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ULTRASONIC CLEANER

<i>Istruzioni per l'uso</i>	<i>ITALIANO</i>
<i>Instructions for use</i>	<i>ENGLISH</i>
<i>Mode d'emploi</i>	<i>FRANCAIS</i>
<i>Instrucciones de uso</i>	<i>ESPAÑOL</i>
<i>Bedienungsanleitung</i>	<i>DEUTSCH</i>

0ZVUI0001
30.04.2013

Questo apparecchio assolve ai criteri di conformità CE in quanto conforme alla direttiva 93/42/CEE. La dichiarazione di conformità originale è fornita in allegato al manuale.

This device compliance to Directive 93/42/CE. The original declaration of confirmity is provided in attached to the manual.

Cet appareil est conforme aux prescriptions CE puisque il respecte la instruction 93/42/CEE. La déclaration de conformité est jointe au manuel d'usage.

El dispositivo es conforme con los criterios CE ya que respecta la norma 93/42/CE. La declaración original es incluida en el manual de uso.

Das Gerät stimmt mit CE Norm. Es beachtet die Norm 93/42/EWG. Die Original Konformitätserklärung ist der Gebrauchsanleitung beigefügt.

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1 APPLICATION AND INTENDED USE

INTENDED USE	The ultrasonic bath has been designed to clean instruments used in many fields including the medical, dental, cosmetic, and veterinary areas as well as all sectors requiring ultrasonic cleaning.
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By ultrasonic cleaning (cavitation), the device enables to sanitize hard-to-reach spots, difficult to be manually cleaned, without the risks resulting from handling contaminated instruments.









Recommended steps when using in the dental field:

DISINFECTION	Chemical disinfection is only performed if suitable liquid disinfectant is used in the percentages and times specified by the manufacturer.
CLEANSING	This step reduces the amount of microbial contamination by over 90%. It removes the residual organic material resulting from the previous procedure.
RINSING	After cleansing, it is necessary to rinse the instruments subjected to cleaning. This step removes any residual disinfectant / detergent.
DRYING	After rinsing, the instruments must be dried to remove water residues which can compromise the subsequent sterilization process.




	The ultrasonic bath must be used <u>only</u> for cleaning instruments and materials that are compatible with the ultrasonic cleaning system, and generally only for the purposes intended by the manufacturer.
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2

SAFETY

	The device must not be used in potentially explosive atmospheres.
	Place the device away from sources of heat or electromagnetic radiation.
	DO NOT OPEN THE DEVICE DO NOT IMMERSE IN WATER DO NOT WASH UNDER RUNNING WATER
	Do not insert any items that may get in contact with the bottom of the bath
	Do not pour acids (e.g. HCl) or chlorides into the bath
	When cleaning, do not touch the liquid and items that transmit ultrasound.
	The bath, frame, and cleaning liquid may heat up; avoid direct contact to prevent burns.
	Risk of fire and explosion; do not use flammable cleaning agents during ultrasound treatment
	Follow the instructions on the safety data sheet of the liquid detergent / disinfectant used.
	Under certain conditions, ultrasound can produce high noise. Wear suitable PPE.
	The electrical system must comply with the rating plate data and the regulations in force. Verify that the system is appropriate for the characteristics of the device.
	Check the integrity of the power cord before connecting the device.
	Situations where it is essential to disconnect the power supply: <ul style="list-style-type: none"> - FAILURE - DANGER DUE TO LIQUID INTRUSION INTO THE DEVICE - MAINTENANCE - CLEANING
	Do not remove the rating plate
	In accordance with the regulations in force, the manufacturer is responsible for the product placed on the market. Responsibility ceases the moment when operations are performed on the device by unqualified personnel or with non-original spare parts. The manufacturer declines all responsibility for damage to people or property if the device is used improperly.

2.1 Safety marking

	DANGEROUS VOLTAGE
	HIGH TEMPERATURE
	GROUND CONNECTION

2.2 Disposal



This product is subject to Directive 2002/96/EC of the European Parliament and of the Council of the European Union on waste electrical equipment (WEEE). In jurisdictions adopting this Directive, the product was launched on the market after 13 August 2005 and must not be disposed of as non-recyclable household waste. Use local WEEE collection facilities for the disposal of this product, or comply with the regulations in force.

