

# Operating Manual

# POLIMAXX Premium

# polishing machine

with continuously variable speed  
adjustment



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Our POLIMAXX Premium is a further development and the next milestone in our POLIMAXX product range. Various technical refinements distinguish it substantially from other similar devices. The device stands out thanks to its modern design and from an ergonomic point-of-view.

This device was developed as a logical continuation of the following thought:  
EFFICIENCY THANKS TO SOLID, COMPACT EQUIPMENT DESIGN.

Give your workpieces an individual finish by means of polishing, brushing and matting in the glare-free, ergonomically designed polishing workspace. A high level of user-friendliness is achieved by the hinged hood and removable Plexiglas® cover over the working area. The redesigned air flow guarantees very good suction performance.

With the POLIMAXX Premium, all polishing jobs are possible under professional conditions and, as usual, we guarantee performance, reliability and a long service life. We congratulate you on your purchase of this high-performance device.

We wish you many years of satisfaction with this unit and would like to ask for your help in this respect: before putting your unit into service, please read through this Operating Manual carefully. Please make yourself and the personnel who will be working with the unit familiar with the POLIMAXX Premium and make sure all comply with the safety instructions given below. Carry out the necessary maintenance and cleaning work at regular intervals, as this is the only way that safe and effective operation can be guaranteed.

Please keep the Operating Manual close to the device and accessible at all times. We would also ask you to kindly keep the original packaging.

Please read and comply with all safety instructions ! They should simplify appropriate operation of the device and help to prevent any misunderstandings, as well as material or immaterial damage.

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This device is built according to state-of-the-art, recognised safety regulations. However, when in use dangers can arise to the life and limb of those operating it or third parties, and/or adverse effects to the device and other property.

For this reason, we would ask you to please comply with the safety instructions below:

- (1) The device must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the unit. No claims under guarantee can be entertained in the event of operator error or lack of maintenance.
- (2) Before putting into service, check the information on the type plate on the rear of the device. The device is designed for a 230 V power supply and may only be connected to mains sockets of this type.
- (3) In the event of any faults that could also have a detrimental impact on safety, have them repaired by the manufacturer immediately, as the unit will otherwise not be covered by any guarantee or liability for defects.
- (4) The device is intended exclusively for grinding, milling, scratching and polishing with approved tools. Any other use or use above and beyond the specifications will be regarded as improper use. The manufacturer cannot accept any liability for damage resulting from such improper use. The risk will be borne entirely by the user.
- (5) As an additional security equipment the polishing machine is inclusive an emergency stop button.
- (6) Always keep the Operating Manual carefully to hand at the location where the device is used.
- (7) Supplementary to the Operating Manual, all generally valid statutory and other binding regulations relating to accident prevention and environmental protection must be observed and communicated to others.
- (8) Personnel entrusted with the operation of the device must, before starting work, have read the Operating Manual and in particular the *Safety instructions* chapter. This is especially important in the case of personnel who only work with the device occasionally.
- (9) DO NOT WEAR any jewellery, ties or loose clothing. Loose clothing can get caught up in rotating parts and cause severe injuries. Use appropriate protection if you have long hair.
- (10) Protect the mains cable from heat and sharp objects and install it in such a way that it cannot be damaged. When not in use, before maintenance, tool changing or repairs, DISCONNECT THE MAINS PLUG. When disconnecting the mains plug, be sure not to pull by the cable, but by the plug. If the cable has to be extended, make sure it is in perfect condition and, before use, ensure correct current carrying capacity.
- (11) Never use the device in a humid environment or close to combustible liquids or gases.
- (12) The device must NOT be used for wet grinding jobs.
- (13) Do not overload the device and clean thoroughly after use.
- (14) In the event of damage to the polisher, disconnect the mains plug immediately. It may not be used again until it has been repaired. Faulty mains cables must be replaced immediately.
- (15) Always wear safety goggles with shatter-proof clear lenses.
- (16) Spare parts must comply with the technical requirements specified by the manufacturer. This can only be guaranteed in the case of original spare parts from Helmut Klein company.
- (17) Work on/with the device may only be carried out by qualified, appropriately trained and assigned personnel.  
Be sure to observe the legally permitted minimum age !
- (18) Store the Operating Manual carefully.

