

## AUTOMATIC GRINDING & POLISHING MACHINE

# QPOL XL



### CONVENIENT OPERATION

The modern design of QATM's proven control software allows for intuitive and user-friendly operation. Standard preparation methods and typical consumables are pre-installed.

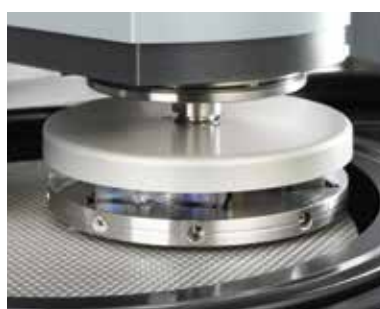
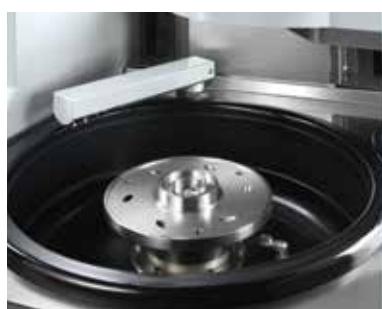


- | 7" touch screen
- | Status display and acoustic signal
- | Up to 200 programs and complete preparation methods storable
- | User Account Management with variable user rights
- | USB / Ethernet interface for remote maintenance and data transfer

High sample throughput with maximum reliability: The Qpol XL for working wheels Ø 300/350 mm convinces as a robust and powerful powerhouse with unique removal capacity and ultimate preparation results.

With the highest stability of body and polishing

head, the device opens the series of QATM floor-standing polishing machines. The integrated load cell and the new 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 is professional user management.



### 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.

### 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.

### 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.



## BASIC MODULE

### Qpol XL (basic unit)

- | single wheel grinding and polishing machine with central pressure
- | stable welded steel construction, powder coated
- | variable speed of working wheel
- | variable speed of grinding / polishing head
- | grinding / polishing head: clockwise / counter-clockwise rotation
- | adjustable pendulum movement distance for grinding / polishing head
- | force control with electronic measuring system
- | removal measurement
- | integrated cleaning station (optional) with water, ethanol, air and spin cycle
- | motorized swiveling dosing arm for even lubrication of the working wheel
- | modularly configurable dosing system with optional magnetic stirrer and level warning
- | automatic water supply via dosing arm
- | 7" touch screen with intuitive QATM user software
- | 200 customized programs storable
- | USB and Ethernet connection
- | automatic safety hood
- | cooling of working wheel and basin rinsing with interval
- | spin cycle feature for working wheel (Cleaning Boost)
- | impact-proof plastic bowl
- | rinsing hose for manual cleaning
- | integrable settling tank or recirculation cooling unit (optional)
- | energy-saving LED illumination of the work area
- | splash ring (selectable depending diameter)
- | preparation for external suction system
- | manual mode for grinding and polishing

400 V / 50 Hz (3Ph/PE)

Order No.: M5700010

480 V / 60 Hz (3Ph/PE)

Order No.: M5700020

220 V / 60Hz (3Ph/PE)

Order No.: M5700030



## EQUIPMENT

### EQUIPMENT FOR SETTLING TANK



- | incl. 45 L settling tank
- | PVC tank
- | removable separating slide
- | inlet sieve with filter bag and overflow
- | mobile, without folding wheels

Order No.: A5700032

### EQUIPMENT FOR RECIRCULATION COOLING SYSTEM

- | incl. 45 L recirculation cooling system
- | automatic shift valve for recirculation cooling system or drain
- | PVC tank
- | removable separating slide
- | inlet sieve with filter bag
- | mobile, without folding wheels

Order No.: A5700033

### EQUIPMENT FOR DIRECT DRAIN

- | without preparation for settling tank or recirculation cooling unit

Order No.: A5700031

## EQUIPMENT

### DOSING SYSTEM



- | preparation for modularly configurable dosing system
- | requirement for the configuration of dosing modules (max. 6 bottles)
- | equipped with up to three dosing modules (can be ordered separately):
  - max. two dosing modules diamond polish
  - max. one dosing module final polish
- | rinsing function for dosing hoses and nozzles with water
- | including magnetic stirrer for all suspension bottles (automatic control in software) (Dosing system standard plus)

Equipment dosing system standard:

**Order No.: A5700042**

Equipment dosing system standard plus:

