

# 目录 Contents

**SoCut**



高硬抗震型



铝用刀



高硬通用型



螺纹铣刀



通用型



非标  
定制

## 高硬抗震型

全新升级

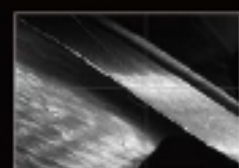
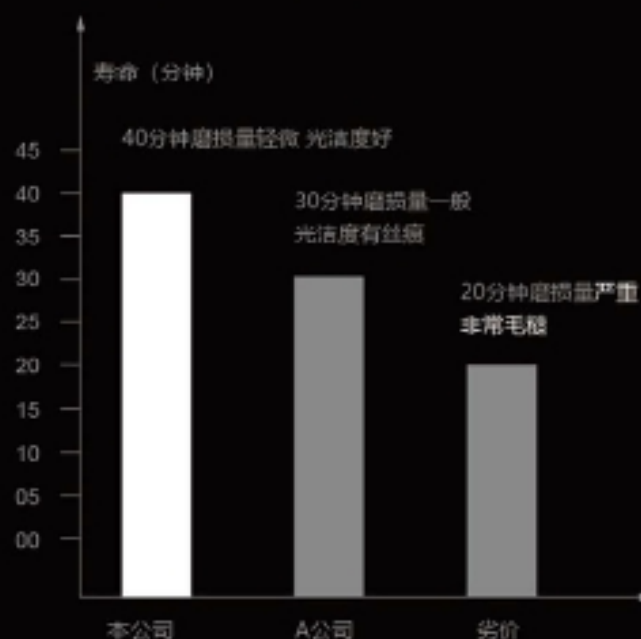
寿命更长 光洁度更高

适合加工

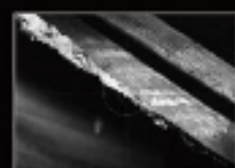
碳钢 合金钢 调质钢

钛合金 高温合金

同种铣削环境下测试得出



本公司 磨损小



A公司 磨损大

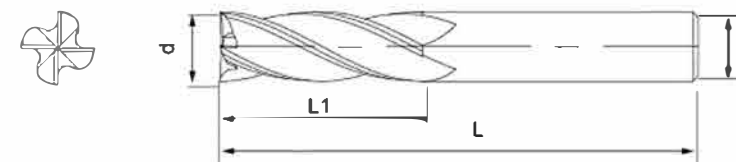


本公司 磨损小



A公司 磨损大

## 4刃立铣刀



可加工材料: 不锈钢、铸铁、铜合金、石墨、塑件、复合材料、钛合金、镍、耐热钢、非合金钢件、高合金钢件<30HRC、60HRC以内的各类金属件加工。

Machinable materials: stainless steel, cast iron, copper alloy, graphite, plastic parts, composite materials, titanium alloy, nickel, heat-resistant steel, non-alloy steel parts, high-alloy steel parts <30HRC, 60HRC and various metal parts processing.

WC=91 Co=9 HV30=2050 抗折=4100N/mm<sup>2</sup> 硬度=94 粒径=0.2 μm

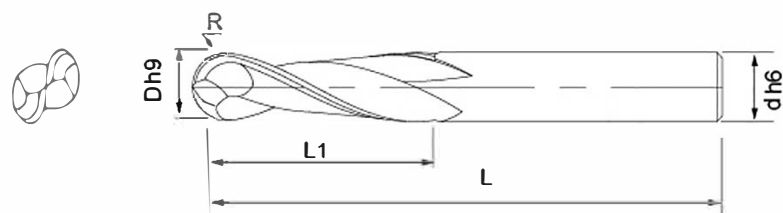
| 直径d | 刃长L1 | 全长L | 柄径D | 刃数Z | 库存 |
|-----|------|-----|-----|-----|----|
| 1   | 3    | 50  | 4   | 4   | ●  |
| 1.5 | 4    | 50  | 4   | 4   | ●  |
| 2   | 5    | 50  | 4   | 4   | ●  |
| 2.5 | 7    | 50  | 4   | 4   | ●  |
| 3   | 8    | 50  | 3   | 4   | ●  |
| 3   | 8    | 50  | 4   | 4   | ●  |
| 4   | 10   | 50  | 4   | 4   | ●  |
| 5   | 13   | 50  | 5   | 4   | ●  |
| 5   | 13   | 50  | 6   | 4   | ●  |
| 6   | 15   | 50  | 6   | 4   | ●  |
| 7   | 20   | 60  | 8   | 4   | ●  |
| 8   | 20   | 60  | 8   | 4   | ●  |
| 4   | 16   | 75  | 4   | 4   | ●  |
| 6   | 24   | 75  | 6   | 4   | ●  |
| 8   | 30   | 75  | 8   | 4   | ●  |
| 9   | 25   | 75  | 10  | 4   | ●  |
| 10  | 25   | 75  | 10  | 4   | ●  |
| 12  | 30   | 75  | 12  | 4   | ●  |
| 4   | 20   | 100 | 4   | 4   | ●  |
| 6   | 30   | 100 | 6   | 4   | ●  |
| 8   | 35   | 100 | 8   | 4   | ●  |
| 10  | 40   | 100 | 10  | 4   | ●  |
| 12  | 40   | 100 | 12  | 4   | ●  |
| 14  | 45   | 100 | 14  | 4   | ●  |
| 16  | 45   | 100 | 16  | 4   | ●  |
| 18  | 45   | 100 | 18  | 4   | ●  |
| 20  | 45   | 100 | 20  | 4   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm



## 2刃球型立铣刀



可加工材料：不锈钢、铸铁、铜合金、石墨、塑料、复合材料、钛合金、镍、耐热钢、非合金钢件、高合金钢件<30HRC、60HRC以内的各类金属件加工。

Machinable materials: stainless steel, cast iron, copper alloy, graphite, plastic parts, composite materials, titanium alloy, nickel, heat-resistant steel, non-alloy steel parts, high-alloy steel parts <30HRC, 60HRC and various metal parts processing.

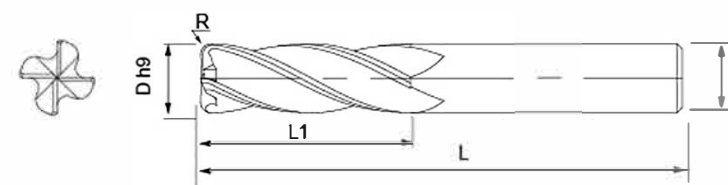
WC=91 Co=9 HV30=2050 抗折=4100N/mm<sup>2</sup> 硬度=94 粒径=0.2 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径   | 刃数Z | 库存 |
|-----|------|-----|-----|------|-----|----|
| 1   | 2    | 50  | 4   | 0.5  | 2   | ●  |
| 1.5 | 3    | 50  | 4   | 0.75 | 2   | ●  |
| 2   | 4    | 50  | 4   | 1    | 2   | ●  |
| 2.5 | 5    | 50  | 4   | 1.25 | 2   | ●  |
| 3   | 6    | 50  | 3   | 1.5  | 2   | ●  |
| 3   | 6    | 50  | 4   | 1.5  | 2   | ●  |
| 4   | 8    | 50  | 4   | 2    | 2   | ●  |
| 5   | 10   | 50  | 5   | 2.5  | 2   | ●  |
| 5   | 10   | 50  | 6   | 2.5  | 2   | ●  |
| 6   | 12   | 50  | 6   | 3    | 2   | ●  |
| 7   | 14   | 60  | 8   | 3.5  | 2   | ●  |
| 8   | 16   | 60  | 8   | 4    | 2   | ●  |
| 4   | 8    | 75  | 4   | 2    | 2   | ●  |
| 6   | 12   | 75  | 6   | 3    | 2   | ●  |
| 8   | 16   | 75  | 8   | 4    | 2   | ●  |
| 9   | 18   | 75  | 10  | 4.5  | 2   | ●  |
| 10  | 20   | 75  | 10  | 5    | 2   | ●  |
| 12  | 24   | 75  | 12  | 6    | 2   | ●  |
| 4   | 8    | 100 | 4   | 2    | 2   | ●  |
| 6   | 12   | 100 | 6   | 3    | 2   | ●  |
| 8   | 16   | 100 | 8   | 4    | 2   | ●  |
| 10  | 20   | 100 | 10  | 5    | 2   | ●  |
| 12  | 24   | 100 | 12  | 6    | 2   | ●  |
| 14  | 28   | 100 | 14  | 7    | 2   | ●  |
| 16  | 32   | 100 | 16  | 8    | 2   | ●  |
| 18  | 36   | 100 | 18  | 9    | 2   | ●  |
| 20  | 40   | 100 | 20  | 10   | 2   | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## 4刃圆鼻立铣刀



可加工材料：不锈钢、铸铁、铜合金、石墨、塑料、复合材料、钛合金、镍、耐热钢、非合金钢件、高合金钢件<30HRC、60HRC以内的各类金属件加工。

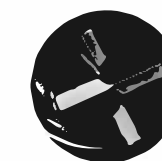
Machinable materials: stainless steel, cast iron, copper alloy, graphite, plastic parts, composite materials, titanium alloy, nickel, heat-resistant steel, non-alloy steel parts, high-alloy steel parts <30HRC, 60HRC and various metal parts processing.

