

Operating Instructions

POLIRET TWIN

LABORATORY EQUIPMENT IN STAINLESS STEEL



Fig.: with optional speed control

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Dear Customer!

The POLIRET TWIN is a powerful stainless steel polishing unit with two spindles and two maintenance-free motors. Separate stainless steel spindle speed control. The comfortable housing width enables working on both sides. Variable speed control 270 - 4.500 rpm – thus speed is perfectly adapted to your requirements. The powerful brushless motors are maintenance free and extremely durable. The POLIRET TWIN offers economic and precise grinding, polishing, cleaning and brushing of metal and plastic material. The integrated and silent suction absorbs dust directly at the spindle. The textile filter bags are washable and reusable. Closing one ventilation flap maximum suction power is achieved on the other side. Since the exhaust air outlet is located on top of the housing the device can be placed directly at a wall without losing suction power. Connection to an external central suction is not provided, however it's available on request.

Any other use or use beyond this is deemed improper. For resulting damage the user/operator of this device is solely responsible.

Prior to installation of the device operating instructions and especially the safety instructions must be read and followed by all personnel who use this device.

After having unpacked the device, please check carefully whether transportation damages of any kind have occurred. If that is the case, the carrier or manufacturer must be notified within 3 days. The company will not be responsible for any damages found after that.

These operating instructions must be read and followed by all personnel who use this device. To ensure quick access we recommend to keep it at a safe place near the device. In case of loss it can be ordered from the manufacturer.

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1 Technical Description

1.1 Basic Equipment

- POLIRET TWIN polishing unit
- Right and left polishing spindle
- 2 filter bags

1.2 Special Accessories

- Order-No. 24800000 Vario–lifting table
- Order-No. 22603000 Workholding fixture for polishing and grinding tools
incl. drill chuck
- Order-No. 22702000 Filter bag
- Order-No.: 22604000 Speed-Display

1.3 Device Components

- 1 Left locking screw
- 2 Left ventilation flap open/shut
- 3 Speed control left polishing motor
- 4 Speed control right polishing motor
- 5 Left safety panel
- 6 Left polishing spindle
- 7 Switch left polishing motor
- 8 Switch right polishing motor
- 9 Right locking screw
- 10 Right ventilation flap open/shut
- 11 Emergency stop button
- 12 Suction switch
- 13 Power switch
- 14 Right safety panel
- 15 Right polishing spindle
- 16 Cover
- 17 Device's fuse
- 18 Main plug
- 19 Lamp
- 20 Motor shaft sealings
- 21 Polishing trough
- 22 Filter bags
- 23 Holding rings
- 24 Filter neck
- 25 Air sheet



Device view



Abb.: Seitenansicht



Abb.: Luftblech



Abb.: Geräteinnenraum

6

1

2

21

1.4 Technical Data

Line voltage	230 V/50–60 Hz
Power consumption motor	2x370 W
Power consumption suction	400 W
Height/width/depth	500+100/730/560 mm
Weight	60 kg
Variable speed	270 – 4.500 rpm
Suction	800 m ³ /h
Sound level	≤ 70 dB(A)
Housing	stainless steel
Made in Germany (Subject to modifications)	

2 Safety Notes

2.1 General Safety Notes

- All equipment undergoes final inspection and testing before leaving our factory. However, if equipment is damaged during shipping or through any other circumstances, it must not be used in service. Please check the device regularly for damages. Damaged parts should be replaced immediately.
- All power/air/water/gas sources should be rated for the demands of the device as listed in the technical data sheets. Maximum ratings must not be exceeded. All VDE (Verein Deutscher Elektro-Ingenieure) standards should be followed. Equipment should be grounded according to standards.
- Adherence to valid regulations regarding necessary checks (e.g. according to Accident Prevention & Insurance or electrical equipment) is exclusively taken over by the buyer/user of this product.
- This device has been designated to be used only for its intended purpose. All other applications must be prohibited for safety reasons as otherwise the manufacturer's warranty expires.
- The device should be set-up in a clean, well-ventilated room, if necessary under a hood.
- Supporting surfaces should be straight, flat and adequately stable.
- Don't place anything on top of the machine.
- To avoid injury, appropriate protection should be worn (e.g. gloves, safety glasses, safety shoes, hearing protection etc.)
- If the machine is defective or working improperly it must be taken out of service. In case of further use of the machine the owner will be held responsible for any consequential damage.
- To prevent accidents from water, fire or explosion, all power/air/water/gas sources should be turned off after working hours and during breaks, and secured against unauthorized access.
- When carrying out maintenance works or repairs or when opening the device always turn off the main power switch and unplug the whole unit.
- Repairs should be carried out only by the manufacturer or by qualified and certified personnel appointed according to chapter 7 – warranty.
- In case of leaking water out of housing or tank shut down device and call service.
- Check all hose joints for tightness, if necessary fasten clamps.

