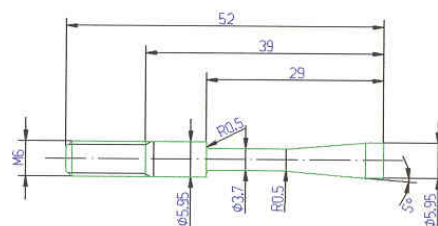
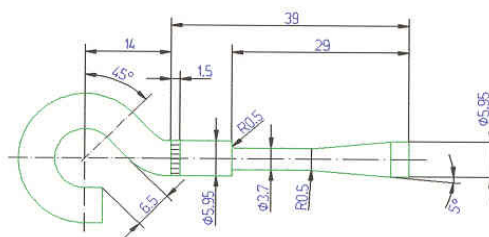


Components produced by Precision Rotary Swaging:
Dowel with Hook and Thread



88 1324/M

Workpiece:

Material: Steel UQSt 36

Blank: wire coil, Ø 5.95 mm
 (other diameters and materials possible)

Manufacturing requirement:

Complete manufacture of dowels in one machine pass from the coil

Previous technique:

Turning and bending on separate machines

Operation sequence:

1. De-coiling, straightening and cropping
2. Recess swaging to thread rolling Ø
3. Facing and chamfering
4. Recess swaging necked in section
5. Knurling
6. Rolling thread
7. Bending

Advantages:

- Good dimensional accuracy
- Excellent surface finish
- Minimal chip production
- Considerable saving in material
- Favourable grain structure
- Advantageous work hardening
- Complete manufacture on one transfer line
- Use of wire from coil

Machine description:

Automatic transfer line consisting of:

- 1 wire de-coiler, straightening and cropping unit
- 2 swaging stations
- 1 turning station
- 1 knurling station
- 1 thread rolling station
- 1 bending device

Production rate:

Cycle time: approx. 5 sec.
 (= 12 pieces/min.)

Machine:

Model: HA 16-7 VE

Required floor space without sound enclosure: (L x W x H)
 approx. 4000 x 2500 x 1800 mm

Weight: approx. 6,000 kg

Required power: approx. 18 kW