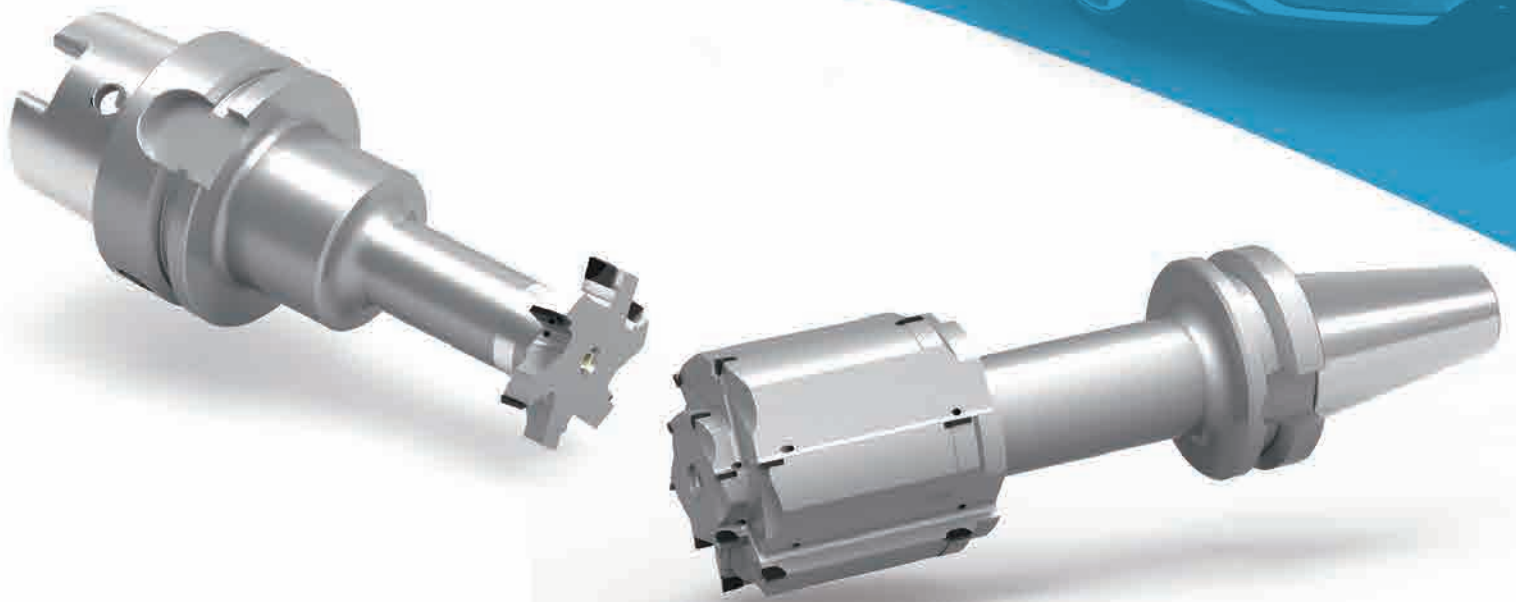




2019
08-8-V1.1



PCD 非标刀具

【汽车零部件加工】

北京沃尔德金刚石工具股份有限公司
BEIJING WORLDIA DIAMOND TOOLS CO.,LTD.



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沃尔德

沃尔德® 非标刀具产品简介

沃尔德®非标刀具产品类别：

- 1、旋转类：高精度的 PCD/PCBN 铰刀、钻铰刀、镗刀、立铣刀、成型铣刀等；
- 2、机夹类：焊接式/整体式镗刀片、成型铣刀片、螺纹刀片、轧辊刀片、刨刀；
- 3、车削类：成型车刀，内圆/外圆槽刀、螺纹车刀；
- 4、耐磨类：高精密 PCD 支撑器、耐磨联轴器、砂轮修整器。

沃尔德®非标刀具应用行业：

- 1、发动机、轮毂、刹车片等汽车行业相关零部件的加工；
- 2、手机、笔记本、平板电脑等3C行业关键零部件的加工；
- 3、空调压缩机壳体、驱动马达等铸铝/铸铁件的加工；
- 4、复合材料的加工；
- 5、树脂、橡胶、塑料、半导体等非金属制品的加工；
- 6、石油钻探行业使用的联轴器、耐磨件等；
- 7、家具、工艺品等木工行业的加工。



Production Equipment

DMG



FANUC



沃尔德®非标刀具设备简介:

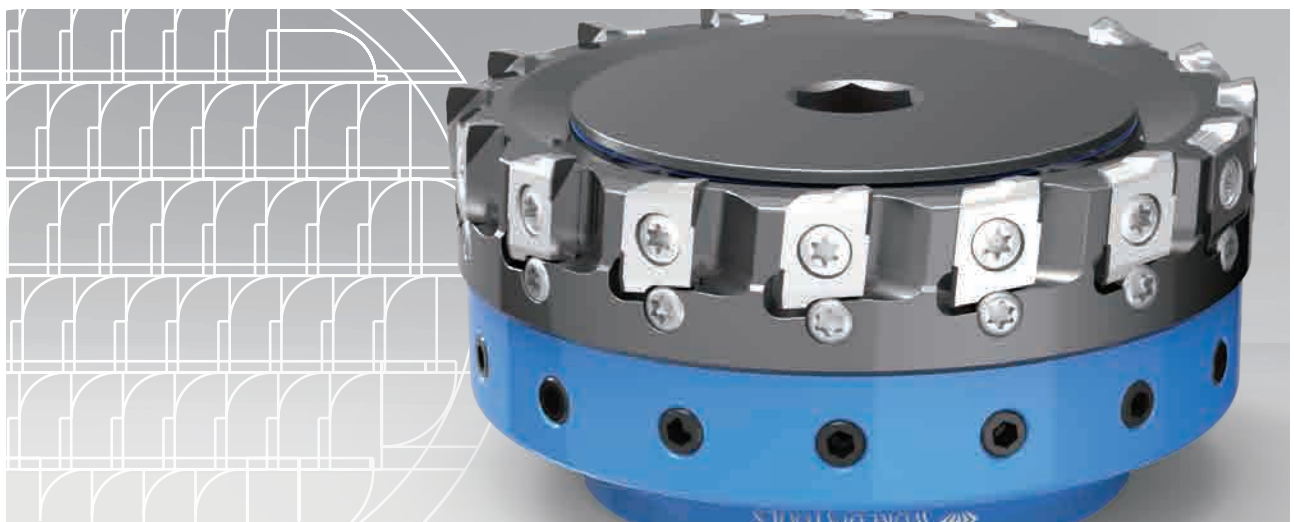
FANUC 六轴高精度慢走丝线切割机, 主要承担 PCD/PCBN 铰刀、铣刀、轮廓刀等非标刀具的加工。设备性能稳定, 加工精度可靠, 可获得较高品位的刃口质量和表面光洁度。

DMG 高精度激光切割机, 主要承担 PCD/PCBN/CVD 等非标刀具的加工, 能够保证较高的加工精度和良好的外观效果, 尤其在 PCD 铰刀断屑槽加工方面具有明显优势。

卓勒对刀仪, 可对各类切削刀具进行方便快捷地预调、测量和管理, 设备配有海德汉光栅尺, 测量数据精确, 重复性和再现性稳定。

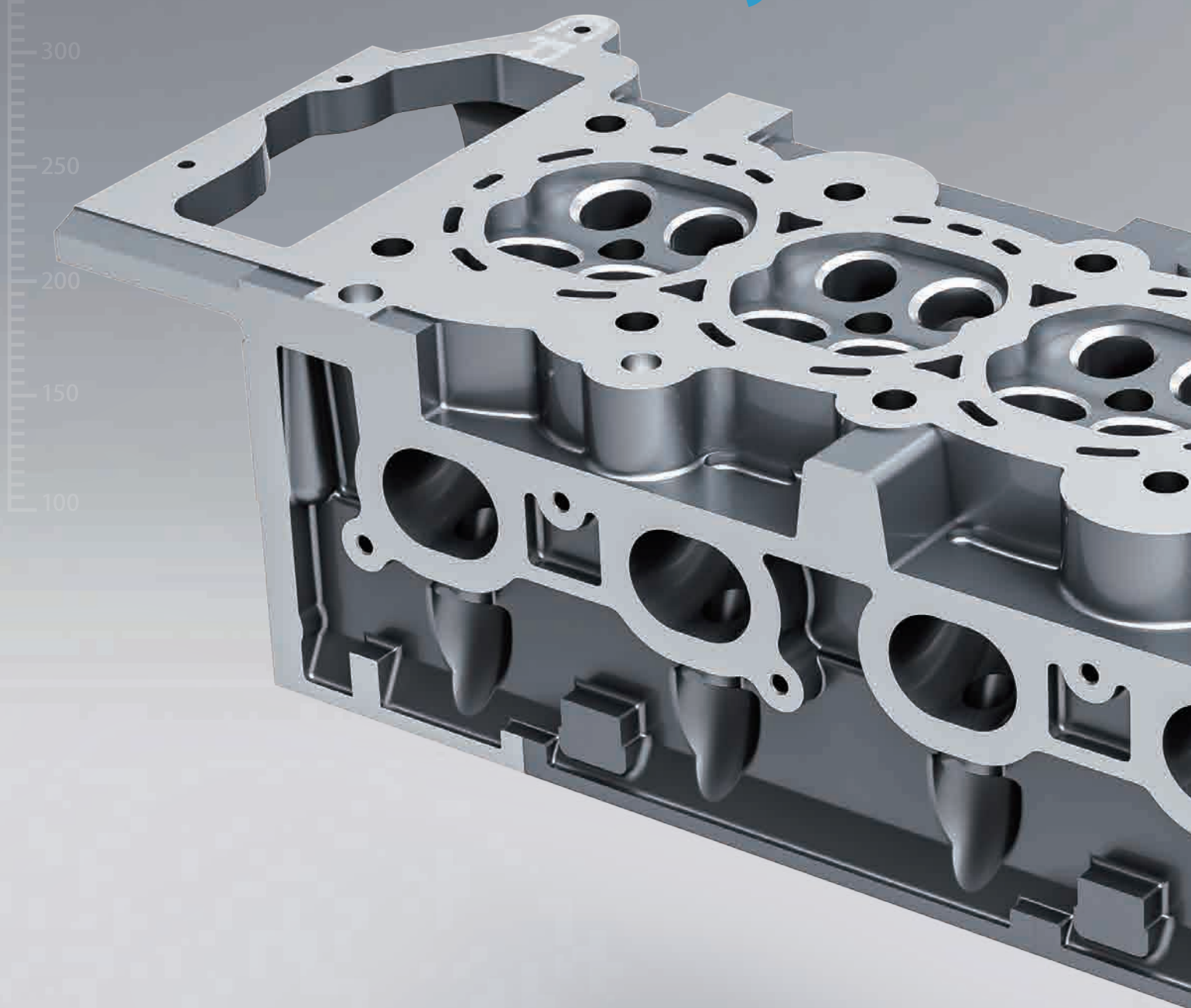
激光测径仪, 能够对测量数据进行自动采集、科学处理、快速运算, 测量精度稳定, 测量效率较高。