3

MECHANICAL

SPECIFICATIONS

Operating temperature	+5°C to +30°C
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MAX relative humidity at 30°C	80%
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ELECTRICAL

Power supply voltage	230 VAC +/-10 % single phase
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Frequency	50 Hz
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Power cord	2 + 1 x 1 mm ²
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BATH SPECIFICATIONS

MODEL:	BASIC3	BASIC9	FREE3	FREE9
DESCRIPTION				
Bath volume (l)	2.8	8.2	2.8	8.2
Water load volume (l)	2.2	6	2.2	6
Fast-acting fuses (A)	2	4	2	4
Bath internal size L x D x H (mm)	235x135x100	332x227x120	235x135x100	332x227x120
Bath external size L x D x H (mm)	315x168x248	438x259x268	315x168x248	438x259x268
Basket internal size L x D x H (mm)	185x100x50	286x191x56	185x100x50	286x191x56
Weight (Kg)	3.7	7.1	4	7.4
Number of transducers	1	4	1	4
Frequency (KHz)	38	38	38	38
Ultrasonic power (W)	150	300	150	300
Heating (W)	/	/	100	300
Bath material	Stainless steel AISI 316			
Integrated drain	/	/	Yes	Yes
Size	/	/	3/4 G	
Valve	/	/	Stainless steel AISI 316	

Packaging boxes must not be subject to impact and should be handled with care, avoiding rolling or dropping them.

The device is contained in a corrugated cardboard packaging box, internally reinforced by a protective structure.

Open the corrugated cardboard packaging box, remove the reinforced parts and take out the device.



The packaging box must be kept throughout the warranty period.
The manufacturer will not accept returns without the original packaging box.




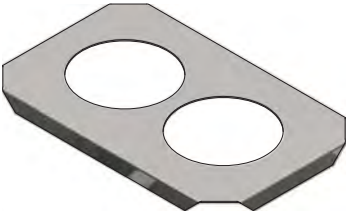


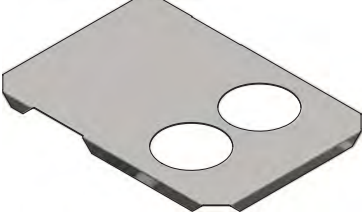


Remove the packaging box and check the condition of the device.



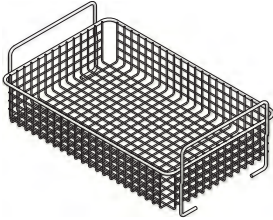
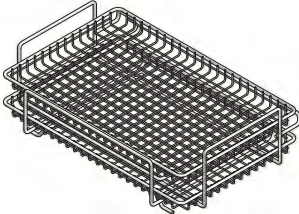

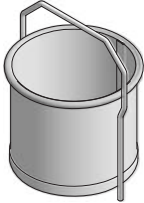

Do not use devices that show visible damage due to transport.

05**COMPONENT DESCRIPTION**

POS	PICTURE	DESCRIPTION	CODE
		<i>POWER CORD (L 2.5 m)</i>	CECG006
32		<i>COVER FOR A 3-LITRE BATH</i>	1ZVUA0012
34		<i>BASKET FOR A 3-LITRE BATH 185 x100 H50 (mm)</i>	1ZVUA0025
41		<i>CUP HOLDER FOR A 3-LITRE BATH</i>	1ZVUA0051
79		<i>COVER FOR A 9-LITRE BATH</i>	1ZVUA0013
80		<i>BASKET FOR A 9-LITRE BATH 286x191 H56 (mm)</i>	1ZVUA0026
78		<i>CUP HOLDER FOR A 9-LITRE BATH</i>	1ZVUA0052

<p>40</p>		<p><i>CUP</i></p>	<p>3MECO0010</p>
<p>43</p>		<p>CUP SEAL</p>	<p>CM50003</p>
<p>39</p>		<p>CUP COVER</p>	<p>3MECQ0012</p>
<p>64</p>		<p>DRAIN VALVE</p>	<p>CPRG034</p>
<p>65</p>		<p>DRAIN PLUG</p>	<p>3MECQ0011</p>

