

Superfinishing-Machine

Supfina RaceFlex 725-727



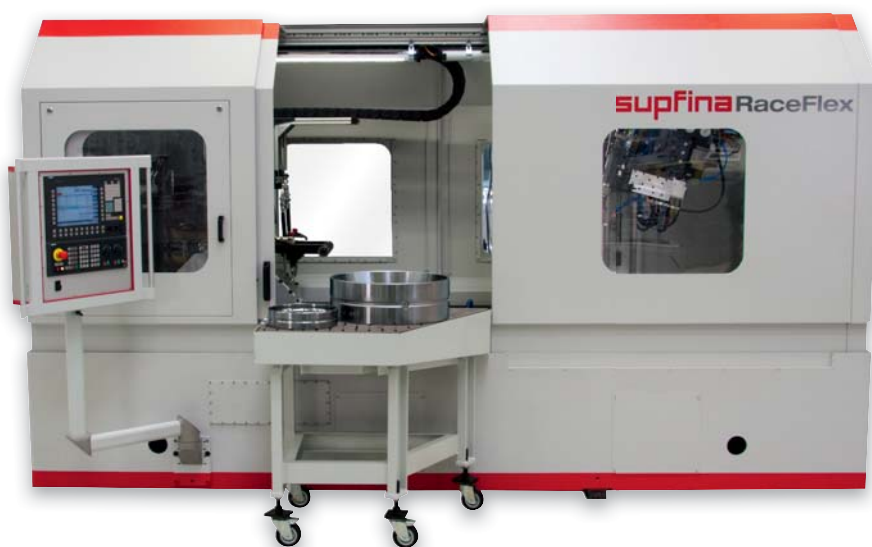
**Machining of ball bearing
and roller bearing**



Superfinish

Machining of ball bearing and roller bearing inner and outer rings

- NC controlled rotary oscillator to produce the desired surface (plateau)
- NC controlled, infinitely adjustable oscillating angle / amplitude optimized for the respective cycle
- Automatic infinitely adjustable contact angle
- NC-controlled linear oscillator for machining of any type of profile like e.g. concave, convex, straight, spherical and logarithmic with the NC-controlled superimposed stroke
- Infinitely adjustable oscillation frequency
- NC-controlled pressure rollers
- NC-controlled roller centering device
- NC controlled hydrostatic mandrels for bore centering
- Manual or optional automatic loading and unloading
- Control with digital drives for linear and rotary motions
- One- or multi-step operation method with 2/3 way stone indexing device
- Vertical spindles and actively controlled workpiece handling to avoid damages



supfina RaceFlex 725-727

Type:	Workpiece-Ø:	Workpiece width:
A	50–320 mm	8–100 mm
B	100–650 mm	20–200 mm
C	600–1200 mm	50–400 mm
D	800–1600 mm	100–450 mm

Our system features ⇒ your benefit

NC-controlled rotary and linear oscillator Superfinishing units

- ⇒ Highest possible flexibility to machine any given raceway geometry
- ⇒ Reproducible top quality also in small batch production

Stone indexing device for two- or three-step process

- ⇒ Generation of optimized bearing surface quality
- ⇒ Extended tool live

Machine can be upgraded with one or two auxiliary Superfinishing units

- ⇒ Tape unit for OR outer diameter
- ⇒ Tape unit for tapered roller bearing IR lip

⇒ Cup wheel unit for cylindrical roller bearing flange

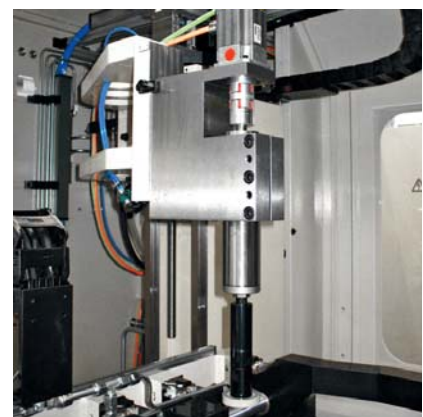
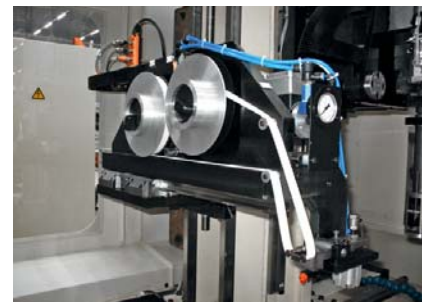
⇒ Cup wheel unit for spherical roller thrust bearing flange

