THE NEW VALUE FRONTIER
京瓷 创造新价值

KYOCERA

钢加工用
混合金属陶瓷

TN620/PV720
TN610/PV710

钢加工用混合金属陶瓷

通用

TN620/PV720

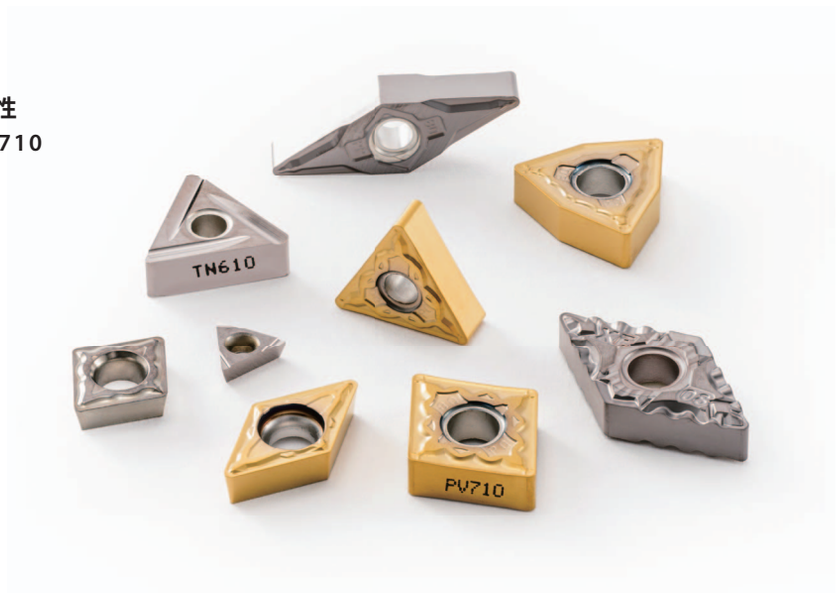
高速、断续

TN610/PV710

实现高品质的完成面与高效率加工的新金属陶瓷

采用3个特殊强化技术(混合技术)

NEW 强化耐磨损性
TN610 / PV710



无涂层金属陶瓷

TN610 / TN620

MEGACOAT NANO金属陶瓷

PV710 / PV720

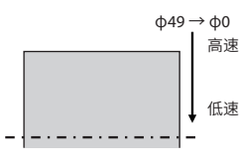
3个特殊强化技术(混合技术)保证兼顾良好完成面与稳定性的新金属陶瓷

1 良好的完成面品质

以往金属陶瓷粘合剂(镍、钴)与特殊高熔点金属粘合剂复合化

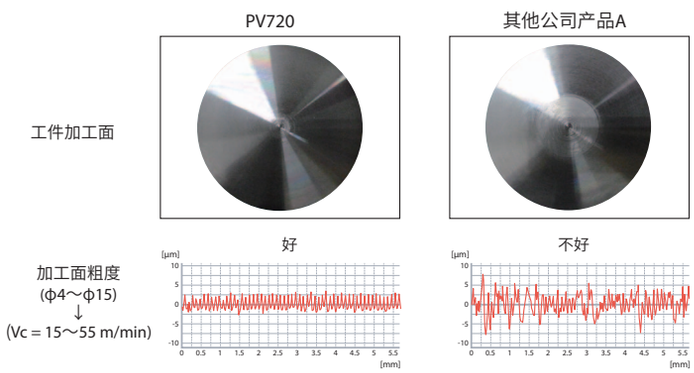
抑制切削时粘合剂软化、实现高耐熔着性与卓越的完成面品质

特殊强化技术1
高熔点混合粘合剂



完成面比较
(本公司比较)

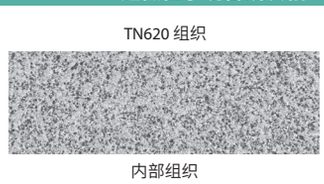
切削条件：Vc=180～0 m/min(转数一定)，ap = 0.5 mm
f = 0.1 mm/rev, Wet, CNMG120404型　被削材：S10C



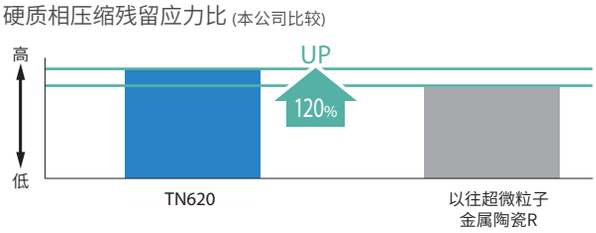
2 卓越的抗崩损性

均一超微粒子硬质相保证高强度化、高熔点结合剂保证大压缩应力效果实现抗崩损性的提高

特殊强化技术2 超微粒子混合硬质相



硬质相压缩残留应力比 (本公司比较)



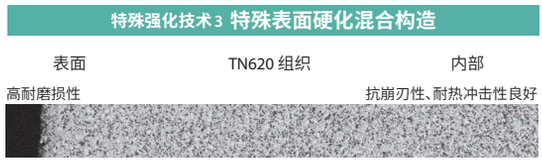
3 卓越的耐磨损性

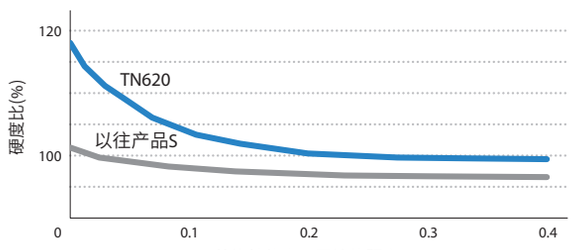
特殊倾斜组成化保证高硬度的“表面硬化层”实现卓越的耐磨损性

确保稳定的耐磨损性与抗崩损性的平衡

内部高韧性保证耐崩刀性与耐热冲击性卓越、特别是表面附近与以往产品S(超微粒子金属陶瓷)相比，高硬度、耐磨损性高(参考图表)
(本公司比较)

特殊强化技术3 特殊表面硬化混合构造





无涂层金属陶瓷

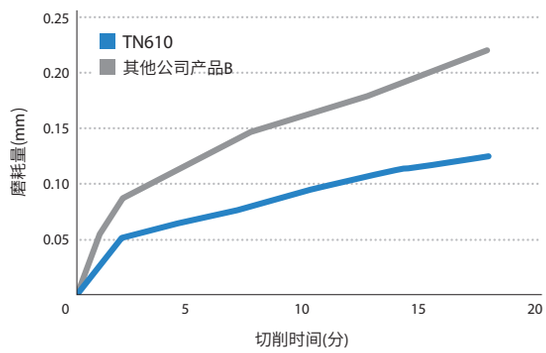
TN610 / TN620

NEW 高速、连续

TN610

连续精加工上实现高耐磨损性
可保证高品味、高精度加工

耐磨损性比较 (本公司比较)



切削时间:17.9分后

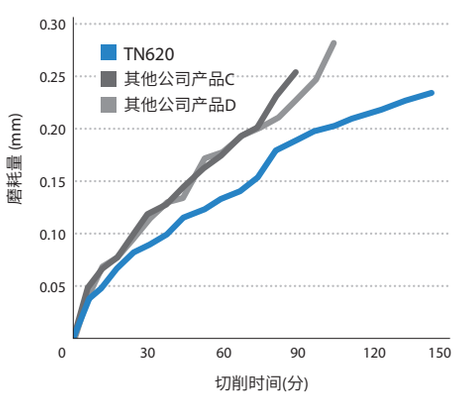
切削条件：Vc = 300 m/min, ap = 1.0 mm, f = 0.2 mm/rev Wet,
CNMG120408型　被削材：SCM435

