



GRINDING & POLISHING MACHINE

QPOL 300 A1-ECO+

The Qpol 300 A1/A2-ECO+ are single or twin wheel grinding and polishing machines for the materialographic laboratory, suitable for working wheels Ø 250/300 mm.

The machines are conveniently operated by a 4.3 „touch screen. The new holder for the working wheel (single-disc design) enables materialographic sample preparation without carrier disc without compromising performance. The control software allows to edit and save up to 200 preparation methods, protected by a user account management. The process of the current preparation is visualized by a status bar. It is possible to select an additional acoustic signal at the end of each preparation step in the service menu.

Pressure, speed and direction of rotation (head and working disc) are adjustable. A spin cycle function (Cleaning Boost) helps to spin dry the grinding and polishing medium at 750 rpm at the end of the preparation process within 3 seconds.

PRODUCT ADVANTAGES

- | Single or double wheel grinder / polisher for metallographic sample preparation
- | Spin cycle feature (Cleaning Boost)
- | 4.3" Touch-Screen with intuitive QATM user software
- | 200 customized programs storable
- | Easy cleaning/rinsing of bowl by lifting the working wheel (single-disc design)
- | Variable speed of working wheel and polishing head
- | Working wheel and polishing head: clockwise / counter-clockwise rotation
- | Impact-proof plastic bowl
- | Aluminium case, powder coated
- | Economic LED illumination



Left: Single wheel model: Qpol 300 A1-ECO+
Right: Twin wheel model Qpol 300 A1/A2-ECO+

GRINDING & POLISHING MACHINE QPOL 300 A1 / A2-ECO+

CONVINCING BENEFITS



OPERATING COMFORT

The ECO+ grinding & polishing head with adjustable swivelling limits is equipped with recessed grips on both sides and integrated buttons for easy swivelling and adjustment. A large gap between the working surface and the polishing head ensures convenient changing of the sample holder.



SINGLE-DISC DESIGN

After removal of the splash protection ring, the working wheel is freely accessible. The wheel is automatically arrested when placed on the new mounting system. On lifting the wheel, all parts below are accessible for easy cleaning.



ECO+ POLISHING HEAD

The ECO+ polishing head is equipped with LED illumination of the working area and a holder for the nozzles of the Qdoser ECO and Qdoser ECO+ dosing systems. Water is supplied automatically via the head.



SAMPLE HOLDERS

QATM offers a wide selection of standard sample holders in various diameters and for different applications and machines. Samples with unusual dimensions can be clamped with the help of special design sample holders.



ELECTRONIC CONTROL SYSTEM

The machine is operated and programmed via the 4.3" touch screen. Preparation methods for sample preparation may be edited and saved. It is also possible to prepare samples manually.



OPTIONAL DOSING UNIT QDOSER ECO / ECO+ / ONE

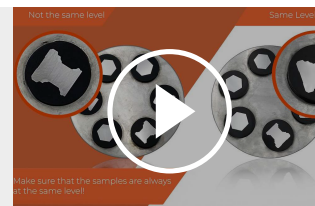
The automatic grinders and polishers can be combined with the fully automatic dosing system Qdoser ECO/ ECO+ or the manual dosing solution Qdoser One, thus offering a high degree of flexibility for sample preparation and ease of use.



PROTECTIVE HOOD (AI ONLY)

The optional protective hood for grinding and polishing machines of the Qpol 250/300 series is available in 2 versions:

- | Variant 1: transparent hood for access and splash protection with connection for external exhaust system.
- | Variant 2: with additional automatic locking during the grinding and polishing process



[Click to view video](#)

Video: The correct way to work with central pressure

THIS INSTRUMENT IS IDEALLY SUITED FOR GEOLOGY AND MINERALOGY APPLICATIONS

PERFORMANCE

The grinding & polishing head ECO+ exerts 5 - 80 N in single pressure and 20 - 350 N in central pressure mode. Up to 6 samples Ø 50 mm can be moved at variable speed with sample holders Ø 185 mm.

GRINDING & POLISHING MACHINE QPOL 300 A1 / A2-ECO+

PERFECT COMBINATION OF PERFORMANCE AND DESIGN

1. Polishing head ECO / ECO+

- | Two-handed operation for operator safety
- | Grip recesses on both sides for easy swivelling and movement
- | Integrated buttons for unlocking
- | Adjustable swivel limits
- | Automatic water supply
- | Energy-saving LED illumination of the working area
- | Variable speed control for the polishing head
- | Polishing head with clockwise / counterclockwise rotation
- | Holder for 4x dosing unit Qdoser Eco integrable



- | For sample holders with Ø 160 mm and up to 6 samples Ø 50 mm

2. Dosing Unit Qdoser ECO

- | Automatic dosing of 3x diamond suspensions and 1x lubricant or 4x diamond suspension Dia-Complete
- | Dosing intervall adjustable
- | Reverse rinsing function
- | Controlled by software of grinder & polisher
- | Glass bottles for suspensions refillable and removable
- | Incl. dosing nozzles

