



### 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.





**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**

**BRILLANT 265**



Order No.: M1842000

- » 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

- » solid aluminum design

**EQUIPMENT**

**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

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



## EQUIPMENT

## COOLING AND FILTER SYSTEMS

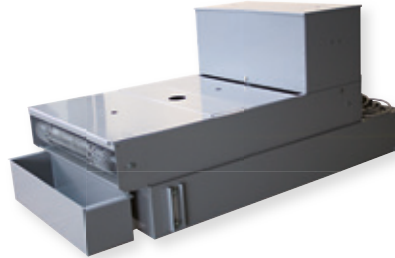
## Equipment 1

**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  
(see consumables)



## Equipment 2

**Belt filter system 285**

Order No.: A1842011

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	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

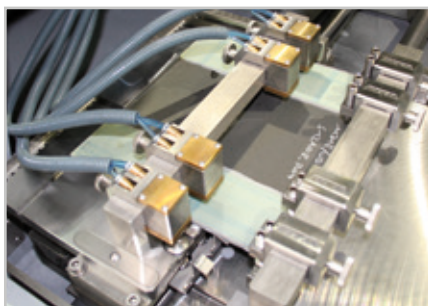
**CENTRIFUGAL SEPARATOR**

Order No.: A1842010

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

**ROTATION TOOL***on request*

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

**AUTOMATIC PULSED CLAMPING SYSTEM FOR BRILLANT 265**

Order No.: A1842013

- » For automatic Z-Axis
- » For parallel cuts of variable thickness of 5–130 mm
- » Max. cutting length: 285 mm (for sample of 20 mm thickness)
- » Max. cross feed 150 mm (for one clamping)
- » Cross feed realized by automatic standard Z-axis of Brillant 265
- » Assembled on automatic standard Z-axis of Brillant 265 (detachable)
- » Fixation and cross feed realized by 4 adjustable manual clamps with pressure screws
- » Addit. fixation by 4 adjustable, pneumatic clamps each with 100 N clamping force



## SPECIFICATIONS

Max. theoretical 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
Table WxD	1 550x375 mm (without Z-axis)
	2 420x375 mm (with Z-axis)
	3 420x375 mm (with Z-axis)
T-slot	12 mm

Motor cut-off wheel	7 kW, S1-mode
Connected load	17 kVA
Variable speed	1000-2900 rpm
Power supply	1 400 V/50 Hz (3Ph/N/PE)
	2 480 V/60 Hz (3Ph/PE)
	3 220 V/60 Hz (3Ph/PE)
WxD ~	1134x1610x930 mm
Weight ~	480 kg (depends on equipment)

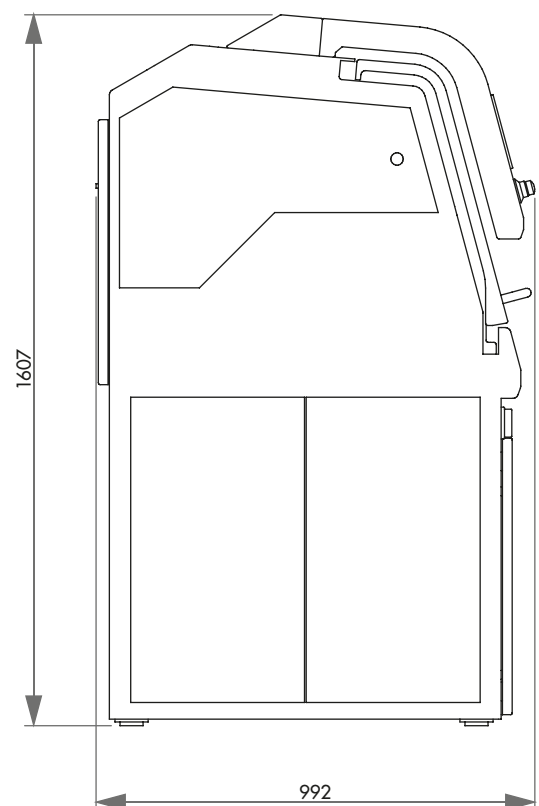
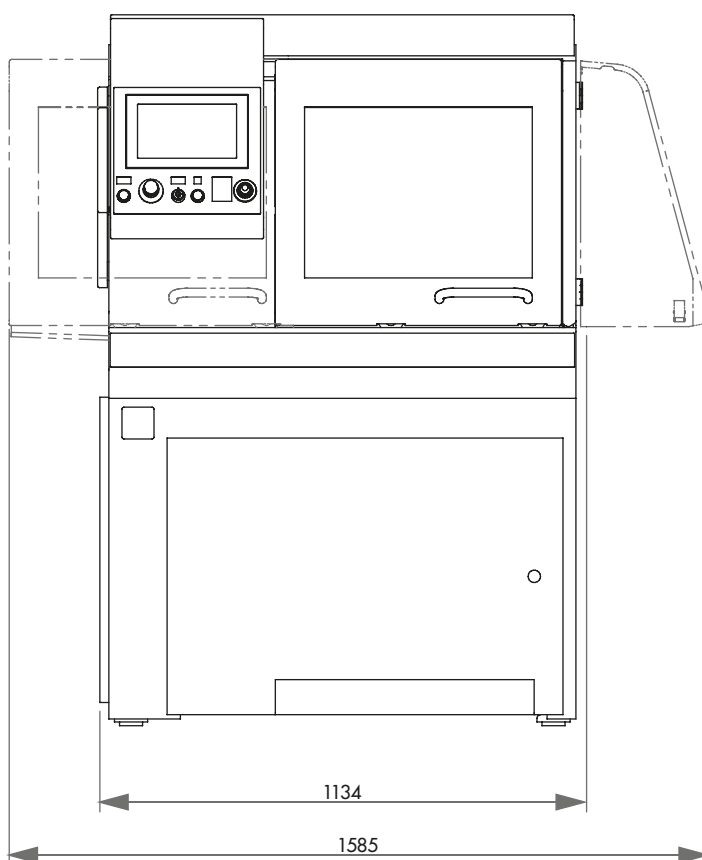


Illustration: Basic unit without equipment, options and accessories. Further information is available on request.