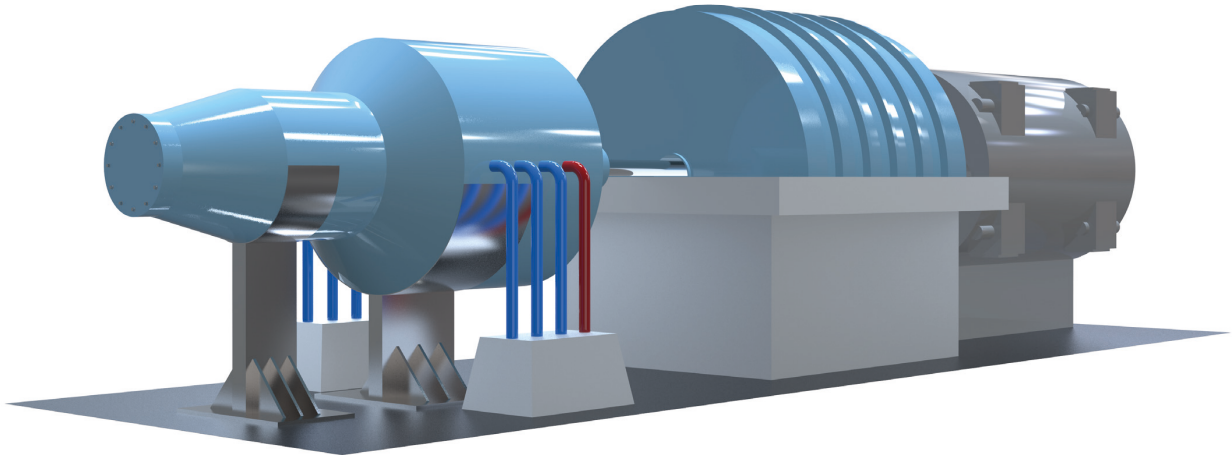
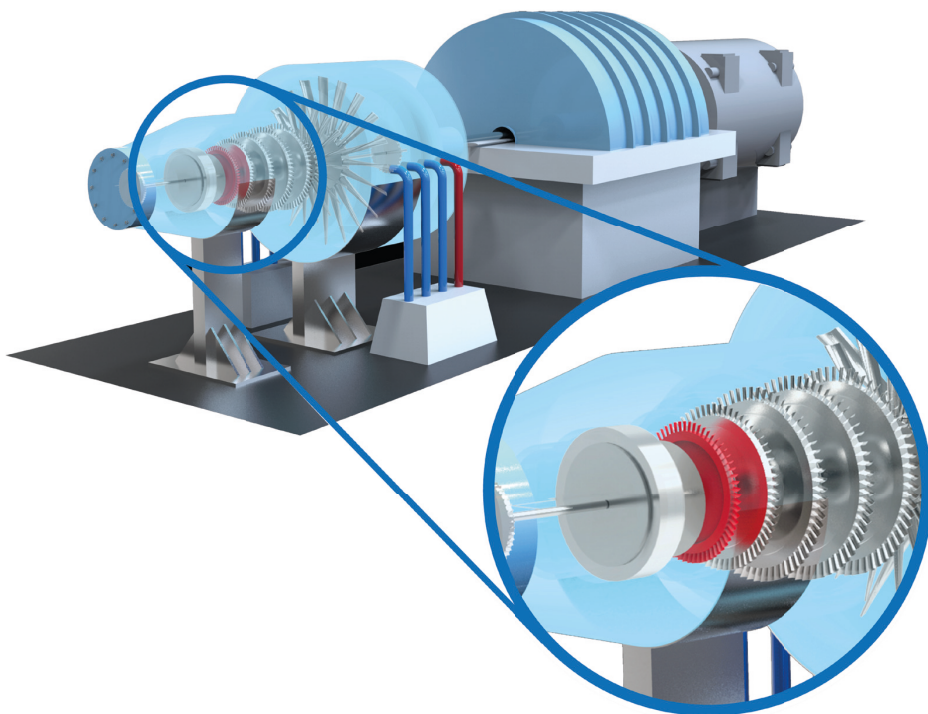


APPLICATION EXAMPLE ▶ Mechanical Engineering ▶ Turbine disk



Task

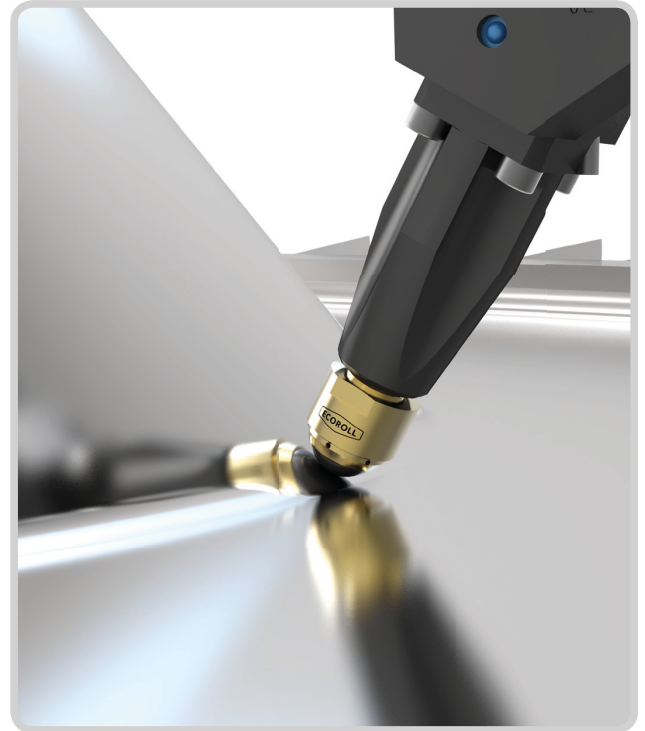
Increase the component life time and avoid stress corrosion cracking





Solution

Yielding internal stress by Deep Rolling different workpiece sections with the HG13-9E270° tool



User benefits

- Increase life time by about **20%**
- Elimination of stress corrosion cracking

Details

- Workpiece Turbine disk
- Part of Steam turbine
- Material Forged steel
- Tensile strength 1200 N/mm²
- Hardness 38 HRC

Parameter

- Tool HG6-9E270°
- Circumferential speed ... 80 m/min
- Feed rate 0,25 mm/rev.
- Rolling force 1500 N
- Cycle time 60 seconds