3. Control

- | 4.3" Touch screen with intuitive QATM user software
- | 200 customized programs storable
- | Spin cycle feature (Cleaning Boost)
- | USB plug for data transfer and software updates
- | Ethernet plug for online-diagnostics and user support

4. Working wheel

- | working wheels Ø 250 / 300 mm
- | Variable speed control
- | Clockwise / counter-clockwise rotation
- | Easy, fast and tool-free change of working wheel

4. Basic unit

- | Basin rinsing tube
- | Aluminium case, powder-coated
- | Impact proof plastic bowl
- | Incl. ergonomically shaped splash ring and cover
- | Online operator support

FULLY AUTOMATIC DOSING UNITS

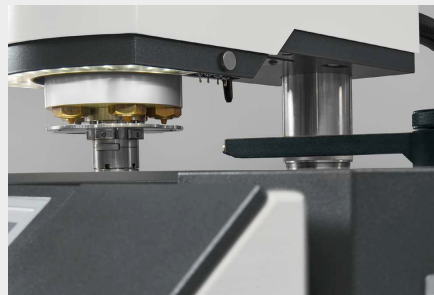
QDOSER ECO / ECO+

- | Fully automatic dosing of
 - | 3x diamond suspensions and 1x lubricant or
 - | 4x diamond suspension Dia-Complete
 - | ECO+: additionally also 3x Dia-Complete and 1x final polishing suspension can be dosed
 - | ECO+: extension for final polishing suspension to 1 L-suspension supply bottle available
- | Dosing intervall adjustable
- | Reverse rinsing function
- | Controlled by software of Qpol 250/300 A grinders & polishers
- | For grinders & polishers Qpol 250/300 A series
- | Glass bottles for suspensions refillable and removable



MAGNETIC STIRRER (OPTIONAL)

The magnetic stirrer integrated in the control unit of the Qpol 250/300 A series prevents the suspension from settling. The automatic stirring of the suspensions ensures a good preparation result due to the optimal distribution of the polishing particles before use.



DOSING

The dosing nozzles are easily attached to the grinding and polishing head. The dosing is controlled fully automatically by the software of the Qpol devices.



[Click to view video](#)

Video: Application & Cleaning

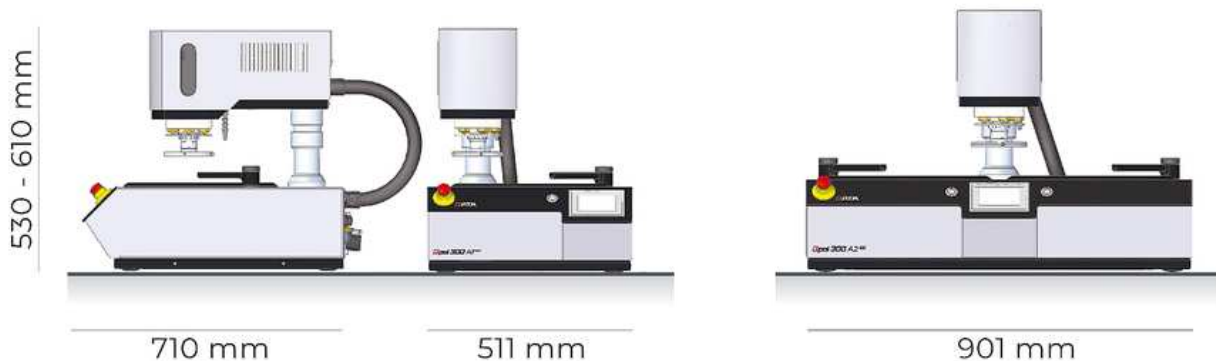
PERFECT GRINDING AND POLISHING – CONSUMABLES BY QATM

Grinding and polishing is more reliable, safe and efficient when processed with the right ingredients: knowledge, care and the right choice of consumables and instruments.



GRINDING & POLISHING MACHINE QPOL 300 A1 / A2-ECO+

TECHNICAL DATA



GRINDING & POLISHING MACHINE QPOL 300 A1-ECO+

Model variant	Single wheel
Working wheels	ø 250/300 mm
No. of samples (single pressure)	1-6 samples ø 50 mm
Single pressing force	variable, 5-80 N
Central pressing force	variable, 20-350 N

GRINDING & POLISHING MACHINE QPOL 300 A2-ECO+

Model variant	Twin wheel
Working wheels	ø 250/300 mm
No. of samples (single pressure)	1-6 samples ø 50 mm
Single pressing force	variable, 5-80 N
Central pressing force	variable, 20-350 N

Connection power	2.8 kVA
Drive power (grinder)	0.75 kW (S1)
Drive power (head)	0.18 kW (S1)
Speed (grinder)	30 - 600 min-1
Speed (head)	30 - 160 min-1
W x H x D	511 x 530-610 x 710 mm
Weight	64 kg
Water connection	1x fresh water connection R½" max. 6 bars
Dosing system (option)	Qdoser ECO / ECO+