2.2 Specific Safety Instructions

Attention:

- Wait for at least 2 min. before unplugging the mains plug for cutting off the device from the domestic supply line in order to unload the condensers.
- The tool must be securely fastened to the spindle.
Danger of injury!
- Operation at too high motor speed may lead to burns!
- Keep the housing dry and clean.

- Tools and lamps may only be changed when the spindle stands still and the whole unit is unplugged.
- Fold the protective panel down and wear protective glasses.
- Only use appropriate and no unbalanced tools. Make sure all tools are fastened securely.
- Switch suction on.
- Never touch the running machine.
- Always follow the instructions of the tool's manufacturer (e.g. max. speed, recommended material).
- Only use appropriate material for polishing. Follow the instructions provided by polishing and grinding tool's manufacturer, especially regarding health protection.
- Always wear clothing which is tight at the forearms and hands. Avoid loose hair and jewels which could get into the spindle or tools.
- Only use clean and disinfected material with the machine.
- In case of danger press emergency stop button (11). Prior to releasing the emergency stop button, switch off power switch (13) and both motor switches (7) and (8). To release the emergency stop button, turn it to the right (see chapter 4.2).
- Hold the object to be polished tight. Danger of injury from flying particles and danger of damage to the workpiece.

3 Installation

The equipment is delivered ready for immediate use. The sealed plug can be connected directly to the mains supply 230 V/16 A. For installation please refer to chapter 2.

3.1 Installation

For extract air and filter change save a minimum space of 20 cm above the device. Connect to the power supply.

3.2 Tool Assembly

1. Slide the polishing spindles (6) and (15) over the axle shaft, fixing them tightly with the Allen head screw and check correct fit.
2. Fix the required polishing tool on the polishing spindles (6) and (15) and check correct fit.
Right side: right-hand thread.
Left side: left-hand thread.
3. Removing the Allen head screw the polishing spindles (6) and (15) can be removed from the axle shaft. If necessary use a removal tool.

4 Operation

4.1 Chronological run of operation

1. Turn off the motor switch
2. Turn the main power switch (13) on. The light goes on.
3. Fix the polishing tool. If required fill polishing troughs with polishing paste/pumice or apply paste/pumice to polishing tools.
4. Switching on one or two polishing motors (7) and/or (8), speed is adjustable with speed control (3) and (4).
5. Turn the suction on with the suction switch (12). Closing one ventilation flap (2) or (10) suction power on the other side is increased.
6. Hold the object to be polished tight, slightly pressing it against the rotating polishing tools.
7. When work is completed switch off the polishing motors with switches (7) and (8) and the power switch (13).

4.2 Emergency Stop Button

1. Activating the emergency stop button the device goes into stop mode.
2. Turn off power switch (13) and the two polishing motors (7) and (8).
3. To release emergency stop button, turn to the right.

