



SUPERFINISH

Vertical machining
of camshafts



Our offer

→ your benefit

Vertical machine design

→ Compact machine layout, thanks to the integrated workpiece conveyor

Modular design with one or more stations

→ Adaptable equipment according to workpiece geometry and surface requirements

Loading by means of walking beam or pallet system

→ Straightforward integration into the flow of workpieces along the entire production line

Tape superfinishing of bearings and cams on a single station

→ Optimum machine equipment and processing strategy, depending on camshaft geometry

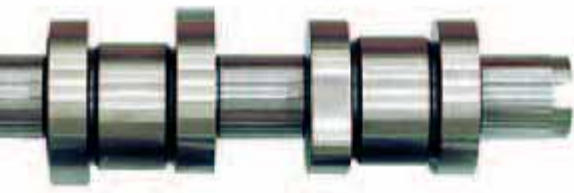
Machining between centers or centerless

→ Preconfigured for all workpiece requirements

supfina 721/1

	passenger cars	trucks
Max. distance between centers:	850 mm	1300 mm
Oscillation:	+/- 3 mm	+/- 3 mm
LxBxH per station:	3 x 2.5 x 3 m	4 x 2.5 x 3,5 m
Loading height:	1050 mm	1000 mm

supfina 721/1



The use of a walking beam or pallet system permits straightforward integration into a production line



Modular design permits rapid adaptation to different workpieces

Of vertical configuration, the Supfina 721 is designed for the mass production of the most wide ranging types of camshaft.

For machining between centers, loading is performed either by a walking beam or pallet system. A lift places the camshaft directly between the centers of the tailstock and headstock. It is driven either by way of driving pins or a chuck.

The superfinishing units are mounted on an NC slide above the machining plane. The slide is capable of machining the cams and bearings in stages (option). For maintenance operations and tape replacement, the entire slide can be traversed sideways into a servicing position.

The special machining shoes for the tape superfinishing of the cams are designed in such a way as to prevent any distortion of the cam shape.

A system for in-progress measurement during the machining of the bearings can be supplied.

In the case of the centerless machining of the bearings, the shaft is placed in the V-supports of the rolls frame, manually or by a gantry, and set into rotary motion. The superfinishing units provide the oscillating movement.

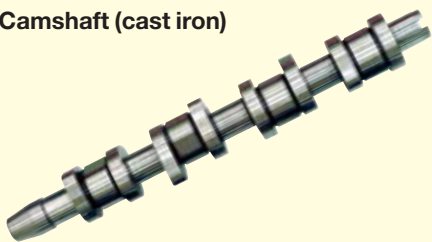
The processing shoes are designed as half-shoes which are brought into contact with the bearings from above.



Cardane cam shoes for the optimum machining of the cam profile



Camshaft (cast iron)



Results

Ra < 0.2 μm
Single-stage machining
Cycle time including loading, 37 s

Results Grinding / Finishing

