

Steam Cleaner Wasi-Steam Compact Wasi-Steam Compact BE



174987 Wasi-Steam Compact BE





Dear customer,

Thank you for choosing a product from the Wassermann range. Wassermann Dental-Maschinen incorporates the highest standards of quality and the latest technology. In order to enjoy maximum performance and years of trouble-free operation, please read this user manual carefully before you connect this unit and start work, and operate the unit according to the recommended guidelines. The operation safety and the functionality of this unit can only be guaranteed if you follow both the general safety guidelines and the applying laws to prevent accidents as well as the precautions given in this user manual. We are not liable for any damages which occur due to inappropriate usage or faulty operation of this unit.



Make sure that anyone using this unit has read and understood this user manual.

Keep this user manual in a safe place where it can be referred to as required at any time.



The unit complies with the relevant EU guidelines.

The unit is subject to the EU guidelines 2012/19/EU (WEEE Directive).

Company address:

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1 Features

- · Powerful and reliable steam cleaner, suitable for all cleaning jobs in the lab
- Offered in two variations:

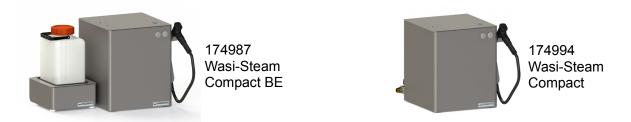
174994 Wasi-Steam Compact

174987 Wasi-Steam Compact BE

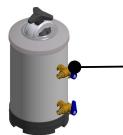
Basic version:

174994 Tabletop appliance with fixed water connection

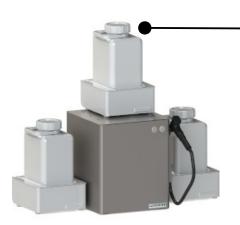
174987 Tabletop appliance with filling unit



NOTE: For labs without a decalcification plant <u>we strongly recommend our water softener</u> Wasi-Clean. The purpose of water softeners is to prevent the formation of limescale deposits caused by water hardness, which results in reduced maintenance costs.



For 174994: Accessories for fixed water connection (REF 174997) Wasi-Clean water softener, table top unit W 190 x H 405 x D 260 mm



For 174987: Supplied for manual filling
(REF 174430) Filling unit 5 Litres
W 215 x H 340 x D 240 mm
NOTE: Operation with <u>distilled/ softened water</u> is possible and recommended.
Adjust the connecting hose according to the table:

Container position = hose length

top (standard) = 210 mm (delivery status) left (optional) = 160 mm right (optional) = 100 mm



- Operation with <u>distilled/ softened water</u> is possible and recommended.
- · Steam pressure 5 bar at rest/ 6 bar in operation
- Protects seals by reducing pressure to 5 bar after 10-minute break
- Indication and check of operating states by LEDs
- Service interval display
- · Simple operation, high safety standards
- Durable, versatile and ecofriendly
- · Stainless steel housing and boiler
- · Selector for wet or dry steam



Optional: Accessory to regulate wet steam saturation and steam quantity (REF 174414) Set for Adjustable Steam Quantity NOTE: Retrofitting is possible, the unit can be upgraded at any time. It would require to retrofit the unit at our factory or at one of our authorized service stations. Just give us a call.



2 Safety Symbols used in this Manual



Warning!

This is a warning of risk situations and dangers.

Failure to observe this warning could be life-threatening. These warnings has to be observed.



Information!

This symbol draws your attention to specific features that has to be observed.



3 Safety Guidelines

Configuring and operating this equipment requires *precise knowledge* and *observance* of the instructions in this *user manual*. The equipment is designed only for its intended application.



WARNING:

Servicing and repairs should be carried out only by authorised specialists. Disconnect the power plug before starting any maintenance work.



Make sure that the equipment is connected to the correct power source.



WARNING:

The jet nozzle is a possible source of injury, as it gets extremely hot (RISK OF SCALDING)!

Before you use the unit for cleaning, sterilizing or degreasing, put on heatresistant gloves and wear some form of eye protection.

Never touch the steam gun directly at the nozzle - risk of scalding!

Never point the steam gun at people (living beings) - risk of injury!

The steam from the nozzle can reach temperatures <u>up to $164^{\circ}C$ </u>, so only spray towards the collector or washbasin.

For usage with permanent water supply:

If the unit is not to be used for an extended period, the tap should be turned off and the staem cleaner switched off.

The tap must have a non-return valve and a breather (washing-machine tap).





