## 涡轮机匣(高温合金)

Turbine casing (high temperature alloy)

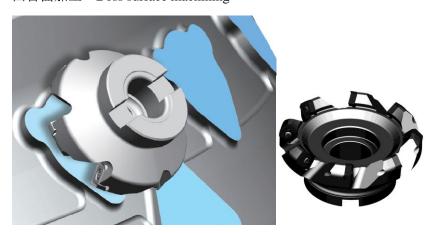


薄壁环形件,刚性差,材料去除量大,加工过程中极易产生变形;尺寸精度高、技术要求严格;内部构形复杂、环形槽区域狭窄,容刀空间狭小;环形槽部位壁薄,壁厚不均匀;材质大多为高温合金,通常用陶瓷车削刀具及数控铣刀来高效去除余量。

Thin-walled ring pieces, poor rigidity, large amount of material removal, prone to deformation during processing; High dimensional accuracy, strict technical requirements; complex internal structure, narrow ring groove area, small space for tool; thin wall of ring groove, with uneven thickness; mostly made of high temperature alloy, usually using ceramic cutting tools and CNC milling cutter to efficiently remove the allowance.

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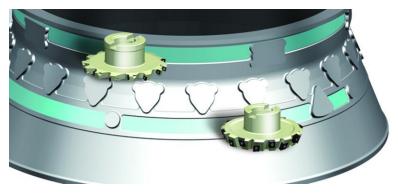
凸台面加工 Boss surface machining



FMA11 系列经济型面铣刀,切削轻快,实现薄壁件凸台的高质量面铣加工。

FMA11 series <u>economy face milling cutter</u>, with soft cutting action, for high quality face milling of thin-walled boss.

槽铣加工 Slot milling



SMP03 刀具所配刀片 MPHT\*-NM 采用压槽结构,精磨周边,锋刃处理,适用于对槽底面平直度要求较低的去粗加工。

MPHT \* - NM insert for SMP03 tool, with groove structure, fine grinding, edge sharpness treatment, for roughing where flatness and straightness of groove bottom are not demanded.

SMP12 <u>刀具</u>所配刀片 CNE\*-NM 采用全磨工艺,槽型结构可根据被加工材质设计,刀尖圆弧可根据要求定制。可获得优异的槽底面平直度,可用于精加工。

CNE \* - NM insert for SMP12 tool, fully ground. Geometry can be designed according to workpiece material and insert nose can be customized. With excellent geometry bottom straightness and flatness, it is suitable for finishing.

三面刃刀具可以根据客户的实际加工需求定制,可变参数有接口形式、刀具直径、切宽、最大切深、加工型面角度、圆弧大小等。

Face and side milling cutter can be customized according to the customer's actual machining requirements. Variable data include interface form, cutter diameter, cutting width, maximum cutting depth, cutting profile angle, nose radius size, etc.







SMP12

## 精铣加工 Finish milling



VSM 不等齿铣刀系列主要用于 S 类材料的侧铣、槽铣及仿形铣削。

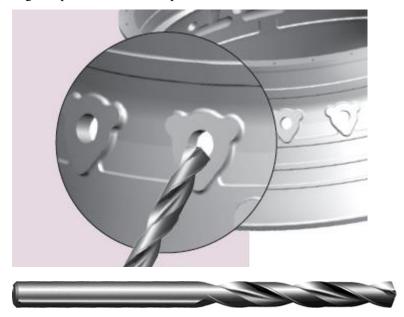
VSM uneven pitch milling series are mainly applied for side milling, slot milling and profile milling in S- materials.

孔加工 Hole making

SD 系列钻头 SD series drill

主切削刃为凸曲线状,切削刃增长,减少单位长度上的载荷,有效地延缓了刀具的磨损速度; 槽前角取负值,刀尖角加大,改善了刀尖处的散热条件。

Main cutting edge is in convex curve shape, with lengthened cutting edge, reducing the load per unit length, effectively slowing down tool wear; Negative rake angle of groove and increased tool angle improve the heat-dissipation conditions of the nose.



车削加工 Turning



<u>陶瓷刀片</u>,优异的抗沟槽磨损性,更大的切削深度,效率更高,<u>刀具</u>寿命更长。 Ceramic inserts, with excellent groove wear resistance, larger cutting depth, higher efficiency and longer tool life.

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