通用

TN620

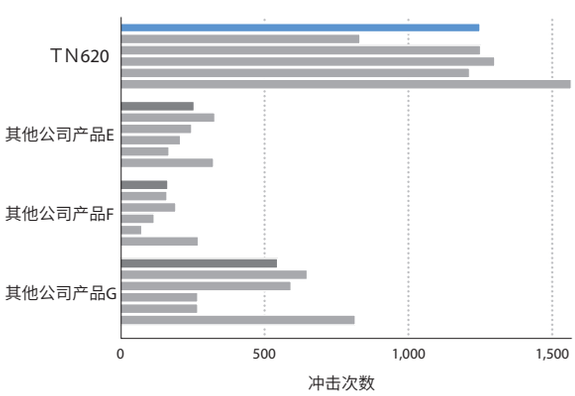
耐磨损性与抗崩损性的平衡性优异
可获得高品质的加工表面的通用材质

耐磨损性比较 (本公司比较)



切削时间:89分后

抗崩损性比较 (本公司比较)

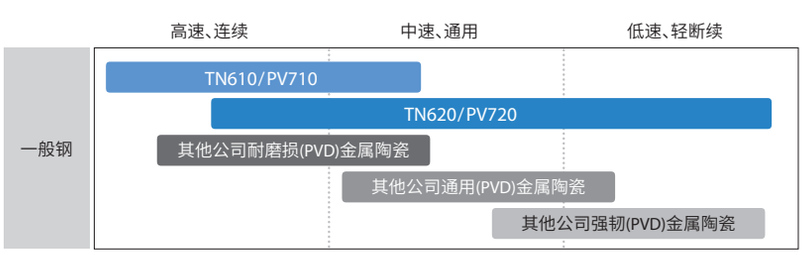


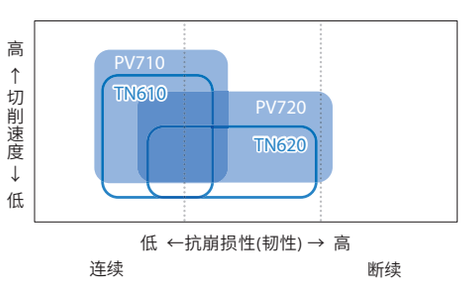
图标最上部为各平均值

切削条件：Vc = 200 m/min, f = 0.2 mm/rev, ap = 1.0 mm
Wet, CNMG120408型　被削材：SCM435

切削条件：Vc = 250 m/min, ap = 1.0 mm, f = 0.2 mm/rev
Wet, CNMG120408型　被削材：S45C (宽幅 带4根槽)

钢加工用金属陶瓷材质 加工范围

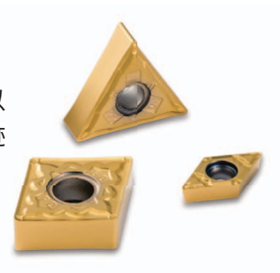




MEGACOAT NANO金属陶瓷

PV710 / PV720

PV710/PV720即在具有高性能的MEGACOAT NANO基础上，配以具有卓越的耐熔着性以及在加工现场易于判明是否有使用痕迹的特殊TiN表面涂层

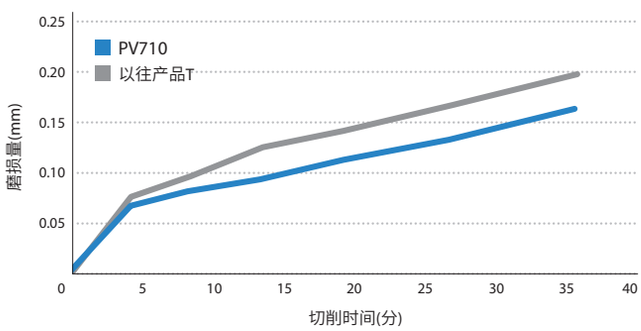


NEW 高速、连续

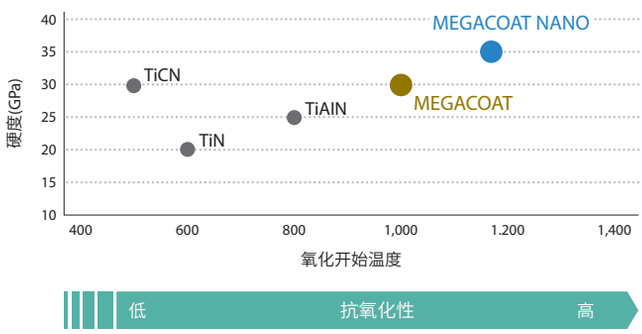
PV710

高速、连续加工上实现长寿命

耐磨损性比较（本公司比较）



涂层特性



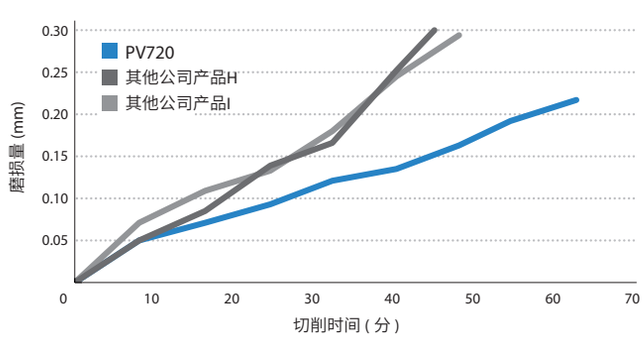
切削条件：Vc = 350 m/min, ap = 1.0 mm, f = 0.2 mm/rev, Wet, CNMG120408型
被削材：SCM435

通用

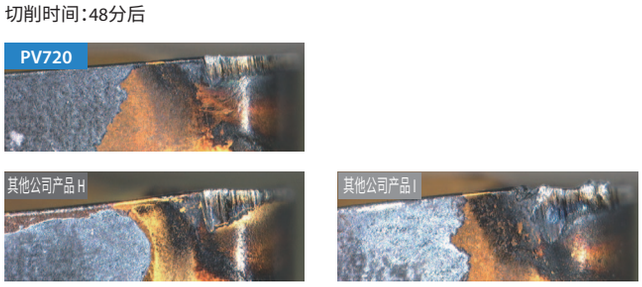
PV720

实现高效率加工与高品质完成面

耐磨损性比较（本公司比较）

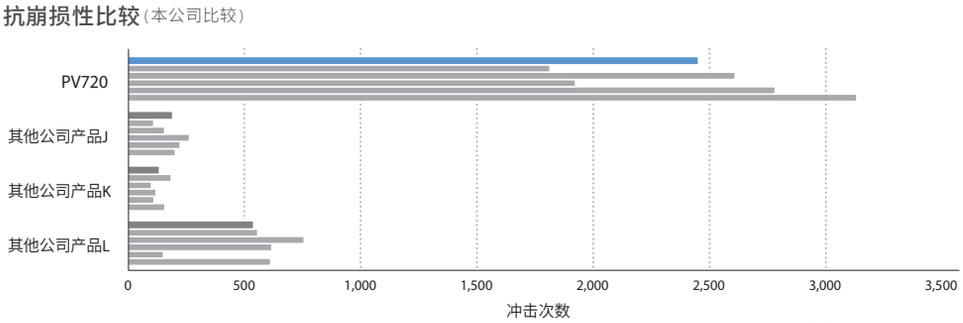


切削时间：48分后



切削条件：V = 250 m/min, ap = 1.0 mm, f = 0.2 mm/rev, Wet, CNMG120408型　被削材：SCM435

抗崩损性比较（本公司比较）



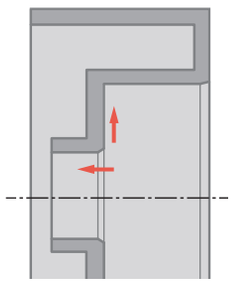
图表最上部为各平均值

切削条件：V = 250 m/min, ap = 1.0 mm, f = 0.2 mm/rev, Wet, CNMG120408型　被削材：S45C（带4根槽）

加工实例

滚筒 S30C

Vc = 300 m/min
ap = 0.5 mm
f = 0.2～0.3 mm/rev
Wet
CNMG090408HQ



加工数

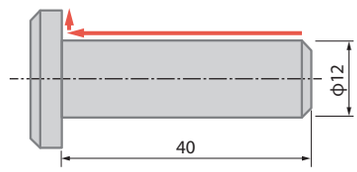
TN620	800个/刀尖	1.1～1.4倍 加工数
其他公司金属涂层 M	550~750个/刀尖	

