

HEULE CASE STUDY

Precision Machining Application COFA



Cross Hole Deburring a Stainless Steel Pipe

Challenge

A precision machining company was looking for a solution to deburr the cross bores of a pipe for industrial cleaners automatically front and back. The difficulty here was the accessibility of the back bore edge.

Application details:

Cross bore: Ø16.0 mm

Max. deburr diameter: Ø17.0 mm

Main bore: Ø30.0 mm

Material 1.4301, X5CrNi18-10, stainless austenitic chrome nickel steel

Solution

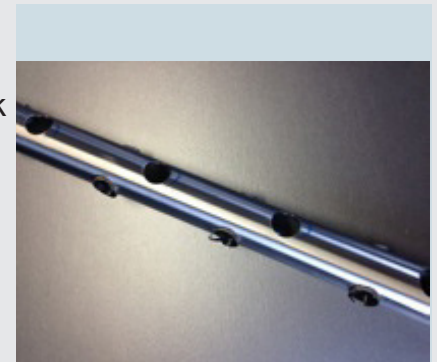
The COFA tool system deburrs consistently even and uneven bore edges front and back in one single pass. It delivers the bore edges radially of the burr, without turning the workpiece or without any need to stop the spindle.
Tool: COFA12/15.5 with a S-type spring.

Machining parameter:

Machining speed: 600 rev/min.

Cutting speed: v_c 32 m/min.

Working feed: 0.3 mm/rev



Results:

This customer was focused on using the newest technology to automate the cross hole deburring operation. By using the COFA tool, the cross bores can be deburred automatically front and back while removing the very large burrs reliably. The customer is very satisfied with the deburr result and the cycle time.