

Operating instructions



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1. Conventional Use

The equipment may only be used for the purpose set in the catalogue and in the technical descriptions which means for ultrasonic cleaning as described in this instruction manual, and only in combination with external devices and components which are recommended or approved by EMAG AG. Any other use of the equipment is considered to be non-conventional.

In case of non-conventional use, EMAG AG will not be liable for possible damages and will not warrant the correct and functional work of the components. Part of the conventional use is also the observance of all information given in the operating manual. To this, attention is drawn by the  sign on the type plate. The correct and safe operation of the equipment implies appropriate transportation, storage, installation and assembly as well as careful handling and maintenance.

2. Non-conventional use

In case of non-conventional use of the equipment, danger for life and limb as well as danger for property may occur. Therefore a non-conventional use is prohibited. In case of non-conventional use, EMAG AG will not be liable for possible damages and will not warrant the correct and functional work of the components. In order to avoid non-conventional use of the ultrasound cleaning equipment, the following directions are to be considered:

- The equipment may only be operated with the voltage printed on the type plate on the back- side/ bottom side of the housing (shockproof socket).
- No flammable or aggressive chemicals (i.e. acids etc.) must be used for operation of the equipment. If necessary, use glass container EM 50 DG.
- Do not touch the liquid during operation
- In case of transportation damage, don't connect the equipment with main source.
- Do not clean creatures (i.e. finger nails, animals etc.) in the equipment.
- The equipment must only be operated with the correct level of water (water till mark, approx. 1 cm below upper brim). This must be controlled if equipment is operated for a long time.
- Strongly contaminated goods shall be positioned in the equipment with the contaminated side to the bottom – do not staple goods.
- The goods to be cleaned must not be positioned directly onto the bottom of the tub – use the basket.
- If the equipment is operated for a long time, do not stay longer than 4 hours within 1 m distance to the equipment.
- The equipment must only be operated indoor and within a dry environment.
- It is normal, that the upper brims warms up with long operation.
- Before emptying the tub, the power connector must be disconnected from the main source.
- An improper usage (heating without ultrasound) leads to a discoloration of the inner tank.

Important: The water can be strongly heated by the formation of ultrasounds.

3. Operating instructions

Check the specification table for the correct operating requirements (located on the rear of the unit).

Startup

Before connecting power, put the unit on a stable and flat working surface. Add water to tank, suitable to completely immerse the items to be cleaned.

Connect the power cable on the rear of the unit and ensure the wall supply is switched “ON”. Touch “ON/OFF” button on the front panel to turn on the machine. You are now ready to set the timer and temperature. Put the items to be cleaned in the basket. Switch on Ultrasonic with “ON/ OFF” button.

Setting the Temperature (optional at D-Series and H-Series)

When power is on, the LED lamp of the actual fluid temperature display flashes and displays fluid's actual temperature. To set it, rotate heating knob. In order to heat the cleaning fluid during cleaning, rotate the heating switch clockwise, then it will enter into the heating state.

The heating temperature can be selected and set freely according to the indication at the edge of the rotary switch on the panel. Once the green heating working indicator lamp is on, the heating band PTC will also start working and heating the fluid. When the temperature reaches the set temperature, the green heating working indicator lamp will go off and the heating band PTC will stop working. When the fluid temperature is lower than the set temperature, the heating band PTC will also start working and heating the fluid. Then, the temperature of the fluid will be automatically controlled at the set temperature.

To stop heating, please rotate heating switch back to the "OFF" position anticlockwise.

Important: Heating function is not restricted by the ultrasonic cleaning timing but can work for a long time (however, it is necessary to make sure there is enough water inside the slot).

Setting the timer

When power is on, rotate timing knob to set time. Once "ON/OFF" button is pressed, the ultrasonic cleaning function will start immediately. Then the LED window lamp will flash and display the remaining time. When cleaning time is due, ultrasonic will stop and LED remaining time display window will flash and resume to flash in the position before setting. At this moment, as long as "ON/OFF" button is pressed, cleaning will start again. This is the so-called "memory function". It is convenient to use.

