

QCUT 150 A

The Qcut 150 A is a compact automatic precision cut-off machine with manual cross feed. With its different operation modes and cooling systems it covers a wide range of applications and materials. The user-friendly system of clamping arm, sample holder and table attachment is designed to change it tool-free. The proven QATM-software on the 4.3" touchscreen contains a consumable and program

database which allows also to create individually set user profiles.

**TABLE ATTACHMENT**

With the tool-free mountable table attachment PCBs, plate material or large samples can be quickly sectioned manually.

**ZONE-CUTTING**

The feed rate or cutting force can be adjusted individually to different areas of the samples. It reduces deformation and warming of the material thus shortens the preparation process.

FORCE-CONTROLLED CUTTING

The cutting force gets precisely controlled by an integrated force-sensor. It keeps the cutting force constant by adjusting the feed rate automatically throughout the cutting process.



GRINDING MODE

In grinding mode, samples can be grinded down with a cup wheel manually or semi-automatically (Target preparation).

CROSS FEED

With a precision of 5 µm the manual Z-axis can be monitored via display for parallel cuts or defined grinding of samples.



BASIC MODULE

Qcut 150 A

- | Automatic Y-axis
- | Manual Z-axis
- | Automatic travel measurement (Y-/Z-axis)
- | Variable speed
- | Table attachment (accessory)
- | Dressing device (option)

Up to 5 different operation modes (depending on equipment)

- | Feed-controlled cutting
- | Force-controlled cutting (option)
- | Cutting on table attachment
- | Cutting with lever
- | Grinding mode (defined material removal with grinding cup)

- | 4.3" Touch-Screen with intuitive QATM user software
- | Zone-cutting feature
- | LED illumination of cutting chamber
- | Solid stainless steel housing, powder coated.
- | Soft-closing hood
- | Connection to external exhausting system on request
- | 200 customized cutting programs storable
- | Consumables data base
- | Individual setting of user access rights
- | Setting of care and maintenance tasks incl. automatic reminder
- | USB plug for data exchange and software updates
- | Ethernet plug for online-diagnostics and user support

200-240V 50/60Hz (1Ph/N/PE)

Order No.: M1870020

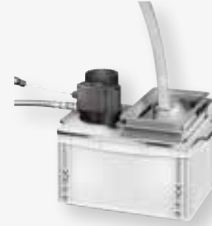
100-120V 50/60Hz (1Ph/N/PE)

Order No.: M1870021

EQUIPMENT
COOLING SYSTEMS (no voltage selection required)

Equipment 1
Cut-off wheel immersion cooling (integrated)


- | Equipment to seal and fill cutting chamber with coolant
- | Incl. drain hose and shut-off valve for easy emptying
- | Sample collector

Order No.: A1870022
Equipment 2
Recirculation cooling system 15 L incl. filter


- | External two-chamber PVC tank
- | Portable, incl. filter insert and lid
- | Rinsing hose

Flow rate (pump)	12 ltr./min.
Filling capacity	15 liters
WxHxD	330 x 398 x 449 mm

Order No.: A1870023
Equipment 3
Recirculation cooling system 45 L


- | PVC tank with removable separating slide
- | Inlet sieve with filter bag and overflow
- | Mobile, without folding wheels
- | Rinsing hose included

Flow rate (pump)	15 ltr./min.
Filling capacity	45 liters
WxHxD	366 x 550 x 600 mm

Order No.: A1870024
Equipment 4
Recirculation cooling system 45 L Systemlab


- | PVC tank with removable separating slide
- | Inlet sieve with filter bag and overflow
- | Mobile, with insertion mechanism for System Lab cabinets
- | Rinsing hose included

Flow rate (pump)	15 ltr./min.
Filling capacity	45 liters
WxHxD	366 x 540(640) x 610 mm

Order No.: A1870025
Equipment 5
Fresh water cooling system

- | Automatic water valve
- | Waterflow manually adjustable
- | Rinsing hose included

Order No.: A1870026

OPTION

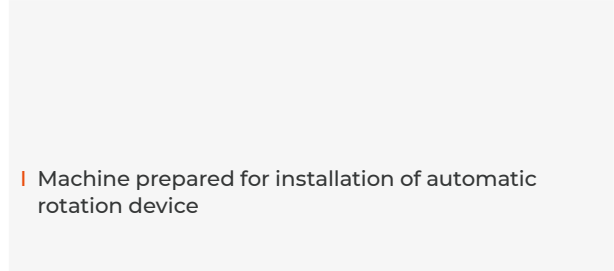
QCUT 150 A DRESSING DEVICE



- | For dressing of diamond cut-off wheels or cup wheels
- | Operation by manual lever

