



CUT-OFF MACHINE

QCUT 400 A

The compact large cut-off machine Qcut 400 A offers high cutting capacity in a minimal footprint. Its automatic travel and cross-cut functions ensure precise, low-contact cuts.

- | Compact design: Enables large and powerful cuts in a small space
- | Best price-performance ratio: Strong cutting performance at a fair price
- | Multi-Position Process (MPP): Simultaneous positioning and automatic cutting of different components on the machine table.



[Click to view video](#)

CUT-OFF MACHINE QCUT 400 A

## SUPERIORITY IN DETAIL

### 1. Ergonomic control panel

- | Large 10.1" industrial touchscreen with intuitive QATM software
- | Quick setup, control of all automatic axes with joystick

### 2. Robust machine body

- | Sturdy powder-coated aluminum construction
- | Integrable recirculating cooling unit
- | Automatic central lubrication of the axes

### 3. Compact machine table

- | Made of stainless steel with integrated longitudinal and cross T-slots
- | Secure clamping of complex workpiece shapes using the T-slot table or Easy

### 4. Large cutting chamber

- | Large sliding door provides easy access and visibility
- | Side swing door for convenient access to cutting chamber
- | Side opening on the right for long samples
- | Break-resistant LED interior lighting

### 5. Optimized swivel arm

- | Highly efficient cooling system
- | Increased cutting capacity thanks to parallel guided cut-off wheel guard
- | Laser alignment aid for easy workpiece positioning
- | Innovative quick-change system for easy maintenance and cut-off wheel replacement



## CUT-OFF MACHINE QCUT 400 A

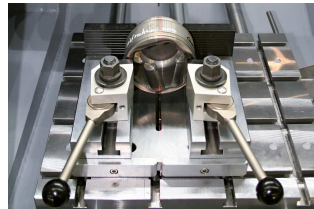
### FEATURES



#### STAINLESS STEEL MACHINE TABLE

Spacious machine table enables precise work even under heavy loads.

- | Integrated T-slots for the Easy clamping system for quick mounting of clamping tools
- | Efficient and reliable fixation of complex geometries using clamping devices
- | Load capacity up to 120 kg (including clamping devices)



#### LASER ALIGNMENT

Optional laser alignment projects the cutting line directly onto the workpiece, enabling precise positioning and exact cut placement.

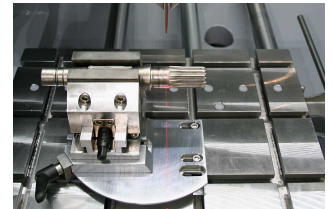
- | Easy positioning of workpieces
- | Precise clamping without much effort



#### ROBUST MACHINE WITH LARGE CUTTING CHAMBER

Robust, powder-coated aluminum machine body features a large sliding door with scratch-resistant laminated safety glass and convenient side access door.

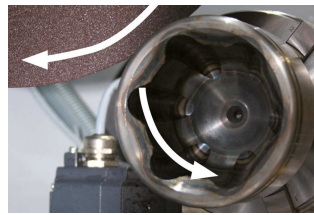
- | Machine body with integrable recirculating cooling unit and automatic central lubrication
- | Large cutting chamber access with safety interlock —



#### PRECISION CROSS FEED

The table-integrated Z-axis maintains consistent cutting height while the automatic cross feed with serial cutting function delivers precise parallel cuts.

- | Simple and intuitive serial cutting
- | The multi-position process (MPP) allows more complex serial cutting to be carried out



### ROTATION TOOL

The optional rotation tool features a vertical rotary feed parallel to the wheel with software-controlled angle input.

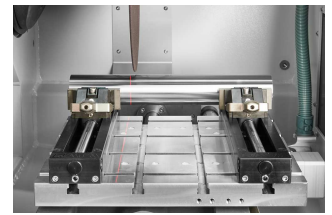
- | More uniform cutting surfaces and cutting quality
- | Cutting time is halved for rotationally symmetrical parts
- | Protects against cut-off wheel run-out



### INTUITIVE AND EASY OPERATION

Large 10.1" industrial touchscreen with intuitive QATM user software and joystick.

- | Easily manage process parameters and create customer-specific maintenance tasks (200 user programs can be saved)
- | Parameters such as feed rate, travel distance, and cutting force can be changed during automatic operation



### PULSED CUTTING

For thick and difficult-to-cut materials, the adjustable automatic pulsed cutting provides gentle sectioning with optimal cooling of the cut interface.

- | Enhanced cutting results for larger components
- | Superior cooling of contact surfaces



### CUTTING FORCE DEPENDENT FEED CONTROL (X- AND Y-AXIS)

The feed rate automatically decreases when cutting force reaches a preset limit, protecting the machine, sample, and clamping tools from overloading while ensuring time savings through variable feed

## CUT-OFF MACHINE QCUT 400 A

### ACCESSORIES



#### RECIRCULATION COOLING UNIT

Compact, integrable cooling system for standard applications.