翰默动平衡仪, 可对刀柄进行单平面和双平面动平衡校正, 采用激光标记, 配合主轴自动定位, 实现微米级的夹持精度, 最小检测精度可达 0.5gmm, 计算结果精确, 操作方便快捷。



铝合金发动机缸

Cylinder H



盖加工

Head



Cylinder Head

Gear-box

Oil Pan

Steering Gear

Brake Caliper

Throttle Valve

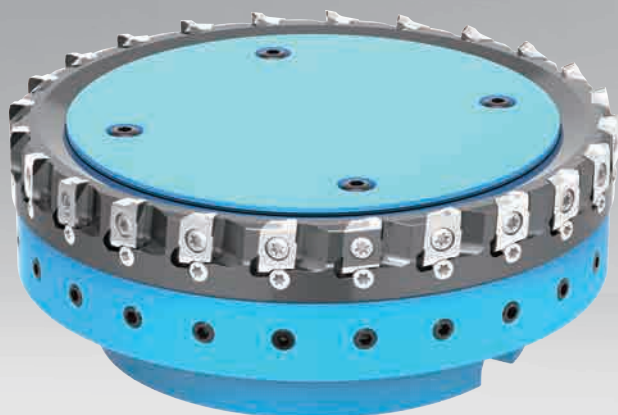
Scroll Plate

Aluminium Products

Standard/Customized

面铣刀盘

$n=12000\text{r/min}$
 $fz=0.05\text{mm/z}$



阶梯钻铰刀

$n=4000\text{r/min}$
 $fz=0.04\text{mm/z}$



阶梯铰刀

$n=5500\text{r/min}$
 $fz=0.05\text{mm/z}$



三面刃铣刀

$n=6000\text{r/min}$
 $fz=0.03\text{mm/z}$



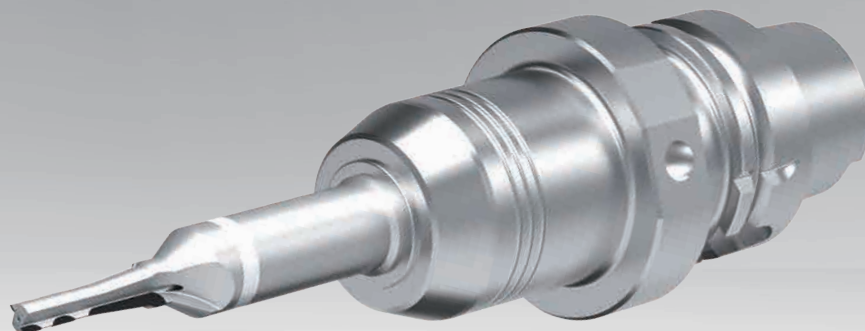
底铣铰刀

$n=4000\text{r/min}$
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阶梯铰刀

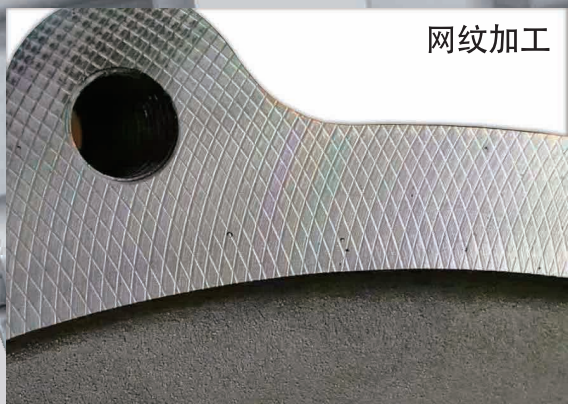
$n=3500\text{r/min}$
 $fz=0.02\text{mm/z}$



变速箱壳体 油底壳 加工

Gear-box
Oil Pan

网纹加工



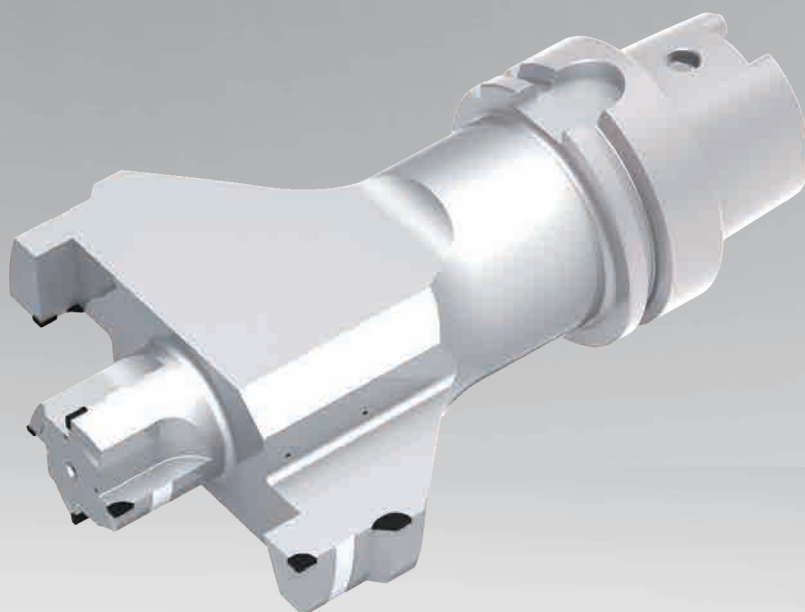
面铣刀盘

$n=6000\text{r/min}$
 $fz=0.03\text{mm/z}$



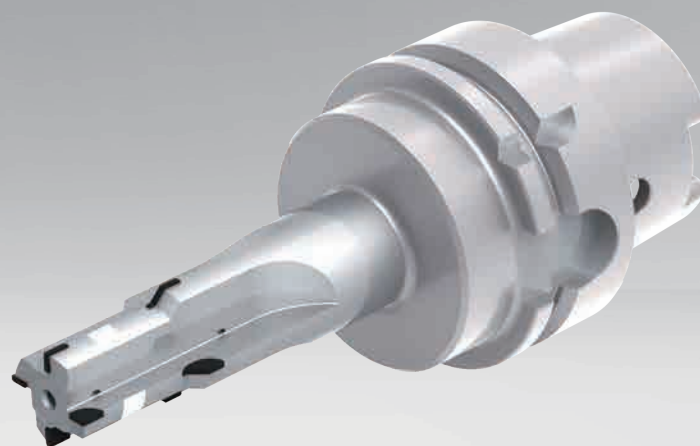
套铣铰刀

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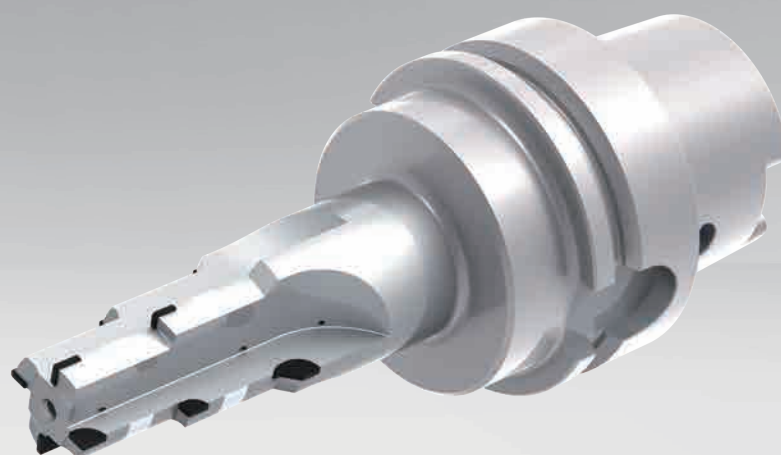
阶梯铰刀