WC=91 Co=9 HV30=2050 抗折=4100N/mm<sup>2</sup> 硬度=94 粒径=0.2 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径  | 刃数Z | 库存 |
|-----|------|-----|-----|-----|-----|----|
| 4   | 10   | 50  | 4   | 0.2 | 4   | ●  |
| 4   | 10   | 50  | 4   | 0.5 | 4   | ●  |
| 4   | 10   | 50  | 4   | 1   | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.2 | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.5 | 4   | ●  |
| 5   | 13   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.2 | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.5 | 4   | ●  |
| 6   | 15   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 0.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 1   | 4   | ●  |
| 8   | 20   | 60  | 8   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 2   | 4   | ●  |
| 10  | 25   | 75  | 10  | 0.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 1   | 4   | ●  |
| 10  | 25   | 75  | 10  | 1.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 2   | 4   | ●  |
| 12  | 30   | 75  | 12  | 0.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 1   | 4   | ●  |
| 12  | 30   | 75  | 12  | 1.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 2   | 4   | ●  |

注：●有库存 ○可定制

单位(Unit): mm

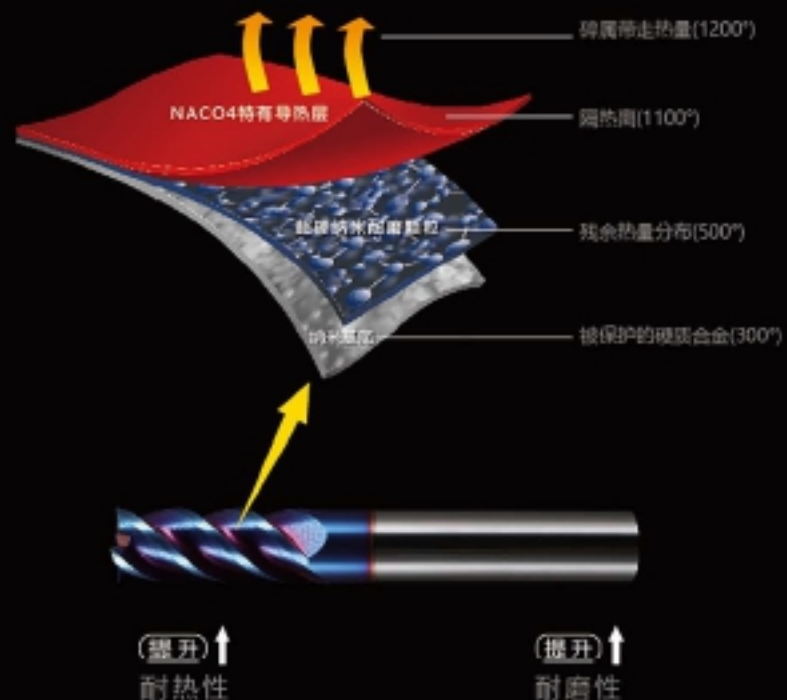


## 高硬通用型

### 全新大螺旋

进口瓦尔特五轴磨床精细研磨  
相比上一代 效率提升15%

### NACO4纳米涂层



### 精选棒材

提高稳定性和耐磨性

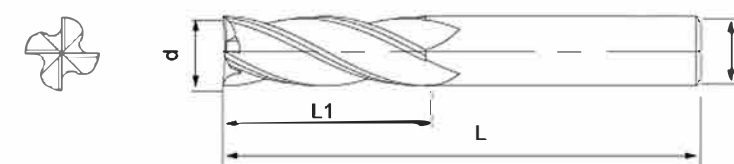
### 刃口钝化

杜绝崩刃现象提高产品光洁度

### 可加工材料

不锈钢 钛合金 调质钢

## 4刃立铣刀



WC=88 Co=12 HV30=1750 抗折=4200N/mm<sup>2</sup> 硬度=92.6 粒径=0.4 μm

| 直径d | 刃长L1 | 全长L | 柄径D | 刃数Z | 库存 |
|-----|------|-----|-----|-----|----|
| 1   | 3    | 50  | 4   | 4   | ●  |
| 1.5 | 4    | 50  | 4   | 4   | ●  |
| 2   | 5    | 50  | 4   | 4   | ●  |
| 2.5 | 7    | 50  | 4   | 4   | ●  |
| 3   | 8    | 50  | 3   | 4   | ●  |
| 3   | 8    | 50  | 4   | 4   | ●  |
| 4   | 10   | 50  | 4   | 4   | ●  |
| 5   | 13   | 50  | 5   | 4   | ●  |
| 5   | 13   | 50  | 6   | 4   | ●  |
| 6   | 15   | 50  | 6   | 4   | ●  |
| 7   | 20   | 60  | 8   | 4   | ●  |
| 8   | 20   | 60  | 8   | 4   | ●  |
| 4   | 16   | 75  | 4   | 4   | ●  |
| 6   | 24   | 75  | 6   | 4   | ●  |
| 8   | 30   | 75  | 8   | 4   | ●  |
| 9   | 25   | 75  | 10  | 4   | ●  |
| 10  | 25   | 75  | 10  | 4   | ●  |
| 12  | 30   | 75  | 12  | 4   | ●  |
| 4   | 20   | 100 | 4   | 4   | ●  |
| 6   | 30   | 100 | 6   | 4   | ●  |
| 8   | 35   | 100 | 8   | 4   | ●  |
| 10  | 40   | 100 | 10  | 4   | ●  |
| 12  | 40   | 100 | 12  | 4   | ●  |
| 14  | 45   | 100 | 14  | 4   | ●  |
| 16  | 45   | 100 | 16  | 4   | ●  |
| 18  | 45   | 100 | 18  | 4   | ●  |
| 20  | 45   | 100 | 20  | 4   | ●  |

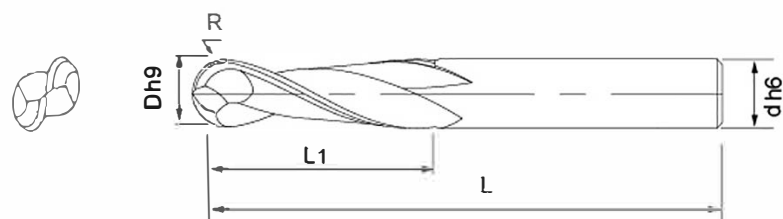
注: ●有库存 ○可定制

单位(Unit): mm





## 2刃球型立铣刀



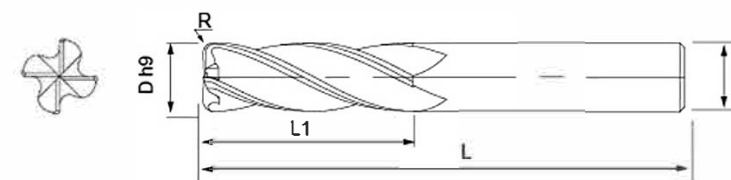
WC=88 Co=12 HV30=1750 抗折=4200N/mm2 硬度=92.6 粒径=0.4 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径   | 刃数Z | 库存 |
|-----|------|-----|-----|------|-----|----|
| 1   | 2    | 50  | 4   | 0.5  | 2   | ●  |
| 1.5 | 3    | 50  | 4   | 0.75 | 2   | ●  |
| 2   | 4    | 50  | 4   | 1    | 2   | ●  |
| 2.5 | 5    | 50  | 4   | 1.25 | 2   | ●  |
| 3   | 6    | 50  | 3   | 1.5  | 2   | ●  |
| 3   | 6    | 50  | 4   | 1.5  | 2   | ●  |
| 4   | 8    | 50  | 4   | 2    | 2   | ●  |
| 5   | 10   | 50  | 5   | 2.5  | 2   | ●  |
| 5   | 10   | 50  | 6   | 2.5  | 2   | ●  |
| 6   | 12   | 50  | 6   | 3    | 2   | ●  |
| 7   | 14   | 60  | 8   | 3.5  | 2   | ●  |
| 8   | 16   | 60  | 8   | 4    | 2   | ●  |
| 4   | 8    | 75  | 4   | 2    | 2   | ●  |
| 6   | 12   | 75  | 6   | 3    | 2   | ●  |
| 8   | 16   | 75  | 8   | 4    | 2   | ●  |
| 9   | 18   | 75  | 10  | 4.5  | 2   | ●  |
| 10  | 20   | 75  | 10  | 5    | 2   | ●  |
| 12  | 24   | 75  | 12  | 6    | 2   | ●  |
| 4   | 8    | 100 | 4   | 2    | 2   | ●  |
| 6   | 12   | 100 | 6   | 3    | 2   | ●  |
| 8   | 16   | 100 | 8   | 4    | 2   | ●  |
| 10  | 20   | 100 | 10  | 5    | 2   | ●  |
| 12  | 24   | 100 | 12  | 6    | 2   | ●  |
| 14  | 28   | 100 | 14  | 7    | 2   | ●  |
| 16  | 32   | 100 | 16  | 8    | 2   | ●  |
| 18  | 36   | 100 | 18  | 9    | 2   | ●  |
| 20  | 40   | 100 | 20  | 10   | 2   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm

## 4刃圆鼻立铣刀



WC=88 Co=12 HV30=1750 抗折=4200N/mm2 硬度=92.6 粒径=0.4 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径  | 刃数Z | 库存 |
|-----|------|-----|-----|-----|-----|----|
| 4   | 10   | 50  | 4   | 0.2 | 4   | ●  |
| 4   | 10   | 50  | 4   | 0.5 | 4   | ●  |
| 4   | 10   | 50  | 4   | 1   | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.2 | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.5 | 4   | ●  |
| 5   | 13   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.2 | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.5 | 4   | ●  |
| 6   | 15   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 0.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 1   | 4   | ●  |
| 8   | 20   | 60  | 8   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 2   | 4   | ●  |
| 10  | 25   | 75  | 10  | 0.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 1   | 4   | ●  |
| 10  | 25   | 75  | 10  | 1.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 2   | 4   | ●  |
| 12  | 30   | 75  | 12  | 0.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 1   | 4   | ●  |
| 12  | 30   | 75  | 12  | 1.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 2   | 4   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm

