MOPEC USER MANUAL

ROUND TISSUE FLOTATION BATH - BK100

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ROUND TISSUE FLOTATION BATH

BK100

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INTRODUCTION

Mopec's Round Tissue Flotation Bath is designed with a deep center bowl so slides can be fully submerged at a convenient angle. It features an anti-microbial coating to protect the system from bacterial and viral growth as well as a rapid heating system to reduce waiting time. The system features an optional lid to cover the bowl when not in use. The lid not only improves temperature control, but also prevents particles from settling on the surface of the water.

GENERAL NOTES

1. This product is designed for laboratory use only. Always follow good laboratory practice.
2. If this product is not used in accordance with these instructions then basic safety protection may be affected.
3. The main supply cord fitted to this product is heat resistant and should be replaced with an equivalent type.
4. Before using any cleaning or decontamination method please refer to the Maintenance and Cleaning section to ensure the proposed method will not damage the unit.
5. Connect only to a power supply with the corresponding voltage to that specified on the rating label positioned on the rear of the unit.
6. Ensure that the power supply has a ground terminal.

SPECIMEN SAFETY

It is the users responsibility, to ensure that the temperature set on the instrument, is at a level where no damage is caused to diagnostic specimens used with the equipment. In the event of this instrument malfunctioning, all specimens within the device should be checked to ensure no harm or damage to the specimen has been caused.

Amendments:

Issue 4: June 2018

Symbols:

This symbol appears in documents and on equipment to warn the user that there are hot surfaces on the equipment.

This symbol appears in documents and on equipment to warn the user that instructions must be followed to ensure correct or safe operation.

USER SAFETY

The equipment you have purchased complies with the European Directives EMC Directive and Low Voltage Directive as indicated in the EC Declaration of Conformity included in the document.This instrument has been designed and constructed in a manner which minimizes the

risk of electrical shock to the operator, offers maximum protection from overheating and provides clear and adequate labeling of instrument controls.

The instrument requires no regular servicing, but Mopec does recommend an annual inspection, as detailed in the manual which will prolong the life of the instrument to ensure continued safety.

Do not touch any electrical contacts or open any closure plates. RISK OF ELECTRIC SHOCK!

DO NOT:

1. Use for heating organic or corrosive fluids.
2. Operate without water in the bowl.
3. Use metal instruments or scouring agents to clean the bowl.
4. Over or under-fill the section bath. The recommended water level to be within 25mm of the bottom of the bowl and 10mm from the top of the bowl.
5. Pour water away from the control panel.
6. Do not immerse in water.

POWER LEAD & CONNECTION TO ELECTRICAL SUPPLY

Check the electrical supply is compatible with the rating label. IF IN DOUBT CONSULT AND ELECTRICIAN. THE PRODUCT MUST BE EARTHED!
Where the mains supply or plug connection differs refer to local regulations or consult an electrician.
On first use, ensure the voltage selected is compatible with local supply!

SPECIFICATION

The tissue section bath features a matt black circular tank, with a working depth to suit and a generous inclined surface to dry slides against the contrasting black finish. The bath holds water at a constant temperature to flatten wax or resin sections be- fore lifting onto slides. Microscope slides can then be left to dry on the 60mm (2.4”) tank rim. During the drying process any residues that run over the side of the bath will not enter the unit since the tank overlaps the body, the only joint, and the body and underside are formed complete. Featuring thermostatic control to control liquid temperature, over temperature cut out and miniature circuit breakers for safety.

Dimensions: Diameter 325mm x Height 120mm
Bowl: Diameter 220mm x Height 60mm

Bowl Capacity: 1.5L
Weight: 3.5Kgs

Temperature range: ambient +/-5℃ to 70℃ (+/-0.5℃) at 45℃
Digital display: graduated in 5℃ divisions
Safety: Class 1 cut out
Heater power: 400 watts
Power Supply: 110/230V, 50-60Hz

LOCATION

The product must be placed on a smooth, level and sturdy work surface. Suitable for use in ambient temperatures 5°C to 40°C with a maximum humidity 80% (tempera- ture 31℃) decreasing to 50% (temperature 40℃).

OPERATING INSTRUCTIONS

1. Fill the bowl of the Round Tissue Flotation Bath with distilled water. The recommended water level to be within 25mm of the bottom of the bowl and 10mm from the top of the bowl.

Do not allow the bath to run dry.

2. Connect the mains plug to the electrical supply and switch on the socket. (Ensure the power supply is properly earthed).
3. Turn on the tissue section bath by pressing the green ON/OFF button at the front of the unit.This button will be back lit if power is being supplied to the instrument.
4. Adjust the black knob to select the desired temperature.
5. Heater indicator will illuminate to show heater activity, and that power is being supplied to the instrument.
6. Allow the water temperature to stabilise in the bath.The instrument is designed to warm up and reach working temperature within 30 minutes.