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 $fz=0.05\text{mm/z}$



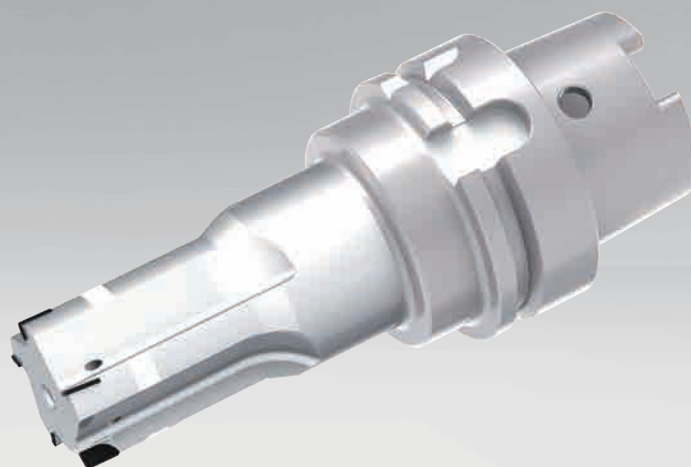
阶梯铰刀

$n=4000\text{r/min}$
 $fz=0.04\text{mm/z}$



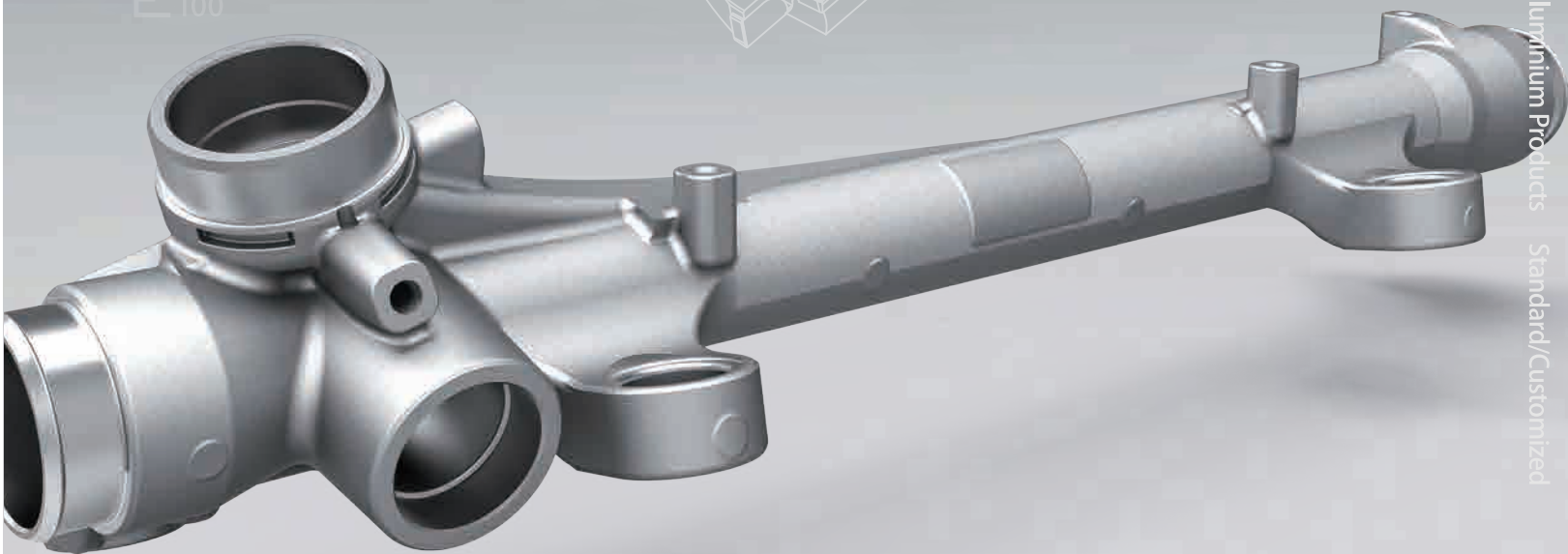
多刃立铣刀

$n=5500\text{r/min}$
 $fz=0.05\text{mm/z}$



转向器加工

Steering Gear



Cylinder Head

Gear-box

Oil Pan

Steering Gear

Brake Caliper

Throttle Valve

Scroll Plate

Aluminium Products

Standard/Customized

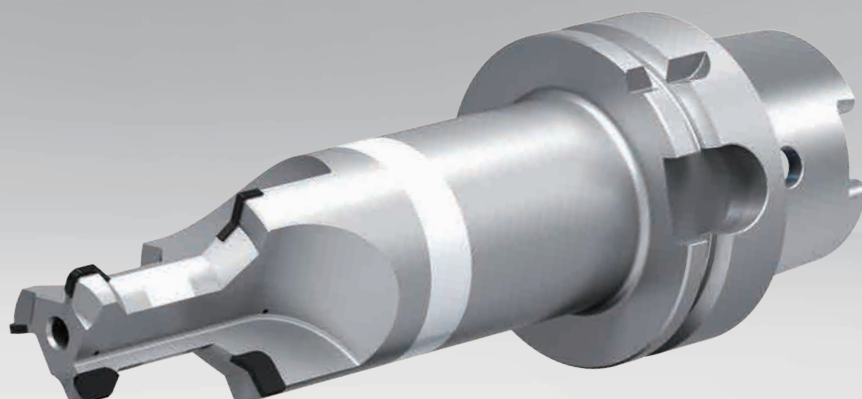
阶梯钻铰刀

$n=4500\text{r/min}$
 $fz=0.03\text{mm/z}$



反倒角铣刀

$n=3500\text{r/min}$
 $fz=0.06\text{mm/z}$



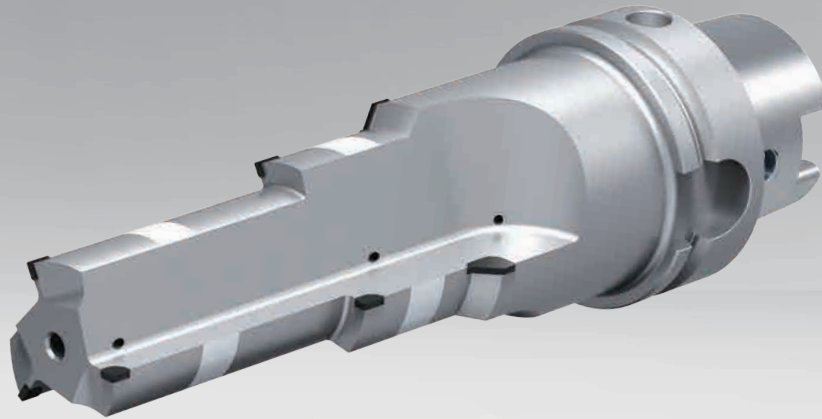
单阶梯铰刀

$n=3500\text{r/min}$
 $fz=0.1\text{mm/z}$



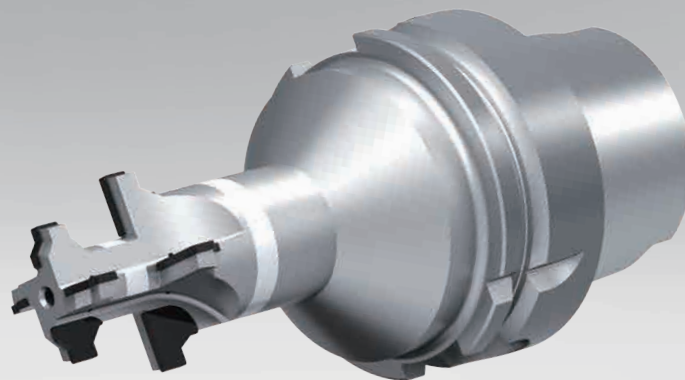
多阶梯铰刀

$n=4000\text{r/min}$
 $fz=0.08\text{mm/z}$



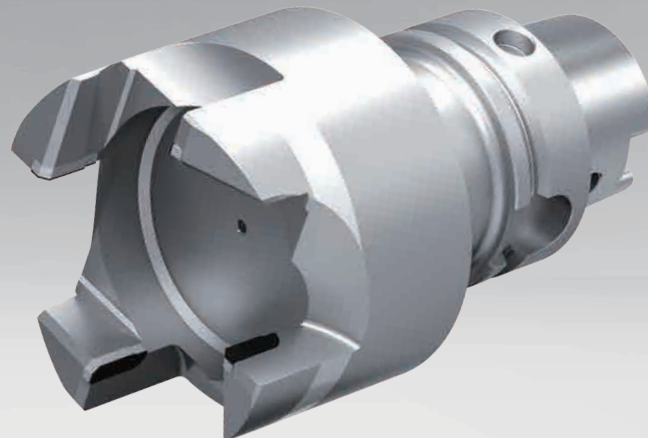
多阶梯槽铣刀

$n=3500\text{r/min}$
 $fz=0.03\text{mm/z}$



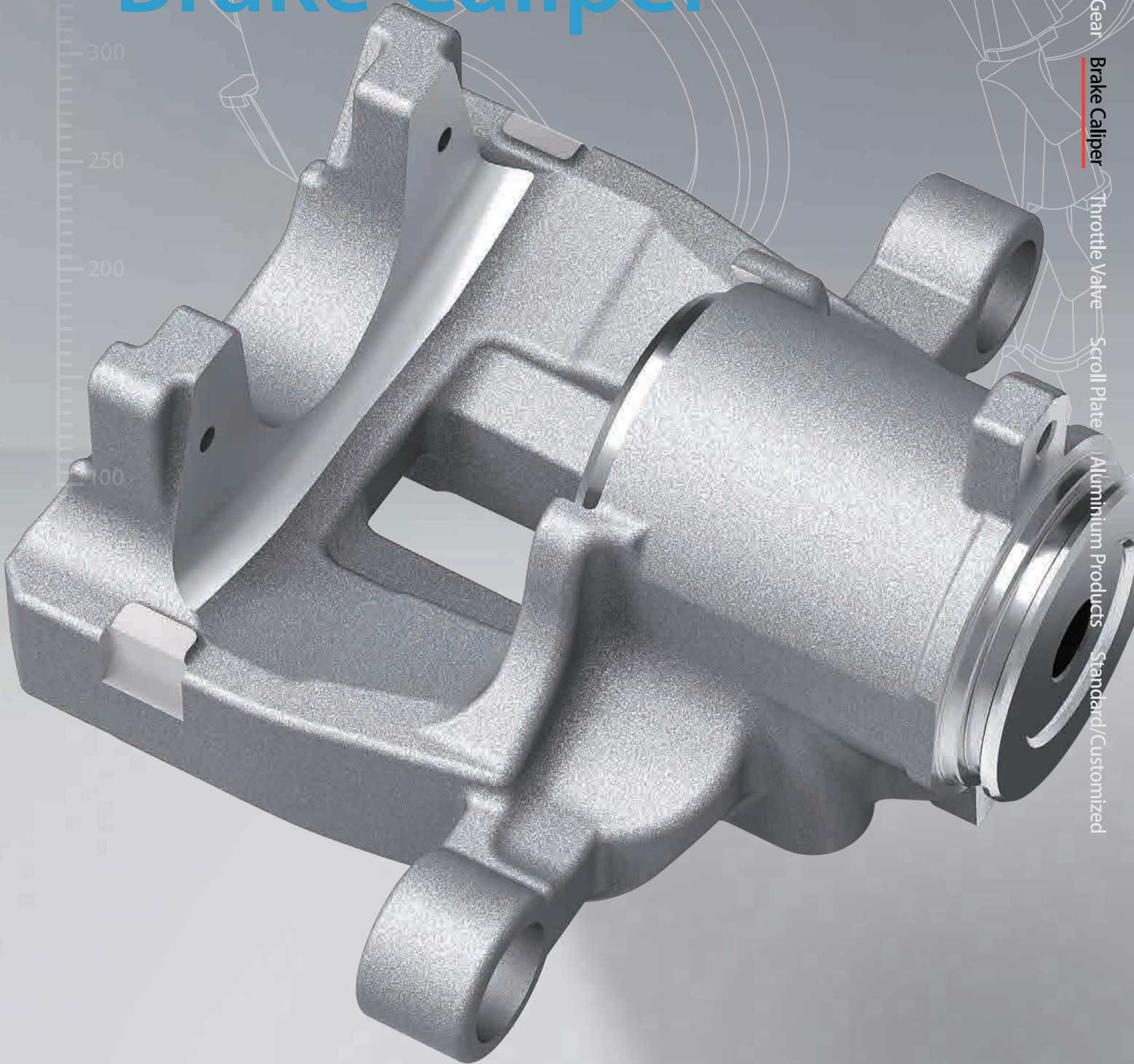
套铣刀

$n=3500\text{r/min}$
 $fz=0.055\text{mm/z}$



刹车钳体加工

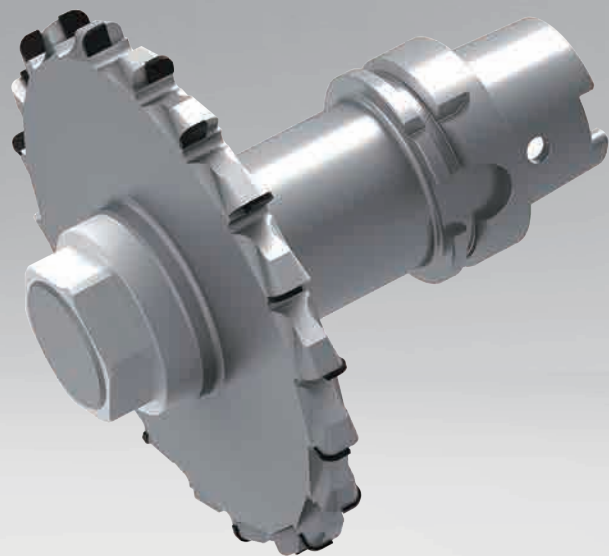
Brake Caliper



Cylinder Head Gear-box Oil Pan Steering Gear **Brake Caliper** Throttle Valve Scroll Plate Aluminium Products Standard/Customized

