



GRINDING & POLISHING MACHINE

QPOL XL

High sample throughput with maximum reliability: The Qpol XL is a robust and powerful powerhouse with unique removal performance and excellent preparation results. With maximum stability of body and polishing head, this unit is part of a series of QATM floor standing polishing machines.

The integrated load cell and the innovative motorized force control allow defined material removal and highest process reliability. The storage of up to 200 preparation methods is possible in the intuitive software as well as professional user management.



[Click to view video](#)

Product Video

PRODUCT ADVANTAGES

- | Working discs Ø 300/350 mm
- | Powerful engines: Drive spindle 2.2 kW - Polishing head 1.1 kW
- | Force control with electronic measuring system (50 - 750 N)
- | Modular dosing system with up to 6 vessels and optional magnetic stirrer
- | Motorized swivelling dosing arm for uniform wetting of the working disc
- | Spin cycle function of the working disc (Cleaning Boost)
- | Highest safety through automated safety hood
- | Fast, easy and tool-free work disc change

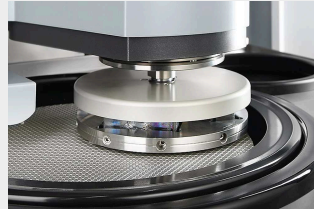
AUTOMATIC GRINDER & POLISHER QPOL XL

REPRODUCIBLE PREPARATION RESULTS GUARANTEED



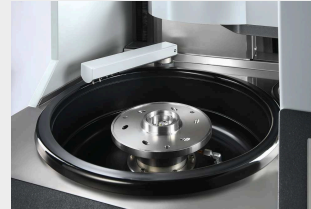
ROBUST ENGINEERING - FUNCTIONAL DESIGN

The basic requirements when developing the automatic grinder / polisher Qpol XL were a corpus and polishing head of utmost stability. A solid steel construction, powder-coated and a working area lined with stainless steel emphasize the sustainable, and at the same time modern and compact, machine design – made in Germany.



REMOVAL MEASUREMENT

The QATM Qpol XL comes with a system for precise measurement of material removal – regardless of operating time, sample type, material and hardness, you can easily monitor the material height already removed.



CONVINCING PERFORMANCE DATA

The drive motor of the working wheel has a power of 2.2 kW and the polishing head of 1.1 kW. The speed of both systems can be operated in clockwise and counter clockwise direction as well as in oscillating movement.



ADVANCED TECHNOLOGY AND MODULARITY

- | Electronic measurement system for controlled press forces between 50 and 750 N.
- | Integrated removal measurement
- | Intuitive operating software
- | Modular dosing concept with level warning



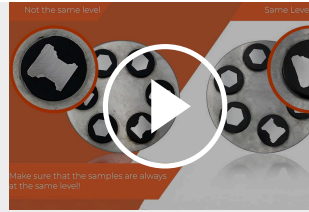
CLEANING STATION (OPTION)

In the cleaning station specimens are automatically cleaned with water, ethanol and air or by spin cycling at up to 800 rpm (adjustable). Thus, each preparation step is finalized with a cleaning step to avoid cross contamination.



ACCESSORIES

QATM offers a wide selection of standard sample holders with different diameters and for a variety of applications and machines. Clamping of samples with unusual dimensions can be realized with special sample holders.



[Click to view video](#)

Video: The correct way to work with central pressure

SIMPLE AND
TOOL-FREE
CHANGING OF
SAMPLE HOLDER



EASY-TO-OPERATE



MOTORIZED SWIVELLING DOSING ARM

The fully loaded motorized swivelling dosing arm provides uniform wetting of the working wheel. It offers automatic referencing, automatic nozzle rinsing as well as good accessibility to the dosing hoses.



MAXIMUM SAFETY

The motorized acryl glass safety hood protects the working area of the machine. The transparent hood is equipped with a safety switch and opens automatically when the program is finished. For easy cleaning the hood can simply be unhinged.



PREPERATION FOR EXTERNAL SUCTION

Direct suction of vapor from the working area through suction nozzle.

AUTOMATIC GRINDER & POLISHER QPOL XL

SUPERIORITY IN DETAIL

1. Intelligent sample head

- | Electronic force sensor with wear measurement
- | Powerful drive
- | Pendulum movement possible during preparation
- | Very high precision

2. Ergonomic control panel

- | Large 7" touch display

3. Modular dosing system

- | Up to six different suspensions
- | Can be easily refilled during operation

4. Automated safety hood

- | Safe operation, hazards are minimized
- | Allows easy visual inspection

5. Robust housing

- | Made of robust powder-coated steel
- | Very high stability

6. With integrated cleaning station (optional)

- | Cross-contamination is prevented
- | Samples can be reused immediately



QPOL XL CONTROL SOFTWARE



Features

- | 7" touch screen
- | Status display and acoustic signal
- | Up to 200 programs and complete preparation methods storable
- | User Account Management with variable user rights
- | USB / Ethernet interface for remote maintenance and data transfer



INNOVATIVE SOLUTIONS

MODULAR CONFIGURATION



MODULAR DOSING SYSTEM

The cleverly integrated dosing system accommodates up to 6 Qdoser Duran glass bottles (1L). When equipping the Qpol XL with “Preparation Dosing System”, the suspension containers can be retrofitted in packages of 2, preparing your Qpol for all future requirements. Details like the gentle illumination of the containers and the soft-closing hood top off this well-thoughtout equipment option.



