



250 to 1200°C

Furnaces

3 Zone High Temperature

- Widest Operating Range
- Three Zone Control
- Long Plateau Length

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 465 3 Zone High Temperature Furnace uses top and bottom guard heaters to minimise temperature gradients.

This more recent addition to our long-established range of metrology furnaces offers an alternative for those who prefer three zone furnaces to heatpipe technology and need high temperature operation. The three zones create a controlled volume of constant temperature within the furnace in which High Temperature Fixed Points such as Aluminium, Silver and Copper can be frozen and melted. Because High Temperature thermometers can be easily contaminated by metallic vapours, great care has been taken to eliminate the use of metals throughout the calibration volume.

A ceramic equalizing block is available comprising a closed ended tube, alumina tubes to house the sensors being compared, and alumina powder to act as an equalizing media.

This 3 Zone Furnace can be used for the realizations of Zinc, Aluminium, Silver, Gold and Copper points, or with an optional equalizing block used for annealing or comparison calibration.



*Long plateaus from Fixed Point Cells
Self-Tuning controller optimizes each Fixed Points
performance 3 zones controlled to compensate for
end loss to give a perfect profile*

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	465
Temperature Range	250°C to 1200°C
Uncertainty	< 1 to 2 mK (with cells)
Control	0.1°C Resolution, Gain Scheduling Action and Power Feedback
Interfaces	Ethernet and USB Host
Core Size	100mm x 500mm
Dimensions	Height - 960mm Width - 600mm Depth - 690mm
Weight	115kg
Power	3kW, 108-130 or 208-240Vac, 50/60Hz

Accessories

465-04-00 Cell holder assembly
465-02-06 ceramic equalising block
Four pockets 10mm ID

How to order

465
Please specify voltage required