

CASE STUDY

Reducing Cycle Time in CNC Drilling & Deburring

BUSINESS IMPACT

By combining drilling and deburring into one CNC operation, manual rework was eliminated, cycle time was reduced and process reliability was improved.

 **15,000**
OPERATIONS

 **17 sec**
PER PART

CHALLENGE

Manual deburring was required on both sides of drilled holes, creating inconsistent results, quality risks, and excessive labor time in high-volume production.

SOLUTION

HEULE RECOMMENDED:

VEX Combination & Drilling Tool

The VEX tool combined drilling and double-sided deburring into a single CNC operation, eliminating manual deburring and reducing cycle time.

RESULT

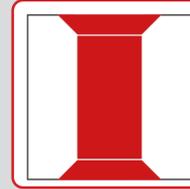
The HEULE BSF delivered a dramatic improvement in both tool life and throughput:

- ✓ Cycle time reduced to **17 seconds per part**
- ✓ Manual deburring eliminated
- ✓ Blade life up to **15,000 operations per blade**



Process reliability improved significantly, and cycle time was reduced to a fraction of what it was. Our operators can now focus on higher-value work.

— Managing Director, Swiss Precision Machining Company



APPLICATION DETAILS

Main bore: Ø13.5 mm

Chamfer: 0.5 mm x 45°

Material: Aluminum

Machine: CNC Machine

MACHINING PARAMETERS

Speed: 5900 rev/min

Feed: Drilling 1200 mm/min,
Deburring 1500mm/min

Coolant: Internal