



The universal wet-abrasive cut-off machine **BRILLIANT 265** with automatic travel and cut-off allows precise, soft touch cutting with 2 axes in arbitrary directions (Y/X axis) and can be equipped with an automatic or manual Z-axis for parallel serial-cuts (option).

The built in electronic control with LCD clearly shows the progress of the current cutting cycle.

The large cutting chamber of solid, powder coated aluminum construction is easily accessible through sliding front and side doors. Complex geometric shaped samples can be fixed securely on the T-slot table using our reliable clamping systems.

The vibration reducing design of the cutting arm allows a low noise cutting process.

Our approved LED cutting chamber illumination is energy saving, damage resistant and guarantees optimum illumination of the cutting chamber.



**PULSED CUTTING**

Especially when cutting through thick and difficult materials, the adjustable automatic pulsed-cut offers material advantages such as cutting clearance and optimal cooling of the intersection area.

**CUTTING FORCE DEPENDANT FEED CONTROL**

The feed speed automatically decreases when the cutting force reaches a pre-defined limit. This protects the machine, sample and clamping tools from over-loading.

**SAFETY**

Integrated safety protection only allows the automatic doors to be opened when the cutting wheel has stopped rotating.

**ELECTRONIC CONTROL**

With the electronic control, all cutting parameters can be saved and loaded again. During the automatic cutting process, all parameters such as feed speed, cutting force etc. can be modified.

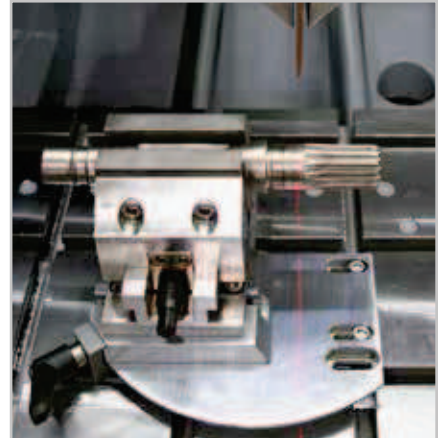
**JOYSTICK CONTROL**

To reduce times for setting up, all axes can be controlled with a joystick.

**PROGRAM CYCLE**

By pressing the start button, the main motor and the feed are activated. After completing the pre-defined travel, the table moves back to its initial position and the machine is shut down.

The feed speed decreases automatically when an overload occurs during the cutting process.



**PRECISION CROSS FEED**

The Z-axis is integrated in the table. This allows keeping the cutting height at the same level. The automatic cross feed with serial cutting function produces precise parallel cuts.

**LASER ALIGNMENT**

With line laser you can display the scheduled cut on the sample. This helps to define the exact cutting position.

⊙ Option





## BASIC MODULE



## BRILLANT 265

Order No.: M1841000

- » Automatic horizontal and vertical movement
- » Spacious cutting chamber with large table
- » Openings on the left and right for continuous long parts
- » Electronic control with clear LCD
- » Automatic pulsed cutting
- » Electronic travel measuring
- » Cutting force-dependant feed control
- » Program storage
- » Direct positioning via joystick (all automatic axes)
- » Current safety standard with door interlock (safety protection)
- » Cutting wheel arbour with wear-ring
- » Automatic central greasing (air required 6 bar)
- » Easy-nut for quick and easy exchange of cutting wheels
- » Optimal cutting chamber illumination with LED
- » Solid aluminium construction, powder coated

## EQUIPMENT

## POWER SUPPLY (select equipment)

Equipment 1

**Fixed speed 1950 rpm**

400 V/50 Hz (3/N/PE)

Order No.: A1841000

Equipment 2

480 V/60 Hz (3/PE)

Order No.: A1841001

Equipment 3

220 V/60 Hz (3/PE)

Order No.: A1841002

**Variable speed 1000-2700 rpm**

400 V/50 Hz (3/N/PE)

Order No.: A1841003

480 V/60 Hz (3/PE)

Order No.: A1841004

220 V/60 Hz (3/PE)

Order No.: A1841005



E-Lab ready



Easy-nut for easy change of cutting wheel



Wear ring



**EQUIPMENT**

**TABLE DRIVE (select equipment)**

Equipment 1  
**without Z-axis**  
 Order No.: A1841008

Equipment 2  
**Z-axis manual (handle)**  
 Order No.: A1841006  
 » Made of stainless steel  
 » Z-axis travel 150 mm  
 » Precision 0.1 mm

Equipment 3  
**Z-axis automatic**  
 Order No.: A1841007  
 » Made of stainless steel  
 » Z-axis travel 150 mm  
 » Precision 0.01 mm

**WHEEL GUARD (select equipment)**

Equipment 1  
**Cut-off wheel Ø 350 mm/14"**  
 Order No.: A1841009  
 » Max. cutting capacity Ø 130 mm