If there is a water leak, the moisture detector will switch the unit off all device functions automatically. But the unit electrically remains on. As a warning all 4 LED flashes.

When it is not in use, the unit switches to a temperature of 158°C and a pressure of 5 bar. The temperature increases automatically to 164°C and the pressure to 6 bar as soon as the steam gun is pressed.

The pressure safety switch turns the unit off automatically when it reaches 7 bar.

The TÜV-tested safety valve on the pressure vessel opens automatically if the operating pressure exceeds 9 bar.

To prevent the pump from running dry, the appliance has a safety switch. If no pump noise can be heard when the steam container is empty or the water level is low, check whether the tap is turned on. *(only for 174994)*



4 Responsibility for Operation or Damage

The responsibility for operating the device lies exclusively with the owner or user if said device is incorrectly serviced, maintained or altered by persons not employed by an authorised dealer or if the device is used in a manner contrary to its specified purpose. The unit has to be maintained and operated in accordance with this user manual. Wassermann Dental-Maschinen GmbH is not responsible for damage arising from the *nonobservance* of these instructions.

Warranty and responsibility provisions contained in the sales and supply conditions of Wassermann Dental-Maschinen GmbH are not extended by these instructions.

4.1 Warranty

The warranty period for our equipment is 12 months. If faults occur within the warranty period, contact your dental depot or get in touch directly with our service department.

Your equipment should only be operated in perfect condition. If faults occur which could harm operators or third parties, the unit should not be used until it has been fixed.

This warranty does not cover damage caused by improper use, external mechanical causes, transport damage or interference with the unit by unauthorized persons.

5 Application

This steamer is used for cleaning, sterilizing and degreasing dental appliances.

Only use the device for this type of application.



6 Before Starting

6.1 Transport

Before transporting the unit, ensure that it has been unplugged from the power socket. Make sure that it is packed correctly in order to avoid accidental damage.



Be sure to check for any transport damage when unpacking the goods. Note down any damage if found.

6.2 Installation

Open the box, remove the packing materials, and carefully lift out the device and accessories. Check the included accessories.

The device must stand horizontally on a steady and even surface.



Install the device in a place where it will not block the working area and the functionality (take the dimensions into account). Make sure that there are about 10 cm of free space on each side to guarantee air circulation (heat dissipation).



Do not install the unit outdoors or in places without proper ventilation. Before start-up, be sure the device reaches room temperature.

6.3 Storage

The unit location is very important when it comes to workplace safety, even if it is only to be set up there for a short period. The room should be dry, well ventilated and vibration-free. An even temperature and wooden supports also help. <u>The unit should not be stored</u> <u>or set up outdoors.</u> If the unit is to be stored for an extended period, protect it from moisture and dust.



7 Start-up/ Installation

Before starting the unit, connect up the following:

Drainage:

The supplied <u>drainage hose</u> is connected to the drain outlet (rear side of the unit) and fastened with the supplied hose clip.

If possible, run the hose into a heat-resistant bucket or washbasin as the draining water can be <u>very hot</u>.

For Permanent Water Supply:

Connect the steam cleaner (rear side of the unit) to a water tap using the supplied <u>inlet hose</u> (screw thread).

NOTE: The tap must have a non-return valve and a breather (washing-machine tap).

Finally, insert the power plug into the socket, making sure that the mains and the unit operate on the same voltage.

Filling unit 5 litres (REF 174430) is supplied with manual filling.

NOTE: The filling unit must be set up on the same level as the steam jet or higher than the steam jet (see picture on page 4).

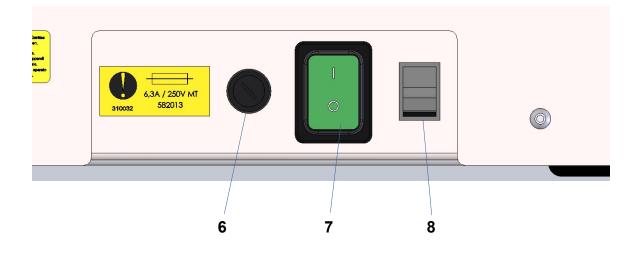
NOTE: To connect the filling unit a circuit board detection is necessary. The steam cleaner has to be switched off. Connect the filling unit and then switch on the steam cleaner. Now the filling unit is connected to the steam cleaner. *(circuit board recognition)*