- | Can be integrated into the housing and extended
- | Multi-chamber filtration
- | Inlet sieve with filter bag (see consumables)



#### BELT FILTER SYSTEM

Large cooling and filter system for continuous operation, e.g. in serial applications.

- | Tank size: 285 l
- | Filtering capacity: 100 l/min (referring emulsion)
- | Pump capacity: 100 l/min



#### CENTRIFUGAL SEPARATOR

Work safety: Working environment with improved air quality.

- | Removes coolant mist
- | Purifies the air and increases visibility
- | Exhaust power 452 m<sup>3</sup>/h

## PERFECT CUTTING - CUT-OFF WHEELS FROM QATM

Cutting is more reliable, safe and efficient when processed with the right ingredients: knowledge, care and the right choice of consumables and instruments. The Qprep range includes specially developed cut-off wheels for a wide variety of materials and requirements.

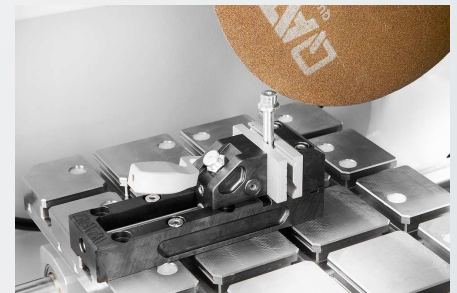
- | Low thermal influence on the specimen during the cutting process
- | Wet abrasive cutting achieves very fine surface finishes after cutting
- | Optimal cutting shortens the further preparation process



## FAST, POWERFUL, FLEXIBLE - QTOOL CLAMPING DEVICES

Our innovative clamping devices are used to clamp workpieces securely and precisely to ensure exact cutting and grinding processes. There is a wide range of different clamping devices that have been developed for specific applications and workpiece sizes.

- | Suitable for regular and irregularly shaped samples
- | Fast, repeat-accurate clamping of regularly shaped samples
- | Large range of different clamping tools and systems available



## CUT-OFF MACHINE QCUT 400 A

### TECHNICAL DATA



### FEATURES

|                                            |                                |
|--------------------------------------------|--------------------------------|
| <b>Cutting wheel</b>                       | up to $\varnothing$ 406 mm/16" |
| <b>Max. cutting capacity</b>               | $\varnothing$ 150 mm           |
| <b>X-axis automatic</b>                    | 345 mm                         |
| <b>Y-axis automatic</b>                    | 200 mm                         |
| <b>Z-axis manual or automatic (option)</b> | 150 mm                         |
| <b>Precision Z-axis</b>                    | 0.1 mm                         |
| <b>T-slot</b>                              | 12 mm                          |
| <b>Speed</b>                               | variable                       |
| <b>Connection power</b>                    | 17 kVA                         |
| <b>Drive power (main drive)</b>            | 7 kW, S1                       |
| <b>W x H x D</b>                           | 1100 x 1610 x 930 mm           |
| <b>Weight (depends on equipment)</b>       | ~ 480 kg                       |

[www.qatm.com/qcut-400-a](http://www.qatm.com/qcut-400-a)

## ORDER DATA

### BASIC EQUIPMENT

#### MACHINE (ALL ITEMS REQUIRED)

M1842000  Qcut 400 A Base machine

#### POWER SUPPLY (1 ITEM REQUIRED)

A1842000 Qcut 400 A power supply 400V/50Hz (3Ph/PE)

A1842001 Qcut 400 A power supply 480V/60Hz (3Ph/PE)

A1842002 Qcut 400 A power supply 220V/60Hz (3Ph/PE)

#### CROSS FEED (1 ITEM REQUIRED)

A1842003 Qcut 400 A X-axis autom. / without Z-axis

A1842004 Qcut 400 A X-axis autom. / Z-axis manual

A1842005 Qcut 400 A X-axis autom. / Z-axis autom.

#### RECIRCULATION SYSTEM (1 ITEM REQUIRED)

A1842008  Brillant 265 recirculation cooling system

A1842011  Brillant 265 Belt filter 285

Z6501003 Connection set belt filter 285

### OPTIONS (TO BE ORDERED WITH MACHINE)

A1842009 Qcut 400 A laser alignment aid

A1842010  Qcut 400 A centrifugal separator

## PRECISION CLAMPING DEVICES

|          |                        |
|----------|------------------------|
| Z1870063 | Reduction ring Ø 30 mm |
| Z1870069 | Manual chuck Ø 44 mm   |

## QUICK CLAMPING TOOLS

### QTOOL 80

|          |                                   |
|----------|-----------------------------------|
| Z2231203 | Qtool 80 - 100mm                  |
| Z2231204 | Qtool 80 - 150mm                  |
| 02231243 | Clamping jaw 40 mm                |
| Z2231215 | Clamping jaws 70 mm               |
| 02231245 | Clamping jaw 40 mm bevelled       |
| 02231246 | Clamping jaw 40 mm cross prism    |
| Z2231216 | Clamping jaws 70 mm slotted       |
| Z2231217 | Clamping jaws 70 mm slotted prism |