TN620与其他公司金属陶瓷M相比，加工数约提高1.1~1.4倍

（来自用户评价）

插销 S35C

Vc = 75 m/min
ap = 0.15 mm
f = 0.12 mm/rev
Wet
TNGG160404R-S



加工数

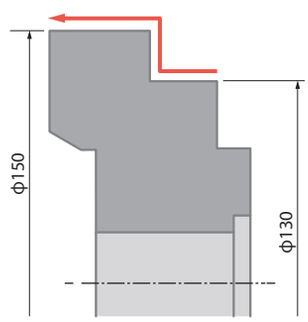
TN620	450个/刀尖	1.5倍 加工数
其他公司金属涂层N	300个/刀尖	

TN620与其他公司金属陶瓷N相比，加工数提高1.5倍
加工面粗度稳定、有光泽、无崩损发生、加工稳定

（来自用户评价）

活塞 S45C 调质处理

Vc = 450 m/min
ap = 0.15~0.2 mm
f = 0.04 mm/rev
Wet(水溶性)
CNMG120404PP



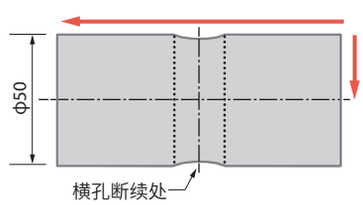
加工数

PV710	200个/刀尖	寿命 2.2倍
以往PVD涂层 U	90个/刀尖	

PV710与以往PVD涂层U相比，加工数提高2.2倍(来自用户评价)

活塞 SCM415

Vc = 250 m/min
ap = 0.1~0.2 mm
f = 0.08 mm/rev
Wet(水溶性)
CNMG120404PP



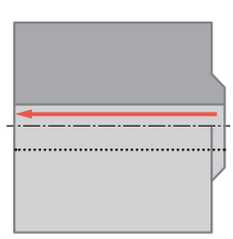
加工数

PV710	250个/刀尖	寿命 1.3倍
其他公司PVD金属陶瓷O	180个/刀尖	

PV710与以往PVD涂层O相比，加工数提高1.3倍(来自用户评价)

油泵 铁系烧结金属

Vc = 160 m/min
ap = 0.2 mm
f = 0.1 mm/rev
Wet
TPGH090204L



加工数

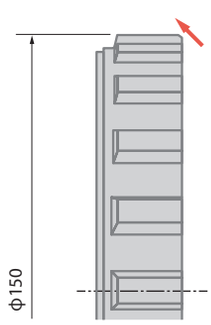
PV720	平均800个/刀尖	2.7倍 加工数
其他公司PVD金属陶瓷P	300个/刀尖	

PV720与其他公司PVD金属陶瓷P相比，加工数提高约2.7倍

（来自用户评价）

内齿轮 特殊合金钢

Vc = 300 m/min
ap = 0.2 mm
f = 0.2～0.4 mm/rev
Wet
WNMG080404PP



加工数

PV720	平均10,000个/刀尖	3.3倍 加工数
其他公司PVD金属陶瓷 Q	3,000个/刀尖	

PV720与其他公司PVD金属陶瓷Q相比，加工数提高约3.3倍

（来自用户评价）

精加工用 PP断屑槽

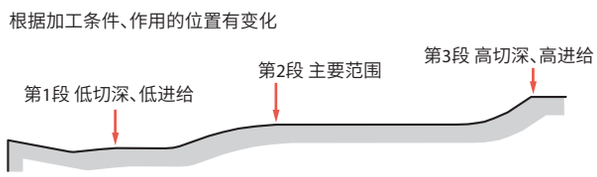
负角型

特点

3段智能凸点构造保证在钢的精加工中对应从低进给~高进给的广泛进给范围

光滑锥度切刃降低切削阻力

刀尖角R(rε)0.2～1.2系列化



精加工~半精加工用 PQ断屑槽

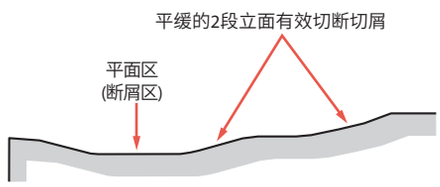
负角型

特点

新创意的平面区(断屑区)与平缓立面的双层智能凸起壁面效果，保证从精加工~半精加工的广泛进给范围实现稳定的切屑处理

前端设计的双凸点保证外径、端面小切深、高进给加工时对切屑的控制

确保锋利度与强度平衡的特殊正角刀尖



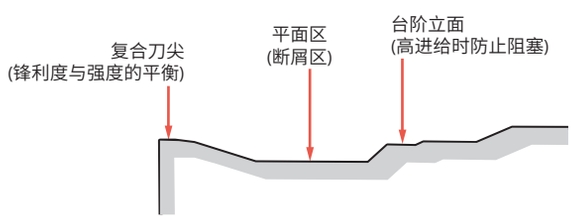
半精加工~粗加工用 PG断屑槽

负角型

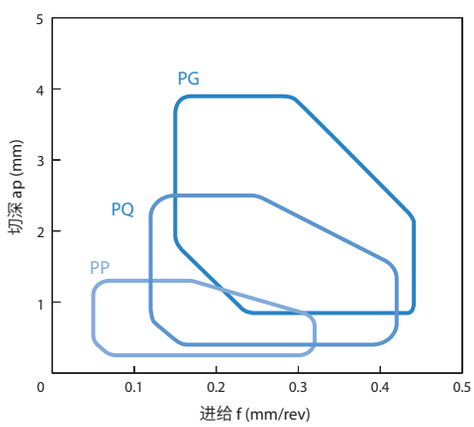
特点

确保刀尖的锋利度与强度的平衡、实现稳定加工

改善高进给加工时的切屑缠绕、层叠，保证即使在低进给范围也可实现良好的切屑处理、确保广泛的加工范围



C12型：钢=12



精加工用 WP断屑槽 (修光刃刀片)

