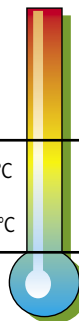


Metal-Clad Fixed-Point Cells



660.323°C
to
-38.8344°C



In the practical world of temperature measurement, a large number of laboratories who normally make comparison calibrations need 1 or 2 fixed points to monitor their Standard Platinum Resistance Thermometers, or would like to calibrate shorter thermometers than the larger cells and apparatus can accept. For this group of users Isothermal Technology Limited has introduced our Metal-Clad Fixed-Point Cells.

The special requirements of immersion depth, plateau duration, etc. required for the calibration of SPRT's may not be necessary in laboratories charged with calibrating industrial resistance thermometers, thermocouples and thermistors, but mobility and cost may be more important. Metal-Clad Cells is a name given to another category of cell, being somewhat slimmer, slightly shorter and lower in price than the standard varieties. Metal-Clad Cells are built using the same materials, techniques and purity of metal as the larger cells, but the uncertainties associated with them are somewhat larger, not because of the cells but precisely because their shorter immersion depth results in a decreased ability to qualifying them.

In consequence of their smaller size, small, lighter-weight apparatus (bench-top or cart-mounted furnaces) may be used to melt and freeze the metal in these cells. Sealed cells and associated apparatus, such as the Model 510 Medusa and Model 580 Oceanus-6, are available from Isotech.

Metal Clad Cells

Cell	Type	Diameter OD/ ID	Length Sealed Overall / Immersed	Temperature °C	Uncertainty °C	P.O.T.T.S. Apparatus
Mercury	TP	35/10	140/120	-38.8344	±0.001	Europa-6
Gallium	MP	31/10	200/120	29.7646	±0.001	Oceanus-6
Indium	MP	42/7.5-8	200/130*	156.5985	±0.001	Medusa
Tin	MP	42/7.5-8	200/130*	231.928	±0.002	Medusa
Zinc	MP	42/7.5-8	200/130*	419.527	±0.005	Medusa
Aluminum	MP	42/7.5-8	200/130*	660.323	±0.020	Oberon

* Optional 160 immersion available



Metal Clad Fixed Point Cell shown with an Isotech Semi-Standard Platinum Resistance Thermometer

Features

- Fixed Point Cells and Apparatus for Special Applications
- Shorter Immersion for the Calibration of Industrial Sensors
- Economic
- Much Less Fragile than Quartz Cells

ACCESSORIES

510-05-00	Inconel Basket including insulators for use with Medusa 510
426-04-00	Inconel Basket including insulators for use with Oberon 426

HOW TO ORDER

ITL-M-17724-M	Mercury Metal Clad Slim Cell
ITL-M-17401-M	Gallium Metal Clad Slim Cell
ITL-M-17668-M	Indium Metal Clad Slim Cell
ITL-M-17669-M	Tin Metal Clad Slim Cell
ITL-M-17671-M	Zinc Metal Clad Slim Cell
ITL-M-17672-M	Aluminum Metal Clad Slim Cell