### ELECTRONIC PERFORMANCE CONTROL

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



### **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.

All parameters such as feed rate, travel and cutting force can be altered during automatic cycles. (X)\_(Z



The BRILLANT 250.3 is an automatic wet abrasive cut-off

It cuts gentle with low contact cutting (lcc) different type of

The machine is commonly used in Materialography, Mineralogy,

as well as for cutting of composite materials (CFC/PMC/MMC)

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

samples in various geometries, sizes and materials.

machine for samples up to max. Ø 135 mm.

# **MULTI-POSITION PROCESS MPP**

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.

# BRILLANT 250.3

or electronic devices such as PCB's. 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.

### 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.



08-2016

**PULSED CUTTING** 

decisive advantages.



1,19 www.atm-m.com

# Wet abrasive cut-off machine

# BASIC MODULE



## BRILLANT 250.3

### Order No.: M1821001

» automatic table (X-axis)

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



Equipment 1 **Cut-off wheel Ø 305/12"** Order No.: A1821018

Max. cutting capacity Ø 110 mm

Equipment 2 **Cut-off wheel Ø 356/14"** Order No.: A1821019

Max. cutting capacity Ø135 mm



# BRILLANT 250.3

### EQUIPMENT

### CROSS-FEED AXIS

Equipment 1 without Z-axis Order No.: A1821020 Equipment 2 Z-axis manual (handle) Order No.: A1821021 » made of stainless steel

140 mm Travel Precision 0.1 mm

Equipment 3
Z-axis automatic
Order No.: A1821022
» made of stainless steel

140 mm Travel Precision 0.1 mm



# **ROTATION TOOL**

on request

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



# LASER ALIGNMENT AID

**OPTION** 

**ACCESSORIES** 

Order No.: A1821023 » laser line to visualize the cutting line

#### **RECIRCULATION COOLING SYSTEM** » 2-chamber-pvc-compartment 45 ltr. » incl. connection set » inlet sieve and filter bag » controlled by cut-off machine Mobile with insertion mechanism for Mobile System Lab cabinets 400 V/50 Hz (3Ph/PE) 400 V/50 Hz (3Ph/PE) Order No.: A5800484 Order No.: A5800487 480 V/60 Hz (3Ph/PE) 480 V/60 Hz (3Ph/PE) Order No.: A5800485 Order No.: A5800488 220 V/60 Hz (3Ph/PE) 220 V/60 Hz (3Ph/PE) Order No.: A5800486 Order No.: A5800489 366x540 (640) **WxHxD** WxHxD 366x550x600mm x610 mm **BELT FILTER SYSTEM 130**



07-2016

» Incl. filter roll 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 Order No.: Z6501004 » for belt filter system please order connection set

Tank	130 ltr.
Filter capacity	30 ltr./min (refering emulsion)
Pump	15 ltr./min
WxHxD	607x632x1308 mm
Weight ~	90 kg

1,21





## BRILLANT 250.3

# ACCESSORIES



### ZCENTRIFUGAL SEPARATOR



» to remove coolant mist

» increases quality of illumination

400 V/50 Hz (3Ph/PE)

Order No.: A1821024

480 V/60 Hz (3Ph/PE)

Order No.: A1821025

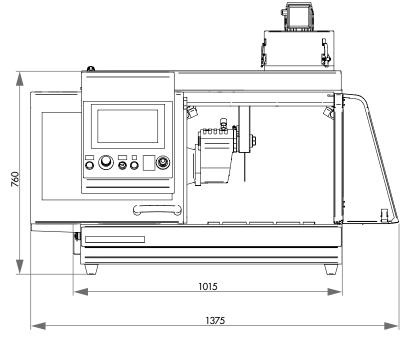
220 V/60 Hz (3Ph/PE)

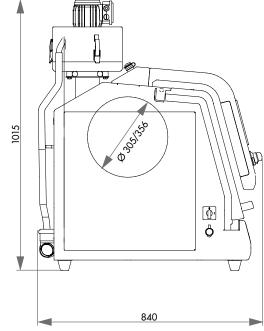
Order No.: A1821026

### SPECIFICATIONS

1 Ø 110 mm (Ø 305 mm cut-off wheel)	
2 Ø 135 mm (Ø 356 mm cut-off wheel)	
1 Ø 305 mm/12"	
2 Ø 356 mm/14"	
Ø 32 mm	
180 mm	
140 mm	
260 mm	
0.1 bis 40 mm/sec	
1 400x300 mm (with Z-axis)	
2 500x300 mm (without Z-axis)	
12 mm	

Motor cut-off wheel	4 kW (S1), 5.5 kW (S3)
Connected load	9.5 kVA
Power supply	variable speed 800-3400 rpm 1 400 V/50 Hz (3/N/PE) 2 480 V/60 Hz (3/PE) 3 220 V/60 Hz (3/PE)
WxHxD ~	1,015 x 760 x 810 mm
Weight ~	200 kg





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