This manual must be read before using the device!

Hettich ESP: Oil – heating bath

• User’s Guide

• Technical documentation

• Drawings
This manual must be read before using the device!

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Introduction

Congratulations on your purchase. In choosing this appliance you have opted for all the benefits of state-of-the-art climate technology, guaranteeing you top quality, a long life span and excellent reliability. The features on your appliance have been designed to ensure maximum convenience – day in, day out. This appliance has been manufactured with recyclable materials using an environmentally friendly process, so together you and we are making an active contribution to the preservation of our environment. To get to know all the benefits of your new appliance, please read the information contained in these operating instructions carefully. If there are questions don’t hesitate to contact us.

Hettich Benelux, department Service & Installation ☎ +0031 88-221 99 00

Application

Intended Purpose

The Hettich ESP Oil Heating baths are meant to be used for the IDB HHHS Test Method for scientific and research purposes.

Warning!
This device is explicitly not meant for purpose of generating drugs other than for medical and research purposes.

Construction

The double-walled stainless steel bath consists of a 2 mm thick inner-bath of stainless steel 304 (argon welded), which is assembled in a stainless steel polished outer bath. Between the inner and outer bath there is insulation.

Temperature control

The bath is provided with a proportional digital electronic temperature controller. The temperature is adjustable till 150 °C.

Dimensions

The inside dimensions of the bath are 400 x 425 x 300 mm (W x L x H)
The outside dimensions of the bath are 510 x 810 x 500 mm (W x L x H)

Interior

A removable swinging little rack can be mounted in the construction, driven by a motor unit with delay, so that the speed will be ± 8 swings in one minute. The swing of this rack is ± 25 degrees forward and 25 degrees backward. There is a space for 15 glass tubes on the rack, which are being held by means of a clamp-system.
This manual must be read before using the device!

**Safety instructions and warnings**

- To prevent injury or damage to the unit, the appliance should only be transported wrapped and set up by two people.
- In the event that the appliance is damaged, contact Hettich Benelux immediately before connecting to the mains.
- To guarantee safe operation, ensure that the appliance is set up and connected as described in these operation instructions.
- Disconnect the appliance from the mains if any faults occur. Pull out the plug (not by pulling the cable) or switch off or remove the fuse.
- Any repairs and work on the appliance should only be carried out by Hettich Benelux service department, as unauthorized work could prove highly dangerous for the user. The same applies to changing the mains power cable.

**Hot surface temperatures!** The oil – heating bath is getting hot on the outside. Before using the oil – heating bath please take care of the necessary safety-measures so that it is not possible to touch the oil – heating bath during the operation.

**Safety during use**

- Do not store explosives or sprays using combustible propellants such as butane, propane, pentane, etc. in the appliance. Electrical components might cause leaking gas to ignite. You can identify such sprays by the printed contents or a flame symbol.
- Do not allow naked flames or ignition sources to enter the appliance.
- Do not use electrical appliance inside the appliance (e.g. steam cleaners, heaters, ice makers, etc.)

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge unless they have been given initial supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

**Ambient temperature**

- The appliance is set to operate within ambient temperature limits according to its climate rating. These temperature limits should not be exceeded.
- For this model, The limit ambient temperature is: +15°C to +25 °C
This manual must be read before using the device!

Installation

- Avoid position in damp locations or near to spraying water.
- Place the unit on a stable table, and be sure the unit is exactly level.
- Once in position, use the spanner provided to adjust the feet so that the appliance is level and does not wobble.
- The ventilation grilles should not be obstructed. Always ensure that there is good ventilation and that the outward flowing air is able to escape.
- Remove all transportation safety components.

Connecting to the mains

- Check the power supply on the label on the backside of the unit and if this is the same as the current supply, connect the mains cord to the socket.
- Connect the appliance with a properly earthed fused plug and socket only.
- The socket must be fused with a 16A fuse or higher, it must be away from rear of the appliance and must be easy accessible.
- Connect the drain.

Do not connect to the supply with other equipment using an extension cable (risk of overheating).