**4.1 Technical data****POLIMAXX Premium**

|                             |   |
|-----------------------------|---|
| <b>Article No.:</b>         | <b>35000</b>  |
| <b>Mains supply:</b>        | <b>230 V / 50 Hz</b>  |
| <b>Motor power rating:</b>  | <b>0.37 KW (0.5 HP)</b>   |
| <b>Typical speed:</b>       | <b>300 - 3,000 rpm</b>  |
| <b>Suction performance:</b> | <b>500 m<sup>3</sup>/h / each working side</b>                      |
| <b>Lighting:</b>            | <b>4 lamp elements each with 36 LEDs - 640 lumens per lamp unit</b> |
| <b>Brush diameter:</b>      | <b>160 mm max.</b>  |
| <b>Dimensions:</b>          | <b>W 760 / D 400 / H 450 mm</b>                                     |
| <b>Weight:</b>              | <b>43 kg net (without packaging)</b>                                |
| <b>Weight:</b>              | <b>50 kg gross (incl. packaging)</b>                                |

**4.2 POLIMAXX Premium polishing machine speed regulation**

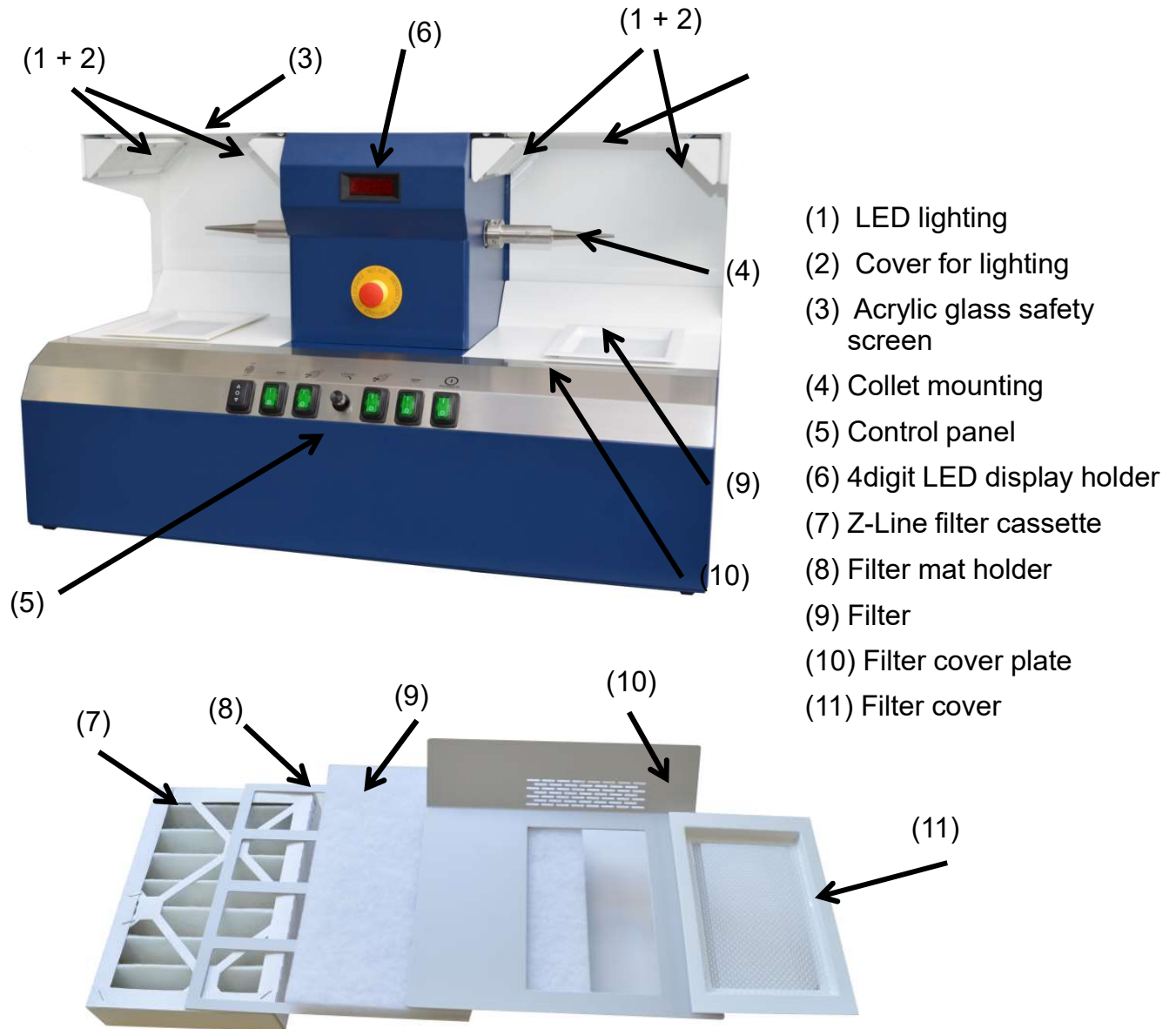
**Continuously variable speed adjustment of typically 300 to 3,000 rpm.  
Set speed can be read off 4-digit display**