Flexible, infinitely adjustable centering systems

- ⇒ Fast setting process
- ⇒ Range tooling with only few exchange parts

Large working range and versatility for different workpiece types

- ⇒ Suitability for small and medium size batches
- ⇒ Built-in capability to cope with future changes in your product range



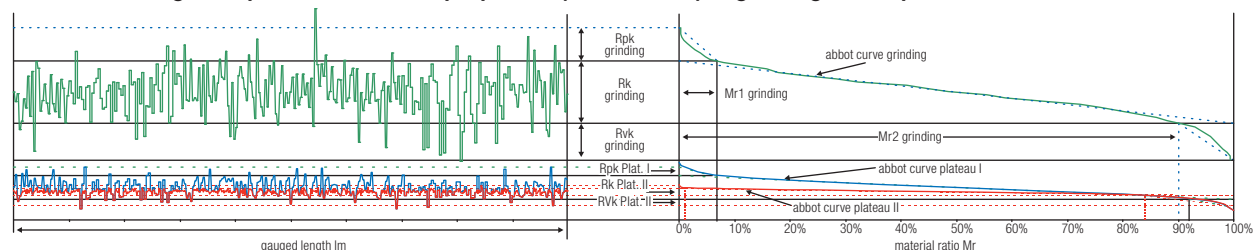
The Supfina RaceFlex 725-727 is designed to achieve consistent top quality and highest flexibility in Superfinishing Aeroengine bearings, prototypes or other small production batches. Unmatched versatility is based on the combination of up to four different Superfinishing units in one machine.

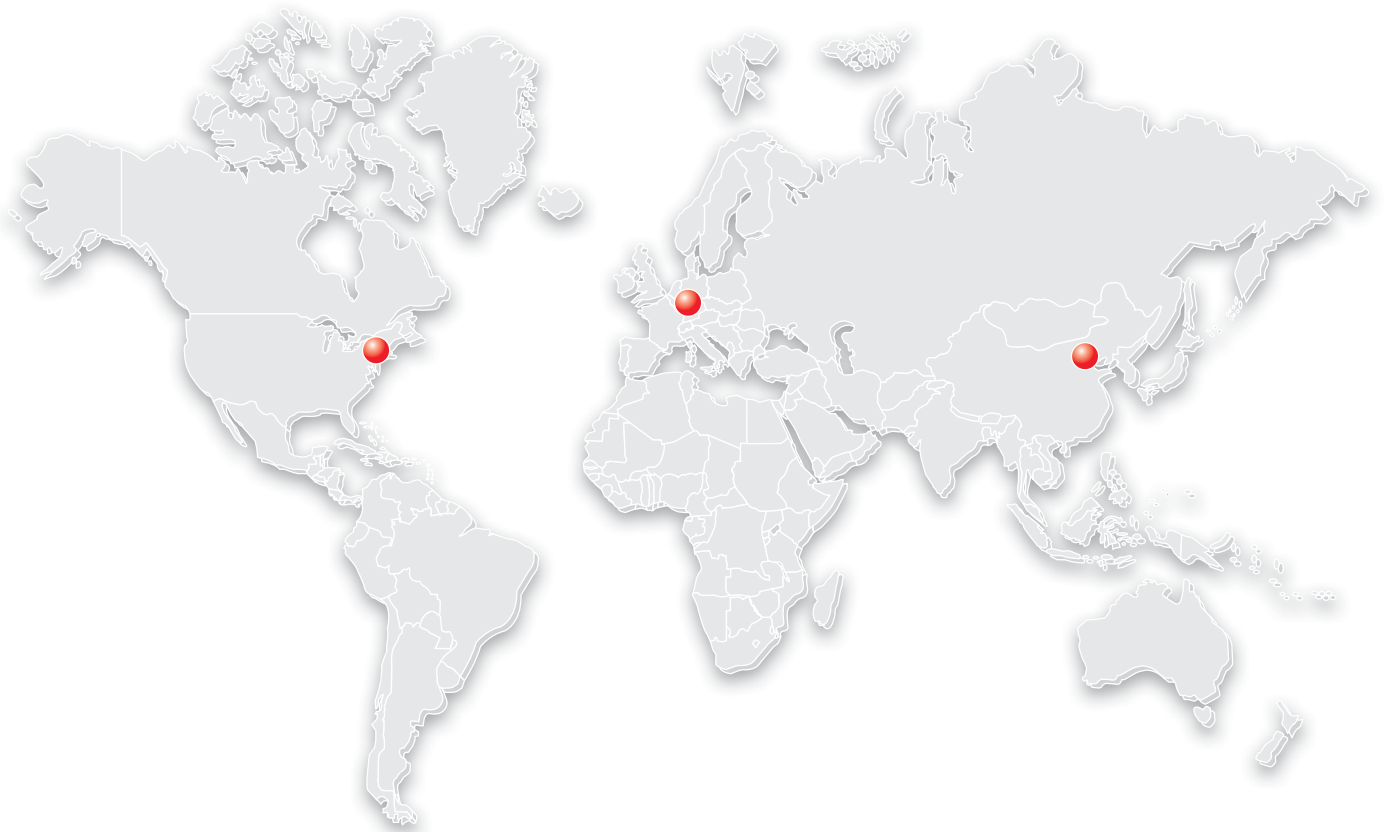
The powerful rotary and linear oscillator systems for the raceway finishing operation can be complemented with tape finishing units for outer diameters and flanges as well as cup wheel spindles for lip and thrust face operations.