通用型

## 大芯径 大螺旋

48%大芯径 刚性更强 有效抗震  
杜绝意外断刀崩刃 提高稼动率

## 全新纳米涂层

提升↑  
耐热性

提升↑  
耐磨性

## 精选棒材

提高稳定性和耐腐蚀性

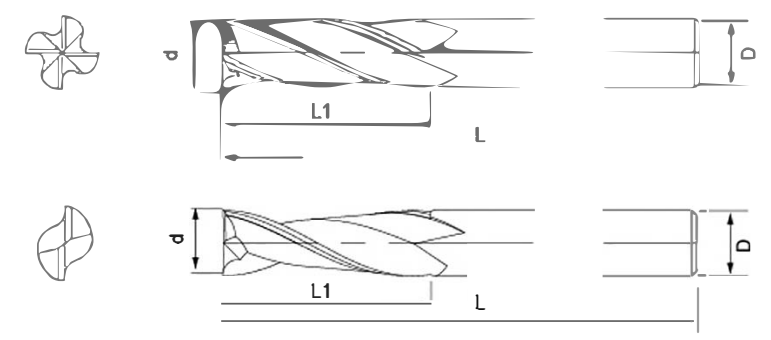
## 刃口钝化

杜绝崩刃现象提高产品光洁度

## 可加工材料

非常适合：40°以内的各类铸件 铸铁件  
注：不适合加工铝合金、塑料件

## 2/4刃立铣刀



WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

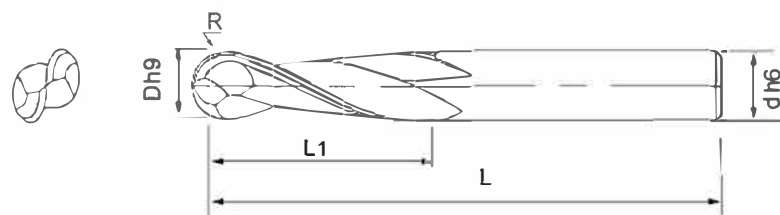
| 直径d | 刃长L1 | 全长L | 柄径D | 刃数Z | 库存 |
|-----|------|-----|-----|-----|----|
| 1   | 3    | 50  | 4   | 2/4 | ●  |
| 1.5 | 4    | 50  | 4   | 2/4 | ●  |
| 2   | 5    | 50  | 4   | 2/4 | ●  |
| 2.5 | 7    | 50  | 4   | 2/4 | ●  |
| 3   | 8    | 50  | 3   | 2/4 | ●  |
| 3   | 8    | 50  | 4   | 2/4 | ●  |
| 4   | 10   | 50  | 4   | 2/4 | ●  |
| 5   | 13   | 50  | 5   | 2/4 | ●  |
| 5   | 13   | 50  | 6   | 2/4 | ●  |
| 6   | 15   | 50  | 6   | 2/4 | ●  |
| 7   | 20   | 60  | 8   | 2/4 | ●  |
| 8   | 20   | 60  | 8   | 2/4 | ●  |
| 4   | 16   | 75  | 4   | 2/4 | ●  |
| 6   | 24   | 75  | 6   | 2/4 | ●  |
| 8   | 30   | 75  | 8   | 2/4 | ●  |
| 9   | 25   | 75  | 10  | 2/4 | ●  |
| 10  | 25   | 75  | 10  | 2/4 | ●  |
| 12  | 30   | 75  | 12  | 2/4 | ●  |
| 4   | 20   | 100 | 4   | 2/4 | ●  |
| 6   | 30   | 100 | 6   | 2/4 | ●  |
| 8   | 35   | 100 | 8   | 2/4 | ●  |
| 10  | 40   | 100 | 10  | 2/4 | ●  |
| 12  | 40   | 100 | 12  | 2/4 | ●  |
| 14  | 45   | 100 | 14  | 2/4 | ●  |
| 16  | 45   | 100 | 16  | 2/4 | ●  |
| 18  | 45   | 100 | 18  | 2/4 | ●  |
| 20  | 45   | 100 | 20  | 2/4 | ●  |

注：●有库存 ○可定制

单位(Unit): mm



## 2刃球型立铣刀



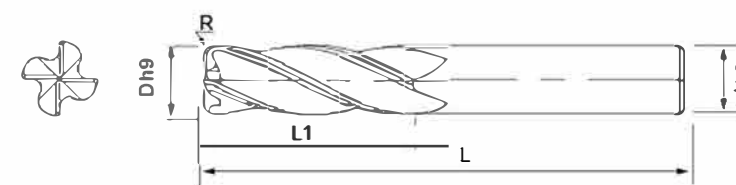
WC=90 Co=10 HV30=1630 抗折=3800N/mm<sup>2</sup> 硬度=91.9 粒径=0.7 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径   | 刃数Z | 库存 |
|-----|------|-----|-----|------|-----|----|
| 1   | 2    | 50  | 4   | 0.5  | 2   | ●  |
| 1.5 | 3    | 50  | 4   | 0.75 | 2   | ●  |
| 2   | 4    | 50  | 4   | 1    | 2   | ●  |
| 2.5 | 5    | 50  | 4   | 1.25 | 2   | ●  |
| 3   | 6    | 50  | 3   | 1.5  | 2   | ●  |
| 3   | 6    | 50  | 4   | 1.5  | 2   | ●  |
| 4   | 8    | 50  | 4   | 2    | 2   | ●  |
| 5   | 10   | 50  | 5   | 2.5  | 2   | ●  |
| 5   | 10   | 50  | 6   | 2.5  | 2   | ●  |
| 6   | 12   | 50  | 6   | 3    | 2   | ●  |
| 7   | 14   | 60  | 8   | 3.5  | 2   | ●  |
| 8   | 16   | 60  | 8   | 4    | 2   | ●  |
| 4   | 8    | 75  | 4   | 2    | 2   | ●  |
| 6   | 12   | 75  | 6   | 3    | 2   | ●  |
| 8   | 16   | 75  | 8   | 4    | 2   | ●  |
| 9   | 18   | 75  | 10  | 4.5  | 2   | ●  |
| 10  | 20   | 75  | 10  | 5    | 2   | ●  |
| 12  | 24   | 75  | 12  | 6    | 2   | ●  |
| 4   | 8    | 100 | 4   | 2    | 2   | ●  |
| 6   | 12   | 100 | 6   | 3    | 2   | ●  |
| 8   | 16   | 100 | 8   | 4    | 2   | ●  |
| 10  | 20   | 100 | 10  | 5    | 2   | ●  |
| 12  | 24   | 100 | 12  | 6    | 2   | ●  |
| 14  | 28   | 100 | 14  | 7    | 2   | ●  |
| 16  | 32   | 100 | 16  | 8    | 2   | ●  |
| 18  | 36   | 100 | 18  | 9    | 2   | ●  |
| 20  | 40   | 100 | 20  | 10   | 2   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm

## 4刃圆鼻立铣刀



WC=90 Co=10 HV30=1630 抗折=3800N/mm<sup>2</sup> 硬度=91.9 粒径=0.7 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径  | 刃数Z | 库存 |
|-----|------|-----|-----|-----|-----|----|
| 4   | 10   | 50  | 4   | 0.2 | 4   | ●  |
| 4   | 10   | 50  | 4   | 0.5 | 4   | ●  |
| 4   | 10   | 50  | 4   | 1   | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.2 | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.5 | 4   | ●  |
| 5   | 13   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.2 | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.5 | 4   | ●  |
| 6   | 15   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 0.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 1   | 4   | ●  |
| 8   | 20   | 60  | 8   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 2   | 4   | ●  |
| 10  | 25   | 75  | 10  | 0.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 1   | 4   | ●  |
| 10  | 25   | 75  | 10  | 1.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 2   | 4   | ●  |
| 12  | 30   | 75  | 12  | 0.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 1   | 4   | ●  |
| 12  | 30   | 75  | 12  | 1.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 2   | 4   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm

## 铝用刀

### 拒绝粘刀

整槽抛光 排屑顺畅无阻  
槽底告别粘刀 大幅提高生产效率



### 杜绝毛刺

采用18°大前角设计 刃口锋利 切削无阻  
杜绝毛刺超边 增加良品率并提高使用寿命



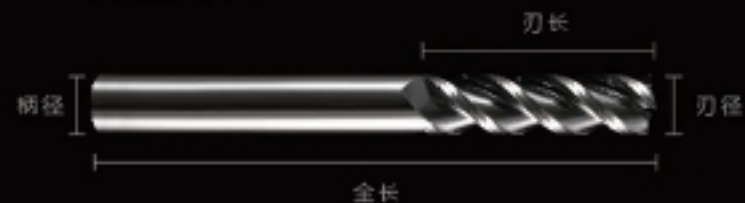
### 优质选材

提高加工稳定性和使用寿命

### 可加工材料

非常合适：各类铝、亚克力等软性材料  
适合：铜、软铁、木材  
注：不适合加工铜件类硬料

### 测量方法



平刀

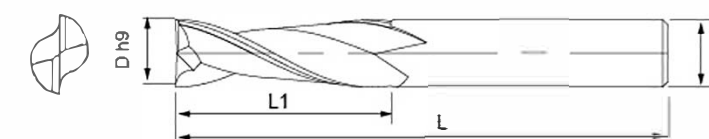


球刀



圆鼻刀

## 2/3刃立铣刀



WC=90 Co=10 HV30=1630 抗折=3800N/mm<sup>2</sup> 硬度=91.9 粒径=0.7 μm

| 直径d | 刃长L1 | 全长L | 柄径D | 刃数Z | 库存 |
|-----|------|-----|-----|-----|----|
| 1   | 3    | 50  | 4   | 2/3 | ●  |
| 1.5 | 5    | 50  | 4   | 2/3 | ●  |
| 2   | 6    | 50  | 4   | 2/3 | ●  |
| 2.5 | 8    | 50  | 4   | 2/3 | ●  |
| 3   | 9    | 50  | 3   | 2/3 | ●  |
| 3   | 9    | 50  | 4   | 2/3 | ●  |
| 4   | 12   | 50  | 4   | 2/3 | ●  |
| 5   | 15   | 50  | 5   | 2/3 | ●  |
| 5   | 15   | 50  | 6   | 2/3 | ●  |
| 6   | 18   | 50  | 6   | 2/3 | ●  |
| 7   | 20   | 60  | 8   | 2/3 | ●  |
| 8   | 24   | 60  | 8   | 2/3 | ●  |
| 10  | 30   | 75  | 10  | 2/3 | ●  |
| 12  | 35   | 75  | 12  | 2/3 | ●  |
| 4   | 16   | 75  | 4   | 2/3 | ●  |
| 6   | 24   | 75  | 6   | 2/3 | ●  |
| 8   | 32   | 75  | 8   | 2/3 | ●  |
| 10  | 40   | 100 | 10  | 2/3 | ●  |
| 12  | 45   | 100 | 12  | 2/3 | ●  |
| 14  | 45   | 100 | 14  | 2/3 | ●  |
| 16  | 45   | 100 | 16  | 2/3 | ●  |
| 18  | 45   | 100 | 18  | 2/3 | ●  |
| 20  | 45   | 100 | 20  | 2/3 | ●  |
| 4   | 20   | 100 | 4   | 2/3 | ●  |
| 6   | 30   | 100 | 6   | 2/3 | ●  |
| 8   | 35   | 100 | 8   | 2/3 | ●  |

