

刀片
增加

铸铁车削用CVD涂层材料
超级涂层硬质合金

UC5105/UC5115

新型平滑涂层技术确保最稳定的切削。

耐磨损性、耐破损性优异的性能卓越的铸铁车削用材料登场

●可加工钢的UC5115

带断屑槽刀片登场



车削铸铁用CVD涂层材料

超级涂层硬质合金

UC5105/UC5115

UC5105/UC5115 的特点

在加工铸铁方面极为有效

新开发的“全黑超平滑涂层”

提高耐磨损性能

与以往的材料相比，厚而精细的Al₂O₃层和微粒纤维状TiCN涂层，显著提高了耐磨损性能。

提高耐崩刃性能

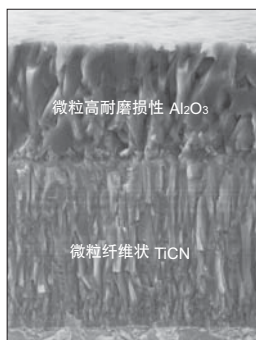
比其他公司涂层表面平滑，大幅度提高了耐粘结性能。不易发生粘结崩刃等异常损伤，能够长时间进行稳定的切削。

UC5105

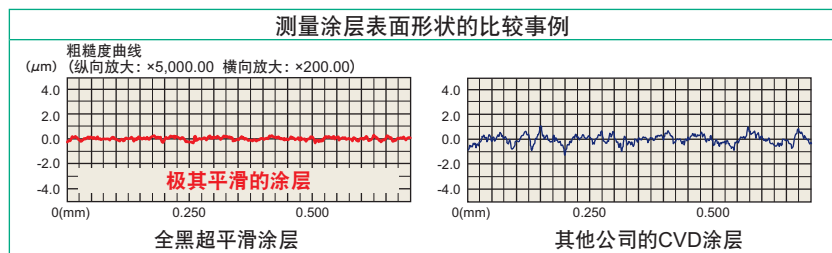
该材料由高硬度硬质合金基体和全黑超平滑涂层组成。对高速车削铸铁和球墨铸铁极为有效。

UC5115

该材料由强韧的硬质合金基体和全黑超平滑涂层组成。是车削铸铁和球墨铸铁的第一推荐材料。



UC5105/UC5115 涂层结构



适用范围和推荐切削条件

TOOL NAVI系统

UC5105是注重耐磨损性能的车削铸铁用材料。

UC5115是兼顾耐磨损和耐破损性能的车削铸铁用材料。并且在钢的高速连续加工中也能发挥出优异的耐磨损性能。

K系列(铸铁)用M级负角刀片的最佳材料、断屑槽



加工状态

● 稳定切削

连续切削
加工余量固定的切削
非黑皮切削
工件夹紧刚性高的切削

● 普通切削

⊕ 不稳定切削

激烈的断续切削
加工余量变化大的切削
工件夹紧刚性低的切削

切削范围

S 轻切削领域 (ap=0.5—1.5mm)

M 中切削领域 (ap=1.5—4.0mm)

G 准重切削领域 (ap=4.0—7.0mm)

适用范围


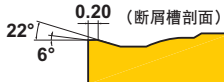

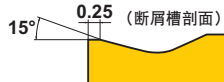


| ISO 使用分类代号 | 适用范围 |
|------------|--------|
| K01 | UC5105 |
| K10 | UC5105 |
| K20 | UC5105 |
| K30 | UC5105 |




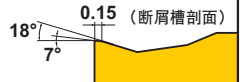


推荐切削条件

| 工件材料 | 抗拉强度 | 切削速度 (m/min) | |
|--------|--------------|---------------|---------------|
| | | UC5105 | UC5115 |
| K 灰口铸铁 | ≤300MPa | 300 (200—400) | 250 (150—300) |
| | ≤450MPa | 300 (200—400) | 250 (150—300) |
| P 球墨铸铁 | 500—800MPa | 230 (180—300) | 200 (150—250) |
| | 硬度 HB180—280 | — | 300 (220—370) |




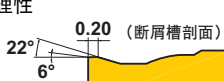
UC5115 断屑槽种类


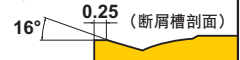

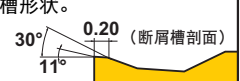
铸铁车削用断屑槽

| 用途 | 断屑槽 | 特点 |
|-------|--|--|
| 轻切削用 | MA  | 正棱边刃形, 切削锋利性高。  (断屑槽剖面) 22° 6° |
| 中切削用 | 全周  | 扁平棱边刃形, 切削刃强度高。  (断屑槽剖面) 15° |
| 准重切削用 | GH  | 适于断续切削、黑皮切削。 宽棱边与大容量屑槽组合, 实现高进给量加工。  (断屑槽剖面) 18° |

| 用途 | 断屑槽 | 特点 |
|---------|--|--|
| 准重切削用 | 平顶  | 刀刃强度高、刀片落位稳定, 最适于断续切削等不稳定切削。  (断屑槽剖面) 0° |
| 高效率轻切削用 | SW  | 带修光刃, 可在轻切削领域内进行高进给加工。  (断屑槽剖面) 18° 7° |
| 高效率中切削用 | MW  | 带修光刃, 可在通用切削领域内进行高进给加工。  (断屑槽剖面) 19° |

