# OPERATING INSTRUCTIONS

Wax-Scalding Unit

**WAPO-EX8** 



Fig 1: Wapo-Ex 8







### Dear Customer,

we appreciate your decision to select a unit of the Wassermann product range. Wassermann Dental - Maschinen provides the highest quality and latest technology. To ensure optimum performance for many years and to get familiar with the various functions, please read these operating instructions carefully before using and always operate the unit accordingly.

Please keep these operating instructions for future reference.

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# Contents

1	FEATURES	4
2	FOR YOUR OWN SAFETY	4
2.1 2.2	READ THE OPERATING INSTRUCTIONS CAREFULLY	
2.3	RELIABILITY FOR FUNCTIONALITY AND DAMAGES	
3	APPLICATION	5
4	BEFORE STARTING	6
4.1 4.2	UNPACKING / TRANSPORTInstallation / Storage	
5	STARTING	7
6	OPERATION	8
6.1	Operation	
6.2	TIME AND TEMPERATURE SETTING	
6.3 6.4	STORINGMANUAL OPERATION	
_	TROUBLESHOOTING / REMEDIES	
8	MAINTENANCE	12
8.1	CLEANING	
8.2	SERVICING	
8.3	Warranty	
8.4 8.5	SPARE PARTS AND ACCESSORIES	
9	SPECIFICATIONS	14
9.1	170991 WAPO-EX 8	14
10	EC CONFORMITY CERTIFICATE	15

#### 1 FEATURES

The approved wax-scalding unit WAPO-EX 8 of the WASSERMANN-brand - nowadays equipped with an easy to clean multi-function display - is a very compact table unit designed for wax-scalding of up to 8 flask halves. Its immersed full-conical spray system simplifies handling and prevents accidental erosion. Its longevity is supported by the silent, joint-free bronze pump and a housing and tank made of stainless steel.

To protect the heating element the wax-scalding unit is equipped with a watershortage protection mechanism. Furthermore it has a low-lying perforated screen cover as well as a hand shower made of non-heat-conducting plastic for manual scalding of small parts.

#### **2 FOR YOUR OWN SAFETY**

## 2.1 Read the operating instructions carefully

Each Handling and operation of this unit require detailed knowledge and attention as explained in these operating instructions. This unit is designed only for the described purpose.

**Especially important notes** are marked as follows:



#### Warning!

This is a warning indicating risk and hazard situations. Ignorance can cause danger to life. These warnings must always be heeded.



#### Information!

This information refers to important features you have to consider.

#### 2.2 Safety instructions

- This unit is designed for AC 230 V 50 Hz only. Make sure that the unit is always operated with the correct voltage.
- Disconnect the power plug before carrying out any service or repairs.

#### 2.3 Reliability for functionality and damages

The reliability for the functionality of the unit depends upon the owner or operator, whether the unit will be serviced, repaired or altered improperly by persons not belonging to an authorized service company or when it is used for other than the described purpose.

The unit must be operated and serviced according to these operating instructions. For damages *incurred due to negligence* of these notes, Wassermann Dental-Maschinen GmbH *cannot* be held responsible.

Warranty and reliability conditions of the terms of sale and delivery of the Wassermann Dental-Maschinen GmbH are not extended by the above mentioned notes.

Please keep these operating instructions in an easily accessible place and make sure they are read and understood.

# 3 Application

The WAPO-EX 8 is suitable for wax-scalding of up to 8 flask-halves as well as for scalding small parts on the low-lying perforated screen cover with the integrated hand shower.

# 4 Before Starting

#### 4.1 Unpacking / Transport

- Remove all packing material and place the unit on an even and stable surface.
   Check the included accessories (see 8.4).
- Before moving the unit, please make sure that it is disconnected from the power source. To avoid unneccessary transport damages, pay attention to proper packing when transporting the unit.

#### 4.2 Installation / Storage

- Place the unit in a horizontal position.
- Attach the supplied discharge hose on the unit using the hose clamp and verify proper water discharge.
- Place the unit so that the work area is freely accessible and operation is not restricted. (Please consider the structural dimensions). Do not place the unit outdoors.
- In case of long-term storage, the unit must be protected against humidity and dust.

We strongly recommend to install the unit firmly to the discharge system, since it is equipped with an

automatic water overflow

discharge system, i.e. too much filled water runs out automatically, even when the discharge cock is closed.

Furthermore complete emptying for cleaning purposes etc. is thus simplified.



# 5 Starting

- Connect the power cord to a power outlet (230 V /50 Hz).
- Place the filter mat with the white side facing down.
- Fill the unit with water up to the overflow limit (18.5 litres max.)
- Switch on the main switch (green toggle switch).
- The unit automatically heats up to the basic setting (65°) or to the last stored scalding-temperature.
- When the desired temperature is reached, the yellow indication lamp will switch off and the unit is ready for use.



When working with the WAPO-EX 8 you should always wear heat-resisting gloves.



