

HEULE CASE STUDY

Automotive Application COFA



Deburring Bores on Hard-to-Reach Irregular Surfaces

Challenge

This manufacturer machines V-8 crankshafts that consist of a main bore that breaks out into seven different surfaces, some which are angled/irregular cast surfaces. They needed a tool solution that was able to reach all of the large exit burrs on the part.

Application details:

- Machine: Custom, no coolant
- Material: steel

Solution:

The solution from HEULE is a special C12 COFA with a 20° "M" blade and "S" spring.

Machining parameters:

Feed: 1.25 mm/s
Speed: 280 RPM



Results:

The COFA tool has a cutting blade which is able to pivot and successfully deburr all of the flat and angled/irregular surfaces by entering through the main bore to reach the seven different bores. The customer is pleased with the automated solution and the tool performance.