Please refer to Sec. **A - DRAWINGS**

ACCESSORIES NOT INCLUDED		
	<p>Only 9-litre version BASKET WITH SUPPORT RACK FOR THE BOTTOM OF THE BATH 180 x 280 H60 (mm)</p>	SVMA069
	<p>Only 9-litre version TRAY HOLDER INCLUDING 2 TRAYS (OPTIONAL)</p>	2210S
	<p>Only 9-litre version FEET GASKETS</p>	CM50080
	<p>Only 9-litre version CUTTER HOLDER (D 70 mm H 60 mm)</p>	SVMA072
DETERGENTS		
	<p>D2 - 2.5-LITRE LIQUID DETERGENT 4-PIECE PACKAGE</p>	VM002ZVM
	<p>D3 - STRONG LIQUID DETERGENT 1-PIECE PACKAGE</p>	2222S

06

INSTALLATION



The electrical system must comply with the regulations in force. Verify that the system is appropriate for the characteristics of the device.

Make sure that the measured value of the mains voltage corresponds to that specified on the rating plate of the device.

Place the device near a power outlet, in a dry place, protected from impact or liquid spillage.

Place the device on a perfectly horizontal surface, stable and suitable for the weight of the appliance

The device must be moved only using the appropriate side handles.

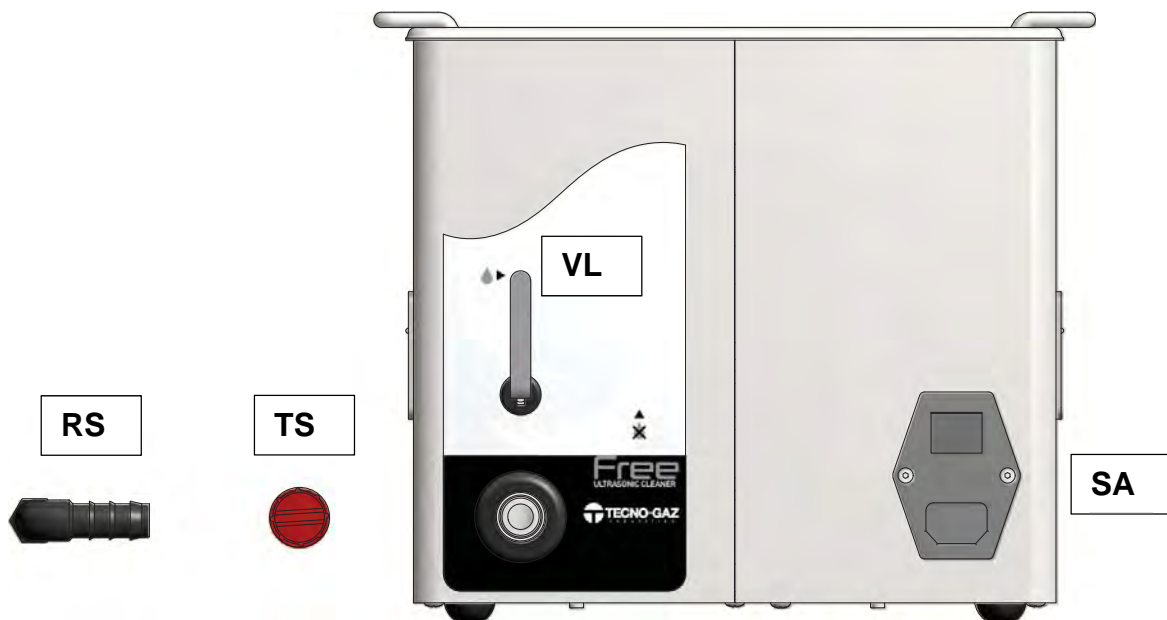
DRAIN VALVE CONNECTOR (Only for versions with drain)

Remove the cap on the exhaust (TS) (unscrew the cap counter-clockwise).

Screw the supplied drain (RS) (turn clockwise).

Connect a drain hose to the desired length (accessory not supplied) suitable for fitting (fitting diameter 10-12 mm).