Order No.: A1870027

PREPARATION ROTATION DEVICE



- | Machine prepared for installation of automatic rotation device

Order No.: A1870028

ACCESSORIES

QCUT 150 A TABLE ATTACHMENT



- | Incl. Cutting guide fixed 90°, parallel cutting guide and small splash guard

Order No.: Z1870020

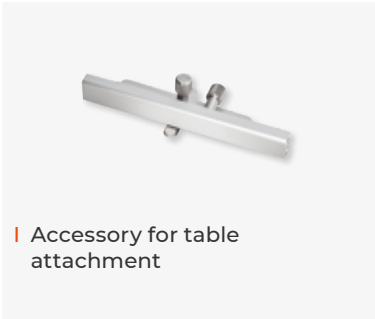
SPLASH GUARD LARGE



- | Accessory for table attachment

Order No.: Z1870021

PARALLEL CUTTING GUIDE



- | Accessory for table attachment

Order No.: Z1870023

ANGLE CUTTING GUIDE



- | Angular adjustable stop
- | Accessory for table attachment

Order No.: Z1870024



- | Angle cutting guide fixed 90°
- | Accessory for table attachment

Order No.: Z1870022

CLAMPING ARM



- | Tool-free attachment of arm and sample holder

Standard M

Order No.: Z1870030

Standard L

Order No.: Z1870031

Incl. cutting-force control



- | Tool-free attachment of arm and sample holder

Standard M, incl. cutting-force control

Order No.: Z1870032

Standard L, incl. cutting-force control

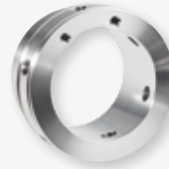
Order No.: Z1870033

ACCESSORIES
SAMPLE HOLDER STANDARD

- | For round or irregular shaped samples
- | 3-point clamping
- | Up to 6 fixing screws

Standard M (open)


- | For clamping arm M
- | Diameter Ø 30 mm

Order No.: Z1870034
Standard L (open)


- | For clamping arm L
- | Diameter Ø 40 mm

Order No.: Z1870035
Standard M (closed)


- | For clamping arm M
- | Diameter Ø 30 mm, depth 15 mm

Order No.: Z1870036
Standard L (closed)


- | For clamping arm L
- | Diameter Ø 40 mm, depth 15 mm

Order No.: Z1870037
SAMPLE HOLDER FLEX

- | To insert in grinding and polishing machines
- | For round or irregular shaped samples
- | 3-point clamping
- | Up to 6 fixing screws

FLEX M (closed)


- | For clamping arm M
- | Diameter Ø 30 mm, depth 21 mm

Order No.: Z1870038
FLEX L (closed)


- | For clamping arm L
- | Diameter Ø 40 mm, depth 21 mm

Order No.: Z1870039
SAMPLE HOLDER PARALLEL CLAMPING VICE

- | Parallel clamping jaws
- | Clamping range variable, dependent on screws

Sample holder parallel clamping vice M (open)


- | For clamping arm M
- | Diameter Ø 30 mm

Order No.: Z1870042
Sample holder parallel clamping vice L (open)


- | For clamping arm L
- | Diameter Ø 40 mm

Order No.: Z1870043
Sample holder parallel clamping vice M (closed)


- | For clamping arm M
- | Diameter Ø 30 mm, depth 27 mm

Order No.: Z1870040
Sample holder parallel clamping vice L (closed)


- | For clamping arm L
- | Diameter Ø 40 mm, depth 27 mm

Order No.: Z1870041

ACCESSORIES
DROP SHAPE SAMPLE HOLDER M Ø 40 MM


- | For round or irregular shaped samples (Ø13 - Ø40 mm)
- | 12 mm clamping depth
- | 3-point clamping

Usable with clamping arm M

Order No.: Z1870044

Usable with clamping arm L

Order No.: Z1870045
UNIVERSAL CLAMPING VICE


- | For samples of any sample geometry
- | Max. sample cross-section: 40 mm x 40 mm
- | 3-point clamping

Usable with clamping arm M

Order No.: Z1870046

Usable with clamping arm L

Order No.: Z1870047
MATRIX CLAMPING VICE


- | For irregularly shaped samples
- | Max. clamping range: 0 - 40 mm

Usable with clamping arm M

Order No.: Z1870048

Usable with clamping arm L

Order No.: Z1870049
MINI VICE


- | Max. Clamping range: 0 - 40 mm
- | Clamping range with prismatic jaw: 0 - 35mm
- | Incl. prismatic jaw

Usable with clamping arm M

Order No.: Z1870053

Usable with clamping arm L

Order No.: Z1870054

ACCESSORIES**DOUBLE PARALLEL VICE**

- | Parallel clamping jaws
- | Fixing a specimen at two clamping points
- | Max. clamping range: 0 - 40 mm

Usable with
clamping arm M

Order No.: Z1870055

Usable with
clamping arm L

Order No.: Z1870056

ADAPTOR WITH BALL JOINT

- | Swivel device for alignment
the sample to the cutting disc
- | Can be combined with all clamping devices
- | Swivel range +/- 18°

Usable with
clamping arm M

Order No.: Z1870057

Usable with
clamping arm L

Order No.: Z1870058



ACCESSORIES
EXTRA FLANGES


! Counteracts offset of the cut-off wheel during cutting

Flange Set Ø 59 mm

Order No.: Z1870050

Flange Set Ø 99 mm

Order No.: Z1870051

Flange Set Ø 139 mm

Order No.: Z1870052

ACCESSORIES
BASIC SET QCUT 150 A

Order No.: Z1870025

SPECIFICATIONS

Cut-off wheel	Ø 75-203 mm/8"
Max. sample size	Ø 40 mm
Arbour size	Ø 12.7 mm
Variable speed	300-3000 rpm
Y-axis (vertical) manual/automatic	120 mm
Feed Y-axis	0.01-20 mm/s
Precision Y-axis	0.1 mm
Z-axis manual (cross feed)	25 mm
Precision Z-axis	0.005 mm
Motor cut-off wheel	0.37 kW, S1-mode
Connected load	0.75 kVA
Power supply	1 230 V/50 Hz (1Ph/N/PE) 2 110 V/60 Hz (1Ph/N/PE)
WxHxD	545 x 391 x 566 mm
Weight	45 kg (dep. on equipment)

