

Components produced by Precision Rotary Swaging:
Steering Shaft



89 1714/M

Workpiece:

Material: St 52

Blank: tube O.D. 30 mm and wall thickness 2.8 mm

Manufacturing requirement:

Complete manufacture of steering wheel end of a steering shaft out of tubing.

Previous technique:

none / new design

Operation sequence:

1. Piercing 3 slots
2. Feed swaging to dia.19,8 mm
3. Recess swaging spline dia.and thread dia.
4. Pressing spline
5. Turning face
6. Rolling thread

Advantage:

- The transfer line is equipped with a feed system with NC. This allows fast changeover for different lengths of workpieces.

Machine description:

Automatic transfer line consisting of:

- 1 feed magazine
- 1 piercing the 3 slots
- 3 swaging stations
- 1 horizontal press
- 1 turning station
- 1 thread forming station

Production rate:

Cycle time: 15 sec

Machine:

Model: HA 40-7 VUE-NC

Required floor space including sound enclosure: (L x W x H) app. 10,800 x 6,800 x 3,700 mm

Weight: approx. 35,000 kg

Required power: approx. 96 kW