Tighten the hose with a hose clamp (accessory not included).



POWER CORD CONNECTION

Check the integrity of the power cord.



Do not connect with extensions, reductions or adapters

Connect the power cord to the socket on the back of the device

TURN ON THE MACHINE USING ITS OWN SWITCH

NOTES

Use only recommended liquids suitable for ultrasonic cleaning.



Do not mix liquids inside the device, because the resulting chemical reactions can cause significant damage to the device and to people.

7 OPERATION OF THE APPLIANCE

The device has a removable cover for accessing the cleaning bath.

Place the special basket in the middle of the cleaning bath; place the items to be cleaned in the basket; for optimal cleaning, do not overlap items but distribute them evenly.




DO NOT START THE ULTRASOUND OR / AND HEATING, IF ANY, IF THE TANK WAS NOT FILLED PROPERLY: GENERATORS OF ULTRASOUND AND HEATING ELEMENTS MAY BE DAMAGED. CHECK REGULARLY THE CORRECT LEVEL OF CLEANING PRODUCT

STEP	DESCRIPTION
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1	<p>Loading water (Before supplying power to the device) Fill the bath with water, preferably distilled, up to about 2/3 of its maximum volume. THE BASKET MUST BE COMPLETELY IMMERSED.</p>
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<p>2</p>	<p>Add the detergent to the bath in the percentage specified by the manufacturer</p>																						
	<table border="1"> <thead> <tr> <th data-bbox="331 297 751 398">Selected percentage</th> <th data-bbox="778 297 1102 398">3-litre bath volume (ml)</th> <th data-bbox="1102 297 1469 398">9-litre bath volume (ml)</th> </tr> </thead> <tbody> <tr> <td data-bbox="331 398 751 443">1%</td> <td data-bbox="778 398 1102 443">22</td> <td data-bbox="1102 398 1469 443">60</td> </tr> <tr> <td data-bbox="331 443 751 488">2%</td> <td data-bbox="778 443 1102 488">44</td> <td data-bbox="1102 443 1469 488">120</td> </tr> <tr> <td data-bbox="331 488 751 533">3%</td> <td data-bbox="778 488 1102 533">66</td> <td data-bbox="1102 488 1469 533">180</td> </tr> <tr> <td data-bbox="331 533 751 577">4%</td> <td data-bbox="778 533 1102 577">88</td> <td data-bbox="1102 533 1469 577">240</td> </tr> <tr> <td data-bbox="331 577 751 622">5%</td> <td data-bbox="778 577 1102 622">110</td> <td data-bbox="1102 577 1469 622">300</td> </tr> <tr> <td data-bbox="331 622 751 663">6%</td> <td data-bbox="778 622 1102 663">132</td> <td data-bbox="1102 622 1469 663">360</td> </tr> </tbody> </table>	Selected percentage	3-litre bath volume (ml)	9-litre bath volume (ml)	1%	22	60	2%	44	120	3%	66	180	4%	88	240	5%	110	300	6%	132	360	
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4%	88	240																					
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6%	132	360																					
<p>3</p>	<p>Heating The device proceeds to heating the cleaning liquid. It stops when the set temperature is reached. Note that during the ultrasonic cleaning, the cleaning liquid temperature increases.</p>																						
<p>4</p>	<p>Degassing (DEGAS) The device proceeds by intermittently activating ultrasound. This process reduces the gases dissolved in the liquid improving the effectiveness of the subsequent cleaning.</p>																						
<p>5</p>	<p>Ultrasonic cleaning Cleaning step by ultrasonic cavitation. SWEEP Ultrasound frequency is modulated by reducing the adverse effects of standing waves and increasing the distribution of ultrasonic energy in the cleaning liquid. Cleaning is more effective (cavitation is improved)</p>																						
<p>9</p>	<p>Drain In versions without drain, the bath is emptied manually.</p>	<p>In versions with drain, the bath is emptied by opening the appropriate valve VL par 06.</p>																					
	<p>Before handling the device, detergents and accessories:</p> <ul style="list-style-type: none"> - Unplug the power cord - Check the temperature of the device - danger of burns - Check the liquid detergent - corrosive liquids - Wear appropriate Personal Protective Equipment 																						

USE OF THE ACCESSORIES see Sec. A DRAWINGS

The use of glasses is suitable for the cleaning of very small objects. it is also possible to use different detergents in the two glasses.

