



USER INTERFACE

The innovative design of the Saphir Vibro software provides intuitive and user-friendly operation. 15 preparation methods for various materials are pre-installed, together with the appropriate consumables. The Saphir 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.

Saphir Vibro

The vibratory polishing device Saphir Vibro is designed for the virtually deformation-free preparation of specimen surfaces (specimens surfaces for polishing steps <math>< 1\mu\text{m}</math>). 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.



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.

POLISHING BOWL

With a diameter of $\varnothing = 308$ 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.

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

SAPHIR VIBRO



Order No.: M5651000

- » applicable for soft and ductile materials, like titanium-aluminum, pure copper and copper alloys, aluminum alloys, steel and nickel based alloys
- » large bowl with $\text{Ø}=308\text{mm}$ for polishing large specimens, filled sample holders, and for simultaneous polishing of up to 21 specimens ($\text{Ø}=30\text{mm}$, 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

EQUIPMENT

POWER SUPPLY



Equipment 1

Equipment 2

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

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

Order No.: A5651001

Order No.: A5651002

ACCESSORIES

POLISHING BOWL (ADDITIONAL)



Order No.: Z5651000

- » large bowl with $\text{Ø}=308\text{mm}$ (inner diameter) for polishing large specimens, filled sample holders and for simultaneous polishing of up to 21 specimens ($\text{Ø}=30\text{mm}$, 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



ACCESSORIES

SAMPLE HOLDER SAPHIR 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



Order No.: Z5651008

- » Sample Ø 25 mm (1")
- » Weight 300 g, additional weight 90 g

Order No.: Z5651009

- » Sample Ø 30/32 mm (1 1/4")
- » Weight 220 g, additional weight 90 g

Order No.: Z5651011

- » Sample Ø 38/40 mm (1 1/2")
- » Weight 550 g, additional weight 190 g

Order No.: Z5651012

- » Sample Ø 50 mm (2")
- » Weight 360 g, additional weight 190 g

LEVELLING PLATE SAPHIR VIBRO



Order No.: Z5651013

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

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) |

| | |
|-------------------------|---------------|
| Plugs | USB, Ethernet |
| Exhaust connection plug | Ø 40 mm |
| Ambient temperature | 10-40 °C |
| IP Code | IP 22 |

POLISHING BOWL

| | |
|-----------------|--------------------|
| Inner diameter | Ø 308 mm |
| Polishing cloth | Ø 300/305 mm (12") |

| | |
|----------|--------------------|
| WxHxD ~ | 510 x 300 x 590 mm |
| Weight ~ | 45 kg |

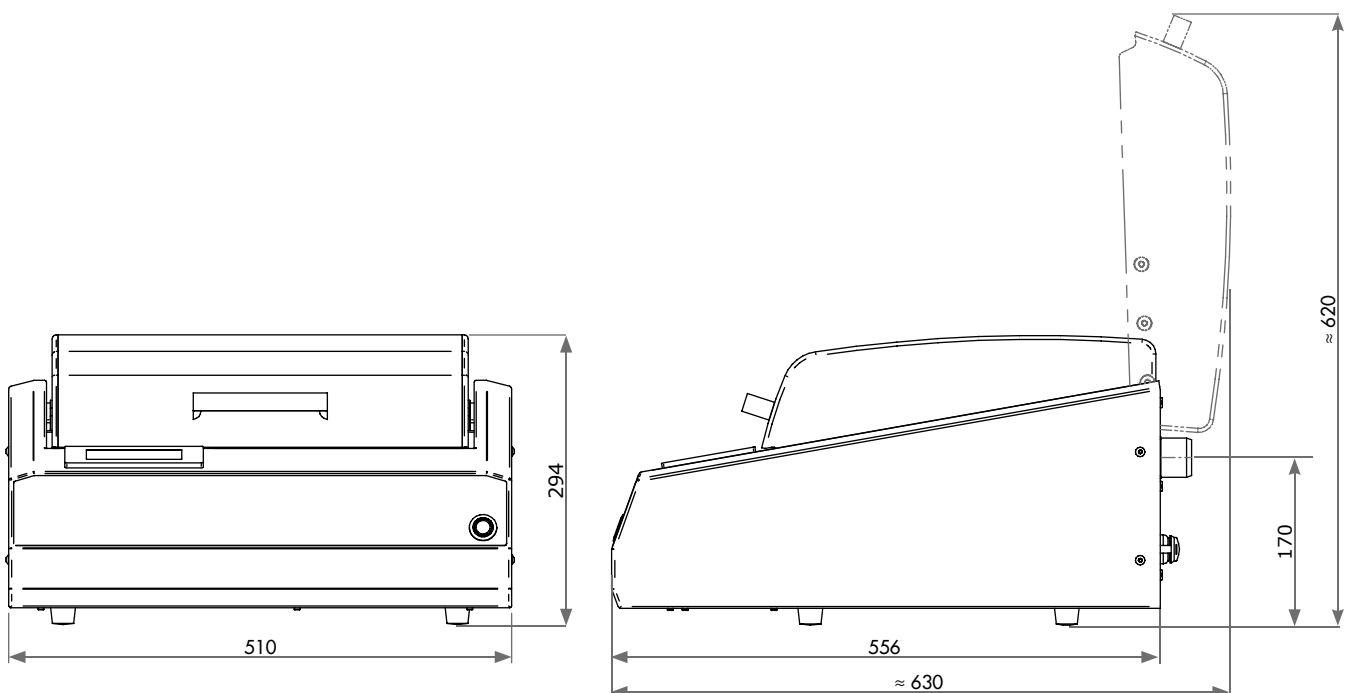


Figure: Basic unit without equipment, option and accessories. Further information on request.

