# Cutting protocol milling

Company: _____

Street: _____

City: _____

Administrator: _____

Machine: _____ P: _____ [kW]

Type: _____ n(s): _____ [min-1]

Tool arbor: _____ $V_M$: _____ [mm/min]

| Workshop no.: DIN des.: | | | | | | Date: Analysis [%]: | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C | Si | Mn | P | S | Cr | Ni | Mo | V | W | | |
| | | | | | | | | | | | |
| N/mm² | | | HB | | | HV | | | HRC | | |
| | | | | | | | | | | | |

CNC controller

| Test | Current situation | Test 1 | Test 2 | Test 3 |
|---|---|---|---|---|
| **Tool** | | | | |
| Machining conditions | | | | |
| Manufacturer | | | | |
| Cutter type | | | | |
| Arbor | | | | |
| Overhang | | | | |
| Cooling (air/water) | | | | |
| **Cutting material** | | | | |
| Cutting material type | | | | |
| Manufacturer | | | | |
| Cutting material designation | | | | |
| Coating | | | | |
| **Cutting data** | | | | |
| $V_c$ [m/min] | | | | |
| $V_f$ [mm/min] | | | | |
| n(s) [$min^{-1}$] | | | | |
| $D_c$ [mm] | | | | |
| $f_z$ [mm/tooth] | | | | |
| $a_p$ [mm] | | | | |
| $a_e$ [mm] | | | | |
| T [min] | | | | |
| **Results** | | | | |
| Number of runs | | | | |
| Tool life [min] | | | | |
| Tool life [m] | | | | |
| Chip volume [$cm^3$/min] | | | | |
| Power consumption [kW] | | | | |
| Assessment* | 1 2 3 4 5 6 7 8 9 10 | 1 2 3 4 5 6 7 8 9 10 | 1 2 3 4 5 6 7 8 9 10 | 1 2 3 4 5 6 7 8 9 10 |
| | | | | |
| Sketch/comment: | | | | |

*1 very poor, 5 satisfactory, 10 very good