### Parts specification
- Material: AlMgSi1Wa
- Previous operation turned
- Dimensions: $Ø$ 82 x 7.85 mm

### Premachined condition
- Base size: 7.85 mm
- Surface: turned
- Flatness: 0.02 mm
- Parallelism: 0.03 mm

### Results
- Tolerance in dimension: ± 2 μ
- Cpk: 1.33
- Ra: 0.08 μ
- Rz: 1 μ
- Flatness: 0.4 μ
- Parallelism: 1 μ
- Surface optical: mat, lapped

### Process specification
- Machine: FLM 1000
- Working wheel: cast iron
- Stock removal: 20 μ
- Pieces per load: 30
- Cycle time without handling: 20:00 min.
- Lapping compound: AWS-SIC500
LAPPING ON FLM 750

Parts specification
Material       cast iron, coated
Previous operation ground
Dimensions     ⌀ 150 mm

Premachined condition
used piece

Process specification
Machine       FLM 750
Working wheel  Multi metal
Pieces per load 3
Cycle time without handling 6:00 min.
Rinsing agent  Diamond 2-4

Results
Ra             0.02 μ
Flatness      0.0003 μ
Surface optical: mat, lapped
LAPPING ON FLM 750

Parts specification
Material: cast iron, coated
Previous operation: grind
Dimensions: \( \varnothing \) 120 mm

Premachined condition
used piece

Process specification
Machine: FLM 750
Working wheel: Multi metal
Pieces per load: 3
Cycle time without handling: 2:00 min.
Rinsing agent: Diamond 2-4

Results
Ra: 0.01 \( \mu \)
Flatness: 0.0003 \( \mu \)
Surface optical: mat, lapped
# LAPPING ON FLM 750

## Parts specification
- **Material**: cast iron
- **Previous operation**: ground
- **Dimensions**: Ø 80 mm

## Premachined condition
- **used piece**

## Process specification
- **Machine**: FLM 750
- **Working wheel**: Multi metal
- **Pieces per load**: 9
- **Cycle time without handling**: 3:00 min.
- **Rinsing agent**: Diamond 2-4

## Results
- **Ra**: 0.01- 0.02 μ
- **Flatness**: 0.0003 μ
- **Surface optical**: mat, lapped
LAPPING ON FLM 750

Parts specification
Material: stainless steel
Previous operation: ground
Dimensions: $\varnothing$ 60 mm

Premachined condition
used piece

Process specification
Machine: FLM 750
Working wheel: Multi metal
Pieces per load: 18
Cycle time without handling: 3:00 min.
Rinsing agent: Diamond 2-4

Results
Ra: 0.01-0.02 $\mu$
Flatness: 0.0003 $\mu$
Surface optical: mat, lapped
LAPPING ON FLM 1000

Parts description
Material  stainless steel
Previous operation  -
Dimensions  Ø 210 x Ø 194 x 2.8 mm

Premachined condition
Base size  -
Surface  -

Results
Tolerance in dim.  -
CpK  -
Ra  -
Flatness  0.0005 mm
Parallelism  -
Surface optical:  -

Process specification
Machine  FLM 1000
Working wheel  lapping wheel
Stock removal  -
Pieces per load  3
Cycle time without handling  -
Rinsing agent  -
LAPPING ON FLM 1000

Parts description
Material 31CrMoV9+QT
Dimensions D = 31.9 x L = 62.1 mm

Premachined condition
Base size 62,090 – 62,080
Surface turned on a lath

Process specification
Machine FLM 1000
Working wheel Cast iron, grooved
Pieces per load 72 pcs
Cycle time without handling approx. 38:00 min.
Rinsing agent Oil

Results
Tolerance in dim. - 150 μ
Cpk >1.00
Ra < 0.07 μ
Flatness 6 – 8 μ (convex)
Surface optical: lapped and rectified
FLATHONING ON FLM 1000

Parts description
Material sintered metall
Previous operation turned on a lathe
Dimensions Ø 125 x 22 mm

Premachined condition
Base size 22.1 mm
Surface turned on a lathe

Process specification
Machine FLM 1000
Working wheel D 46
Stock removal 100 μ
Pieces per load 24
Cycle time without handling 4:00 min.
Rinsing agent Oil

Results
Tolerance in dim. 2.5 mm, ± 40 μ
Cpk 1.33
Ra 0.4 μ
Flatness 10 μ
Parallelism 30 μ
Surface optical: bright, cross hatch