CLEANING INSTRUCTIONS

1. The lower case work of the tissue section bath, including the control panel, may be wiped using small quantities of mild detergent or polishes applied with a soft cloth.
2. The bowl should be emptied and refilled with clean distilled water at the end of each working day.

3. The bowl will require cleaning at regular intervals, using a minimal quantity of mild detergent applied with a soft cloth and then allowed to dry.

WARNING:

SCOURING PADS OR DESCALING AGENTS MUST NOT BE USED TO CLEAN THIS INSTRUMENT.

MINIATURE CIRCUIT BREAKERS

Located on the rear of the bath. In the event of a fault, push back in to reset. If the fault situation continues, please contact your Service Engineer or Mopec.

LATCHING SAFETY CUT OUT

Disconnect from electrical supply before continuing.
Always investigate the cause for safety device operation.

Located on the underside of the unit is a small hole labeled “push to reset”. Insert a small diameter screwdriver into the hole until it touches. Press to reset the device.

PORTABLE APPLIANCE TESTING

Portable appliance testing should be carried out by a qualified person.

DO NOT PAT TEST THE BATH UNLESS IT CONTAINS WATER!
THIS EQUIPMENT MUST NOT BE FLASH TESTED!

WARRANTY TERMS AND CONDITIONS

1. Mopec warrants to the Customer that the product purchased is free from defects in materials and workmanship.
2. Provided the terms of payment are duly complied with, Mopec undertakes to remedy any original defects arising from faulty materials or workmanship, in any goods manufactured/supplied by Mopec, which under proper and normal conditions of use, may develop within a period of twelve months from the date of delivery.
3. In the case of components which by their nature of application have an unpredictable life, this guarantee shall only be to the extent of the guarantee given by the manufacturers of these articles.

4. Mopec will accept no liability, where in the opinion of the company the defect has been caused by damage due to the Customers failure to follow operating instructions, correct installation, wear and tear, or damage due to the use of spare parts other than those spare parts of Mopec or which are recommended by Mopec, the defect has been caused by alterations or repairs being undertaken by a person(s) other than an authorized representative of Mopec.
5. Any damage claim must be in writing, and give the serial number and description of the goods, order number and date of delivery, and will not apply where any names or serial numbers or other information which may be attached to or inscribed upon the goods have been removed, covered up or defaced in any way.
6. Any goods or parts thereof, which may require repair or replacement, shall be repaired or replaced (at the election of Mopec) at the works of Mopec. The product to be repaired shall be delivered carriage paid back to Mopec by the customer at the Customer's risk and expense. Any such goods or parts will be delivered by Mopec to the Customer free within the United Kingdom but if required to be borne by the Customer. All faulty parts removed from the equipment will become Mopec's property. Any other repairs or work by Mopec will be carried out under the terms and conditions for specialist engineers currently in force.
7. In the event of replacement with a new or reconditioned model, the replacement unit will continue the warranty period of the original equipment.
8. If any goods or parts thereof are returned unnecessarily all cost involved, including a charge for inspection, handling and the return carriage must be paid by the sender. In no circumstances shall any of the goods be returned to Mopec without its prior written consent.
9. Please retain the original packaging over the warranty period.
10. Mopec offers an Extended Warranty Option for instruments in the Mopec equipment range.This includes all parts and labor (exceptions may apply dependent upon the type of equipment) and supply a swap out instrument whilst the customers equipment is repaired.

    The extended warranty is only available at the date of purchase of the equipment.The warranty is immediately upgraded to a "swap out" service and is increased to 24 or 36 months depending on how long the warranty is extended for.

    The "swap out" service covers a loan unit being sent to the customer whilst the faulty unit is returned for repair (or replacement if necessary). A response to a customer request will normally be within 24 hours.

    If equipment is returned and the fault is found to be due to misuse or abuse, this falls outside the terms of the extended warranty and therefore a quotation for the inspection and repair of the equipment will be issued prior to any work being carried out.

On return of the repaired equipment to the customer, it is the customer's responsibility to ensure that the loan equipment is returned in the same condition as it was received and if required decontaminated with a signed decontamination sheet enclosed with the instrument.

It is the customers responsibility to ensure that the loan equipment is packed in the packaging provided by Mopec, in order that Mopec can arrange collection of the loan instrument. If the loan instrument is not packed and ready for collection within 48 hours of a repaired instrument being returned to the customer, costs for collection and equipment rental fee will be applied.

NON-WARRANTY INFORMATION

Spare parts shall be made available for a period of 5 years after a piece of equipment is discontinued.

