

Components produced by Axial Forming:
Drive Shaft for Trucks



05-1139F

Workpiece:

Material: 25MoCr4E

Previous technique:

Percussion cold rolling

Manufacturing requirement:

Forming of a spline with a module of 2.5, a teeth height of 2.625 mm and a spline length of approx. 100 mm in less than 50 sec

Spline data:

- Spline type: Involute spline
- Number of teeth: 18
- Module: 2.5
- Pressure angle: 30°
- Minor diameter: $\varnothing 44.000 +0 / -0.200$ mm
- Major diameter: $\varnothing 49.500 +0 / -0.160$ mm
- Dimension over pins: $\varnothing 55.987 +0.044 / -0$ mm

Advantages at a glance:

- Cycle time reduction from 180 sec. to approx. 50 sec,
- Highest process reliability
- High constant spline quality
- Dimension over pins adjustable by ± 0.030 mm with the same tool
- Continuous grain structure

Production rate:

Cycle time: approx. 50 sec.
(incl. handling)

Machine:

Model: Aximus H02

Press force: 700 kN static
400 kN recursive

Reference: Daimler

Required floor space with integrated cabin:
(L x W x H)
approx. 6,000 x 2,000 x 2,500 mm

Final customer: Daimler

Weight: approx. 9,800 kg

Required power: approx. 60 kW

