

## VIBRATORY POLISHING DEVICE

# QPOL VIBRO



### USER INTERFACE

The innovative design of the Qpol Vibro software provides intuitive and user-friendly operation. 15 preparation methods for various materials are pre-installed, together with the appropriate consumables. The Qpol Vibro offers storage of up to 200 customized methods both on the device or on USB, allowing a transfer of methods from one device to another.

These may be programmed without any restriction in duration or in vibration intensity.

The vibratory polishing device Qpol Vibro is designed for the virtually deformation-free preparation of specimen surfaces (specimens surfaces for polishing steps  $< 1 \mu\text{m}$ ). It is ideal for further characterizations, e.g. EBSD (electron backscatter diffraction), AFM analysis and nanoindentation or micro hardness testing.

The device is applicable for soft and ductile materials, like titanium-aluminum, pure copper and copper alloys, aluminum alloys, steel and nickel based alloys and may be operated in manual or automatic mode.



### POLISHING BOWL

With a diameter of  $\varnothing = 308 \text{ mm}$  the large bowl provides sufficient space for polishing of completely filled sample holders, large specimens, as well as for simultaneously polishing up to 21 specimens. Held by strong magnets the polishing bowl can be easily removed by pressing a button and exchanged by simply putting it back into the device.

The clamping ring protects the edge of the polishing cloth to ensure a long service life. The bowl is designed for the use of polishing cloths on magnetic systems. Consequently, the cloth is quickly and easily removed.

### PLUGS

Connection to an exhaust air system improves health and safety conditions for the operator. Ethernet plug for remote control and service applications and USB plug to save and exchange data is integrated.

### SURFACE-GUARD

The Surface-Guard (movement interval) offers advantages for corrosion-sensitive materials like cast iron and preserves the quality of the polished surface after a program has finished.



## BASIC MODULE

### Qpol Vibro

- | applicable for soft and ductile materials, like titanium-aluminum, pure copper and copper alloys, aluminum alloys, steel and nickel based alloys
- | large bowl with  $\varnothing=308\text{mm}$  for polishing large specimens, filled sample holders, and for simultaneous polishing of up to 21 specimens ( $\varnothing=30\text{ mm}$ , 1 1/4")
- | rapid changeable polishing bowl with magnetic system
- | Surface-Guard: protects the quality of the polished surface after running a preparation program
- | automatic frequency control from 60-120Hz, e.g. for mass variation
- | clearly ATM-User interface and touch screen
- | pre-installed preparation methods and consumables for various materials
- | programmable and storable polishing recipes on the device or on USB
- | manual and automatic operation modus
- | alert function (timer) indicating the finish of a program
- | low-noise operation, almost indefinite polishing time without supervision
- | vibrational motor with oscillation compensation
- | exhaust connection plug (exhaust connection for enhanced user-friendliness and safety)
- | soft closing clear-sighted hood protecting polishing cloth and specimens for contamination
- | vibration adsorbing construction
- | weight of 45 kg suitable as benchtop device

Order No.: M5651000

## EQUIPMENT

### POWER SUPPLY

#### Equipment 1

220-240 V 50/60 Hz (1Ph/N/PE)

Order No.: A5651001

#### Equipment 2

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

Order No.: A5651002



## ACCESSORIES

### POLISHING BOWL (ADDITIONAL)

- | large bowl with  $\varnothing=308\text{mm}$  (inner diameter) for polishing large specimens, filled sample holders and for simultaneous polishing of up to 21 specimens ( $\varnothing=30\text{ mm}$ , 1 1/4")
- | ergonomic carrying handle for easy handling
- | fast and easy change of the bowl due to release button and magnetic system
- | specially designed for polishing cloths of magnetic system
- | easy cleaning of bowl
- | polishing cloth meter: 300/305 mm (12")
- | lid protects cloth and suspension from contamination

