

# Steam Cleaner Wasi-Steam 2



Wasi-Steam 2 with accessory splash protection



USER MANUAL

**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 device and start work, and operate the device according to the recommended guidelines. The operation safety and the functionality of this device 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 device.



Make sure that anyone using this device 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).

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## 1 Features

- Powerful steam-cleaner for all cleaning applications
- Water connection, electronic delimer, service interval display and huge stainless steel boiler
- User-friendly operation using swivel head to regulate wet steam saturation and steam quantity
- Selector for wet or dry steam
- Steam pressure 5 bar at rest / 6 bar in operation
- Protects seals by reducing pressure to 5 bar after 10-minute break
- Clear pressure and temperature display (combined)
- Simple operation, high safety standards
- Durable, versatile and ecofriendly
- Stainless steel housing
- Wall mount available as accessory

## 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 must be observed.



### **Information!**

This symbol draws your attention to specific features that must 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 heat-resistant gloves and wear some form of eye protection.

Hold the steam gun only by the housing.

Do not point the steam spray at living things.

The steam from the nozzle can reach temperatures up to 164°C, so only spray towards the collector or washbasin.

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

Make sure that the unit is connected to the correct mains voltage.

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 automatically.

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.

As a safety precaution, the steam regulating valve on the nozzle does not close completely, even in the “0” position.

## 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 or may be mounted horizontally to a stable wall using the optional wall bracket. If mounting the unit on the wall, make sure that the wall is **strong enough** to take the weight.



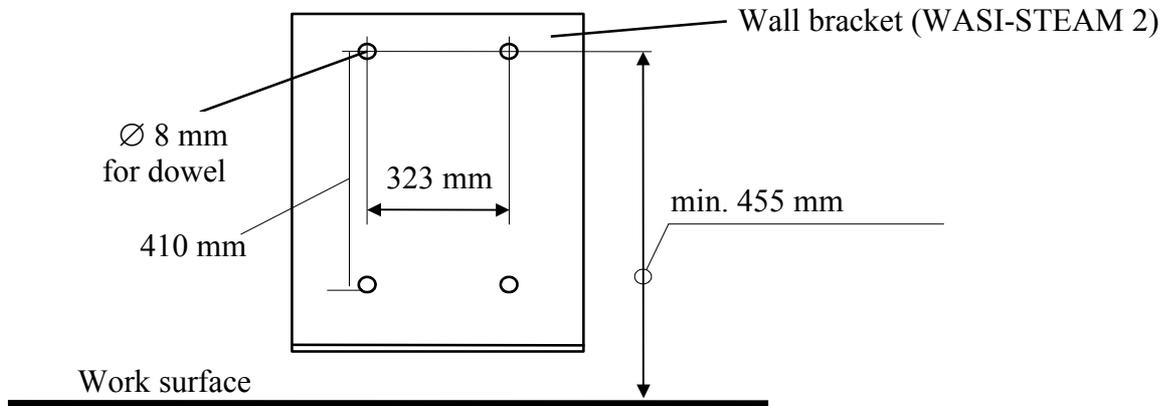
Install the device in a place where it will not block the working area and the functionality (take the dimensions into account). Make sure that there are about 10 cm of free space on each side to guarantee air circulation (heat dissipation).



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

### 6.2.1 Wall Mounting

Use the following hole template if mounting the unit on a wall:



### 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. The unit should not be stored or set up outdoors. 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:

Use the water supply hose supplied to connect the steam cleaner (left side) to a tap (the tap must have a non-return valve and a breather – washing-machine tap).

Connect the drain hose supplied to the left side of the unit (if possible, run the hose into a heat-resistant container or washbasin as the draining water can be very hot).

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

### 7.1 Filling



Turn on the tap.

Press the green ON/OFF switch – the unit will fill with water automatically and heat up.

For the initial filling or a refilling after draining the unit please press the black rinse button on the left side of the device until the pump switches off and the filling is completed.

