



CUT-OFF MACHINE

QCUT 600 A

The Qcut 600 A represents the flagship of QATM's cut-off machine series, delivering maximum cutting capacity for large and heavy workpieces. Its automatic travel and cross-feed functions enable precise, low-contact cutting while setting new standards in workspace efficiency, operational flexibility, and process automation.

- | Maximum cutting capacity: Samples with a diameter of up to 244 mm can be easily cut
- | Industrial applications: Even the heaviest samples can be placed on the heavy-duty machine table using a forklift or crane
- | Multi-Position Process (MPP): Simultaneous positioning and automatic cutting of different components on the machine table



CUT-OFF MACHINE QCUT 600 A
SUPERIORITY IN DETAIL

1. Ergonomic control panel

- | Large 12.1" industrial touchscreen with intuitive QATM software
- | Quick setup, control of all automatic axes with joystick
- | The sliding control panel enables unobstructed working conditions

2. Robust machine body

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

3. Large machine table

- | Made of stainless steel with integrated longitudinal and cross T-slots
- | Secure clamping of

4. Large cutting chamber

- | Large sliding door provides easy access and visibility
- | Side swing door for convenient access to cutting chamber
- | Large side door for easy cut-off wheel replacement
- | Break-resistant LED interior lighting

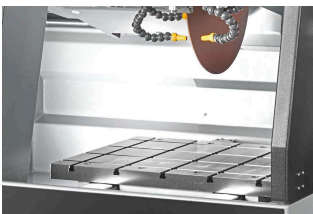
5. Optimized swivel arm

- | Highly efficient cooling system
- | Increased cutting capacity thanks to parallel guided cut-off wheel guard
- | Laser alignment aid for easy workpiece positioning
- | Water-cooled main drive with 15 kW drive power



CUT-OFF MACHINE QCUT 600 A

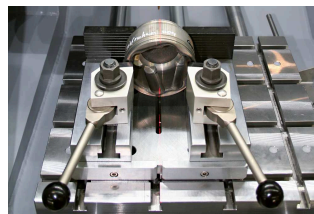
FEATURES



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 400 kg (including clamping devices)



LASER ALIGNMENT

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

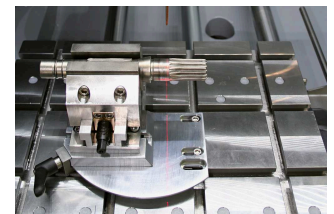
- | Easy positioning of workpieces
- | Precise clamping without much effort



ROBUST MACHINE WITH LARGE CUTTING CHAMBER

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

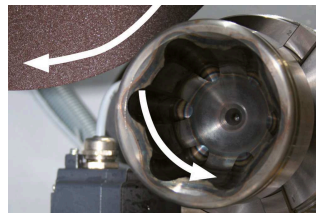
- | Machine body with integrable recirculating cooling unit and automatic central lubrication
- | Large cutting chamber access with safety interlock —



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.

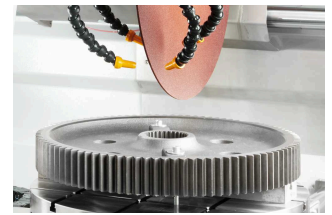
- | More uniform cutting surfaces and cutting quality
- | Cutting time is halved for rotationally symmetrical parts
- | Protects against cut-off wheel run-out



INTUITIVE AND EASY OPERATION

Large 12.1" 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.

- | Time savings thanks to variable feed rate

CUT-OFF MACHINE QCUT 600 A

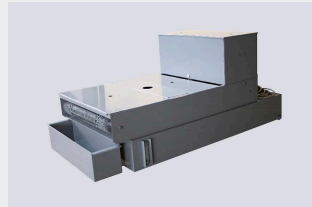
ACCESSORIES



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 or 500 m³/h depending on voltage

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.

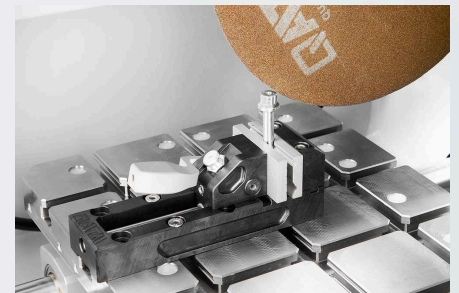
- | Low thermal influence on the specimen during the cutting process
- | Wet abrasive cutting achieves very fine surface finishes after cutting
- | Optimal cutting shortens the further preparation process



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 600 A TECHNICAL DATA



Cutting wheel	up to \varnothing 600 mm/24"
Max. cutting capacity	\varnothing 244 mm
Feed rate	0.001 - 50 mm/sec
Max. way of cutting wheel into sample	190 mm (cutting wheel \varnothing 500 mm)
Wheel flange size	\varnothing 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, stainless
T-slot	12 mm
Speed	variable 1000-2400 rpm
Drive power (main drive)	15 kW SI
Connection power	30 kVA
W x H x D	1488 x 1960 x 1477 mm
Weight	~ 1600 kg (depends on equipment)

www.qatm.com/qcut-600-a

ORDER DATA

BASIC EQUIPMENT

MACHINE (ALL ITEMS REQUIRED)

M1831000  Qcut 600 A (Brillant 285) Base machine

POWER SUPPLY (1 ITEM REQUIRED)

A1831000 Qcut 600 A power supply 400V/50Hz (3Ph/N/PE)

A1831002 Qcut 600 A power supply 480V/60Hz (3Ph/PE)

WHEEL GUARD (1 ITEM REQUIRED)

A1831001 Qcut 600 A wheel guard 500mm

A1831010 Qcut 600 A wheel guard 600mm

RECIRCULATION SYSTEM (1 ITEM REQUIRED)

