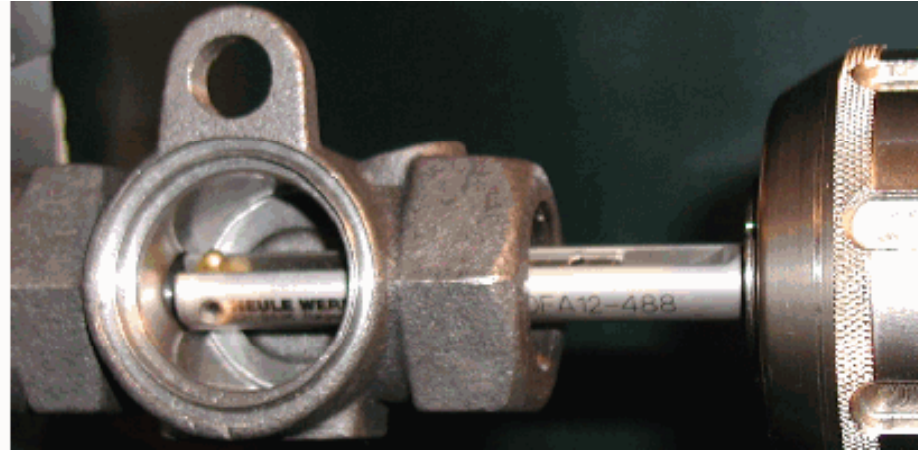


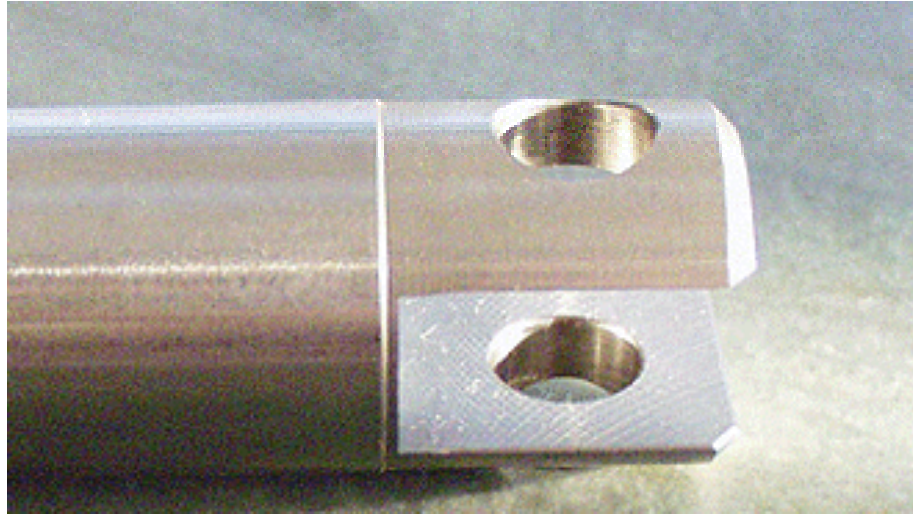
## COFA in cast iron



This cast iron valve body is being deburred by the COFA deburring tool.

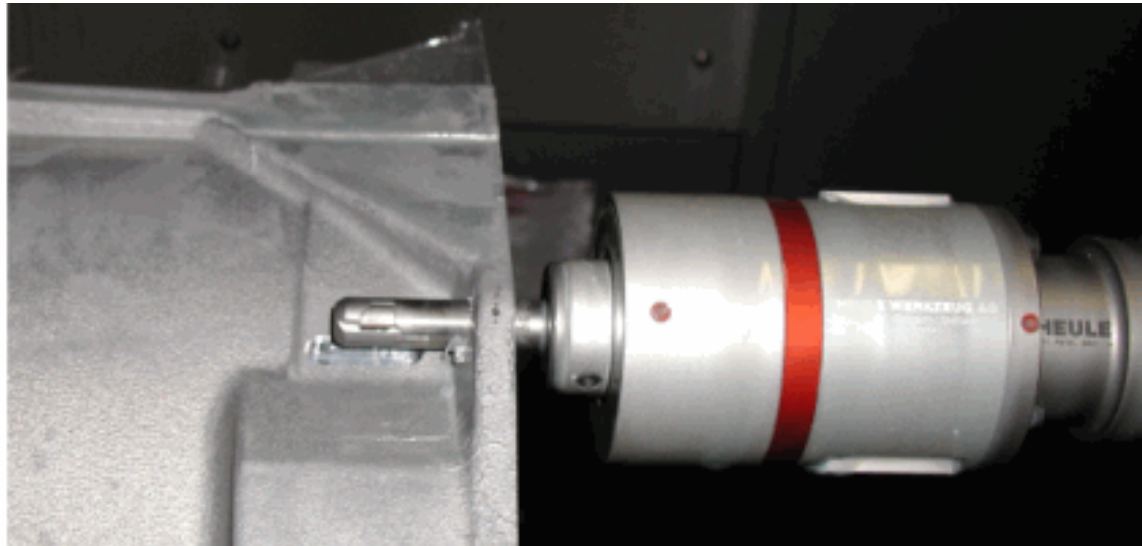
The manufacturer is running the tool at 1400 rpm with a feed rate of 0.25mm/rev. The reported insert life is 17,000+ parts

