## **CUT-OFF MACHINE**

# **QCUT 350 A**



# ELECTRONIC CONTROL

Cutting parameters for the automatic traverse cuts can be saved in the electronic control, and then loaded later. The position of the manual traverse cut is also shown on the display.

**ELECTRONIC PERFORMANCE CONTROL** 

cutting components from overloading.

The feed rate is reduced upon reaching the preset maximum power. This protects the machine and its

All parameters such as feed rate, travel and cutting force can be altered during automatic cycles.



With the "Multi-Position-Process" (MPP) you can place multiple specimens on the table and cut them in one sequence. The teach-in function enables a simple and user-friendly setting of various cutting positions.

The Qcut 350 A is an automatic wet abrasive cut-off machine for samples up to max. Ø 135 mm. It cuts gentle with low contact cutting (Icc) different type of samples in various geometries, sizes and materials. The machine is commonly used in Materialography, Mineralogy, as well as for cutting of composite materials (CFC/PMC/MMC) or electronic devices such as PCBs.

The large scale cutting chamber, the stainless steel table as well as other software based functions of the large abrasive machines such as automatic touch detection, MPP and parallel setting of the wheel guard during vertical cutting, make operation comfortable and processes reproducable and flexible.

#### **PULSED CUTTING**

In cases where there are heavy sections and materials which are difficult to cut, the variable pulsed cutting system gives decisive advantages.

#### **AUTOMATIC TOUCH DETECTION**

After automatic start of the cutting process the sample is approached in rapid run. By touching the cut-off wheel the sample is cut efficiently and safely with preset cutting parameters.



#### **NEW DIMENSIONS**

The enlarged cutting chamber and worktable combined with parallel setting of wheel guard increases cutting capacity and travel for all axes. The side door ensures optimum access to the cutting chamber and the additional opening for supplying long sample parts opens up much possibilities.

#### **PRECISION CROSS FEED**

The optional, automatic cross-feed with series cut function is suitable for exact parallel cuts. Operational handling takes place via electronic control. The electronic cross-feed can also be applied as feeder axis when working with pot wheel.



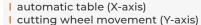




## **BASIC MODULE**

#### **Qcut 350 A**





- I equipment: automatic cross feed (Z-axis) note equipm. version
- manual control of X-/Y-/Z-axis via an industrial joystick
- I high dymnamic drive up to 40 mm/sec.
- I automatic touch detection
- parallel setting of wheel guard during vertical cutting sequences increases cutting capacity
- variable speed
- I incl. cutting wheel arbout with wear ring
- I Easy-nut for easy change of cutting wheel
- I Touch-Screen display and QATM-Software control
- I optical menu navigation for drawing up precise program sequences with position steps and cutting modes (horizontal, vertical, diagonal and step cut)
- I variable pulsed cutting
- I storage of programs with password; update and backup via USB
- I remote service/support is available via controller
- I robust aluminium construction, powder-coated
- I large sliding and side door for optimal access to cutting chamber; with safety lock when machine is
- I sliding door with large window
- I opening on the right for long parts
- I optimal chamber illumination
- I options: laser alignment aid, centrifugal separator

Order No.: M1821001

## **EQUIPMENT**

#### **POWER SUPPLY**

Equipment 1	Equipment 2	Equipment 3
400 V/50 Hz (3P/PE)	480 V/60 Hz (3Ph/PE)	220 V/60 Hz (3Ph/PE)
Order No.: A1821015	Order No.: A1821016	Order No.: A1821017

#### WHEEL GUARD

Equipment 1		Equipment 2	
Cut-off wheel	Ø 305/12"	Cut-off wheel	Ø 356/14"
Max. cutting capacity	Ø 110 mm	Max. cutting capacity	Ø 135 mm
Order No.: A1821018		Order No.: A1821019	

#### **CROSS-FEED AXIS**

Equipment 1	Equipment 2	Equipment 2		Equipment 3	
without Z-axis	Z-axis manual (h	Z-axis manual (handle)			
	Travel	140 mm	Travel	140 mm	
	Precision	0.1 mm	Precision	0.1 mm	
Order No.: A1821020	Order No.: A182	Order No.: A1821021		1022	



## OPTION

#### **ROTATION TOOL**



- I tool with vertical rotary feed, parallel to wheel
- I angle input via software control

on request

## LASER ALIGNMENT AID

- I laser line to visualize the cutting line
- I laser class 1

Order No.: A1821023

## **CENTRIFUGAL SEPARATOR**

- I to remove coolant mist
- I increases quality of illumination
- I exhauster power 180 or 215 m³/h depends on power supply

Order No.: A1821024

## **ADDITIONAL LED**

I illumination for the left hand area of the cutting chamber

Order No.: A1821027

## **ACCESSORIES**

#### **RECIRCULATION COOLING SYSTEM**





- I 2-chamber-pvc-compartment 45 ltr.
- I inlet sieve and filter bag
- I mobile with insertion mechanism for System Lab cabinets

WxHxD 366 x 540 (640) x 610 mm

Order No.: A5800507



- I incl. connection set
- I controlled by cut-off machine
- I mobile

WxHxD 366 x 550 x 600 mm

Order No.: A5800508

## **BASIC SET QCUT 350 A**

Order No.: Z1821002

#### **BELT FILTER SYSTEM 130**

I incl. filter roll



Tank	130 ltr.
Filter capacity	30 ltr./min (referring emulsion)
Pump	15 ltr./min
WxHxD	607 x 632 x 1308 mm
Weight	~ 90 kg
400 V/50 Hz (3Dh/DE)	

400 V/50 Hz (3Ph/PE) Order No.: A6501009 480 V/60 Hz (3Ph/PE) Order No.: A6501011 220 V/60 Hz (3Ph/PE)

Order No.: A6501010

## **CONNECTION SET 230/250**

I for belt filter system please order connection set

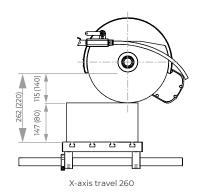
Order No.: Z6501004

QCUT 350 A





Clamping example



SPECIFICATIONS		
Max. cutting capacity	1	Ø 110 mm (Ø 305 mm cut-off wheel) Ø 135 mm (Ø 356 mm cut-off wheel)
Cut-off wheel	1 2	Ø 305 mm/12" Ø 356 mm/14"
Arbour size		Ø 32 mm
Y-axis automatic		175 mm
Z-axis automatic (parallel cut) (option)		140 mm
X-axis automatic		260 mm
Feed rate		0.001 - 40 mm/sec
Table WxD	1	400 x 300 mm (with Z-axis) 500 x 300 mm (without Z-axis)
T-slot		12 mm
Motor cut-off wheel		4 kW (S1), 5.5 kW (S3)
Connected load		9.5 kVA
Power supply	1 2 3	variable speed 800-3400 rpm 400 V/50 Hz (3/PE) 480 V/60 Hz (3/PE) 220 V/60 Hz (3/PE)
WxHxD		~ 1,015 x 780 x 840 mm
Weight		~ 200 kg

