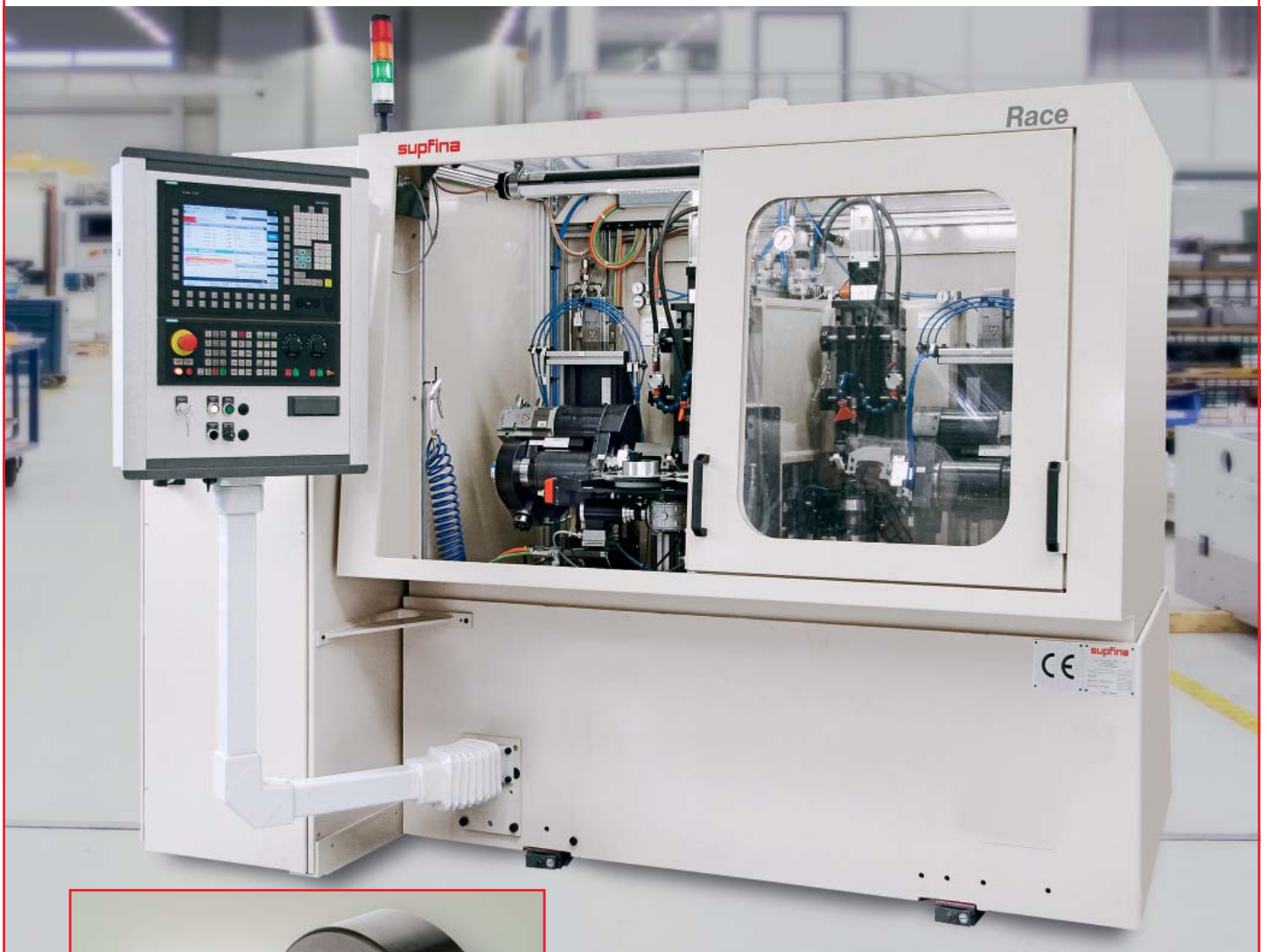


Superfinishing-Machine

Supfina Race 705 • Supfina Race 715



**Machining of
roller bearings**



Superfinish

Machining of roller bearings inner and outer rings

The Supfina Race 705 and Race 715 are designed for the Superfinishing operation on raceways of roller bearing inner and outer rings up to 160 mm in diameter.