正角类型

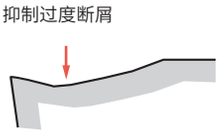
特点

高进给时也维持完成面优异、切屑处理良好

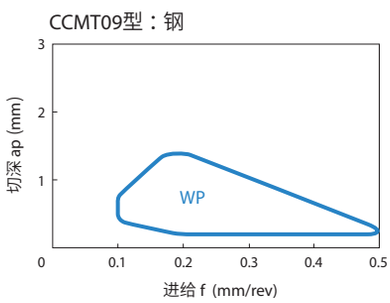
抑制加工面的倾斜、实现优异的完成面、

低阻力设计保证良好的加工精度

2段凸起构造
低进给时的切屑稳定、
高进给高负荷加工中
抑制过度断屑



CCMT09型：钢



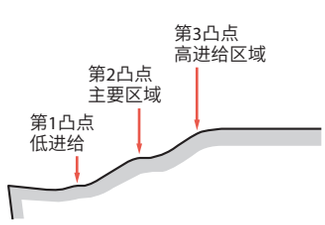
精加工用 PP断屑槽

正角类型

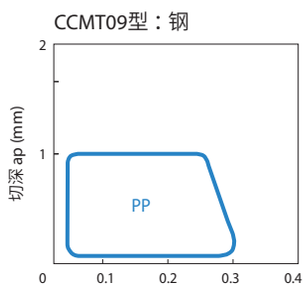
特点

在钢的精加工中稳定的控制切屑

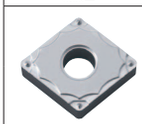
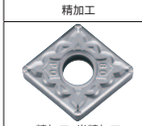
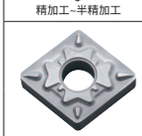
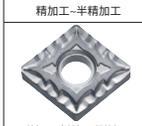
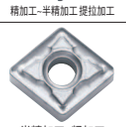
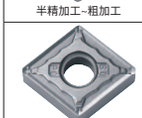
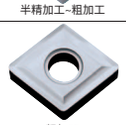
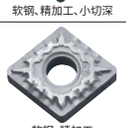
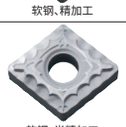
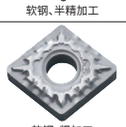
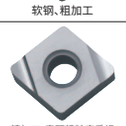
锋利度无下降、强度得以改善的刀尖设计，保证高进给加工的高效率化以及实现稳定的工具寿命

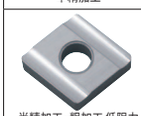
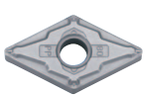
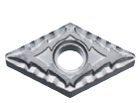
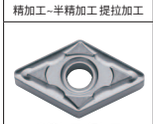


CCMT09型：钢



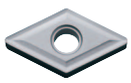
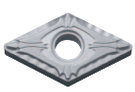
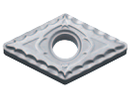
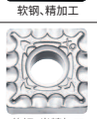
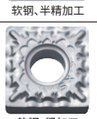
标准库存型号(负角)

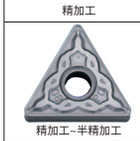
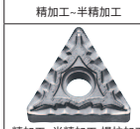
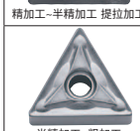
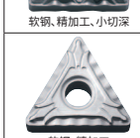
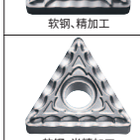
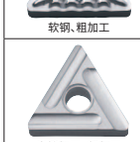
形状 带方向刀片 显示为右手(R)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	TN610	TN620	PV710	PV720
 精加工 带修光刃	CNMG 120404WP 120408WP	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 精加工~半精加工 带修光刃	CNMG 120404WQ 120408WQ 120412WQ	12.70	4.76	5.16	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●
 精加工	CNMG 120402PP 120404PP 120408PP 120412PP	12.70	4.76	5.16	0.2 0.4 0.8 1.2	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
 精加工	CNMG 090404GP 090408GP	9.525	4.76	3.81	0.4 0.8		● ●		● ●
	CNMG 120402GP 120404GP 120408GP	12.70	4.76	5.16	0.2 0.4 0.8	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	CNMG 120404PQ 120408PQ 120412PQ	12.70	4.76	5.16	0.4 0.8 1.2	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	CNMG 090404HQ 090408HQ	9.525	4.76	3.81	0.4 0.8		● ●		● ●
	CNMG 120404HQ 120408HQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 精加工~半精加工 提拉加工	CNMG 120404CQ 120408CQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 半精加工~粗加工	CNMG 090404GS 090408GS	9.525	4.76	3.81	0.4 0.8		● ●		● ●
 半精加工~粗加工	CNMG 120404PG 120408PG 120412PG	12.70	4.76	5.16	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●
 粗加工	CNMG 120404 120408	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、精加工、小切深	CNMG 120404XF 120408XF	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、精加工	CNMG 120404XP 120408XP	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、半精加工	CNMG 120404XQ 120408XQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、粗加工	CNMG 120408XS	12.70	4.76	5.16	0.8	●	●	●	●
 精加工、表面粗糙度重视	CNGG 090402 R/L-S 090404 R/L-S 090408 R/L-S	12.70	4.76	3.81	0.2 0.4 0.8	● ● ●		● ● ●	

形状 带方向刀片 显示为右手(R)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	TN610	TN620	PV710	PV720
 半精加工	CNGG 120404 R/L 120408 R/L	12.70	4.76	5.16	0.4 0.8	● ●	● 	● ●	●
 半精加工~粗加工 低阻力	CNGG 120404 R/L-25R 120408 R/L-25R	12.70	4.76	5.16	0.4 0.8	● ●		● ●	
 精加工	DNMG 150402PP 150404PP 150408PP 150412PP	12.70	4.76	5.16	0.2 0.4 0.8 1.2	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
	DNMG 150602PP 150604PP 150608PP 150612PP	12.70	6.35	5.16	0.2 0.4 0.8 1.2	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
 精加工	DNMG 110404GP 110408GP	9.525	4.76	3.81	0.4 0.8		● ●		● ●
	DNMG 150402GP 150404GP 150408GP	12.70	4.76	5.16	0.2 0.4 0.8	● ● ●	● ● ●	● ● ●	● ● ●
	DNMG 150602GP 150604GP 150608GP	12.70	6.35	5.16	0.2 0.4 0.8	● ● ●		● ● ●	
 精加工~半精加工	DNMG 150404PQ 150408PQ 150412PQ	12.70	4.76	5.16	0.4 0.8 1.2	● ● ●	● ● ●	● ● ●	● ● ●
	DNMG 150604PQ 150608PQ 150612PQ	12.70	6.35	5.16	0.4 0.8 1.2	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	DNMG 110402HQ 110404HQ	9.525	4.76	3.81	0.2 0.4		● ●		● ●
	DNMG 150404HQ 150408HQ 150412HQ	12.70	4.76	5.16	0.4 0.8 1.2	● ● ●	● ●	● ● ●	● ●
	DNMG 150604HQ 150608HQ 150612HQ	12.70	6.35	5.16	0.4 0.8 1.2	● ● ●		● ● ●	
 精加工~半精加工 提拉加工	DNMG 150404CQ 150408CQ 150412CQ	12.70	4.76	5.16	0.4 0.8 1.2	● ● ●	● ●	● ● ●	● ●
	DNMG 150604CQ	12.70	6.35	5.16	0.4	●		●	
 半精加工~粗加工	DNMG 110404GS 110408GS	9.525	4.76	3.81	0.4 0.8		● ●		● ●
 半精加工~粗加工	DNMG 150404PG 150408PG 150412PG	12.70	4.76	5.16	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●
	DNMG 150604PG 150608PG 150612PG	12.70	6.35	5.16	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●

●：标准库存

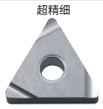
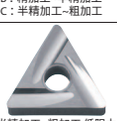
标准库存型号(负角)

