGN 432	1/2	3/16	0.031
SPGN 433	1/2	3/16	0.047
SPGN 434	1/2	3/16	0.063
SPGN 633	3/4	3/16	0.047
SPGN 634	3/4	3/16	0.063

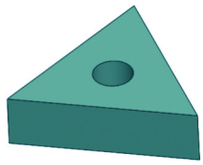


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
SPGN 322	T00220	SPGN 090308	T00520	☐	☐
SPGN 422	T00220	SPGN 120308	T00520	☐	☐
SPGN 432	T00220	SPGN 120408	T00520	■	■
SPGN 433	T00220	SPGN 120412	T00520	■	■
SPGN 434	T00220	SPGN 120416	T00520	■	■
SPGN 633	T00220	SPGN 190412	T00520	☐	☐
SPGN 634	T00220	SPGN 190416	T00520	☐	☐

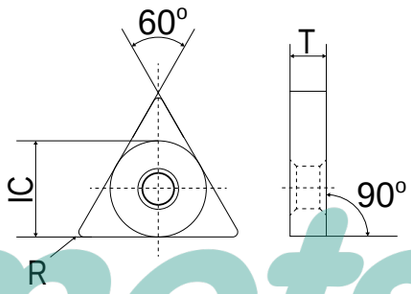
■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

三角形60°负角带孔
Triangle Inserts, 60º, Negative, with hole



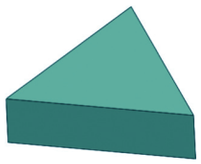
Geometry	IC	T	R
TNGA 332	3/8	3/16	0.031
TNGA 432	1/2	3/16	0.031



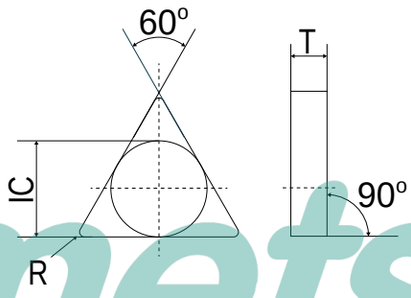
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
TNGA 332	T00220	TNGA 160408	T00520	■	■
TNGA 432	T00220	TNGA 220408	T00520	■	■
TNGA 432	T00425	TNGA 220408	T01025	■	■

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

三角形60°负角/Triangle Inserts, 60°, Negative



Geometry	IC	T	R
TNGN 332	3/8	3/16	0.031
TNGN 432	1/2	3/16	0.031
TNGN 433	1/2	3/16	0.047
TNGN 434	1/2	3/16	0.063
TNGN 453	1/2	5/16	0.047
TNGN 454	1/2	5/16	0.063

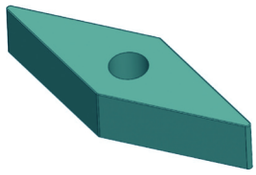


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
TNGN 332	T00220	TNGN 160408	T00520	■	■
TNGN 432	T00220	TNGN 220408	T00520	■	■
TNGN 432	T00820E2	TNGN 220408	S02025	□	□
TNGN 433	T00220	TNGN 220412	T00520	■	■
TNGN 433	T00820E2	TNGN 220412	S02025	□	□
TNGN 434	T00220	TNGN 220416	T00520	■	■
TNGN 434	T00820E2	TNGN 220416	S02025	□	□
TNGN 453	T00220	TNGN 220712	T00520	■	■
TNGN 454	T00220	TNGN 220716	T00520	■	■

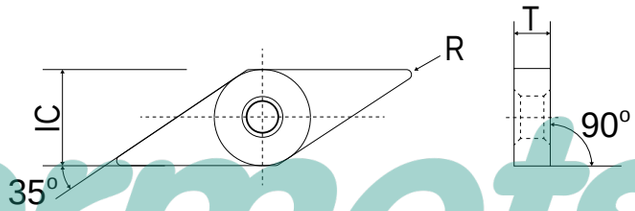
■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

菱形35°负角带孔

Diamond Inserts, 35°, Negative, with hole



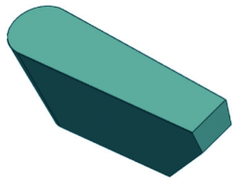
Geometry	IC	T	R
VNGA 332	3/8	3/16	0.031
VNGA 333	3/8	3/16	0.047
VNGA 432	1/2	3/16	0.031
VNGA 433	1/2	3/16	0.047