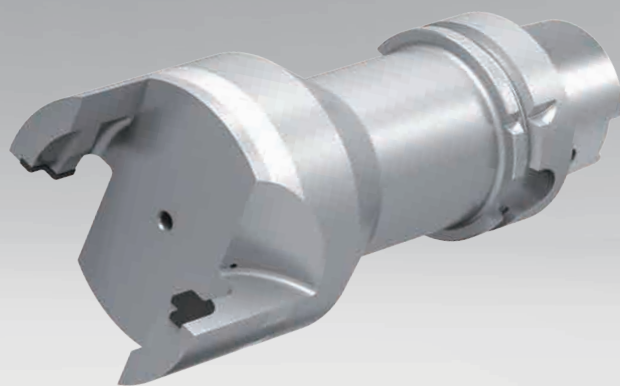
三面刃铣刀盘

$n=4500\text{r/min}$
 $fz=0.035\text{mm/z}$



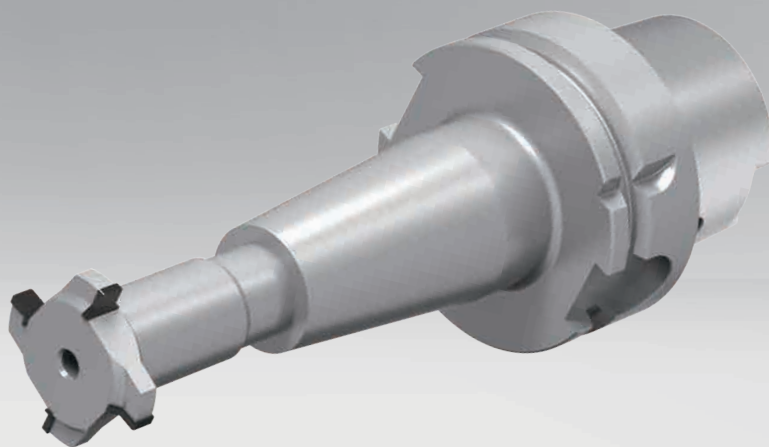
套铣槽刀

$n=6000\text{r/min}$
 $fz=0.05\text{mm/z}$



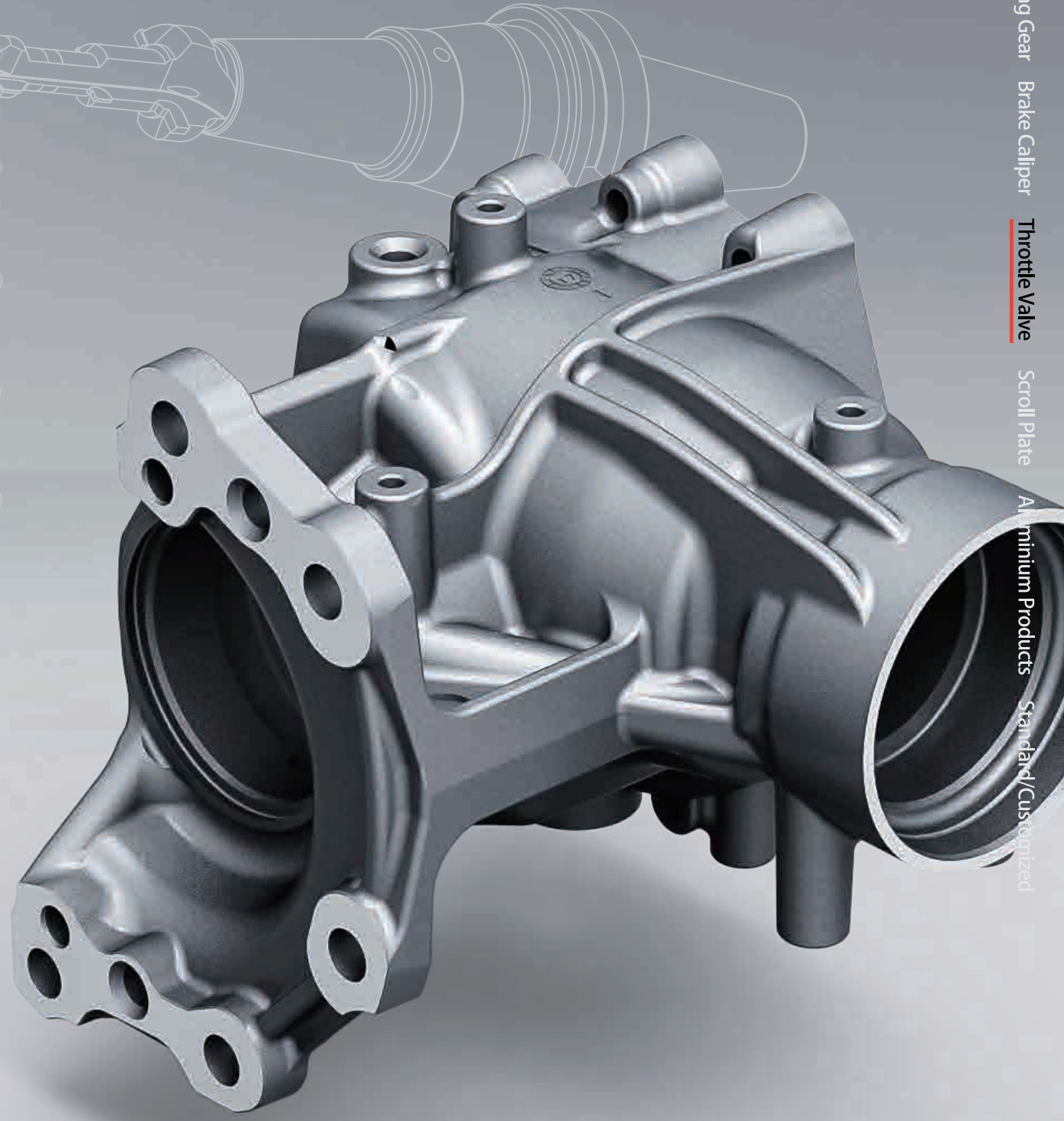
槽铣刀

$n=6500\text{r/min}$
 $fz=0.045\text{mm/z}$



节气门加工

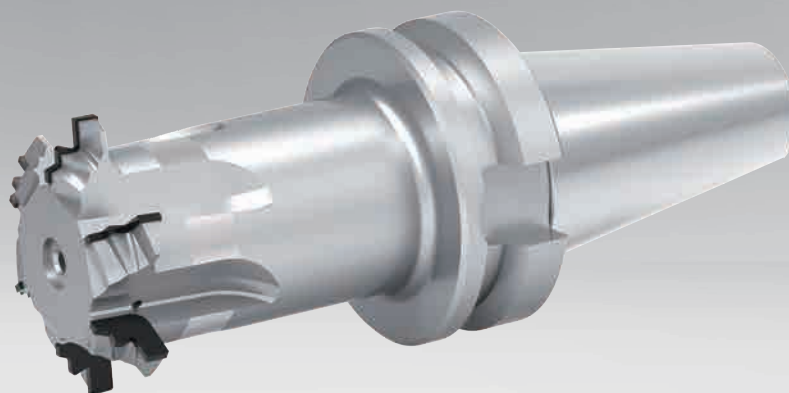
Throttle Valve



Cylinder Head Gear-box Oil Pan Steering Gear Brake Caliper **Throttle Valve** Scroll Plate Aluminum Products Standard/Customized

