PRECITEC®

POLYTEC POLISHING MACHINE

User manual
MSA23.005 Touch-Sensitive



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1. INTRODUCTION

Please read this user manual before running the device and comply with safety requirements stated below. We highly recommend you to perform periodical maintenance and cleaning precautions ; safe and efficient usage is only possible through these.

Please keep this user manual at a location, which is close to device and always accessible.

Please read and comply with all safety warnings!

Safety warnings will enable you to use the device with ease and help to prevent misunderstandings and tangible or intangible damages.



2. SAFETY INSTRUCTIONS

This device is manufactured in accordance with current technical standards and well accepted technical safety rules.

Thus, we kindly request the following safety instructions are observed in an absolute manner:

1. Use the polishing machine when it is in a perfect technical condition and in compliance with the rules, ensure its safety and be aware of potential dangers and according to instruction manual! You shall have no right to claim warranty in case of misuse or deficient maintenance.
2. Before running the device, check the information stated on type license at the rear side of the device. Device is compatible for 230V connection and shall only be connected that type of mains input.
3. In case of failures, which may have adverse effects on safety, please immediately request the failure to be repaired by manufacturer; otherwise, all warranty and liability insurances will be lost.
4. This device is suitable for grinding, milling, scratching and polishing processes only with permitted tools. Any other use deemed to be unsuitable. Manufacturer shall not be liable for losses arising from such use. User shall be fully responsible for this risk.
5. Store the user manual meticulously and close to device at all times.
6. In addition to user manual, pay attention to legal provisions with general validity and other binding regulations related to accident prevention and environment protection.
7. Personnel assigned to work with the device are required to carefully read user manual and in particular, safety instructions before using. This rule is especially prevalent for personnel, which will occasionally work with the device.
8. Do not carry jewellery, necktie or pendant clothes. Pendant cloth pieces may be snatched by rotary parts and cause serious injuries. In case of having long hair, wear a suitable hood.
9. Protect connection cables from heat and sharp edges and install them in such a way that they will not get damaged. Unplug the device when it is not used, during tool change or repair. While unplugging, pull from plug and do not pull the cable itself. Make sure that all connections are perfect when using cable extensions and check electrical load and capacity before use.

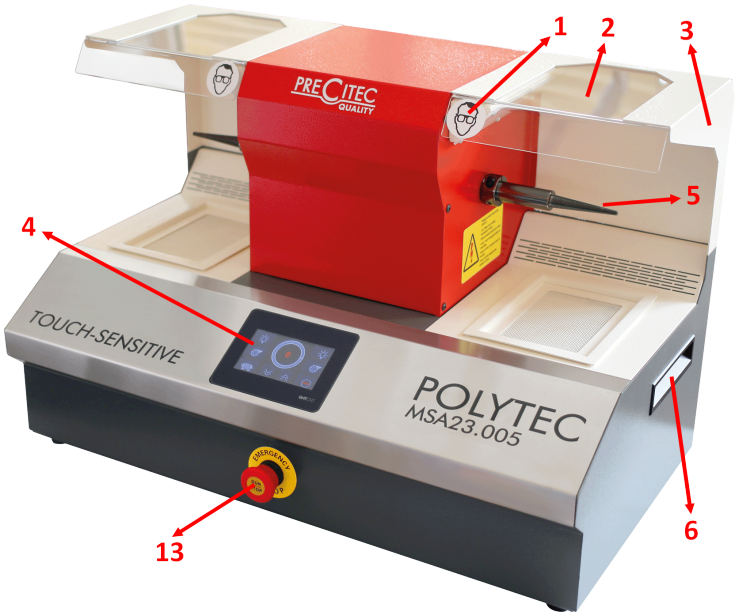
10. Do not use the device in humid environment or close to flammable liquids and gases.
11. Device is not suitable for wet grinding.
12. Do not exceed device capacity and clean meticulously after use.
13. In case polishing device fails, immediately unplug. Device can only be re-used after maintenance or repair. Broken connection cables must be immediately changed.
14. Always wear goggles with clear glass that can protect against shreds.
15. Spare parts must be compatible with the requirements specified by manufacturer. Warranty can only be provided when original spare parts of HOROTEC SA are used.
16. Operations to be performed on or with the device must only be executed by qualified, trained and specifically assigned personnel.
    Please take legally permitted age limit into consideration.