Place the cup holders on the tub after .

Place the glasses with special seals in the correct areas so that they are immersed in the liquid for about 1/3 of their height.

Fill the tank so as to reach 2/3 of the total volume.

Fill the glasses with the detergent so as to cover the objects to be treated.

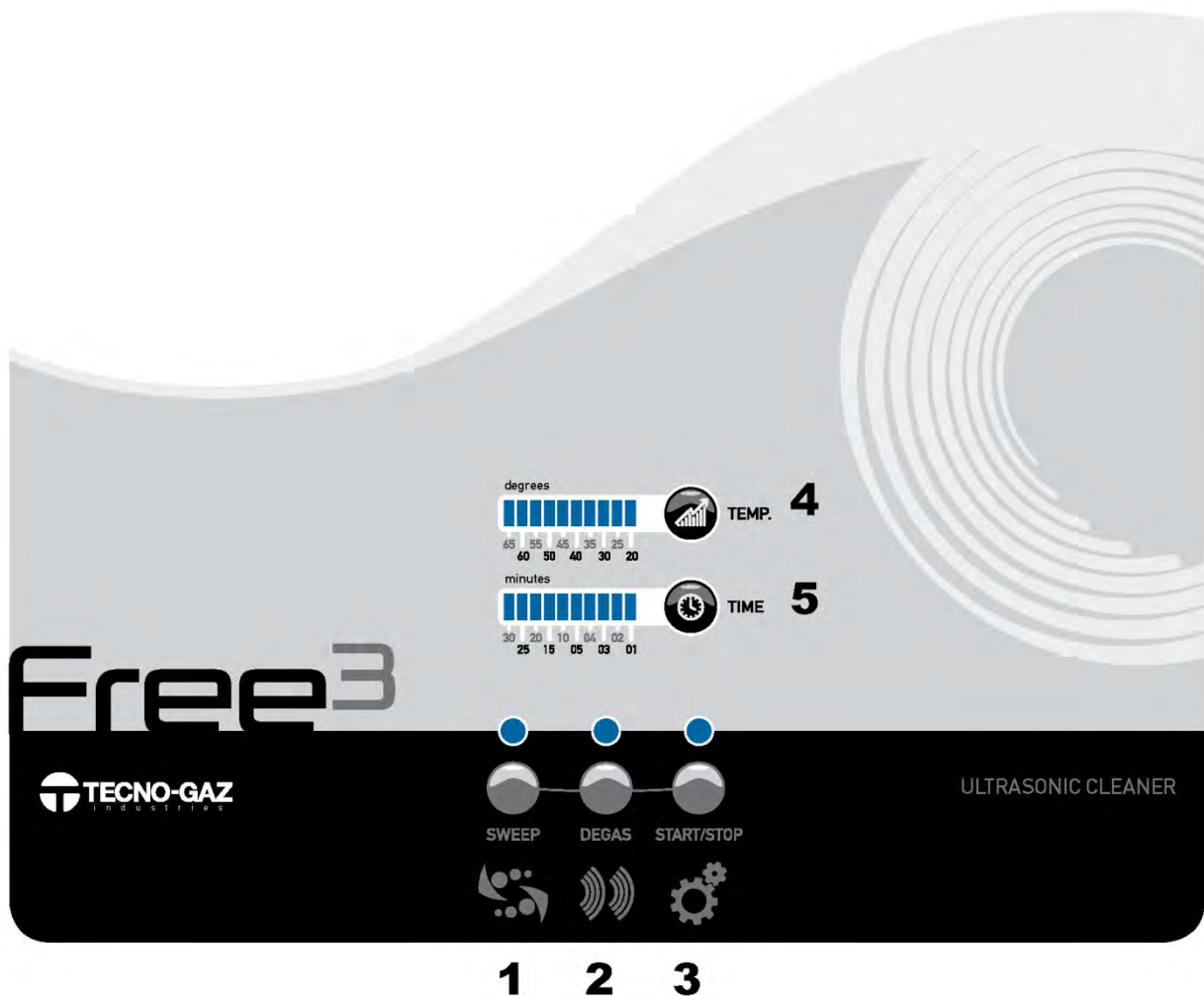
The glasses can be used with different detergents at different percentage (example: 1 Glass filled with detergent to 5%, 2 glass filled with disinfectant to 10%)

In version 3 It is not possible to use stainless steel basket.