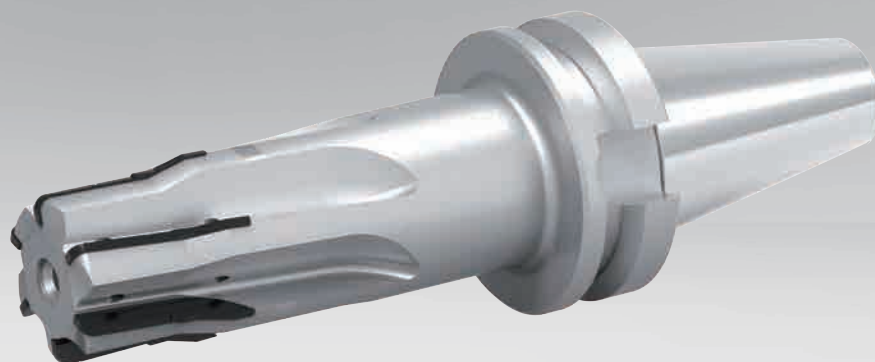
成型铣刀

$n=3500\text{r/min}$
 $fz=0.045\text{mm/z}$



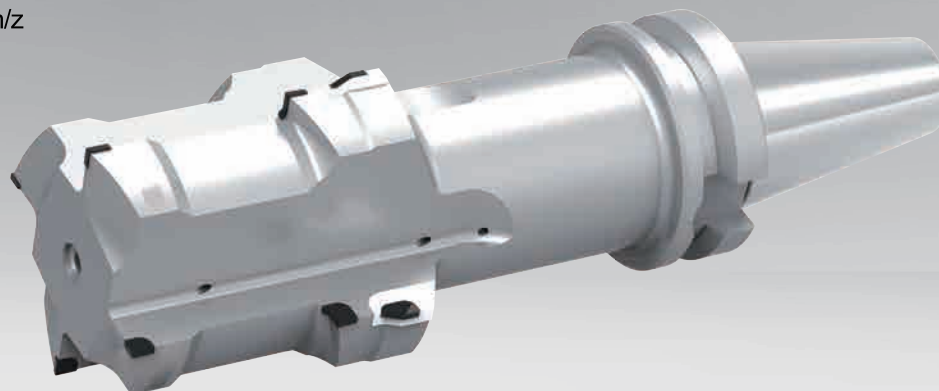
侧面铣刀

$n=4000\text{r/min}$
 $fz=0.055\text{mm/z}$



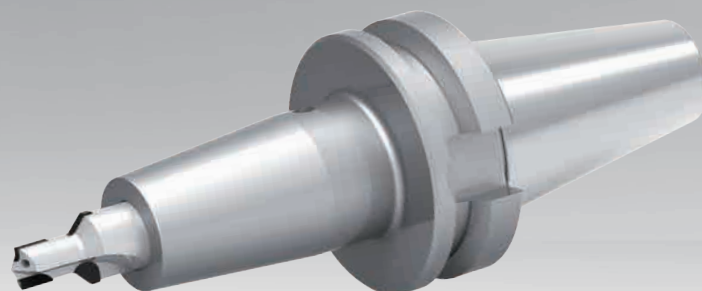
阶梯铰刀

$n=4200\text{r/min}$
 $fz=0.015\text{mm/z}$



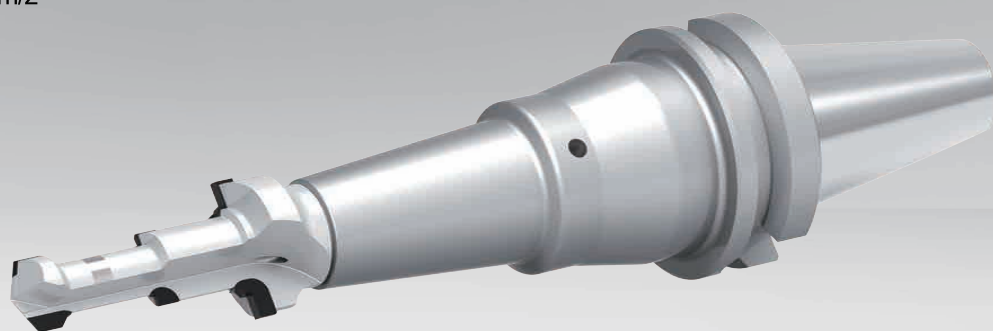
阶梯钻铰刀

$n=3600\text{r/min}$
 $fz=0.015\text{mm/z}$



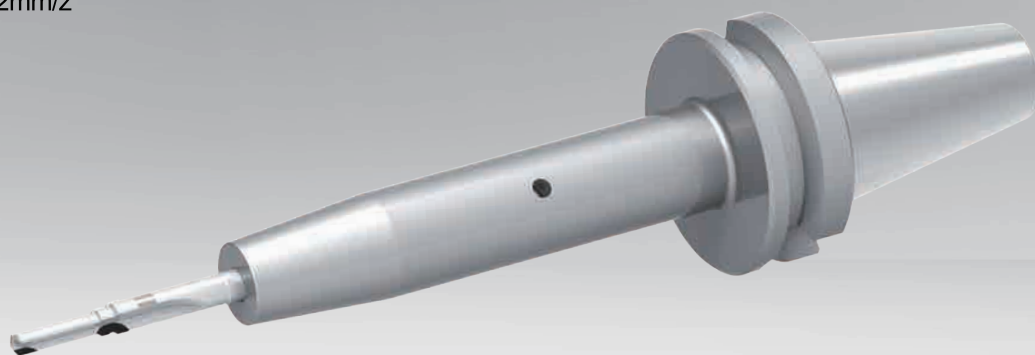
阶梯钻铰刀

$n=3750\text{r/min}$
 $fz=0.025\text{mm/z}$



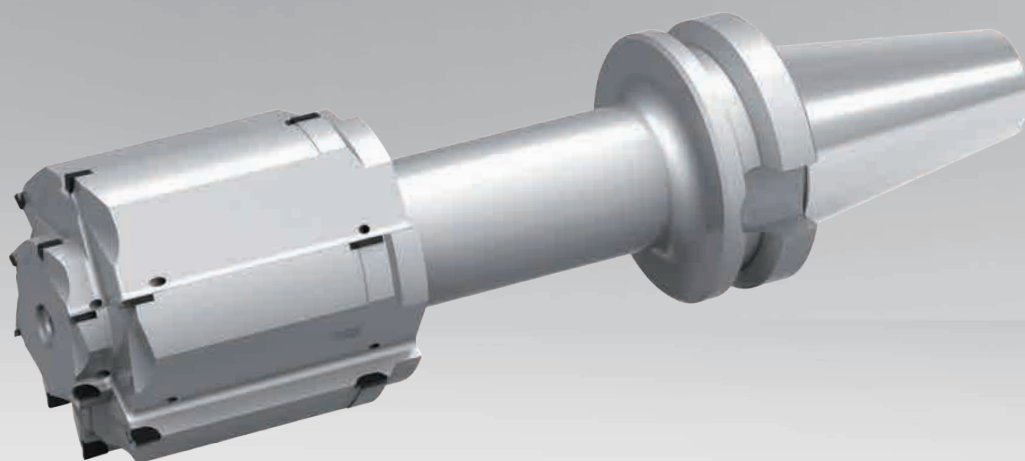
深孔钻铰刀

$n=3500\text{r/min}$
 $fz=0.012\text{mm/z}$



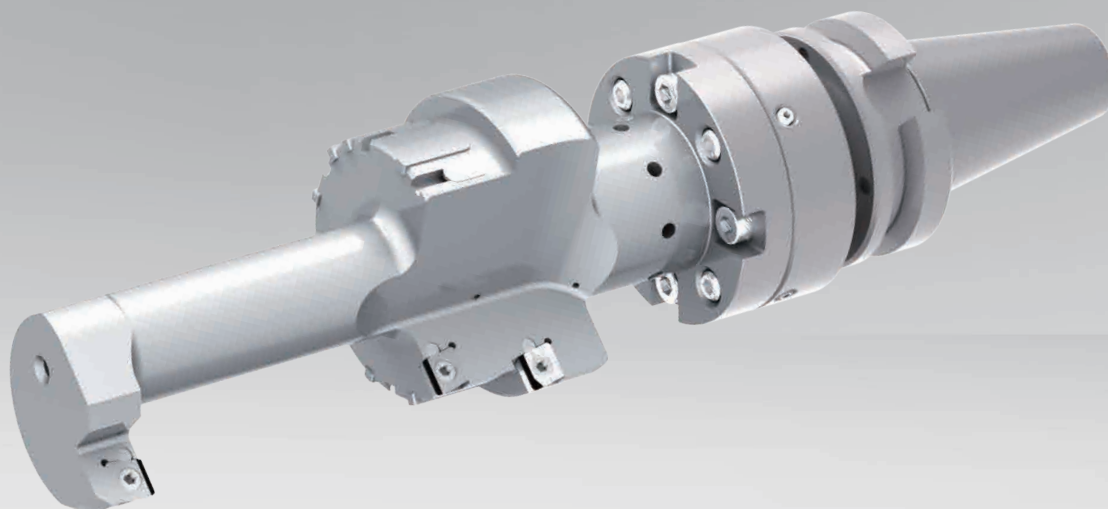
密齿多阶梯铰刀

$n=8000\text{r/min}$
 $fz=0.05\text{mm/z}$



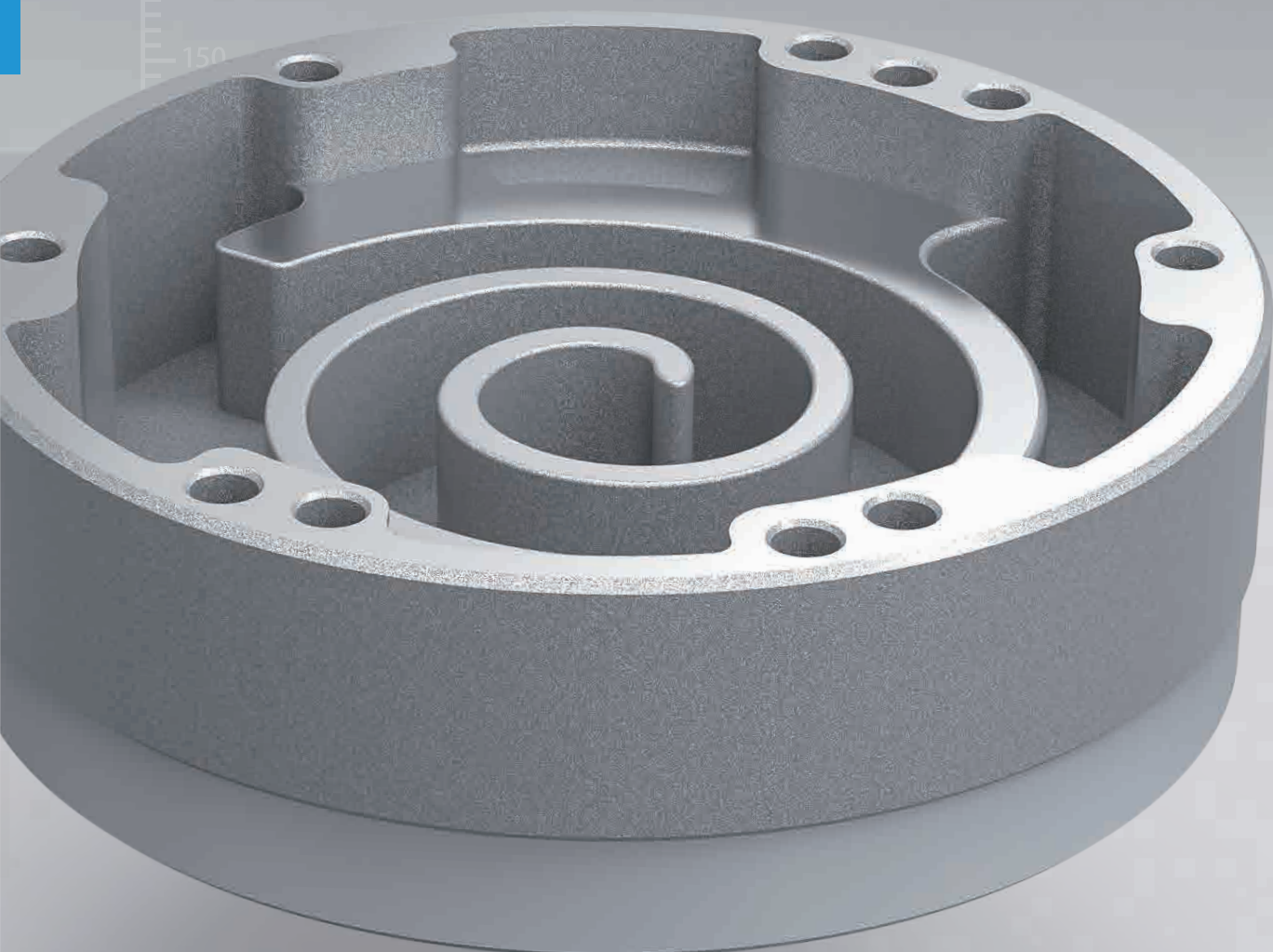
可调精镗刀

$n=5500\text{r/min}$
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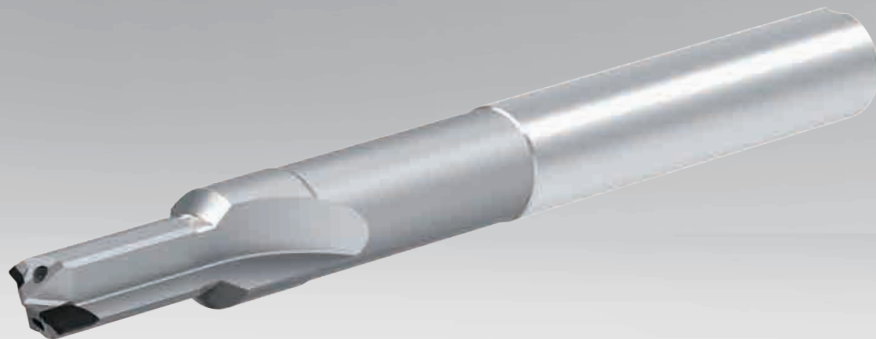
涡旋盘加工