钢车削用断屑槽

| 用途 | 断屑槽 | 特点 |
|------|--|--|
| 轻切削用 | SH  | 正棱边刃形, 切削锋利性高。 在轻切削领域内, 切屑处理性良好。  (断屑槽剖面) 15° |
| 中切削用 | MA  | 正棱边刃形, 切削锋利性高。 在通用切削领域内, 切屑处理性良好。  (断屑槽剖面) 22° 6° |

| 用途 | 断屑槽 | 特点 |
|------|--|---|
| 中切削用 | MH  | 扁平棱边刃形, 切削刃强度高。 在通用切削领域内, 切屑处理性良好。  (断屑槽剖面) 16° |
| 中切削用 | MV  | 正棱边刃形, 切削锋利性高。 适合仿形、提拉加工的断屑槽形状。 在通用切削领域内, 切屑处理性良好。  (断屑槽剖面) 30° 11° |

UC5105/UC5115的切削性能

耐磨损性能

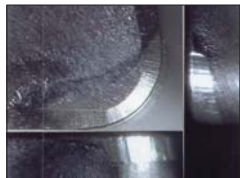
高速连续车削灰口铸铁 (FC300)
($v_c = 600\text{m/min}$)

UC5105 显示了超群的耐磨损性能, 能够与陶瓷材料媲美!!

< 切削条件 >

刀片: CNMA120408
刀具: PCLNL2525M12
切削速度: 600m/min
每转进给量: 0.3mm/rev
切削深度: 1.5mm
切削液: 干式
连续车削外圆

切削时间=2 min



A公司陶瓷材料

切削时间=5 min

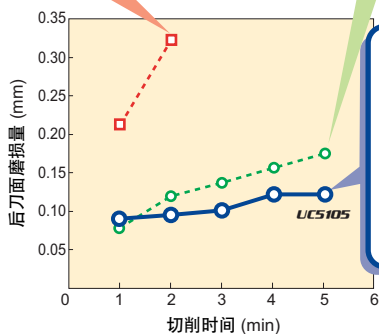


B公司陶瓷材料

切削时间=5 min



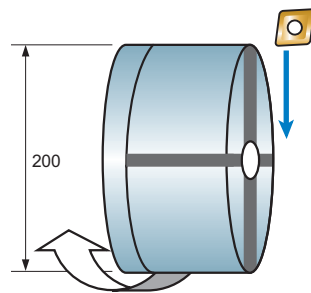
UC5105



耐破损性能

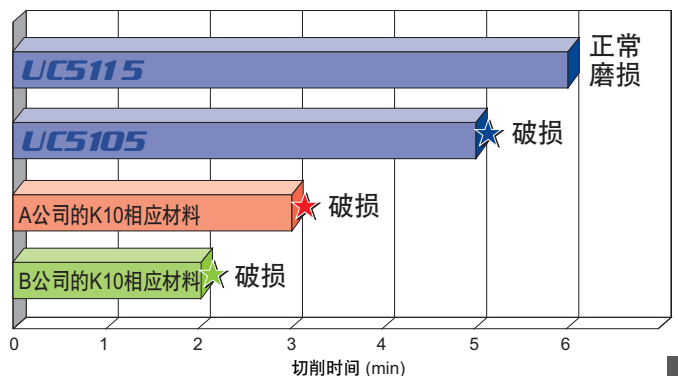
球墨铸铁的断续端面车削 (FCD450)

UC5115 显示了超群的耐崩刃性, 实现极为稳定的切削刃可靠性!!



< 切削条件 >


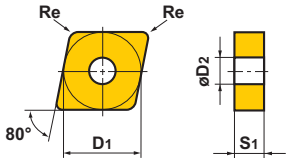

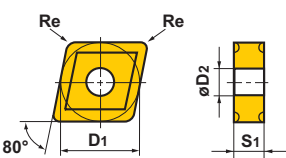

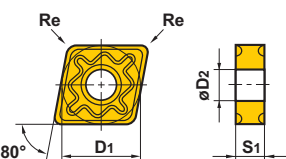

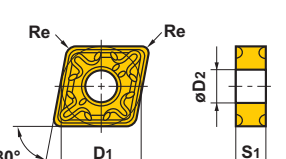

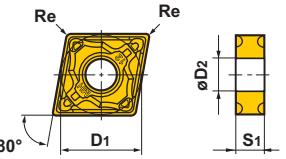

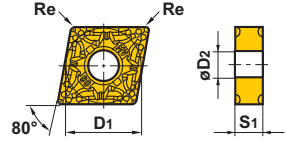
刀片: CNMA120408
刀具: PCLNL2525M12
切削速度: 120m/min
每转进给量: 0.3mm/rev
切削深度: 1.5mm
切削液: 湿式


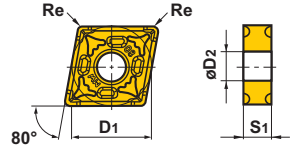

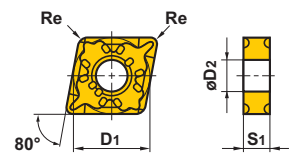

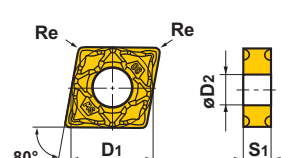

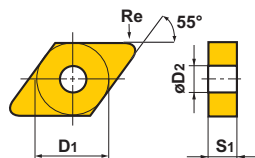

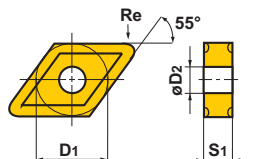

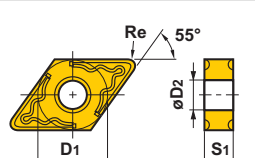

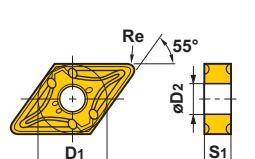

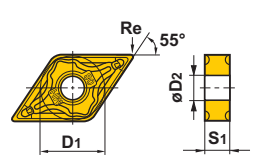


超级涂层硬质合金 UC5105/UC5115

刀片规格

●负角刀片(带孔)