## COFA in steel



A steel clevice deburred by the COFA deburring tool. The manufacturer is running the tool at 1200rpm and 0.25mm/rev. Blade life is approximately 3,000-4,000 holes.

# SOLO



This manufacturer of heavy equipment components is using the SOLO back spotfacing tool to improve reliability and eliminate rejected parts because of missing spotfaces.

SOLO tool is through coolant and is feeding 228mm/min at 3000rpm in an aluminum casting. The insert change interval is 8,000 holes. The spotface is approximately twice the hole diameter.

## SNAP in machined aluminum



This automotive component manufacturer uses SNAP tools on a rotary transfer machine to ensure quality and extended tool life when chamfering the through holes in this reactionary gear carrier for an automatic transmission.

The SNAP tool runs at 2300rpm and 0.15mm/rev which significantly reduced their previous cycle time. In addition, the tool life is in excess of 20,000 holes which is more than four times the previous chamfer tool.

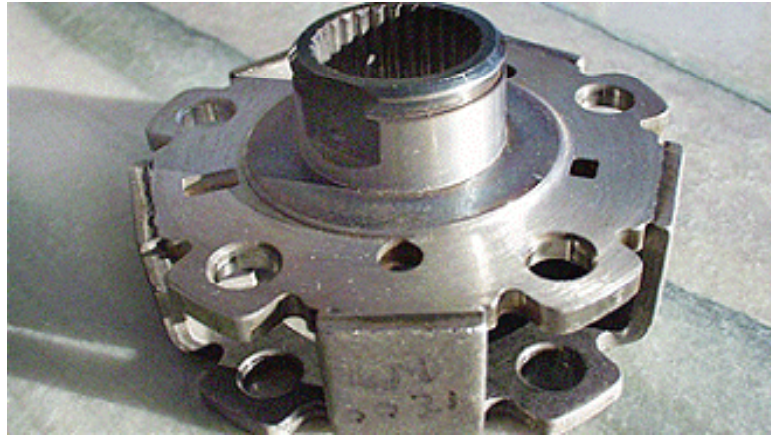
## SNAP in cast iron



This automotive component manufacturer uses SNAP tools on a rotary transfer machine to chamfer the bolt holes in this differential housing.

The SNAP tool runs at 1600rpm and 0.15mm/rev and the tool life is in excess of 24,000 holes.

## DEFA in medium carbon steel



Another automotive component supplier manufactures steel reactionary gear carriers on a rotary transfer machine. They use DEFA tool to get precise chamfers inspite of the very large burrs caused by the drilling process.

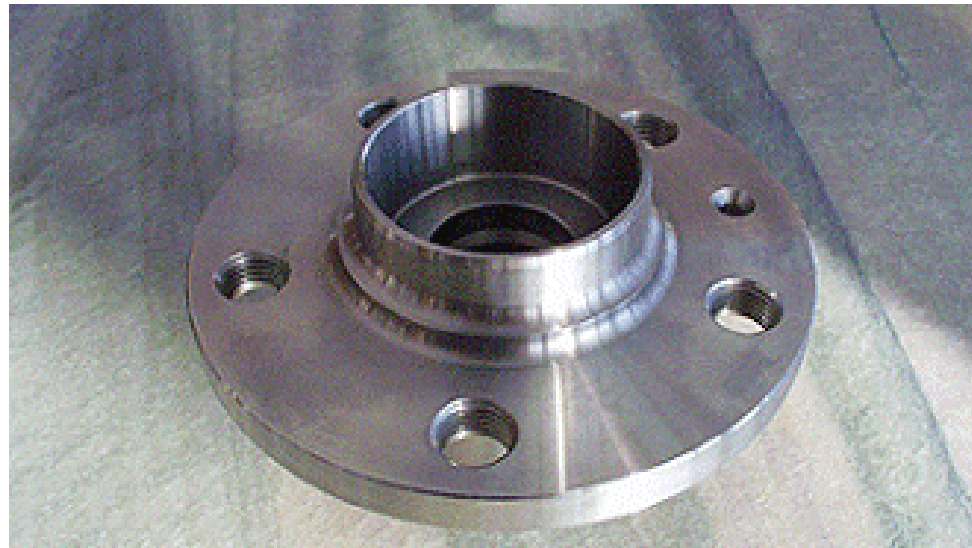
DEFA is running at 1200rpm and 0.03mm/rev and insert life is 3,000-5,000 holes.