Equipment 2  
**Cut-off wheel Ø 400 mm/16"**  
 Order No.: A1841010  
 » Max. cutting capacity Ø 150 mm

**COOLING AND FILTER SYSTEMS (select equipment)**

Equipment 1  
**Recirculation cooling unit**  
 400 V/50 Hz (3/PE)  
 Order No.: A1841011  
 480 V/60 Hz (3/PE)  
 Order No.: A1841012  
 220 V/60 Hz (3/PE)  
 Order No.: A1841013

- » Integrated
- » Tank approx. 130 Ltr.
- » Pump approx. 100 Ltr./min
- » Inlet sieve with filter bag  
 (see consumables)



Equipment 2  
**Belt filter system 285**  
 400 V/50 Hz (3/PE)  
 Order No.: A6501000  
 480 V/60 Hz (3/PE)  
 Order No.: A6501002  
 220 V/60 Hz (3/PE)  
 Order No.: A6501001

- » Incl. filter roll
- » Tank 285 Ltr.
- » Filtering capacity 100 Ltr./min  
 (referring emulsion)
- » Pump 100 Ltr./min
- » Filter area 0,85 m<sup>2</sup>
- » Filter fleece width 710 mm
- » WxHxD 850x790x1656 mm
- » Weight approx. 120 kg



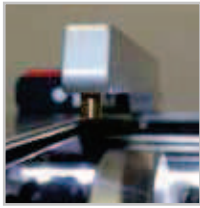
**Connection set Brilliant 255/265**  
 Order No.: Z6501003  
 » For belt filter system please order connection set





OPTION

LASER ALIGNMENT AID



- Order No.: A1841014
- » Laser line to visualize the cutting line
  - » Laser class 2 EN/IEC 60825-11

ROTATION TOOL



- on request
- » Tool with vertical rotary feed, parallel to wheel
  - » Angle input via software control

CENTRIFUGAL SERARATOR



- 400 V/50 Hz (3/PE)  
Order No.: A1841015
- 480 V/60 Hz (3/PE)  
Order No.: A1841016
- 220 V/60 Hz (3/PE)  
Order No.: A1841017

- » To remove coolant mist
- » Increases quality of illumination
- » exhauster power 425 or 500 m<sup>3</sup>/h depending on power supply

PULSED CLAMPING SYSTEM FOR BRILLANT 255/265



- » Parallel, continuous serial cuts of 5–130 mm width
- » Clamping and adjusting of sheet material up to 10 mm thickness in Z-direction
- » Max. material width (cutting length) 300 mm

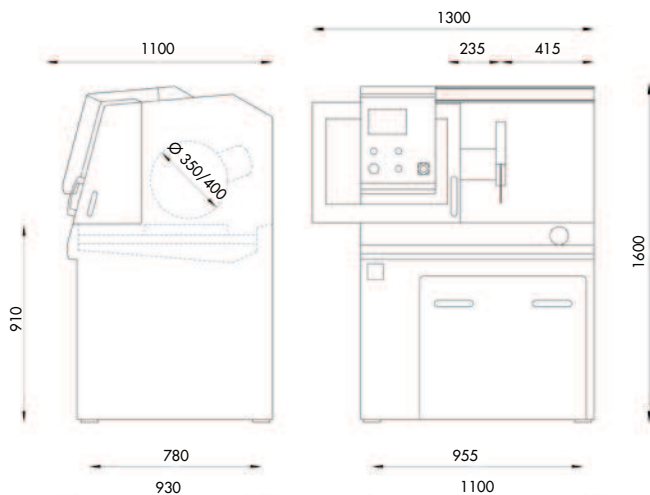
manual pulsed clamping system

- Order No.: Z1841010
- » for manual Z-axis

automatic pulsed clamping system

- Order No.: Z1841011
- » for automatic Z-axis

SPECIFICATIONS



Max. cutting capacity	Ø 150 mm (depends on cut-off wheel)	
Cut-off wheel	1	Ø 350 mm
	2	Ø 400 mm
Arbour size	Ø 32 mm	
Vertical movement	170 mm (depends on cut-off wheel)	
Horizontal movement	345 mm	
Table WxD	1	550 x 375 mm (without Z-axis)
	2	420x 375 mm (withZ-axis)
	3	
T-slot	12 mm	
Connected load	12.5 kVA	
Power supply	1	fixed speed 1950 rpm
	2	400 V/50 Hz (3/N/PE)
	3	480 V/60 Hz (3/PE)
	3	220 V/60 Hz (3/PE)
Connected load	1	18 kVA
	2	variable speed 1000-2700 rpm
Power supply	1	400 V/50 Hz (3/N/PE)
	2	480 V/60 Hz (3/PE)
	3	220 V/60 Hz (3/PE)
WxHxD	approx. 1100 x 1600 x 930 mm	
Weight	approx. 450 kg (depends on equipment)	

