

## NPA New Product Announcement- 2017

2017-新产品公告

Carmex presents a new Multi-Function milling tool (MF)

Carmex展现一个新产品-多功能铣削刀具

### Benefits

优点:

- Single tool for multi task operations  
单个刀具可用于多项功能加工
- Reduced tool changing time.  
减少刀具更换时间
- Reduce the cost - since few operations can be done by a single tool, setup time and programing is being reduced as well as reduction of stock investment.
- Perfect solution for machines with small tool storage/cassette.

用于减少小型刀具库存的、完美的解决方案。

降低成本，通过单个刀具完成多项工序加工。减少编程和设置时间，减少库存和资金占用。

### Applications 适用:

- Spotting and Drilling  
定心和钻孔
- Side milling  
侧铣
- Chamfering  
倒角
- Slotting/Grooving/Engraving  
插铣 / 槽铣 / 雕刻铣
- Deburring  
去毛刺
- Edge chamfering, Interpolation  
边缘倒角，插补铣

### Carbide grade: CR3

硬质合金基体: CR3

Ultra-Fine carbide grade with high hardness and toughness provides high cutting edge stability and wear resistance.

特微细颗粒硬质合金基体，高硬度和高韧性提高切削刃的稳定性和耐磨性。

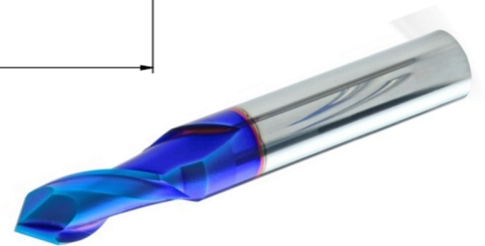
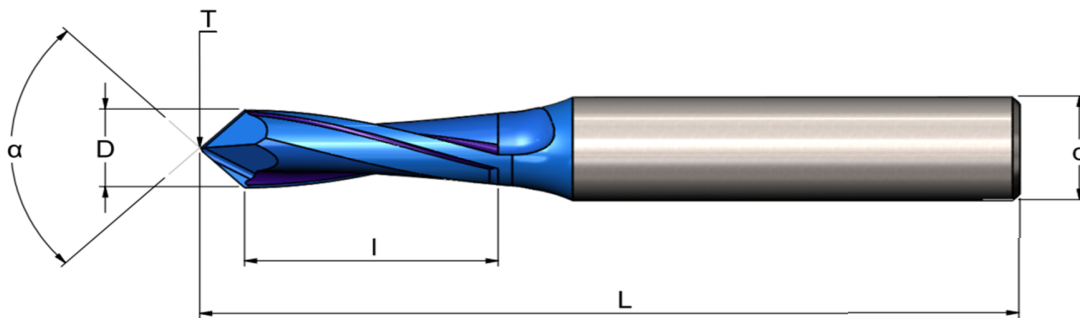
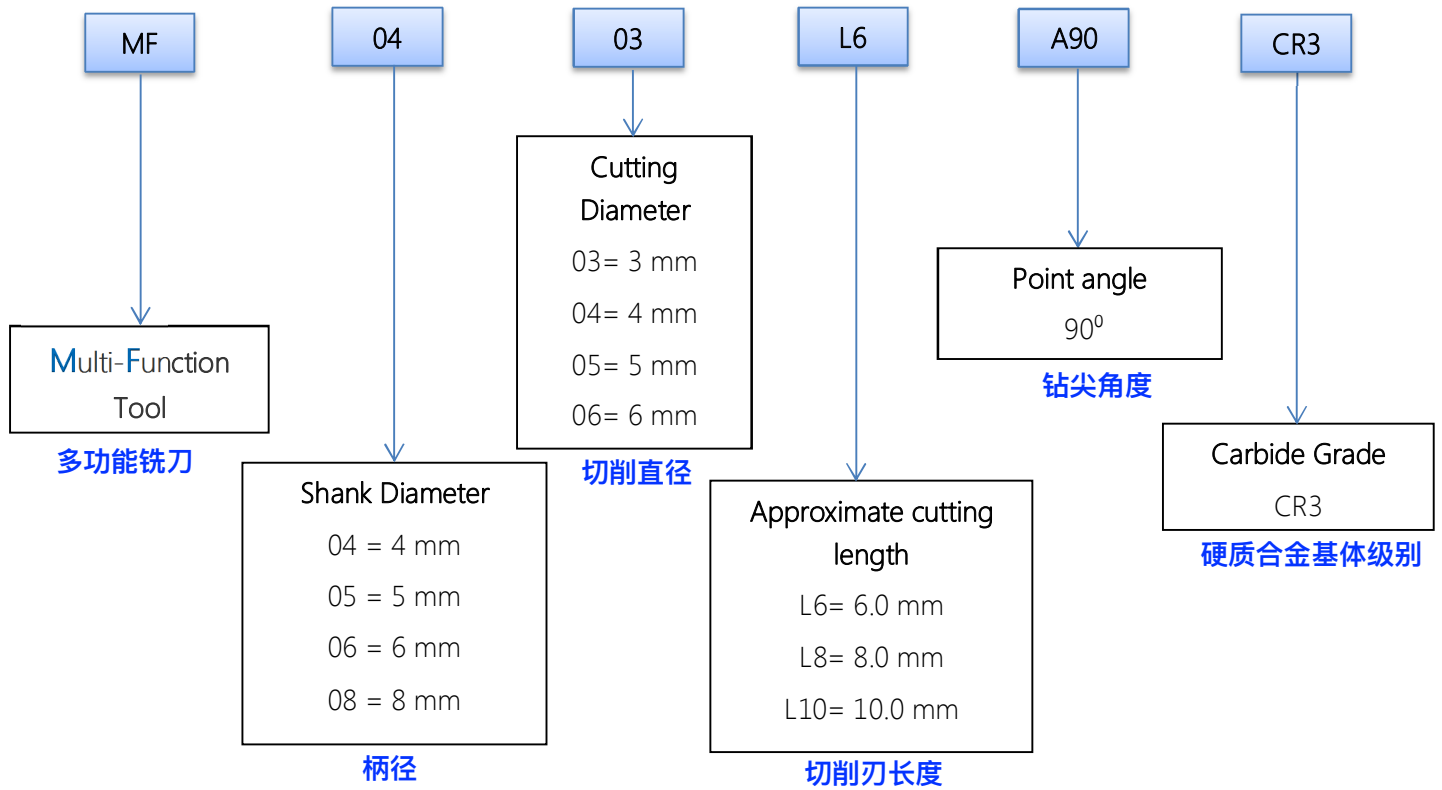
A New Generation of PVD Coating for High-Performance Cutting Applications  
应用于高性能切削的，新一代物理气相沉积PVD涂层。



