



The industrial wet cut-off machine **BRILLIANT 285** meets the highest of demands on space available and possibilities for cutting with its innovative concept for design, construction and operation.

A water-cooled 15 kW main motor is integrated into the swing arm and the **automatic horizontal (X-axis) and cutting wheel (Y-axis)** can reach up to 80 mm/sec. through highly dynamic axis drives in rapid-run.

With a totally new approach with the **automatic cross-feed movement (Z-axis)** through the swing arm, the cutting chamber is ideally put to use. Parallel setting of the wheel guard during vertical cutting sequences increases the cutting capacity considerably.

The large wheel and side door with safety lock for large cutting movements enable best-possible access to the large machine table with longitudinal and cross T-slots.

Recirculating cooling and automatic central lubrication systems are integrated into the robust welded steel construction body of the machine.



OPERATION

Touch-Screen display for the ATM-Software control is easy to read thanks to smart phone technology and even easier to operate.

Compact program sequences are easy to compile with **Drag&Drop** and thereby enable automated program sequences.

An unlimited number of password-secured program sequences can be updated and backed-up via USB.

CONTROL

A wide range of cutting procedures is at your disposal for the very best cutting results. Through the combination of this **unlimited range of positions**, series cuts or differing cut sequences can be made into reality - all made possible by such a large variety of positions.

The cutting process is rightly supported by **controlled cut-off wheel revolutions**.

Control of the cutting speed and a **soft start control** serve additionally for an economical cutting feed.

Manual control commands in the X-/Z-/Y-axes are also possible using an industrial joystick. User-friendly features are completed by an operator console which can be slid either to left or the right.





BRILLANT 285



TYPES OF CUT

Travel and cutting wheel offer a wide-ranging repertoire of types of cut through different combinations. In addition to the linear **diagonal cut**, the layer and segment-cuts are recommended for gentle cuts.

The **layer-cut** is well-suited for cutting taller and longer objects as well as solid material.

The **segment-cut** is especially suitable for large objects and hard materials.

CUT OPTIMIZATION

In addition to the type of cut, variable pulse-cut feed can also be selected.

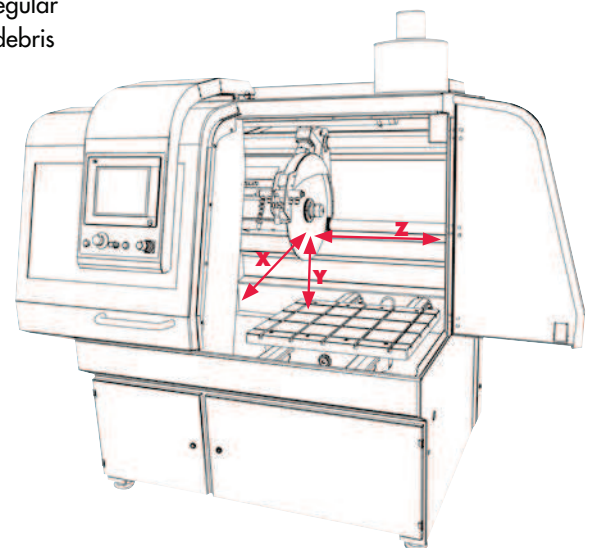
Rhythmic **pulsed feed** ensures regular cooling and removal of cutting debris from the sample.

LASER ALIGNMENT AID 

An optional line laser helps to get an exact cut positioning by visually showing the direction of cut.

REMOTE MAINTENANCE

In case an ISDN connection is available ATM provides tele diagnosis and online user support.



 Option





BASIC MODULE



BRILLANT 285

M1831000

- » Automatic table (X-axis) and cutting wheel movement (Y-axis) can reach up to 80 mm/sec. through highly dynamic axis drive in rapid-run
- » Automatic cross feed (Z-axis)
- » Parallel setting of wheel guard during vertical cutting sequences increases cutting capacity
- » Large machine table made of stainless steel with longitudinal and cross T-slots
- » Sliding and side door with safety lock during wheel movement
- » Sliding door with large window made of scratchproof safety glass
- » Touch-Screen display with ATM-Software control
- » An unlimited number of password-secured program sequences can be stored and updated
- » File exchange and backup via USB
- » Remote service/support is available via controller (requires ISDN connection with router on site)
- » Smart phone optics for easy compilation of compact program sequences with position steps and cutting modes with Drag&Drop (travel-, cut-off-, diagonal-, layer- and segment cut)
- » Through the combination of an arbitrary range of cutting positions, series cuts of differing cut-sequences can be made into reality
- » Variable pulse-cut feed
- » Cutting force-related feeder regulation and soft-approach control
- » Variable speed
- » Manual control of X-/Y-/Z-axis via an industrial joystick
- » Incl. cutting wheel arbour with wear ring and optimal chamber illumination
- » Automatic central lubrication (6 bar compressed air required)
- » Water-cooled 15 kW-main motor integrated into the swivel arm
- » Robust welded steel construction body of machine