Setting: Rotational speed: rpm

Start = Min. typ. 300 rpm

Max. typ. 3000 rpm

4.3 Overview of device



4.4 Scope of supply

**PM 2 polishing machine** ready for connection

**1 x mains power cable**

**2 x safety screen** made of acrylic glass

**2 x suction grating**

**2 x filter cover plate,** coated metal

**2 x filter mat,** dimensions: 260 x 260 x 20 mm

**2 x filter mat holder,** coated metal

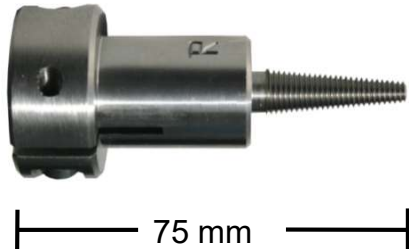
**2 x Z-Line filter cassette,** woven filter medium in complete frame, dimensions 258 x 178 x 48 mm

Can be ordered separately:



**Art.-No. 24004**

Grinding disc holder V2A, right  
for 14 mm cylindrical shaft



**Art.-No. 24005**

Polishing spindle V2A, right  
short version  
for 14 mm cylindrical shaft



**Art.-No. 34004**

Collet mounting compl., **right**  
for a fast and easy tool changing

**Art.-No. 34005**

Collet mounting compl., **left**  
for a fast and easy tool changing



**Art.-No. 34014**

Lever with spring f. collet mounting



**Art.-No. 34006**

Polishing spindle, **right**  
suitable for collet mounting

**Art.-No. 34007**

Polishing spindle, **left**  
suitable for collet mounting



**Art.-No. 34008**

Grinding disc holder, **right**  
suitable for collet mounting

**Art.-No. 34009**

Grinding disc holder, **left**  
suitable for collet mounting

Before unpacking, make sure the packaging has not suffered any external damage. Open the carton, remove the protective paper and the foam packaging. Firstly, remove the carton with the accessories that are packed separately from the main carton. These are:

- Suction grating
- Filter cover plate
- Mains power cable
- Acrylic glass safety screen

Next, lift the device out carefully and remove any foam packaging from the bottom. Please retain the original packaging along with the device protection in case the unit has to be returned.

Check the device for any damage and make sure all the accessories have been included. If any damage has occurred during transportation, please get in touch with the supplier immediately, otherwise claims for damages cannot be accepted.



**During installation, preparation and or modification of the device, we would ask you to basically make sure that the mains plug has been disconnected and the green rocker switch is in the "Zero" setting.**

Remove the protective film from the control panel. Place the filter cover plate into the chamber above the filter. Next, position the suction grating in the opening provided in the cover plate.

Take the safety screen, remove the protective film and manoeuvre the cover horizontally backwards into the guides provided for it in the hood.

Connect the mains power cable that is included at the rear of the device and plug it into the mains socket.



**Protect the mains cable from heat and sharp objects and install it in such a way that it cannot be damaged. If the cable has been extended, check it is in perfect condition and, before use, make sure current carrying capacity is correct.**

The device is now ready to use.



