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**CUT-OFF MACHINE**  
**QCUT 500 A**



## OPERATION

Touch-Screen display for the QATM-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, password-secured program sequences. Update and back-up possible via USB.



## 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.

## REMOTE MAINTENANCE

Using your existing broadband Internet connection, QATM provides an online fault diagnosis and operator support.

The universal wet cut-off machine Qcut 500 A 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.

## 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.

## LASER ALIGNMENT AID

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

## 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.

## MULTI-POSITION-PROCESS MPP

With the "Multi-Position-Process" (MPP) you can place multiple specimens on the table and cut them in one sequence. The teach-in function enables a simple and user-friendly setting of various cutting positions.



## BASIC MODULE

### Qcut 500 A



- | 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)
- | automatic touch detection
- | spacious cutting chamber with large T-slot table
- | machine table made of stainless steel with longitudinal and cross T-slots
- | parallel setting of wheel guard during vertical cutting sequences increases cutting capacity
- | Multi-position process MPP allows positioning of different components on the table simultaneously and adding into an automatic cutting process
- | economical cutting feed by control of the cutting speed and soft start control
- | variable speed
- | manual control of X-/Y-/Z-axis via an industrial joystick
- | Touch-Screen display and QATM-Software control
- | smart phone optics for easy compilation of compact program sequences with position steps and cutting modes (travel-, cut-off-, diagonal-, step- and segment cut)
- | an unlimited number of password-secured program sequences can be stored and updated; file exchange and backup via USB
- | QATM online-diagnostics and user support available
- | 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
- | opening on both sides for long parts
- | options: laser alignment aid, centrifugal separator
- | incl. cutting wheel arbour with wear ring and optimum cutting chamber illumination
- | automatic central lubrication (6 bar compressed air required)
- | robust powder-coated aluminum construction body of machine
- | Easy-nut – for easy change of cutting wheel
- | e-Lab-ready

Order No.: M1832000

## EQUIPMENT

### POWER SUPPLY

#### Equipment 1

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

Order No.: A1832000

#### Equipment 2

480 V/60 Hz (3Ph/PE)

Order No.: A1832002



Clamping example

### TABLE DRIVE

#### Equipment 1

Table with X-axis

| made of stainless steel

Travel X-axis 420 mm

Precision 0.1 mm

Order No.: A1832008

#### Equipment 2

Table with X/Z-axis

| made of stainless steel

Travel X-axis 420 mm

Travel Z-axis 200 mm

Precision 0.1 mm

Order No.: A1832011

### WHEEL GUARD

#### Equipment 1

Cut-off wheel Ø 432 mm/17"

Order No.: A1832001

#### Equipment 2

Cut-off wheel Ø 508 mm/20"

Order No.: A1832010

## EQUIPMENT

### COOLING AND FILTER SYSTEM

#### Equipment 1

##### Recirculation cooling unit



- integrated, mobile
- multi chamber filtration (see consumables)

Tank ~ 200 ltr.

Pump ~ 100 ltr./min

WxHxD 810 x 608 x 1008 mm

400 V/50 Hz (3Ph/PE)

Order No.: A1832005

480 V/60 Hz (3Ph/PE)

Order No.: A1832006

#### Equipment 2

##### Belt filter system 285



- 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 929 x 790 x 1745 mm

Weight ~ 120 kg

400 V/50 Hz (3Ph/PE)

Order No.: A6501000

480 V/60 Hz (3Ph/PE)

Order No.: A6501002

#### Connection set 275

- for belt filter system please order connection set

Order No.: Z6501000

## OPTION

### CENTRIFUGAL SEPARATOR



- to remove coolant mist
- increases quality of illumination
- suction output 425 or 500 m<sup>3</sup>/h depends on power supply

400 V/50 Hz (3Ph/PE)

Order No.: A1832007

480 V/60 Hz (3Ph/PE)

Order No.: A1832009

### LASER ALIGNMENT AID



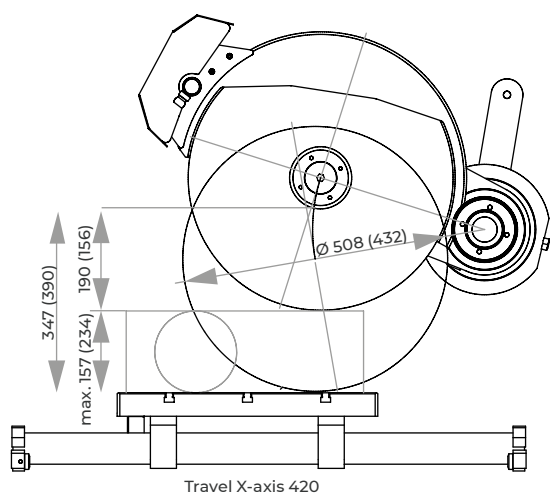
- laser line to visualize the cutting line
- laser class 1

