

supfina

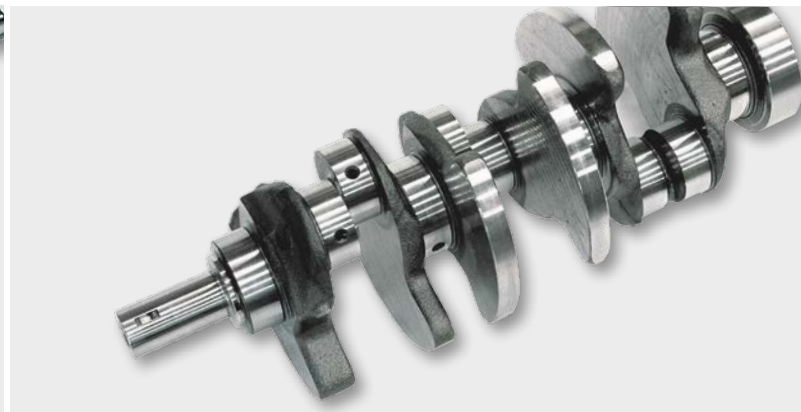


Superfinishing of crankshafts,  
camshafts, gearshafts and balancer shafts

CENFLEX 1

# Supfina CenFlex 1

Superfinishing of crankshafts, camshafts, gearshafts and balancer shafts



The CenFlex 1 is the compact superfinishing machine for automotive components. Its maximum flexibility allows for machining of a wide range of automotive shafts. This means for the automotive OEM and its suppliers that just one machine can handle many different tasks.

Whether large-scale batch production in assembly lines or small-scale prototype production: The CenFlex 1 can handle the job efficiently. All engine and transmission shafts can be given the precise surface finish that they require.

- Highly flexible machining
- Compact design
- Very short setup times
- Economic and long-term reliable

## Machining Options

- Main bearings, pin bearings, post end, flange, thrust faces (axial guide bearings), fillet radii, cam lobes

## Special Processes

- Multi-stage machining in one clamping
- Lead free machining of oil seals
- Removal of chatter marks and waviness
- Removal of ferrite caps of cast iron workpieces
- Deburring of cam lobes and flange bores
- Rounding of oil holes

### Supfina CenFlex 1

Workpiece length	max. 1000mm
Stroke (for crankshafts)	max. 120mm
Superfinishing tape arms	up to 20, depending on the machining task

