



## SPECIFICATION

<i>Type of Furnace:</i>	<b>Vertical single zone split tube furnace for use with Probostat sample holder system. The furnace is based on standard model CSC12/90/300V.</b>
<i>Furnace Bore:</i>	Top insulation collar has no hole. Bottom insulation collar is bored out to 40mm diameter.
<i>Heated Length:</i>	300mm
<i>Maximum Temperature:</i>	1200°C.
<i>Heating Elements:</i>	Spiral wire coils embedded in vacuum formed ceramic fibre half cylinders.

### CONSTRUCTION:

<i>Insulation:</i>	Heating elements embedded in ceramic fibre forms part of the insulation with fibre board and blanket on the outside.
<i>Steelwork:</i>	Outer case manufactured from stainless steel sheet with an outer mesh cover for maximum operator safety.

### ELECTRICAL:

<i>Temperature Control:</i>	Eurotherm 2416CG, eight segment programmer with dual display of set point and measured temperature, each segment can be a ramp, step or dwell. RS232 digital communications facility is included.
<i>Temperature Sensors:</i>	The control thermocouple is positioned inside the ProboStat sheath and connected to the main 2416 controller via a panel mounted t/c socket. A type R thermocouple is also fitted inside the furnace so that it can be used independently of the Probostat.
<i>Temperature Alarm:</i>	Eurotherm 2132 digital instrument is provided to shut down the furnace in the event of overheating. A type N mineral insulated thermocouple is fitted in the furnace for the overtemperature device.
<i>Power Control:</i>	Burst firing solid state relay.
<i>Power Supply:</i>	208-240 volts single phase.
<i>Energy Rating:</i>	1.5 kW



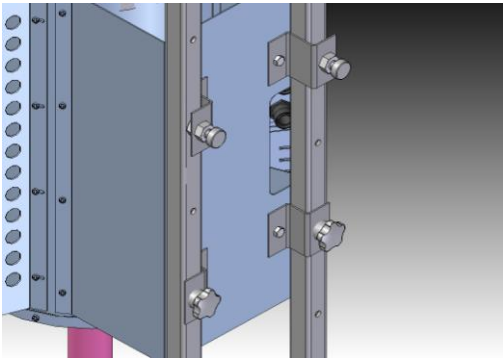
**GENERAL NOTES:**

*Location of Controls:*

In a control box separate from the furnace by 2 metres of flexible conduit.

*Mounting Arrangement:*

The furnace is mounted on a stand designed to have the following features



- a. Three height positions for the furnace defined 550, 650, & 750mm from the bottom of the ProboStat support to the middle of the heated zone of the furnace.
- b. Method of easily adjusting the height between these positions and fixing the furnace to the stand. Two clamp screws fix the furnace in position along with two plunger pins. The furnace height is adjustable with removal of the two clamp screws, then while supporting the weight of the furnace the plunger pins are pulled out and the furnace slides up or down the stand to the next position. The plunger pins are spring loaded and will click into the next location holes as the furnace is moved. The clamp screws are refitted once in the desired position.

c. The stand is supplied with a 'Swissboy' Lab-Jack, which is modified to provide an easy to use and definite location for the base of the ProboStat. The 'ab-Jack is fixed to the stand. The position of the ProboStat in the furnace can be adjusted up or down by 80mm using the Lab-Jack. The heights of 550, 650, & 750mm are achieved with the 'Lab-Jack' in its mid position.

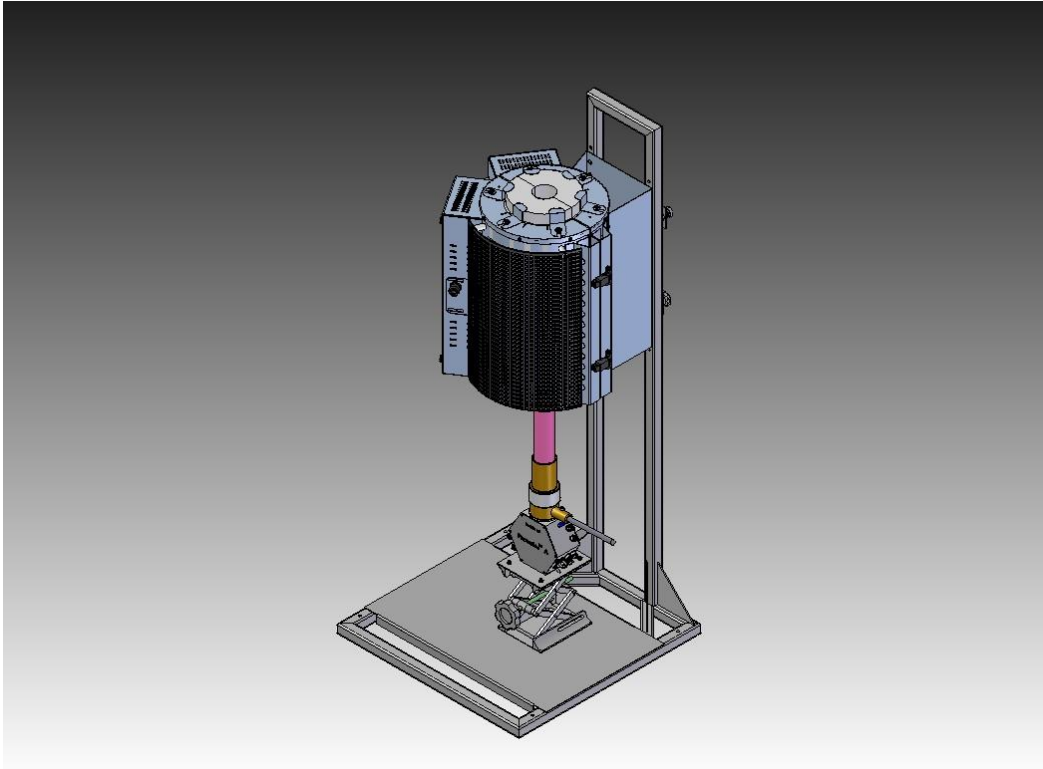
d. The ProboStat location gives clearance for ProboStat connections.

*Overall External Dimensions:*

1200mm High x 500mm Wide x 500mm Deep.

**LENTON reserve the right to alter this specification in any way without prior notice provided the specified performance of the equipment described is not affected.**

Front view of furnace



Rear view of furnace

