

Improvement of Surface and Geometry



**Surface Structures
in μ -Precision by means of
Bandfinishing-Technology**

modular • flexible • economical • universal

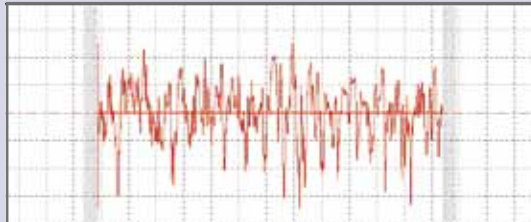
SUPERFINISH
INNOVATION 

TECHNOLOGY Bandfinishing

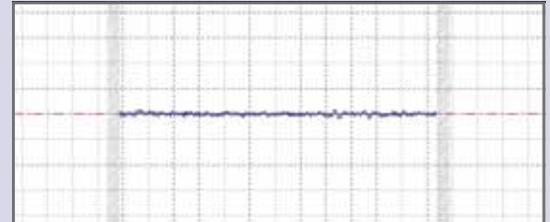
automotive industry / bearing industry / medical industry / hydraulic & pneumatic industry

Surface Qualities

- Roundness
- Roughness
- Waviness
- Straightness
- Cylindricity
- Parallelism



Before Microfinish
Rz 1 μm
Tp < 20 % Cref = 5 %



After Microfinish
Rz 0,05 μm
Tp > 99 % Cref = 5 %

Surface Structures

- cross-grinding
- spiral-free
- radial lead
- circumferential



cross-grinding



radial lead /
spiral-free



circumferential

Shapes of Workpiece

- crowned
- spherical
- cylindrical
- conical



crowned



spherical



cylindrical



conical

Tools

- Tapes
- Honing Stones
- Pastes
- Finishing Oil



Tapes



Honing Stones



Pastes



Finishing Oil

PRODUCTS Bandfinishing

camshafts / balance shafts / drive shafts / pump gears / cups & balls / tappets

Standard device SL 50

Technical datas:

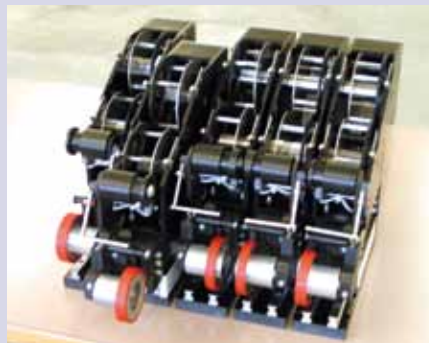
- Pressing-on move: 30 mm
- Pressing-on force: 5–25 kg
- Automated tape feed: 15–100 mm/min.
- Oscillation rate: 300–1.400 strokes/min.
- Amplitude: 0,2–4,0 mm
- Weight: 12 kg



Cassette Device SL 50

Technical datas:

- Pressing-on move: 40–100 mm
- Pressing-on force: 5–25 kg
- Automated tape feed: 15–100 mm/min.
- Oscillation rate: 300–1.400 strokes/min.
- Amplitude: 0,2–4,0 mm
- Stackable side-by-side, pitch: 80 mm
- Weight: 13 kg



Superfinisher CUBE 650

Technical datas:

- Workpiece length: max. 750 mm
- Workpiece diameter: max. 100 mm
- Traversing move of finisher: max. 650 mm
- Number of finishers taking in: max. 4
- Spindle velocity: 300–3000 U/min.
- Grooving machine operation: yes
- Quick change-over time: <2 min.
- Parts tensioning between mandrel-tips



Other Products

- Electric powered Stone-finishing Device
- Cassette Device KG 100
- Filter Lorry FG 70 + FG 150

Other machine platforms ...



... by Thielenhaus Technologies



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