

Improvement of Surface and Geometry



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

modular • flexible • economical • universal

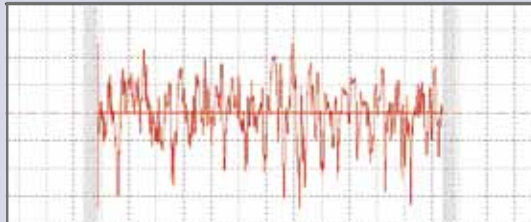
SUPERFINISH
INNOVATION 

TECHNOLOGY Bandfinishing

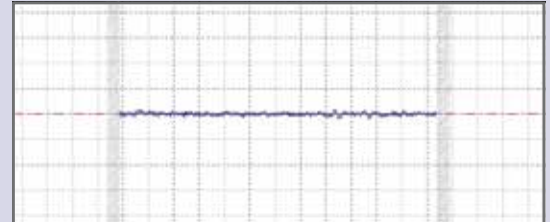
automotive industry / bearing industry / medical industry / hydraulic & pneumatic industry

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



Thielenhaus Technologies GmbH
Schwesterstrasse 50
D-42285 Wuppertal
Phone: +49 (0) 202 - 481-0
Fax: +49 (0) 202 - 450 445
info@thielenhaus.com
www.thielenhaus.com



Thielenhaus Microfinish Corp.
42925 W. Nine Mile Road
Novi, MI 48375, U.S.A.
Phone: +1 (248) 349 - 9450
Fax: +1 (248) 349 - 9457
info@thielenhaus.us
www.thielenhaus.us



Thielenhaus Machinery (Shanghai)
Jiangnan Dong Lu 92, Building D
Songjiang Industrial Zone
201613 Shanghai P.R. China
Phone: +86 (21) 6775 - 3157
Fax: +86 (21) 3352 - 8767
info@thielenhaus.cn
www.thielenhaus.cn



Superfinish Innovation AG
St. Gallerstrasse 52
CH-9548 Matzingen
Phone: +41 (0)52 376 26 20
Fax: +41 (0)52 376 26 19
info@superfinish.ch
www.superfinish.ch

THIELENHAUS
TECHNOLOGIES

SUPERFINISH
INNOVATION μ