**This procedure speeds up the filling.**

Once the pressure has reached 2 bar, vent the steam vessel once by pointing the steam gun in the direction of the collector or washbasin and pressing the steam gun button until the pressure gauge reads 0 (**this only applies to new equipment or after the pressure vessel has been emptied**).

The operating pressure of 6 bar is reached after about 12 minutes, 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 appropriate switch to select dry steam (4) or wet steam (3).

If you are using wet steam, set the amount of hot water using controller wet steam (2) on the front of the unit (0 = no water, 5 = max. water).

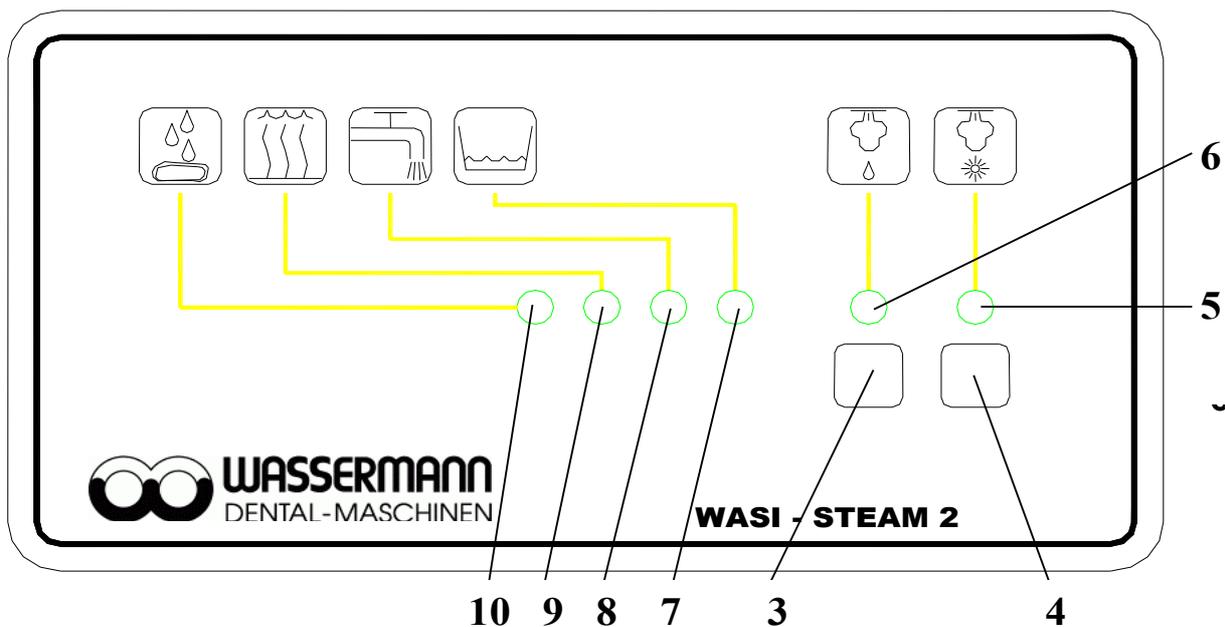
Use controller steam quantity (1) to set the desired amount of steam (for safety reasons, the valve is not completely shut in position "0").

Hold the steam gun in your hand, then release and control the steam using the button.

