



### POLISHING UNIT

The polishing head is integrated in the handle. Polishing and etching gets automatically ready by touching the piezo button in the handle. A multi-coloured LED on the handle indicates all program states. The operator can focus his attention completely to the checkpoint.

The handle is connected to the unit by a flexible hose.

For flat surfaces, the exchangeable sealing-lip ring is especially suitable. Complex surfaces (e.g. angled areas) can be examined by using an additional flexible end piece which can be cut to size individually.

The pump's adjustable performance allows an infinitely variable flow rate regulation of electrolyte.



## Kristall 650

The KRISTALL 650 is a mobile battery supplied electrolytic polisher and etcher.

It convinces by its compact and robust construction, ideal for use outside of the lab. The simple operation simultaneous with high functionality is matchless.

The epoxy-coated aluminium housing meets highest demands on functionality, stability and design.

All sensitive parts are well protected for transport and local operation. For maximum comfort the Kristall 650 is equipped with handle and carrying strap.

### CONTROL PANEL

The LC-display clearly shows all important parameters like current, voltage, time as well as the charge of battery. All parameters can be adjusted via control panel during operation.

You can choose between constant current and constant voltage.

### INNOVATIVE DETAILS

Micro motor, straight handle and accessories of our mobile grinder Saphir 300 can optionally be connected directly to the controlling unit of the Kristall 650 (suitable storage area inside the case). The electrolyte tanks are replaceable and with screwed top for external storage. The integrated return-flow filter optimizes the life time of the electrolyte.



### BATTERY SUPPLIED OPERATION

The high capacity lithium battery allows with a single charge approximately 150 simple etching/polishing cycles including pre-grinding (state of charge display, charging and mains operation via external power supply). Up to 30 examinations are possible by using the mobile grinder at the same time.

### SAFETY FUNCTIONS

An additional locking valve allows the flow of the electrolyte only during the cycle.

## BASIC MODULE



## KRISTALL 650



Order No.: M6201000

- » mobile electrolytic polisher and etcher
- » fully automatic, microprocessor controlled programm sequence
- » battery supplied by high capacity lithium battery
- » operation and charging by external power supply
- » polishing head with automatic start-stop function and multicolour LED for displaying current operating states
- » infinitely variable flow rate regulation of electrolyte
- » additional locking valve to avoid leakage of electrolyte
- » control panel with clear LC display
- » variable power and voltage supply, adjustable time
- » return-flow filter (filter pads exchangeable without tool)
- » replaceable electrolyte tank
- » flexible, exchangeable sealing-lip ring for flat surfaces; additional end-piece which can be cut to size for examination of complex surfaces (e.g. angled areas)
- » solid epoxy-coated aluminium case with carrying-sling and handle
- » prepared for storing up and controlling manual grinder Saphir 300 (option)
- » incl. maintenance set

## EQUIPMENT

## POWER SUPPLY

Equipment 1  
**230 V/50 Hz (1Ph/N/PE)**  
 Order No.: A6201000

Equipment 2  
**110 V/60 Hz (1Ph/N/PE)**  
 Order No.: A6201001



## FACILITY FOR TRANSPORTABLE GRINDER AND POLISHER

Equipment 1  
**without facility**  
 Order No.: A6201004

Equipment 2  
**with facility**  
 Order No.: A6201005



## ACCESSORIES



## TRANSPORTABLE GRINDER AND POLISHER

Order No.: Z6201002

variable speed 1.000 – 14.000 rpm



## ACCESSORIES



## ACCESSORIES SET FOR KRISTALL 650 IN SUITCASE

Order No.: Z6201001

» set including:

5x V-ring	Order No.: 95003606
1x profile ring-material (approx. 150 mm)	Order No.: 06201052
1x flexible end piece for profile ring	Order No.: 06201051
1x tube cutter	Order No.: 95004030
10x filer pads (Ø 40.5 mm)	Order No.: 95003985
1x dolphin connector	Order No.: 82000374



## BOTTLE FOR ELECTROLYTE



Order No.: 95003955

» with screw top

Volume 1 Ltr.

## SPECIFICATIONS

Power	160 W
Voltage	90 V DC
External power supply	1 230 V/50 Hz (1Ph/N/PE)
	2 110 V/60 Hz (1Ph/N/PE)
Polishing area	approx. Ø 9 mm

WxHxD 415 x 400 x 200 mm

Weight approx. 8.5 kg\*

\* without electrolyte (approx. 1 ltr.)