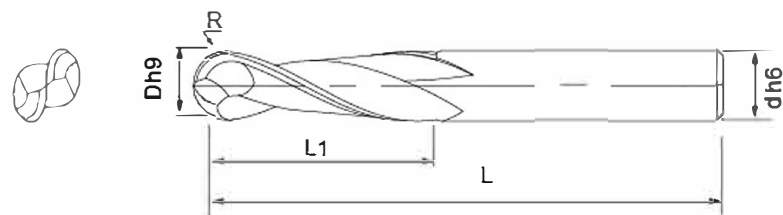
注：●有库存 ○可定制

单位(Unit): mm





## 2刃球型立铣刀



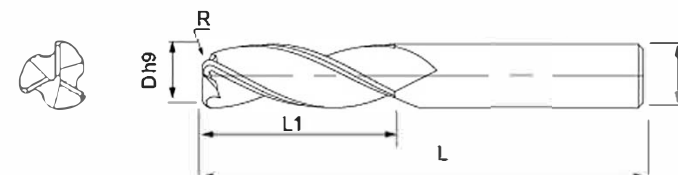
WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

| 直径d | 刃长L1 | 全长L | 柄径D | R径   | 刃数Z | 库存 |
|-----|------|-----|-----|------|-----|----|
| 1   | 2    | 50  | 4   | 0.5  | 2   | ●  |
| 1.5 | 3    | 50  | 4   | 0.75 | 2   | ●  |
| 2   | 4    | 50  | 4   | 1    | 2   | ●  |
| 2.5 | 5    | 50  | 4   | 1.25 | 2   | ●  |
| 3   | 6    | 50  | 3   | 1.5  | 2   | ●  |
| 3   | 6    | 50  | 4   | 1.5  | 2   | ●  |
| 4   | 8    | 50  | 4   | 2    | 2   | ●  |
| 5   | 10   | 50  | 5   | 2.5  | 2   | ●  |
| 5   | 10   | 50  | 6   | 2.5  | 2   | ●  |
| 6   | 12   | 50  | 6   | 3    | 2   | ●  |
| 7   | 14   | 60  | 8   | 3.5  | 2   | ●  |
| 8   | 16   | 60  | 8   | 4    | 2   | ●  |
| 4   | 8    | 75  | 4   | 2    | 2   | ●  |
| 6   | 12   | 75  | 6   | 3    | 2   | ●  |
| 8   | 16   | 75  | 8   | 4    | 2   | ●  |
| 9   | 18   | 75  | 10  | 4.5  | 2   | ●  |
| 10  | 20   | 75  | 10  | 5    | 2   | ●  |
| 12  | 24   | 75  | 12  | 6    | 2   | ●  |
| 4   | 8    | 100 | 4   | 2    | 2   | ●  |
| 6   | 12   | 100 | 6   | 3    | 2   | ●  |
| 8   | 16   | 100 | 8   | 4    | 2   | ●  |
| 10  | 20   | 100 | 10  | 5    | 2   | ●  |
| 12  | 24   | 100 | 12  | 6    | 2   | ●  |
| 14  | 28   | 100 | 14  | 7    | 2   | ●  |
| 16  | 32   | 100 | 16  | 8    | 2   | ●  |
| 18  | 36   | 100 | 18  | 9    | 2   | ●  |
| 20  | 40   | 100 | 20  | 10   | 2   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm

## 3刃圆鼻立铣刀



WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

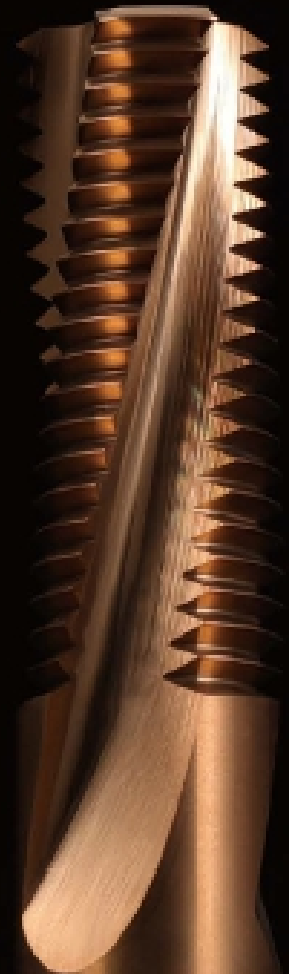
| 直径d | 刃长L1 | 全长L | 柄径D | R径  | 刃数Z | 库存 |
|-----|------|-----|-----|-----|-----|----|
| 4   | 10   | 50  | 4   | 0.2 | 4   | ●  |
| 4   | 10   | 50  | 4   | 0.5 | 4   | ●  |
| 4   | 10   | 50  | 4   | 1   | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.2 | 4   | ●  |
| 5   | 13   | 50  | 6   | 0.5 | 4   | ●  |
| 5   | 13   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.2 | 4   | ●  |
| 6   | 15   | 50  | 6   | 0.5 | 4   | ●  |
| 6   | 15   | 50  | 6   | 1   | 4   | ●  |
| 6   | 15   | 50  | 6   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 0.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 1   | 4   | ●  |
| 8   | 20   | 60  | 8   | 1.5 | 4   | ●  |
| 8   | 20   | 60  | 8   | 2   | 4   | ●  |
| 10  | 25   | 75  | 10  | 0.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 1   | 4   | ●  |
| 10  | 25   | 75  | 10  | 1.5 | 4   | ●  |
| 10  | 25   | 75  | 10  | 2   | 4   | ●  |
| 12  | 30   | 75  | 12  | 0.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 1   | 4   | ●  |
| 12  | 30   | 75  | 12  | 1.5 | 4   | ●  |
| 12  | 30   | 75  | 12  | 2   | 4   | ●  |

注: ●有库存 ○可定制

单位(Unit): mm



# 螺纹铣刀



## 大芯径

独特螺旋刃角 刚性更强 有效抗震  
杜绝意外断刀崩刃 提高稼动率

## 全新纳米涂层

提升↑  
耐热性

提升↑  
耐磨性

## 精选棒材

提高稳定性和耐磨性

## 刃口钝化

杜绝崩刃现象提高产品光洁度

## 可加工材料

涂层款:

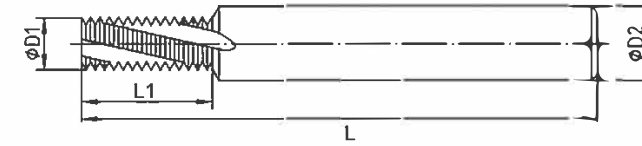
非常适合模具钢、硬质料、50°以下各类钢件  
适合钛合金、不锈钢、60°以下钢件

未涂层款:

非常适合各类铝、亚克力等软性材料  
适合: 铜、软铁、木材

# SoCut

## 整体硬质合金螺纹铣刀



### M ISO公制 内螺纹-钢用型 60°牙尖

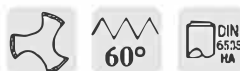
| 螺距Pitch | M粗牙         | M细牙          | 内螺纹铣刀<br>订货号 | 柄径<br>D2 | 刃径<br>D1 | 切削刃 | 刃长<br>L1 | 总长<br>L | 底孔<br>直径 | 库存 |
|---------|-------------|--------------|--------------|----------|----------|-----|----------|---------|----------|----|
| 0.5     | M3x0.5      |              | ISO001       | 4        | 2.3      | 3   | 6        | 50      | 2.5      | ●  |
| 0.5     |             | M6x0.5       | ISO002       | 4        | 4        | 3   | 10       | 50      | 5.5      | ●  |
| 0.5     |             | M8-M12x0.5   | ISO003       | 6        | 6        | 3   | 13       | 60      | 7.5      | ●  |
| 0.6     | M3.5x0.6    |              | ISO209       | 4        | 2.7      | 3   | 7        | 50      | 2.9      | ●  |
| 0.7     | M4x0.7      |              | ISO004       | 4        | 3        | 3   | 8        | 50      | 3.3      | ●  |
| 0.75    | M4.5x0.75   |              | ISO005       | 4        | 3.4      | 3   | 9        | 50      | 3.75     | ●  |
| 0.75    |             | M10-M12x0.75 | ISO006       | 8        | 8        | 3   | 20       | 60      | 9.25     | ●  |
| 0.8     | M5x0.8      |              | ISO007       | 4        | 4        | 3   | 10       | 50      | 4.2      | ●  |
| 1.0     | M6x1.0      |              | ISO008       | 6        | 4.8      | 3   | 12       | 57      | 5.0      | ●  |
| 1.0     |             | M8x1.0       | ISO009       | 6        | 6        | 3   | 16       | 57      | 7.0      | ●  |
| 1.0     |             | M10x1.0      | ISO010       | 8        | 8        | 3   | 20       | 60      | 9.0      | ●  |
| 1.0     |             | M12x1.0      | ISO011       | 10       | 10       | 4   | 22       | 75      | 11.0     | ●  |
| 1.0     |             | M16x1.0      | ISO012       | 12       | 12       | 4   | 22       | 75      | 15.0     | ●  |
| 1.0     |             | M20-M48x1.0  | ISO013       | 16       | 16       | 4   | 30       | 90      | 19.0     | ●  |
| 1.25    | M8x1.25     |              | ISO014       | 6        | 6        | 3   | 16       | 57      | 6.75     | ●  |
| 1.25    |             | M12-M14x1.25 | ISO015       | 10       | 10       | 4   | 25       | 75      | 10.75    | ●  |
| 1.5     | M10x1.5     |              | ISO016       | 8        | 8        | 3   | 20       | 60      | 8.5      | ●  |
| 1.5     |             | M12-M20x1.5  | ISO017       | 10       | 10       | 4   | 28       | 75      | 10.5     | ●  |
| 1.5     |             | M14-M24x1.5  | ISO018       | 12       | 12       | 4   | 28       | 75      | 12.5     | ●  |
| 1.5     |             | M20-M48x1.5  | ISO019       | 16       | 16       | 4   | 30       | 90      | 18.5     | ●  |
| 1.75    | M12x1.75    |              | ISO020       | 10       | 9.8      | 4   | 30       | 75      | 10.25    | ●  |
| 2       | M14x2.0     | M15-M16x2.0  | ISO021       | 10       | 10       | 4   | 30       | 75      | 12.0     | ●  |
| 2       | M16x2.0     | M17-M20x2.0  | ISO022       | 12       | 12       | 4   | 30       | 75      | 14.0     | ●  |
| 2       |             | M20-M80x2.0  | ISO023       | 16       | 16       | 4   | 40       | 90      | 18.0     | ●  |
| 2.5     | M18-M20x2.5 |              | ISO024       | 14       | 14       | 4   | 36       | 83      | 15.5     | ●  |
| 2.5     | M20-M80x2.5 |              | ISO025       | 16       | 16       | 4   | 40       | 90      | 17.5     | ●  |
| 3       | M24x3.0     |              | ISO026       | 16       | 16       | 4   | 42       | 90      | 21.0     | ●  |
| 0.75    |             | M6x0.75      | ISO412       | 6        | 4.8      | 3   | 12       | 60      | 5.25     | ●  |
| 0.75    |             | M8x0.75      | ISO413       | 6        | 6        | 3   | 16       | 60      | 7.25     | ●  |
| 1.25    |             | M10x1.25     | ISO414       | 8        | 8        | 3   | 20       | 60      | 8.75     | ●  |

