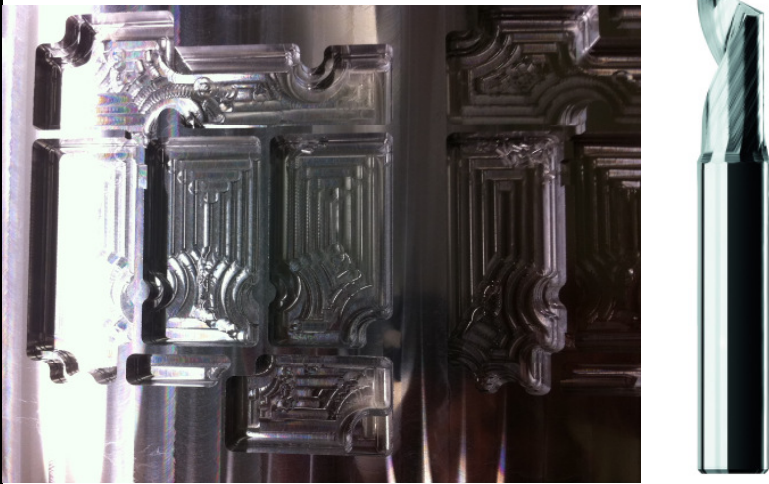


Test report no: 007-12

| | | |
|--------------------|-------------------------------------|---------------------------------------|
| Machine | Datron M10 Pro | |
| Spindle type | | |
| Max RPM | 40.000 | |
| Power Kw | | |
| Cutter holder | Collet Chuck | |
| Workpiece material | 3.2381 | |
| Hardness | AISI10Mg | |
| Application | | |
| Side milling | <input checked="" type="checkbox"/> | Up-milling <input type="checkbox"/> |
| Slotting | <input checked="" type="checkbox"/> | Down-milling <input type="checkbox"/> |
| Profiling | <input type="checkbox"/> | Ramping <input type="checkbox"/> |
| Plunging | <input checked="" type="checkbox"/> | Circular <input type="checkbox"/> |

Sketch



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

| Test 1 | Test 2 |
|--------------------------|--------------------------|
| van Hoorn Carbide | van Hoorn Carbide |
| VHAE 1 060 050 06 10 | VHAE 1 060 050 06 10 |
| 6 | 6 |
| 1 | 1 |
| 10 | 10 |

| 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 | H _m 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 |

| | |
|---|---|
| 716 | 716 |
| 38.000 | 38.000 |
| 0,150 | 0,150 |
| 5.700 | 5.700 |
| 2 | 6 |
| 4 | 4 |
| 45,60 | 136,80 |
| 0,12247 | 0,12247 |
| dry / air / <u>minimum lub</u> / emulsion | dry / air / <u>minimum lub</u> / emulsion |
| Internal / <u>External</u> | Internal / <u>External</u> |
| 5 Min | 2M40S |
| ~10% | 45% |
| not visible | not visible |

Remarks

Cooling with Ethanol, Mist equipment.

Test 1. Starting values, same as with competitor endmill.

Test 2. Increased values, up to 3 times more Material Removal Rate.