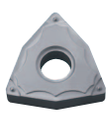
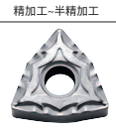
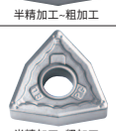
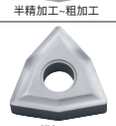
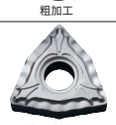
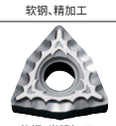
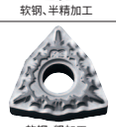
形状 带方向刀片 显示为右手(R)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	TN610	TN620	PV710	PV720
 粗加工	DNMG 150404 150408	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
软钢、精加工、小切深	DNMG 150404XF 150408XF	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、精加工	DNMG 150404XP 150408XP	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
	DNMG 150604XP 150608XP	12.70	6.35	5.16	0.4 0.8	● ●		● ●	
 软钢、半精加工	DNMG 150404XQ 150408XQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
软钢、粗加工	DNMG 150408XS	12.70	4.76	5.16	0.8	●	●	●	●
半精加工	DNGG 150404 R/L 150408 R/L	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
精加工~半精加工	SNMG 120404PQ 120408PQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
精加工~半精加工	SNMG 120404HQ 120408HQ 120412HQ	12.70	4.76	5.16	0.4 0.8 1.2	● ● ●	● ●	● ● ●	● ●
半精加工~粗加工	SNMG 120408PG 120412PG 120416PG	12.70	4.76	5.16	0.8 1.2 1.6	●	● ● ●	●	● ● ●
粗加工	SNMG 090304 090308	9.525	3.18	3.81	0.4 0.8	● ●		● ●	
	SNMG 120404 120408	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
软钢、精加工	SNMG 120408XP	12.70	4.76	5.16	0.8	●	●	●	●
 软钢、半精加工	SNMG 120408XQ	12.70	4.76	5.16	0.8	●	●	●	●
 软钢、粗加工	SNMG 120408XS	12.70	4.76	5.16	0.8	●	●	●	●
B：精加工~半精加工 C：半精加工~粗加工	SNGG 090304 R/L-B 090308 R/L-B	9.525	3.18	3.81	0.4 0.8	● ●		● ●	
	SNGG 120404 R/L-C 120408 R/L-C	12.70	4.76	5.16	0.4 0.8	● ●		● ●	
	SNMG 120404 R/L-C 120408 R/L-C	12.70	4.76	5.16	0.4 0.8	● ●		● ●	

形状 带方向刀片 显示为右手(R)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	TN610	TN620	PV710	PV720
半精加工~粗加工 低阻力	SNGG 120404 R/L-25R 120408 R/L-25R	12.70	4.76	5.16	0.4 0.8	● ●		● ●	
精加工	TNMG 160402PP 160404PP 160408PP 160412PP	9.525	4.76	3.81	0.2 0.4 0.8 1.2	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
精加工	TNMG 110404GP 110408GP	6.35	4.76	2.26	0.4 0.8		● ●		● ●
	TNMG 160402GP 160404GP 160408GP	9.525	4.76	3.81	0.2 0.4 0.8	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	TNMG 160404PQ 160408PQ 160412PQ	9.525	4.76	3.81	0.4 0.8 1.2	● ● ●	● ● ●	● ● ●	● ● ●
精加工~半精加工	TNMG 110404HQ 110408HQ	6.35	4.76	2.26	0.4 0.8		● ●		● ●
	TNMG 160404HQ 160408HQ	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
 精加工~半精加工 提拉加工	TNMG 160404CQ 160408CQ 160412CQ	9.525	4.76	3.81	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●
 半精加工~粗加工	TNMG 110404GS	6.35	4.76	2.26	0.4		●		●
半精加工~粗加工	TNMG 160404PG 160408PG 160412PG	9.525	4.76	3.81	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●
粗加工	TNMG 160404 160408	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
软钢、精加工、小切深	TNMG 160404XF 160408XF	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、精加工	TNMG 160404XP 160408XP	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、半精加工	TNMG 160404XQ 160408XQ	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
软钢、粗加工	TNMG 160408XS	9.525	4.76	3.81	0.8		●		●
 半精加工~粗加工	TNMG 160404 R/L-ST	9.525	4.76	3.81	0.4	●		●	

●：标准库存

标准库存型号(负角)

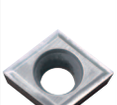
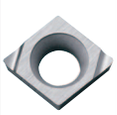
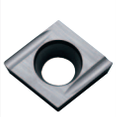
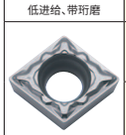
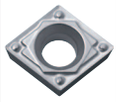
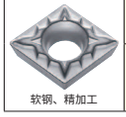
形状 带方向刀片 显示为右手(R)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	TN610	TN620	PV710	PV720
 精加工	TNGG 160401 R/L-S 160402 R/L-S 160404 R/L-S 160408 R/L-S	9.525	4.76	3.81	0.1 0.2 0.4 0.8	 ● ● ●	● ● ● ●	 ● ● ●	● ● ● ●
超精细  精加工、锋利刀尖、对应精密加工	TNEG 160402 R/L-SSF 160404 R/L-SSF	9.525	4.76	3.81	0.2 0.4	● ●	● ●	● ●	● ●
 B：精加工~半精加工 C：半精加工~粗加工	TNGG 110302 R/L-B 110304 R/L-B	6.35	3.18	2.26	0.2 0.4	● ●		● ●	
	TNGG 160402 R/L-B 160404 R/L-B 160408 R/L-B	9.525	4.76	3.81	0.2 0.4 0.8	● ● ●	● ● 	● ● ●	● ●
	TNGG 160402 R/L-C 160404 R/L-C 160408 R/L-C 160412 R/L-C	9.525	4.76	3.81	0.2 0.4 0.8 1.2	 ● ● ●	● ● ● 	 ● ● ●	● ● ●
	TNGG 220404 R/L-C 220408 R/L-C	12.70	4.76	5.16	0.4 0.8	 	● ●	 	● ●
	TNMG 160404 R/L-C 160408 R/L-C	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
 半精加工~粗加工 低阻力	TNGG 160404 R/L-25R 160408 R/L-25R	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
 精加工	VNMG 160402PP 160404PP 160408PP 160412PP	9.525	4.76	3.81	0.2 0.4 0.8 1.2	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
 精加工	VNMG 160402GP 160404GP 160408GP	9.525	4.76	3.81	0.2 0.4 0.8	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	VNMG 160404 R/L-VC 160408 R/L-VC 160412 R/L-VC	9.525	4.76	3.81	0.4 0.8 1.2	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	VNMG 160404VF 160408VF 160412VF	9.525	4.76	3.81	0.4 0.8 1.2	● ●	● ● ●	● ● 	● ● ●
 精加工~半精加工	VNMG 160404PQ 160408PQ 160412PQ	9.525	4.76	3.81	0.4 0.8 1.2	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	VNMG 160404HQ 160408HQ 160412HQ	9.525	4.76	3.81	0.4 0.8 1.2	● ●	● ● ●	● ● 	● ● ●
 粗加工	VNMG 160404 160408	9.525	4.76	3.81	0.4 0.8	● ●	● ●	● ●	● ●
 精加工~半精加工	VNGG 160402M-SK 160404M-SK	9.525	4.76	3.81	＜0.2 ＜0.4	● ●	● ●	● ●	● ●
 半精加工	VNGG 160402 R/L 160404 R/L 160408 R/L	9.525	4.76	3.81	0.2 0.4 0.8	● ● ●	● ● ●	● ● ●	● ● ●

形状 带方向刀片 显示为右手(R)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	TN610	TN620	PV710	PV720
 精加工 带修光刃	WNMG 080404WP 080408WP	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 精加工~半精加工 带修光刃	WNMG 080404WQ 080408WQ 080412WQ	12.70	4.76	5.16	0.4 0.8 1.2	● ●	● ● ●	● ●	● ● ●
 精加工	WNMG 080402PP 080404PP 080408PP 080412PP	12.70	4.76	5.16	0.2 0.4 0.8 1.2	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
	WNMG 060404GP 060408GP	9.525	4.76	3.81	0.4 0.8		● ●		● ●
 精加工	WNMG 080404GP 080408GP	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 精加工~半精加工	WNMG 080404PQ 080408PQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
	WNMG 060404HQ 060408HQ	9.525	4.76	3.81	0.4 0.8		● ●		● ●
 精加工~半精加工	WNMG 080404HQ 080408HQ 080412HQ	12.70	4.76	5.16	0.4 0.8 1.2	● ● ●	● ● 	● ● ●	● ●
 精加工~半精加工 提拉加工	WNMG 080404CQ 080408CQ 080412CQ	12.70	4.76	5.16	0.4 0.8 1.2	● ●	● ● ●	● ● 	● ● ●
 半精加工~粗加工	WNMG 060404GS 060408GS	9.525	4.76	3.81	0.4 0.8		● ●		● ●
 半精加工~粗加工	WNMG 080404PG 080408PG	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 粗加工	WNMG 080404 080408	12.70	4.76	5.16	0.4 0.8	● ●		● ●	
 软钢、精加工	WNMG 080404XP 080408XP	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、半精加工	WNMG 080404XQ 080408XQ	12.70	4.76	5.16	0.4 0.8	● ●	● ●	● ●	● ●
 软钢、粗加工	WNMG 080408XS	12.70	4.76	5.16	0.8		●		●