## DEFA chamfering tapped holes



The unique design of the DEFA chamfering blades allows for chamfering threaded holes after tapping and without any damage to the threads. In this low carbon steel flange the DEFA tool runs at 1200rpm and 0.03mm/rev .

## COMBI drill and chamfer in medium carbon steel

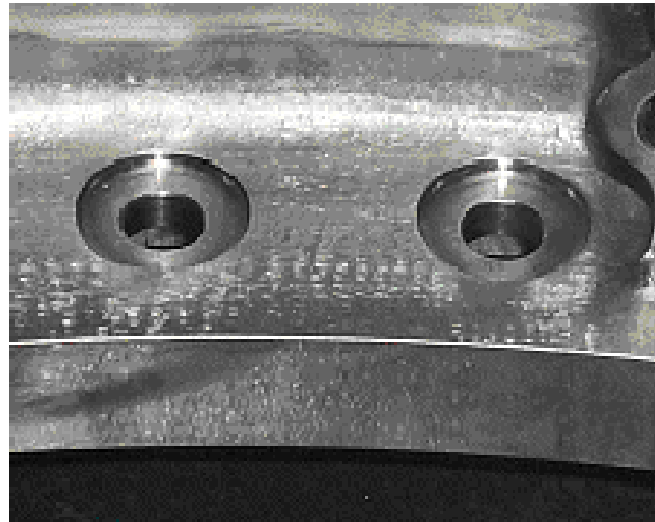


Drilling and chamfering in one operation saves cycle time and tool space.

Using a COMBI drill-chamfer tool on a vertical machining center to manufacture these wheel hubs, the COMBI tool drilled at 2000rpm and 0.3mm/rev and chamfered at 1500rpm and 0.15mm/rev.

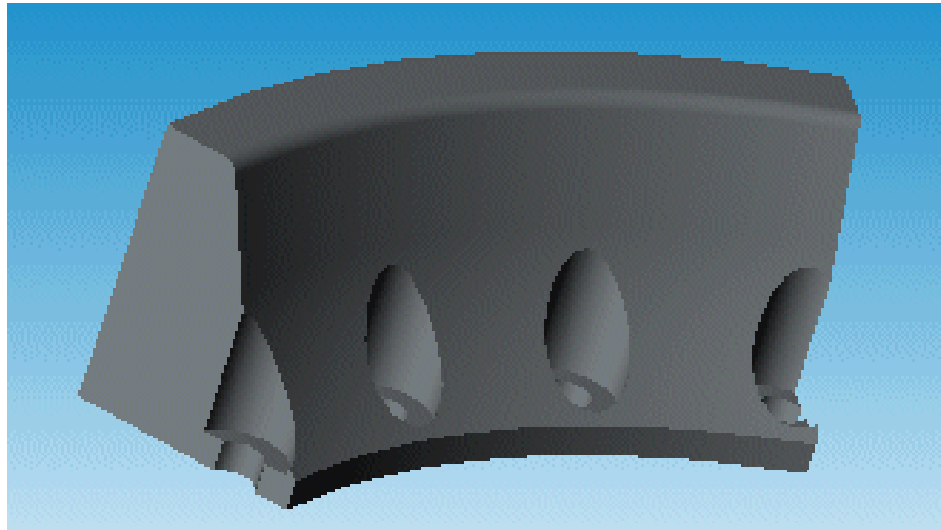


## GH-Z in Inconel 718



This jet engine services company uses the GH-Z back boring tool to machine these washer seats. The process was to machine the holes in one setup then move and refixture the part for spotfacing. Using the GH-Z to automate the operation on one machine saved moving and fixturing time. A two day process was reduced to hours. The GH-Z tool runs at about 1200rpm and 0.05mm/rev and the tool life is about 200 spotfaces, or about 2" of material.

## GH-Z



This rendering shows the severity of the cut needed by this jet engine manufacturer. The GH-Z tool cuts a fully interrupted counterbore in inconel 718 with a counterbore to bore ratio of nearly 2:1. The process utilizes a roughing and finishing tool to maintain critical finishes and tolerance.

This GH-E (one bladed option) runs at 1200rpm and 0.25mm/rev.