

HEULE CASE STUDY

Automotive Application VEX-P



Saving 34% Cycle Time on a Sprocket Wheel

Challenge

A subcontracting company was looking for a solution to reduce cycle time for drilling, deburring, and chamfering a sprocket wheel. Previously, the customer used a full carbide drill for the hole and a front and back deburring tool for removal of the burrs. The cycle time for all 12 bores amounted to 320 seconds. Since the deburring tool failed to produce a consistent chamfer, the sprockets had to be reworked manually outside of the machine.

Application details:

- Bore diameter: Ø16 mm
- Bore depth: 12 mm
- Chamfer: 0.5 x 45°
- Material: Cast Steel, 500 N/mm²

Solution

The customer decided to use a standard VEX-P drill-chamfering combi tool from HEULE. This tool allows to machine the complete hole in one setting and without any tool change.

Tool:

VEX-P Tool Ø16.0 1xd
VEX-P Insert Ø16.0 1H
SNAP12 Blade Ø17.0 TiN

Machining parameters:

Cutting data:

Speed: 1500 rev/min

Feed: 0.2 mm/rev

Life time:

Drill insert: 100 m

Blade: 8000-10,000 Bores



Results:

By using the VEX-P tool, the customer reduced the production time by 34 % to now 210 seconds. The customer is very satisfied about the simple handling of the HEULE tool and the very easy blade change of the SNAP system.

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