To prevent the heating element from melting in case of water shortage (red lamp and acoustic signal) the WAPO-EX 8 is equipped with a dry-operation protection mechanism.

Pay attention that the water level is always above the white plastic ring (see

inside the housing). Otherwise the heating will be switched off automatically.

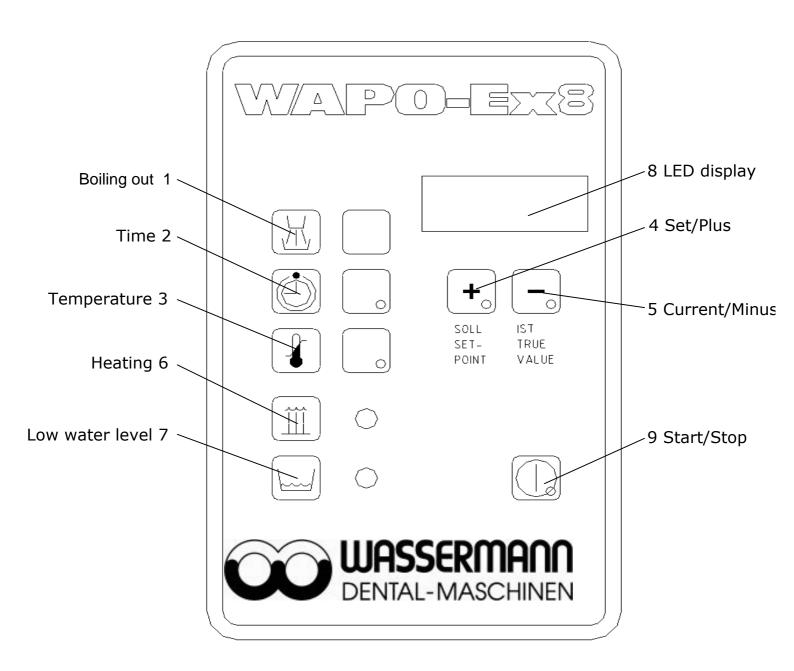
i When not using the unit for a long period of time, the power cord should be disconnected.



# 6 Operation

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All recommendations given for the use of this unit – regardless if mentioneverbally, in writing or in the form of practical instructions - are based on our own experiences and tests and can only be considered as standard values.



#### 6.1 Operation

- 1. Switch on the main switch (green toggle switch).
- 2. Check the water level(7) red water shortage indicator must not light.
- 3. Place the prepared flask-halves inside the unit (4 flask baskets á 2 halves).
- 4. Set the desired scalding-time (see 6.2).
- 5. Set the desired temperature (see 6.2).
- 6. Press the "Start/Stop"-button(9) to start the scalding process.
- 7. During heating(6) up the yellow lamp (heating) lights.
- 8. After the pre-selected time has elapsed, the unit switches off automatically.

Note: The respective key reservation is indicated by the red spot on the buttons.

# 6.2 Time and temperature setting

#### Time setting:

- 1. Set to button "Time"(2).
- 2. Set to button "Set"(4).
- 3. Hold down the "Time"-button(2) und set the desired time with the "+"(4) or "-"(5)button.

#### Temperature setting:

- 1. Set to button "Temperate"(3).
- 1. Sett to button "Set"(4).
- 2. Hold down the "Temperate"-button(4) and set the desired temperature with the "+"(4) or "-"(5)button.



#### 6.3 Storing

The individually set values can be stored by pressing the buttons "Boiling out"(1) and "+"(4) simultaneously.

To confirm the storage a "YES" will appear on the LED display(8).

When storing new data the previously stored data will be overwritten.

**Attention:** You can reset the data to the "Wassermann default setting" (15 min and 65°C) by simultaneously pressing the buttons "Boiling out"(1) and "-"(5). This is also confirmed by a "YES" on the LED-display(8) and must be confirmed again.

#### 6.4 Manual operation

With the unit in the standby mode it is always possible to activate the hand shower by shifting the ball cock. Make the settings according to the descriptions in 6.2. Always return the ball cock to its initial position after using.



The WAPO-EX 8 is not ready to use until the temperatur exceeds 60°C, i.e. the pump will not start operating until the desired temperature is reached and also the count down of the timer do not start earlier.



**Attention! Danger of Scalding!** 

Do not touch the hand shower at the nozzle or hose.

Do not point the spraying jet towards humans or animals.

The water, which comes out of the nozzle can reach temperatures of 95°C; therefore only use the hand shower in the area of the screen cover or the hand basin.



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During scalding with the hand shower you must shift the ball cock (situated at the right side at the top of the housing) to the vertical position.

To relieve the hose and hand shower of pressure when not in use, the ball cock should always be returned to the horizontal position.