Before putting into service, please test the individual keys on the control panel and make yourself familiar with the device.




|           |                                       |   |          |          |          |          |
|-----------|---------------------------------------|---|----------|----------|----------|----------|
| <b>1</b>  | <b>2</b>                              | <b>3</b>                                    | <b>4</b> | <b>5</b> | <b>6</b> | <b>7</b> |
| Switch 1  |                                       | On/Off rocker switch for polishing motor    |          |          |          |          |
| Switch 2  | Rocker switch for left-hand lighting  |   |          |          |          |          |
| Switch 3  |                                       | On/Off rocker switch for left-hand suction  |          |          |          |          |
| Control 4 |                                       | Rotary knob for regulating speed            |          |          |          |          |
| Switch 5  |                                       | On/Off rocker switch for right-hand suction |          |          |          |          |
| Switch 6  | Rocker switch for right-hand lighting |   |          |          |          |          |
| Switch 7  |                                       | Mains (power) switch                        |          |          |          |          |

The mains switch (No. 7) is used to turn the unit on and off. If switched off (switch setting 0), the unit is completely isolated from the mains voltage, which means that all the components of the device can be turned off centrally using this mains switch

### 6.1 Lighting

The lighting consists of 4 x 36 high-power LEDs with an illuminating power of 640 lumens, which illuminate the working space of the polisher optimally and glare-free. Non-fatiguing work is guaranteed thanks to the pleasant white light.


Actuate rocker switch 2 or 6  to switch the light on. The lighting unit on the device is dust- and dirt-proof and can be cleaned easily and safely.



**To clean use a slightly damp, dust-free cloth. In order to avoid any damage to the protective glass, NEVER use aggressive solvents for cleaning purposes.**

Should damage occur to the lighting cover, or should it become badly scratched, as per usual with our products, you can replace the cover yourself. The protective acrylic glass cover can be ordered from Greiner Vibrograf AG as a spare part.

## 6.2 Suction

Putting the suction unit into service is by means of actuation of Rocker switch 3 and 5 with the logo  on the control panel.

The "exhauster" or ventilator is maintenance-free and is characterised by its long service life and quiet operation.




**Important! Only have defects or faults rectified by the manufacturer, Greiner Vibrograf AG. In the event of non-compliance, all guarantees and liability for defects become null and void.**

## 6.3 Polishing motor

Your PM 2 polishing machine is equipped with the most powerful 2-spindle electric motor in its class (0.5 HP). In spite of its high power, this motor is characterised by its extremely quiet running and optimal torque. The motor is maintenance-free and, based on experience, we can confirm long-term, trouble-free operation.



**We would point out that, in the event of long periods of polishing work, the motor can heat up to 85°C . This is normal and influences neither the performance nor the service life of the motor.**

Putting the polishing motor into operation requires the actuation of Rocker switch 1  indicated by this illustration on the control panel.



**Caution! Polishing motor starts up immediately (at 300 rpm).**

You can regulate the speed at any time when the motor is running by turning it. The selected speed can be seen on the digital speed indicator.

### 6.4 Speed indicator



The 4-digit LED display indicates the speed that has been set in rpm. Regulation of the speed takes place continuously by turning the rotary knob in a clockwise direction. (See control panel page 9, control No. 4)



**When you switch on, test displays are shown for the first 3 seconds. Only once "0" appears on the display with the motor at a standstill is the power-up test finished and the correct speed then indicated.**

### 6.5 Emergency stop button



This is used to bring the polishing motor of the unit to a standstill quickly in the event of a hazard or to prevent a potential hazard.

By pressing the emergency stop button, the polishing motor can be stopped at any time during the operating process. The device lighting and suction are not switched off by the emergency stop button, as they do not present any potential danger.

The polishing motor can only be switched on again once the emergency stop button has been unlocked. To do this, you must rotate the button in the direction of the arrow back into its original position. The polishing motor can be put back in motion by putting Rocker switch 1 into the "ON" position (please see also chapter 6.3).