In version 9It is possible to use stainless steel basket,put it on the opposite side of the tub.



7.1 Control panel



CYCLE START/STOP BUTTONS

1	START	START CYCLE
	STOP	STOP CYCLE

SETTING BUTTONS

2	DEGAS	ENABLE THE DEGAS FUNCTION
3	SWEEP	ENABLE THE SWEEP FUNCTION
4	TEMP.	TEMPERATURE SETTING
5	TIME	TIME SETTING



CYCLE START/STOP BUTTONS

1	START	START CYCLE
	STOP	STOP CYCLE

SETTING BUTTONS

2	DEGAS	ENABLE THE DEGAS FUNCTION
3	SWEEP	ENABLE THE SWEEP FUNCTION
5	TIME	TIME SETTING

7.4 Cycle setting

TEMPERATURE from 20 to 65°C (VERSION WITH HEATING)

To set the cleaning temperature: press the TEMP button; by doing so, the led can be scrolled through the setting BAR; stop at the desired temperature.

TIME from 1 to 30 minutes

To set the cleaning time: press the TIME button; by doing so, the led can be scrolled through the setting BAR; stop at the desired cleaning time.

DEGAS

Press the DEGAS button: if the corresponding LED lights up, the function is set

SWEEP

Press the SWEEP button: if the corresponding LED lights up, the function is set

At the end of the cleaning cycle, settings are stored and re-proposed for the next cycle.

DEGAS and SWEEP

The DEGAS and SWEEP functions can be enabled and disabled by pressing the appropriate buttons.

These functions can be set before starting a cycle or enabled during cleaning.

The duration is determined by the initial setting of the cleaning time.

The DEGAS and SWEEP functions are mutually exclusive: if DEGAS is set and SWEEP is pressed, the DEGAS function is automatically disabled while the SWEEP one is enabled.

AUTOMATIC FUNCTIONS

They are enabled by pressing and holding a specific button for longer than 6 sec.

DEGAS: By pressing and holding the corresponding button for a time ≥ 6 sec, the device automatically performs a 5-minute DEGASSING cycle; it is not necessary to press the START button. To stop, press the STOP button before the 5 minutes have elapsed.

CYCLE START ONLY IN THE VERSIONS WITH HEATING

It is possible to start a cleaning cycle automatically after the device has reached the set temperature.

PRESS AND HOLD the START button for a time ≥ 6 sec. The device starts operating; the operation LED starts flashing; the cleaning liquid starts heating up. When the set temperature is reached, the cleaning cycle will start and run for the set time.

FILLING THE BATH

Fill the bath with water (preferably distilled)

Add the detergent, suitable for the type of cleaning to be performed, in the percentage specified by the manufacturer.

LOADING

Place the items to be cleaned into the basket provided as standard, distributing them evenly on the bottom of the basket. Overlapping items reduces cleaning effectiveness.

For proper cleaning, the material to be cleaned must be completely immersed in the cleaning liquid.

Close the bath with the cover provided

SWITCHING ON THE DEVICE

The main power switch is located above the power plug.

Turn off the main power switch when the device is not used.

Move the main power switch to I (on)

Set the cycle by entering the desired parameters.

START CYCLE

Press the **START** button

The start of the cycle is displayed by the corresponding flashing LED

The device displays:

Time: a fixed LED indicates the set time, a flashing LED the time remaining to the end of the cycle.

Temperature: a fixed LED indicates the set temperature, a flashing LED the actual temperature of the cleaning liquid.

Degas: it is enabled if the corresponding led is on

Sweep: it is enabled if the corresponding led is on

END OF CYCLE

The end of the cycle is displayed by the corresponding **START / STOP** fixed led light.