4. After approx. 8 sec. the power switch can be turned on and the two polishing motors can be activated.

4.3 Filter Replacement and Cleaning

1. Unscrew the fixing screws (1) and (9) on top of the device and remove the cover (16).
2. Remove the old filter bags (22) by detaching the holding rings (23) from the filter support (24).
3. Empty the filter bags, if necessary, wash them:
 - a. Water-soluble contaminants can be washed with cold or 40-50°C warm water in a trough or washing machine. The addition of 1-3 g/L of non-ionic surfactant is helpful.
 - b. For acidic contaminants, wash at a maximum of 50°C with the addition of 1-2 ml/L of ammonia. Alkaline contaminants can be dissolved by soaking in water at a maximum of 50°C with 1-2 ml/L of vinegar for one to two hours.
 - c. Resin-based impurities require soaking for several hours in cold water with 1-10 g/L of solvent.
 - d. The filters can be dried in a machine dryer at a maximum of 60°C or air-dried.
 - e. No obligations can be derived from the above recommendations. After the new filter bag has been positioned on the adapter, fasten the clamp ring and reinstall the cover, closing it.
4. Put the new filter bag on the filter neck, fasten it with the locking ring and reinsert the cover.

4.4 Lamp Replacement

1. Turn off the main power switch (13) and pull the plug.
2. Remove plexiglas cover.
3. Pull out the lamp.
4. Insert new lamp and check proper fit.
5. Refasten the plexiglas cover.

5 Troubleshooting

Unit does not start.	<ul style="list-style-type: none"> a. Emergency stop activated. Release it by turning it to the right (see chapter 4.2). b. Motor switch was turned on when starting main switch → turn off motor-switch and start again c. wait approx. 2 sec. between main switch and motor switch to turn on. d. Power failure → Check the building's main fuse. Switch on and off polishing motors (7) and (8). e. Check the device's fuse (17).
Overload protection was released.	<p>Motor becomes overloaded, caused by continuous use and/or too high contact pressure →</p> <p>Turn off the power switch, check the run of the spindle and turn power switch on again after a short cooling-down period.</p>
Insufficient suction power	<ul style="list-style-type: none"> a. Clean filter bag (22), or replace it. The filter is machine washable at 60°C. Please respect the polishing paste manufacturer's instructions. b. Cover (16) is untight and has to be fixed.
Insufficient motor power:	<ul style="list-style-type: none"> a. Polishing brush is too big (max. diameter: approx. 150 mm). b. Contact pressure is too high.
Uneasy running / machine is vibrating.	<ul style="list-style-type: none"> a. Unbalanced polishing disc or polishing spindle. b. Detach spindle with Allen head key and replace it. c. Replace tool (pay attention to type of thread).

6 Maintenance

- Regularly check the state of the device. Pay attention to visible damage of the housing or power cords.
- Regularly clean dirty tools or polishing troughs (21).
- Regularly replace blunt or defective tools.
- Regularly replace or wash the filter bag (22) (see chapter 4.2 filter replacement).

7 Warranty

We, REITEL Feinwerktechnik GmbH, offer a 1 year's warranty beginning from the proven date of purchase. This warranty covers all defects traceable to materials, design or workmanship. The following warranty regulations are applicable:

Within the warranty period Reitel Feinwerktechnik GmbH or an authorized distributor agrees at its sole option, to perform repair or replace this product at no charge covering all defects traceable to materials, design or workmanship. Warranty only applies to appropriate use and regular maintenance of this product according to the operating instructions. Claims under warranty are restricted to complementary performance. Additional claims, especially claims for indemnifications, are not covered by this warranty.

1.

Warranty claims have to be addressed to the distributor the product was purchased from or directly to our service department.

Contact:

REITEL Feinwerktechnik GmbH

Senfdamm 20

49152 Bad Essen

Germany

Phone: +49(0)5472-9432-32 (Service Department)

Phone: +49(0)5472-9432-0 (Reception)

Fax-No: +49(0)5472-9432-40

2.

In case of warranty claim application the sales receipt or your purchase invoice showing the date of purchase of the product and the serial number must be furnished. Securely pack and ship the device, freight charges prepaid, at your own risk to us, along with a report describing the defect. We reserve the right to decline warranty if this information has been removed or modified after purchase of the product or if they are not included in case of warranty claims.

3.

Warranty repairs have to be performed by REITEL Feinwerktechnik GmbH or by authorised distributors. Repairs performed by non-authorised companies will void the claim for refund since damages to the product resulting hereof are not covered by warranty.

4.

If the unit sent in for repair or replacement is still under the original warranty then warranty is to the end of the original 1 year warranty.

5.

