

Laboratory Alcalab Private Limited, 3rd Floor, Ashiana Trade Centre, Adityapur, Jamshedpur, Jharkhand

Accreditation Standard ISO/IEC 17025:2005

Discipline Thermal Calibration

Issue Date 24.09.2015

Certificate Number C-0571

Valid Until 23.09.2017

Last Amended on 06.01.2016

Page 1 of 2

Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (\pm)	Remarks
I. TEMPERATURE			
1. RTD, THERMOCOUPLE WITH & WITHOUT INDICATOR / RECORDER / DATA LOGGER & DIGITAL THERMOMETER [§]	(-) 20 °C to 20 °C 20 °C to 250 °C 250 °C to 1000 °C	0.55 °C 0.45 °C 2.3 °C	Using RTD, R-Type T/C with Temperature Calibrator & Liquid / Dry Well Bath by Comparison Method
2. TEMPERATURE INDICATOR WITH SENSOR OF INCUBATORS / LIQUID BATH / DRY BLOCK / AUTOCLAVE / COLD & HOT CHAMBER / MUFFLE & TUBE FURNACE [#]	(-) 20 °C to 20 °C 20 °C to 250 °C 250 °C to 1000 °C	0.55 °C 0.45 °C 2.4 °C	Using RTD, R-Type T/C with Temperature Calibrator by Single Position Method
3. GLASS / DIAL THERMOMETER [§]	(-) 20 °C to 250 °C	0.8 °C	Using RTD with Temperature Calibrator & Liquid Bath by Comparison Method
4. PYROMETER / INFRARED THERMOMETER [§]	50 °C to 400 °C 500 °C to 1500 °C	2.1 °C 4.5 °C	Using RTD with Temperature Calibrator & Black Body Source by Comparison Method Using Non Contact Pyrometer & Black Body Source

Naveen Jangra
Convenor

Avijit Das
Program Manager

Laboratory Alcalab Private Limited, 3rd Floor, Ashiana Trade Centre, Adityapur, Jamshedpur, Jharkhand

Accreditation Standard ISO/IEC 17025:2005

Discipline Thermal Calibration **Issue Date** 24.09.2015

Certificate Number C-0571 **Valid Until** 23.09.2017

Last Amended on 06.01.2016 **Page** 2 of 2

Quantity Measured / Instrument	Range/ Frequency	* Calibration Measurement Capability (\pm)	Remarks
5. RTD, THERMOCOUPLE WITH & WITHOUT INDICATOR / RECORDER / DATA LOGGER & DIGITAL THERMOMETER*	50 °C to 250 °C 250 °C to 1000 °C	0.45 °C 2.3 °C	Using RTD, R-Type T/C with Temperature Calibrator & Liquid / Dry Well Bath by Comparison Method
II SPECIFIC HEAT AND HUMIDITY			
1. TEMPERATURE / HUMIDITY METER WITH SENSOR, THERMO HYGROMETER [§]	40 % RH to 90 % RH @ \approx 25°C	2.0% RH	Using Temperature & Humidity Meter & Humidity Chamber by Comparison Method
2. HUMIDITY / TEMPERATURE INDICATOR OF HUMIDITY / ENVIRONMENT CHAMBER*	10 °C to 50 °C @ \approx 50% RH 20% RH to 90% RH @ \approx 25 °C	0.26 °C 2.0% RH	Using Standard Temperature & Humidity Meter by Comparison Method

* Measurement Capability is expressed as an uncertainty (\pm) 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.

Naveen Jangra
Convenor

Avijit Das
Program Manager