Ultrasonic function

After pressing "ON/OFF" button each time, the machine will initiate and stop Ultrasonic function. Press the button again to operate continuously after observing the cleaning effect.

Degassing function (optional at D-Series)

At the normal working state, once degas button is pressed, the machine will start degassing function and degas button indicator lamp will be on. Once degas button is pressed again, degassing function will stop and degassing Button indicator lamp will be off.

Sweep function (optional at D-Series)

At the normal working state, sweep function will start and sweep button indicator lamp will be on once sweep button is pressed. If sweep button is pressed again, the machine will stop sweep function and sweep button indicator lamp will be off.

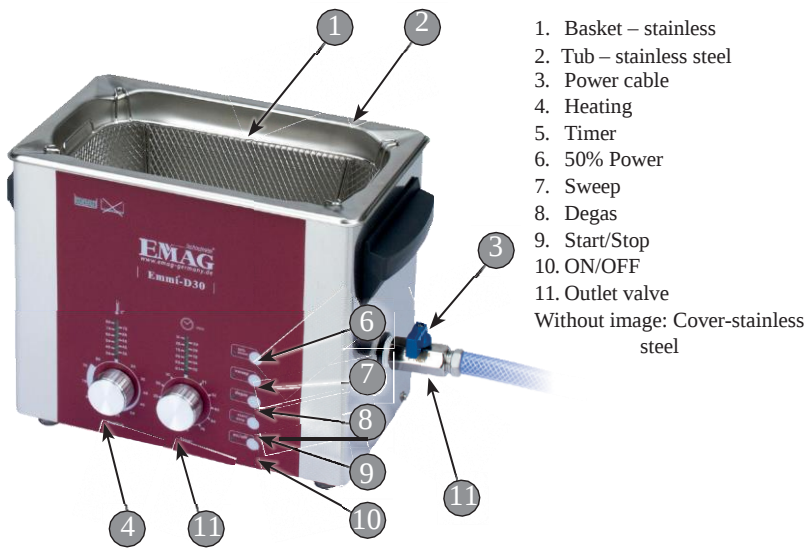
Important: Sweep and degassing function do not work at once!

Emptying the tank

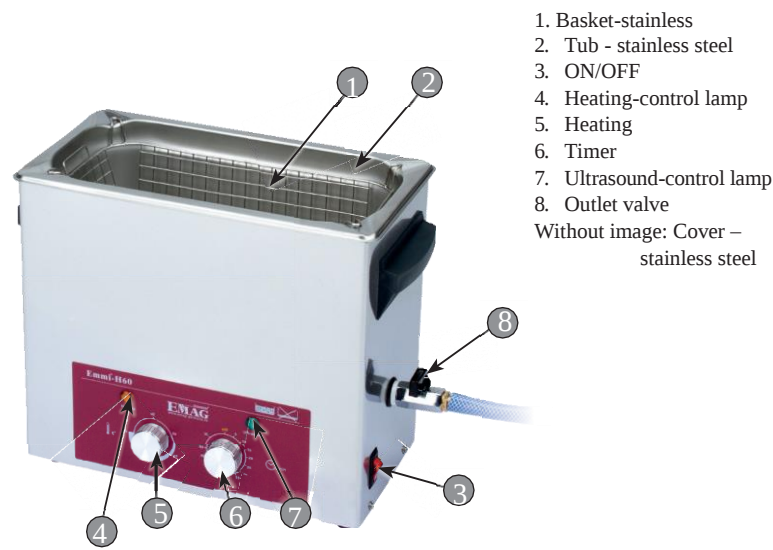
Remove waste liquids to empty the tank when there is no more need to use it. Some models feature a drain tap located on the side of the unit; using it can make the removal of the waste liquids effortless and safe. Always ensure the drain tap is "Closed" when filling the tank with water.