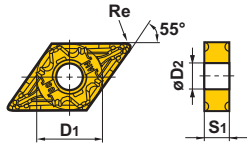

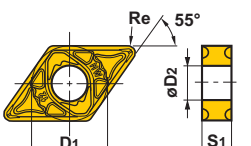

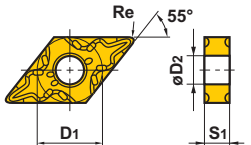

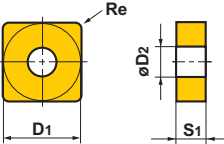

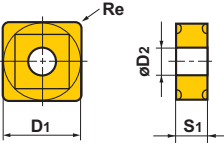

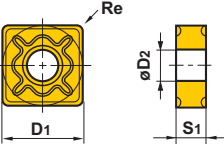

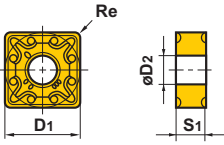

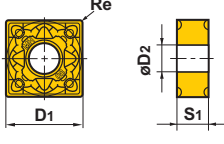
| 刀片外形 | 型号 | 库存 | | 尺寸(mm) | | | | 形状 |
|--|--------------------------|--------|--------|--------|------|-----|------|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
|  无断屑槽 | CNMA 120404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 120412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 160612 | ● | ● | 15.875 | 6.35 | 1.2 | 6.35 | |
| | 160616 | ● | ● | 15.875 | 6.35 | 1.6 | 6.35 | |
| | 190612 | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| | 190616 | ● | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
|  全周断屑槽 | CNMG 120404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 120412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 160612 | ● | ● | 15.875 | 6.35 | 1.2 | 6.35 | |
| | 160616 | ● | ● | 15.875 | 6.35 | 1.6 | 6.35 | |
| | 190612 | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| | 190616 | ● | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
|  GH断屑槽 | CNMG 120408-GH | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 120412-GH | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416-GH | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 160612-GH | ● | ● | 15.875 | 6.35 | 1.2 | 6.35 | |
| | 160616-GH | ● | ● | 15.875 | 6.35 | 1.6 | 6.35 | |
| | 190612-GH | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| 准重切削 | 190616-GH | ● | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
| | | | | | | | | |
|  MA断屑槽 | CNMG 120404-MA | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 120408-MA | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 120412-MA | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416-MA | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 160608-MA | | □ | 15.875 | 6.35 | 0.8 | 6.35 | |
| | 160612-MA | ● | ● | 15.875 | 6.35 | 1.2 | 6.35 | |
| | 160616-MA | ● | ● | 15.875 | 6.35 | 1.6 | 6.35 | |
| | 190612-MA | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| 中切削 | 190616-MA | ● | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
| | | | | | | | | |
|  MH断屑槽 | NEW CNMG120404-MH | | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 120408-MH | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 120412-MH | | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | NEW 120416-MH | | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | NEW 160608-MH | | ● | 15.875 | 6.35 | 0.8 | 6.35 | |
| | NEW 160612-MH | | ● | 15.875 | 6.35 | 1.2 | 6.35 | |
| | NEW 160616-MH | | ● | 15.875 | 6.35 | 1.6 | 6.35 | |
| | NEW 190612-MH | | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| | NEW 190616-MH | | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
| | | | | | | | | |
|  MV断屑槽 | NEW CNMG120404-MV | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 120408-MV | | □ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 120412-MV | | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| | NEW 120416-MV | | □ | 12.7 | 4.76 | 1.6 | 5.16 | |
| | | | | | | | | |
| 中切削 | | | | | | | | |

| 刀片外形 | 型 号 | 库存 | | 尺寸(mm) | | | | 形 状 |
|---|----------------------|--------|--------|--------|------|-----|------|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| MW 断屑槽  中切削 (修光刃) | CNMG120408-MW | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 120412-MW | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| SH 断屑槽  轻切削 | CNMG120404-SH | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 120408-SH | | □ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 120412-SH | | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| SW 断屑槽  轻切削 (修光刃) | CNMG120404-SW | | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 120408-SW | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| 无断屑槽  | DNMA150404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 150408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 150412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 150416 | □ | □ | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 150608 | ● | ● | 12.7 | 6.35 | 0.8 | 5.16 | |
| | 150612 | ● | ● | 12.7 | 6.35 | 1.2 | 5.16 | |
| 全周 断屑槽  中切削 | DNMG150404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 150408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 150412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 150604 | □ | □ | 12.7 | 6.35 | 0.4 | 5.16 | |
| | 150608 | ● | ● | 12.7 | 6.35 | 0.8 | 5.16 | |
| | 150612 | ● | ● | 12.7 | 6.35 | 1.2 | 5.16 | |
| GH 断屑槽  准重切削 | DNMG150408-GH | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 150412-GH | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 150608-GH | ● | ● | 12.7 | 6.35 | 0.8 | 5.16 | |
| | 150612-GH | ● | ● | 12.7 | 6.35 | 1.2 | 5.16 | |
| | | | | | | | | |
| MA 断屑槽  中切削 | DNMG150404-MA | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 150408-MA | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 150412-MA | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 150608-MA | ● | ● | 12.7 | 6.35 | 0.8 | 5.16 | |
| | 150612-MA | ● | ● | 12.7 | 6.35 | 1.2 | 5.16 | |
| MH 断屑槽  中切削 | DNMG150404-MH | | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 150408-MH | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 150412-MH | | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 150604-MH | | ● | 12.7 | 6.35 | 0.4 | 5.16 | |
| | 150608-MH | | ● | 12.7 | 6.35 | 0.8 | 5.16 | |
| | 150612-MH | | ● | 12.7 | 6.35 | 1.2 | 5.16 | |