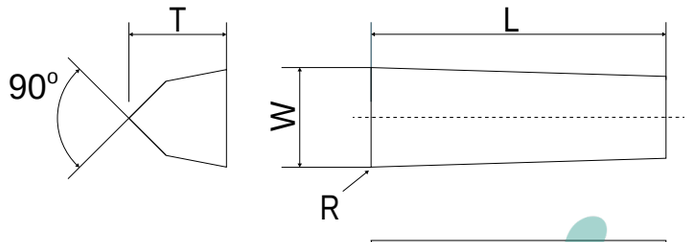
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
VNGA 332	T00220	VNGA 160408	T00520	■	■
VNGA 333	T00220	VNGA 160412	T00520	□	□
VNGA 432	T00220	VNGA 220408	T00520	■	■
VNGA 433	T00220	VNGA 220412	T00520	□	□

■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

VGW型/Grooving and Side Turning Inserts



Geometry	W	L	T	R
VGW 4125-R	0.125	0.500	0.187	0.063
VGW 4125-1	0.125	0.500	0.187	0.016
VGW 4125-2	0.125	0.500	0.187	0.031
VGW 4156-R	0.156	0.500	0.187	0.078
VGW 4156-1	0.156	0.500	0.187	0.016
VGW 4156-2	0.156	0.500	0.187	0.031
VGW 4187-R	0.187	0.500	0.187	0.094
VGW 4187-1	0.187	0.500	0.187	0.016
VGW 4187-2	0.187	0.500	0.187	0.031
VGW 6218-R	0.218	0.750	0.250	0.109
VGW 6218-1	0.218	0.750	0.250	0.016
VGW 6218-2	0.218	0.750	0.250	0.031
VGW 6250-R	0.250	0.750	0.250	0.125
VGW 6250-1	0.250	0.750	0.250	0.016
VGW 6250-2	0.250	0.750	0.250	0.031
VGW 6250-3	0.250	0.750	0.250	0.047

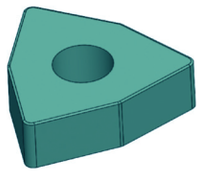


ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
VGW 4125-R	E1	VGW 4125-R	E002	■	■
VGW 4125-1	E1	VGW 4125-1	E002	■	■
VGW 4125-2	E1	VGW 4125-2	E002	■	■
VGW 4156-R	E1	VGW 4156-R	E002	■	■
VGW 4156-1	E1	VGW 4156-1	E002	■	■
VGW 4156-2	E1	VGW 4156-2	E002	■	■
VGW 4187-R	E1	VGW 4187-R	E002	■	■
VGW 4187-1	E1	VGW 4187-1	E002	■	■
VGW 4187-2	E1	VGW 4187-2	E002	■	■
VGW 6218-R	E1	VGW 6218-R	E002	■	■
VGW 6218-1	E1	VGW 6218-1	E002	■	■
VGW 6218-2	E1	VGW 6218-2	E002	■	■
VGW 6250-R	E1	VGW 6250-R	E002	■	■
VGW 6250-1	E1	VGW 6250-1	E002	■	■
VGW 6250-2	E1	VGW 6250-2	E002	■	■
VGW 6250-3	E1	VGW 6250-3	E002	■	■

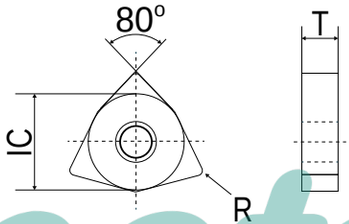
■ 主推牌号 Standard
□ 可按客户要求定制 Non-stock standard - call for availability

T: +86 133 3733 5988 | E: lifeng@newcermets.com | W: newcermet.com

六边形80°负角带孔
Trigon Inserts, 80°, Negative, with hole



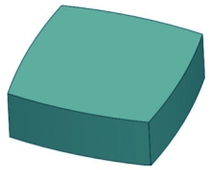
Geometry	IC	T	R
WNGA 332	3/8	3/16	0.031
WNGA 333	3/8	3/16	0.047
WNGA 431	1/2	3/16	0.016
WNGA 432	1/2	3/16	0.031
WNGA 433	1/2	3/16	0.047
WNGA 434	1/2	3/16	0.063



