#### Wet abrasive cut-off machine



#### **ELECTRONIC CONTROL**

With the electronic control, all cutting parameters can be saved and loaded again. Maintenance tasks can also be stored in a customer-specific manner. During the automatic cutting process, all parameters such as feed speed, cutting force etc. can be modified.

#### **PROGRAM CYCLE**

By pressing the start button, the main motor and the feed are activated. The integrated cut detection ensures a constant cutting behavior, even when the cutting disk wears during sectioning.

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

# **BRILLANT 265**

The universal wet-abrasive cut-off machine BRILLANT 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 newly developed intuitive user software with graphical LCD interface makes the automatic process sequence easy and clear. The large cutting chamber of solid, powder coated aluminum construction is easily accessible through sliding door and side doors. Complex geometric shaped samples can be fixed securely on the T-slot table using our reliable clamping systems. The innovative Quick-Change system facilitates maintenance and replacement of the cutting disc. Our approved LED illumination of the cutting chamber is energy saving, damage resistant and guarantees optimum illumination of the cutting chamber.

### **PULSED CUTTING**

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



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.

#### CUTTING FORCE DEPENDENT 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.

#### JOYSTICK CONTROL

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



#### **BRILLANT 265**



#### SAFETY

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



## LASER ALIGNMENT

With the optional line laser the cutting line can be projected on the sample. This helps to define the exact cutting position.

**BASIC MODULE** 



#### Order No.: M1841000

- » automatic horizontal and vertical movement (X- and Y-axis)
- » variable speed
- » 10.1" Touch-Screen user interface with intuitive ATM user software
- » superior LED illumination of cutting chamber
- » parallel setting of wheel guard during cutting sequences increases cutting capacity
- » opening on the right for long parts
- » automatic touch detection
- » cutting-force dependent feed control (X- and Y-axis)
- » 200 customized programs storable

#### POWER SUPPLY

Equipment 1 Variable speed Order No.: A1842000

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

Equipment 2 Variable speed Order No.: A1842001

480 V/60 Hz (3Ph/PE)

Equipment 3 **Variable speed** Order No.: A1842002

EQUIPMENT

220 V/60 Hz (3Ph/PE)

EQUIPMENT

#### TABLE DRIVE

Equipment 1 **X-axis automatic (**without Z-axis)

Order No.: A1842003 » included in basic unit Equipment 2 X-axis automatic Z-axis (cross feed) manual (hand wheel) Order No.: A1842004 » made of stainless steel

| Travel Z-axis | 150 mm |  |
|---------------|--------|--|
| Precision     | 0.1 mm |  |
|               |        |  |

Equipment 3 X-axis automatic Z-axis (cross feed) automatic Order No.: A1842005 » made of stainless steel

| Travel Z-axis | 150 mm |
|---------------|--------|
| Precision     | 0.1 mm |





## BRILLANT 265

## EQUIPMENT

#### COOLING AND FILTER SYSTEMS

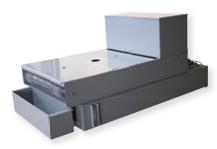
#### Equipment 1 Recirculation cooling unit Order No.: A1842008

| Tank  | appr. 130 ltr.     |
|-------|--------------------|
| Pump  | appr. 100 ltr./min |
| WxHxD | 625x608x810 mm     |

- » integrated, mobile
- » multi-chamber filtration
- » inlet sieve with filter bag







Equipment 2 Belt filter system 285 Order No.: A1842011

| Tank                | 285 ltr.                            |
|---------------------|-------------------------------------|
| Filtering capacity  | 100 ltr./min<br>(refering emulsion) |
| Pump                | 100 ltr./min                        |
| Filter area         | 0.85 m <sup>2</sup>                 |
| Filter fleece width | 710 mm                              |
| WxHxD               | 929x790x1745 mm                     |
| Weight approx.      | 120 kg                              |

» incl. filter roll

» for belt filter system please order connection set

Connection set for belt filter system 285 Order No.: Z6501003



## LASER ALIGNMENT AID

Order No.: A1842009

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

## CENTRIFUGAL SEPARATOR

### Order No.: A1842010

» removes coolant mist

- » purifies the air and increases visibility
- » exhaust power 425 m<sup>3</sup>/h



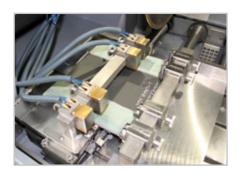
OPTION



## ROTATION TOOL

on request » tool with vertical rotary feed, parallel to wheel

» angle input via software control



#### 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 with cut-off wheel Ø 350 mm

#### Manual

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

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





**OPTION** 

### **SPECIFICATIONS**

| Max. theoretical<br>cutting capacity | Ø 150 mm                        |  |
|--------------------------------------|---------------------------------|--|
| Cut-off wheel                        | Ø 406/16" mm                    |  |
| Arbour size                          | Ø 32 mm                         |  |
| Horizontal movement 345 mm           |                                 |  |
| Vertical movement                    | 200 mm                          |  |
| Cross feed                           | 150 mm                          |  |
| Feed rate                            | 0.001-40 mm/sec                 |  |
|                                      | 1 550x375 mm (without Z-axis)   |  |
| Table WxD                            | 2<br>3 420x375 mm (with Z-axis) |  |
| T-slot                               | 12 mm                           |  |
|                                      |                                 |  |

| Motor cut-off wheel            | 7 kW, S1-mode  |
|--------------------------------|--|
| Connected load<br>Power supply | 17 kVA<br>variable speed<br>2 400 V/50 Hz (3Ph/N/PE)<br>2 480 V/60 Hz (3Ph/PE)<br>3 220 V/60 Hz (3Ph/PE) |
| WxHxD ~<br>Weight ~            | 1134x1610x930 mm<br>480 kg (depends on equipment)  |

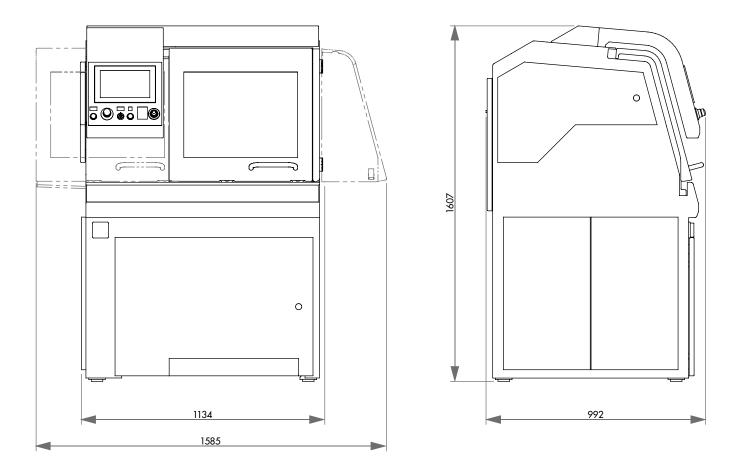


Illustration: Basic unit without equipment, options and accessories. Further information is available on request.