



The industrial wet cut-off machine **BRILLIANT 2000** meets the highest of demands on space available and possibilities for cutting with its innovative concept for design, construction and operation.

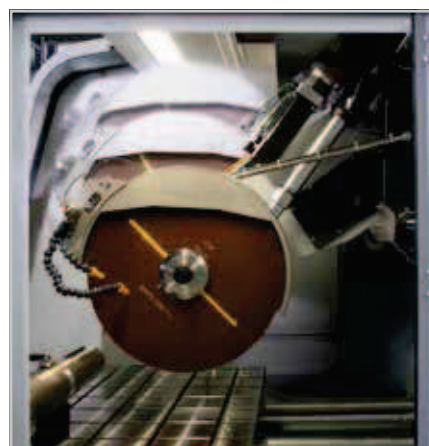
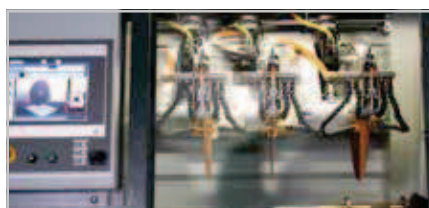
A water-cooled 30 kW main motor is integrated into the swing arm and the **automatic horizontal table (X-axis) and cutting wheel movement (Y-axis)** can reach up to 100 mm/sec. through highly dynamic axis drives in rapid-run.

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 front and hinged door with safety lock enable access to the machine table with longitudinal and cross T-slots.

The side door allows easy and convenient change of the cut-off wheel if Z-axis is set on the hard right position.

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 therefore 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**.

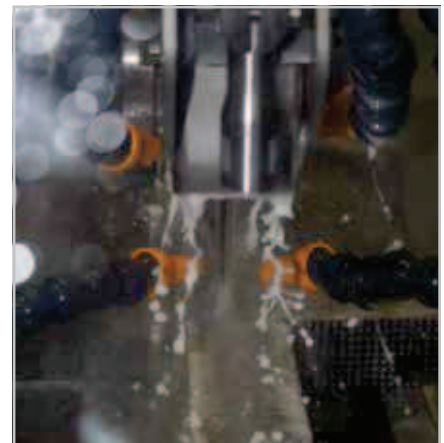
**Control of the cutting speed** and a **soft start control** serve additionally for an economical cutting feed.

A performance chart in the display takes you through the cutting process. 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 20000



**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.

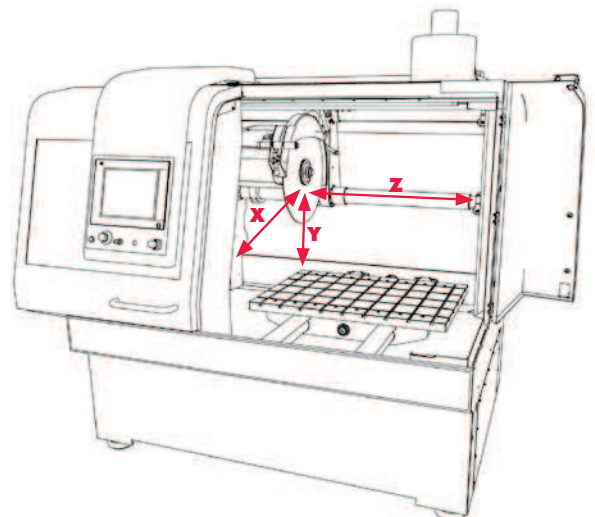
Rhythmic **pulsed feed** ensures regular cooling and removal of cutting debris from the sample.