注: ●有库存 ○可定制

单位(Unit): mm



## 整体硬质合金螺纹铣刀 微型 3xP 公制三牙



### M

| 螺距Pitch mm | M 粗牙      | 内螺纹铣刀 订货号 | 柄径 | 刃径   | 切削刃 | 刃长   | 总长 | 底孔直径  | 库存 |
|------------|-----------|-----------|----|------|-----|------|----|-------|----|
| 0.25       | M1.0x0.25 | SM172     | 4  | 0.73 | 3   | 2.3  | 50 | 0.75  | ●  |
| 0.25       | M1.2x0.25 | SM173     | 4  | 0.92 | 3   | 2.8  | 50 | 0.95  | ●  |
| 0.3        | M1.4x0.3  | SM174     | 4  | 1.05 | 3   | 3.2  | 50 | 1.05  | ●  |
| 0.35       | M1.6x0.35 | SM175     | 4  | 1.2  | 3   | 3.3  | 50 | 1.25  | ●  |
| 0.35       | M1.8x0.35 | SM390     | 4  | 1.41 | 3   | 4.1  | 50 | 1.45  | ●  |
| 0.4        | M2.0x0.4  | SM176     | 4  | 1.54 | 3   | 4.4  | 50 | 1.6   | ●  |
| 0.45       | M2.2x0.45 | SM177     | 4  | 1.63 | 3   | 4.8  | 50 | 1.75  | ●  |
| 0.45       | M2.5x0.45 | SM178     | 4  | 1.96 | 3   | 5.3  | 50 | 2.05  | ●  |
| 0.5        | M3x0.5    | SM179     | 4  | 2.4  | 3   | 6.4  | 50 | 2.5   | ●  |
| 0.6        | M3.5x0.6  | SM180     | 4  | 2.75 | 3   | 7.4  | 50 | 2.9   | ●  |
| 0.7        | M4x0.7    | SM181     | 4  | 3.15 | 3   | 8.6  | 50 | 3.3   | ●  |
| 0.75       | M4.5x0.75 | SM262     | 4  | 3.5  | 3   | 9.5  | 50 | 3.75  | ●  |
| 0.8        | M5x0.8    | SM182     | 6  | 4    | 3   | 12   | 50 | 4.2   | ●  |
| 1.0        | M6x1.0    | SM183     | 6  | 4.75 | 3   | 13   | 50 | 5.0   | ●  |
| 1.25       | M8x1.25   | SM184     | 6  | 6    | 3   | 17.3 | 50 | 6.8   | ●  |
| 1.5        | M10x1.5   | SM185     | 8  | 8    | 3   | 21.8 | 60 | 8.5   | ●  |
| 1.75       | M12x1.75  | SM186     | 10 | 10   | 4   | 24   | 75 | 10.3  | ●  |
| 2.0        | M14x2.0   | SM208     | 10 | 10   | 4   | 25   | 75 | 12.0  | ●  |
| 2.0        | M16x2.0   | SM187     | 12 | 11.5 | 4   | 27   | 75 | 14.0  | ●  |
| 2.5        | M20x2.5   | SM188     | 16 | 15.0 | 4   | 36   | 90 | 17.5  | ●  |
| 0.5        | M4x0.5    | SM390     | 4  | 3    | 3   | 8.6  | 50 | 3.5   | ●  |
| 0.75       | M6x0.75   | SM391     | 6  | 4.8  | 3   | 13   | 50 | 5.25  | ●  |
| 1.0        | M8x1.0    | SM392     | 6  | 6    | 3   | 17.3 | 50 | 7     | ●  |
| 0.75       | M8x0.75   | SM393     | 6  | 6    | 3   | 17.3 | 50 | 7.25  | ●  |
| 0.5        | M8x0.5    | SM394     | 6  | 6    | 3   | 17.3 | 50 | 7.5   | ●  |
| 1.25       | M10x1.25  | SM395     | 8  | 8    | 3   | 21.8 | 60 | 8.75  | ●  |
| 1.0        | M10x1.0   | SM396     | 8  | 8    | 3   | 21.8 | 60 | 9     | ●  |
| 0.75       | M10x0.75  | SM397     | 8  | 8    | 3   | 21.8 | 60 | 9.25  | ●  |
| 0.5        | M10x0.5   | SM398     | 8  | 8    | 3   | 21.8 | 60 | 9.5   | ●  |
| 1.5        | M12x1.5   | SM399     | 10 | 10   | 4   | 25   | 75 | 10.5  | ●  |
| 1.25       | M12x1.25  | SM400     | 10 | 10   | 4   | 25   | 75 | 10.75 | ●  |
| 1.0        | M12x1.0   | SM401     | 10 | 10   | 4   | 25   | 75 | 11    | ●  |
| 1.5        | M14x1.5   | SM402     | 10 | 10   | 4   | 28   | 75 | 12.5  | ●  |
| 1.25       | M14x1.25  | SM403     | 10 | 10   | 4   | 28   | 75 | 12.75 | ●  |
| 1.0        | M14x1.0   | SM404     | 10 | 10   | 4   | 28   | 75 | 13    | ●  |
| 1.5        | M16x1.5   | SM405     | 12 | 12   | 4   | 30   | 75 | 14.5  | ●  |
| 1.25       | M16x1.25  | SM406     | 12 | 12   | 4   | 30   | 75 | 14.75 | ●  |
| 1.0        | M16x1.0   | SM407     | 12 | 12   | 4   | 30   | 75 | 15    | ●  |
| 2.0        | M20x2.0   | SM408     | 16 | 15.8 | 4   | 40   | 90 | 18    | ●  |
| 1.5        | M20x1.5   | SM409     | 16 | 15.8 | 4   | 40   | 90 | 18.5  | ●  |
| 1.0        | M20x1.0   | SM410     | 16 | 15.8 | 4   | 40   | 90 | 19    | ●  |
| 3.0        | M24x3.0   | SM411     | 16 | 16   | 4   | 45   | 90 | 21    | ●  |

### UNC UNF 美制三牙

| 螺距Pitch TPI | UNC           | UNF      | 内螺纹铣刀 订货号 | 柄径 | 刃径   | 切削刃 | 刃长   | 总长 | 底孔直径 | 库存 |
|-------------|---------------|----------|-----------|----|------|-----|------|----|------|----|
| 72          |               | No.1-72  | SU189     | 4  | 1.45 | 3   | 3.9  | 50 | 1.6  | ●  |
| 64          | No.1-64       | No.2-64  | SU190     | 4  | 1.4  | 3   | 4.2  | 50 | 1.5  | ●  |
| 56          | No.2-56       | No.3-56  | SU191     | 4  | 1.65 | 3   | 5.0  | 50 | 1.8  | ●  |
| 48          | No.3-48       | No.4-48  | SU192     | 4  | 1.9  | 3   | 6.0  | 50 | 2.1  | ●  |
| 40          | No.4, No.5-40 | No.6-40  | SU193     | 4  | 2.1  | 3   | 6.0  | 50 | 2.3  | ●  |
| 40          | No.5-40       | No.6-40  | SU194     | 4  | 2.45 | 3   | 7.2  | 50 | 2.6  | ●  |
| 36          |               | No.8-36  | SU195     | 4  | 3.3  | 3   | 8.7  | 50 | 3.5  | ●  |
| 32          | No.8, No.8-32 | No.10-32 | SU196     | 4  | 2.55 | 3   | 7.4  | 50 | 2.8  | ●  |
| 32          | No.8-32       | No.10-32 | SU197     | 4  | 3.2  | 3   | 10.0 | 50 | 3.5  | ●  |
| 32          |               | No.10-32 | SU198     | 4  | 3.8  | 3   | 10.3 | 50 | 4.0  | ●  |
| 28          |               | 1/4-28   | SU199     | 6  | 5.25 | 3   | 13.2 | 60 | 5.5  | ●  |
| 24          | No.10-24      | 5/16-24  | SU200     | 4  | 3.58 | 3   | 10.2 | 50 | 3.9  | ●  |
| 24          |               | 5/16-24  | SU201     | 8  | 6.68 | 3   | 16.5 | 60 | 6.9  | ●  |
| 20          | 1/4-20        | 7/16-20  | SU202     | 6  | 4.88 | 3   | 13.4 | 60 | 5.2  | ●  |
| 20          |               | 7/16-20  | SU203     | 10 | 9.55 | 4   | 23   | 75 | 9.9  | ●  |
| 18          | 5/16-18       |          | SU204     | 8  | 6.15 | 3   | 16.9 | 60 | 6.6  | ●  |
| 16          | 3/8-16        |          | SU205     | 8  | 6.7  | 3   | 19.1 | 60 | 8.0  | ●  |
| 14          | 7/16-14       |          | SU206     | 10 | 9.0  | 4   | 23.3 | 75 | 9.4  | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## 整体硬质合金螺纹铣刀 微型 1xP