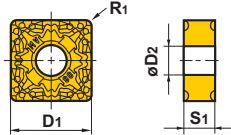

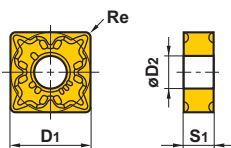

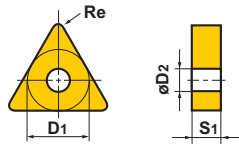

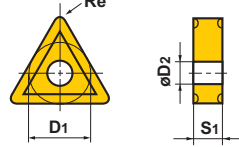

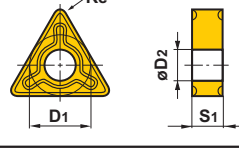

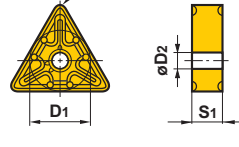

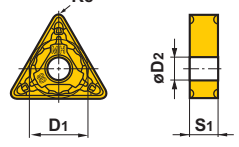

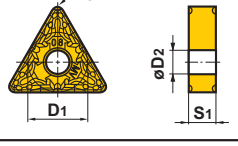
超级涂层硬质合金 UC5105/UC5115

刀片规格

●负角刀片(带孔)

| 刀片外形 | 型号 | 库存 | | 尺寸(mm) | | | | 形状 |
|---|--------------------------|--------|--------|--------|------|-----|------|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| MV 断屑槽  中切削 | NEW DNMG150404-MV | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 150408-MV | | □ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 150412-MV | | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| | NEW 150416-MV | | □ | 12.7 | 4.76 | 1.6 | 5.16 | |
| | NEW 150604-MV | | □ | 12.7 | 6.35 | 0.4 | 5.16 | |
| | NEW 150608-MV | | □ | 12.7 | 6.35 | 0.8 | 5.16 | |
| | NEW 150612-MV | | □ | 12.7 | 6.35 | 1.2 | 5.16 | |
| | NEW 150616-MV | | □ | 12.7 | 6.35 | 1.6 | 5.16 | |
| MW 断屑槽  中切削 (修光刃) | DNMX150408-MW | □ | □ | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 150412-MW | □ | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 150608-MW | □ | □ | 12.7 | 6.35 | 0.8 | 5.16 | |
| | 150612-MW | □ | □ | 12.7 | 6.35 | 1.2 | 5.16 | |
| SH 断屑槽  轻切削 | NEW DNMG150404-SH | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 150408-SH | | □ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 150412-SH | | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| | NEW 150604-SH | | □ | 12.7 | 6.35 | 0.4 | 5.16 | |
| | NEW 150608-SH | | □ | 12.7 | 6.35 | 0.8 | 5.16 | |
| | NEW 150612-SH | | □ | 12.7 | 6.35 | 1.2 | 5.16 | |
| 无断屑槽  | SNMA090308 | ● | ● | 9.525 | 3.18 | 0.8 | 3.81 |  |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 120412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 190612 | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| | 190616 | ● | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
| 全周 断屑槽  中切削 | SNMG120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 120412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 150612 | □ | □ | 15.875 | 6.35 | 1.2 | 6.35 | |
| | 190612 | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| | 190616 | ● | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
| GH 断屑槽  准重切削 | SNMG120408-GH | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 120412-GH | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| MA 断屑槽  中切削 | NEW SNMG120404-MA | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 120408-MA | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 120412-MA | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 120416-MA | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| | 150612-MA | □ | □ | 15.875 | 6.35 | 1.2 | 6.35 | |
| | 190612-MA | ● | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| MH 断屑槽  中切削 | NEW SNMG120404-MH | | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 120408-MH | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 120412-MH | | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | NEW 190612-MH | | ● | 19.05 | 6.35 | 1.2 | 7.93 | |
| | NEW 190616-MH | | ● | 19.05 | 6.35 | 1.6 | 7.93 | |
| | | | | | | | | |