**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 2000

## M3510000

- » Automatic table (X-axis) and cutting wheel movement (Y-axis) can reach up to 100 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
- » Front and hinged door with safety lock during wheel movement
- » Changing of cut-off wheel through side door
- » 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
- » A performance chart takes you through the cutting process
- » 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 30 kW-main motor integrated into the swivel arm
- » Robust welded steel construction body of machine

## EQUIPMENT

## POWER SUPPLY (select equipment)

Equipment 1

**Variable speed 1000-2000 rpm**

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

Order No.: A3510000

Equipment 2

480 V/60 Hz (3/PE)

Order No.: A3510002



E-Lab-ready



Wear ring

**WHEEL GUARD (select equipment)**

Equipment 1

**Cut-off wheel Ø 600 mm/24"**

Order No.: A3510001

Equipment 2

**Cut-off wheel Ø 800 mm/32"**

on request

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

Equipment 1

**Recirculation cooling unit**

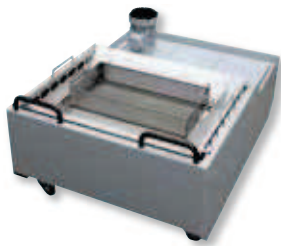
400 V/50 Hz (3/PE)

Order No.: A3510005

480 V/60 Hz (3/PE)

Order No.: A3510006

- » Integrated
- » Tank approx. 220 Ltr.
- » Pump approx. 100 Ltr./min
- » Inlet sieve with filter roll  
(see consumables)



Equipment 2

**Belt filter system 285**

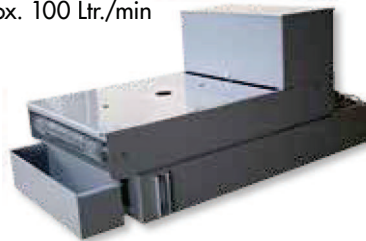
400 V/50 Hz (3/PE)

Order No.: A6501006

480 V/60 Hz (3/PE)

Order No.: A6501007

- » Incl. filter roll
- » Tank 285 Ltr.
- » Filter 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
- » Weigh approx. 120 kg

**Connection set Brillant 2000**

Order No.: Z6501006

- » For belt filter system please order connection set

## OPTIONS

**LASER ALIGNMENT AID**

Order No.: A3510004

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

**CENTRIFUGAL SEPARATOR**

400 V/50 Hz (3/PE)

Order No.: A3510007

480 V/60 Hz (3/PE)

Order No.: A3510009

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





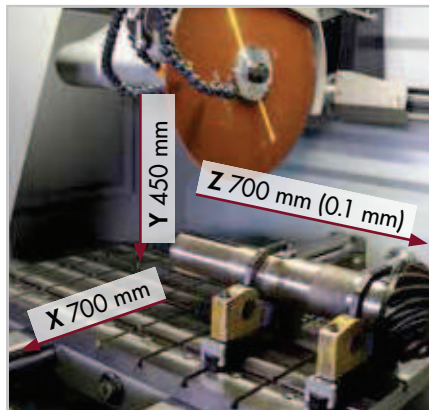
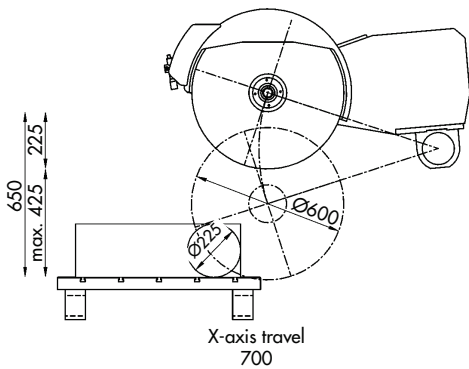
OPTIONS

ROTATION TOOL



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

SPECIFICATIONS



Cut-off wheel	1	Ø 600 mm*
	2	Ø 800 mm
Max. sample size	Ø 225 mm (refer. cut-off wheel Ø 600 mm)	
Arbour size	Ø 32 + 40 mm	
Vertical movement	450 mm	
Horizontal movement	700 mm	
Z-axis automatic	700 mm	
Precision Z-axis	0.1 mm	
Table WxD	1150 x 800 mm	
T-slot	12 mm	
Connected load	50 kVA	
Variable speed	1000-2000 rpm	
Power supply	1	400 V/50 Hz (3/N/PE)
	2	480 V/60 Hz (3/PE)
WxHxD	approx. 2200 x 2185 x 1860 mm	
Weight	approx. 3500 kg (depends on equipment)	

\* all technical data refer to use with wheel guard Ø 600 mm