Clamping and centering systems as well as the workpiece drive are just as flexible.

Supfina relies on state-of-the-art modules that have been optimized over decades and that can be adjusted to a new workpiece quickly while requiring only a minimum of type dependent tooling. Due to the intelligent design, set-up times of less than 20 minutes are achieved, supported by NC controlled adjusting axes.

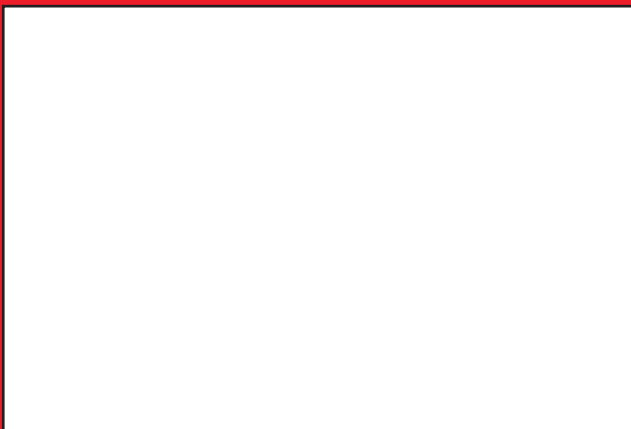
Plateau finishing: Comparison of surface properties (Abbot curve) of grinding and Superfinish results





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

Surface Finishing Systems
www.supfina.com



Supfina Grieshaber GmbH & Co. KG
Schmelzegrün 7 · 77709 Wolfach / Germany
Phone +49 7834 866-0 · Fax +49 7834 866-200
info@supfina.com · www.supfina.com



Supfina Machine Company, Inc.
181 Circuit Drive · N. Kingstown, RI 02852 / USA
Phone +1 401 294-6600 · Fax +1 401 294-6262
info@supfina.com · www.supfina.com



Supfina Grieshaber GmbH & Co. KG
Beijing representative Office
DiYang Tower 1202B
Chaoyang District Beijing 100027 / P.R. China
Phone +86 84536-669 · Fax +86 84536-670
supfina@126.com · www.supfina.com