





FULLY AUTOMATIC CUTTING ROBOT WITH HIGHEST PRECISION AND ROTATIONAL AXES



part of **VERDER** 



### **CUTTING WITHOUT RESTRICTIONS**

### **QCUT 600 BOT**

- I Highest degree of automation with dynamic cut-off wheel measurement and automatic adjustment of the cutting parameters
- I Visual menu guidance for easy programming
- I Any number of cut-offs with different components can be cut in one process
- I Complex cutting sequences made easy the rotation of the machine table eliminates the need for timeconsuming reclamping of the workpieces (patented)
- I Expandable with additional rotary axis that can be adapted modularly
- I Unlimited clamping possibilities with individually tailored solutions
- I Generous access to the cutting chamber



The Qcut 600 BOT is a fully automatic cutting robot with max. 5 axes for the use of cutting discs with a size of up to 610 mm / 24".

The Qcut 600 BOT cutting robot opens up new possibilities with its 5 axes (X-, Y-, Z-, B-, C-axis) and the generously sized machine table ( $\emptyset$  600 mm) opens up new application possibilities. The automatic travel (X-axis) and cross-cut (Y-axis) reach speeds of up to 80 mm/sec thanks to its highly dynamic drives.

The rotary table (B-axis) has a swivelling range of 360° and can be modularly extended with an additional rotary axis (C-axis - swivel range of combined axes: B-axis 200° / C-axis 360°).

The cut-off wheel guard is guided in parallel during the chop cut, to increase the cutting capacity of the cut-off wheel. The large sliding and side door, with safety lock when the cutting disc moves, ensures the best possible access to the large machine table.

Recirculation cooling and automatic central lubrication are integrated in the machine body of the robust steel construction. The Qcut 600 BOT can also be equipped with a belt filter unit as an alternative to the recirculating cooling unit.



### INTUITIVE AND EASY OPERATION

The teach-in function enables user-friendly programming of the of the cutting positions by approaching the individual positions. The multi-position process MPP allows the simultaneous positioning and automatic start-up of different components on the clamping table. This eliminates the need for time-consuming reclamping of the components.



### **CUTTING OPTIMISATION**

In order to optimise the cutting quality, the machine automatically detects local material singularities, such as hardened areas, and regulates the feed rate depending on the cutting force. When starting a new cut, the component is automatically detected and approached at reduced speed (cut detection).



### AUTOMATIC CUT-OFF WHEEL MEASUREMENT

The dynamic cut-off wheel measurement leads to reproducible cutting results with consistent quality. By automatically monitoring the current cut-off wheel diameter, the cutting parameters are adjusted after each cut so that the cutting speed and cutting depth remain constant.



### REMOTE MAINTENANCE

Direct fault diagnosis and online support from QATM can be provided via a VPN connection using an existing broadband internet connection. **ADDITIONAL ROTARY AXIS** 

# UNLIMITED CLAMPING POSSIBILITIES

The modular C-axis on the table opens up new possibilities to precisely position complex components. The patented solution of combined rotary axes eliminates the need for time-consuming reclamping and the use of additional clamping tools.

### **ERGONOMIC CONTROL PANEL**

- I Large 12.1" TFT touch display
- I Two joysticks for manual operation
- I The sliding control panel enables clear working

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### **OPTIONAL AXIS OF ROTATION**

### C-Achse

- I Rotation range 360°
- I Modularly removable rotary axis
- I Clamping possibility can be individually extended with lathe chuck or other clamping devices

### **ROBUST MACHINE BODY**

- I Integrated central lubrication
- I Extendable recirculation cooling
- I Optionally also with belt filter system

### LARGE MACHINE TABLE

- I Axes can be precisely positioned and fixed vibration-free in the cutting process
- I Diameter: 600 mm
- I Load capacity: 150 kg
- I Travel: X/Z-axis: 550 mm

### SIDE DOORS

- I Swivel door for free access to the cutting chamber
- I Change of cutting disc via separate side door possible

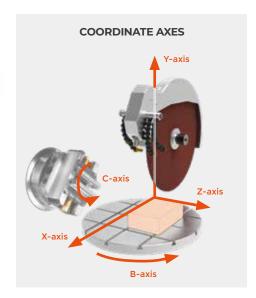
### AUTOMATIC CUT-OFF WHEEL MEASUREMENT

- I Dynamic adjustment of the cutting parameters for optimum results
- I Ideal utilization of the cutting space due to innovative transverse infeed via the swivel arm

### **ROTATIONAL AXIS**

### B-axis

- I Rotation range max. 360°
- I Rotation range with combined C-axis 200 $^{\circ}$
- I Positioning accuracy: ±0.1°



FREE ACCESSIBILITY

## FOR LARGE WORKPIECES

Large components can be placed directly by forklift or crane via the wide sliding door.



### THE BEST SOLUTION FOR YOUR APPLICATION

The additional rotary axis can be equipped with a variety of different clamping systems that can be individually adapted. We offer a free consultation and execution of feasibility studies with your applications in CAD and give further recommendations on possible clamping tools.



### **QPREP CONSUMABLES**

High-quality cut-off wheels are available for the various applications. The use of an optimum cut-off wheel results in very fine surface finishes after cutting and shortens the preparation process.



Further information on our consumables and other products can be accessed via the QR code.





### TECHNICAL DATA



Machine type	4 axes (X/Y/Z/B)	5 axes (X/Y/Z/B/C)
Cutting wheel	up to Ø 610 mm / 24"	
Max. way of cutting wheel into sample	244 mm (cutting wheel Ø 610 mm)	
Wheel flange size	Ø 32 / 40 mm	
X-axis automatic	550 mm	
Y-axis automatic	360 mm	
Z-axis automatic	550 mm	
Precision Z-axis	0.1 mm	
B-Axis	360°	200°
C-Axis	-	360°
Table	Ø 600 mm, stainless	
T-slot	12 mm	
Speed	variable 1000 - 2400 rpm	
Drive power (main drive)	15 kW, S1	
Connection power	30 kVA	
WxHxD	1640 x 2200 x 1480 mm	
Weight	approx. 1600 kg (depends on equipment)	



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