3. TECHNICAL DATA

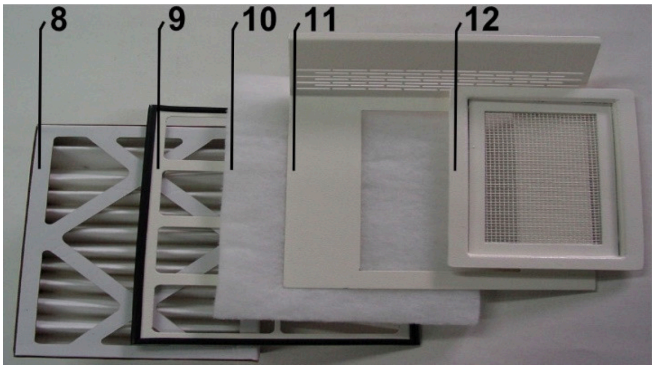
3.1 TECHNICAL INFORMATION

Product number	:	MSA23.005 (230 V) / MSA23.005-110 (110 V)
Motor supply	:	230 V - 50 Hz / 110 V - 50 Hz
Motor power	:	0.55 kW
Speed RPM	:	300…3000 adjustable (every 10 rpm)
Vacuum	:	750 m3 / hour (on each side)
Lighting	:	4x 9 LED 1600 Lumen (on each side)
Brush diameter	:	160 mm maximum
Device dimensions	:	680 mm (L) x 390 mm (W) x 460 mm (H)
Packaging dimensions	:	795 mm (L) x 485 mm (W) x 565 mm (H)
Net weight	:	45.000 Kg
Gross weight	:	48.000 Kg

3.2 DEVICE SUMMARY







1) LED lighting (on each side)
2) Plexiglass face protection
3) Safety cover
4) Control panel
5) Tapered polishing adaptor
6) Handle
7) Safety switch (stop)
on each cover
8) Z-Line cartridge filter
9) Filter protection filter
10) Fibre filter
11) Filter cover plate
12) Vacuum grid
13) Emergency button

3.3 INCLUDED IN THE DELIVERY

MSA23.005	Ready for installation
1x Electric cord	
1x Tapered polishing adaptor	Right rat tail, Ø 14 mm
1x Tapered polishing adaptor	Left rat tail, Ø 14 mm
2x Plexiglas face protection	Transparent plexiglas
2x Vacuum grid	Painted metal
2x Filter cover plate	Painted metal
4x Fibre filter	Size : 265 x 190 x 16 mm
2x Filter protection plate	Painted metal
4x Z-Line cartridge filter	High performance G4 cartridge filter. Size : 258 x 178 x 48 mm.

Note : All of the above items are installed in the device except extra spare two Z-line filters and the fibre filters.

4. BEFORE RUNNING

Check the package whether it is damaged from outside before opening the product package. Open cardboard and remove protective papers and foam casts. First, take the cardboard containing accessories packed separately. These are :

- Fibre filter

- Z-Line cartridge filter

- Power cable

Then carefully take the device and remove foam cast beneath. Keep the original package and device protective equipment for possible return.

Check the device for possible damages and control whether accessories are complete. In case any damage occurred during sipping, we kindly request you to immediately contact shipper. Otherwise, compensation claims shall be discharged.



We kindly request that the device is unplugged during installation and equipping.

Remove the protective folio on control panel.
Connect the mains cable provided into to hole at the rear side of the device and plug in.





Protect connection cables from heat and sharp edges and install them in such a way that they will not get damaged. Make sure that all connections are perfect when using cable extensions and check electrical load and capacity before use.

The device is ready for use !

5. OPERATING

Check if the power cord is plugged in. Make sure the switch next to the socket is set to the "I" position.
Before running the device, please check the touch screen and recognize the device.





Turn on/off the motor.



Increasing the speed of motor, when held down speed continuously increase.



