## **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.

### **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



Milling spindle



Piercing the oil duct



ficient robot solutions







### **Deburring a crankshaft**

### **Technical details:**

Workpiece Weight Dimensions of cladding circles Lenghts	Crankshaft 100 kg 260 mm 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.

Sampas + Silvercut GmbH Ernst-Heinkel-Str. 16 71394 Kernen-Rommelshausen GERMANY

cegger@sampas.de Phone: +49 7151 604033-0 Fax: +49 7151 604033-300 www.sampas.de

