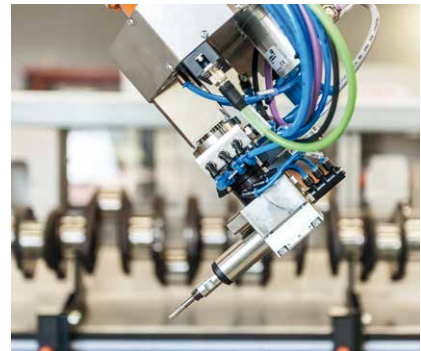


Deburring a crankshaft



Your Task = our solution:

The crankshaft is placed on a rotary table. The rotary table has two mounting positions, one on the robot side and the other on the loading side. Each mounting is connected to the robot controls with an NC axis (7th and 8th robot axis). The robot gauges the turning position before the start with the help of a sensor. Now the robot operates the tool station in order to deburr the crankshaft with the corresponding deburring tool.



Milling spindle



Piercing the oil duct

- Step 1:** Deburring the edges with the milling spindle
- Step 2:** Brushing the transitions on the double big end bearing (spandrel)
- Step 3:** Piercing the oil duct with an oil duct piercer
- Step 4:** Turning the rotary table, the processed crankshaft is then removed from the rotary table using the loader and an unprocessed crankshaft is loaded.
- Step 5:** The tensioned crankshaft is turned to the robot with the rotary table.



Tool station

Deburring a crankshaft

Technical details:

Workpiece	Crankshaft
Weight	100 kg
Dimensions of cladding circles	260 mm
Lengths	max. 1,100 mm
Cycle time	2 min.
Tools	Milling spindle, Brushes, Oil duct piercer
Tool tray	several locations
Robot	KR 16 with KRC4 controls
Rotary table	2 clamping devices for crankshafts

We provide ready to use robot systems and automation solutions:



Processing:

Deburring

Milling

Grinding

Stroke filing

Polishing



Assembly:

Assembling

Screwing

Shrinking

Pressing

Glueing



Handling:

Picking up

Stacking

Insertion

Removal

Placing

Everything from a single source:

Thanks to our integration into the **Pütz Group** and the resulting **synergy effects**, we are able to offer you not just robot systems and automation solutions, but also the appropriate test technology to test surfaces for dimensional accuracy.

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