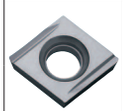
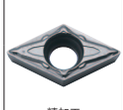
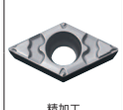
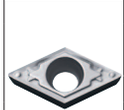
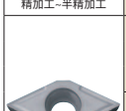
刀尖角R(rε)用不等号表示的刀片为负公差产品。

●：标准库存

标准库存型号(正角)

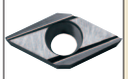
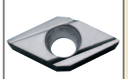
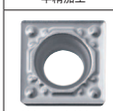
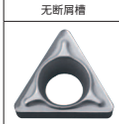
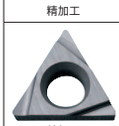
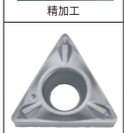
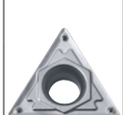
形状 带方向刀片 显示为左手(L)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	后角	TN610	TN620	PV710	PV720
精加工带修光刃	CCMT 060202WP 060204WP	6.35	2.38	2.8	0.2 0.4	7°	● ●	● ●	● ●	● ●
	CCMT 09T304WP 09T308WP	9.525	3.97	4.4	0.4 0.8	7°	● ●	● ●	● ●	● ●
精加工	CCMT 060202PP 060204PP	6.35	2.38	2.8	0.2 0.4	7°	● ●	● ●	● ●	● ●
	CCMT 09T302PP 09T304PP 09T308PP	9.525	3.97	4.4	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
精加工~半精加工	CCMT 060202GK 060204GK	6.35	2.38	2.8	0.2 0.4	7°	● ●	● ●	● ●	● ●
	CCMT 09T302GK 09T304GK	9.525	3.97	4.4	0.2 0.4	7°	● ●	● ●	● ●	● ●
	CCMT 120404GK 120408GK	12.70	4.76	5.5	0.4 0.8	7°	● ●	● ●	● ●	● ●
精加工~半精加工	CCMT 060202HQ 060204HQ	6.35	2.38	2.8	0.2 0.4	7°	● ●	● ●	● ●	● ●
	CCMT 09T302HQ 09T304HQ 09T308HQ	9.525	3.97	4.4	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
 半精加工	CCGT 060201 060202 060204	6.35	2.38	2.8	0.1 0.2 0.4	7°	● ● ●	● ● ●	● ● ●	● ● ●
	CCGT 09T301 09T302 09T304	9.525	3.97	4.4	0.1 0.2 0.4	7°	● ● ●	● ● ●	● ● ●	● ● ●
	CCMT 09T308	9.525	3.97	4.4	0.8	7°	●	●	●	●
 精加工、锋利刀尖	CCET 030101M R/L-F 030102M R/L-F 030104M R/L-F	3.5	1.4	1.9	＜0.1 ＜0.2 ＜0.4	7°	● ● ●	 L L	● ● ●	 L L
	CCET 040101M R/L-F 040102M R/L-F 040104M R/L-F	4.3	1.8	2.3	＜0.1 ＜0.2 ＜0.4	7°	● ● ●	 L L	● ● ●	 L L
低进给、锋利刀尖	CCET 060201MF R/L-U 060202MF R/L-U	6.35	2.38	2.8	＜0.1 ＜0.2	7°	● ●	● ●	● ●	● ●
	CCET 09T301MF R/L-U 09T302MF R/L-U	9.525	3.97	4.4	＜0.1 ＜0.2	7°	● ●	R R	● ●	R R
 低进给、带珩磨	CCGT 060201E R/L-U 060202E R/L-U 060204E R/L-U	6.35	2.38	2.8	0.1 0.2 0.4	7°	● ● ●	 ● ●	● ● ●	 ● ●
	CCGT 09T301E R/L-U 09T302E R/L-U 09T304E R/L-U	9.525	3.97	4.4	0.1 0.2 0.4	7°	● ● ●	 R R	● ● ●	 R R
 精加工	CPMT 080202PP 080204PP	7.94	2.38	3.3	0.2 0.4	11°	● ●	● ●	● ●	● ●
	CPMT 090302PP 090304PP 090308PP	9.525	3.18	4.4	0.2 0.4 0.8	11°	● ● ●	● ● ●	● ● ●	● ● ●
精加工	CPMT 080204GP	7.94	2.38	3.3	0.4	11°	●	●	●	●
	CPMT 090304GP 090308GP	9.525	3.18	4.4	0.4 0.8	11°	● ●	● ●	● ●	● ●
 精加工~半精加工	CPMH 080204HQ 080208HQ	7.94	2.38	3.5	0.4 0.8	11°	● ●	● ●	● ●	● ●
	CPMH 090304HQ 090308HQ	9.525	3.18	4.5	0.4 0.8	11°	● ●	● ●	● ●	● ●
半精加工	CPMH 080204 080208	7.94	2.38	3.5	0.4 0.8	11°	● ●	● ●	● ●	● ●
	CPMH 090304 090308	9.525	3.18	4.5	0.4 0.8	11°	● ●	● ●	● ●	● ●
 软钢、精加工	CPMT 080204XP	7.94	2.38	3.3	0.4	11°	●	●	●	●
	CPMT 090304XP 090308XP	9.525	3.18	4.4	0.4 0.8	11°	● ●	● ●	● ●	● ●