Scroll Plate



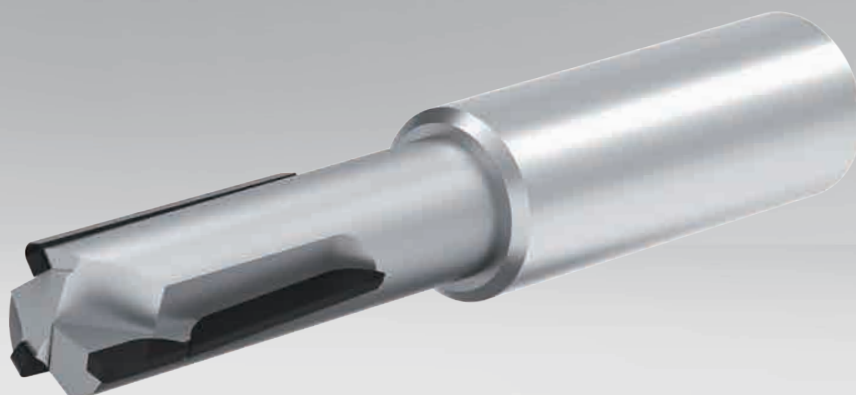
钻铰刀

$n=4500\text{r/min}$
 $fz=0.05\text{mm/z}$



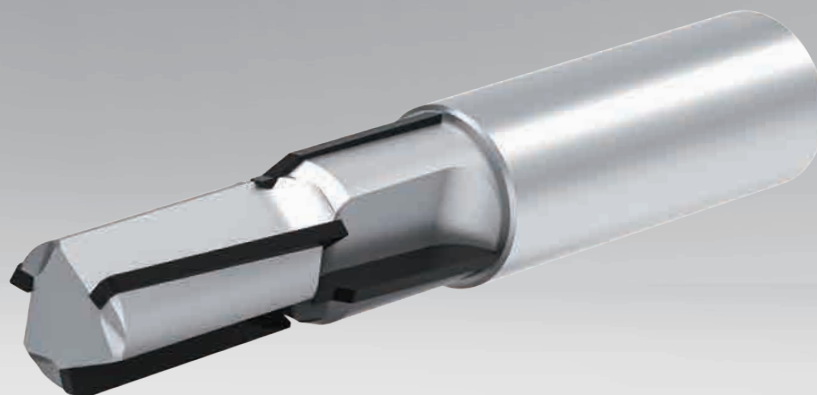
侧面铣刀

$n=39800\text{r/min}$
 $fz=0.10\text{mm/z}$



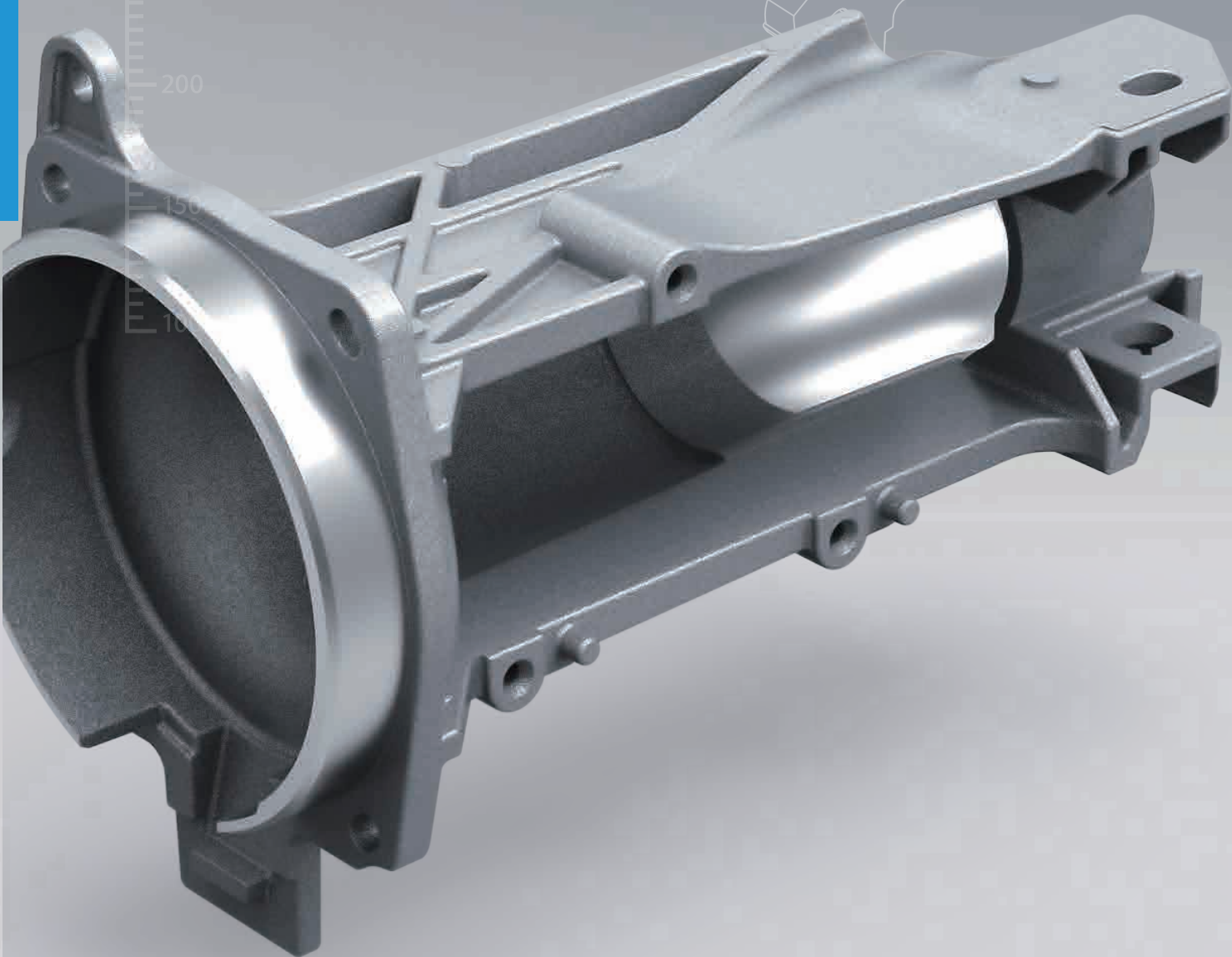
玉米铣刀

$n=39800\text{r/min}$
 $fz=0.05\text{mm/z}$



铝制工件加工

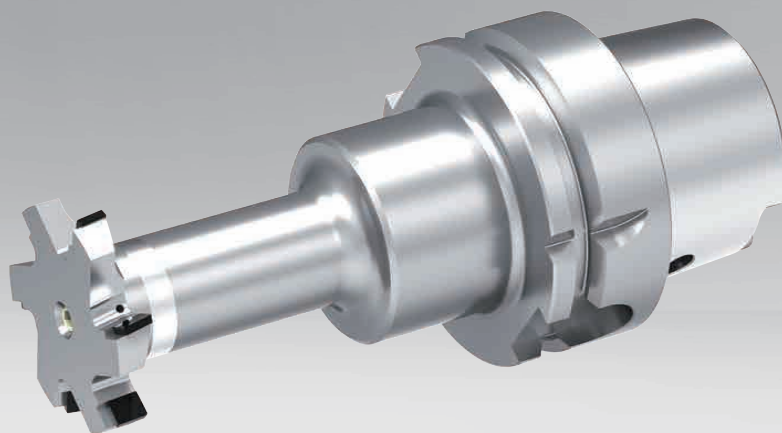
Aluminium Products



Cylinder Head Gear-box Oil Pan Steering Gear Brake Caliper Throttle Valve Scroll Plate **Aluminium Products** Standard/Customized