4. Description: D & H Series

D SERIES: ZCC005, ZCC006, ZCC007



H SERIES: ZCC008, ZCC009, ZCC010, ZCC011



5. Technical Data: D & H Series

D Series	External dimensions L x W x H (mm)	Internal dimensions L x W x H (mm)	Content (liters)	Ultrasound power (watt)	Heating power (watt)	Generator (watt)	Outlet valve
ZCC005	265 x 165 x 225	240 x 140 x 100	2,7	240	150	3 x 80	si
ZCC006	330 x 175 x 290	300 x 150 x 150	6,0	320	250	4 x 80	si
ZCC007	330 x 270 x 355	300 x 240 x 200	13,0	400	400	5 x 80	si

Technical changes reserved

H Series	External dimensions L x W x H (mm)	Internal dimensions L x W x H (mm)	Content (liters)	Ultrasound power (watt)	Heating power (watt)	Generator (watt)	Outlet valve
ZCC008	200 x 110 x 160	180 x 90 x 50	0,8	60	120	1 x 60	no
ZCC009	265 x 165 x 225	240 x 140 x 100	2,7	180	150	3 x 60	si
ZCC010	330 x 175 x 290	300 x 150 x 150	6,0	240	260	4 x 60	si
ZCC011	600 x 165 x 355	500 x 135 x 150	9,0	300	370	5 x 60	si

Reservados cambios técnicos

6. Examples of cleaning of goods with ultrasounds

- Eyeglasses, glass frames (please pay attention: Glasses must not be in direct contact with the tub bottom).
- Gold and silver jewels, jewelry, emeralds, pearls
- Ink crayons, drawing instruments / -accessories
- Dentures
- Aircraft components, engine components, electrical boards, ink cartridges, motor bike chains, tools, carburetors, etc.
- Precision parts, weapon parts, i.e. magazines bullet casings, strikers, springs.



7. Concentrates for disoxidation

Various cleaning concentrates are available for cleaning operations which can make cleaning more efficient. These are available at the place where you have bought your equipment or through www.emag-germany.de. EMAG recommends the following high efficient concentrates for the various requirements:



EM 070 for dental application and cleaning of dentures at home. Application: 1%.

EM 080 Eyeglasses, jewelry, optical glasses, ink crayons smaller tools and instruments such as small precision parts, shaver heads. Application: 1% (except for contact lenses).

EM 100 Concentrate for disoxidation of silver etc. Application: neat.

EM 200 Concentrate for disinfection of instruments. Application: 1%.

EM 300 Super plus – extreme cleaner for difficult cases (supports, hinges, weapon parts, bullets, brass etc.). Application: 1%.

EM 303 PC Board cleaning. Application: 5-10%.

EM 404 Aluminum and diecast cleaning (carburetors, engine blocks, cylinder heads). Application: 3-5%.

EM 600 Special cleaning (glass, rubber, ceramic, plastic, metal). Application: 1-10%.

EM 700 Non-ferrous metal cleaner (bullet casings, PC boards from maintenance, jewelry, clock parts). Application: 5%.

If concentrates are used, application instructions must be followed very correctly!

If cleaning concentrates of other manufacturers are used, we will not be liable for any problems occurring with the goods to be cleaned and any damages which may happen to the equipment. For detailed information you can contact us at any time.

8. Warranty

This product is warranted against defects in manufacturing or materials for a period of two year from the date of purchase. Defects may be corrected by repair, or by replacement of the unit, at the option of the manufacturer.

This warranty may be voided if the unit is not operated in accordance with the instructions provided by the manufacturer. The warranty may also be voided by the opening of the unit, and/or its partial or total assembly, without prior factory authorization.

Any claim made under this clause shall be directed to the seller, and shall be verified by proof of purchase. The seller will advise the buyer concerning disposition of the unit. The normal procedure shall be for the manufacturer to issue a warranty claim number, and to authorize return of the unit to the factory. Buyer shall bear shipping costs.