Decreasing the speed of motor, when held down speed continuously decrease.



Speedometer. You can adjust desired speed when you press 3 second on it.



Activating or deactivating vacuum motors.



Activating or deactivating lightings.



Stops all active operating functions including motor.

If you do not adjust the desired speed to the memory, the motor starts at 300 Rpm. To adjust desired speed, touch the speed icon and hold your finger for 3 seconds on it. A star will appear as shown in the image on the right.



Once you set the motor will always start at the desired speed.

You can adjust the speed of the Polishing Motor to work between 300-3000 RPM with precision of 10 RPM.

The color of the icons on the touch screen will change according to the active-passive status of the device functions.

5.1. LIGHTING

Lighting system is consisted of 4x 9 high-power LED lights and has the capacity of 1600 Lumens that perfectly lightens the work area. With its comfortable white light, it is possible to work without straining the eyes.

You can turn on/off the lights by touching the icons  on touch screen control panel for each right and left side separately. When they activated, colour of the icon will go brighter.



Use a slightly moisturized and dust-free swab for cleaning. Do not use aggressive solutions for cleaning in order to prevent protective glass from potential damages.

It is possible to change the light cover when it is damaged or seriously scratched. You can procure this protective glass produced by acrylic as spare part from your dealer.

5.2. VACUUM SYSTEM

To operate the vacuum system, use the icon  on the touch screen that allows you to switch on/off the right and left vacuum motors separately.

When activated, color of the icon will go brighter.

The vacuum system is maintenance-free, running quietly and ensures long-lasting use.

5.3 POLISHING MOTOR

Our device has an electrical motor (0,55 kW), which has the highest performance in its class. In spite of its power, most important feature of the motor is its silent operation and suitable propelling force. Motor does not require maintenance and based on our experience we can say that you will have a long lasting and smooth usage.



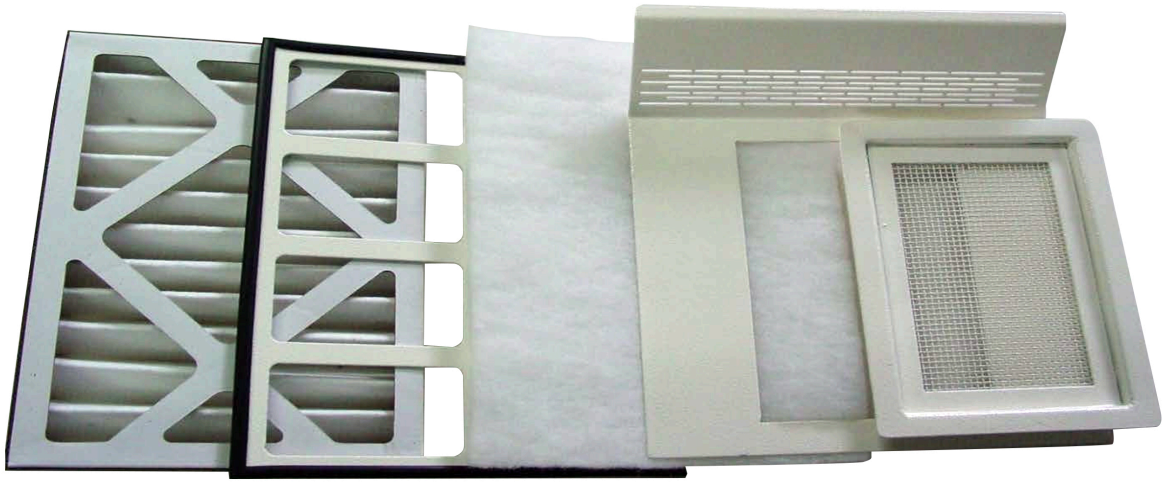
We would like to remind you that motor can heat up to 85° C during long polishing processes. This is normal and does not affect power and life of the engine.



Important! For the users safety the polishing motor will automatically stop when the safety cover is opened. However please be cautious that the motor will again automatically start to turn when the cover is closed.