Lift the cover paying careful attention to condensation.

Rotate the cover and place it close to the device.

Remove the basket and place it on top of the cover.

Proceed by rinsing the items.



Replace the cleaning solution periodically, following the instructions given by the detergent/disinfectant manufacturer. Always replace the solution when exhausted.

For effective cleaning, frequently replace the cleaning solution.

Use of ACCESSORIES

(the supplied accessories vary depending on the product purchased)

CUP HOLDER	Suitable for holding 2 glass cups
SEAL	To properly position the cup
CUPS	Suitable for cleaning small items and using detergents that cannot be added directly to the bath.
SMALL BASKET	An accessory of the 9-litre bath, it can be used along with the cups.
HOLDER CUTTER BASKET	Suitable for small items that could fall to the bottom of the bath (optional, not included)
BASKET WITH SUPPORT RACK FOR THE BOTTOM OF THE BATH	(180 mm X 28 mm H60mm) (optional, not included)
TRAY HOLDER INCLUDING 2 TRAYS	(optional, not included)

9

MAINTENANCE

9.1 CLEANING

Maintenance and **repair operations** must be carried out with the machine disconnected from the power supply and cold.



Do not immerse the device in water



Use detergents that are not aggressive toward plastics



Use detergents suitable for stainless steel

9.2 Bath cleaning

Remove any possible deposits or debris to prevent potentially obstructing materials from entering into the drain circuit.

To reduce scale formation, we recommend using distilled water.

For cleaning, common detergents can be used, provided they do not contain any Hydrochloric Acid (muriatic acid) or its compounds.

In the event of stubborn stains, try using specific products for stainless steel.

For cleaning, do not use steel wool pads or anything that could scratch or grind.

Proper maintenance of the device ensures a smooth operation of the same as well as significant time and assistance cost savings.

10**REPORTS - ERRORS****10.2 Errors**

In case of an error report, you need to reset the device in order to start a new cycle. Errors are signaled by the **simultaneous flashing of the DEGAS and SWEEP leds**

The type of error is reported on the time LED bar:

All errors are reset by pushing any button for 5"

Display	Causes	Solutions
1M LED	Mains failure during the cycle	Reset and restart the cycle if necessary
4M LED	Temperature probe (open)	Contact support to replace the probe
5M LED	Temperature probe not working (short circuit)	Contact support to replace the probe

10.4 General problems

Problems	Possible causes	Solution
Poor cleaning	- Presence of non-pretreated elements (cement, alginates)	- Pre-treat with suitable detergents.
	- Incorrect cycle settings	- Change parameters, increasing cleaning time.
	- No noise from ultrasound can be heard during the cleaning phase	- Please contact technical support
Some instruments become damaged	- Instruments unsuitable for ultrasonic cleaning (e.g. mirrors)	- Do not sanitize unsuitable instruments by ultrasonic cleaning

11 PROCEDURES FOR SERVICE AND ASSISTANCE

In case of failure or revision, please contact **MEDILINE ITALIA s.r.l.** helpline

PHONE	+39 0522 94.29.96
FAX	+39 0522 94.47.98
@	service@tecnogaz.com

The Service Department will evaluate whether the machine must be returned to the manufacturer or the intervention of a technician is required and, after inspecting the machine, an estimate will be drawn up and forwarded to the distributor, who will then transmit it to the end customer for acknowledgement and signature.

After receiving the estimate signed for acceptance, the device will be processed and shipped within the time indicated in the estimate.

The following steps are mandatory if the machine must be shipped to the company:

- Use the original packaging box. If you no longer have it, use adequate packaging. Transport risks are borne by the sender.
- Ship only the device (do not add any component contained in the accessory kit).
- Thoroughly clean the bath, before shipping it. Should it come dirty, you will be charged for the cost of cleaning and disinfection.
- Specify the anomaly in writing, placing a document clearly indicating the anomaly noted or the service you are requesting inside the package.
- Always send with carriage paid, otherwise you will be charged for the transport costs incurred.

All non-original packaging that we receive will be disposed of.

The device will be returned in its original packaging box (you will be charged for the packaging cost) through your shipping agent.

A

DRAWINGS

