



Ultrasonic baths

JM-No. 665 00 90

JM-No. 665 00 91



Thank you for choosing a JMP ultrasonic bath.

Please read the operating manual through thoroughly before using the bath and keep the instructions in a safe place for future reference.

The baths, accessories and cleaning agents must only be used in accordance with the operating manuals/product information.

Please keep the baths and cleaning agents out of the reach of children and people not instructed in their proper use by means of this manual at all times.

JM-Products does not accept any liability for safety or the proper functioning of the devices if they are employed incorrectly. Unauthorised modifications/conversions void the CE conformity and all warranty claims.

Technical data:

JM no. of model:	665 00 90	665 00 91
Oscillating tank volume:	10 litres	30 litres
Oscillating tank dimensions (L x B x H):	300x240x150 mm	500x300x200 mm
External dimensions of bath (L x B x H):	325x265x280 mm	530x325x325 mm
Ultrasonic power:	200 W	500 W
Ultrasonic frequency:	40 KHz	40 KHz
Heating power 20-80°C:	450 W	600 W
Timer:	0-30 min.	0-30 min.
Oscillating tank material:	Stainless steel	Stainless steel
Rated voltage:	230 V approx. 50/60 Hz	230 V approx. 50/60 Hz

1. General safety and operating instructions

- Do not place any parts of the body or living organisms in the bath. Do not touch the cleaning fluid, especially during ultrasonic cleaning.
- Do not allow the cleaning fluid to come into contact with the eyes or skin.
- Do not ingest or inhale the cleaning fluid.
- Never operate the bath without fluid!
- Do not clean anything contaminated with aggressive substances such as acids, chloride ions, etc., in the bath.
- Only fill the bath with correspondingly labelled ultrasonic cleaning agents and water. Do not use flammable liquids under any circumstances!
- Please only use aggressive cleaning fluids (acids, salt solutions) in beaker inserts.
- After removing the packaging, check the housing and control elements for damage incurred during transport. In case of damage, do not use the bath. Instead, notify the company who delivered the bath and the supplier immediately in writing. Please keep the original packaging safe.
- Only operate the ultrasonic bath in a horizontal position on a solid, dry surface.
- Only connect the bath up to a properly earthed socket.
- Keep the surface of the bath and the control elements clean and dry.
- Defective parts must only be replaced with original JMP parts.
- During preheating, the fluid must be stirred or the ultrasound function activated at least every 15 minutes.
- Cavitation noises are produced during ultrasonic cleaning. Operators should wear hearing protection as a health and safety precaution if working within 5 metres of the ultrasonic bath for extended periods of time.
- Objects should always be cleaned in the appropriate accessories (e.g., basket).
- The cleaning fluid will heat up during periods of extended operation. Please bear this in mind when cleaning temperature-sensitive components.
- Only transport the bath empty.

“Electronic brushing” – How does ultrasonic cleaning work?

There are a number of PZT ultrasonic transducers on the bottom of the oscillating tank which convert electrical energy into mechanical oscillations. These oscillations spread out through the cleaning fluid, forming minute vacuum bubbles, which subsequently implode.

This principle is known as cavitation and removes contaminants from deep in the pores on the surfaces of the materials.

2. Start-up

Check that the drain is connected properly.

Fill the bath at least 2/3 with water and an appropriate concentrated cleaning agent.

Connect the bath up to the power supply. Never switch the bath on without any fluid in it.

a.) Degassing

Please make sure that you always use a basket insert to protect the bath.

Ensure that the objects to be cleaned are completely immersed in the fluid.

The more heavily soiled side should always face the bottom of the tank.

Do not stack the items, as the ultrasound is absorbed.

Very sensitive items should not be in contact with each other so as to avoid damage.

Avoid leaving air trapped in cavities.

b.) Cleaning

Please make sure that you always use a basket insert to protect the bath.

Ensure that the objects to be cleaned are completely immersed in the fluid.

The more heavily soiled side should always face the bottom of the tank.

Do not stack the items, as the ultrasound is absorbed.

Very sensitive items should not be in contact with each other so as to avoid damage.

Avoid leaving air trapped in cavities.

c.) Ultrasonic programme

Depending on the cleaning fluid used and actual soiling of the items to be cleaned, the cleaning should take between 1 and 20 minutes. Please pay attention to the cleaning agent manufacturer's specifications.

Please use the corresponding buttons on the right-hand side of the control panel to switch on the ultrasound function. The ultrasonic cleaning is performed automatically for the period of time shown on the display.

d.) Heating programme

The cleaning fluid can be heated with the aim of improving the cleaning performance up to a certain point. However, the cavitation performance declines again at temperatures which are too high. The recommended tank temperature is between 50°C and 60°C.

Please use the corresponding buttons on the left-hand side of the control panel to switch on the heating function. In addition, you can also read the actual and set temperature on the display.

e.) Following the cleaning

To drain the tank following cleaning, switch the bath off and unplug it from the mains power. Then open the ball valve and drain off the used cleaning fluid.

f.) The cleaning fluid

To achieve the best results, the cleaning fluid should always be comprised of a large proportion of water in combination with the corresponding concentrated ultrasonic cleaning agent.

Please always pay attention to the dosing and safety information provided with the concentrated cleaning agent used. Always replace the used cleaning fluid with a fresh batch and do not attempt to refresh the solution by adding more agent.

Never heat the cleaning fluid to above 90°C.

Do not use deionised or distilled water in the oscillating tank.

g.) Cleaning of the bath

Repeated use of the bath can result in contaminants being deposited on the walls of the tank, for example. These affect the cleaning result and should be removed periodically.

Disconnect the bath from the mains power and empty the oscillating tank. Wipe and rinse the tank out thoroughly. Do not use tools for scratching or scraping and especially no wire wool.

In case of heavy soiling, use a care product for stainless steel without abrasive additives.