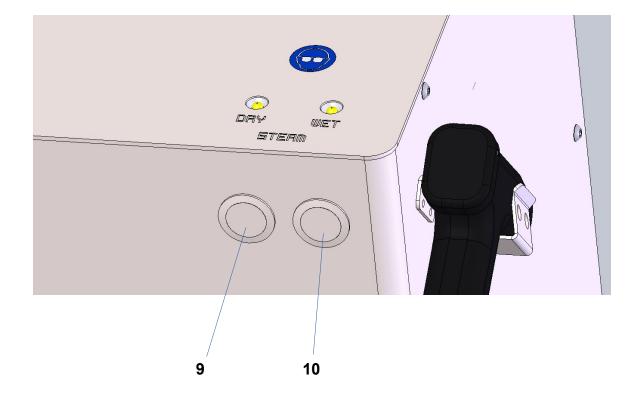


The filling unit must not be positioned below the steam boiler. Pay attention to the minimum water level.



7.1 Functions of the Switches and Buttons





- 6 6,3 A medium-blowing-fuse
- 7 Power switch/ Mains switch
- 8 Rinse button
- 9 Selector for dry steam
- 10 Selector for wet steam



7.2 Filling Process



Turn on the water tap (only for usage with permanent water supply).

Press the green ON/OFF switch (7). The unit will fill with water automatically by a pump and heat up.

Following procedure speeds up the filling and protects the pump

(only when permanent water supply and a required water pressure is present): For the <u>initial filling</u> or a <u>refilling after draining the unit</u> it is an option to press the black <u>rinse button</u> (8) on the right side of the device until the pump switches off and the filling is completed.

Following procedure applies to new equipment or after the pressure vessel has been emptied. Then a <u>one-time venting</u> of the pressure vessel can optimize the heating-up time:

<u>After approx. 10 minutes</u>, point the steam gun towards a splash protection with tray or wash basin and press the push button until no more steam/ air/ water comes out of the nozzle. As a result, the unit is now initially pressureless.

The operating pressure of 6 bar is reached <u>after about 25 minutes</u>, and the unit is then ready for use.



8 Operation

8.1 General Operating Instructions

All instructions for using the unit, whether in verbal or written form, are based on our own experience and experimentation and can only be regarded as guidelines.

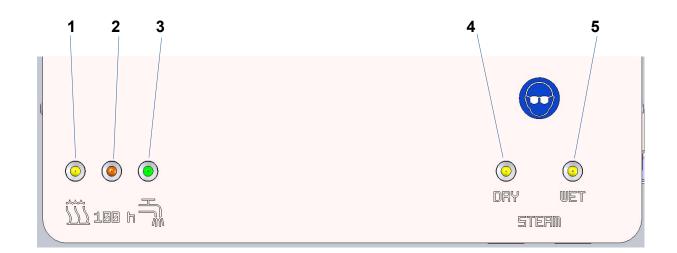


Use the selector (9) for dry steam or (10) for wet steam. Hold the steam gun in your hand, then release and control the steam using the button of the gun.

If the unit is not used for more than 10 minutes, it switches to stand-by mode (5 bar). When the steam gun is operated, the unit returns to operating temperature/ pressure (164°C, 6 bar) within 90 seconds.



8.2 Functions of the LEDs (Diodes)



- 1 LED yellow = heating
- 2 LED orange = operating hours counter (OHC)
- 3 LED green = water supply
- 4 LED yellow = dry steam
- 5 LED yellow = wet steam



LED (1) off = Heating off

(Heating protection: The water level is below the sensor ", water level min.")

LED (1) illuminated = Heating on

(The water level is at the same height as or above the sensor , water level min.")

LED (2) flashes = OHC 100 h / Rinsing the tank is recommended

Although it is still possible to work with the steam cleaner and to reset the operating

hours counter to 0.

RESET: The unit must be switched off. Then press the dry steam button (9) and switch on the device with the main switch (7) at the same time.

LED (3) flashes =	Low water, water supply, pump runs	
	(The water level is below the sensor , water level min.")	
LED (3) illuminated =	Water supply, pump runs	
	(The water level is at the same height as or above the sensor	
	" water level min.")	
	Mater level als numer off	

LED (3) off = Water level ok, pump off

LED (4) or (5) flashes fast =	Heating (1) on, units pressure < 5 bar
LED (4) or (5) flashes slow =	Heating (1) on, units pressure = 5 bar or > 5 bar
LED (4) or (5) illuminated =	Heating (1) off, units pressure $= 6$ bar
	or
	Heating (1) off, units pressure $= 5$ bar
	after 10-minute break (stand by mode)

LED's (1), (3), (4) and (5) flashes = If there is a water leak, the moisture detector will switch the unit off all device functions automatically. But the unit electrically remains on. As a warning all 4 LED flashes.



