



50 to 700°C

# Furnaces

## Medium Temperature

- Wide Operating Range
- For Indium, Tin, Zinc and Aluminium Cells
- Three Zone Design

Whilst heatpipe furnaces offer the ideal environment to melt and freeze ITS-90 Fixed Points the temperature range is limited by fluid that flows inside the pipe. Three zone furnaces can offer wider operating ranges and still meet the requirements for "Optimal Realization of the Defining Points of the ITS-90..." CCT/2000-13. In place of a heatpipe the Model 17703 Medium Temperature furnace uses top and bottom guard heaters to minimise temperature gradients.

The Model 17703 Furnace can be used with Indium, Tin, Zinc and Aluminium Cells. The substantial furnace core is machined from aluminium bronze.



*Fixed Points of:  
Indium 156.5985°C, Tin 231.928°C,  
Zinc 419.527°C, and Aluminium 660.323°C  
Active and Passive Safety Circuits, Equalizing  
Block for Comparison Calibration*

### Enhanced Furnace Design

Developed with user feedback and hands-on experience, the Isotech Furnace Range combines trusted performance with a range of practical features designed to improve usability.

Controllers are positioned at the top for easier access, an SPRT Stand is included for secure thermometer support, and Cable Tides and Accessory Pods help maintain a tidy, efficient workspace. The furnaces are programmable to automate the melting and freezing of cells and offer both USB and Ethernet connectivity, all with bright, crystal-clear displays.

#### Specification

Model	ITL-M-17703
Temperature Range	50°C to 700°C
Uncertainty	< 1mK (with cells)
Control	0.1°C Resolution, Gain Scheduling Action and Power Feedback
Interfaces	Ethernet and USB Host
Core Size	54.7mm x 420mm
Dimensions	Height - 960mm Width - 600mm Depth - 690mm
Weight	115kg
Power	2.6kW, 108-130 or 208-240Vac, 50/60Hz
<b>Accessories</b>	420-02-14 Aluminium Bronze Equalising Block 824-01-00 Fan Assembly 411-01-11B Annealing Adaptor
<b>How to order</b>	ITL-M-17703 Please specify voltage required