NABL

National Accreditation Board for Testing and Calibration Laboratories

(An Autonomous Body under Department of Science & Technology, Govt. of India)

CERTIFICATE OF ACCREDITATION

HI-TECH CALIBRATION SERVICES

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2005

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

No.209, VGP Nagar, Muggapair West, Chennai, Tamil Nadu

in the discipline of

THERMAL CALIBRATION

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Certificate Number C-1264

Issue Date 07/11/2016

Valid Until 10/09/2017

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

Avijit Das	Anil Relia	Prof. S. K. Joshi
Program Manager	Director	Chairman

NABL

SCOPE OF ACCREDITATION

Laboratory	Hi Tech Calibration Services, No. 209, 2nd Floor, VGP Nagar, Mugappair West, Chennai, Tamil Nadu		
Accreditation Standard	ISO/IEC 17025:2005		
Discipline	Thermal Calibration	Issue Date	07.11.2016
Certificate Number	C-1264	Valid Until	10.09.2017
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	Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (±)	Remarks
I.	**TEMPERATURE**			
1.	**GLASS THERMOMETER, TEMPERATURE GAUGES#**	(-) 80 °C to 50 °C	0.21 °C	Using Liquid Bath, 6 ½ Digit Multimeter & RTD Sensor by Comparison Method
2.	**GLASS THERMOMETER, TEMPERATURE GAUGES$**	50 °C to 250 °C	0.28 °C	Using Liquid Bath, 6 ½ Digit Multimeter & RTD Sensor by Comparison Method
3.	**THERMOMETER, RTD SENSOR, THERMOCOUPLE, TEMPERATURE INDICATOR / CONTROLLER / TRANSMITTER / RECORDER WITH SENSOR$**	(-) 196 °C	0.1 °C	Using 6 ½ Digit Multimeter and RTD Sensor by Comparison Method
4.	**THERMOMETER, RTD SENSOR, THERMOCOUPLE, TEMPERATURE INDICATOR / CONTROLLER / TRANSMITTER / RECORDER WITH SENSOR, TEMPERATURE GAUGE$**	(-) 80 °C to 50 °C	0.16 °C	Using Liquid Bath, 6 ½ Digit Multimeter and RTD Sensor by Comparison Method

Vishal Shukla
Convenor

Avijit Das
Program Manager

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	Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (±)	Remarks
5.	THERMOMETER, RTD SENSOR, THERMOCOUPLE, TEMPERATURE INDICATOR / CONTROLLER / TRANSMITTER / RECORDER WITH SENSOR, TEMPERATURE GAUGE#	(-) 8 °C to 50 °C 50 °C to 250 °C 250 °C to 600 °C 600 °C to 1200 °C	0.16 °C 0.2 °C 1.38 °C 1.63 °C	Using Liquid Bath, Dry Block Calibrator, 6 ½ Digit Multimeter, RTD Sensor and R - Type Thermocouple by Comparison Method
6.	TEMPERATURE BATH, LIQUID BATH, DRY BLOCK CALIBRATOR#	(-) 80 °C to 250 °C 250 °C to 600 °C 600 °C to 1200 °C 1200 °C to 1500 °C	0.2 °C 1.38 °C 1.63 °C 3.75 °C	Using 6 ½ Digit Multimeter, RTD Sensor and R - Type Thermocouple by Comparison Method
7.	TEMPERATURE INDICATOR / RECORDER / CONTROLLER WITH SENSOR OF DEEP FREEZER, FREEZER, INCUBATOR, AUTOCLAVE, CHAMBER, WATER BATH, HOT AIR OVEN, FURNACE*	(-) 90 °C to 400 °C 400 °C to 1200 °C 1200 °C to 1500 °C	0.18 °C 1.49 °C 3.71 °C	Using 6 ½ Digit Multimeter, RTD Sensor and R - Type Thermocouple @ Measuring Location in DUC (Single Position Calibration)
8.	DEEP FREEZER, FREEZER, INCUBATOR, AUTOCLAVE, CHAMBER, WATER BATH, HOT AIR OVEN, FURNACE*	(-) 80 °C to 100 °C 100 °C to 500 °C 500 °C to 1200 °C	1.85 °C 1.85 °C 4.07 °C	Using RTD Sensors with Data Logger and N - Type Thermocouples with Data Logger (Multi Position Calibration)

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Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (±)	Remarks
II. SPECIFIC HEAT AND HUMIDITY			
1. **HUMIDITY INDICATOR, HUMIDITY TRANSMITTER, THERMO HYGROMETER, HUMIDITY SENSOR / PROBE[$] (Relative Humidity)**	20 %RH to 95 %RH @ 25 °C	1.44 %RH	Using Temperature & Humidity Generator and Temperature & Humidity Indicator with Sensor by Comparison Method
2. **HUMIDITY INDICATOR, HUMIDITY TRANSMITTER, THERMO HYGROMETER, HUMIDITY SENSOR / PROBE, TEMPERATURE INDICATOR WITH INTERNAL SENSOR[$] (Temperature)**	5 °C to 50 °C @ 50 %RH	0.18 °C	Using Temperature & Humidity Generator, 6 ½ Digit Multimeter and RTD Sensor by Comparison Method
3. **HUMIDITY INDICATOR / CONTROLLER WITH SENSOR OF HUMIDITY CHAMBER, ENVIRONMENTAL CHAMBER, CLIMATIC CHAMBER[+]**	20 %RH to 95 %RH @ 20 °C to 50 °C	1.44 %RH	Using Temperature and Humidity Data Logger @ Measuring Location in DUC (Single Position Calibration)

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	Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (±)	Remarks
4.	HUMIDITY CHAMBER, ENVIRONMENTAL CHAMBER, CLIMATIC CHAMBER[♣]	20 %RH to 95 %RH @ 20 °C to 50 °C	2.4 %RH	Using Temperature and Humidity Data Logger (Multi Position Calibration)

* Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%
[$] Only in Permanent Laboratory
[♣] Only for Site Calibration
[#] The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.

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