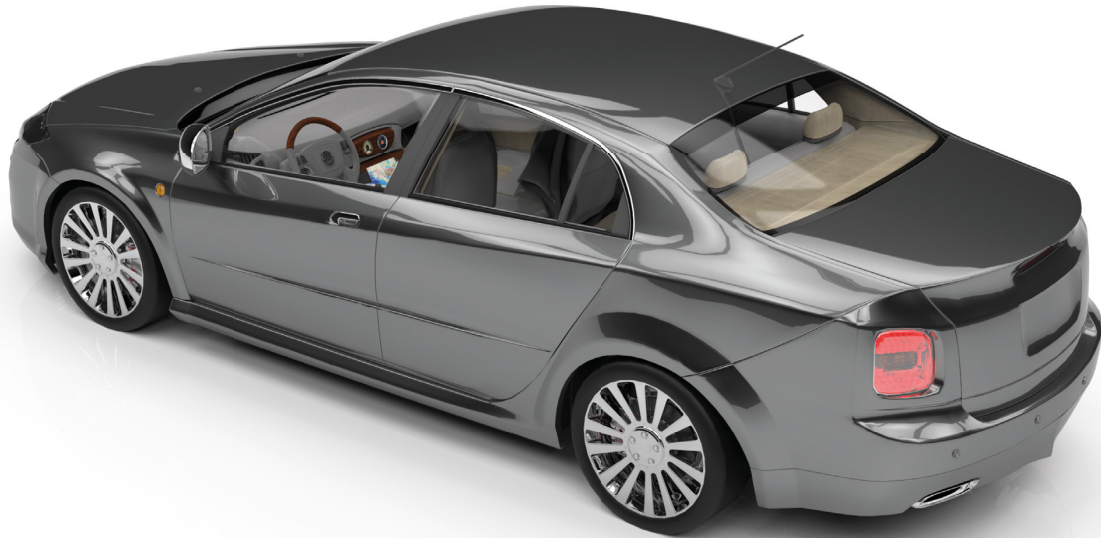
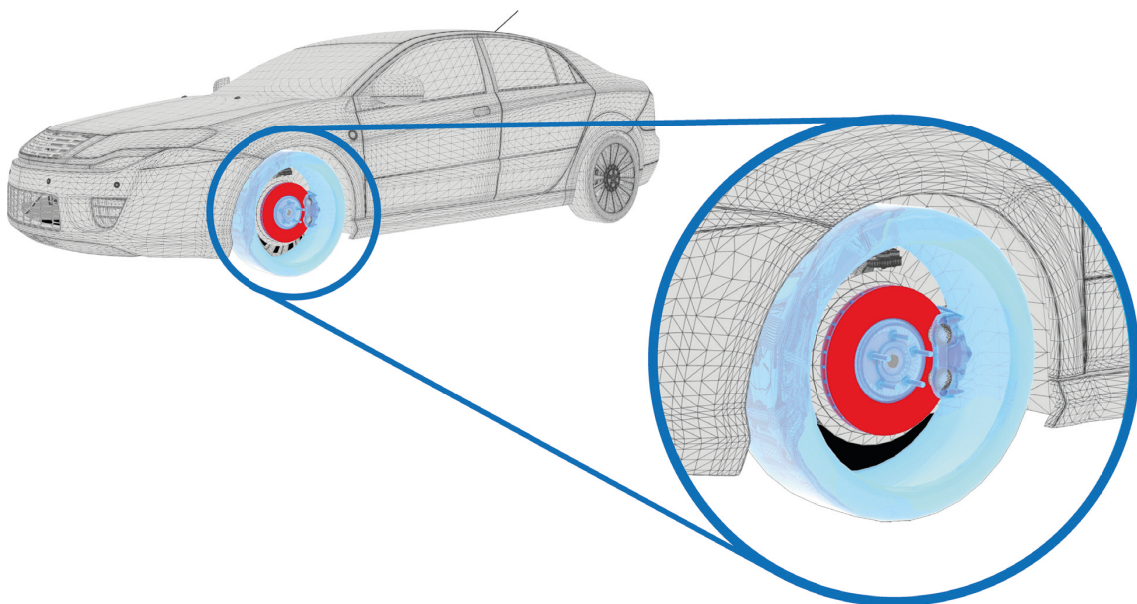


