



# Boekel Round Tissue Bath

**Models  
14792 and 14792-2**

## Operating Instructions

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# 1. Safety

**The following symbols marked on the equipment mean:**



Caution: Read these operating instructions fully before use and pay particular attention to sections containing this symbol.

Attention: Suivre attentivement les instructions avant l'usage et prêtez une attention particulière aux sections comportant ce symbole.



Caution: Surfaces can become hot during use.

Attention: Les surfaces peuvent devenir brûlantes pendant l'usage.

**Always observe the following safety precautions:**

- Use only as specified by the operating instructions or the intrinsic protection may be impaired. After transport or storage in humid conditions, dry out the unit before connecting it to the supply voltage. During drying out the intrinsic protection may be impaired.
- Connect only to a power supply with a voltage corresponding to that on the serial number label.
- Connect only to a power supply that provides a safety ground terminal.
- Before moving, disconnect at the power supply socket.
- To reduce the risk of eye injury during high temperature operation, use safety goggles or spectacles.
- Do not touch surfaces that become hot during high temperature operation.
- Ensure that the operating temperature is less than the maximum operating temperature of your sample material.
- Ensure that the power switch is easily accessible during use.
- If liquid is spilled inside the unit, disconnect it from the power supply and have it checked by a competent person.
- It is the user's responsibility to carry out appropriate decontamination if hazardous material is spilled on or inside the equipment.
- The Power Cord supplied with the unit is the disconnect means.

## 2. Product Information

The Boekel Round Tissue Bath is designed as an economical and efficient tissue floatation bath for use in mounting tissue specimens to glass slides.

The Round Tissue Bath has an 8.5" (21.6cm) diameter by 2" (5cm) deep-water chamber with a 1.25" (3.2cm) wide rim for slide warming and drying. The Tissue Bath has a water temperature range of ambient + 10°C to 65°C under normal operating conditions.

## 3. Assembly

### 3.1 Unpacking

Remove packing materials carefully, and retain for future shipment or storage of the unit. Inspect for damage. Report all shipping damage to the carrier immediately. Shipping damage is covered by the carrier and repair/replacement for shipping damages must be coordinated through the carrier. Complete and return the Warranty Registration Card. Packs should contain:

- Round Tissue Bath
- Operating Instructions
- Bath Cover
- Thermometer Holder

### 3.2 Installation

Place the Round Tissue Bath on a flat and stable surface, preferably away from drafts. Plug power cord into a power supply that matches the voltage listed on the serial number label on the rear of the unit.

## 4. Operation

### 4.1 Controls and Indicator Lamp

The Power Switch controls power to the unit.

The heater lamp is on continuously while the bath is heating up. As the required temperature is approached, it starts to flash. When the bath is controlling at the set temperature, the heater lamp flashes intermittently.

### 4.2 Setting the Temperature

To increase bath temperature, rotate the thermostat knob in the clockwise direction. To decrease bath temperature, rotate the thermostat knob in the counterclockwise direction. Allow about 60 minutes for the bath to equilibrate from a cold start. A thermometer may be used to check exact bath temperature. Allow 5 to 10 minutes for the bath to re-equilibrate when adjusting the bath temperature from a previous set point. If the bath is to be operated at the same temperature in the future, the thermostat setting should not be disturbed. Just turn the bath off using the On/Off switch.

## 4.2 Filling the Bath

Fill the bath with water. Always keep at least 3/4" (1.9cm) of water in the bath. Do not let the bath run dry as heater damage may result.

## 5. Fault Diagnosis

<b>Symptom</b>	<b>Possible Cause</b>	<b>Action Required</b>
1. Unit does not operate	a. Unit not switched on b. Unit not plugged into power supply c. Fuses blown d. Power supply failure	a. Switch on b. Plug in, switch on c. Replace fuses per 8.2 d. Check that other electrical appliances on the same circuit are working
2. Chamber temperature does not rise when expected	a. Actual temperature is higher than set temperature b. Temperature control circuit fault	a. Check set temperature b. Have unit checked by competent person
3. Temperature continues to rise when not expected	a. Actual temperature is lower than set temperature b. Temperature control circuit fault	a. Check set temperature b. Have unit checked by competent person

## 7. Technical Specifications

This equipment is intended for indoor use and will meet its performance figures within the ambient temperature range of 10°C to 35°C, with maximum relative humidity of 80% (non-condensing). Installation Category II (transient voltages). Pollution Degree 2 in accordance with IEC 664. Suitable for operation at altitudes of up to 6500 feet.

### Specifications:

Temperature Range:	(Ambient +10°C) to 65°C
Setting Range:	Ambient to approximately 70°C
Supply Voltage Range:	115V +/- 10%, 50/60 Hz 230V +/- 10%, 50/60 Hz
Power Rating:	Model 14792: 190W Model 14792-2: 190W
Heating Rate:	Ambient to 65°C within 60 minutes

## 8. Maintenance and Service

All Boekel laboratory products are designed to comply with IEC1010-1. No routine maintenance is required.

### 8.1 Cleaning

Disengage power cord prior to cleaning. The outer casing may be cleaned with water and a damp cloth. Do not submerge or immerse the Round Tissue Bath in water. Before using any cleaning or decontamination method except those recommended by the manufacturer, users should check that the proposed method would not damage the equipment.

### 8.2 Replacement of Fuses

There are two supply fuses located inside the Round Tissue Bath. Fuse replacement must be done only by a qualified service person.

- Disconnect the unit from the power supply.
- Remove the screws from the bottom of the unit and lift the pan out of the body.
- Check and replace with the correct fuses if necessary. The fuses must be ¼” X 1 ¼” quick acting, rated 250V. Replacement fuses are available from Boekel.

Model 14792:	-2AF	(Boekel part number 902-0068)
Model 14792-2-2:	-1AF	(Boekel part number 902-0101)
- Carefully replace the pan into the body. Make sure that no wires are pinched when inserting the pan into the body.
- Replace the screws in the bottom of the unit.
- Reconnect unit to the power supply.

## 9. Warranty

When used in laboratory conditions and according to these operating instructions, Boekel warrants this product to be free of defective material and workmanship for a period of two years from the date of manufacture. The liability of Boekel for any defective equipment during the warranty period shall be limited to the repair of such equipment or replacement thereof without charge for parts or labor.

## 10. Service

A Returned Goods Authorization (RGA) number must be obtained before any Boekel products are returned for any reason. A Decontamination Notice must be completed, signed by the user, and returned to Boekel Scientific prior to receiving the RGA number. Please be sure to mark the outside of the return goods package with this RGA number to ensure prompt handling.

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