# 7 Troubleshooting / Remedies

Symptom/Trouble	Possible cause	Possible solution
No heating(6) up.	The power plug is not connected.	Check the power plug and insert it.
	The main switch is not switched on.	Check the main switch and switch it on.
	The level tracer is dirty.	Clean the level tracer.
The water shortage indicator is lit and an acoustic alarm is heard.	The water level is too low.	Refill water until the red control lamp goes off and the acoustic alarm stops.
	The level tracer is dirty.	Clean the level tracer.
The water pump does not operate.	The operating temperature or desired temperature is not reached yet.	Heat up to the operating temperature of 60°C or to the desired temperature.
The multi-function display does not work properly.	Voltage fluctuations in the power line (230 V / 50 Hz)	Switch off the main switch and switch it on again after about 1 min.

If the trouble persists, please contact your dealer or our service department.



Attention! Do not use any solvent-based wax-solving agents, since these could damage the rubber parts of the unit!

Attention! KALK-EX is allowd to react 12 hours max.

Discharge the solvent and rinse thoroughly.

# 8 Maintenance

#### 8.1 Cleaning

To ensure continuous and correct operation the unit must be cleaned at least: once a week

- Change water and add WACHS-EX.
  - Dosage: approx. 4 ccm / 1 litre water = approx. 80-100 g/18,5 litres
- Clean the level tracer (white plastic ring), i.e. with a nail-brush.

#### Every 2 weeks

Replace the filter mat (white side facing down)

#### every 4 weeks

- Clean the unit with Kalk-Ex.
  - Dosage: approx. 5 ccm / 1 litre water = approx. 150-200 g Kalk-Ex/18.5 litres
- In case of lime build-up the dose must be increased.

It is recommended to clean the surfaces of the unit as well as the armatures with a sponge or soft cloth moistend with a soft cleaning agent.

The **identification plate** must always be kept in easily legible condition and must not be removed.



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In order to change the filter and to clean the level tracer (white ring), take out the flask baskets first. Then the perforated plate (2 parts) can be removed.

Grip into the two holes and lift the plate up. Now you can easily remove the filter mat. When inserting the new filter you have to take care that the white side of the filter is facing down and that the filter is placed under the high folded edge of the bottom plate. The plate (2 parts) can be removed easily.

Now the level tracer and the heating spiral are freely accessible for cleaning. Reinsert the bottom plate with the folded edges facing up.

#### 8.2 Servicing



Before opening the unit, the capacitors must be discharged.

The WAPO-EX 8 does not require any special maintenance. You only have to take care that the unit is kept <u>clean</u>.

#### 8.3 Warranty

The warranty period for all our units is 12 months. Should trouble occur during this time, please inform your dealer or contact our service department.

Only use the wax-scalding unit in perfect technical condition. Should trouble occur, which could endanger employees or third persons, the unit **must** be repaired before it is used again.

Damage, caused by improper use, external mechanical influences, transport damages as well as alterations made by unauthorized persons, is not covered by this warranty.



#### 8.4 Spare parts and Accessories

Spare parts	
Part no.	Description
170074	Flask basket
170220	Foil for keyboard
326002	Scalding nozzle
392008	Rubber foot 32 x 32 - H6 black
511091	Rocker-type switch, green

Accessories				
Part no.	Description			
170021	Service set for WAPO-EX 8			
170120	Stand for WAPO-EX 8, movable			
320030	PVC-hose 19 x 4 (3/4") - length: 1500 mm			
322017	Hose clamp D20 - 32 x 12.2			

#### 8.5 Repairs

All service and repair work should be referred to qualified service personnel only. For replacement, use only original WASSERMANN parts. The product liability expires if any modifications or alterations have been made by others as well as if non-original spare parts are used.

# 9 Specifications

#### 9.1 170991 WAPO-EX 8

Power supply: 230 V / 50 Hz Power consumption: 8.5 A

Power consumption: 8.5 A Power: 2000 W

Water volume approx. 18.5 litres
Overall dimensions Width: 610 mm

Height: 435 mm (without splash

quard)

Depth 420 mm

Weight: 36.0 kg



The noise emission values of the wax-scalding units are **170** dB(A).

i Specifications and design are subject to change without notice.



for the use in dental

Rudorffweg 15-17 · 21031 Hamburg

## 10 EC conformity certificate

in accordance with 73/23/EWG (low-voltage guidelines) modified by 93/68/EWG and 89/336/EWG (EMV guidelines) and 89/392/EWG (Machinery guidelines), with modifications

Manufacturer: WASSERMANN Product description: Wax-scalding unit

Dental-Maschinen GmbH

Rudorffweg 15 - 17 D-21031 Hamburg

Machine type: WAPO-EX 8 (170991)

Applicable EN 61010-1:1993 + A2:1995 standards: EN 50081-1 + EN 50082-1

DIN 45635 Part 1

Hiermit wird bestätigt, dass die oben bezeichnete Maschine den genannten EG-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 EC rules. This declaration becomes invalid if the machine is modified without our approval.

Cette machine est conforme aux normes en vigueur de la Communauté Européene. 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 EC. 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, den 10.Apr.2003 Company stamp :

Wilfried Wassermann (Managing Director)

Signed:



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