A1831005  Qcut 600 A recirculation system 400V/50Hz (3Ph/PE)

A1831006 Qcut 600 A recirculation system 480V/60Hz (3Ph/PE)


A6501000  Belt filter 285 400V/50Hz (3Ph/PE)

A6501002  Belt filter 285 480V/60Hz (3Ph/PE)

Z6501007 Connection set belt filter 285

OPTIONS (TO BE ORDERED WITH MACHINE)

A1831003 Qcut 600 A automatic wheel measurement laser

A1831004  Qcut 600 A laser alignment aid

A1831007 Qcut 600 A centrifugal separator 400V/50Hz (3Ph/PE)

A1831009 Qcut 600 A centrifugal separator 480V/60Hz (3Ph/PE)

PRECISION CLAMPING DEVICES, CLAMPING_DEVICES, PRECISION_CLAMPING_DEVICES

Z1870063	Reduction ring Ø 30 mm, Clamping_devices, Precision_clamping_devices
Z1870069	Manual chuck Ø 44 mm, Clamping_devices, Precision_clamping_devices

QUICK CLAMPING TOOLS, CLAMPING_DEVICES

QTOOL 80, CLAMPING_DEVICES, QTOOL_SERIES

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

QTOOL 80 VARIO, CLAMPING_DEVICES, QTOOL_SERIES

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

POWER CLAMPING SYSTEMS, CLAMPING_DEVICES, POWER_CLAMPING_SYSTEMS

POWER CLAMPING SYSTEM 100-540, CLAMPING_DEVICES, POWER_CLAMPING_SYSTEMS

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

POWER CLAMPING SYSTEM LC 90, CLAMPING_DEVICES, POWER_CLAMPING_SYSTEMS

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

EASY-CLAMPING PLATES, CLAMPING_DEVICES, EASY_CLAMPING_PLATES

CLAMPING ACCESSORIES FOR ROTATING, SWIVELING AND SPECIAL APPLICATIONS, CLAMPING_DEVICES, CLAMPING_ACCESSORIES_SPECIALS

Z1304636	Expansion clamping device, Clamping_devices, Clamping_accessories_specials
Z1340000	 Cross vice 80 - 100, Clamping_devices, Clamping_accessories_specials
Z1340001	Cross vice 80 - 150, Clamping_devices, Clamping_accessories_specials




ANGLE AND ROTATING VICES, CLAMPING_DEVICES, CLAMPING_ACCESSORIES_SPECIALS

Z1304001	Angle vice 60, Clamping_devices, Clamping_accessories_specials
01304008	Prism jaw angle vice 60, Clamping_devices, Clamping_accessories_specials
Z1302000	Angle vice 80, Clamping_devices, Clamping_accessories_specials
01302016	Prism jaw angle vice 80, Clamping_devices, Clamping_accessories_specials

ROTATIG DEVICES, CLAMPING_DEVICES, ROTATION_DEVICES

Z1870059	Rotation device type RD1, Clamping_devices, Rotation_devices
Z1891001	Rotation device type RD2.1, Clamping_devices, Rotation_devices

UNIVERSAL VICES AND ACCESSORIES, CLAMPING_DEVICES, UNIVERSAL_VICES_AND_ACCESSORIES

Z1350025	Clamping rail, Clamping_devices, Universal_vices_and_accessories
01350022	Prism 120°, Clamping_devices, Universal_vices_and_accessories
01350023	Prism slim, Clamping_devices, Universal_vices_and_accessories
01350024	Prism 90°, Clamping_devices, Universal_vices_and_accessories
01350025	Prism 90° high, Clamping_devices, Universal_vices_and_accessories
Z1350002	 Universal vice Mono 61, Clamping_devices, Universal_vices_and_accessories
Z1350004	 Suitcase set universal vice Mono 61, Clamping_devices, Universal_vices_and_accessories
Z1350011	 Universal vice Mono 132, Clamping_devices, Universal_vices_and_accessories
Z1350005	Universal vice Duo, Clamping_devices, Universal_vices_and_accessories
Z1350006	Chain vice set, Clamping_devices, Universal_vices_and_accessories
92005796	Longitudinal v-shoe, Clamping_devices, Universal_vices_and_accessories
92005797	Traverse v-shoe, Clamping_devices, Universal_vices_and_accessories
92005799	Longitudinal bridge, Clamping_devices, Universal_vices_and_accessories
92005800	Traverse bridge, Clamping_devices, Universal_vices_and_accessories
92005798	Standard clamping shoe, Clamping_devices, Universal_vices_and_accessories
Z1350007	Height adapter 60mm Piccolo, Clamping_devices, Universal_vices_and_accessories
Z1350003	Height adapter 74mm Mono, Clamping_devices, Universal_vices_and_accessories

95003172	Clamping arm extension Piccolo 54 and Mono 61, Clamping_devices, Universal_vices_and_accessories
Z1304591	Fixing screw M6 x 25, Clamping_devices, Universal_vices_and_accessories
95003169	Fixing screw Piccolo M8 x 25, Clamping_devices, Universal_vices_and_accessories
95003170	Fixing screw Piccolo M10 x 25, Clamping_devices, Universal_vices_and_accessories
95003168	Fixing screw Mono M10 x 32, Clamping_devices, Universal_vices_and_accessories
91001157	T-slot nut - stainless M6 x 8, Clamping_devices, Universal_vices_and_accessories
91001161	T-slot nut - stainless M8 x 10, Clamping_devices, Universal_vices_and_accessories
91001159	T-slot nut - stainless M8 x 12, Clamping_devices, Universal_vices_and_accessories
91001158	T-slot nut - stainless M10 x 12, Clamping_devices, Universal_vices_and_accessories