



SUPERFINISH

Machining of pump gears

- One- or two-stage machining of bearing journals
- Simultaneous machining of both gearwheel faces
- NC configuration:
Automatic change-over to different workpiece dimensions by program.
- Modular design
- Universal usability: Only simultaneous machining of bearings or machining of bearings and faces time parallel.
- Short stoppage times, thanks to automatic resetting

Loading and unloading system:

- Manual
- By walking beam or cyclical chain conveyor
- By shuttle



supfina 660 KF

Max. distance between centers: 400 mm
Max. workpiece \varnothing : 80 mm

supfina 660 KF



The Supfina 660 KF was developed to perform the simultaneous machining of two bearings and two faces at right angles (e.g. the pinions of gear pumps).

The modular concept on which the machine is based provides for configurations ranging from manual loading and unloading to full automation and the automatic unloading of the machine by program when workpiece types are changed. This machine also uses the proven subassemblies of the 660 series.

The principal components are:

- Workpiece headstock with infinitely adjustable drive and tailstock with pneumatic sleeve, both adjustable manually or by NC slides
- Pneumatic oscillator (2500 Double Strokes per min)
- Two stone application cylinders, adjustable manually or by NC
- Surface finishing units, mounted on cross slides, controlled pneumatically or by NC axis
- SPC system with program and technology data memory



*Machining procedure for a pump pinion
Machining of bearings and faces*

Pump gearwheel

Machining of two bearings and two faces simultaneously



Results

Roughness:	Ra < 0.05 µm
Cylindricity:	< 3 µm
Roundness improvement:	30-80%, depending on incoming parameters
Stock removal, bearings:	2-3 µm
Regularity of faces:	< 2 µm
Stock removal per side:	1-2 µm
Cycle time:	20-30 s, depending on size of workpiece