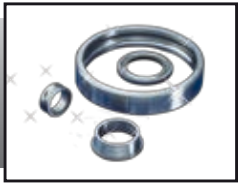


HYPER FINISH

THIELENHAUS
MICROFINISH

The Revolution in Superfinish Technology



Benefit from higher quality and shorter machining times!

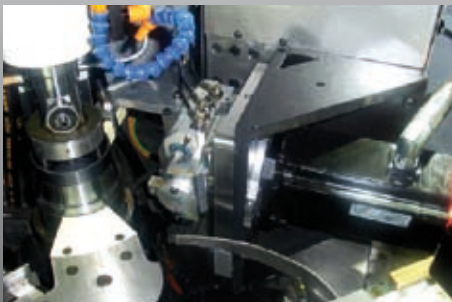
With the new Thielenhaus **HyperFinish Technology** you can now reduce your costs and still achieve higher workpiece qualities. This is a result of drastically reduced machining times, which in many cases permit single-station machining solutions for tasks which used to require two stations.

High-Tech: High Frequency Tool Oscillation

HyperFinish overlaps the conventional Superfinish oscillation with a second, high frequency oscillation with up to 3,600 double-strokes per minute (60 Hz). In this manner your stock removal is greatly accelerated. In addition, the tool kinematics permit optimization of other parameters, so that you can achieve higher work piece qualities.

Your Benefits:

- ✓ Up to 35% shorter machining times
- ✓ Fewer machining stations required:
up to 30% reduced investment and
lower operating costs
- ✓ Improved results for roundness and
fine-waviness
(depends on workpiece and task)

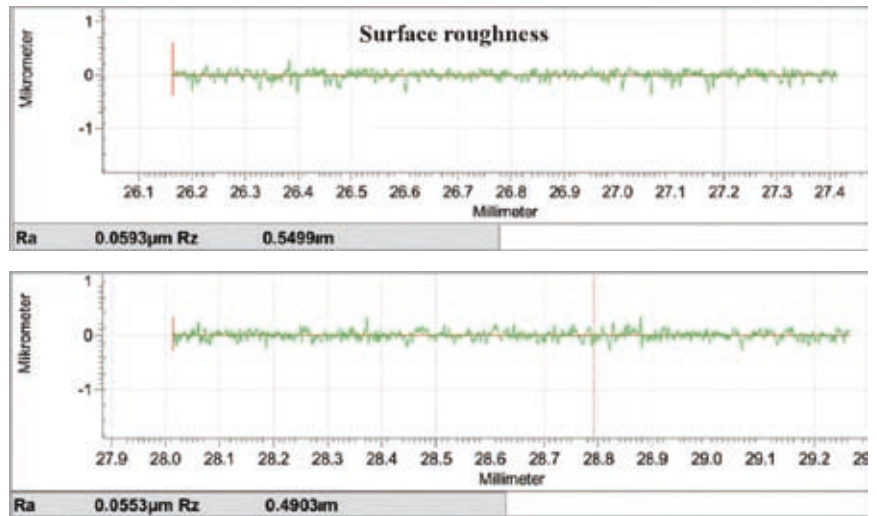


Watch a demo video using the
QR code or click the "HyperFinish"
banner on www.thielenhaus.us



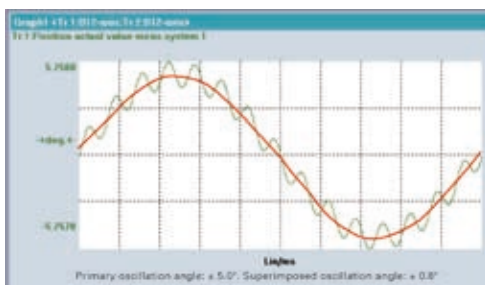
Surface

Surface roughness after conventional Superfinish (top) and after **HyperFinish** (bottom) of an anti-friction bearing inner ring with a 50 mm bore. With a target of 0.05 μm , the machining time is 4 seconds (20%) shorter with HyperFinish. This is especially due to the higher rate of stock removal.



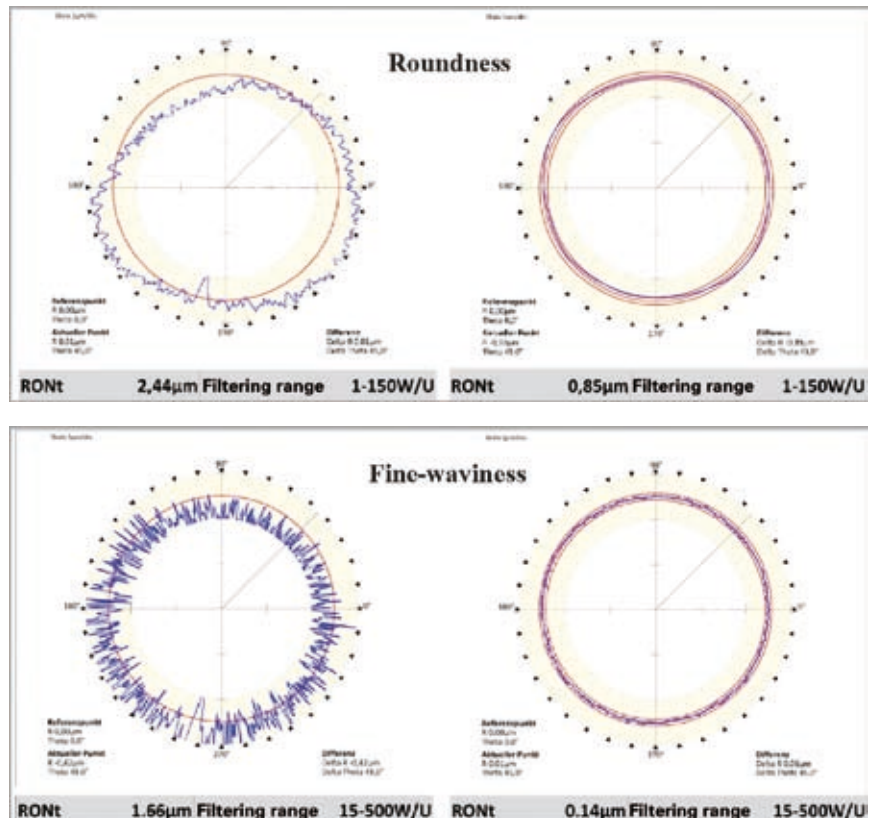
Geometry

Roundness and fine-waviness before (left) and after (right) **HyperFinish** in a single-step operation. These excellent results can only be achieved with conventional Superfinish in two or more steps.



— HyperFinish oscillation
— Conventional oscillation

Primary oscillation angle: $\pm 5.0^\circ$
Superimposed oscillation angle: $\pm 0.8^\circ$



Do you need help with a machining task?
Contact us!

We look forward to challenging new machining tasks.

Stay informed about HyperFinish:

Send an e-mail with the subject heading "HyperFinish" to info@thielenhaus.com and we will keep you posted about new developments in the fields of HyperFinish, Microfinish/Superfinish.

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