9 Troubleshooting

Fault	Cause	Solution	
No LEDs displayed and/or	Blown fuse	Replace fuse. Trace cause or contact Service Department	
only ON/OFF switch luminated	Temperature/ pressure too high	A pressure safety switch turns the unit off automatically when it reaches 7 bar. Trace cause or contact Service Department.	
Hot water rather than steam comes from nozzle	Container overfilled with water. This can happen if the rinse button (8) was pressed too long when filling (mains water).	Set unit to dry steam and spray until only steam comes out.	
Collection tray spills over	Collection tray is full	Empty the collection tray or connect the drainage hose (wash basin)	
Water supply LED (3) on continuously	No water flow	Check tap and connections or fill up the filling unit	
LED (2) (OHC 100 h) flashes	Rinsing the tank is recommended	Rinse container according to instructions. RESET: The unit must be switched off. Then press the dry steam button (9) and switch on the device with the main switch (7) at the same time.	
Heating LED (1) on continuously with no increase in pressure	Faulty heating	Contact Service Department	
LED (1), (3), (4), (5) flash	Unit leaking	Contact Service Department	



If the above recommendations do not solve the problem, contact your dental depot or our service department.



10 Care and Maintenance

10.1 Cleaning



Disconnect the power plug before starting any maintenance work. The identification plate has always to be kept in easily legible condition and has not to be removed.



Remove external dirt from time to time with some form of cold cleaner. Use only cold cleaners to avoid damaging the paintwork or removing the lettering. The equipment should be cleaned at regular intervals to ensure trouble-free operation.

It requires only normal cleaning (sponge, damp cloth, mild detergent) and no further chemical additives.

10.2 Maintenance

The unit should be descaled depending on use, but at least every 14 days, <u>according to</u> <u>the following instructions</u>. Basically, it should be ensured that the unit is kept clean.



Calcification can be minimized depending on use, which extends the cleaning intervals.

- Permanent water supply: The purpose of water softeners is to prevent the formation of limescale deposits caused by water hardness, which results in reduced maintenance costs. We strongly recommend to use our Wasi-Clean water-softener.
- *Manual filling*: Operation with our fill unit (5 Liter) allows to use distilled/ softened water.



10.2.1 Rinsing/ Decalcification



Rinse the steam boiler only after the pressure has dropped to zero. Otherwise, there is a **very high risk of scalding**.

The unit is equipped with an operating hours counter:

- When 100 hours are counted the LED (2) flashes. Rinsing the tank is recommended. It is still possible to work with the steam cleaner.
- RESET the operating hours counter to 0:
 The unit must be switched off. Then press the dry steam button (9) and switch on the device with the main switch (7) at the same time.

When draining the water, please note the following:

- Turn the main switch off
- Before draining the water, make sure that the unit has cooled down.
- Activate the steam gun. The unit must be cooled and relieved of pressure.
- Before draining the water, make sure that the hose runs into a heatresistant bucket or washbasin. For safety reasons, you should firmly install the drain hose as the draining water can be very hot (up to 164 ° C if the device has not cooled down).
- Using the black rotary knob at the rear side of the unit, <u>carefully</u> open the drain valve <u>slowly</u> to the end.



Then switch the unit to **rinsing mode** as follows:

- With the button of the steam gun pressed, switch on the unit and keep the steam gun button pressed for a short time.
- Both steam LEDs light up = protective function.
- Now release the steam gun button.
- Rinse mode on = steam LEDs flash alternately.
- In this mode the heating is switched off. And with the wet steam button (10) the pump in the unit (intermittent operation 20/10 sec.) can be switched on or off for rinsing.
- In this mode both valves are opened by pressing the steam gun button (air balance in the boiler), which increases the outflow speed when draining the water.

Permanent Water Supply:

By pressing the flush button (8) on the right side of the unit, the pressure (= water pressure in the building) can be increased during flushing in order to flush the sludge chamber in the steam boiler even **more effectively** until only clear water comes out.

Manual Filling:

When using the filling unit, only the pump in the unit is used for rinsing. In order to achieve the best possible result, we recommend connecting the device to a mains water supply for rinsing.