EQUIPMENT

POWER SUPPLY (select equipment))

Equipment 1

Variable speed 1000-2400 rpm

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

Order No.: A1831000

Equipment 2

480 V/60 Hz (3Ph/PE)

Order No.: A1831002



E-Lab-ready



Wear ring



WHEEL GUARD (select equipment)

Equipment 1

Cut-off wheel Ø 500 mm/20"

Order No.: A1831001

Equipment 2

Cut-off wheel Ø 600 mm/24"

Order No.: A1831010

COOLING AND FILTER SYSTEMS (select equipment)

Equipment 1

Recirculation cooling unit

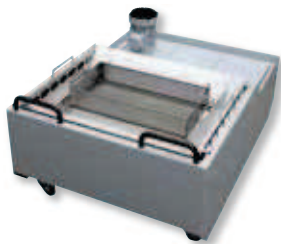
400 V/50 Hz (3Ph/PE)

Order No.: A1831005

480 V/60 Hz (3Ph/PE)

Order No.: A1831006

- » Integrated
- » Tank approx. 170 Ltr.
- » Pump approx. 100 Ltr./min
- » Multi chamber filtration
- » Exchangeable filter fleece, filter performance up to 90% (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

- » Incl. filter roll
- » Tank 285 Ltr.
- » Filter capacity 100 Ltr./min (referring emulsion)
- » Pump 100 Ltr./min
- » Filter area 0.85 m²
- » Filter fleece width 710 mm
- » WxHxD 850x790x1656 mm
- » Weight approx. 120 kg



Connection set Brillant 285

Order No.: Z6501007

- » For belt filter system please order connection set

LASER ALIGNMENT AID

Order No.: A1831004

- » Laser line to visualize the cutting line
- » Laser class 2M Norm EN 60825-1



CENTRIFUGAL SEPARATOR

400 V/50 Hz (3Ph/PE)

Order No.: A1831007

480 V/60 Hz (3Ph/PE)

Order No.: A1831009



- » To remove coolant mist
- » Increases quality of illumination





OPTIONS

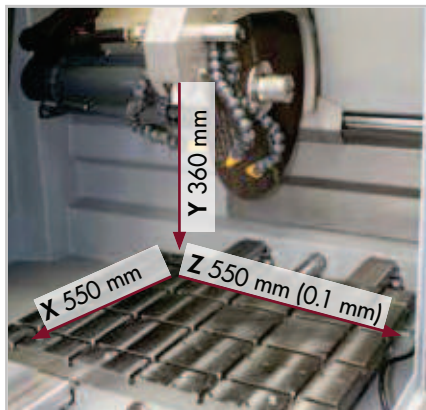
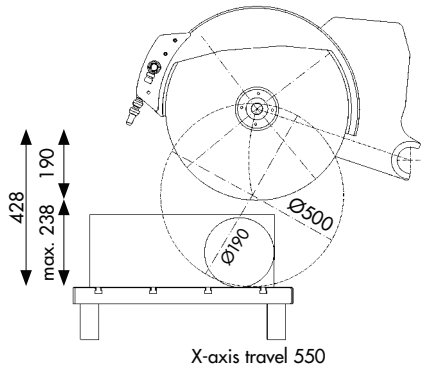
ROTATION TOOL



on request

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

SPECIFICATIONS



Cut-off wheel	1	Ø 500 mm*
	2	Ø 600 mm
Max. sample size	Ø 190 mm (refer. cut-off wheel Ø 500 mm)	
Arbour size	Ø 32 + 40 mm	
X-axis automatic	550 mm	
Y-axis automatic	360 mm	
Z-axis automatic	550 mm	
Precision Z-axis	0.1 mm	
Table WxD	750 x 600 mm	
T-slot	12 mm	
Connected load	30 kVA	
Variable sped	1000-2400 U/min	
Power supply	1	400 V/50 Hz (3Ph/N/PE)
	2	480 V/60 Hz (3Ph/PE)
WxHxD	approx. 1640 x 1960 x 1480 mm	
Weight	approx. 2200 kg (depends on equipment)	

* all technical data refer to use with wheel guard Ø 500 mm

