

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

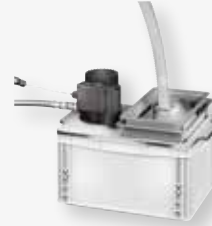
Cut-off wheel immersion cooling (integrated)



- | 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

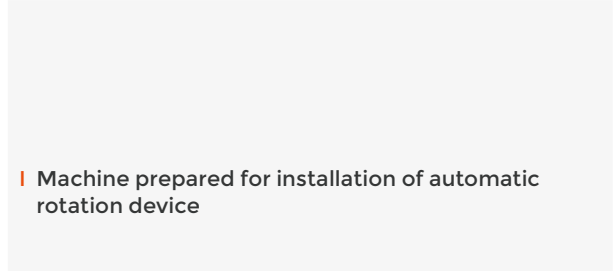
QCUT 150 A DRESSING DEVICE



- | 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

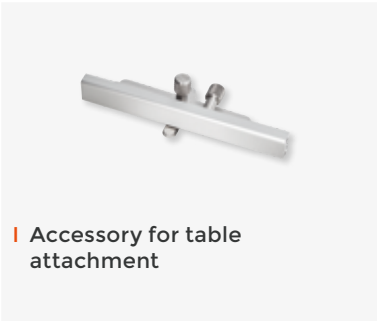
SPLASH GUARD LARGE



- | 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 \varnothing 30 mm

Order No.: Z1870034
Standard L (open)


- | For clamping arm L
- | Diameter \varnothing 40 mm

Order No.: Z1870035
Standard M (closed)


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

Order No.: Z1870036
Standard L (closed)


- | For clamping arm L
- | Diameter \varnothing 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 \varnothing 30 mm, depth 21 mm

Order No.: Z1870038
FLEX L (closed)


- | For clamping arm L
- | Diameter \varnothing 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 \varnothing 30 mm

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


- | For clamping arm L
- | Diameter \varnothing 40 mm

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


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

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


- | For clamping arm L
- | Diameter \varnothing 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

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 U/min
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)