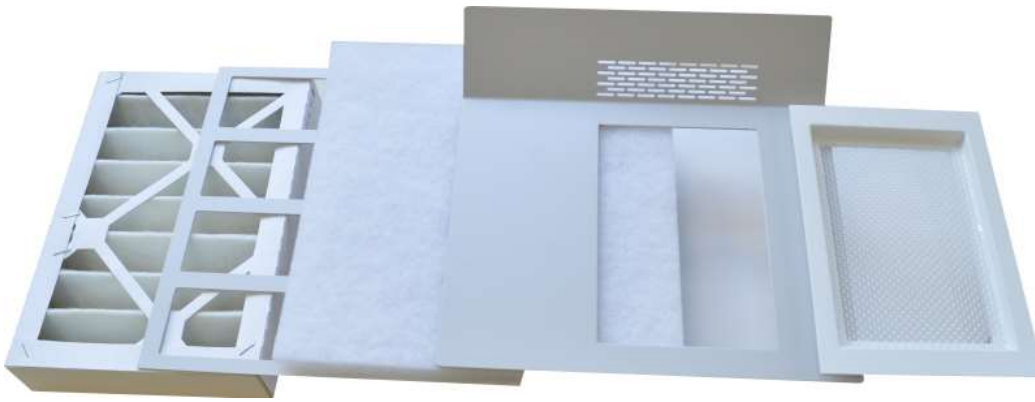
**The polishing machine continues to run for up to 3 seconds after actuation of the emergency stop button !**



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## 6.6 Filter system

### 6.6.1 Filter system design (each side)



With our PM 2 we have again brought into use a new and extremely efficient filter system which enables us to filter out in excess of 90% of fine dust particles.

Explanation of filters from left to right:

- |                       |   |
|-----------------------|---|
| 1. Z-Line filter      | Complete frame made of cardboard with folded woven filter mat, filter class G4, DIN EN 779  |
| 2. Filter mat holder  | Made of coated metal, as intermediate layer and protection for pre-filter and filter cassette   |
| 3. Fine filter        | Made of artificial fibres according to DIN EN 779<br>Dimensions: 260 x 260 x 20 mm<br>Precious metal residues are trapped here and can be shaken out as required. |
| 4. Filter cover plate | Made of painted iron, on rear with small suction holes to filter out coarse dirt  |
| 5. Suction grating    | Filter cover to immediately filter out coarse particles of dirt during suction  |

The filter material is manufactured according to currently valid regulations governing health and safety at work and disposal, and fulfils the relevant requirements.



**Make sure the dense side of the fine filter mat is inserted pointing downwards.**

### 6.6 Filter system

#### 6.6.2 Cleaning the filters

Remove the suction grating (pre-filter) and clean off any coarse dirt and fibrous material. Should the net be torn, we recommend replacing it.

Now reach through the hole and pull the filter cover plate forwards at an angle out of the working area. Clean off any coarse dirt and dust.

Next pull the fine filter out of the opening and clean it according to the level of contamination by tapping it, suction, washing it or possibly even replacing it.



**Never wring out washed filter mats!**

Now remove the filter mat holder and if necessary remove any contamination.

Finally remove the complete frame with the Z-Line filter from the housing and clean this filter if necessary by tapping, suction or possibly replacing it.

Rebuilding takes place from bottom to top, starting with the complete frame and ending with the suction grating. Please ensure that all parts are replaced in the correct order and so they fit into the frame.



**Poor cleaning or too infrequent replacement of filter mats can have a detrimental effect on suction.**



**During installation, preparation and/or modification of the device, we would ask you to basically make sure that the mains plug has been disconnected and the green rocker switch is in the "Zero" setting.**

The filter material that we use is harmless to health and the environment, silicone-free, fully reducible to ashes, temperature resistant up to 80°C, self-extinguishing as per DIN 53438/F1 and moisture resistant up to 100% RH.

The German Electrical and Electronic Equipment Act (Elektrogesetz, ElektroG) implements, amongst other things, the European WEEE Directive 2002/96/EC in German law. It imposes on manufacturers of electrical and electronic equipment the responsibility for an environmentally-friendly equipment design and an obligation to accept returns of old equipment for correct disposal.

The manufacturer has been registered for many years and responsibly reports its devices annually. We do everything possible to keep recycling costs to a minimum, in order to pass the resulting benefits on to our customers and to society in general.

For this reason, we would also ask you, once you reach the point of having to dispose of this device, not to put into the general waste, but to deliver it to the disposal centre responsible for old electrical equipment.

Thank you !



WEEE- Reg.-Nr.: DE51617604

**We hope you enjoy using your new device !**