



Furnaces Low Temperature

Single Zone

- Aluminium Alloy Block
- Six to 12 Hour Plateau

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 indium or the tin plateau, essentially automatically, for a period of 10 to 12 hours and the zinc plateau for 6 to 8 hours.

- 1. 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.
- 2. An advanced proportioning electronic control system regulates furnace temperature, using a platinum resistance thermometer as sensing element. The controller may be calibrated in-situ using Freeze Point Cells as references.

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

3. The Low Temperature Furnace is completely selfcontained, castor mounted and requires no external supplies (except power).







ITL-M-17701

50°C to 500°C

<1mk (with cells)

0.1°C Resolution

Height 960mm

Width 600mm Depth 560mm Weight 115kg |

Included as standard 1.5kW. 108-130

or 208-240VAC, 50/60Hz

Model Temperature Range Uncertainty Control Communications Power

Dimensions

Accessories 411-01-11 Annealing Adaptor 824-01-00 Fan Assembly

How to order ITL-M-17701 Low Temperature Furnace Please specify voltage required

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