## Impressive advantages

### Ergonomics

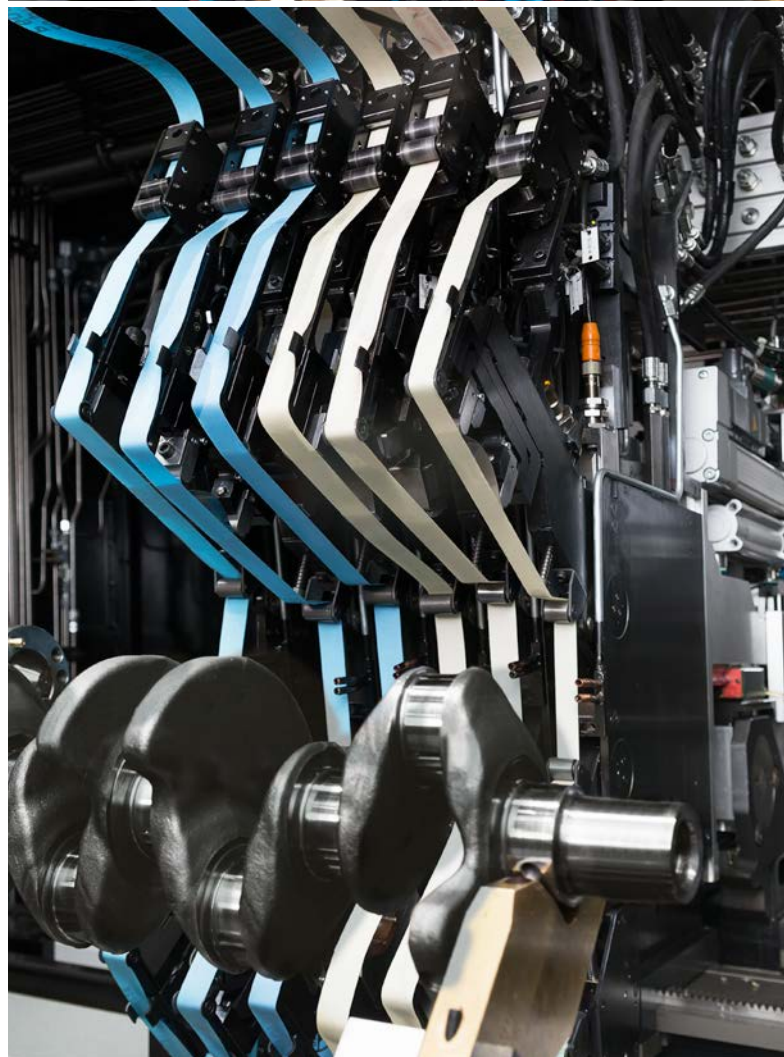
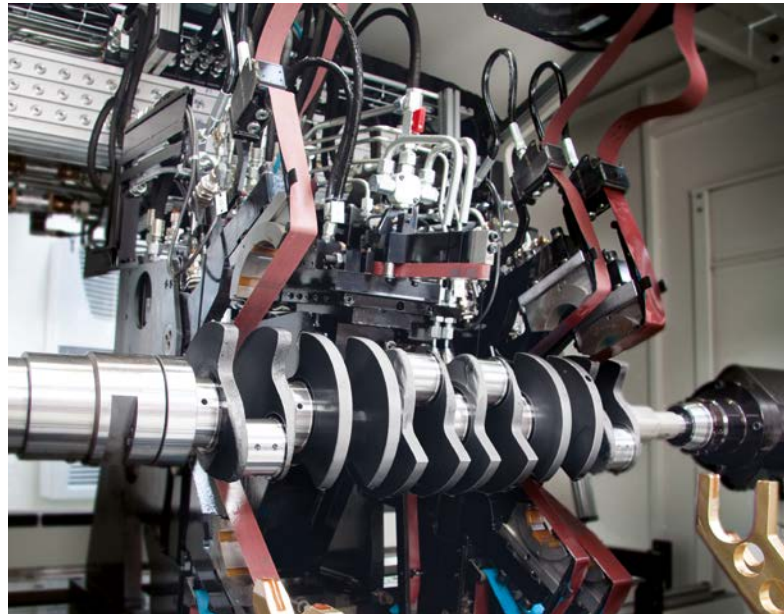
- Outstanding accessibility of the machining area resulting in the working area being within direct reach of the operator.
- All hydraulic and pneumatic valves, as well as the de-centralized electric periphery, are installed easily accessible and visible outside the machining area.

### Economic Efficiency

- Cycle time parallel loading / unloading of the machine by using the internal double swivel loader.
- Individually adjustable tape feed for each Superfinishing arm.
- Easy and quick changeover using automatic tape arm adjustment in connection with quick-change systems.
- Prolonged lifetimes of machining shoes and workpiece dependent tooling by applying wear reducing coatings.
- Integrated tape cutting and disposal system.

### Highest Flexibility


- Automatic pitch adjustment of all installed Superfinishing tape arms.
- Easy and quick changing of shoes (Supfina Quick-Change System).
- Use of 'hard' and 'soft' shoes.
- Up to 20 Superfinishing tape arms in a block or step-by-step machining process.
- Different types of shafts (for example cam- and crankshafts) can be machined on the same machine.
- Selection of individual tape arms for rework.
- Easy and cost-efficient setting to new workpieces.
- Universal loading: Manually, with gantry loader or robot, alternatively in the internal single or double swivel loader.




## Superfinish · FlatFinishing · FineGrinding · Double-DiskGrinding · SpeedFinish®

Supfina's superfinishing technology economically produces the highest-quality surfaces and geometries.

Supfina is your worldwide partner for precision surface finishing.

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