The Race 705 and Race 715 cater to different diameter ranges. While the Supfina Race 705 can machine rings of up to 90 mm diameter, the Race 715 covers a range of up to 160 mm.

Workpieces:

- Cylindrical roller bearings
- Tapered roller bearings
- Needle roller bearings

The track record and benefits of the well established Supfina 725 for larger ring diameters have been converted into this newly developed machine concept.



supfina Race 705

Working stations:	2
Workpiece diameters:	28–90 mm
Workpiece width:	up to 45 mm
Taper angle:	0–30°

supfina Race 715

Working stations:	2
Workpiece diameters:	62–160 mm
Workpiece width:	up to 65 mm
Taper angle:	0–30°

- 2 operating stations
- 2 Superfinishing units
- Vertical workpiece spindles
- NC positioning of the Superfinishing units
- NC-controlled spindle drives
- Variable centering systems
- Automatic loading and unloading
- Multi-step process with automatic sequence
- State-of-the-art control system
- Integrated control cabinet
- Multi-range tooling
- High productivity due to minimized loading times
- Low tooling cost
- Set-up times < 15 minutes
- Operator friendly HMI design
- Optimum accessibility
- Small footprint
- Swivel unit for tapered roller bearing operation
- Superimposed stroke for crowned / logarithmic raceways
- Optional attachment for flange operation



The modular structure of the machines supports fast and easy customization. Depending on the combination of available options, set-up times of < 15 minutes can be achieved. Setting up the machine for a new part is accomplished with just a few, easily manageable tasks.

Hardly any workpiece-dependent tooling is required, a typical feature of all Supfina machines. The horizontally arranged feeding system supplies the parts to the vertical spindles.

In combination with the actively controlled workpiece handling, damages to the parts and wear on the machine are avoided.

The central part handling grips, lifts and transports 3 bearing rings simultaneously. Compared to conventional systems, the loading time is reduced by more than 50 %.

The two operating stations are located at the front side of the machine and are readily accessible.

The workflow can be easily monitored by the operator. State-of-the-art electronic controls support the machine functions during setting, manual and automatic mode. To guarantee reproducible Superfinishing results and consistent quality parameters, the machine offers extensive memory for the technological know-how.

Tapered roller bearing inner ring with simultaneous flange operation



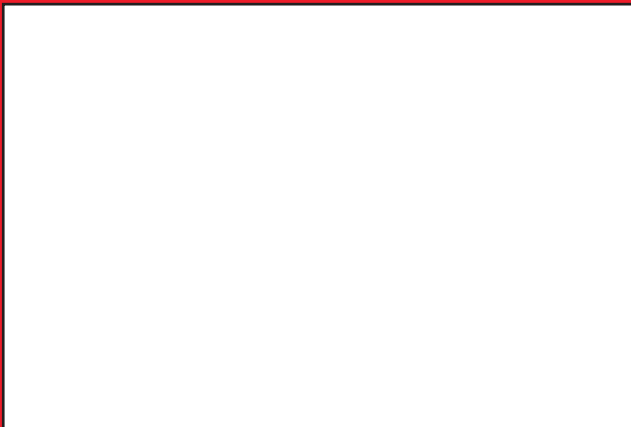
Ring outer Ø approx.: 140 mm
 Raceway Ø approx.: 120 mm
 Raceway width approx.: 38 mm
 Ring width: 50 mm
 Material: hardened bearing steel

Roughness Ra raceway: < 0.08 µm
 Roughness Ra flange: < 0.08 µm
 Roundness: < 1.5 µm



With locations in America and Asia and over 50 distributors worldwide we can offer customers comprehensive global service.

Surface Finishing Systems
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