

HEULE CASE STUDY

Automotive Application COFA



Eliminating Manual Deburring of a Steel Steering Column Component

Challenge:

A precision machining subcontractor to the automotive industry was deburring a steel fork manually. The time-consuming manual deburring was a bottle neck in the production process, so the company set out to look for a new solution.

Application details:

- Bore-Ø: 15.0 mm
- Deburr size: max. 0.3 mm
- Material: Steel
- Machine: Hermle Milling Center
- Machining: axially
- Cooling: external cooling, 30 bar pressure
- Dimensions: $d = 15.0$ mm, $H = 42.0$ mm, $E = 28.0$ mm
- Production volume: 200,000 bores per year

Solution:

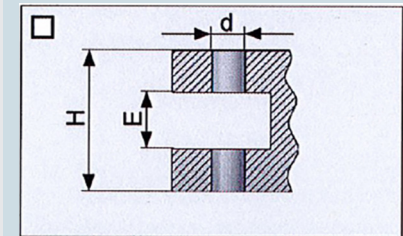
In order to be able to work with a maximal work speed and reduce the cycle time as much as possible, HEULE proposed a double cassette COFA tool, which works with two blades at once.

Tool: Double-cassette-tool COFA C6

Blade: C6-M-0006-T

Machining parameters:

Speed: 1000 rev./min. Feed: 0.8 mm/rev.



Results:

The need for the time-consuming manual deburring operation was eliminated by using the COFA double cassette tool, reducing both labor and cycle time for the customer.