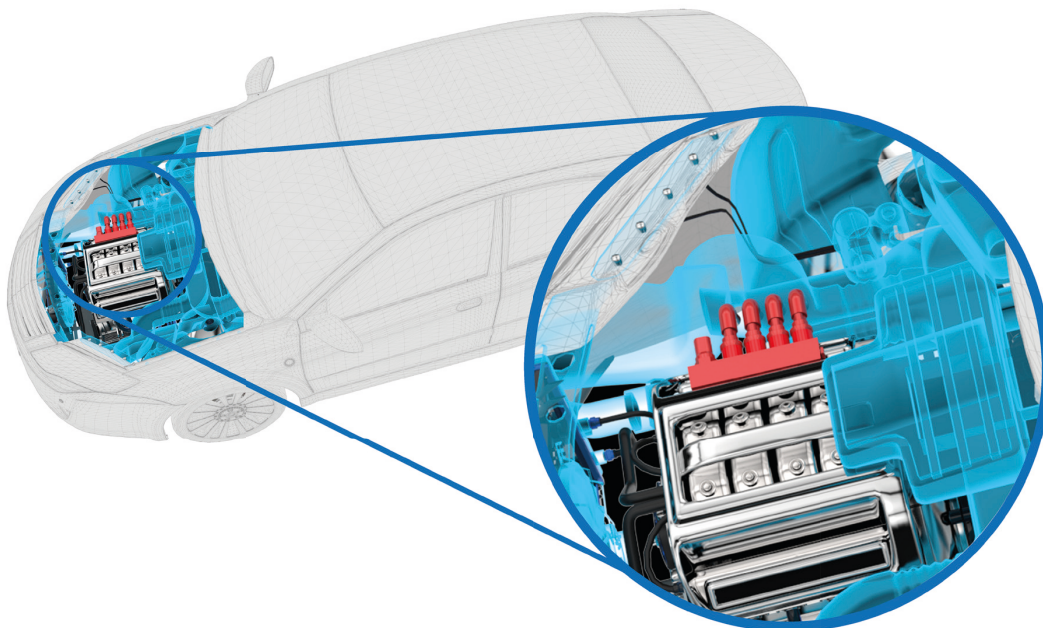


APPLICATION EXAMPLE ▶ Automotive ▶ **Guide sleeve**



Task

Roller Burnishing of the cylindrical inner diameter to surface finishes of about $R_z = 2 \mu\text{m}$





Solution

Processing with GMI Roller Burnishing tool on Swiss type CNC-automatic lathe



User benefits

- Depth of roughness of $R_a = 0,12 \mu\text{m}$ reached
- Reduction of scrap rate (**12%**) by reaching process stability
- Shortening of process time by about **8%**

Details

- Workpiece Guide sleeve
- Part of Gas valve
- Material Stainless steel
- Tensile strength 650-850 Mpa
- Hardness 200-205 HB

Parameter

- Tool GMI
- Circumferential speed ... 75 m/min
- Feed rate 0,1 mm/rev.
- Cycle time 2 seconds