Order No.: Z5651000



## ACCESSORIES

### SAMPLE HOLDER Qpol Vibro

- for clamping of mounted samples
- adding additional weights possible to increase surface pressure
- specimen height max. 30 mm
- slip ring of sample holder suppresses interactions with other sample holders in bowl

Sample Ø	25 mm (1")	Sample Ø	30/32 mm (1 1/4")
Weight	300 g	Weight	220 g
add. weight	90 g	add. weight	90 g
Order No.: Z5651008		Order No.: Z5651009	
Sample Ø	38/40 mm (1 1/2")	Sample Ø	50 mm (2")
Weight	550 g	Weight	360 g
add. weight	190 g	add. weight	190 g
Order No.: Z5651011		Order No.: Z5651012	



### LEVELLING PLATE Qpol Vibro

- for levelling of mounted specimens
- suitable for samples with diameter 25-50 mm (1"-2")

Order No.: Z5651013

## SPECIFICATIONS

Connected load	0.25 kVA
Drive power	135 VA
Power supply	1 220-240 V 50/60 Hz (1Ph/N/PE) 2 100-120 V 50/60 Hz (1Ph/N/PE)
Polishing bowl: inner diameter	Ø 308 mm
Polishing bowl: polishing cloth	Ø 300/305 mm (12")
Plugs	USB, Ethernet
Exhaust connection plug	Ø 40 mm
Ambient temperature	10-40 °C
IP Code	IP 22
WxHxD	~ 510 x 300 x 590 mm
Weight	~ 45 kg

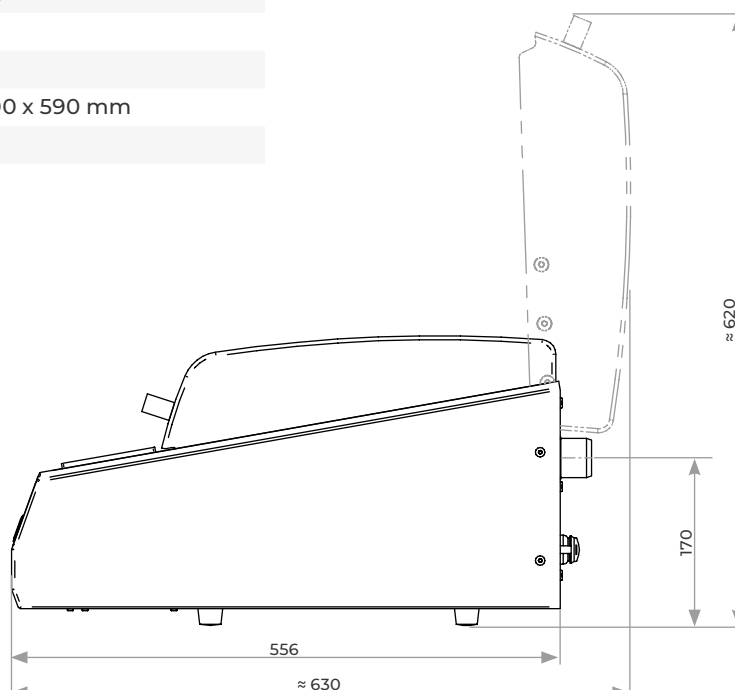
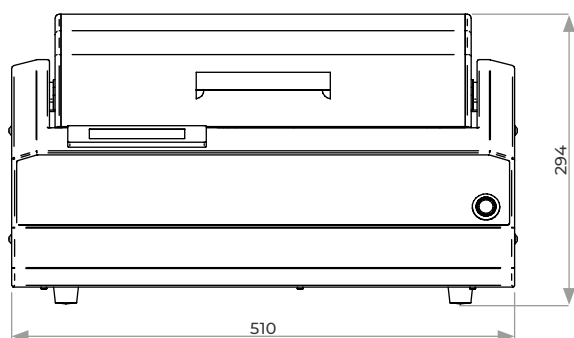


Figure: Basic unit without equipment, option and accessories. Further information on request.