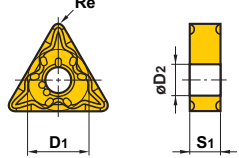

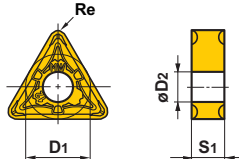

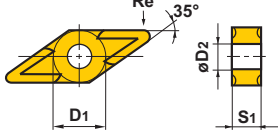

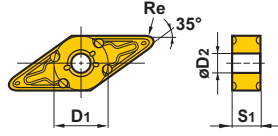

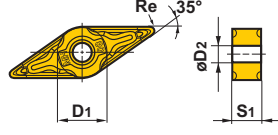

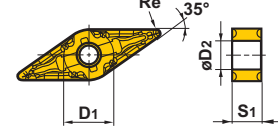

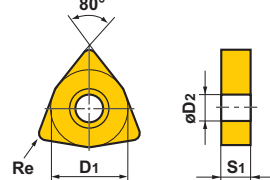

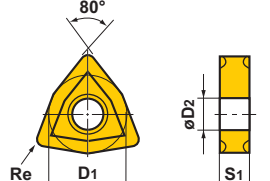

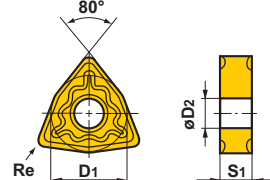
●: 标准库存品 □: 预订生产品

| 刀片外形 | 型 号 | 库存 | | 尺寸(mm) | | | | 形 状 |
|---|--------------------------|--------|--------|--------|------|------|------|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| MV 断屑槽  中切削 | NEW SNMG120404-MV | | ☐ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 120408-MV | | ☐ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 120412-MV | | ☐ | 12.7 | 4.76 | 1.2 | 5.16 | |
| SH 断屑槽  轻切削 | NEW SNMG120404-SH | | ☐ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 120408-SH | | ☐ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 120412-SH | | ☐ | 12.7 | 4.76 | 1.2 | 5.16 | |
| 无断屑槽  | TNMA160404 | ● | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | 160408 | ● | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| | 160412 | ● | ● | 9.525 | 4.76 | 1.2 | 3.81 | |
| | 160416 | ● | ● | 9.525 | 4.76 | 1.6 | 3.81 | |
| | 160420 | ● | ● | 9.525 | 4.76 | 2.0 | 3.81 | |
| | 220408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 220412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| 220416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | | |
| 全周 断屑槽  中切削 | TNMG160404 | ● | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | 160408 | ● | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| | 160412 | ● | ● | 9.525 | 4.76 | 1.2 | 3.81 | |
| | 160416 | ● | ● | 9.525 | 4.76 | 1.6 | 3.81 | |
| | 160420 | ● | ● | 9.525 | 4.76 | 2.0 | 3.81 | |
| | 220408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 220412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| 220416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | | |
| GH 断屑槽  准重切削 | TNMG160408-GH | ● | ● | 9.525 | 4.76 | 0.8 | 3.81 |  |
| | 160412-GH | ● | ● | 9.525 | 4.76 | 1.2 | 3.81 | |
| | 220408-GH | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 220412-GH | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| MA 断屑槽  中切削 | TNMG160404-MA | ● | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | 160408-MA | ● | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| | 160412-MA | ● | ● | 9.525 | 4.76 | 1.2 | 3.81 | |
| | 160416-MA | ● | ● | 9.525 | 4.76 | 1.6 | 3.81 | |
| | 220408-MA | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 220412-MA | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| MH 断屑槽  中切削 | NEW TNMG160404-MH | | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | NEW 160408-MH | | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| | NEW 160412-MH | | ● | 9.525 | 4.76 | 1.2 | 3.81 | |
| | NEW 220408-MH | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 220412-MH | | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| MV 断屑槽  中切削 | NEW TNMG160404-MV | | ☐ | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | NEW 160408-MV | | ☐ | 9.525 | 4.76 | 0.8 | 3.81 | |
| | NEW 160412-MV | | ☐ | 9.525 | 4.76 | 1.2 | 3.81 | |

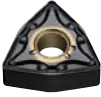
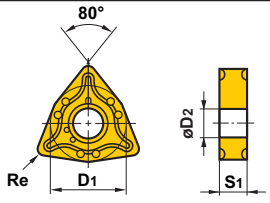

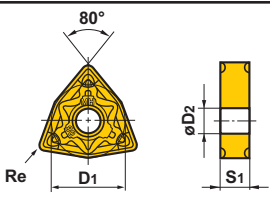
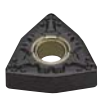
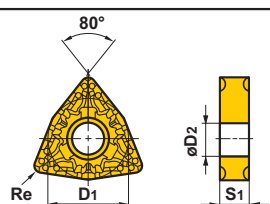

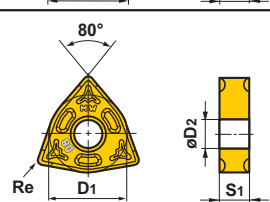

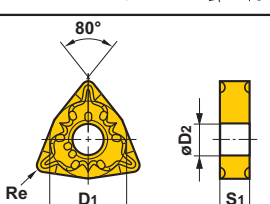
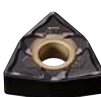
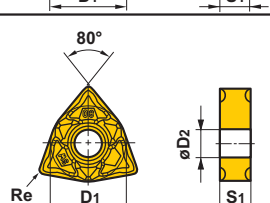
超级涂层硬质合金 UC5105/UC5115

刀片规格


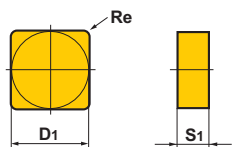

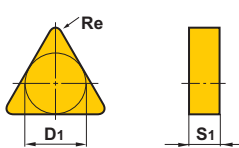
●负角刀片(带孔)

| 刀片外形 | 型号 | 库存 | | 尺寸(mm) | | | | 形状 |
|---|--------------------------|--------|--------|--------|------|-----|------|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| SH 断屑槽  轻切削 | NEW TNMG160404-SH | | ☐ | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | NEW 160408-SH | | ☐ | 9.525 | 4.76 | 0.8 | 3.81 | |
| MW 断屑槽  中切削 (修光刃) | TNMX160408-MW | ☐ | ☐ | 9.525 | 4.76 | 0.8 | 3.81 |  |
| | 160412-MW | ☐ | ☐ | 9.525 | 4.76 | 1.2 | 3.81 | |
| 全周 断屑槽  中切削 | VNMG160404 | ● | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | 160408 | ● | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| | 160412 | ● | ● | 9.525 | 4.76 | 1.2 | 3.81 | |
| MA 断屑槽  中切削 | VNMG160404-MA | ● | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | 160408-MA | ● | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| MH 断屑槽  中切削 | NEW VNMG160404-MH | | ● | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | NEW 160408-MH | | ● | 9.525 | 4.76 | 0.8 | 3.81 | |
| MV 断屑槽  中切削 | NEW VNMG160404-MV | | ☐ | 9.525 | 4.76 | 0.4 | 3.81 |  |
| | NEW 160408-MV | | ☐ | 9.525 | 4.76 | 0.8 | 3.81 | |
| 无断屑槽  | WNMA080404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 080408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 080412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 080416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| 全周 断屑槽  中切削 | WNMG080404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 080408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 080412 | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 080416 | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| GH 断屑槽  准重切削 | WNMG080408-GH | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 |  |
| | 080412-GH | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |

●：标准库存品 ☐：预订生产品

| 刀片外形 | 型 号 | 库存 | | 尺寸(mm) | | | | 形 状 |
|---|--------------------------|--------|--------|--------|------|-----|------|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| MA 断屑槽  中切削 | WNMG080404-MA | ● | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | 080408-MA | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 080412-MA | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| | 080416-MA | ● | ● | 12.7 | 4.76 | 1.6 | 5.16 | |
| MH 断屑槽  中切削 | NEW WNMG080404-MH | | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 080408-MH | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 080412-MH | | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| MV 断屑槽  中切削 | NEW WNMG080404-MV | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 080408-MV | | □ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 080412-MV | | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| MW 断屑槽  中切削 (修光刃) | WNMG060408-MW | □ | □ | 9.525 | 4.76 | 0.8 | 3.81 |  |
| | 060412-MW | □ | □ | 9.525 | 4.76 | 1.2 | 3.81 | |
| | 080408-MW | ● | ● | 12.7 | 4.76 | 0.8 | 5.16 | |
| | 080412-MW | ● | ● | 12.7 | 4.76 | 1.2 | 5.16 | |
| SH 断屑槽  轻切削 | NEW WNMG080404-SH | | □ | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 080408-SH | | □ | 12.7 | 4.76 | 0.8 | 5.16 | |
| | NEW 080412-SH | | □ | 12.7 | 4.76 | 1.2 | 5.16 | |
| SW 断屑槽  轻切削 (修光刃) | NEW WNMG080404-SW | | ● | 12.7 | 4.76 | 0.4 | 5.16 |  |
| | NEW 080408-SW | | ● | 12.7 | 4.76 | 0.8 | 5.16 | |


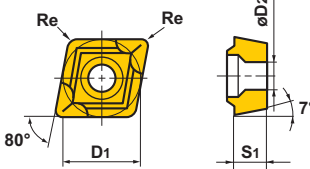

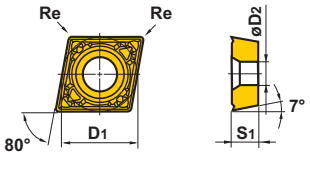

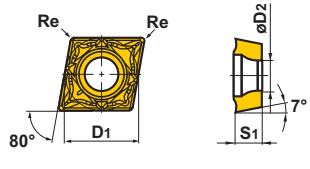

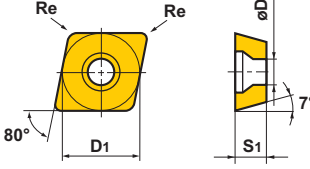

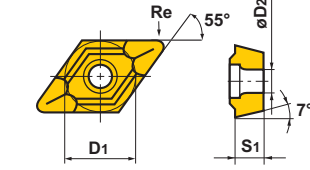

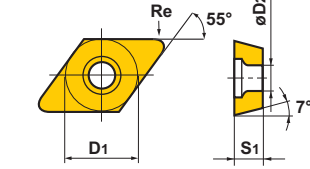

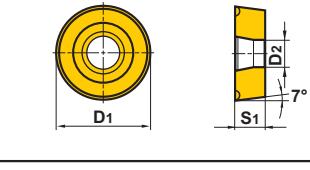

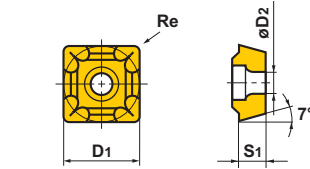
●负角刀片(无孔)


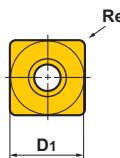
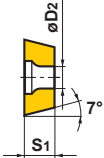

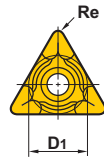
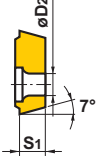

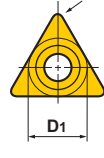
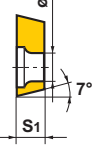

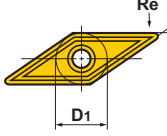
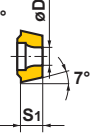

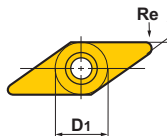
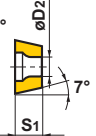
| 刀片外形 | 型 号 | 库存 | | 尺寸(mm) | | | | 形 状 |
|---|-------------------|--------|--------|--------|------|-----|----|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
|  | SNMN120408 | ● | ● | 12.7 | 4.76 | 0.8 | — |  |
| | 120412 | ● | ● | 12.7 | 4.76 | 1.2 | — | |
| | 120416 | ● | ● | 12.7 | 4.76 | 1.6 | — | |
|  | TNMN160408 | ● | ● | 9.525 | 4.76 | 0.8 | — |  |
| | 160412 | ● | ● | 9.525 | 4.76 | 1.2 | — | |
| | 160416 | ● | ● | 9.525 | 4.76 | 1.6 | — | |
| | 160420 | ● | ● | 9.525 | 4.76 | 2.0 | — | |

