

**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.

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.

JOYSTICK CONTROL

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

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

The large cutting chamber of solid, powder coated aluminum

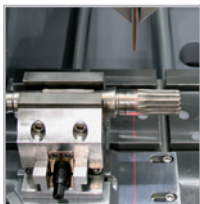
construction is easily accessible through sliding front and side doors. Complex geometric shaped samples can be fixed securely on the T-slot table using our reliable clamping systems.

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.

**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

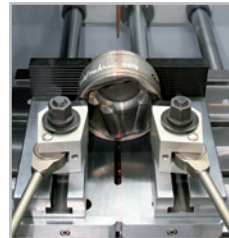
The feed speed automatically decreases when the cutting force reaches a pre-defined limit. This protects the machine, sample and clamping tools from over-loading.





SAFETY

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



LASER ALIGNMENT

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



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
- » optimum cutting chamber illumination with LED
- » solid aluminium construction, powder coated
- » Easy-nut – for easy change of cutting wheel
- » e-Lab-ready

EQUIPMENT



POWER SUPPLY

Equipment 1
Fixed speed 1950 rpm
 Order No.: A1841000

Variable speed 1000-2700 rpm
 Order No.: A1841003

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

Equipment 2
Fixed speed 1950 rpm
 Order No.: A1841001

Variable speed 1000-2700 rpm
 Order No.: A1841004

480 V/60 Hz (3Ph/PE)

Equipment 3
Fixed speed 1950 rpm
 Order No.: A1841002

Variable speed 1000-2700 rpm
 Order No.: A1841005

220 V/60 Hz (3Ph/PE)

TABLE DRIVE



Equipment 1
Without Z-axis
 Order No.: A1841008

Equipment 2
Z-axis manual (handle)
 Order No.: A1841006
 » made of stainless steel

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

Equipment 3
Z-axis automatic
 Order No.: A1841007
 » made of stainless steel

| | |
|---------------|---------|
| Travel Z-axis | 150 mm |
| Precision | 0.01 mm |



EQUIPMENT

WHEEL GUARD

Equipment 1
Cut-off wheel Ø 350 mm/14"
 Order No.: A1841009

Max. cutting capacity Ø 125 mm

Equipment 2
Cut-off wheel Ø 400 mm/16"
 Order No.: A1841010

Max. cutting capacity Ø 150 mm

COOLING AND FILTER SYSTEMS

Equipment 1
Recirculation cooling unit

400 V/50 Hz (3Ph/PE)

Order No.: A1841011

480 V/60 Hz (3Ph/PE)

Order No.: A1841012

220 V/60 Hz (3Ph/PE)

Order No.: A1841013

| | |
|-------|--------------------|
| Tank | appr. 130 ltr. |
| Pump | appr. 100 ltr./min |
| WxHxD | 755x663x921 mm |

- » integrated
- » inlet sieve with filter bag
(see consumables)



Equipment 2
Belt filter system 285

400 V/50 Hz (3Ph/PE)

Order No.: A6501000

480 V/60 Hz (3Ph/PE)

Order No.: A6501002

220 V/60 Hz (3Ph/PE)

Order No.: A6501001

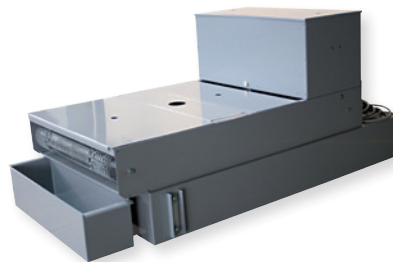
| | |
|---------------------|-------------------------------------|
| Tank | 285 Ltr. |
| Filtering capacity | 100 tr./min (referring emulsion) |
| Pump | 100 ltr./min |
| Filter area | 0.85 m ² |
| Filter fleece width | 710 mm |
| WxHxD | 929x790x1745 mm |
| Weight approx. | 120 kg |

- » inc. filter roll

Connection set 255/265

Order No.: Z6501003

- » for belt filter system please order connection set



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 SEPARATOR

- » to remove coolant mist
- » increases quality of illumination
- » exhauster power 425 or 500 m³/h depends on power supply

400 V/50 Hz (3Ph/PE)

Order No.: A1841015

480 V/60 Hz (3Ph/PE)

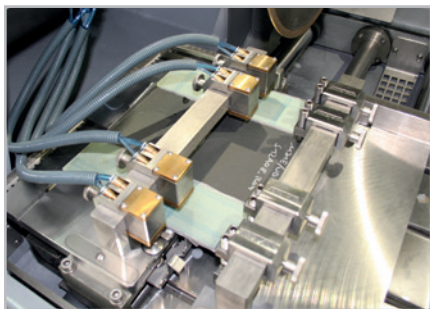
Order No.: A1841016

220 V/60 Hz (3Ph/PE)

Order No.: A1841017



OPTION



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 \varnothing 350 mm

Manual

Order No.: Z1841010

- » for manual Z-axis

Automatic

Order No.: Z1841011

- » for automatic Z-axis

SPECIFICATIONS

| | |
|-----------------------|---|
| Max. cutting capacity | \varnothing 150 mm (depends on cut-off wheel) |
| Cut-off wheel | 1 \varnothing 350 mm |
| | 2 \varnothing 400 mm |
| Arbour size | \varnothing 32 mm |
| Vertical movement | 170 mm (depends on cut-off wheel) |

| | |
|---------------------|--------------------------|
| Motor cut-off wheel | 7 kW, S1-mode |
| Connected load | 12.5 kVA |
| Power supply | 1 fixed speed 1950 rpm |
| | 2 400 V/50 Hz (3Ph/N/PE) |
| | 3 220 V/60 Hz (3/PE) |

| | |
|---------------------|-------------------------------|
| Horizontal movement | 345 mm |
| Feed rate | 0.05-3 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 | 8 kW, s1-mode |
| Connected load | 18 kVA |
| Power supply | 2 variable speed 1000-2700 rpm |
| | 1 400 V/50 Hz (3Ph/N/PE) |
| | 2 480 V/60 Hz (3Ph/PE) |
| | 3 220 V/60 Hz (3Ph/PE) |

| | |
|----------------|-------------------------------|
| MWxHxD approx. | 1100x1600x930 mm |
| Weight approx. | 450 kg (depends on equipment) |

