

翰默 HAIMER 安全锁应用实例 SAFE-LOCK® APPLICATION EXAMPLES



安全锁：在工业密封技术领导企业中的应用

Safe-Lock: Application at a leading provider in the industrial sealing technology

问题

- 刀具从高精度刀柄中被拔出
- 只能使用侧固式刀柄

Problem:

- Tool pull-out at high precision tool holder
- Only Weldon holders could be used

目标

- 在加工中使用高精度刀柄并确保工艺可靠性

Target:

- Process reliability in machining with highly precise tool holding

粗加工不锈钢

工件： 垫片环
材料： 1.4571 (VA)
机床： Mazak
接口： SK 40
刀具： Ø 16 mm 的硬质合金多刃立铣刀

Application: Roughing VA Steel

Workpiece: Gasket ring
Material: 1.4571 (VA)
Machine: Mazak
Interface: SK 40
Tool: Solid carbide, variable flute end mill, Ø 16 mm

加工参数:

切削深度： 轴向切深 (ap) 19.8 mm
 径向切宽 (ae) 槽 29.8 mm
转速： 1194 rpm
切削线速度 (vc): 60 m/min
每转进给 (fz): 0.2 mm/r

Application parameters:

Cutting Depth: axial (ap) 19,8 mm
 radial (ae) Slot 29,8 mm
RPM: 1194 rpm
Cutting speed (vc): 60 m/min
Feed rate/flute (fz): 0,2 mm/r

结果

- 用侧固刀柄，每一把刀具可切削 50-70 件
- 用含安全锁的刀柄，每一把刀具可切削 150 件
- 加工过程非常流畅并且无振动

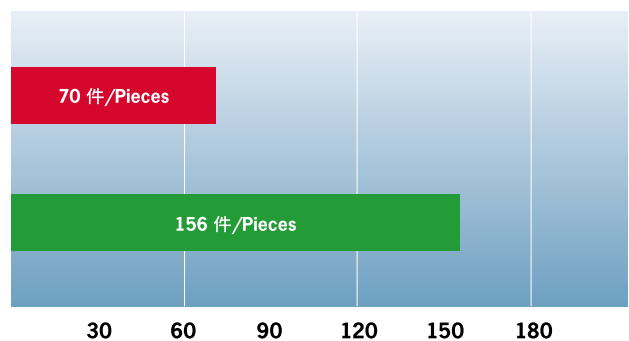
Result:

- With Weldon holder and tooling 50-70 parts per cutter
- With Safe-Lock 150 parts per cutter and no pull-out issue
- Machine runs much smoother with less vibrations

测试/Test:

侧固刀柄/Weldon Holder
Ø 16 mm, 长度/Length A = 80 mm

翰默HAIMER带安全锁的强力热缩刀柄/
HAIMER Safe-Lock Power Shrink Chuck 40.445.16.37,
长度/Length A = 65 mm



测试结果：刀具寿命延长了86件，增长率超过122%

Test result: In same time 86 pieces higher output i.e. increase by 122%