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Title: Use and Maintenance of the Water Baths

Version: v3

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SOP History		
Number	Date	Reason for Change
v1	01/01/2013	Original
v2	01/01/2018	Update
v3	06/04/2020	Ammendmment

1.0 Purpose –

The purpose of this SOP is to outline the principles of the routine use and maintenance of the water baths in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

This SOP applies to routine use and maintenance of the water baths within the SASoM.

3.0 Responsibilities –

It is the responsibility of all users of the water baths within the SASoM to comply with this SOP.

4.0 Procedure –

Grant water baths:

Check water level inside the bath and fill up with tap water if required. NOTE: some baths have a water level detector inside the bath and switch off automatically if the level is too low. If the bath will not heat and the power light is on then this is likely to be the reason.

Switch on mains electrical supply by depressing the rocker switch and lighting the neon indicator (this may be found either at the front of the unit or on the back, depending upon the type involved).

To set the temperature press the grey display set °C button to change the display from actual to set temperature; at the same time press the blue push to set °C knob and turn it to the required operating temperature.

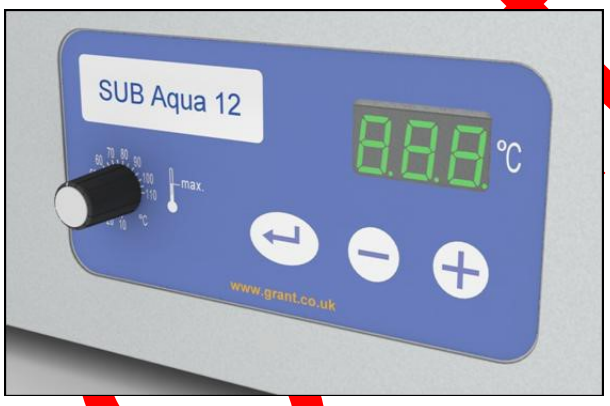
When the knob is released, the set temperature cannot be altered by turning the knob.

Wait for the water to reach the set temperature.

Switch off by depressing the rocker switch so that the neon light is turned off and remove plug from the mains supply. Turn water baths off after use.

Sub Aqua 12 Water Bath:

Turn on and off as above



Turn the knob of the sample protection thermostat to maximum. Whilst the display is showing actual temperature, pressing either the + or - keys will cause the display to flash

Press + or - to set the desired temperature. (If no key is pressed for 15 seconds, the display will revert back to showing the actual temperature and the set point will remain at its original value).

Press the enter key, this will store the requested value and the display will revert to showing the actual water temperature. The water temperature will change to the new set value

N.B. During heating or cooling to the set point, the last digit will change to a rising or falling bar until the actual temperature is within one degree of the set value

When the temperature has stabilised, measure the temperature with a thermometer, and adjust the set temperature again if necessary

NB: Sample Protection Thermostat:
Set the sample protection thermostat as detailed below:

1. Turn the knob of the sample protection thermostat to maximum
2. Set the control temperature 2ºC above the desired operating temperature, and wait for the temperature to stabilise
3. Turn the knob of the sample protection thermostat slowly anti-clockwise until a click is heard and "Err" is displayed
4. Re-set the control temperature to the desired temperature

Circular Water Bath for floating histology sections:
Partially fill bath with distilled water (max 2.25L). Cover unit with lid when not in use.

Adjust the heat setting by turning the round control situated on the front of the unit clockwise (increase temperature) or anti-clockwise (to decrease temperature). Turn on.

Float sections in the bath.

Excess or damaged sections may be removed by skimming a filter paper over the water surface.

The wide rim of the unit can be used to dry mounted sections.

Empty the unit of water. Never do this without disconnecting from the mains electrical supply.

5.0 Personal protection –
Howie coat must be worn at all times.

6.0 General maintenance –
Remove water and clean basin with a cloth and mild detergent.
Fill up to required water level

7.0 Related documents –

7.1 Equipment manual

7.2 Equipment Maintenance Log

7.3 Equipment Maintenance Information sheet

7.4 Risk assessments – RA/GEN/08

8.0 Approval and sign off –

Author:

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Position: Research Fellow

Signature: Date:

Management Approval:

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

QA release by:

Name: Alex MacLellan

Position: QA Manager

Signature: Date:

STANDARD OPERATING PROCEDURE

Please sign below to indicate you have read this S.O.P and understand the procedures involved.

NAME	POSITION HELD	SIGNATURE	DATE