Connection power	3.3 kVA
Drive power (grinder)	0.75 kW (S1)
Drive power (head)	0.18 kW (S1)
Speed (grinder)	30 - 600 min-1
Speed (head)	30 - 160 min-1
W x H x D	901 x 530-610 x 710 mm
Weight	~ 78 kg
Water connection	1x fresh water connection R½" max. 6 bars
Dosing system (option)	Qdoser ECO / ECO+

www.qatm.com/qpol-300-A1-eco

ORDER DATA

BASIC EQUIPMENT

QPOL 300 A1-ECO+

M5631101  Qpol 300 A1-ECO+ base machine 200-240V 50/60Hz

M5631106  Qpol 300 A1-ECO+ base machine 100-120V 50/60Hz

PROTECTIVE COVER FOR QPOL 300 A1-ECO+ (TO BE ORDERED WITH THE MACHINE)

A5631008 Preparation protective cover with safety switch

Z5631025 Protective cover

Z5631026 Protective cover with safety switch

QPOL 300 A2-ECO+

M5631111  Qpol 300 A2-ECO+ base machine 200-240V 50/60Hz

M5631116  Qpol 300 A2-ECO+ base machine 100-120V 50/60Hz

WORKING WHEEL

1 item required for Qpol 300 A1-ECO+

2 items required for Qpol 300 A2-ECO+

Z5631002 Working wheel Ø 250 mm

Z5631007 Working wheel Ø 300 mm

Z5631017 Working wheel Ø 250 mm PVC

Z5631018 Working wheel Ø 300 mm PVC

SAMPLE HOLDER (1 ITEM REQUIRED)

Z5446020 Sample holder L-160-6-Ø-25 single pressure

Z5446022 Sample holder L-160-6-Ø-30 single pressure

Z5446025 Sample holder L-160-6-Ø-40 single pressure

Z5446026	Sample holder L-160-6-Ø-50 single pressure
Z5446021	Sample holder L-160-6-Ø-1" single pressure
Z5446023	Sample holder L-160-6-Ø-1 1/4" single pressure
Z5446024	Sample holder L-160-6-Ø-1 1/2" single pressure
Z5446027	Sample holder L-160-6-Ø-2" single pressure
Z5446028	Sample holder L-160-3-RE-55x30 single pressure
Z5446029	Sample holder L-160-3-RE-60x40 single pressure
Z5446030	Sample holder L-160-12-Ø-25 central pressure
Z5446031	Sample holder L-160-8-Ø-30 central pressure
Z5446034	Sample holder L-160-6-Ø-40 central pressure
Z5446035	Sample holder L-160-5-Ø-50 central pressure
Z5446042	Sample holder L-185-3-Ø-60 central pressure
Z5446044	Sample holder L-204-5-Ø-70 central pressure
Z5446030	Sample holder L-160-12-Ø-1" central pressure
Z5446032	Sample holder L-160-8-Ø-1 1/4" central pressure
Z5446033	Sample holder L-160-6-Ø-1 1/2" central pressure
Z5446035	Sample holder L-160-5-Ø-2" central pressure
Z5446036	Sample holder L-160-3-RE-55x30 central pressure
Z5446037	Sample holder L-160-3-RE-60x40 central pressure
Z5446043	Sample holder L-185-3-RE-70x40 central pressure
Z5446045	Sample holder L-204-3-RE-100x50 central pressure
Z5446038	Sample holder L-160-6-Ø-20-40 central pressure

OPTIONS (CAN BE ORDERED SEPARATELY)

Z5600009	Connection set semi-automatic grinding machines
Z5631004	Clamping ring Ø 250 mm
Z5631009	Clamping ring Ø 300 mm
Z5631022	Qpol 300 Protection ring Ø 250 mm
Z5631023	Qpol 300 Protection ring Ø 300 mm
92005820	 Magnetic Foil Ø 250 x 1,0 mm PSA

92005822		Magnetic Foil Ø 300 x 1,0 mm PSA
05446012		Distance ring Ø 25 mm (for 50 mm Hole)
05446015		Distance ring Ø 1" (for 50 mm Hole)
05446011		Distance ring Ø 30 mm (for 50 mm Hole)
05446014		Distance ring Ø 1 1/4" (for 50 mm Hole)
05446010		Distance ring Ø 40 mm (for 50 mm Hole)
05446013		Distance ring Ø 1 1/2" (for 50 mm Hole)
05400356		Levelling plate Ø 130 mm 2 mm
05400372		Levelling plate Ø 130 mm 4 mm
A5810261		Settling tank 45L for System Lab 2, mobile, with insertion mechanism for cabinet 800
A5810237		Settling tank 45L for System Lab 2, mobile, with insertion mechanism for cabinet 900
A5800496		Settling tank 45L for System Lab, mobile, without folding wheels

DOSING UNIT

M6300070		Qdoser ECO+ Base Unit
A6300070		Connection set Qdoser ECO+ to Qpol ECO+
M6300060		Qdoser ECO Base Unit
A6300053		Connection set Qdoser ECO to Qpol ECO
Z5631015		Qdoser ONE
Z5631014		Qdoser ONE holder

OPTION (TO BE ORDERED WITH MACHINE)

A6300052		Magnetic stirrer
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