5.4 FILTER SYSTEM

5.4.1 INSTALLATION OF FILTER SYSTEM



We use a brand new and highly effective filter system in our device universal polishing bench. This filter system enables us to filter fine dust over 90%.

Explanation of filters from left to right :

1. Z-Line filter	Complete board frame, folded filter with net layer, filter class G4, DIN EN779
2. Filter support plate	Metal coating, as intermediate layer and protection of filters
3. Fibre filter	Synthetic fibre according to DIN EN779. Size : 265 x 190 x 16 mm. Valuable metal wastes are collected here and can be shaken if necessary.
4. Filter cover plate	Varnished from iron, little vacuum holes at the back, to filter coarse dust
5. Vacuum grid	Filter cover, to immediately filter coarse dust during vacuum.

Filter material is produced in accordance with current occupational safety and disposal regulations and meets relevant requirements.



Ensure that filters are placed correctly in accordance with the photo above.

5.4.2 FILTER SYSTEM CLEANING

Remove vacuum grid (front filter) and clean by removing coarse dirt and dust. In case the net is torn, it is recommended to change it.
Put your fingers inside the hole and remove the filter cover plate from work area by pulling to front sinuously. Clean this part from coarse dirt and dust in the same way.
Remove fibre filter from its location and clean it by shaking, vacuuming with vacuum cleaner, washing or change it depending on its level of contamination.



Do not squeeze washed filters!

Remove the filter support plate and clear dust if it necessary.

Lastly, remove the complete frame from the body along with Z-Line filter and clean these filters by shaking, vacuuming with vacuum cleaner or change them.

Re-assembly is done from bottom to the top; starts with Z-line cartridge filter and ends with suction grid. We kindly request you to pay attention that all parts are placed on the frame in correct order and in the right way.



Insufficient cleaning or rare changing of filters may cause damages on suction system.



We kindly request that the device is unplugged during installation and equipment changing.

Filter material we use are harmless in terms of health and ecology, silicon-free, fully flammable, can be heated up to 80° C, can spontaneously extinguish in accordance with DIN 53438 / F1 and resists to humidity up to 100%.

5.5 PROTECTION INSTRUCTIONS

5.5.1 SAFETY COVER

In any case, when the door is open, the device detects the door opening thanks to its sensors. For safety reasons, the polishing motor stops directly.
You can also see the status of the safety covers on the electronic control panel.



Safety cover open



When the safety cover is open, only the polishing motor stops working. The vacuum motors and lighting continue to operate.

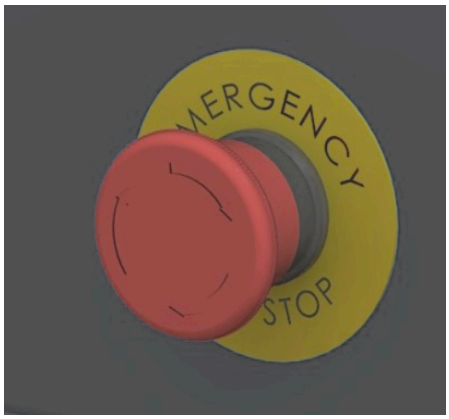
When the safety cover is closed, the polishing motor does not continue to run, it must be restarted via the Touch Screen Control Panel.

5.5.2 EMERGENCY BUTTON

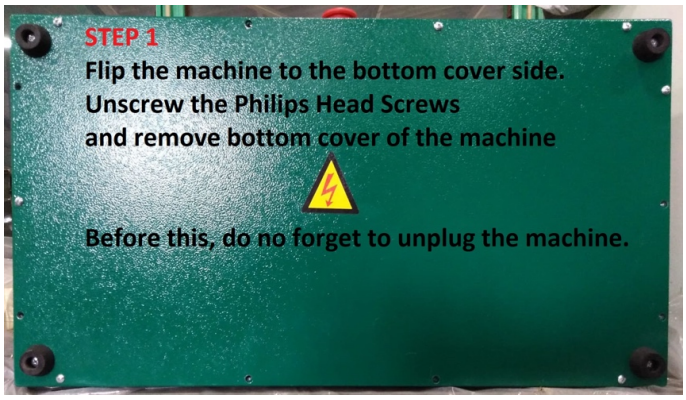
The switch allows immediate shutdown of the device in case of danger.

