



The universal wet cut-off machine **BRILLANT 275** meets the highest of demands on space available and possibilities for cutting with its innovative concept for design, construction and operation.

The **automatic horizontal table (X-axis) and cutting wheel movement (Y-axis)** can reach up to 80 mm/sec. through highly dynamic axis drives in rapid-run. 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. Recirculating cooling and automatic central lubrication systems are integrated into the robust aluminum 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 and therefore enable automated program sequences. An unlimited number of password-secured program sequences can be updated and backed-up via USB.



User-friendly features are completed by an operator console which can be slid either to left or the right.

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.

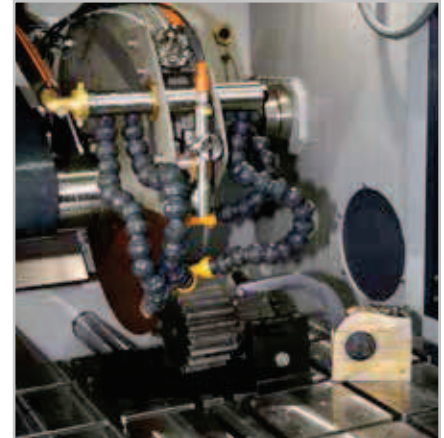
The cutting process is rightly supported by **controlled cut-off wheel revolutions**. **Control of the cutting speed** and a **soft start control** serve additionally for an economical cutting feed. Manual control commands in the X-/Z-/Y-axes are also possible using an industrial joystick.

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.

 Option





BASIC MODULE



BRILLANT 275

Order No.: M1832000

- » 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
- » Equipment: automatic cross feed (Z-axis)
- » Parallel setting of wheel guard during vertical cutting sequences increases cutting capacity
- » Economical cutting feed by control of the cutting speed and soft start control
- » Variable speed
- » Incl. cutting wheel arbour with wear ring
- » Optimum cutting chamber illumination
- » Manual control of X-/Y-/Z-axis via an industrial joystick
- » Automatic central lubrication (6 bar compressed air required)
- » Touch-Screen display with smart phone technology and ATM-Software control
- » Smart phone optics for easy compilation of compact program sequences with position steps and cutting modes (travel-, cut-off-, diagonal-, layer- and segment cut)
- » An unlimited number of password-secured program sequences can be stored and updated; file exchange and backup via USB
- » Easy access to cutting chamber by large sliding and side door (with safety lock during wheel movement)
- » Sliding door with large window made of scratchproof safety glass
- » Options: laser alignment aid, centrifugal separator
- » Robust powder-coated aluminum construction body of machine

EQUIPMENT

POWER SUPPLY (select equipment)

Equipment 1

Variable speed 1000-2800 rpm

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

Order No.: A1832000

Equipment 2

480 V/60 Hz (3Ph/PE)

Order No.: A1832002

TABLE DRIVE (select equipment - consider variation)

Equipment 1

Table with X-axis

Order No.: A1832008

- » Made of stainless steel
- » Travel X-axis 420 mm
- » Precision 0.1 mm

Equipment 2

Table with X/Z-axis

Order No.: A1832011

- » Made of stainless steel
- » Travel X-axis 420 mm
- » Travel Z-axis 200 mm
- » Precision 0.1 mm



E-Lab-ready



EQUIPMENT

WHEEL GUARD (select equipment)

Equipment 1
Cut-off wheel Ø 432 mm/17"
 Order No.: A1832001

Equipment 2
Cut-off wheel Ø 508 mm/20"
 Order No.: A1832010

COOLING AND FILTER SYSTEMS (select equipment)

Equipment 1
Recirculation cooling unit
 400 V/50 Hz (3Ph/PE)
 Order No.: A1832005
 480 V/60 Hz (3Ph/PE)
 Order No.: A1832006

- » Integrated
- » Tank approx. 200 Ltr.
- » Pump approx. 100 Ltr./min
- » 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

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



Connection set Brillant 275

Order No.: Z6501000
 » For belt filter system please order connection set

OPTIONS

LASER ALIGNMENT AID

Order No.: A1830020
 » Laser line to visualize the cutting line
 » Laser class 2M Norm EN 60825-1



CENTRIFUGAL SEPARATOR

400 V/50 Hz (3Ph/PE)
 Order No.: A1832007
 480 V/60 Hz (3Ph/PE)
 Order No.: A1832009



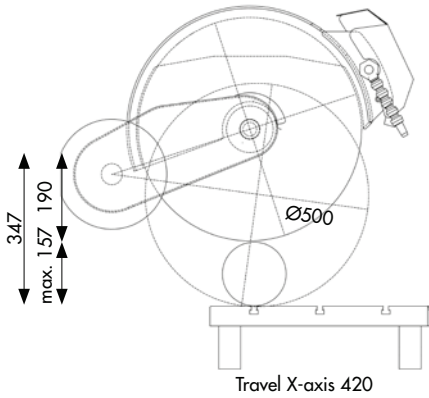
- » To remove coolant mist
- » Increases quality of illumination
- » Suction output 425 or 500 m³/h depending on power supply



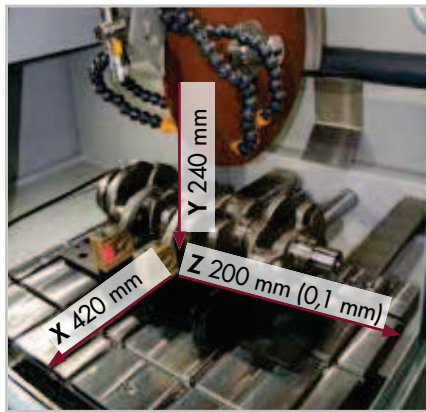


SPECIFICATIONS

BRILLANT 275



Travel X-axis 420



Cut-off wheel	1	Ø 400 mm*
	2	Ø 500 mm**
Arbour size	Ø 32 + 40 mm	
Vertical movement	280*/240** mm	
Horizontal movement	420 mm	
Z-axis automat. (equipment)	200 mm	
Precision Z-axis	0.1 mm	
Table WxD (without Z-axis)	700 x 500 mm	
Table WxD (with Z-axis)	550 x 500 mm	
T-slot	12 mm	
Motor cut-off wheel	15 kW, S1-mode	
Connected load	30 kVA	
Power supply	variable speed	
	1000-2800* rpm	
	1000-2400** rpm	
	1	400 V 50 Hz (3Ph/N/PE)
	2	480 V 60 Hz (3Ph/PE)
WxHxD	approx. 1350 x 1820 x 1240 mm	
Weight	approx. 1000 kg (depends on equipment)	