Product Identification 产品识别



Ordering Codes 订货样式



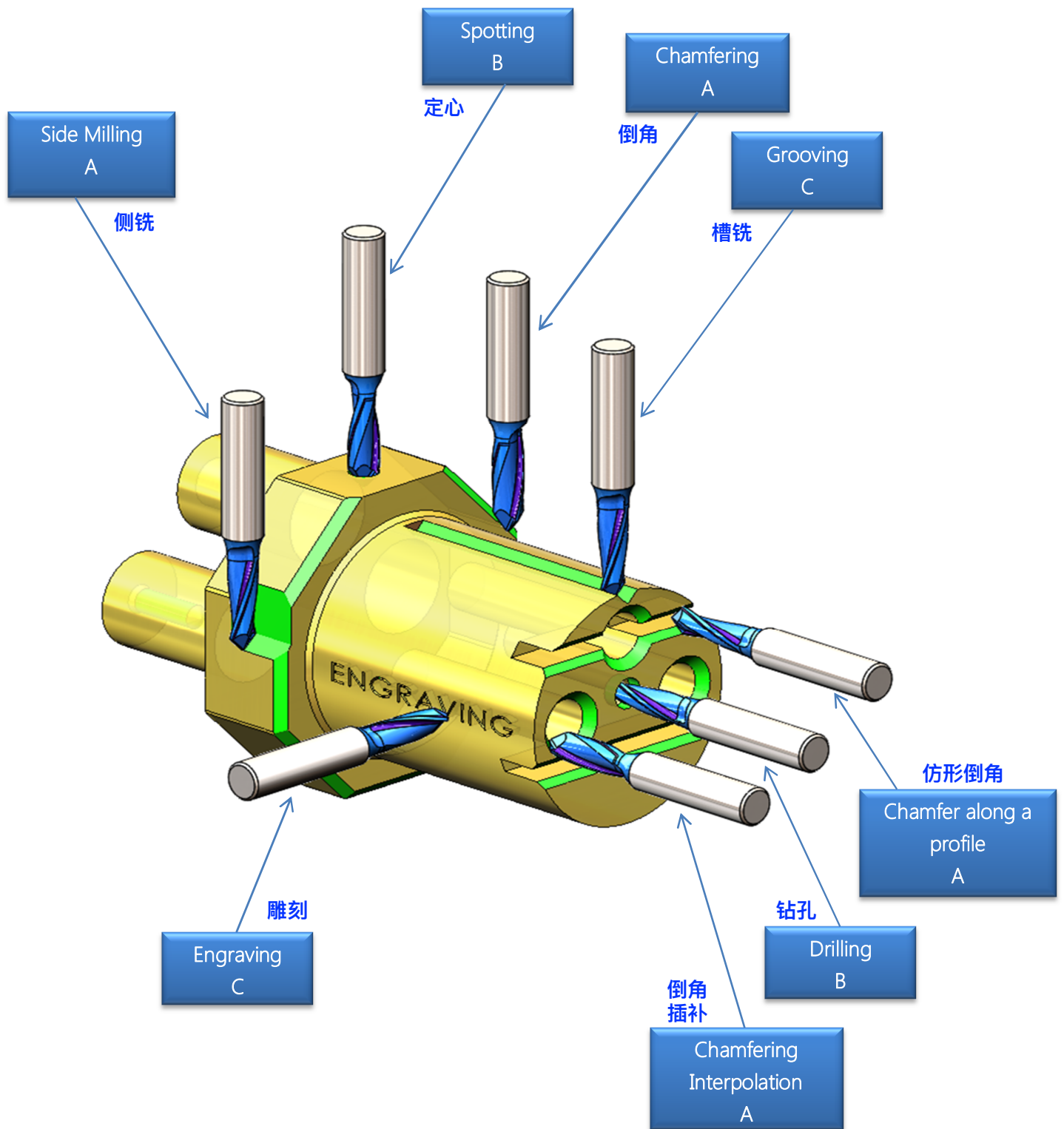
| 订货号<br>Ordering Code | 柄径<br>d | 切削径<br>D | 钻尖角度<br>$\alpha$ | 钻心厚度<br>*T | 有效刃长<br>l | 总长<br>L |
|----------------------|---------|----------|------------------|------------|-----------|---------|
| MF 0403 L6 A90       | 4       | 3.0      | 90°              | 0.3        | 6.0       | 51      |
| MF 0504 L8 A90       | 5       | 4.0      | 90°              | 0.4        | 8.0       | 51      |
| MF 0605 L10 A90      | 6       | 5.0      | 90°              | 0.5        | 10.0      | 58      |
| MF 0806 L12 A90      | 8       | 6.0      | 90°              | 0.6        | 12.0      | 64      |
| MF 1008 L16 A90      | 10      | 8.0      | 90°              | 0.8        | 16.0      | 73      |
| MF 1210 L18 A90      | 12      | 10.0     | 90°              | 1.0        | 18.0      | 84      |
| MF 1212 L20 A90      | 12      | 12.0     | 90°              | 1.2        | 20.0      | 84      |

| ISO | CR3 |
|-----|-----|
| P   | ●   |
| M   | ●   |
| K   | ●   |
| N   | ●   |
| S   | ●   |
| H   | ○   |

\* T=Web thickness 钻心厚度

● First choice 首选 ○ Alternative 次选

Working Method 加工方法



## Cutting Data 切削参数

A: Side milling, Chamfering    **A: 侧铣、倒角**  
 B: Spotting, Drilling         **B: 定心、钻孔**  
 C: Grooving, Engraving       **C: 铣槽、雕刻**