**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 45 seconds.**



- 1 Controller steam quantity
- 2 Controller wet steam



- 3 Button wet steam
- 4 Button dry steam
- 5 Lamp (LED) dry steam
- 6 Lamp (LED) wet steam
- 7 Lamp (LED) low water
- 8 Lamp (LED) water intake
- 9 Lamp (LED) heating
- 10 Lamp (LED) water leak

## 9 Troubleshooting

<b>Fault</b>	<b>Cause</b>	<b>Solution</b>
No display reading and/or only ON/OFF switch illuminated	Blown fuse	Replace fuse and trace cause or contact Service Department
	Temperature/pressure too high	Check pressure gauge – if pressure in red range (above 6.3 bar), check for fault and repair if necessary (Service Workshop)
Hot water rather than steam comes from nozzle	Water container too full	Set unit to dry steam and spray until only steam comes out
Pressure gauge below 0 bar	Normal function	None
Collector spills over	Full	Empty collector
Wet steam setting produces only dry steam	Control turned to "0"	Select wet steam (settings 1-5)
Low-water LED on continuously	No water flow	Check tap and connections
Low-water LED flashes in conjunction with wet-steam and dry-steam LEDs	Indicates need to flush container	Flush container as instructed
Water-supply LED on continuously	No water supply	Check tap and connections
Heating LED on continuously with no increase in pressure	Faulty heater	Contact Service Department
Water-leak LED comes on	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 Wasi-Steam 2 should be descaled depending on use, but at least once per week, according to the following instructions. Basically, it should be ensured that the unit is kept clean.

Your Wassermann steam cleaner incorporates a special technique for avoiding lime build-up: harmless lime residue should be rinsed away **once per week**.

### 10.2.1 Rinsing/ Decalcification



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



When draining the water, observe the following points:

- **Before draining** the water, ensure that the unit has cooled down (pressure gauge) and that the drain hose will empty into a heat-resistant container or washbasin. For your own safety, you should fix the hose firmly in place as the draining water/steam mixture, (if the unit has not cooled down completely), is very hot (up to 164°C).
- Using a square-head socket wrench, carefully turn the drain valve slowly to the stop (90° counter-clockwise), while simultaneously pressing the steam gun until no more water comes out.
- Press the flushing button on the left-hand side of the unit (for a brief guide to the flushing procedure, see the sticker on the front of the unit). Flush the desludger in the steam vessel until the water runs clear.
- To prevent damage to the unit, we recommend you flush it once a week and at the latest when the dry steam (5), wet steam (6) and low-water (7) LEDs flash.
- The unit is fitted with a running-time meter. After about 100 hours of operation, the low-water (7), dry steam (5) and wet steam (6) LEDs will flash to indicate that the unit must be flushed.
- Pressing the dry steam button (4) when the unit is turned off and simultaneously turning it on at the mains will return the running-time meter to zero (**RESET**).
- You now use the square-head socket wrench to turn the valve 90° clockwise and stop the water draining out.
- Now place the spray protector with filter insert (if you have one) in front of the unit.

### 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 parts	Item no.
Discharge hose	320031
Sypply hose	320060
Square socket spanner	174133

Accessories	Item no.
Wasi-Clean water softener, table top version (W 190 x H 405 x D 260 mm)	174995
Splash protection (W max. 555 x H max. 250 x D max. 160 (left) / 210 (right) mm)	174230
Wall mount incl. fastening set	174280
Console for splash protection (for wall-mounted version)	174288

## 11 Technical Data

<b>Wasi-Steam 2</b>	<b>Item no.: 174992</b>
Voltage	220–240 V / 50/60 Hz
Power consumption	8.3 A (Si 10 A)
Output	1880 W
W x H x D	450 x 490 x 265 mm
Weight	30 kg
Working pressure	max. 6 bar (stand by 5 bar)
Steam temperature	max. 164°C at 6 bar
Boiler capacity	2.2 l
Safety class	IP 33
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 authorities.

**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: **W A S S E R M A N N**      Product description: Steam Cleaner for dental applications  
Dental-Maschinen GmbH  
Rudorffweg 15-17  
21031 Hamburg  
Germany

Model: Wasi-Steam 2      Item no. 174992

Applicable 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 límites 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 wijzigingen aan de machine worden aangebracht.

Place, date: Hamburg, 2018-07-10

Company stamp:



Signature : \_\_\_\_\_  
Wilfried Wassermann  
(Managing director)

Notes:



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