Mopec
800 Tech Row
Madison Heights, MI 48071

CE

EC DECLARATION OF CONFORMITY

We herewith confirm the following products:

Round Tissue Flotation Bath - BK100

Conforms with requirements outlined by the following European Directives:

LowVoltage Directive 2014/35/EU
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU

We confirm the declaration:

Mopec
800 Tech Row
Madison Heights, MI 48071

Conforms with the requirements of the following standards:

BS EN 61010-1:2010
BS EN 61010-2-010:2014
Safety requirements for electrical equipment for measurement, control and laboratory use.
BS EN 61236-1:2013
Electrical equipment for measurement control and laboratory use - EMC requirements.

ROUTINE INSPECTION RECOMMENDATIONS

Mopec recommends that a simple annual inspection be made for all Mopec laboratory equipment in order that any malfunction can be identified and rectified as early as possible.This is to ensure user safety and prolong instrument lifespan.

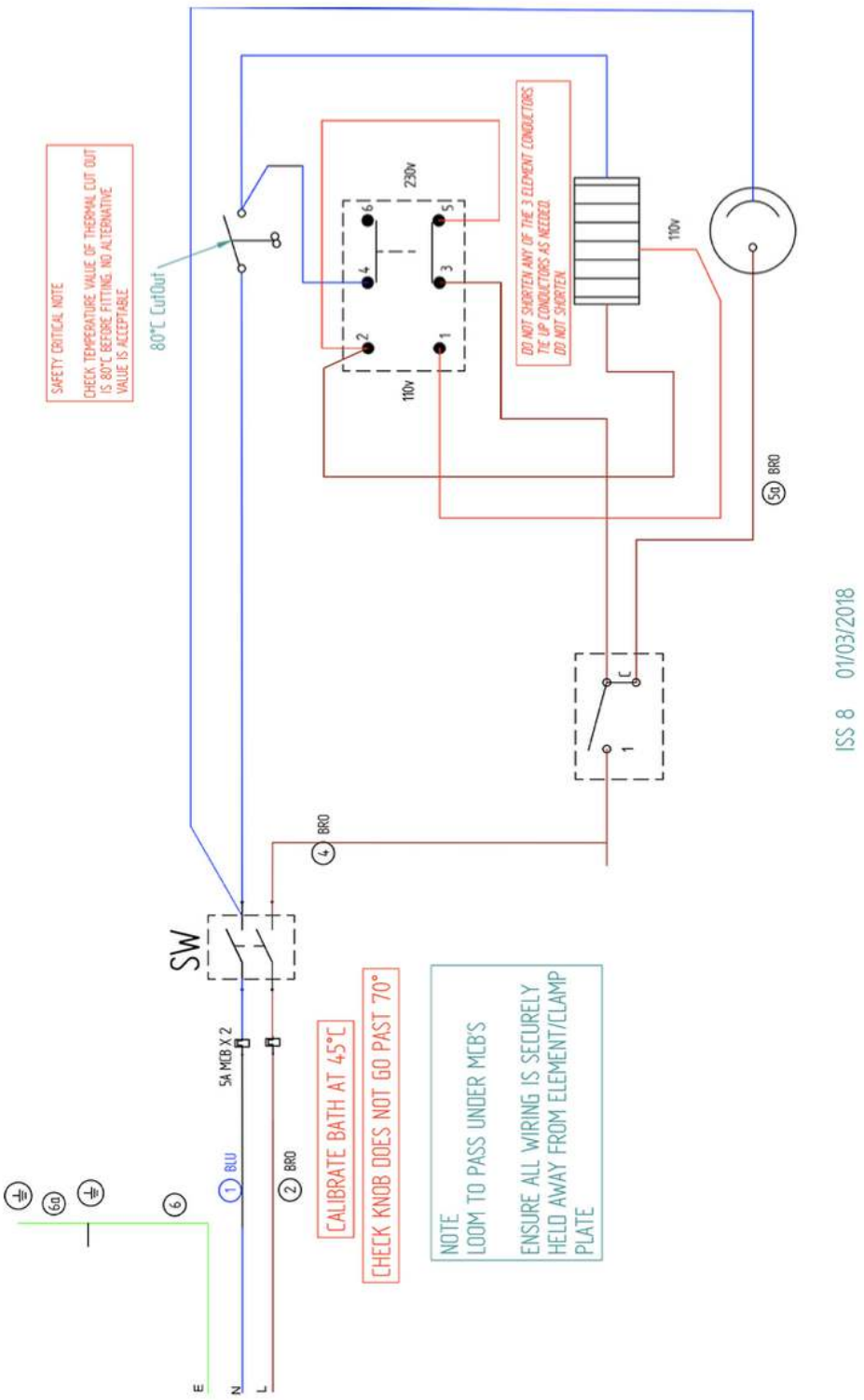
Recommended checks to be made:

1. Condition of Power Lead: A visual inspection to ensure the insulation is not damaged and that the correct fuse is fitted.
2. Functioning of Heater On Lamp: Heater lamp should be on when the instrument is warming up.
3. Condition of the Bowl: Surface of the bowl should be free of scratches and dents.