超级涂层硬质合金 UC5105/UC5115

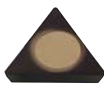

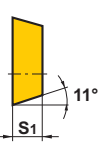
刀片规格

●正角刀片(带孔)

| 刀片外形 | 型号 | 库存 | | 尺寸(mm) | | | | 形状 |
|---|--------------------------|--------|--------|--------|------|-----|-----|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| 无代号 断屑槽  | CCMT060204 | ● | ● | 6.35 | 2.38 | 0.4 | 2.8 |  |
| | NEW 060208 | □ | □ | 6.35 | 2.38 | 0.8 | 2.8 | |
| | 09T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 | |
| | 09T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| | 120404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.5 | |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.5 | |
| 中切削 | 120412 | □ | □ | 12.7 | 4.76 | 1.2 | 5.5 | |
| MW 断屑槽  | NEW CCMT120404-MW | □ | □ | 12.7 | 4.76 | 0.4 | 5.5 |  |
| | NEW 120408-MW | □ | □ | 12.7 | 4.76 | 0.8 | 5.5 | |
| 中切削 (修光刃)  | NEW CCMT060204-SW | □ | □ | 6.35 | 2.38 | 0.4 | 2.8 |  |
| | NEW 09T302-SW | □ | □ | 9.525 | 3.97 | 0.2 | 4.4 | |
| | NEW 09T304-SW | □ | □ | 9.525 | 3.97 | 0.4 | 4.4 | |
| 轻切削 (修光刃)  | CCMW060204 | ● | ● | 6.35 | 2.38 | 0.4 | 2.8 |  |
| | 09T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 | |
| | 09T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| | 120404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.5 | |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.5 | |
| | 120412 | □ | □ | 12.7 | 4.76 | 1.2 | 5.5 | |
| 无断屑槽  | DCMT070204 | □ | □ | 6.35 | 2.38 | 0.4 | 2.8 |  |
| | NEW 070208 | □ | □ | 6.35 | 2.38 | 0.8 | 2.8 | |
| | 11T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 | |
| | 11T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| | 150404 | □ | □ | 12.7 | 4.76 | 0.4 | 5.5 | |
| | 150408 | □ | □ | 12.7 | 4.76 | 0.8 | 5.5 | |
| 中切削  | DCMW070204 | □ | □ | 6.35 | 2.38 | 0.4 | 2.8 |  |
| | 11T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 | |
| | 11T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| | 150404 | □ | □ | 12.7 | 4.76 | 0.4 | 5.5 | |
| | 150408 | □ | □ | 12.7 | 4.76 | 0.8 | 5.5 | |
| | 无断屑槽 | | | | | | | |
| 无代号 断屑槽  | RCMX1204M0 | ● | ● | 12 | 4.76 | — | 4.2 |  |
| | | | | | | | | |
| 无代号 断屑槽  | SCMT09T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 |  |
| | 09T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| | 120404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.5 | |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.5 | |
| | 120412 | □ | □ | 12.7 | 4.76 | 1.2 | 5.5 | |
| 中切削 | | | | | | | | |

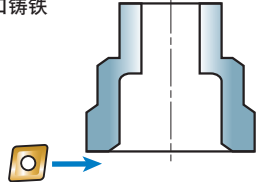
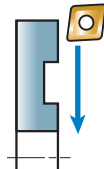
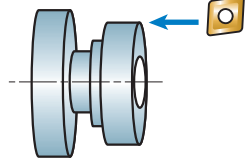
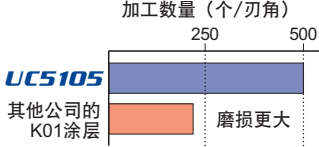
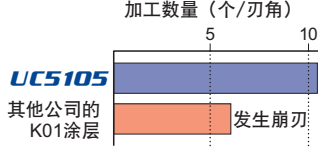
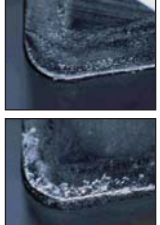
| 刀片外形 | 型 号 | 库存 | | 尺寸(mm) | | | | 形 状 |
|--|------------|--------|--------|--------|------|-----|-----|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
| 无断屑槽  | SCMW09T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 |   |
| | 09T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| | 120404 | ● | ● | 12.7 | 4.76 | 0.4 | 5.5 | |
| | 120408 | ● | ● | 12.7 | 4.76 | 0.8 | 5.5 | |
| | 120412 | | □ | 12.7 | 4.76 | 1.2 | 5.5 | |
| 无代号 断屑槽  | TCMT110204 | | □ | 6.35 | 2.38 | 0.4 | 2.8 |   |
| | 16T304 | | ● | 9.525 | 3.97 | 0.4 | 4.4 | |
| | 16T308 | | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| 中切削 无断屑槽  | TCMW110204 | □ | □ | 6.35 | 2.38 | 0.4 | 2.8 |   |
| | 16T304 | ● | ● | 9.525 | 3.97 | 0.4 | 4.4 | |
| | 16T308 | ● | ● | 9.525 | 3.97 | 0.8 | 4.4 | |
| 无代号 断屑槽  | VCMT160404 | | □ | 9.525 | 4.76 | 0.4 | 4.4 |   |
| | 160408 | | ● | 9.525 | 4.76 | 0.8 | 4.4 | |
| 中切削 无断屑槽  | VCMW160404 | □ | □ | 9.525 | 4.76 | 0.4 | 4.4 |   |
| | 160408 | ● | ● | 9.525 | 4.76 | 0.8 | 4.4 | |