Order No.: A1832004

## ACCESSORIES

### BASIC SET QCUT 500 A

Order No.: Z1832000



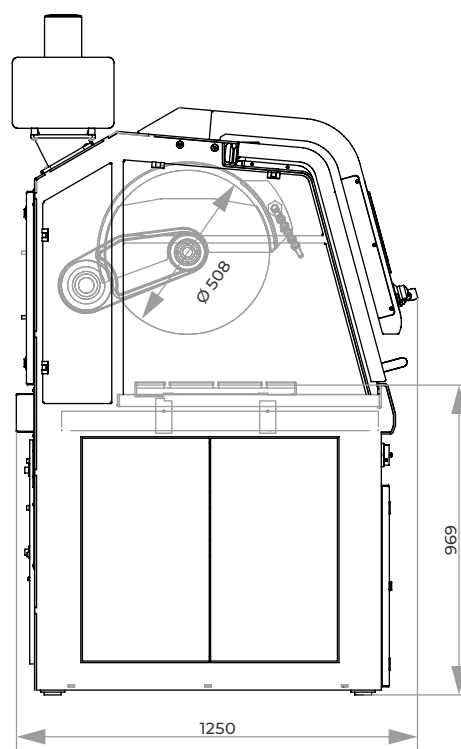
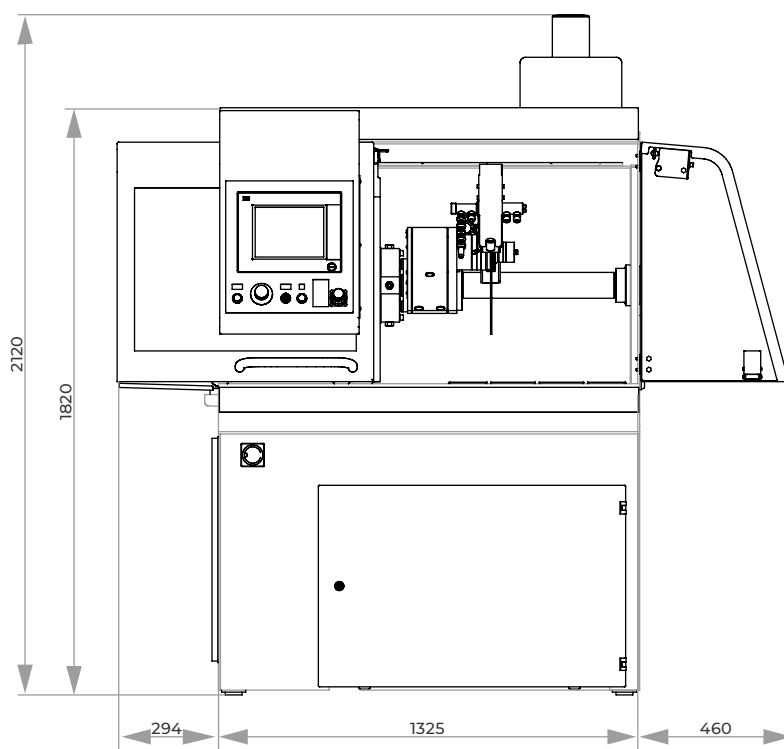
## SPECIFICATIONS

Cut-off wheel	1 Ø 432 mm/17" *
	2 Ø 508 mm/20" **
Max. sample size	Ø 156 mm* / Ø 190 mm**
Arbour size	Ø 32 + 40 mm
Vertical movement	280*/240** mm
Horizontal movement	420 mm
Feed rate	0.001 - 50 mm/sec
Z-axis automat.	200 mm (equipment)
Precision	0.1 mm
Table WxD	700 x 500 mm (without Z-axis) 550 x 500 mm (with Z-axis)
T-slot	12 mm
Motor cut-off wheel	15 kW, S1-mode
Connected load	30 kVA
Variable speed	1000-2800 rpm* 1000-2400 rpm**
Power supply	1 400 V 50 Hz (3/N/PE) 2 480 V 60 Hz (3/PE)
WxHxD	~ 1325 x 1820 x 1250 mm
Weight	~ 1000 kg (depends on equipment)

use with cut-off wheel

\*Ø 432 mm or

\*\*Ø 508 mm

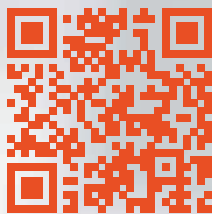




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