刀尖角R(rε)用不等号表示的刀片为负公差产品。

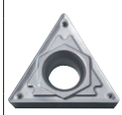
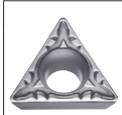
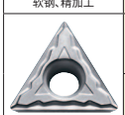
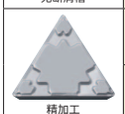
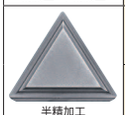
形状 带方向刀片 显示为左手(L)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	后角	TN610	TN620	PV710	PV720
软钢、精加工~半精加工	CPMT 090304XQ 090308XQ	9.525	3.18	4.4	0.4 0.8	11°	● ●	● ●	● ●	● ●
 精加工~半精加工	CPMH 080204 R/L-Y	7.94	2.38	3.5	0.4	11°	●		●	
	CPMH 090304 R/L-Y	9.525	3.18	4.5	0.4	11°	●		●	
精加工带修光刃	DCMX 070204WP	6.35	2.38	2.8	0.4	7°	●	●	●	●
	DCMX 11T304WP	9.525	3.97	4.4	0.4	7°	●	●	●	●
 精加工	DCMT 070202PP 070204PP	6.35	2.38	2.8	0.2 0.4	7°	● ●	● ●	● ●	● ●
	DCMT 11T302PP 11T304PP 11T308PP	9.525	3.97	4.4	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
 精加工	DCMT 070202GP 070204GP	6.35	2.38	2.8	0.2 0.4	7°	● ●	● ●	● ●	● ●
	DCMT 11T304GP 11T308GP	9.525	3.97	0.4	0.4 0.8	7°	● ●	● ●	● ●	● ●
精加工~半精加工	DCMT 070202GK 070204GK 070208GK	6.35	2.38	2.8	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
	DCMT 11T302GK 11T304GK 11T308GK	9.525	3.97	4.4	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
 精加工~半精加工	DCMT 070202HQ 070204HQ 070208HQ	6.35	2.38	2.8	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
	DCMT 11T302HQ 11T304HQ 11T308HQ	9.525	3.97	4.4	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
 半精加工	DCGT 070201 070202 070204	6.35	2.38	2.8	0.1 0.2 0.4	7°	● ● ●	● ● ●	● ● ●	● ● ●
	DCGT 11T301 11T302 11T304	9.525	3.97	4.4	0.1 0.2 0.4	7°	● ● ●	● ● ●	● ● ●	● ● ●
	DCMT 11T308	9.525	3.97	4.4	0.8	7°	●	●	●	●
软钢、精加工	DCMT 070204XP	6.35	2.38	2.8	0.4	7°	●	●	●	●
	DCMT 11T302XP 11T304XP 11T308XP	9.525	3.97	4.4	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
软钢、精加工~半精加工	DCMT 11T304XQ 11T308XQ	9.525	3.97	4.4	0.4 0.8	7°	● ●	● ●	● ●	● ●
精加工、锋利刀尖	DCET 070201M R/L-F 070202M R/L-F 070204M R/L-F	6.35	2.38	2.8	＜0.1 ＜0.2 ＜0.4	7°	● ● ●	 	● ● ●	
	DCET 11T301M R/L-F 11T302M R/L-F 11T304M R/L-F	9.525	3.97	4.4	＜0.1 ＜0.2 ＜0.4	7°	● ● ●	 	● ● ●	
低进给、锋利刀尖	DCET 070201MF R/L-U 070202MF R/L-U	6.35	2.38	2.8	＜0.1 ＜0.2	7°	● ●	 ●	● ●	 ●
	DCET 11T301MF R/L-U 11T302MF R/L-U	9.525	3.97	4.4	＜0.1 ＜0.2	7°	● ●	 ●	● ●	 ●
低进给、带珩磨	DCGT 070201E R/L-U 070202E R/L-U 070204E R/L-U	6.35	2.38	2.8	0.1 0.2 0.4	7°	● ● ●	 ●	● ● ●	 ●
	DCGT 11T301E R/L-U 11T302E R/L-U 11T304E R/L-U	9.525	3.97	4.4	0.1 0.2 0.4	7°	● ● ●	 ● ●	● ● ●	 ● ●

●：标准库存　R：仅右手(R)有库存　L：仅左手(L)有库存

标准库存型号(正角)

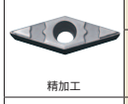
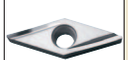
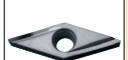
形状 带方向刀片 显示为左手(L)	型号	尺寸(mm)					TN610	TN620	PV710	PV720
		内接圆径	厚度	孔径	刀尖角 R(rε)	后角				
 低进给、锋利刀尖	DCET 11T301MF R/L-J 11T302MF R/L-J	9.525	3.97	4.4	＜0.1 ＜0.2	7°	● ●		● ●	
 低进给、带珩磨	DCGT 11T301E R/L-J 11T302E R/L-J 11T304E R/L-J	9.525	3.97	4.4	0.1 0.2 0.4	7°	● ● ●		● ● ●	
半精加工	RCMX 1003M0	10.0	3.18	3.6	–	7°		●		●
	RCMX 1204M0	12.0	4.76	4.2	–	7°		●		●
 精加工~半精加工	SCMT 09T304HQ 09T308HQ	9.525	3.97	4.4	0.4 0.8	7°	● ●		● ●	
精加工	SPGR 090304 R/L 090308 R/L	9.525	3.18	–	0.4 0.8	11°	● ●		● ●	
	SPGR 120304 R/L 120308 R/L	12.7	3.18	–	0.4 0.8	11°	● ●		● ●	
无断屑槽	SPMN 120308 120312	12.7	3.18	–	0.8 1.2	11°	● ●		● ●	
 精加工	TBMT 060102DP 060104DP	3.97	1.59	2.3	0.2 0.4	5°	● ●	● ●	● ●	● ●
 精加工	TBGT 060102 R/L 060104 R/L	3.97	1.59	2.3	0.2 0.4	5°	● ●	L L	● ●	L L
 精加工	TCMX 090204WP	5.56	2.38	2.5	0.4	7°	●	●	●	●
	TCMX 110204WP	6.35	2.38	2.8	0.4	7°	●	●	●	●
 精加工~半精加工	TCMT 090202HQ 090204HQ	5.56	2.38	2.5	0.2 0.4	7°	● ●	● ●	● ●	● ●
	TCMT 110202HQ 110204HQ 110208HQ	6.35	2.38	2.8	0.2 0.4 0.8	7°	● ● ●	● ● ●	● ● ●	● ● ●
	TCMT 16T304HQ 16T308HQ	9.525	3.97	4.4	0.4 0.8	7°		● ●		● ●
精加工 带修光刃	TPMX 090204WP	5.56	2.38	2.8	0.4	11°	●	●	●	●
	TPMX 110304WP	6.35	3.18	3.3	0.4	11°	●	●	●	●
精加工	TPMT 090202PP 090204PP	5.56	2.38	2.8	0.2 0.4	11°	● ●	● ●	● ●	● ●
	TPMT 110302PP 110304PP 110308PP	6.35	3.18	3.3	0.2 0.4 0.8	11°	● ● ●	● ● ●	● ● ●	● ● ●
精加工	TPMT 090202GP 090204GP	5.56	2.38	2.8	0.2 0.4	11°	● ●	● ●	● ●	● ●
	TPMT 110304GP 110308GP	6.35	3.18	3.3	0.4 0.8	11°	● ●	● ●	● ●	● ●
	TPMT 160304GP	9.525	3.18	4.4	0.4	11°	●	●	●	●

