



**50 to 500°C**

# Furnaces Low Temperature

- Affordable Single Zone Furnace
- Simple Operation
- For Indium, Tin and Zinc Cells

The Isotech Low Temperature Fixed Point Furnace is designed specifically to realize and maintain the freeze plateaux of Isotech Indium, Tin and Zinc Fixed Point Cells, for calibration of thermometers on the International Temperature Scale of 1990.

The Low Temperature Furnace is a single zone furnace. The recommended procedure for establishing a freeze plateau requires operator attention until the plateau is realized. Following that, the Model 17701 Furnace will maintain the plateau, essentially automatically, for a period of 10 to 12 hours.

The furnace core, into which the freeze-point cell is inserted, is of aluminium alloy, which provides a very low thermal gradient along the core length. The main furnace heater is of the parallel-tube design as used at NIST. A pre-warming tube is provided.

Two entirely independent over-temperature safety devices are included. A dedicated (on-off) over temperature control circuit provides active safety. A fusible link in the main power circuit provides passive safety.

The Low Temperature Furnace is completely self-contained, castor mounted and requires no external supplies (except power).



Fixed Points of:  
 Indium 156.5985°C  
 Tin 231.928°C  
 Zinc 419.527°C  
 6 to 12 Hours Plateau  
 Annealing Adaptor  
 Active and Passive Safety Circuits

## New Features



From our own ongoing experience and customer feedback we have updated the Isotech Furnace Range to deliver the same proven performance and advanced features but with a number of convenience upgrades to make your life easier.

The controllers have now been relocated to the top for easier operation, we now include an SPRT Stand and Cable Ties to keep your standards safe and Accessory Pods to keep the furnace tops free from clutter. Our furnaces are programmable to automatically melt and freeze cells and feature both USB and Ethernet interfaces with bright crystal clear displays.

<b>Model</b>	ITL-M-17701
<b>Temperature Range</b>	50 to 500°C
<b>Uncertainty</b>	<1mK (with cells)
<b>Control</b>	0.1°C Resolution, Gain Scheduling Action and Power Feedback
<b>Interface</b>	Ethernet and USB Host
<b>Core Size</b>	54.7mm x 420mm
<b>Dimensions</b>	Height 960mm Width 600mm Depth 690mm
<b>Weight</b>	115kg
<b>Power</b>	1.5kW, 108-30 or 208-240Vac, 50/60Hz
<b>Accessories</b>	411-01-11 Annealing Adaptor 824-01-00 Fan Assembly
<b>How to Order</b>	ITL-M-17701 Please specify Voltage required