By pressing this button, all functions are stopped, including polishing motors, suction motors, lighting and display.

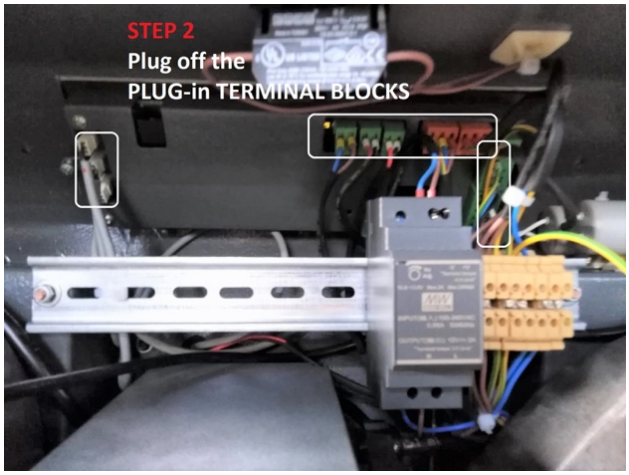
To start the device, the button must be unlocked. The button must be turned by following the arrows and returned to its original position to unlock it.



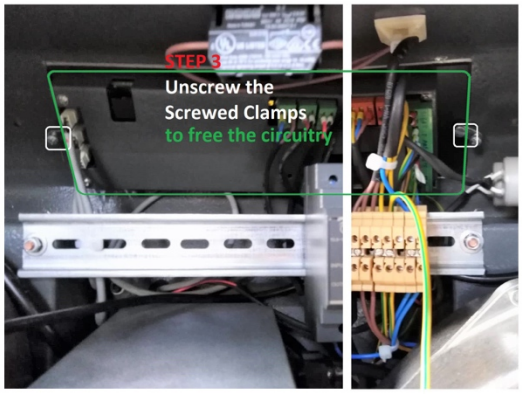
6. REPLACING FUSES



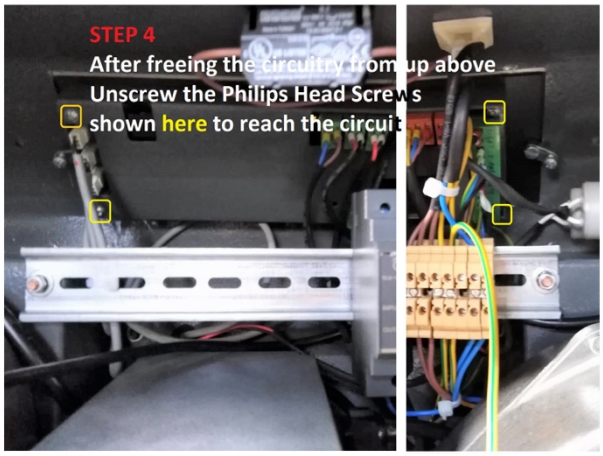
Step 1
Flip the machine to the bottom cover side. Unscrew the Philips head screws and remove bottom cover of the machine. Before this, do not forget to unplug the machine.



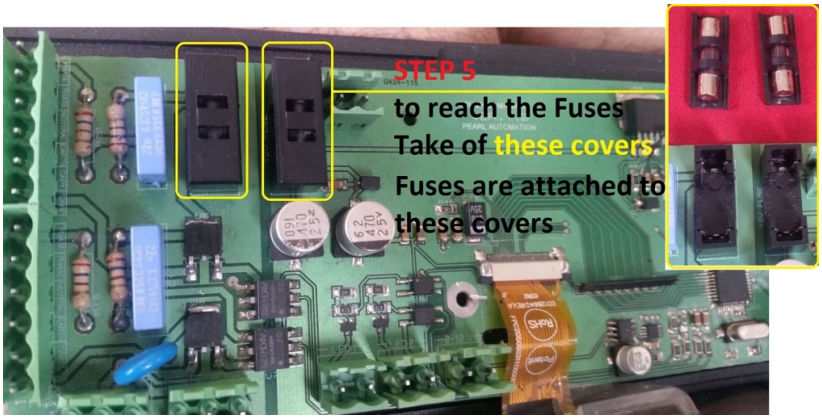
Step 2
Plug off the plug-in terminal blocks.