### QTOOL 80 VARIO

|          |                                          |
|----------|------------------------------------------|
| Z2231200 | Qtool 80 Vario - 100 mm                  |
| Z2231201 | Qtool 80 Vario - 150 mm                  |
| Z2231202 | Qtool 80 Vario - 250 mm                  |
| Z2231210 | Workpiece stop                           |
| 02231200 | Clamping jaw, 40 mm - for Qtool 80 Vario |
| Z2231211 | Clamping jaws, 70 mm                     |
| 02231213 | Prism jaw, 40 mm                         |
| 02231229 | Bevelled jaw, 40 mm                      |
| 02231230 | Cross prism jaw, 40 mm                   |
| Z2231212 | Round bar jaws, 70 mm slotted            |
| Z2231213 | Prism jaws, 70 mm slotted                |
| Z2231214 | Clamping jaws, 70 mm slotted             |

## POWER CLAMPING SYSTEMS

### POWER CLAMPING SYSTEM 100-540

|          |                               |
|----------|-------------------------------|
| Z2234016 | Power clamping system 100-540 |
| Z2234018 | Prism clamping jaw            |
| Z2234017 | Clamping jaw flat             |
| Z2234019 | Angular drive                 |

#### POWER CLAMPING SYSTEM LC 90

|          |                             |
|----------|-----------------------------|
| Z2234001 | Power clamping system LC 90 |
| Z2234003 | Carrier jaws LC 90          |
| Z2234004 | V-groove jaw 100            |
| Z2234005 | Clamping jaw flat           |
| Z2234009 | Quick-change adapter        |
| Z2234008 | Step jaw 100                |
| Z2234002 | Clamping system X-Clamp 100 |
| Z2234006 | Socket 90°                  |

## EASY-CLAMPING PLATES

## CLAMPING ACCESSORIES FOR ROTATING, SWIVELING AND SPECIAL APPLICATIONS

|          |                           |
|----------|---------------------------|
| Z1304636 | Expansion clamping device |
|----------|---------------------------|

#### CROSS VICES

|          |                                                                                     |                     |
|----------|-------------------------------------------------------------------------------------|---------------------|
| Z1340010 |  | Cross vice 50 - 100 |
| Z1340000 |  | Cross vice 80 - 100 |

#### ANGLE AND ROTATING VICES

|          |                         |
|----------|-------------------------|
| Z1304001 | Angle vice 60           |
| 01304008 | Prism jaw angle vice 60 |
| Z1302000 | Angle vice 80           |

|          |                         |
|----------|-------------------------|
| 01302016 | Prism jaw angle vice 80 |
|----------|-------------------------|

## ROTATIG DEVICES

|          |                            |
|----------|----------------------------|
| Z1870059 | Rotation device type RD1   |
| Z1891001 | Rotation device type RD2.1 |

## UNIVERSAL VICES AND ACCESSORIES

|          |                                                                                                                         |
|----------|-------------------------------------------------------------------------------------------------------------------------|
| Z1350025 | Clamping rail                                                                                                           |
| 01350022 | Prism 120°                                                                                                              |
| 01350023 | Prism slim                                                                                                              |
| 01350024 | Prism 90°                                                                                                               |
| 01350025 | Prism 90° high                                                                                                          |
| Z1350002 |  Universal vice Mono 61               |
| Z1350004 |  Suitcase set universal vice Mono 61 |
| Z1350011 |  Universal vice Mono 132             |
| Z1350005 | Universal vice Duo                                                                                                      |
| Z1350006 | Chain vice set                                                                                                          |
| 92005796 | Longitudinal v-shoe                                                                                                     |
| 92005797 | Traverse v-shoe                                                                                                         |
| 92005799 | Longitudinal bridge                                                                                                     |
| 92005800 | Traverse bridge                                                                                                         |
| 92005798 | Standard clamping shoe                                                                                                  |
| Z1350007 | Height adapter 60mm Piccolo                                                                                             |
| Z1350003 | Height adapter 74mm Mono                                                                                                |
| 95003172 | Clamping arm extension Piccolo 54 and Mono 61                                                                           |
| Z1304591 | Fixing screw M6 x 25                                                                                                    |
| 95003169 | Fixing screw Piccolo M8 x 25                                                                                            |
| 95003170 | Fixing screw Piccolo M10 x 25                                                                                           |

|          |                                 |
|----------|---------------------------------|
| 95003168 | Fixing screw Mono M10 x 32      |
| 91001157 | T-slot nut - stainless M6 x 8   |
| 91001161 | T-slot nut - stainless M8 x 10  |
| 91001159 | T-slot nut - stainless M8 x 12  |
| 91001158 | T-slot nut - stainless M10 x 12 |