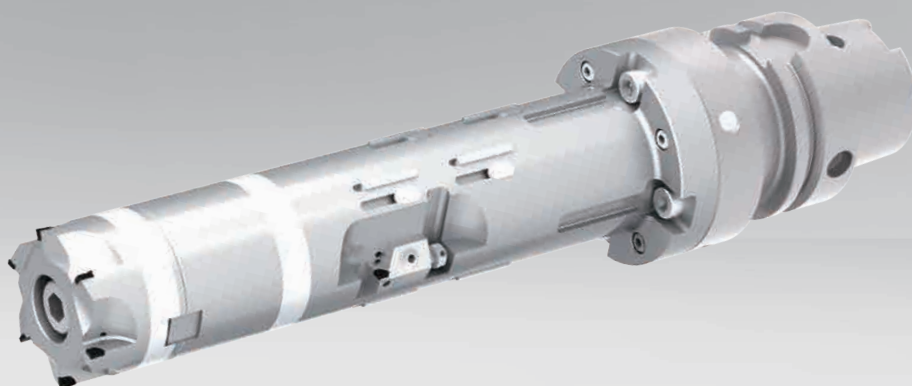
反铣刀

$n=8000\text{r/min}$
 $fz=0.05\text{mm/z}$



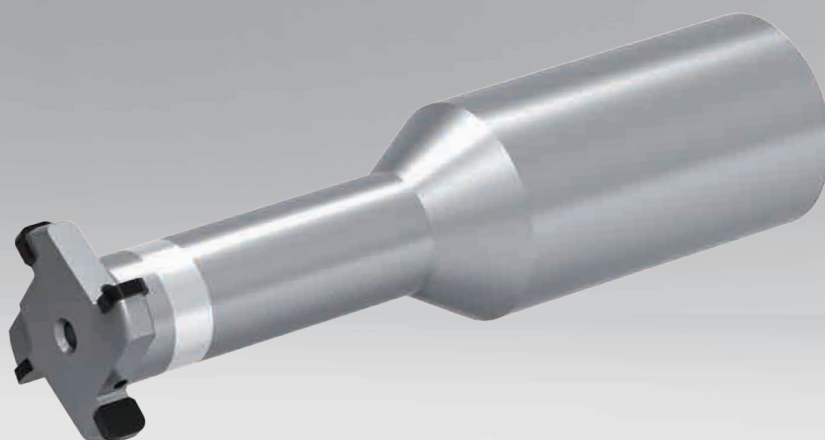
可调精镗刀

$n=8000\text{r/min}$
 $fz=0.035\text{mm/z}$



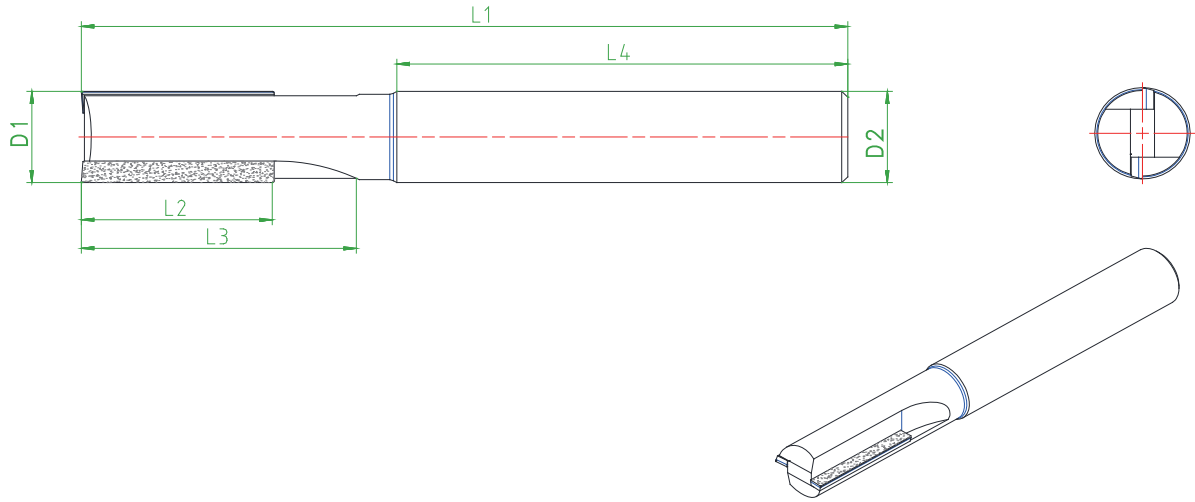
三面刃铣刀

$n=8000\text{r/min}$
 $fz=0.065\text{mm/z}$



标准/定制 PCD刀具

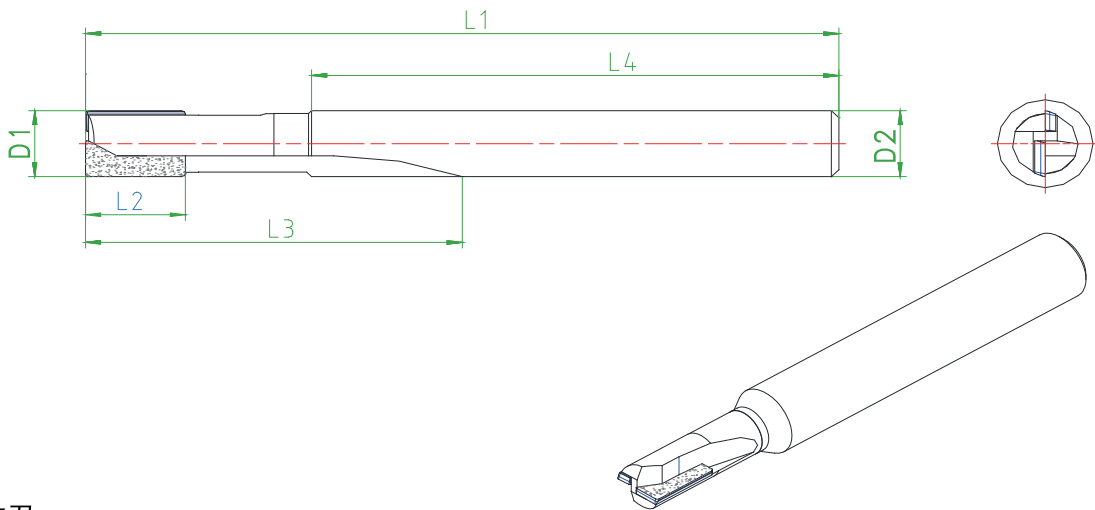
Standard
&
Customized



英制PCD铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|-----------------------------|--------|--------|-------|-------|------|------|-----|----|------|
| RE1CR0000-122R | D4.76*6.35*52*D4.76*35 | 4.76 | 4.76 | 52 | 6.35 | 25 | 35 | 0° | 2 | PCD |
| RE1CR0000-122R | D6.35*12.7*63.5*D6.35*37 | 6.35 | 6.35 | 63.5 | 12.7 | 20 | 37 | 0° | 2 | PCD |
| RE1CR0000-122R | D9.525*25.4*101.6*D9.525*61 | 9.525 | 9.525 | 101.6 | 19.05 | 38.1 | 61 | 0° | 2 | PCD |
| RE1CR0000-122R | D12.7*25.4*102*D12.7*60 | 12.7 | 12.7 | 102 | 25.4 | 37 | 60 | 0° | 2 | PCD |
| RE1CR0000-122R | D19.05*25.4*102*D19.05*61 | 19.05 | 19.05 | 102 | 25.4 | 38.1 | 61 | 0° | 2 | PCD |

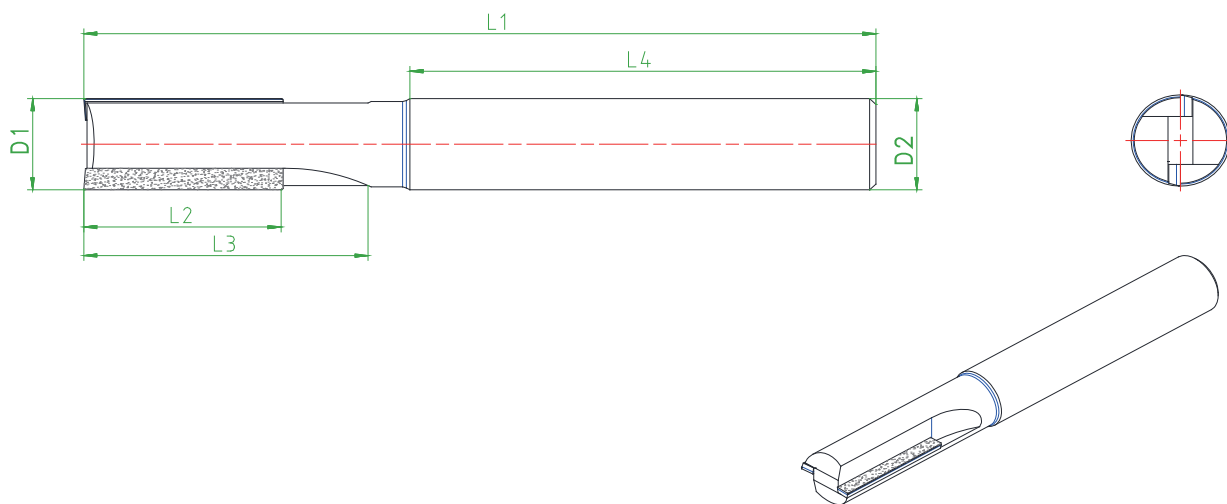
定制尺寸



英制PCD铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|-----------------------------|--------|--------|-------|-------|------|------|-----|----|------|
| RE1CR00CC-122R | D4.76*6.35*52*D4.76*35 | 4.76 | 4.76 | 52 | 6.35 | 25 | 35 | 0° | 2 | PCD |
| RE1CR00CC-122R | D6.35*12.7*63.5*D6.35*37 | 6.35 | 6.35 | 63.5 | 12.7 | 20 | 37 | 0° | 2 | PCD |
| RE1CR00CC-122R | D9.525*25.4*101.6*D9.525*61 | 9.525 | 9.525 | 101.6 | 19.05 | 38.1 | 61 | 0° | 2 | PCD |
| RE1CR00CC-122R | D12.7*25.4*102*D12.7*60 | 12.7 | 12.7 | 102 | 25.4 | 37 | 60 | 0° | 2 | PCD |
| RE1CR00CC-122R | D19.05*25.4*102*D19.05*61 | 19.05 | 19.05 | 102 | 25.4 | 38.1 | 61 | 0° | 2 | PCD |

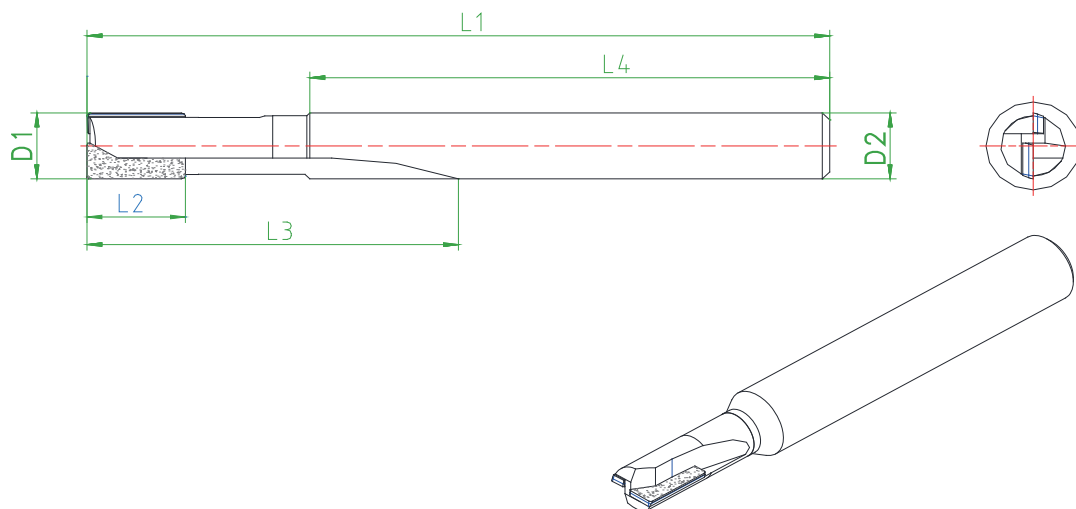
定制尺寸



公制PCD铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|-------------------|--------|--------|------|------|------|------|-----|----|------|
| RE1CR0000-122R | D6*6*50*D6*30 | 6 | 6 | 50 | 4/11 | 20 | 30 | 0° | 2 | PCD |
| RE1CR0000-122R | D8*8*60*D8*30 | 8 | 8 | 60 | 4/11 | 30 | 30 | 0° | 2 | PCD |
| RE1CR0000-122R | D10*10*80*D10*45 | 10 | 10 | 80 | 4/11 | 30 | 45 | 0° | 2 | PCD |
| RE1CR0000-122R | D12*12*100*D12*45 | 12 | 12 | 100 | 4/11 | 40 | 45 | 0° | 2 | PCD |
| RE1CR0000-122R | D16*15*120*D16*55 | 16 | 16 | 120 | 4/11 | 50 | 55 | 0° | 2 | PCD |

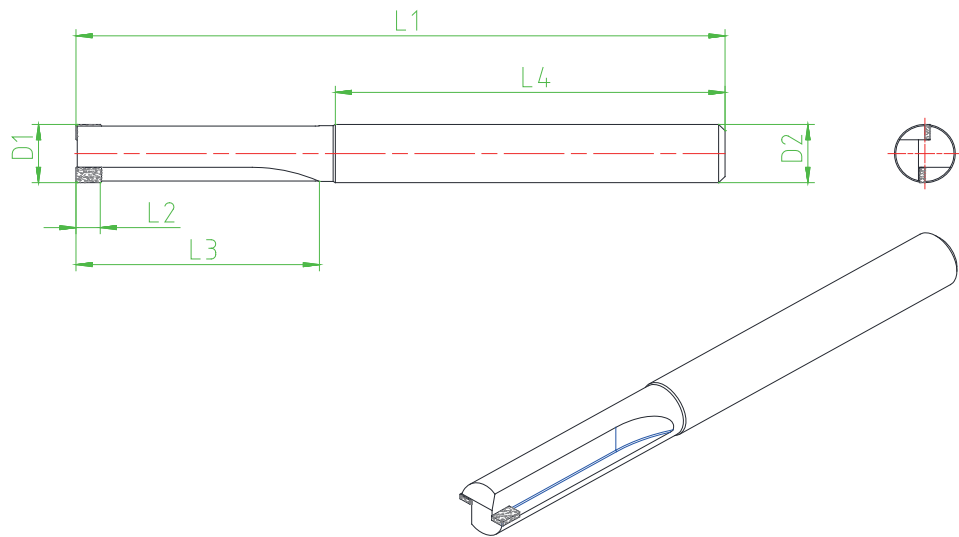
定制尺寸



公制PCD铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|-------------------|--------|--------|------|------|------|------|-----|----|------|
| RE1CR00CC-122R | D6*6*50*D6*30 | 6 | 6 | 50 | 4/11 | 20 | 30 | 0° | 2 | PCD |
| RE1CR00CC-122R | D8*8*60*D8*30 | 8 | 8 | 60 | 4/11 | 30 | 30 | 0° | 2 | PCD |
| RE1CR00CC-122R | D10*10*80*D10*45 | 10 | 10 | 80 | 4/11 | 30 | 45 | 0° | 2 | PCD |
| RE1CR00CC-122R | D12*12*100*D12*45 | 12 | 12 | 100 | 4/11 | 40 | 45 | 0° | 2 | PCD |
| RE1CR00CC-122R | D16*15*120*D16*55 | 16 | 16 | 120 | 4/11 | 50 | 55 | 0° | 2 | PCD |