If the unit is destined to be operated in another country than originally intended and manufactured for, modifications to the product might be necessary to comply to special technical and /or safety standards of that specific country. Such modifications are no defects traceable to materials, design or workmanship. and are therefore expressly excluded from warranty claims.

Modification costs or damages arising from operation of the product under deviating conditions are not covered by warranty.

6.

Exclusions from warranty:

- Service and maintenance work as well as repair and replacement of consumables according to our consumables' list
- Transportation cost of the machine or installation and dismounting expenses incurred
- Damages due to use of the product other than for its intended purpose
- Damages due to faulty installation or insufficient maintenance of the product (e.g. decalcification)
- Damages due to natural disaster e.g. lightning, water, fire, act of nature beyond control, war, inadequate line voltage, insufficient ventilation, no decalcification, insufficient care and cleaning or non-adherence to operation and maintenance instructions according to the accompanying operation guide.
- Damage due to use of the product other than in accordance with the instructions provided by REITEL Feinwerktechnik GmbH;
- The warranty does not cover the cost of removal and replacement of parts and accessories, unless supplied as original equipment by REITEL Feinwerktechnik GmbH
- All kind of damages occurred not directly at the device as well as consequential damages (e.g. damages to furniture due to a lack of water, downtime of the machine, material, lost working hours, wages and other consequential damages).

This warranty shall be rendered null and void if:

- the product has been subject to any modification, repair or replacement other than as authorised by REITEL Feinwerktechnik GmbH
- the product is continued to be operated despite a functional defect

7.

The warranty is device specific and may be claimed, within the warranty period, by any person who has legally acquired the device.

8.

Consumables are excluded from warranty. Spare parts are subject to a warranty coverage of 6 months against all defects traceable to materials, design or workmanship according to these warranty regulations.

9.

Legal default claims on the part of the purchaser remain unaffected by this warranty.

10.

We reserve the right to charge a fee if repair of the device is rejected and the device is destined to be sent back unrepaired.

11.

Please note:

Upon repair or replacement of this unit, personal data and settings might get lost or damaged. We don't accept liability for all kind of data loss. The customer is advised to backup essential programs and data before sending for service.

12.

This warranty shall be interpreted in accordance with German law to the exclusion of UN sales law. Place of jurisdiction is our business location.

13.

If any provisions of this warranty are judged to be illegal or unenforceable, the continuation in full force and effect of the remaining provisions will not be prejudiced. The provisions of this warranty judged to be illegal or unenforceable shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable and to give effect to section 13 hereof.

14.

Should you need to borrow a device while your device is being repaired, please contact Messrs. REITEL or your distributor. These loans are a service for which availability cannot necessarily be guaranteed. After the warranty period, a fee may be charged for loan equipment as well as for shipping and packaging.

8 Disposal Regulations



According to valid laws our devices are properly disposed of according to B2B – regulations for proper disposal. Pls. contact your local dealer for additional information.

9 Spare Parts List

Best.-Nr. Ref.	Poliret + Poliret Twin 27 Ersatzteilliste / Spare parts list - 03/2019	Stck/ME Qty.	ME Unit
E6158800	Beleuchtung Scheibe, Acryl 185*50*4dick Acrylic screen for lamp	1	Stck piece
E6134910	Dichtung f.Polierspindel, Leder	1	Stck piece
22702000	Filterbeutel mit Reissverschluß (1 Pack= 2 Stück) Filter bag with zipper (2 pcs.)	1	Pack pack
E6152200	Gummieinlage für Trog (1Satz=2 Stück) Rubber pad for trough (1 set)	1	Satz set
E6152100	Kantenschutzprofil Edge protection profile	1	m
22603000	Polier- und Schleifaufnahme m.Bohrfutter	1	Stck piece
E61453-E	Polierspindel POLIRET / E aktuell, zylindrisch, bitte Gerätenummer angeben), li oder re	1	Stck piece
E6145300	Polierspindel POLIRET TWIN, zylindrisch Polishing spindle POLIRET TWIN, cylindric, li oder re	1	Stck piece
E6152700	Prallschutz (2 Stück/Satz) Baffle absorber 2 pcs./pack	1	Satz set
E6064800	Schalter mit Lampe grün Switch with green lamp	1	Stck piece
E6156000	Schutzglas mit Haltebügelsatz Support for protecting glass, incl. glass	1	Stck piece
E6153020	Sieb Kunststoff, für Absaugkanal Plastic sieve for suction channel	1	Stck piece
E6150500	Trog für POLIRET Trough for POLIRET	1	Stck piece