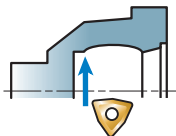
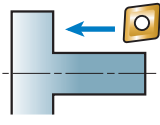
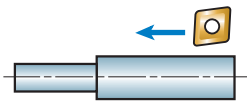
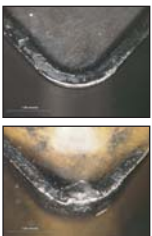
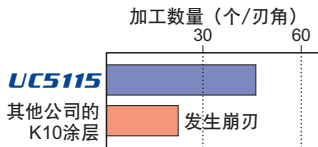
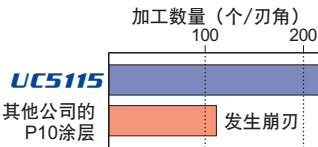
●正角刀片(无孔)

| 刀片外形 | 型 号 | 库存 | | 尺寸(mm) | | | | 形 状 |
|---|------------|--------|--------|--------|------|-----|----|---|
| | | UC5105 | UC5115 | D1 | S1 | Re | D2 | |
|  | TPMN110304 | ● | ● | 6.35 | 3.18 | 0.4 | — |   |
| | 110308 | ● | ● | 6.35 | 3.18 | 0.8 | — | |
| | 160304 | ● | ● | 9.525 | 3.18 | 0.4 | — | |
| | 160308 | ● | ● | 9.525 | 3.18 | 0.8 | — | |
| | 160312 | □ | □ | 9.525 | 3.18 | 1.2 | — | |
| | 220408 | □ | □ | 12.7 | 4.76 | 0.8 | — | |

超级涂层硬质合金 UC5105/UC5115

使用实例

| 使用刀片 (材料) | CNMA120408(UC5105) | CNMA120412 (UC5105) | CNMA120408 (UC5105) |
|-----------|---|--|--|
| 工件材料 | 灰口铸铁  | 球墨铸铁  | 球墨铸铁  |
| 零部件名称 | 轮毂 | 挡圈 | 扣环 |
| 切削条件 | 切削速度 (m/min) | 250 | 230 |
| | 每转进给量 (mm/rev) | 0.30 | 0.30 |
| | 切削深度 (mm) | 2.5 | 2.0 |
| 切削液 | 湿式切削 | 湿式切削 | 湿式切削 |
| 结果 |  <p>加工数量 (个/刃角) 250 500</p> <p>UC5105 加工数量 250个/刃角</p> <p>其他公司的 K01涂层 磨损更大</p> <p>UC5105 可以达到双倍以上的刀具寿命</p> |  <p>加工数量 (个/刃角) 5 10</p> <p>UC5105 加工数量 5个/刃角</p> <p>其他公司的 K01涂层 发生崩刃</p> <p>UC5105 可以达到1.5倍刀具寿命, 无任何异常损伤现象。</p> |  <p>UC5105 加工数量 70个/刃角</p> <p>其他公司的 K01涂层 加工数量 46个/刃角</p> |

| 使用刀片 (材料) | WNMG080412-GH (UC5115) | CNMG120408 (UC5115) | DNMG150608-MH (UC5115) |
|-----------|--|--|--|
| 工件材料 | 球墨铸铁 (FCD550)  | 球墨铸铁 (FCD600)  | 合金钢 (SCM420)  |
| 零部件名称 | 差速器壳体 | 曲轴 | 旋转轴 |
| 切削条件 | 切削速度 (m/min) | 160 | 145-160 |
| | 每转进给量 (mm/rev) | 0.25 | 0.20 |
| | 切削深度 (mm) | 1-2 | 2.5 |
| 切削液 | 湿式切削 | 湿式切削 | 湿式切削 |
| 结果 |  <p>UC5115 加工数量 100个/刃角</p> <p>其他公司的 K10涂层 加工数量 100个/刃角</p> |  <p>加工数量 (个/刃角) 30 60</p> <p>UC5115 加工数量 30个/刃角</p> <p>其他公司的 K10涂层 发生崩刃</p> <p>UC5115 可以达到1.7倍刀具寿命, 无崩刃现象。</p> |  <p>加工数量 (个/刃角) 100 200</p> <p>UC5115 加工数量 100个/刃角</p> <p>其他公司的 P10涂层 发生崩刃</p> <p>UC5115 可以达到双倍刀具寿命, 无崩刃现象。</p> |

关于安全

- 请不要直接用手摸切削刃、切屑。● 请在推荐条件范围内使用, 提早更换刀具。● 有时会有高温的切屑飞出、伸长的切屑排出。请使用安全罩、防护镜等防护用具。● 使用非水溶性切削液时, 务必采取防火措施。
- 安装刀片或零部件时, 请使用附带的扳手稳妥安装。

三菱综合材料株式会社

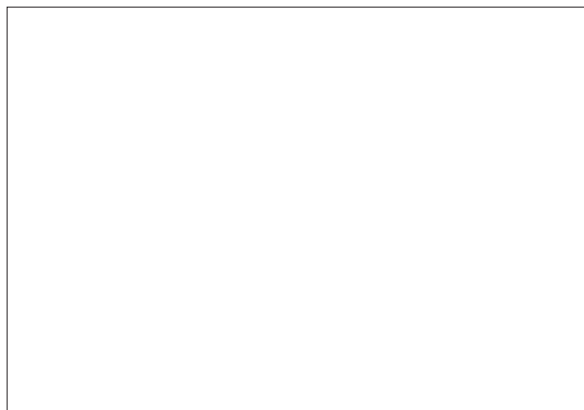
MITSUBISHI MATERIALS CORPORATION

东部亚洲销售部门:

〒130-0015 日本国东京都墨田区横网1-6-1, KFC大楼8楼

电话: 81-3-5819-8771 传真: 81-3-5819-8774

<http://www.mitsubishicarbide.com>



(规格若有更改, 恕不事先通知)