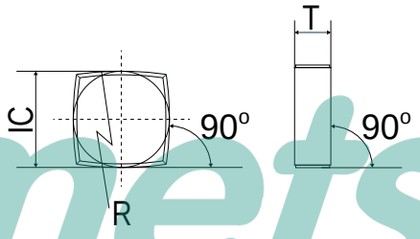
ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
WNGA 332	T00220	WNGA 060408	T00520	☐	☐
WNGA 333	T00220	WNGA 060412	T00520	☐	☐
WNGA 431	T00220	WNGA 080404	T00520	☐	☐
WNGA 432	T00220	WNGA 080408	T00520	☐	☐
WNGA 433	T00220	WNGA 080412	T00520	☐	☐
WNGA 434	T00220	WNGA 080416	T00520	☐	☐

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

正方形90°/Square Inserts



Geometry	IC	T	R
ZT-1130	1 ½	1/2	4 ½



ANSI Designation		ISO Designation		Grades	
Tool	Edge Prep	Tool	Edge Prep	CT-10 (C)	CT-25 (C)
ZT-1130	HD09515E2	ZT-1130	HD2415E2	■	■

■ 主推牌号 Standard
☐ 可按客户要求定制 Non-stock standard - call for availability

注意事项 Points to note

如Inconel 718这类的耐热合金具有在超过700℃的高温下开始软化，从而使加工更加容易的特性。发挥这类加工材料特性的情况下推荐使用陶瓷铣刀。

Heat-resistant alloys such as Inconel 718 have a tendency to soften when temperature exceeds 700℃,enabling easier machining.Ceramic end mills are ideal for these materials as they excel under high temperatures and can generate the heat required to soften the machined materials.

⚠ 推荐使用气冷

Use of air blaw recommended.

冷却夹具、除去切屑时使用。冷却夹具有助于保持夹具精度。请使用具耐热性的夹具。

Use air blow to cool the holder and rmow chips, Cooling the helder helps mainnain helder eccuracy Use a heat-esistant helder.

⚠ 推荐连续加工

Use of air blaw recommended.

冷却夹具、除去切屑时使用。冷却夹具有助于保持夹具精度。请使用具耐热性的夹具。

Intermittent machining is likely to cause chipping, resulting in shorter tool life.Reduce the feed by 50% or more at the entry (chamfer) in the initial cutting stage. Then, raise the feed gradually.Excessively high cutting speeds raise the temperature of the workpiece and may melt it. To avoid this, lower the cutting speed.

⚠ 加工后无需将刃尖附着的熔着物去除就可进行下次加工

After a cutting cycle, use the cutting edges as they are, without removing any fused deposits on them.

如果强行剥落可能会导致刃尖脱落从而降低刀具寿命。必要时，请去除除刃尖外的沟槽底部、背部附着的熔着物。

Forcibly removing fused deposits can result in cutting edge chipping and shortened tool life.Fused deposits may be found on the flute end and back of the cutting edge. Remove them when necessary.

⚠ 请使用全覆盖式机械

Use fully covered machines.

加工中高温的切屑四处飞散有可能引起火灾或使操作人员受伤的危险。且，请勿将可燃物品放置在加工工件四周。

During machining, high temperature cutting chips may scatter, which can create re hazards and potential injury to the operator. Ensure that the workpiece area is clear of any inflammable objects.

⚠ 由于在高温下加工，工件表面将会形成变质层。

High temperatures produced during machining can form altered layers on workpiece surfaces.

在进行路径设置时，请考虑到加工后的变质层余量。

When making path settings, ensure that a machining allowance for removing the altered layers is taken into account.

⚠ 用立铣刀进行深壁加工或轮廓加工时，请务必设定脱模斜度(3°以上)。

When using end mill to perform vertical wall or pocket milling, always specify a draft (at least 3°).

有可能受颈部干扰导致折损。

Neck interference may occur, resulting in tool breakage.

NewCermets
新陶新材

株洲新陶新材料有限公司

ZHUZHOU NEW CERMETS MATERIAL CO.,LTD

湖南省株洲市天元区黄河北路中小企业促进园A5**栋**101**号**

No. 101, Building A5, Hi-Tech Standard Workshop, Liyu Industrial Park,North Huanghe Road, Tianyuan District, Zhuzhou, Hunan, China

Tel: +86 133 3733 5988

Emai: lifeng@newcermets.com

http：//www.newcermet.com