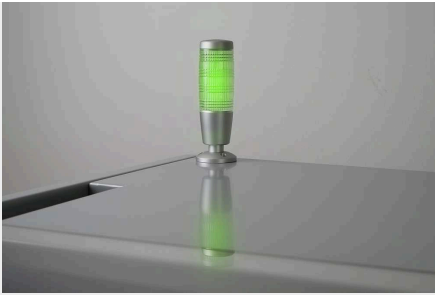
MAGNETIC STIRRER AND LEVEL WARNING

The dosing system can be equipped with a magnetic stirrer. The automated stirring ensures optimum distribution of abrasive particles contained in the suspension before usage. This homogenization process significantly improves the preparation result. The new level detection for suspensions gives a warning before the container is empty, which is refillable in the ongoing process.



CLEANING BOOST

The spin cycle function „Cleaning Boost” is integrated into the software and spins the residual liquid off the grinding/polishing medium at the end of the preparation process with max. rpm for 3 seconds.



SIGNAL LAMP

The optional signal lamp allows monitoring of your Qpol XL from a distance: The red/yellow/green lights show the current state of the machine at a glance.



RECIRCULATION COOLING AND SEDIMENTATION TANK

Seamlessly incorporated into the machine base and easily accessible via push-to-open door. Lateral guidance of the extendible and rollable unit via slide rails.



MANUAL CLEANING

Integrated spiral rinsing hose with ball valve allows for manual cleaning of the working area.

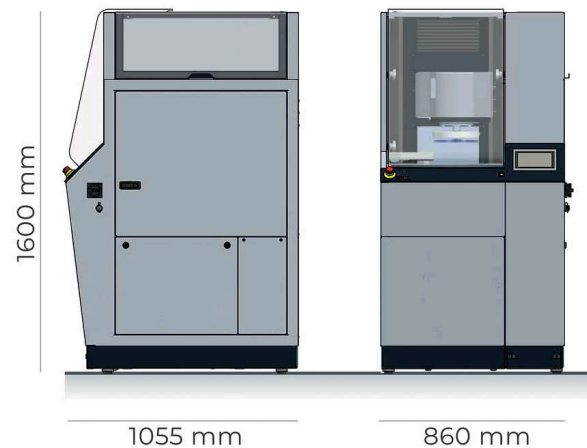
PERFECT GRINDING AND POLISHING – CONSUMABLES BY QATM

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.



AUTOMATIC GRINDER & POLISHER QPOL XL

TECHNICAL DATA




Working wheels	ø 300 / 350 mm
Speed working wheel	variable (50 – 600 rpm)
Running direction working wheel	right
Sample holder	ø 159 - 204 mm
Speed sample holder	variable (50 – 350 rpm)
Running direction sample holder	right / left
Controlled removal	0.1 mm display accuracy
Speed of „Cleaning Boost“	800 rpm
Pressing system	Central pressing force
Central pressure	50 – 750 N
Drive power working wheel	2.2 kW (S1 operation)
Drive power head	0.75 kW (S1 operation) resp. 1.1 kW (S3 operation)
Connection power	6 kVA
Power connection	400 V / 50 Hz (3Ph / PE), 480 V / 60 Hz (3Ph / PE), 220 V / 60 Hz (3Ph / PE)
Weight (depending on configuration)	~ 420 kg


www.qatm.com/qpol-xl

ORDER DATA

BASIC EQUIPMENT

MACHINE (ALL ITEMS REQUIRED)

M5700010  Qpol XL Base machine 400V/50Hz (3Ph/PE)

M5700020  Qpol XL Base machine 480V/60Hz (3Ph/PE)

M5700030  Qpol XL Base machine 220V/60Hz (3Ph/PE)

MEDIA CONNECTION (1 ITEM REQUIRED)

A5700011 Media connections back side

A5700012 Media connections right-hand side

CLEANING (1 ITEM REQUIRED)

A5700021 Without cleaning station

A5700022 Cleaning station

WASTE WATER (1 ITEM REQUIRED)

A5700031 Equipment for direct drain

A5700032 Equipment for settling tank (incl. settling tank 45L)

A5700033 Equipment for recirculation with shift valve (incl. recirculation cooling system 45L)

DOSING UNIT (1 ITEM REQUIRED)

A5700041 without equipment dosing system

A5700042 Equipment dosing system standard - for max. six bottles

A5700043 Equipment dosing system standard plus - for max. six bottles

DOSING MODULE (CAN BE ORDERED SEPARATELY)

Z5700011 Dosing module diamond polish (2 pumps for suspension)

Z5700012	Dosing module final polish (1 pump for suspension, 1 pump for final polish suspension)
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SIGNAL LIGHT (TO BE ORDERED WITH THE MACHINE)

A5700051	Signal light
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OPTIONS (CAN BE ORDERED SEPARATELY)

Z5700002	Connection-Set
Z5700021	Working wheel Ø 350 mm
Z5700022	Working wheel Ø 300 mm
Z5700023	Splashing ring Ø 350 mm
Z5700024	Splashing ring Ø 300 mm
Z5631009	Clamping ring Ø 300 mm
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
05400260	Levelling plate Ø 185 mm 4 mm
05440021	Levelling plate Ø 204 mm 4 mm