Step 3
Unscrew the screwed clamps to free the circuitry.



Step 4
After freeing the circuitry from up above, unscrew the Philips Head screws shown here to reach the circuit.



Step 5
To reach the fuses, take off these covers. Fuses are attached to these covers.

7. DISPOSAL

Electrical and electronic devices law (ElektroG) has also adapted 2002/96/EG numbered WEEE European Directive to introduced electrical and electronic device manufacturers the obligations to design devices that help to protect environment.

Thus, we kindly request that if one day you have to leave this device, please do not dispose it with domestic wastes and deliver it to a location where unused old electronic devices are collected.

Thank you!

And now we wish you to enjoy using your new device !

8. SPARE PARTS

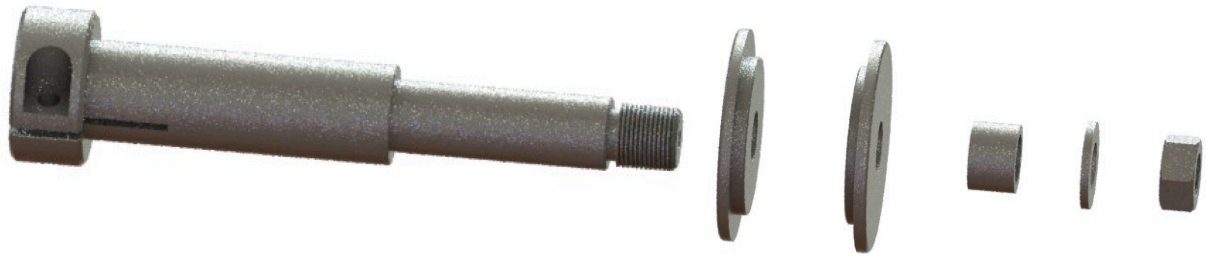
MSA23.000-E
RIGHT-SIDED TAPERED SPINDLE
MSA23.000-F
LEFT-SIDED TAPERED SPINDLE



MSA23.000-A
PLEXIGLAS PROTECTION



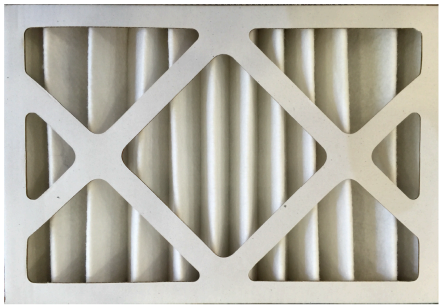
MSA23.000-D
GRINDING WHEEL HOLDER
Ø 16 mm
Ø inner brush : 50.80 mm
Brush width : 20-40 mm



MSA23.000-B
FIBRE FILTER



MSA23.000-C
CARTRIDGE FILTER



9. EC DECLARATION

HOROTEC® SWISS
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EC Declaration of conformity

We herewith,

HOROTEC SA
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CH-2300 La Chaux-de-Fonds / SWITZERLAND

declare that the polishing machine MSA23.005 comply with the essential health and safety requirements according to the :

- Machinery Directive (MD) 2006/42/EC
- Low Voltage Directive (LVD) 2006/95/EC.

The design, type and release by Horotec SA are based on the above-mentioned directives. In case of any unauthorised modification by Horotec SA, this declaration will lose its validity.

Description of the machine	:	Polishing machine
Machine type	:	MSA23.005
Applicable harmonized standards	:	TS EN ISO 12100:2010 TS EN 953+A1 TS EN ISO 13857 TS EN 1837+A1 TS EN 894-1+A1 TS EN 894-3+A1 TS EN 60204-1 TS EN 1093-2+A1
Date	:	November 2019
First and last name	:	Eric Zuccatti
Title	:	Director
Authorized signature	:	

Company stamp