10 EU DIRECTIVE

EU-Konformitätserklärung EC-Conformity Declaration CE-Déclaration de Conformité

im Sinne der EG-Richtlinie 2006/42/EG über Maschinen (Anhang II A)
according to Machinery Directive 2006/42/EC (Appendix II A)
au sens de la Directive Machines 2006/42/CE (Annexes II A)

Name und Anschrift des Herstellers/Name and address of manufacturer/Nom et adresse du fabricant:

Reitel Feinwerktechnik GmbH
Senfdamm 20
49152 Bad Essen

Diese Erklärung bezieht sich nur auf die Maschine in dem Zustand, in dem sie in Verkehr gebracht wurde; vom Endnutzer nachträglich angebrachte Teile und/oder nachträglich vorgenommene Eingriffe bleiben unberücksichtigt. Die Erklärung verliert ihre Gültigkeit, wenn das Produkt ohne Zustimmung umgebaut oder verändert wird./This declaration relates exclusively to the machinery in the state in which it was placed on the market and excludes components which are added and/or operations carried out subsequently by the final user. This declaration will become invalid if any unauthorised modification is made to the product./Cette déclaration concerne exclusivement les machines dans l'état dans lequel elles ont été mises sur le marché et exclut des composants ajoutés et/ou les opérations effectuées par la suite par l'utilisateur final. La présente déclaration perd sa validité si des modifications non-autorisées ont été apportées à la machine.

Hiermit erklären wir, dass die nachstehend beschriebene Maschine/**We hereby declare** that the machine described below/**Nous déclarons** que la machine ci-dessous

Produktbezeichnung/Product name/Nom du produit: Poliereinheit/
Polishing Unit/
Unité de Polissage

Typenbezeichnung/Type/Type: POLIRET MINI / CLASSIC / COMFORT / TWIN

allen einschlägigen Bestimmungen der Maschinenrichtlinie 2006/42/EG sowie der Richtlinie 2014/30/EU (EMV-Richtlinie) über elektromagnetische Verträglichkeit entspricht. Die Schutzziele der Richtlinie 2014/35/EU über elektrische Betriebsmittel sowie 2011/65/EU (RoHS 2) werden eingehalten./is in conformity with all applicable requirements of the Machinery Directive 2006/42/EC and the Electromagnetic Compatibility Directive 2014/30/EU. The safety objectives of the Directive on Electrical Equipment 2014/35/EU as well as the Directive 2011/65/EU (RoHS 2) are adhered to./est conforme aux dispositions applicables de la Directive Machines 2006/42/CE et de la Directive Compatibilité Electromagnétique 2014/30/EU. Les objectifs de sécurité de la Directive sur les Matériels Electriques 2014/35/EU ainsi que de directive 2011/65/EU (RoHS 2) sont respectés.

Angewandte harmonisierte Normen/Harmonised standards applied/Normes harmonisées appliquées:

EN ISO 12100:2011	EN 61010-1:2020
DIN EN 60204-1:2019	EN 61000-6-1:2019
DIN EN 45635-1	EN 61000-6-3:2011

Bevollmächtigter für die Zusammenstellung der relevanten technischen Unterlagen/Representative authorised to compile the relevant technical documentation/Personne autorisée à constituer la documentation technique pertinente:

Daniel Reitel
Reitel Feinwerktechnik GmbH
Senfdamm 20
49152 Bad Essen

11.02.2021

Ort, Datum
Place, Date
Lieu, Date

Daniel Reitel, Geschäftsführender Gesellschafter/Managing Director/
Directeur Général



Unterschrift/Signature/
Signature

We manufacture in compliance with Quality Management ISO 13485:2016 incorporating established standards.



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