### 60°牙尖

适合加工深孔螺纹、高硬度45°-65°淬火钢

| M 粗牙      | M 细牙      | 螺距Pitch TPI | 内螺纹铣刀 订货号 | 柄径 | 刃径   | 切削刃 | 刃长  | 总长 | 库存 |
|-----------|-----------|-------------|-----------|----|------|-----|-----|----|----|
| M1.0x0.25 | M1.4x0.25 | 0.25        | DM146     | 4  | 0.7  | 3   | 3.1 | 50 | ●  |
| M1.2x0.25 | M1.4x0.25 | 0.25        | DM147     | 4  | 0.9  | 3   | 3.8 | 50 | ●  |
| M1.4x0.3  |           | 0.3         | DM148     | 4  | 1.05 | 3   | 4.4 | 50 | ●  |
| M1.6x0.35 |           | 0.35        | DM149     | 4  | 1.2  | 3   | 5.0 | 50 | ●  |
| M1.8x0.35 | M2.0x0.35 | 0.35        | DM150     | 4  | 1.4  | 3   | 5.6 | 50 | ●  |
| M2.0x0.4  |           | 0.4         | DM151     | 4  | 1.5  | 3   | 6.2 | 50 | ●  |
| M2.5x0.45 |           | 0.45        | DM152     | 4  | 1.95 | 3   | 7.7 | 50 | ●  |
| M3x0.5    |           | 0.5         | DM153     | 4  | 2.4  | 3   | 9   | 50 | ●  |
| M3.5x0.6  |           | 0.6         | DM207     | 4  | 2.75 | 3   | 10  | 50 | ●  |
| M4x0.7    |           | 0.7         | DM154     | 4  | 3.15 | 3   | 12  | 50 | ●  |
| M5x0.8    |           | 0.8         | DM155     | 4  | 4    | 3   | 15  | 50 | ●  |
| M6x1.0    |           | 1.0         | DM156     | 6  | 4.8  | 3   | 19  | 60 | ●  |
| M8x1.25   |           | 1.25        | DM157     | 6  | 6    | 3   | 26  | 60 | ●  |
| M10x1.5   |           | 1.5         | DM158     | 8  | 8    | 3   | 32  | 60 | ●  |
| M12x1.5   |           | 1.5         | DM159     | 10 | 9.4  | 4   | 38  | 75 | ●  |
| M12x1.75  |           | 1.75        | DM160     | 10 | 9.4  | 4   | 38  | 75 | ●  |
| M14x2.0   |           | 2.0         | DM161     | 12 | 10.2 | 4   | 44  | 75 | ●  |
| M16x2.0   |           | 2.0         | DM162     | 14 | 13   | 4   | 48  | 80 | ●  |
| M18x2.5   |           | 2.5         | DM163     | 16 | 14.5 | 4   | 60  | 90 | ●  |
| M20x2.5   |           | 2.5         | DM164     | 16 | 16   | 5   | 60  | 90 | ●  |

### 60°范围牙适合UN、M系

适合加工深孔螺纹、高硬度45°-65°淬火钢

| M 粗牙     | M 细牙     | UN UNS UNF UNEF                       | 螺距Pitch  |       | 内螺纹铣刀 订货号 | 柄径 | 刃径   | 切削刃 | 刃长 | 总长 | 库存 |
|----------|----------|---------------------------------------|----------|-------|-----------|----|------|-----|----|----|----|
|          |          |                                       | MM       | TPI   |           |    |      |     |    |    |    |
| M5x0.8   | M5x0.5   | No.10-56UNS, No.10-48UNS, No.10-40UNS | 0.5-0.8  | 32-56 | DM165     | 4  | 3.9  | 4   | 16 | 50 | ●  |
| M6x1.0   | M6x0.5   | No.12-56UNS, No.12-48UNS, 1/4-40UNS   | 0.5-1.0  | 24-56 | DM166     | 6  | 4.85 | 5   | 20 | 60 | ●  |
| M6x1.0   | M6x0.75  | 1/4-36UNS, 1/4-32UNEF, 1/4-28UNF      |          |       |           |    |      |     |    |    |    |
| M8x1.25  | M7x0.5   | 5/16-48UNS, 5/16-40UNS, 5/16-36UNS    | 0.5-1.25 | 20-48 | DM167     | 6  | 5.9  | 5   | 25 | 60 | ●  |
| M8x1.25  | M7.5x1.0 | 5/16-32UNEF, 5/16-28UN, 5/16-27UNS    |          |       |           |    |      |     |    |    |    |
|          | M10x0.5  | 5/16-24UNS, 5/16-20UN                 | 0.5-1.0  | 24-56 | DM168     | 10 | 9.9  | 6   | 35 | 75 | ●  |
|          | M11x0.75 | 7/16-24UNS, 1/2-20UNS, 1/2-18UNS      |          |       |           |    |      |     |    |    |    |
|          | M11x1.0  | 1/2-16UNS, 1/2-14UNS                  |          |       |           |    |      |     |    |    |    |
| M10x1.5  | M5x0.5   | 3/8-24UNF, 3/8-20UNS, 7/16-18UNS      | 1.0-1.5  | 16-24 | DM169     | 8  | 7.9  | 6   | 32 | 60 | ●  |
| M10x1.5  | M5x0.75  | 7/16-24UN                             |          |       |           |    |      |     |    |    |    |
| M12x1.75 | M5x0.5   | 1/2-24UNS, 1/2-20UNS, 1/2-18UNS       | 1.0-1.75 | 14-24 | DM170     | 10 | 9.9  | 6   | 38 | 75 | ●  |
| M12x1.75 | M5x0.75  | 1/2-16UNS, 1/2-14UNS                  |          |       |           |    |      |     |    |    |    |
|          | M5x0.5   | M5x0.5                                | 1.0-1.75 | 14-24 | DM171     | 12 | 11.9 | 6   | 45 | 75 | ●  |
|          | M5x0.75  | M5x0.75                               |          |       |           |    |      |     |    |    |    |

注：●有库存 ○可定制

单位(Unit): mm





## 非标定制

### 可加工材料

适用于加工铜件、铸铁、铝件、淬火钢、淬硬钢等

### 可根据客户要求定制

Suitable for processing steel, cast iron, aluminum, hardened steel, hardened steel, etc.  
Can be customized according to customer requirements.





## HRC75° 陶瓷铣刀

可加工材料：  
非常适合：模具钢、铸铁、粉末冶金的加工。不适合：铜、铝、不锈钢

Machinable materials:  
Very suitable: die steel, cast iron, powder metallurgy processing.  
Not suitable for: copper, aluminum, stainless steel



| 直径d | 刃长L1 | 全长L | 柄径D | 刃数Z | 库存 |
|-----|------|-----|-----|-----|----|
| 1   | 3    | 50  | 4   | 2   | ●  |
| 1.5 | 4    | 50  | 4   | 2   | ●  |
| 2   | 5    | 50  | 4   | 2   | ●  |
| 2.5 | 7    | 50  | 4   | 2   | ●  |
| 3   | 8    | 50  | 4   | 4   | ●  |
| 3   | 8    | 50  | 3   | 4   | ●  |
| 4   | 10   | 50  | 4   | 4   | ●  |
| 5   | 13   | 50  | 5   | 4   | ●  |
| 6   | 15   | 50  | 6   | 4   | ●  |
| 6   | 18   | 70  | 6   | 4   | ●  |
| 8   | 20   | 60  | 8   | 4   | ●  |
| 8   | 24   | 75  | 8   | 4   | ●  |
| 8   | 24   | 100 | 8   | 4   | ●  |
| 10  | 25   | 75  | 10  | 4   | ●  |
| 10  | 30   | 100 | 10  | 4   | ●  |
| 12  | 30   | 75  | 12  | 4   | ●  |
| 12  | 30   | 100 | 12  | 4   | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## HRC55° 定心钻

可加工材料：  
涂层：非常适合40° 以内的各类钢件、铸铁件。 未涂层：非常适合各类铝、亚克力等软性材料 适合：铜、软铁、木材。

Machinable materials:  
Coating: It is very suitable for all kinds of steel and iron castings within 40° .  
Uncoated: very suitable for various soft materials such as aluminum and acrylic.  
Suitable for: copper, soft iron, wood.

WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

| 直径d  | 刃长L1 | 全长L | 柄径D | 角度A | 刃数Z | 库存 | 直径d | 刃长L1 | 全长L | 柄径D | 角度A | 刃数Z | 库存 |
|------|------|-----|-----|-----|-----|----|-----|------|-----|-----|-----|-----|----|
| Φ1   | 4    | 50  | 4   | 90  | 2   | ●  | Φ10 | 30   | 75  | 10  | 90  | 2   | ●  |
| Φ1.5 | 5    | 50  | 4   | 90  | 2   | ●  | Φ10 | 30   | 100 | 10  | 90  | 2   | ●  |
| Φ2   | 8    | 50  | 4   | 90  | 2   | ●  | Φ12 | 30   | 75  | 12  | 90  | 2   | ●  |
| Φ2.5 | 8    | 50  | 4   | 90  | 2   | ●  | Φ12 | 30   | 100 | 12  | 90  | 2   | ●  |
| Φ3   | 12   | 50  | 3   | 90  | 2   | ●  | Φ14 | 35   | 100 | 14  | 90  | 2   | ●  |
| Φ4   | 16   | 50  | 4   | 90  | 2   | ●  | Φ16 | 40   | 100 | 16  | 90  | 2   | ●  |
| Φ4   | 16   | 100 | 4   | 90  | 2   | ●  | Φ3  | 12   | 50  | 3   | 120 | 2   | ●  |
| Φ5   | 20   | 50  | 5   | 90  | 2   | ●  | Φ4  | 16   | 50  | 4   | 120 | 2   | ●  |
| Φ6   | 20   | 50  | 6   | 90  | 2   | ●  | Φ6  | 20   | 50  | 6   | 120 | 2   | ●  |
| Φ6   | 20   | 100 | 6   | 90  | 2   | ●  | Φ8  | 25   | 60  | 8   | 120 | 2   | ●  |
| Φ8   | 25   | 60  | 8   | 90  | 2   | ●  | Φ10 | 30   | 75  | 10  | 120 | 2   | ●  |
| Φ8   | 25   | 100 | 8   | 90  | 2   | ●  | Φ12 | 30   | 75  | 12  | 120 | 2   | ●  |

注：●有库存 ○可定制

单位(Unit): mm



## HRC55° 粗皮铣刀

可加工材料：  
钢用：非常适合55° 以内的各类钢件、铸铁。 铝用：非常适合各类铝、亚克力等软性材料。适合：铜、软铁、木材

Machinable materials:  
For steel: very suitable for all kinds of steel and cast iron within 55° .  
Aluminum: very suitable for all kinds of soft materials such as aluminum and acrylic.  
Suitable for: copper, soft iron, wood

WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm



| 直径d | 刃长L1 | 全长L | 柄径D | 刃数Z | 库存 |
|-----|------|-----|-----|-----|----|
| 4   | 10   | 50  | 4   | 4   | ●  |
| 5   | 13   | 50  | 6   | 4   | ●  |
| 6   | 15   | 50  | 6   | 4   | ●  |
| 8   | 20   | 60  | 8   | 4   | ●  |
| 10  | 25   | 75  | 10  | 4   | ●  |
| 12  | 30   | 75  | 12  | 4   | ●  |
| 14  | 45   | 100 | 14  | 4   | ●  |
| 16  | 45   | 100 | 16  | 4   | ●  |
| 18  | 45   | 100 | 18  | 4   | ●  |
| 20  | 45   | 100 | 20  | 4   | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## HRC55° 直槽倒角刀

可加工材料：  
涂层：非常适合40° 以内的各类钢件、铸铁件。 未涂层：非常适合各类铝、亚克力等软性材料 适合：铜、软铁、木材。

Machinable materials:  
Coating: It is very suitable for all kinds of steel and iron castings within 40° .  
Uncoated: very suitable for various soft materials such as aluminum and acrylic.  
Suitable for: copper, soft iron, wood.

WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

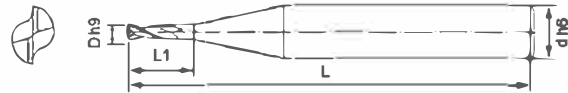
| 直径d  | 刃长L1 | 全长L | 柄径D | 角度A       | 刃数Z | 库存 | 直径d | 刃长L1 | 全长L | 柄径D | 角度A | 刃数Z | 库存 |
|------|------|-----|-----|-----------|-----|----|-----|------|-----|-----|-----|-----|----|
| Φ1   | 4    | 50  | 4   | 60/90/120 | 2   | ●  | Φ10 | 30   | 75  | 10  |     | 2   | ●  |
| Φ1.5 | 5    | 50  | 4   |           | 2   | ●  | Φ10 | 30   | 100 | 10  |     | 2   | ●  |
| Φ2   | 8    | 50  | 4   |           | 2   | ●  | Φ12 | 30   | 75  | 12  |     | 2   | ●  |
| Φ2.5 | 8    | 50  | 4   |           | 2   | ●  | Φ12 | 30   | 100 | 12  |     | 2   | ●  |
| Φ3   | 12   | 50  | 3   |           | 2   | ●  | Φ14 | 35   | 100 | 14  |     | 2   | ●  |
| Φ4   | 16   | 50  | 4   |           | 2   | ●  | Φ16 | 40   | 100 | 16  |     | 2   | ●  |
| Φ4   | 16   | 100 | 4   |           | 2   | ●  | Φ3  | 12   | 50  | 3   |     | 2   | ●  |
| Φ5   | 20   | 50  | 5   |           | 2   | ●  | Φ4  | 16   | 50  | 4   |     | 2   | ●  |
| Φ6   | 20   | 50  | 6   |           | 2   | ●  | Φ6  | 20   | 50  | 6   |     | 2   | ●  |
| Φ6   | 20   | 100 | 6   |           | 2   | ●  | Φ8  | 25   | 60  | 8   |     | 2   | ●  |
| Φ8   | 25   | 60  | 8   |           | 2   | ●  | Φ10 | 30   | 75  | 10  |     | 2   | ●  |
| Φ8   | 25   | 100 | 8   |           | 2   | ●  | Φ12 | 30   | 75  | 12  |     | 2   | ●  |

注：●有库存 ○可定制

单位(Unit): mm



## HRC60° 微小径平刀



可加工材料：  
 钢用：非常适合60° 以内的各类钢件、铸件。 铝用：非常适合各类铝、亚克力等软性材料  
 适合：铜、软铁、木材

Machinable materials:  
 Steel: It is very suitable for all kinds of steel and iron castings within 60°.  
 Aluminum: very suitable for various soft materials such as aluminum and acrylic.  
 Suitable: copper, soft iron, wood

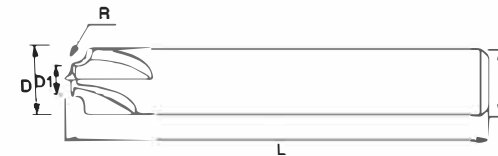
WC=90 Co=10 HV30=1700 抗折=4000N/mm2 硬度=92.3 粒径=0.6 μm

| 直径d | 刃长L1 | 全长L  | 柄径D | 库存 |
|-----|------|------|-----|----|
| 0.2 | 0.4  | 50.0 | 4.0 | ●  |
| 0.3 | 0.6  | 50.0 | 4.0 | ●  |
| 0.4 | 0.8  | 50.0 | 4.0 | ●  |
| 0.5 | 1.0  | 50.0 | 4.0 | ●  |
| 0.6 | 1.2  | 50.0 | 4.0 | ●  |
| 0.7 | 1.4  | 50.0 | 4.0 | ●  |
| 0.8 | 1.6  | 50.0 | 4.0 | ●  |
| 0.9 | 1.8  | 50.0 | 4.0 | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## HRC55° 4刃内R刀



可加工材料：  
 钢用：非常适合60° 以内的各类钢件、铸件。 铝用：非常适合各类铝、亚克力等软性材料  
 适合：铜、软铁、木材

Machinable materials:  
 Steel: It is very suitable for all kinds of steel and iron castings within 60°.  
 Aluminum: very suitable for various soft materials such as aluminum and acrylic.  
 Suitable: copper, soft iron, wood

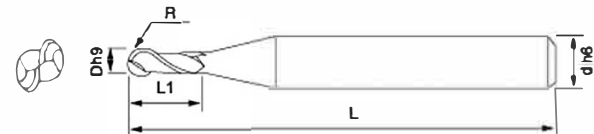
WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

| 直径d | R径    | 全长L | 柄径D | 库存 | 直径d | R径   | 全长L | 柄径D | 库存 |
|-----|-------|-----|-----|----|-----|------|-----|-----|----|
| 4   | 0.5R  | 50  | 4   | ●  | 6   | 2.0R | 50  | 6   | ●  |
| 4   | 0.7R  | 50  | 4   | ●  | 8   | 2.5R | 50  | 8   | ●  |
| 4   | 1.0R  | 50  | 4   | ●  | 8   | 3.0R | 50  | 8   | ●  |
| 6   | 1.25R | 50  | 6   | ●  | 12  | 4.0R | 60  | 12  | ●  |
| 6   | 1.5R  | 50  | 6   | ●  | 16  | 5.0R | 75  | 16  | ●  |
| 6   | 1.75R | 50  | 6   | ●  | 16  | 6.0R | 75  | 16  | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## HRC60° 微小径球刀



可加工材料：  
 钢用：非常适合60° 以内的各类钢件、铸件。 铝用：非常适合各类铝、亚克力等软性材料  
 适合：铜、软铁、木材

Machinable materials:  
 Steel: It is very suitable for all kinds of steel and iron castings within 60°.  
 Aluminum: very suitable for various soft materials such as aluminum and acrylic.  
 Suitable: copper, soft iron, wood

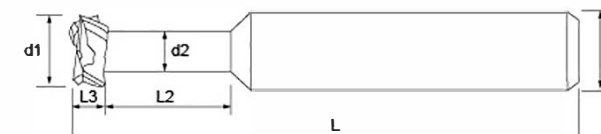
WC=90 Co=10 HV30=1700 抗折=4000N/mm2 硬度=92.3 粒径=0.6 μm

| 直径d  | R    | 刃长L1 | 全长L | 柄径D | 库存 |
|------|------|------|-----|-----|----|
| 0.20 | 0.10 | 0.3  | 50  | 4   | ●  |
| 0.30 | 0.15 | 0.6  | 50  | 4   | ●  |
| 0.40 | 0.20 | 0.8  | 50  | 4   | ●  |
| 0.50 | 0.25 | 1    | 50  | 4   | ●  |
| 0.60 | 0.30 | 1.2  | 50  | 4   | ●  |
| 0.70 | 0.35 | 1.4  | 50  | 4   | ●  |
| 0.80 | 0.40 | 1.6  | 50  | 4   | ●  |
| 0.90 | 0.45 | 1.8  | 50  | 4   | ●  |

注：●有库存 ○可定制

单位(Unit): mm

## HRC55° T型铣刀



可加工材料：  
 钢用：非常适合40° 以内的各类钢件、铸件。 铝用：非常适合各类铝、亚克力等软性材料  
 适合：铜、软铁、木材

Machinable materials:  
 Steel: It is very suitable for all kinds of steel and iron castings within 40°.  
 Aluminum: very suitable for various soft materials such as aluminum and acrylic.  
 Suitable: copper, soft iron, wood

WC=90 Co=10 HV30=1630 抗折=3800N/mm2 硬度=91.9 粒径=0.7 μm

| 直径d | 刃高L3              | L2 | d2 | 柄径D | 全长L | 库存 |
|-----|-------------------|----|----|-----|-----|----|
| Φ4  | 0.5/1/1.5/2       | Φ2 | 8  | 4   | 50  | ●  |
| Φ6  | 0.5/1/1.5/2/2.5/3 | Φ3 | 10 | 6   | 50  | ●  |
| Φ8  | 1/1.5/2/2.5/3     | Φ4 | 12 | 8   | 50  | ●  |
| Φ10 | 1/1.5/2/2.5/3     | Φ5 | 15 | 10  | 60  | ●  |
| Φ12 | 1/1.5/2/2.5/3     | Φ6 | 15 | 12  | 60  | ●  |

