

Components produced by Precision Rotary Swaging:

Expansion Bolt for Heavy Goods Vehicles and Cars



Workpiece:

Material: 42 CrMo 4

Manufacturing requirement:

Reducing diameter in the middle zone, and size outside diameter for the thread.

Operation sequence:

Recess swaging in one operation and moving axially.

Advantages:

- Saving in material up to 50 %
- Good surface quality (R_a 0.5 - 1 μ m) in the swaged zone. No subsequent operation, like e. g. after turning, required
- Advantageous work hardening up to 30%
- No chip production

Machine description:

Semi-automatic machine

The workpiece is entered by hand into a loading device which places it into the hydraulic feed where it is clamped. After giving the start signal, the working cycle takes place automatically.

Fully automatic machine :

With this machine, workpiece handling and the forming operation take place in a fully automatic sequence, the workpieces being entered via a suitable magazine. The workpieces can be completed in a multi-station transfer line incorporating e. g. facing / chamfering and thread rolling.