刀尖角R(rε)用不等号表示的刀片为负公差产品。

形状 带方向刀片 显示为左手(L)	型号	尺寸(mm)					TN610	TN620	PV710	PV720
		内接圆径	厚度	孔径	刀尖角 R(rε)	后角				
 精加工~半精加工	TPMT 090202HQ 090204HQ	5.56	2.38	2.8	0.2 0.4	11°	● ●	● ●	● ●	● ●
	TPMT 110302HQ 110304HQ 110308HQ	6.35	3.18	3.3	0.2 0.4 0.8	11°	● ● ●	● ● ●	● ● ●	● ● ●
	TPMT 160302HQ 160304HQ 160308HQ	9.525	3.18	4.4	0.2 0.4 0.8	11°	● ● ●	 ● ●	● ● ●	 ● ●
 软钢、精加工	TPMT 090204XP	5.56	2.38	2.8	0.4	11°	●	●	●	●
	TPMT 110304XP 110308XP	6.35	3.18	3.3	0.4 0.8	11°	● ●	● ●	● ●	● ●
	TPMT 160304XP 160308XP	9.525	3.18	4.4	0.4 0.8	11°	● ●	● ●	● ●	● ●
 软钢、精加工~半精加工	TPMT 110304XQ 110308XQ	6.35	3.18	3.3	0.4 0.8	11°	● ●	● ●	● ●	● ●
	TPMT 160304XQ 160308XQ	9.525	3.18	4.4	0.4 0.8	11°	● ●	● ●	● ●	● ●
精加工	TPGH 080202 R/L 080204 R/L	4.76	2.38	2.3	0.2 0.4	11°	L L	● ●	L L	● ●
	TPGH 090202 R/L 090204 R/L	5.56	2.38	3.0	0.2 0.4	11°	L L	● ●	L L	● ●
	TPGH 110202 R/L 110204 R/L	6.35	2.38	3.5	0.2 0.4	11°	L L		L L	
	TPGH 110302 R/L 110304 R/L 110308 R/L	6.35	3.18	3.3	0.2 0.4 0.8	11°	L L ●	● ● L	L L ●	● ● L
	TPGH 160302 R/L 160304 R/L 160308 R/L	9.525	3.18	4.5	0.2 0.4 0.8	11°	● ● L	 ● 	● ● L	 ●
半精加工	TPGH 110302 R/L-H 110304 R/L-H 110308 R/L-H	6.35	3.18	3.3	0.2 0.4 0.8	11°	L L L	L ● L	L L L	L ● L
	TPGH 160304 R/L-H	9.525	3.18	4.5	0.4	11°	L	L	L	L
	TPGT 160402 R/L-H 160404 R/L-H	9.525	4.76	4.4	0.2 0.4	11°	L L		L L	
无断屑槽	TPGB 080204	4.76	2.38	2.3	0.4	11°		●		●
	TPGB 090204	5.56	2.38	3.0	0.4	11°		●		●
	TPGB 110204	6.35	2.38	3.5	0.4	11°	●		●	
	TPGB 110302 110304 110308	6.35	3.18	3.3	0.2 0.4 0.8	11°	● ● ●	● ● ●	● ● ●	● ● ●
	TPGB 160304 160308	9.525	3.18	4.5	0.4 0.8	11°	● ●		● ●	
 精加工	TPMR 110304GP	6.35	3.18	–	0.4	11°		●		●
	TPMR 160304GP	9.525	3.18	–	0.4	11°		●		●
精加工~半精加工	TPMR 110304HQ 110308HQ	6.35	3.18	–	0.4 0.8	11°		● ●		● ●
	TPMR 160304HQ 160308HQ	9.525	3.18	–	0.4 0.8	11°	● ●	● ●	● ●	● ●
 半精加工	TPMR 110304 110308	6.35	3.18	–	0.4 0.8	11°	● ●		● ●	
	TPMR 160304 160308	9.525	3.18	–	0.4 0.8	11°	● ●		● ●	
A:精加工 B:精加工~半精加工 C:半精加工	TPGR 110302 R/L-A 110304 R/L-A	6.35	3.18	–	0.2 0.4	11°	L L	L L	L L	L L
	TPGR 110304 R/L-B 110308 R/L-B	6.35	3.18	–	0.4 0.8	11°	L L	L	L L	L
	TPGR 160302 R/L-B 160304 R/L-B 160308 R/L-B	9.525	3.18	–	0.2 0.4 0.8	11°	● ● ●	L L L	● ● ●	L L L
	TPGR 160304 R/L-C 160308 R/L-C	9.525	3.18	–	0.4 0.8	11°	● ●	L L	● ●	L L
无断屑槽	TPGN 110304 110308	6.35	3.18	–	0.4 0.8	11°	● ●		● ●	
	TPGN 160304 160308	9.525	3.18	–	0.4 0.8	11°	● ●		● ●	

●：标准库存　R：仅右手(R)有库存　L：仅左手(L)有库存

标准库存型号(正角)

形状 带方向刀片 显示为左手(L)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	后角	TN610	TN620	PV710	PV720
精加工	VBMT 110302PP 110304PP 110308PP	6.35	3.18	2.8	0.2 0.4 0.8	5°	● ● ●	● ● ●	● ● ●	● ● ●
	VBMT 160404PP 160408PP 160412PP	9.525	4.76	4.4	0.4 0.8 1.2	5°	● ● ●	● ● ●	● ● ●	● ● ●
 精加工	VBMT 110304GP	6.35	3.18	2.8	0.4	5°	●	●	●	●
	VBMT 160404GP 160408GP	9.525	4.76	4.4	0.4 0.8	5°	● ●	● ●	● ●	● ●
精加工	VBMT 110302VF 110304VF 110308VF	6.35	3.18	2.8	0.2 0.4 0.8	5°	● ● ●	● ● ●	● ● ●	● ● ●
	VBMT 160402VF 160404VF 160408VF 160412VF	9.525	4.76	4.4	0.2 0.4 0.8 1.2	5°	● ● ● ●	● ● ● ●	● ● ● ●	● ● ● ●
精加工~半精加工	VBMT 110304HQ 110308HQ	6.35	3.18	2.8	0.4 0.8	5°	● ●	● ●	● ●	● ●
	VBMT 160404HQ 160408HQ 160412HQ	9.525	4.76	4.4	0.4 0.8 1.2	5°	● ● ●	● ● ●	● ● ●	● ● ●
精加工、锋利刀尖	VBET 110301M R/L-F 110302M R/L-F	6.35	3.18	2.8	＜0.1 ＜0.2	5°	 ●	● ●	 ●	● ●
 精加工~半精加工 锋利刀尖	VBET 110302M R/L- Y 110304M R/L- Y	6.35	3.18	2.8	＜0.2 ＜0.4	5°	● ●	● ●	● ●	● ●
 精加工~半精加工	VBGT 160402 R/L- Y 160404 R/L- Y	9.525	4.76	4.4	0.2 0.4	5°	● ●		● ●	

刀尖角R(rε)用不等号表示的刀片为负公差产品。

形状 带方向刀片 显示为左手(L)	型号	尺寸(mm) 内接圆径	厚度	孔径	刀尖角 R(rε)	后角	TN610	TN620	PV710	PV720
精加工	VCMT 080202PP 080204PP	4.76	2.38	2.3	0.2 0.4	7°	● ●	● ●	● ●	● ●
	VCMT 160404PP 160408PP	9.525	4.76	4.4	0.4 0.8	7°	● ●	● ●	● ●	● ●
精加工	VCMT 080202VF 080204VF	4.76	2.38	2.3	0.2 0.4	7°	● ●	● ●	● ●	● ●
精加工~半精加工	VCMT 080202HQ 080204HQ	4.76	2.38	2.3	0.2 0.4	7°	● ●	● ●	● ●	● ●
精加工	WBMT 060102 R/L-DP 060104 R/L-DP	3.97	1.59	2.3	0.2 0.4	5°	L L	L L	L L	L L
	WBMT 080202 R/L-DP 080204 R/L-DP	4.76	2.38	2.3	0.2 0.4	5°	L L	L L	L L	L L
精加工、锋利刀尖	WBET 060102M R/L-F 060104M R/L-F	3.97	1.59	2.3	＜0.2 ＜0.4	5°	● ●	L L	● ●	L L
	WBET 080201M R/L-F 080202M R/L-F 080204M R/L-F	4.76	2.38	2.3	＜0.1 ＜0.2 ＜0.4	5°	● ● ●	 L L	● ● ●	 L L
精加工~半精加工	WPMT 110204GP	6.35	2.38	2.8	0.4	11°		●		●
	WPMT 160304GP	9.525	3.18	4.4	0.4	11°		●		●
精加工~半精加工	WPMT 110202HQ 110204HQ	6.35	2.38	2.8	0.2 0.4	11°	●	● ●	●	● ●
	WPMT 160304HQ 160308HQ	9.525	3.18	4.4	0.4 0.8	11°	● ●	● ●	● ●	● ●

●：标准库存　R：仅右手(R)有库存　L：仅左手(L)有库存

推荐切削条件表

Vc (m/min)

	低碳素钢 低碳素合金钢 150HB以下	中碳素钢 中碳素合金钢 250HB以下	高碳素合金钢 300HB以下
TN610	150 – **250** – 350		150 – **230** – 300
TN620	100 – **200** – 300		100 – **180** – 250

Vc (m/min)

	低碳素钢 低碳素合金钢 150HB以下	中碳素钢 中碳素合金钢 250HB以下	高碳素合金钢 300HB以下
PV710	150 – **300** – 400		150 – **250** – 330
PV720	100 – **250** – 350		100 – **200** – 280