注：●有库存 ○可定制

单位(Unit): mm



### 切削数据参考

#### 1)侧面铣削 标准型2刃、4刃 Side Milling Standard 2/4Flutes

| 加工材料<br>Work material | 铝合金、铜<br>Aluminum Alloy, cuprum |                           |            | 碳素钢、铸铁<br>Carbon steel, Castiron<br>AISI 1049, SCM,FC250<br>(~30HRC) |                           |            | 合金钢、模具钢<br>Alloy steel, Die steel<br>( < 35HRC) |                           |            | 不锈钢<br>Stainless steel<br>AISI 1304, AISI1316 |                           |            |
|-----------------------|---------------------------------|---------------------------|------------|--|---------------------------|------------|---|---------------------------|------------|---|---------------------------|------------|
|                       | 直径<br>Φ D(mm)                   | 切削速度Cutting speed(mm/min) |            | 转速<br>Rev(min <sup>-1</sup> )  | 切削速度Cutting speed(mm/min) |            | 转速<br>Rev(min <sup>-1</sup> )                   | 切削速度Cutting speed(mm/min) |            | 转速<br>Rev(min <sup>-1</sup> )                 | 切削速度Cutting speed(mm/min) |            |
|                       |                                 | 2刃 2Flutes                | 4刃 4Flutes |  | 2刃 2Flutes                | 4刃 4Flutes |   | 2刃 2Flutes                | 4刃 4Flutes |   | 2刃 2Flutes                | 4刃 4Flutes |
| 1                     | 30400                           | 240                       | 480        | 16000  | 96                        | 192        | 9600  | 56                        | 112        | 8000  | 48                        | 96         |
| 2                     | 17600                           | 352                       | 640        | 8800   | 144                       | 216        | 5760  | 88                        | 136        | 4800  | 75                        | 112        |
| 3                     | 13600                           | 384                       | 696        | 6800   | 160                       | 240        | 4240  | 104                       | 160        | 3520  | 88                        | 136        |
| 4                     | 11200                           | 584                       | 880        | 5760   | 288                       | 432        | 3520  | 176                       | 264        | 2960  | 144                       | 216        |
| 5                     | 9600                            | 688                       | 1040       | 4800   | 304                       | 456        | 2880  | 184                       | 280        | 2400  | 152                       | 232        |
| 6                     | 8800                            | 792                       | 1200       | 4240   | 336                       | 504        | 2560  | 192                       | 288        | 2160  | 168                       | 256        |
| 8                     | 6400                            | 800                       | 1200       | 3200   | 360                       | 544        | 1920  | 192                       | 288        | 1600  | 176                       | 264        |
| 10                    | 5120                            | 720                       | 1080       | 2560   | 312                       | 472        | 1520  | 152                       | 232        | 1280  | 152                       | 232        |
| 12                    | 4240                            | 592                       | 880        | 2160   | 264                       | 400        | 1280  | 128                       | 192        | 1040  | 120                       | 184        |
| 16                    | 3200                            | 448                       | 672        | 1600   | 192                       | 288        | 960   | 96                        | 144        | 800   | 96                        | 144        |
| 20                    | 2560                            | 360                       | 544        | 1280   | 160                       | 240        | 800   | 80                        | 120        | 640   | 76                        | 112        |

#### 2)沟槽铣削 标准型2刃、4刃 Slotting Standard 2/4Flutes

| 加工材料<br>Work material | 碳素钢、铸铁<br>Carbon steel, Castiron<br>AISI 1049, SCM,FC250<br>(~30HRC) |                           |            | 合金钢、模具钢、预硬钢<br>Alloy steel, Die steel, Pre-hardened steel<br>AISI H13, NAK<br>( < 45HRC) |                           |            | 淬硬钢<br>Hardened steel<br>AISI H13<br>( < 52HRC) |                           |            |
|-----------------------|--|---------------------------|------------|--|---------------------------|------------|---|---------------------------|------------|
|                       | 直径<br>Φ D(mm)  | 切削速度Cutting speed(mm/min) |            | 转速<br>Rev(min <sup>-1</sup> )  | 切削速度Cutting speed(mm/min) |            | 转速<br>Rev(min <sup>-1</sup> )                   | 切削速度Cutting speed(mm/min) |            |
|                       |  | 2刃 2Flutes                | 4刃 4Flutes |  | 2刃 2Flutes                | 4刃 4Flutes |   | 2刃 2Flutes                | 4刃 4Flutes |
| 1                     | 24000  | 384                       | 576        | 16000  | 256                       | 384        | 12000   | 77                        | 116        |
| 2                     | 12000  | 384                       | 576        | 8000   | 256                       | 384        | 6400  | 77                        | 116        |
| 3                     | 8000   | 384                       | 576        | 5600   | 256                       | 384        | 4000  | 77                        | 116        |
| 4                     | 6000   | 384                       | 576        | 4160   | 256                       | 384        | 3200  | 77                        | 116        |
| 5                     | 4800   | 384                       | 576        | 3360   | 256                       | 384        | 2560  | 77                        | 116        |
| 6                     | 4000   | 384                       | 576        | 2800   | 256                       | 384        | 2160  | 77                        | 116        |
| 8                     | 3200   | 333                       | 500        | 2240   | 224                       | 333        | 1600  | 71                        | 103        |
| 10                    | 2560   | 288                       | 436        | 1760   | 192                       | 288        | 1280  | 64                        | 90         |
| 12                    | 2160   | 363                       | 397        | 1520   | 173                       | 263        | 1040  | 64                        | 77         |
| 16                    | 1600   | 231                       | 352        | 1120   | 148                       | 224        | 800   | 84                        | 109        |
| 20                    | 1280   | 205                       | 314        | 880  | 141                       | 218        | 640   | 71                        | 90         |

#### 使用中的注意事项

1. 请使用精度高、刚性好的设备和夹具。
2. 如果加工设备或工具的夹持刚性不足而出现震动或杂音时，请适度降低转速或进给速度。
3. 纵向进给时，进给速度请设定为上表1/3以下。
4. 切削不锈钢时，请用湿式加工；切削奥氏体不锈钢时，使用非水溶性切削液效果好。

#### Matters need attention in usage

1. Use rigid and precise machine and tool holder.
2. If chattering and noise occur due to the rigidity of machine or the work material installation is very low, please reduce the revolution and the feed rate proportionately.
3. In drilling, please set the feed rate at 1/3 or below.
4. When cutting stainless steel, please use fluid; when cutting Austenitic stainless steel, non-water-soluble cutting fluid is very effective.

### 解决方向

#### 切削条件计算公式

##### 立铣刀主轴转速计算公式

$$N = \frac{1000 \cdot V}{\pi \cdot D}$$

|   |      |        |
|---|------|--------|
| V | 切削速度 | M/分    |
| π | 圆周率  | 3.1416 |
| D | 刀具直径 | mm     |
| N | 主轴转速 | 转/分    |

##### 立铣刀进给速度之计算公式

$$F = F_t \cdot Z \cdot N$$

|                |         |      |
|----------------|---------|------|
| F              | 每分钟进给速度 | mm/分 |
| F <sub>t</sub> | 每一刃进给速度 | mm/刃 |
| Z              | 立铣刀刃数   | 刃    |

##### 影响立铣刀V值与F<sub>t</sub>值之条件

1. 机器主体之刚性强度
2. 机器主轴之最高转速
3. 机器最佳动态平衡之最高转速
4. 机器本身最高切削进给速度
5. 机器控制器预读程式之能力
6. 夹头本体与筒夹之精度
7. 夹头本体与筒夹之刚性
8. 夹头本体与筒夹之把握力
9. 夹头本体与筒夹之动态平衡
10. 立铣刀之型式
11. 立铣刀之材质
12. 立铣刀之刚性
13. 立铣刀突出夹头之伸出量
14. 立铣刀之切削方式
15. 立铣刀之切削路径
16. 立铣刀之切削量
17. 立铣刀之排屑能力
18. 工作之硬度
19. 工作之抗拉强度
20. 工作之被切削性
21. 工作之本身刚性
22. 夹治具之刚性
23. 冷却液之种类
24. 冷却液之供给方式

#### 铣刀加工异常原因对策

| 情况<br>trouble                                 | 原因<br>occurrences                          | 对策<br>countermeasures   |
|---|--|---|
| 崩刃<br>chipping                                | 进给量太大<br>too high feed                     | 降低进给量<br>reduce feed  |
|   | 逆铣(向上切削)<br>Up milling                     | 顺铣(向下切削)<br>Change down milling   |
|   | 切削刃太锋利<br>Sharp cutting edge               | 修磨切削刃-必要时倒角或倒圆<br>Honing at the cutting edge<br>-chamfering or rounding if needed |
|   | 震动<br>Chattering                           | 向下调整主轴转速<br>Check spindle speed down  |
|   | 刀具突出量太长<br>Too much overhang               | 将刀具突出量调整为最小<br>Adjust to minimize overhang  |
| 磨损<br>wear                                    | 铣刀未牢固夹紧<br>Unfixed chucking<br>of End mill | 调整夹治具精度<br>Check the precision of chuck<br>and collet                             |
|   | 切削速度过高<br>High Cutting speed               | 减低切削速度<br>Decrease cutting speed  |
|   | 进给量太小<br>Low feed                          | 增加进给量<br>Increase feed  |
| 刀具折断<br>tool<br>breakage                      | 逆铣(向上切削)<br>Up milling                     | 顺铣(向下切削)<br>Down milling  |
|   | 材质硬度过高<br>High-hardened<br>work piece      | 选用特殊镀膜的铣刀<br>Choosing special coating end mill                                    |
| 表面粗糙度<br>surface<br>roughness                 | 切削量太大<br>Too much cutting<br>amount        | 减少切削量<br>Decrease cutting amount  |
|   | 切削力过大<br>High cutting force                | 降低进给;提高转速<br>Feed down;spindle speed up   |
|   | 刀具突出量太长<br>Too much overhang               | 将刀具突出量调整为最小<br>Adjust to minimize overhang  |
| 加工精度<br>accuracy of<br>finished<br>work piece | 震动<br>Chattering                           | 改变切削条件<br>Change the cutting condition  |
|   | 排屑不良<br>Generation of built<br>-up edge    | 提升切削速度&进给率或顺铣<br>Increasing cutting speed<br>& Feed rate or down milling          |
| 加工精度<br>accuracy of<br>finished<br>work piece | 高进给, 低切削速度<br>high feed, low speed         | 降低进给提高切削速度<br>Reduce feed & Increase speed  |
|   | 刃数不够<br>incorrect numbers<br>of flute      | 更换多刃铣刀<br>Replace more flutes End mill  |
| 加工精度<br>accuracy of<br>finished<br>work piece | 刀具偏差<br>Deflection of Tool                 | 使用大刃径和突出量减至最小<br>Using big diameter tool&Minimize<br>the overhang                 |