



<b>Document Number:</b>	<b>SASoM/EQUIP/016.v2</b>
<b>Title:</b>	<b>Use and Maintenance of the Heraeus Fresco and Pico Microcentrifuges</b>
<b>Version:</b>	<b>v2</b>
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SOP History		
Number	Date	Reason for Change
v1	01/01/12	Original
V2	01/01/18	Update

**1.0 Purpose –**

The purpose of this SOP is to outline the principles of the routine use and maintenance of the Heraeus Fresco and Pico Microcentrifuges in Laboratory 24 at the St Andrews School of Medicine (SASoM).

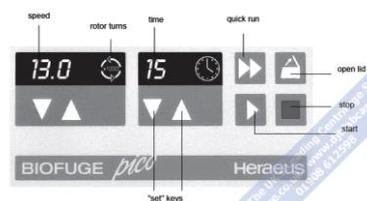
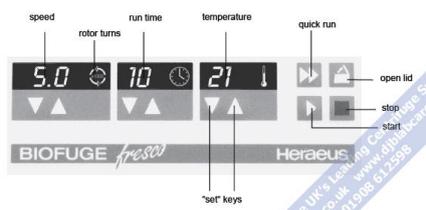
**2.0 Scope –**

This SOP applies to routine use and maintenance of the Heraeus ‘Fresco’ and ‘Pico’ microcentrifuges within the SASoM.

**3.0 Responsibilities –**

It is the responsibility of all users of the Heraeus Fresco and Pico microcentrifuges within the SASoM to comply with this SOP.

**4.0 Procedure –**





Equipment Operation Procedure

Turn on the mains switch on the lower right.

Push the "open lid" key.

Load the samples symmetrically into the rotor. When loading the rotor only partially, you must ensure that opposite bores always receive tubes of equal weight (when centrifuging a single sample, place a centrifuge tube e.g. filled with water opposite).

Fasten the rotor lid and close the lid of the centrifuge by firmly pressing it down, there will be a clicking sound.

Set the speed by pressing one of the "set" keys (increase) or (decrease) in the speed control section of the control panel. The minimum speed of the rotor is 2,000 rpm, the maximum speed 13,000 rpm.

Set the run time by pressing one of the "set" keys (increase) or (decrease) in the speed control section of the control panel. You can select a run time between 1 and 99 min or continuous operation.

For continuous operation, press the key  repeatedly or press and hold until "hd" (for "hold") appears in the display. With this setting, the centrifuge keeps running until stopped manually by pressing the stop key.

Set the temperature by pressing one of the "set" keys (increase) or (decrease) in the speed control section of the control panel. You can select a run time between 1 and 99 min or continuous operation.

The refrigeration starts operating at once if the pre selected temperature is below the temperature of the rotor chamber.

You can pre-cool or pre-heat the rotor inside the centrifuge by setting the required temperature, speed to the maximum value and a run time of 15 min. Start the centrifuge by briefly pressing the start key.

Press the "start" key in the control panel.

The centrifuge will stop after pre selected time. As soon as the speed is close to zero, the display reads "End".

Press the open lid key and remove the samples.

Emergency open: Make sure the rotor stands still. Push a thin screwdriver or another suitable tool horizontally from each side through the two openings in the side panels of the centrifuge. Push the locking pins under the side panels simultaneously from both sides until the lid unlocks audibly. Remove the auxiliary tools and open the lid. In case the rotor still turns, close lid immediately and wait until it has come to a complete stop. As soon as the rotor stands still, remove your samples and close the lid.



### **5.0 Personal protection –**

Howie coat must be worn at all times.

Gloves as specified in the appropriate COSHH RA

### **6.0 Spillages –**

Disinfect rota with ethanol.

Turn the rotor head down and drain.

Thereafter thoroughly rinse rotor and lid with water.

### **7.0 General maintenance –**

Clean surfaces of the apparatus with soft cloth and mild detergent.

### **8.0 Training –**

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

### **9.0 Related documents –**

- 9.1 Equipment manual
- 9.2 Equipment Maintenance Information sheet
- 9.3 Risk assessments – RA/GEN/002



### 10.0 Approval and sign off –

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Control