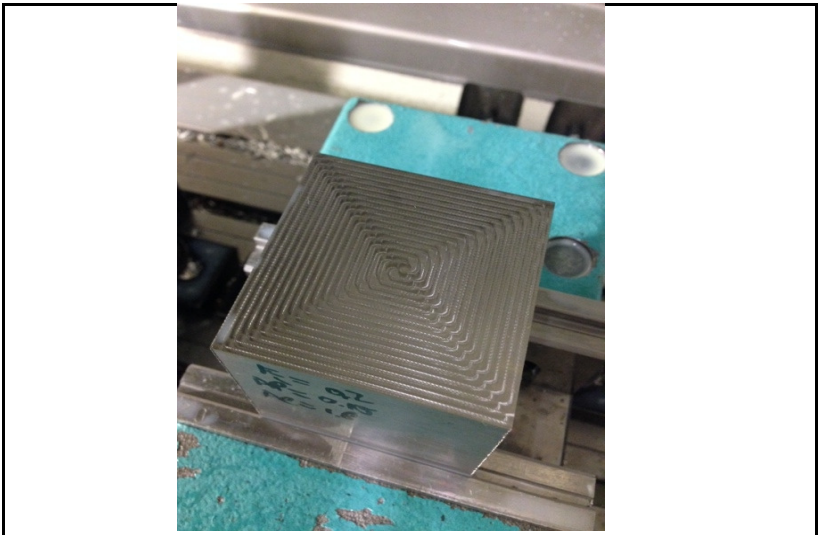


Test report no: 003-14

| | | | |
|--------------------|-------------------------------------|--------------|-------------------------------------|
| Machine | Mikron VCP 600 | | |
| Spindle type | Step-Tec | | |
| Max RPM | 20.000 | | |
| Power Kw | 18 KW | | |
| Cutter holder | collet chuck | | |
| Workpiece material | Titanium grade 5 | | |
| Hardness | | | |
| Application | | | |
| Side milling | <input checked="" type="checkbox"/> | Up-milling | <input type="checkbox"/> |
| Slotting | <input type="checkbox"/> | Down-milling | <input checked="" type="checkbox"/> |
| Profiling | <input type="checkbox"/> | Ramping | <input type="checkbox"/> |
| Plunging | <input type="checkbox"/> | Circular | <input type="checkbox"/> |



| | |
|----------------------|-------|
| Cutter supplier | |
| Cutter description | |
| Cutter diameter eff. | Ød mm |
| Number of teeth | z |
| Carbide grade | |

| Test 1 | | Test 2 | |
|--------------------------|--|--------|--|
| van Hoorn Carbide | | | |
| VHDR 4 060 080 06 03 L12 | | | |
| 6 | | | |
| 4 | | | |
| 3 | | | |

| Cutting conditions | |
|---------------------|------------------------|
| Cutting speed | V _c m/min |
| Revolution | n rpm |
| Feed per tooth | f _z mm |
| Table feed | V _f mm/min |
| Depth of cut | a _p mm |
| Width of cut | a _e mm |
| Length of cut | L mm |
| Chip removal rate | Q cm ³ /min |
| Chip thickness | Hm mm |
| Coolant type | |
| Coolant pressure | Bar |
| Cutting time / comp | T _{comp} min |
| Toollife | T _{total} min |
| Power consumption | P Kw |
| Edge wear | V _b mm |
| Successful | |

| | |
|-------------------------------------|--------------------|
| 100 | |
| 5.305 | |
| 0,200 | |
| 4.244 | |
| 0,15 | |
| 1,8 | |
| 1,15 | |
| 0,10954 | |
| dry / air / minimum lub. / emulsion | |
| Internal | External |
| | |
| | |
| | |
| | |
| Yes / Average / No | Yes / Average / No |

Remarks
milling of a block titanium 60x60 spiral inwards

Test has a good result. No burrs on the product, surface finish is good. The sound was good.