APPLICATION EXAMPLE ▶ Automotive ▶ Disc brake



Task

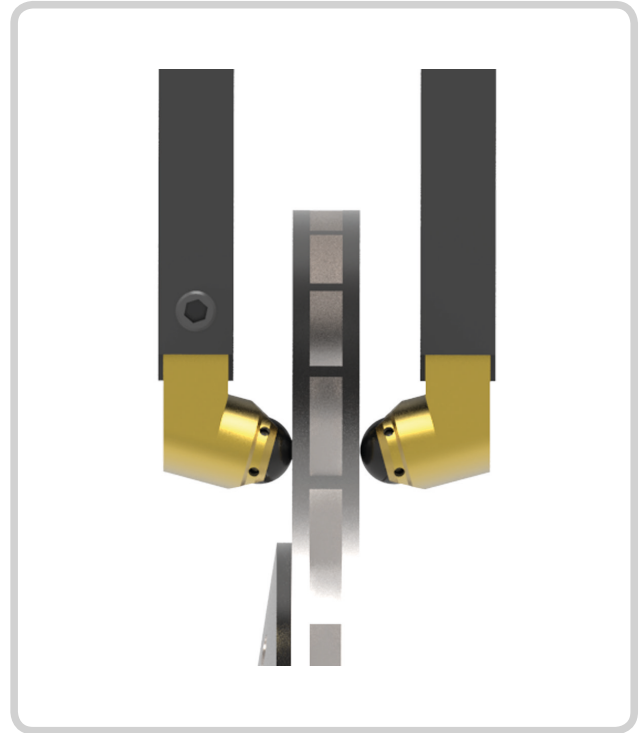
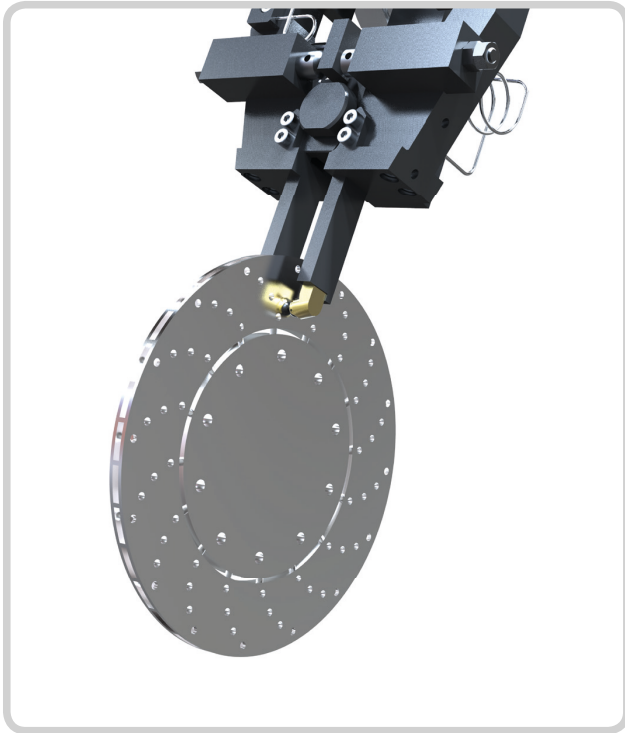
Improving the surface finish of dies brake rotors, requested roughness value $R_a = 1 \mu\text{m}$





Solution

Concurrent roller burnishing on both sides of a disc brake with HG6-29 tool



User benefit

- Increase of livetime by **factor 2**
- Roughness **$R_a = 0,54 \mu\text{m}$**
- Process time reduced by about **20%**
- Loss of disk brake incoming process

Details

- Workpiece Disc brake
- Part of Brake sytem
- Material Gray cast iron
- Tensile strength 150 MPa
- Hardness..... 550 - 650 N/mm²
- Demand..... $R_a = 1 \mu\text{m}$ or better

Parameter

- Tool HG6-29.02Z00°
- Circumferential speed 800 m/min
- Feed rate 0,15 mm/rev.
- Rolling force 120 bar