- Now turn the drain valve with the black button (rear side of the unit) clockwise again to close the water outlet.
- Now exit the rinsing mode by switching off the unit.
- If you now switch on the unit only with the main switch (7) (= normal mode), you can put the device back into operation according to section 7.2 Initial filling.
- Place the splash protection (if applicable) in front of the steam cleaner.



10.3 Repairs



Servicing or repairs to the unit has only to be carried out by qualified technicians. Only original spare parts are to be used. Responsibility for the product is voided if unauthorised persons alter it or if inappropriate components are installed.

10.4 Spare Parts

If necessary please contact our service hotline phone.

10.5 Service Hotline 0049 (0)40 730 926 -20/ -24

10.6 Scope of Delivery/ Accessories

Included in delivery:

- Supply hose, grey, cpl. (for 174994)
- Filling unit 5 litres (for 174987)
- Discharge hose, 1,5 m (pre-assembled)
- Holder for spray gun (incl. screws)

Accessories	Item no.
Wasi-Clean water softener, table top unit (for 174994)	174997
(W 190 x H 405 x D 260 mm)	
Splash protection entirely made of stainless steel	174460
(W 250 x H 265 x D 255 mm)	
Filling unit (5 Litres) (for 174987)	174430
(W 215 x H 340 x D 240 mm) (D + connection = 290 mm)	
Special spray nozzle Ø 2.5 mm	174352
(Spare basic nozzle Ø 1.2 mm, item no. 174100)	
Quantity Control Accessory Set*	174414
Accessory to regulate wet steam saturation and steam quantity	
*Retrofitting is possible, the unit can be upgraded at any time. It would	
require to retrofit the unit at our factory or at one of our authorized	
service stations. Just give us a call.	
Discharge hose per meter	320031



11 Technical Data

Wasi-Steam Compact / BE	Item no.: 174994 / 174987
Voltage	220–240 V / 50/60 Hz
Power consumption	5.5 A (6.3 A medium-blowing-fuse)
Output	1270 W
W x H x D max.	345 x 360 x 390 mm
W x H x D (housing)	300 x 353 x 310 mm
Weight	19 kg
Working pressure	max. 6 bar (stand by 5 bar)
Steam temperature	max. 164°C at 6 bar
Boiler capacity	3.3
Safety class	IP 22
Duty	Interrupt operation 5/5 min

Other voltages on request.

The noise level of the unit amounts to \leq 70 dB (A).



Technical changes reserved.



12 Disposing of the Unit

The unit has to be disposed by an authorized recycling operation. The selected company has to be informed of all possibly health-hazardous residues in the unit.

12.1 Information on Disposal for Countries within the EU

To conserve and protect the environment, prevent environmental pollution and improve the recycling of raw materials, the European Commission adopted a directive that requires the manufacturer to accept the return of electrical and electronic units for proper disposal or recycling.

Within the European Union units with this symbol should not therefore be disposed of in unsorted domestic waste.

For more information regarding proper disposal please apply at your local authoritie.



13 EU Declaration of Conformity

in accordance with 2014/35/EU (Low Voltage Directive) and 2014/30/EU (Electromagnetic Compatibility Directive) and 2006/42/EC (Machinery Directive) and 2011/65/EU (RoHS Directive) and 2014/68/EU (Pressure Units Directive)

Manufacturer:	WASSERMANN Dental-Maschinen GmbH Rudorffweg 15-17 21031 Hamburg Germany	Product description:	Steam Cleaner for dental applications
Model:	Wasi-Steam Compact Wasi-Steam Compact BE		ltem no. 174994 174987
Aapplicable standards:	DIN EN 61010-1 DIN EN 61000-6-3 DIN EN 61000-6-1 DIN 45635-1 DIN EN 60335-1		

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EU-Richtlinien entspricht. Diese Erklärung wird ungültig, falls die Maschine ohne unsere Zustimmung verändert wird.

This is to confirm that the above mentioned machine complies with the described EU guidelines. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur d'Union européenne. Cet avis est nul et non avenant si cette machine est modifiée sans notre accord.

Esta máquina, anteriormente mencionada, cumple con los limites requeridos por el reglamento UE. Ahora bien, esta declaración quedará invalidada en caso de realizar modificaciones al aparato sin nuestra aprobación.

Hiermee wordt bevestigd dat bovengenoemde machine voldoet aan de voorgeschreven EU normen. Deze verklaring verliest geldigheid als er zonder onze uitdrukkelijke toestemming wijzigen aan de machine worden aangebracht.

Place, date: Hamburg, 2025-04-17

Signature:

Sven Wassermann (Managing Director)

Company stamp :





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