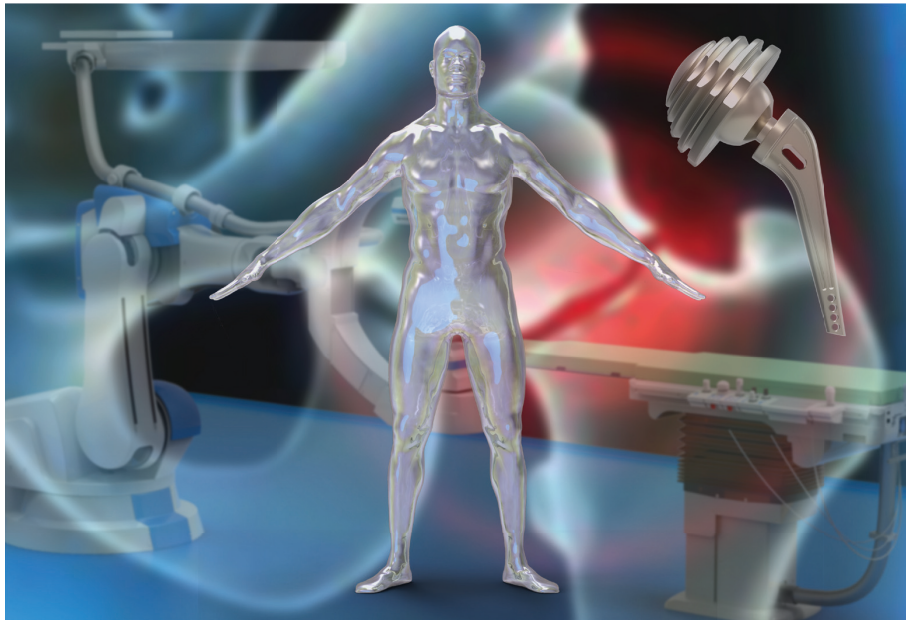
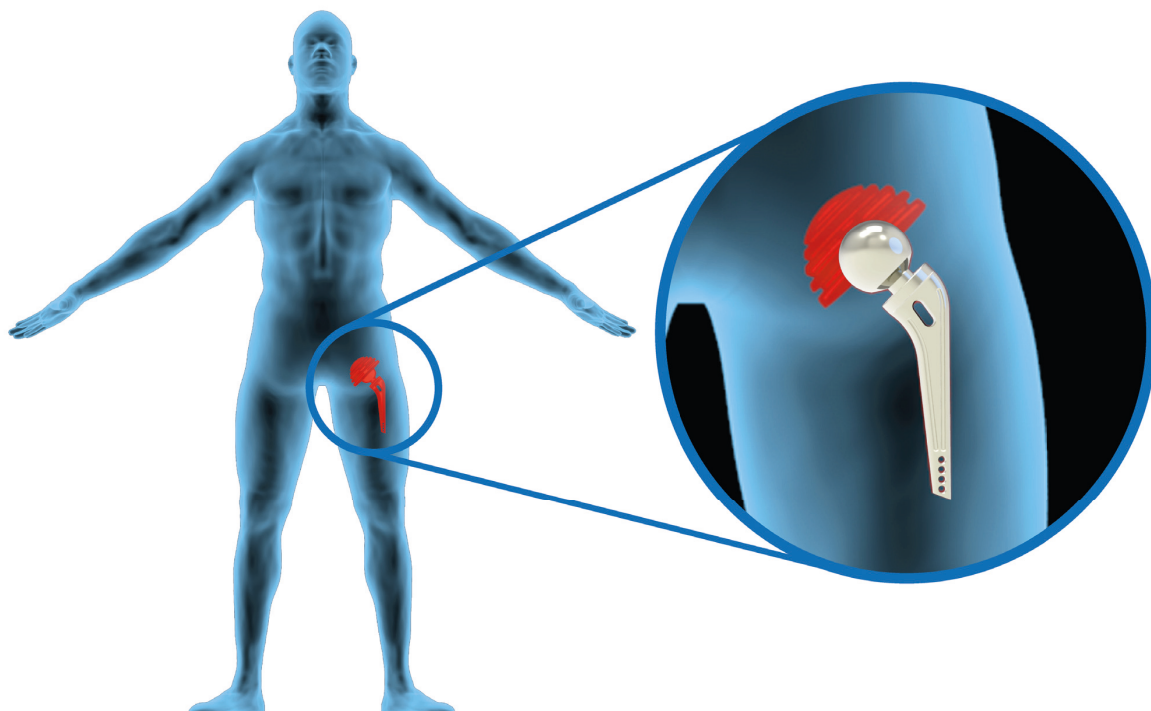


APPLICATION EXAMPLE ▶ Medical technology ▶ Ball joint of hip-prosthesis



Task

Improve the surface quality of a ball joint for a hip-prosthesis





Solution

Roller Burnishing of the ball joint surface and shortening the polishing process



User benefits

- Shortening of the polish process
- Reduction of production costs by about **27%**
- Achievement of surface quality **$R_z < 0,6 \mu\text{m}$**

Details

- Workpiece Ball joint
- Part of Implant
- Material Titan alloy
- Tensile strength 1000 N/mm^2
- Hardness 39 HRC

Parameter

- Tool HG6-9K
- Circumferential speed 150 m/min
- Feed rate 0,1 mm/rev.
- Rolling force 750 N