**Order No.: A5700043**

Without equipment dosing system:

**Order No.: A5700041**

## EQUIPMENT

### CLEANING STATION



- | automatic cleaning of sample holders up to Ø 204 mm
- | cleaning media: water, ethanol and air
- | integration of the cleaning step in preparation processes
- | drying by spin cycle with max. 800 rpm (adjustable)
- | user-defined programming of cleaning process in software
- | level warning for ethanol containers
- | preparation for external suction (recommended when using ethanol)
- | tap water (drinking water) and compressed air required

With cleaning station:

**Order No.: A5700022**

Without cleaning station:

**Order No.: A5700021**

## ACCESSORIES FOR DOSING SYSTEM

### Dosing module diamond polish

- | two pumps for diamond suspensions or lubricants (water and alcohol based)
- | Incl. two suspension bottles (refillable and removable)
- | level warning for both positions
- | backflushing function (software function)
- | dosing interval adjustable (software function)
- | LED illumination in the dosing compartment
- | max. filling quantity: 1L per bottle

Dosing module diamond polish:

**Order No.: Z5700011**

### Dosing module final polish

- | one pump for final polish suspension
- | one pump for diamond suspensions or lubricants (water and alcohol based)
- | Incl. two suspension bottles (refillable and removable)
- | level warning for both positions
- | backflushing function (software function)
- | dosing interval adjustable (software function)
- | LED illumination in the dosing compartment
- | max. filling quantity: 1L per bottle

Dosing module final polish:

**Order No.: Z5700012**

## EQUIPMENT

### MEDIA CONNECTIONS

- | water in
- | water drain
- | compressed-air (only in case of cleaning station)
- | power supply
- | Ethernet

On back side of the machine:

**Order No.: A5700011**

On right-hand side of the machine:

**Order No.: A5700012**

## OPTION

### SIGNAL LIGHT



- | LED-signal light with status display
- | color coding according to DIN EN 60204-1

**Order No.: A5700051**

## ACCESSORIES

### WORKING WHEELS Qpol XL

Ø 300 mm

Order No.: Z5700022

Ø 350 mm

Order No.: Z5700021

### CLAMPING RING Qpol XL

I for working wheels Qpol XL  
I plastic

Ø 300 mm

Order No.: Z5631009

### STANDARD SAMPLE HOLDER FOR CENTRAL PRESSURE

Samples 7x Ø 50 mm

Dimensions Ø 203 mm

Order No.: Z5440014

more sample holders as of page 3.62

## ACCESSORIES

### SPLASH RING Qpol XL

I made of resistant PVC

Ø 300 mm

Order No.: Z5700024

Ø 350 mm

Order No.: Z5700023

### CONNECTION SET Qpol XL

1 HT pipe Ø 50 mm, 1 m long

2 HT bow Ø 50 mm, 90°

1 armored tube R ½"; 2 m long with accessories

1 pressure tube R 3/8" coupling and screw thread; 3 m

Order No.: Z5700002

### BASIC SET Qpol XL

Order No.: Z5700001

## SPECIFICATIONS

|                |                                                                                 |
|----------------|---------------------------------------------------------------------------------|
| Connected load | 6 kVA                                                                           |
| Power supply   | 1 400 V / 50 Hz (3Ph/PE)<br>2 480 V / 60 Hz (3Ph/PE)<br>3 220 V / 60Hz (3Ph/PE) |

## WORKING WHEELS

|                       |                          |
|-----------------------|--------------------------|
| Drive power           | 2.2 kW (S1)              |
| Diameter              | Ø 300/350 mm             |
| Variable speed        | 50-600 rpm               |
| Direction of rotation | clockwise/anti-clockwise |

## SAMPLE HOLDER / GRINDING AND POLISHING HEAD

|                           |                          |
|---------------------------|--------------------------|
| Drive power               | 0.75 kW (S1)             |
| Diameter                  | Ø 160 - 204 mm           |
| Variable speed            | 50 - 350 rpm             |
| Speed of „Cleaning Boost“ | 800 rpm                  |
| Direction of rotation     | clockwise/anti-clockwise |
| Central pressure          | 50 - 750 N               |

## Qpol XL

|                    |                         |
|--------------------|-------------------------|
| Controlled removal | 0.1 mm display accuracy |
| WxHxD              | ~ 860 x 1650 x 1055 mm  |
| Weight             | ~ 420 kg                |