Drain

The Oil-heating bath is equipped with a drain. The oil-heating bath must be connected to a drain system. Ignoring this instruction might lead to damaging the building and/or equipment.
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**Operation instructions**

**Fill the bath with oil/water**
Switch on the bath by means of the main switch. (POWER)
Adjust the digital controller to the requested temperature (see appendix enclosure).
Do not change any of the parameters and / or configuration settings of the controller.

**Adjust the set point:**

- Increase the setpoint
- Decrease the setpoint

Adjust the safety, approximately 10 °C higher than the requested temperature on the digital temperature controller. When the safety switches on, because of the real temperature exceeding the set temperature, the bath is switched off. Reset by pressing the red button.

**Safety 10°C higher than the requested temperature.**

**Reset button**
This manual must be read before using the device!

Switch on the shaker with the switch (motor) and adjust its speed with the speed selection.

Switch on the lamp with the switch (lamp).

Cleaning/ maintenance

Caution! Before cleaning, always switch off the appliance. Disconnect from the mains or unscrew or switch off the fuse.

- Clean the outer walls, inside and equipment by hand with lukewarm water and a little detergent. Because of the risk of injury and damage to the appliance, steam cleaning equipment should not be used.
- We recommend using soft cloth and an all-purpose cleaner with a neutral pH value. Only use food compatible cleaning and care agents on the inside of the appliance.
- Do not use abrasive sponges or scourers, do not use concentrated cleaning agents and never use cleaning agents containing sand, chloride or acid or chemical solvents, as these would damage the surfaces and could cause corrosion.
- Ensure that no cleaning water penetrates into the ventilation grilles or any electrical components.
- Wipe the appliance dry.
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Troubleshooting

Self support

Your appliance is designed and manufactured for a long life span and reliable operation. If the malfunction nonetheless occurs during operation, check whether it is due to an operation error. Please note that even during the warranty period the resultant servicing costs in this case will have to be borne by the owner. You may be able to rectify the following faults by checking the possible causes yourself:

<table>
<thead>
<tr>
<th>Malfunction</th>
<th>Possible cause and remedy</th>
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| Appliance does not work, display is off. | • Is the appliance switched on properly?  
| | • Is the mains plug properly inserted in the socket?  
| | • Is the socket fuse intact?  
| | • Did the safety come into force? |
| The light does not come on. | • Is the appliance switched on?  
| | • The bulb/ tubes are defective. |
| Loud running noise. | • Is the appliance standing firmly on the floor?  
| | • Burbling noises are normal. These will be heard whenever the motor, lightning, or other components switches on automatically. |
| The temperature and is not correct. | • Is the temperature/ humidity setting correct? |

Customer service and type plate

If none of the above causes apply and toy cannot rectify the fault yourself. Please contact:

Hettich Benelux B.V., Department Service & Installation ☎ 088-221 99 00

Hettich Benelux has a comprehensive, knowledgeable staff of technical service able to assist you with maintenance and repair of your equipment. Engineers with fully equipped service vehicles are available to help you on site also with supportive proceedings.

Whenever you contact Hettich Benelux B.V. please quote the details from the type identification plate e.g. Type/model and serial number.

Should you wish to inactivate the device for a longer period of time then switch it of, disconnect from the power supply and/or remove the mains group fuse. Clean the oil-bath inside and leave the lid open to prevent the occurrence of odors.
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General information

The manufacturer is continuously working on further development of variations of types and models. Please understand that we reserve the right to modify shape, version and technology.

Included technical documentation

Temperature scan
Parts list
Electrical diagram

Recycling

Contact your local recycling organization and act according to local law.

To dispose this product

If you want to dispose this product, do not mix it with general household waste. There is a separate collection system for used electronic and refrigerant products in accordance with legislation that required proper treatment, recovery and recycling.

Disposal notes

The packaging is made of recyclable materials.
- Corrugated board
- Polythene sheets
- EPS moulded parts
- Polypropylene straps

Keep packaging materials away from children. Polythene sheets and bags can cause suffocation!

Please return the packaging to an official collection point. Discarded appliance should be disabled: Remove the plug, cut through the connection cable and render the catch unusable so that children cannot become trapped inside.