

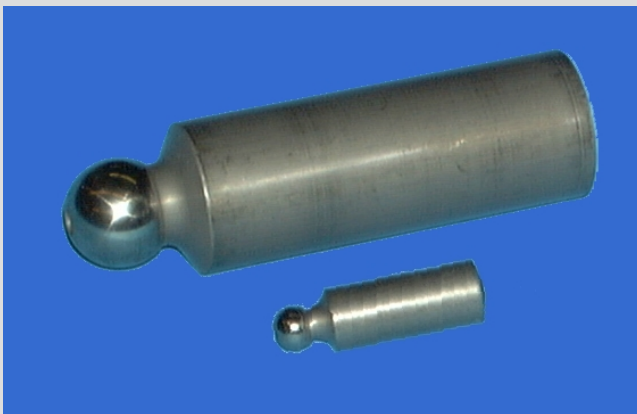
Finishing of different ball pins



*Superfinishing Machine type 2 SPHK 3
automatic loading and unloading*



Rough and final finishing of the ball



Different ball pins

Advantages and machine features

- ◆ No running-in behaviour
- ◆ Improvement of surface and shape after turning and hardening
- ◆ High life time of cup wheels by means of CNC controlled tools
- ◆ Using of CBN and ceramic cup wheels
- ◆ Quick change over time

Machining Data

Material	steel	Roughness	fine turned	Ra 0,6 µm
Hardness	nitrided surface		finished	Ra 0,05 µm
Coolant	Honilo 987	Ball shape	fine turned	3 - 5 µm
Cycle time	7,5 s		finished	1 - 1,5 µm
stock removal	0,020 mm	ball diameter	tolerance	0,007 mm