OPTIONAL EQUIPMENT

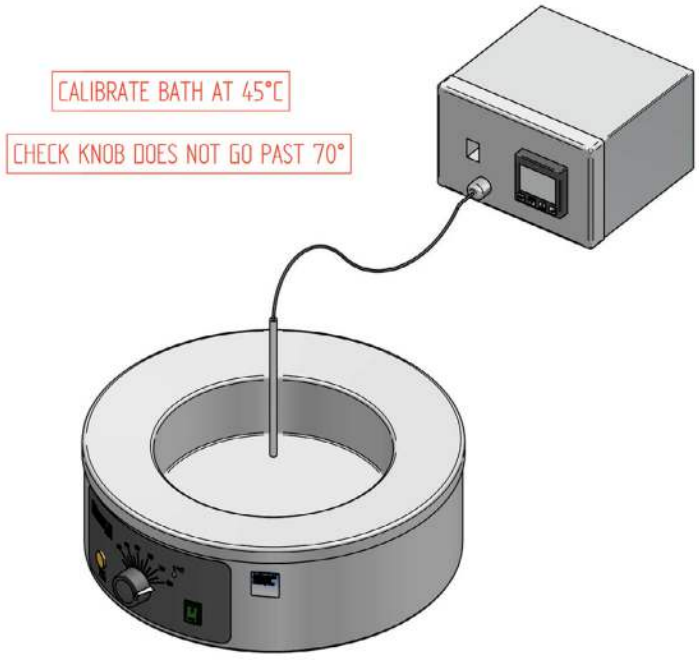
Part Number: BK100-L
Product Description: Round Tissue Flotation Bath - Lid

WIRING DIAGRAM



CALIBRATION INSTRUCTIONS

1. Allow instrument to settle at 45℃ for 2 hours.
2. Only use a calibrated probe and measure instrument within its own calibration.
3. Position measuring probe in centre of bath. Probe depth 50mm from bottom of tank.Turn thermostat, so knob points at 45℃. Ensure pointer does not go past 70℃.



TROUBLESHOOTING

Symptom	Possible Cause	Action Required
1. Unit does not operate/ No power to the instrument *(Illuminated On/Off button not lit, temperature controller not lit.)*	A: Unit is not switched on. B: Unit not plugged into power supply. C: Circuit breakers have been triggered and need to be re-set. D: Fuse in instrument lead plug has failed. E: Power supply failure.	A: Switch On B: Plug in, and switch on unit. C: Re-set circuit breakers. D: Replace fuse or use a new lead set. E: Check that other electrical instruments on the same circuit are working. Check distribution board for a trigged circuit breaker or blown fuse.
2. Power is supplied to the instrument, but the water bath does not heat. *(Temperature does not rise and the orange heater light does not operate)*	A: Thermal cut out has triggered. B: Temperature of water bath is set too low. C: Heating element has failed.	A: Re-set thermal cut out. B: Check set temperature of the water bath. C: Instrument should be checked by a competent person.
3. Instrument does not reach working temperature as quickly as expected.	A: Voltage selector set to the in-correct voltage.	A: Set the voltage selectors at the rear of the instrument to the correct voltage for your country.
4. Temperature of water bath seems to be fluctuating more than expected. *(Expected temperature variation ±1°C from the set temperature)*	A: Temperature control circuit fault.	A: Instrument should be checked by a competent person.
5. Temperature of the water bath shown on the controller, is different to the temperature of the water measured by a reference probe.	A. External temperature probe being used is not suitable for water temperature measurements or external probe is not calibrated. B: Position of the external temperature probe is not at the calibration point. Bowl should be filled to within 15mm of the top of the bowl and a measurement taken 10mm from the surface of the water in the centre of the bowl.	A: Check correct probe is being used for measurement and that the probe is calibrated. B: Measure temperature at the position where the instrument is calibrated, using a calibrated probe. Users should wait at least 45 minutes before taking a measurement to allow the temperature of the water in the bath to equilibrate. If the temperature is reading is significantly different, the instrument may need to be re-calibrated. Follow the calibration instructions.
6: Temperature of the water bath continues to rise when not expected.	A: Actual water bath temperature is lower than the set temperature B: Temperature control circuit fault	A: Check the set temperature. B: Instrument should be checked by a competent person.