| ISO Standard | Materials Class 材料  | 线速度 Vc [m/min] | Fz [mm/tooth] 每齿进给 切削直径                            |  |  |
|--------------|---|----------------|--|--|--|
|              |   |                | Ø3- Ø4   | Ø5- Ø6   | Ø8- Ø12  |
| P            | Low & Medium Carbon Steels <0.55%C 低、中碳钢                  | 50-115         | A: 0.003-0.01<br>B: 0.003-0.007<br>C: 0.005-0.015  | A: 0.005-0.02<br>B: 0.004-0.009<br>C: 0.006-0.025  | A: 0.013-0.038<br>B: 0.007-0.015<br>C: 0.015-0.038 |
|              | High Carbon Steels ≥0.55%C 高碳钢                            | 40-100         | A: 0.002-0.012<br>B: 0.003-0.007<br>C: 0.005-0.018 | A: 0.005-0.018<br>B: 0.006-0.01<br>C: 0.01-0.028   | A: 0.009-0.03<br>B: 0.009-0.018<br>C: 0.016-0.047  |
|              | Alloy Steels, Treated Steels 合金钢                          | 40-100         | A: 0.002-0.008<br>B: 0.003-0.006<br>C: 0.005-0.015 | A: 0.005-0.015<br>B: 0.004-0.009<br>C: 0.005-0.018 | A: 0.013-0.031<br>B: 0.006-0.015<br>C: 0.015-0.031 |
| M            | Stainless Steel-Free Cutting 易切不锈钢                        | 30-85          | A: 0.004-0.012<br>B: 0.003-0.007<br>C: 0.004-0.018 | A: 0.007-0.018<br>B: 0.004-0.016<br>C: 0.006-0.018 | A: 0.018-0.047<br>B: 0.008-0.024<br>C: 0.012-0.047 |
|              | Stainless Steel-Austenitic 奥氏体不锈钢                         | 25-70          | A: 0.005-0.010<br>B: 0.003-0.006<br>C: 0.004-0.015 | A: 0.006-0.015<br>B: 0.004-0.015<br>C: 0.005-0.017 | A: 0.017-0.04<br>B: 0.007-0.02<br>C: 0.01-0.035    |
|              | Cast Steels 铸造不锈钢   | 40-90          | A: 0.004-0.012<br>B: 0.003-0.007<br>C: 0.004-0.018 | A: 0.007-0.018<br>B: 0.004-0.016<br>C: 0.006-0.018 | A: 0.018-0.047<br>B: 0.008-0.024<br>C: 0.012-0.047 |
| K            | Cast Iron 铸铁  | 30-120         | A: 0.003-0.01<br>B: 0.003-0.007<br>C: 0.005-0.015  | A: 0.005-0.02<br>B: 0.004-0.009<br>C: 0.006-0.025  | A: 0.013-0.038<br>B: 0.007-0.015<br>C: 0.015-0.038 |
| N            | Aluminum ≤12%Si, Copper 铝、铜                               | 90-120         | A: 0.005-0.008<br>B: 0.004-0.007<br>C: 0.005-0.008 | A: 0.01-0.02<br>B: 0.008-0.015<br>C: 0.01-0.02     | A: 0.025-0.045<br>B: 0.02-0.04<br>C: 0.025-0.045   |
|              | Aluminum >12%Si 高硅铝                                       | 75-100         | A: 0.003-0.006<br>B: 0.003-0.005<br>C: 0.003-0.008 | A: 0.005-0.015<br>B: 0.006-0.01<br>C: 0.005-0.015  | A: 0.02-0.032<br>B: 0.015-0.035<br>C: 0.02-0.032   |
|              | Synthetics, duroplastics, 合成橡胶<br>thermoplastics 塑料、热塑性塑料 | 90-120         | A: 0.005-0.008<br>B: 0.004-0.007<br>C: 0.005-0.008 | A: 0.01-0.02<br>B: 0.008-0.015<br>C: 0.01-0.02     | A: 0.025-0.045<br>B: 0.02-0.04<br>C: 0.025-0.045   |
| S            | Nickel alloys, Titanium alloys.<br>镍基合金、钛合金               | 20-60          | A: 0.004-0.008<br>B: 0.003-0.007<br>C: 0.002-0.005 | A: 0.007-0.01<br>B: 0.006-0.008<br>C: 0.005-0.007  | A: 0.01-0.025<br>B: 0.008-0.02<br>C: 0.007-0.015   |
| H            | Hardened Steel 40-45 HRc<br>HRC40-45硬钢                    | 20-60          | A: 0.005-0.009<br>B: 0.004-0.008<br>C: 0.003-0.006 | A: 0.008-0.015<br>B: 0.007-0.009<br>C: 0.006-0.008 | A: 0.015-0.03<br>B: 0.009-0.025<br>C: 0.008-0.02   |