



<b>Document Number:</b>	<b>SASoM/EQUIP/054.v2</b>
<b>Title:</b>	<b>Safe Use and Operation of the BMM Weston V10189 Autoclave (for Biohazard use)</b>
<b>Version:</b>	<b>v2</b>
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SOP History		
Number	Date	Reason for Change
v1	02/07/2013	Original
V2	02/07/2018	Update

**1.0 Purpose –**

The purpose of this SOP is to outline the principles of the routine use of the BMM Weston V10189 Autoclave in Room 248N at the St Andrews School of Medicine (SASoM).

**2.0 Scope –**

This SOP applies to routine use and maintenance of the BMM Weston V10189 Autoclave within the SASoM.

**3.0 Responsibilities –**

It is the responsibility of all users of the BMM Weston V10189 Autoclave within the SASoM to comply with this SOP.

**4.0 Procedure –**

Principles of Operation

This Autoclave is used primarily to sterilize biohazard waste to render it harmless for disposal.

To start up, select 'Auxiliary Menu' then 'Boiler Menu'. Select 'Start Boiler' (band will be green) and then select 'Demand Steam'. Press exit to return to Main menu



Equipment Operation Procedure

Boiler display will turn from yellow to green once the boiler is activated. The start-up sequence takes ~40mins.

When the boiler reaches 4.5bar, warm up the autoclave by selecting the 'Fabrics' cycle. The machine will then heat up to the pre-programmed temperature (136 degrees) and remain there until instructed to start a preferred cycle. The boiler should read 4.5bar and the jacket temperature should be allowed to stabilise to required temperature before activating the chosen cycle. **N.B.** Both 'Media' and 'Plastic Discard' cycles have lower jacket temperatures than the 'Fabrics' cycle.

Use the 'Media' cycle for autoclaving liquids. When using the 'Media' cycle, a 'Load Probe' MUST be inserted into a 'placebo' bottle containing tap water. Always use a bottle (500ml or 1 litre) equivalent in size to the largest volume to be sterilised. 1 litre bottle of liquid is the maximum volume which can be effectively sterilised as this was the maximum volume validated during commissioning. Select 'Media' and then 'Start Cycle' to commence operation.

Use the 'Plastic Discard' cycle for autoclaving Biohazard waste. When using the 'Plastic Discard' cycle, place the Load Probe on top of plastic load or anywhere on the shelf – not amongst plastic bags otherwise the bags will melt and cover the probe. The Load Probe is placed anywhere on shelf when using 'Fabrics' or 'Glassware' cycle. Select 'Plastic Discard' and then 'Start Cycle' to commence operation.

Use the 'Glassware' cycle for autoclaving dry glassware, plastics and tip boxes. When using the 'Glassware' cycle, place the Load Probe on top of plastic load or anywhere on the shelf – not amongst plastic bags otherwise the bags will melt and cover the probe. The Load Probe is placed anywhere on shelf when using 'Fabrics' or 'Glassware' cycle. Select 'Plastic Discard' and then 'Start Cycle' to commence operation.

Use the 'Fabrics' cycle for autoclaving contaminated fabrics (rarely used). When using the 'Fabrics' cycle, place the Load Probe on top of plastic load or anywhere on the shelf – not amongst plastic bags otherwise the bags will melt and cover the probe. The Load Probe is placed anywhere on shelf when using 'Fabrics' or 'Glassware' cycle. Select 'Plastic Discard' and then 'Start Cycle' to commence operation.

Once the cycle has completed and the temperature has come down, the display will read 'Door can be Opened'. Select 'Open Door' and carefully remove contents.

Always rinse out plastic trays/tubs after using the 'Plastic Discard' cycle to remove residual liquid. Ensure any agar does not get washed down the sink as this will block the drain. Remove with tissue – easier to remove once cooled and solidified.

A 'Failed Cycle' will show up as a red information band on the display panel. To enable the autoclave door to be opened and retrieve the load after a failed cycle it may be necessary to enter an ID number (300) and a Passcode (1428).

Select 'Exit' until the door operation menu allows you to open the door.



Equipment Operation Procedure

At the end of a working day, ensure the door is in a closed position with the probe placed safely inside the autoclave. Press visual display and select 'Stop Boiler' (red band) to terminate operation. Leave in this mode until start-up activation is required again.

To turn off autoclave in case of **emergency**, turn the **RED DIAL** to the **OFF** position (nine o' clock) or press the Red **STOP** knob. To restart, the red dial must be returned to the 'ON' position (six o' clock). The key will have to be given a clockwise (reset) turn if the RED STOP knob was used to perform an emergency stop.

### 5.0 Personal protection –

Howie coat must be worn at all times as well as gloves. Heat resistant gloves must be worn to withdraw shelf from autoclave.

### 6.0 Training –

All users have to be trained before using the Instrument by a designated person.

### 7.0 Related documents –

- 7.1 Equipment Handbook
- 7.2 RA/GEN/001 Autoclave  
RA/GEN/009 General Laboratory Safety
- 7.3 RA/COSHH/001 Cleaning and Sterilisation  
RA/COSHH/002 Waste Disposal

Controlled



## 8.0 Approval and sign off –

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Name: Alex MacLellan

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