

DEBURRING A CRANKSHAFT

SAMPAS

efficient robot solutions

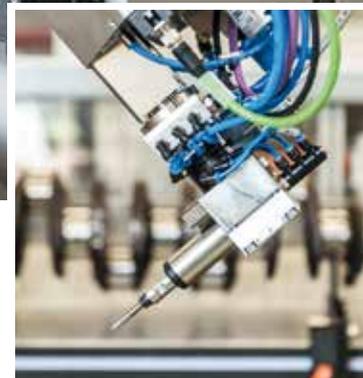
ROBOTIC SYSTEMS
AND AUTOMATION SOLUTIONS



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.

- 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.



Milling spindle



Piercing the oil duct

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Technical details:

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

Our services:

- Project planning and management
- Programming
- Electronic and mechanical design
- Commissioning
- Production interfaces
- Manufacture and assembly



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 only Robotic systems and automation solutions but also the appropriate testing technology to test surfaces and dimensional accuracy and completeness.

**SAMPAS GmbH takes care
of everything:**

... project planning
and programming,
project management,
production interfaces, activation,
operational approval, production
oversight and much more!

**We look forward
to hearing from you!**

Sampas GmbH

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