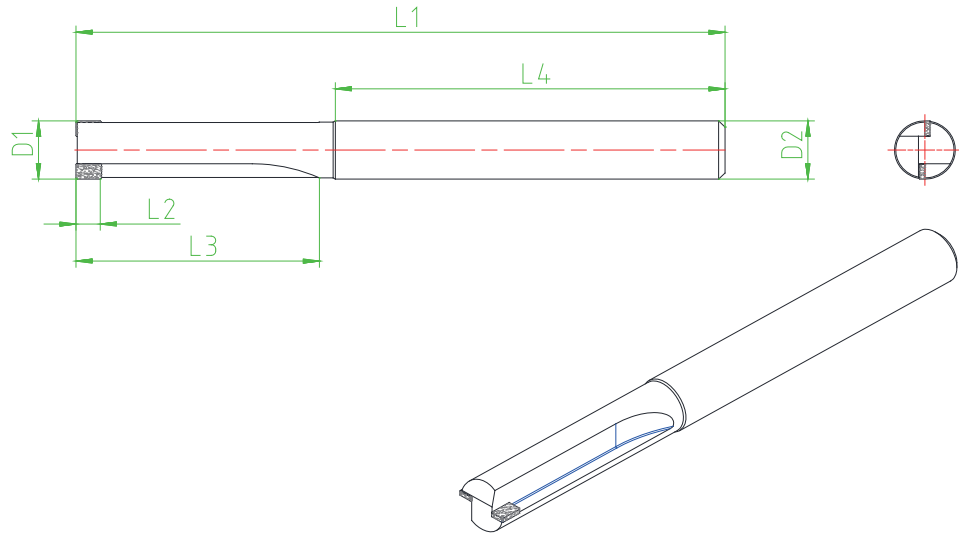
定制尺寸



英制CVDD铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|--------------------------|--------|--------|-------|------|------|------|-----|----|------|
| RE1CR0000-122R | D4.76*6*52*D4.76*35 | 4.76 | 4.76 | 52 | 4 | 25 | 35 | 0° | 2 | CVDD |
| RE1CR0000-122R | D6.35*6*63.5*D6.35*37 | 6.35 | 6.35 | 63.5 | 4 | 20 | 37 | 0° | 2 | CVDD |
| RE1CR0000-122R | D9.525*6*101.6*D9.525*61 | 9.525 | 9.525 | 101.6 | 4 | 38.1 | 61 | 0° | 2 | CVDD |
| RE1CR0000-122R | D12.7*8*102*D12.7*60 | 12.7 | 12.7 | 102 | 4 | 37 | 60 | 0° | 2 | CVDD |
| RE1CR0000-122R | D19.05*8*102*D19.05*61 | 19.05 | 19.05 | 102 | 4 | 38.1 | 61 | 0° | 2 | CVDD |

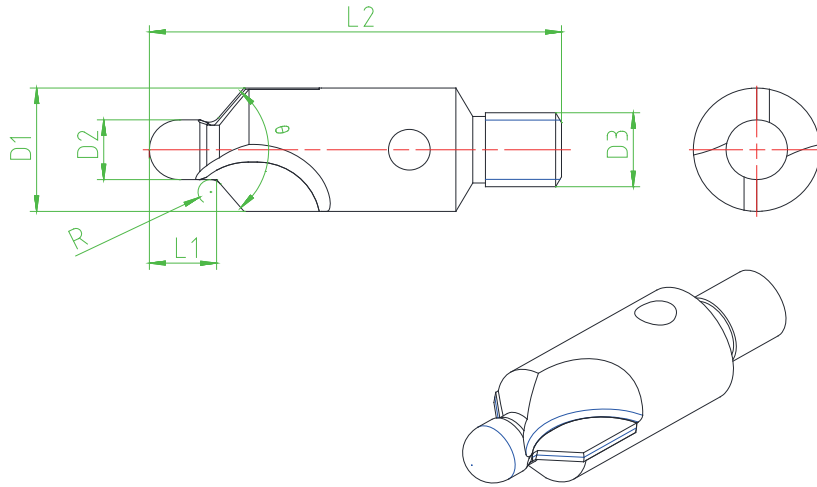
定制尺寸



公制CVDD铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|------------------|--------|--------|------|------|------|------|-----|----|------|
| RE1CR0000-122R | D6*6*50*D6*30 | 6 | 6 | 50 | 4 | 20 | 30 | 0° | 2 | CVDD |
| RE1CR0000-122R | D8*6*60*D8*30 | 8 | 8 | 60 | 4 | 30 | 30 | 0° | 2 | CVDD |
| RE1CR0000-122R | D10*6*80*D10*45 | 10 | 10 | 80 | 4 | 30 | 45 | 0° | 2 | CVDD |
| RE1CR0000-122R | D12*8*100*D12*45 | 12 | 12 | 100 | 4 | 40 | 45 | 0° | 2 | CVDD |
| RE1CR0000-122R | D16*8*120*D16*55 | 16 | 16 | 120 | 4 | 50 | 55 | 0° | 2 | CVDD |

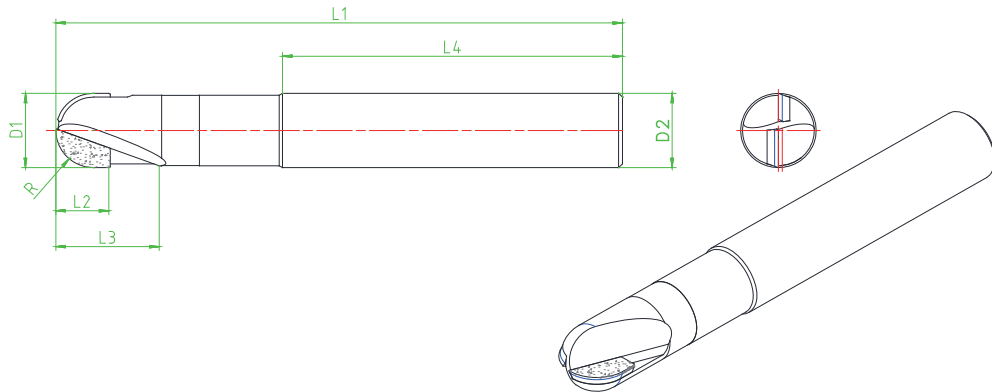
定制尺寸



英制PCD孔口倒角刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 连接螺纹D3 | L1 | L2 | 圆弧R | 孔口角度θ | 刃数 | 刀粒材质 |
|----------------|--------------------------------|--------|--------|---------|-------|------|-------|-------|----|------|
| RP1TRRSPC-122R | D5.1*25.4*D12.7-A100*32.5 | 12.7 | 5.1 | 1/4--28 | 25.4 | 38.1 | 1 | 100 | 2 | PCD |
| RP1TRRSPC-122R | D5.05*7.62*D9.525-A130*25.4 | 9.525 | 5.05 | 1/4--28 | 7.62 | 25.4 | 1 | 130 | 2 | PCD |
| RP1TRRSPC-122R | D4.165*7.62*D9.525-A130*25.4 | 9.525 | 4.165 | 1/4--28 | 7.62 | 25.4 | 0.762 | 130 | 2 | PCD |
| RP1TRRSPC-122R | D7.899*15.24*D15.875-A100*38.1 | 15.875 | 7.899 | 1/4--28 | 15.24 | 38.1 | 1.27 | 100 | 2 | PCD |
| RP1TRRSPC-122R | D6.578*7.62*D13.97-A130*25.4 | 13.97 | 6.578 | 1/4--28 | 7.62 | 25.4 | 1 | 130 | 2 | PCD |
| RP1TRRSPC-133R | D9.525*7.62*D22.225-A130*38.1 | 22.225 | 9.525 | 3/8--24 | 7.62 | 38.1 | 1 | 130 | 2 | PCD |
| RP1TRRSPC-133R | D7.925*7.62*D22.225-A100*38.1 | 22.225 | 7.925 | 3/8--24 | 7.62 | 38.1 | 1 | 100 | 2 | PCD |

定制尺寸



英制PCD球头铣刀

| 型号 | 规格 | 刃部直径D1 | 柄部直径D2 | 总长L1 | 刃长L2 | 槽长L3 | 柄长L4 | 轴向角 | 刃数 | 刀粒材质 |
|----------------|--------------------------|--------|--------|-------|-------|------|------|-----|----|------|
| RE1CR00CC-122R | D4.76*6.35*50*D6.35*30 | 4.76 | 4.76 | 52 | 6.35 | 15 | 30 | 0° | 2 | PCD |
| RE1CR00CC-122R | D6.35*9.525*60*D6.35*35 | 6.35 | 6.35 | 63.5 | 9.525 | 20 | 35 | 0° | 2 | PCD |
| RE1CR00CC-122R | D9.525*12.7*70*D9.525*40 | 9.525 | 9.525 | 101.6 | 12.7 | 25 | 40 | 0° | 2 | PCD |
| RE1CR00CC-122R | D12.7*14.7*80*D12.7*45 | 12.7 | 12.7 | 102 | 14.7 | 30 | 45 | 0° | 2 | PCD |
| RE1CR00CC-122R | D19.05*20.4*91*D19.05*45 | 19.05 | 19.05 | 102 | 20.4 | 35 | 45 | 0° | 2 | PCD |

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- 1、根据客户图纸要求设计生产PCD/PCBN铰刀、铣刀及非标刀具产品；
- 2、根据客户要求，承接整套用刀方案的设计、生产及技术服务；
- 3、替换原有刀具产品，帮助客户优化现有刀具方案以达到提高寿命降低成本的需求；
- 4、承接PCD/PCBN非标刀具产品的修磨、换片等业务。

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提供非标刀具售前服务，对客户现场的工件材料，工装夹具，生产节拍，机床参数等加工工况进行技术调研，为原有产品的优化升级提供可行性方案；

售后服务

提供非标刀具售后技术服务，对客户使用产品的情况进行技术跟踪服务，以更高的尺寸精度，更优的加工效果，更长的使用寿命，更快的生产节拍满足客户的加工要求。



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