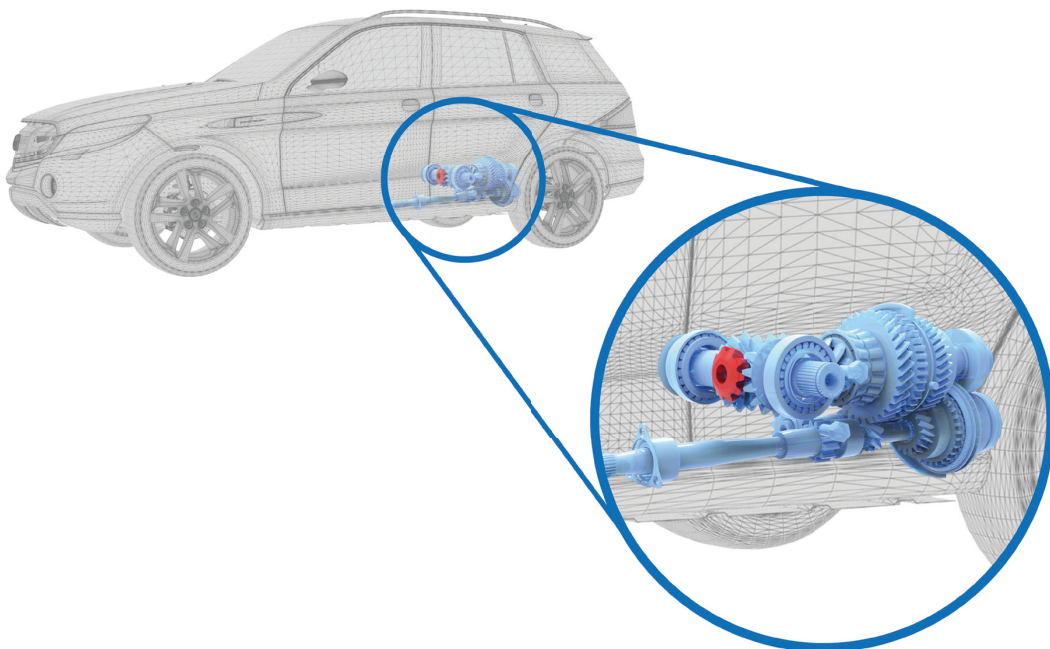


APPLICATION EXAMPLE ▶ Automotive ▶ **Bevel gear**



**Task**

Improvement of surface roughness of spherical bevel gear to  $R_z = 2 \mu\text{m}$





## Solution

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



## User benefits

- Reduction of process time by about **20%**
- Compensation of tool costs by about **15%**
- **Higher process reliability** by HG-following system

## Details

- Workpiece ..... Bevel gear
- Part of ..... Differential gear
- Material ..... 16CD4
- Tensile strength ..... 1000 N/mm<sup>2</sup>
- Hardness ..... 42 HRC

## Parameter

- Tool ..... HG6
- Circumferential speed ... 250 m/min
- Feed rate ..... 0,1 mm/rev.
- Rolling force ..... 750 N
- Cycle time ..... 4 seconds