Ascendent Technology Sdn. Bhd. (1093652-W)

Applicable

Claimable

MEASURING INSTRUMENT CALIBRATION

(Can be Customized)

SATISFACTION GUARANTEED

We ensure satisfaction in our training courses. If you think this training does not meet the objective as mentioned in the brochure, we will replace you with other training with the same or less value (valid 1 year).

PROGRAMME OVERVIEW:

This calibration training is the combination of (1) Weighing Scale, (2) Temperature Controller with Sensor, (3) Climatic Chamber (Oven / Humidity Chamber). Training focus on the three instruments & shall also go through Pressure /Vacuum / Manometer Gauge. It is designed to meet ISO quality management system requirement include ISO 9001, ISO14001, ISO/TS 16949, ISO 22000, ISO/IEC 17025, and other quality management systems. This training can be customized based on customer internal used instruments.

TARGET GROUP:

Quality Managers, Technical Managers, Laboratory Managers, Supervisors, Chemist, Engineer, Signatories of test reports & certificates, Laboratories Personnel.

OBJECTIVE:

At the end of the course, participants are expected to:

- **1.1** Acquire basic knowledge in using the equipment
- **1.2** Perform calibration independently that meet ISO requirement.
- **1.3** Perform necessary calculations include uncertainty estimation based on ISO Guide. [According to the model given only]
- **1.4** Understand and interpret calibration report include Uncertainty and its application in equipment "fit for purpose"
- **1.5** Understand the term calibration, verification, calibration interval.
- **1.6** Acquire general knowledge relates to traceability in the context of ISO 9001:2000, and ISO/IEC 17025:2017 instrument measurement system

CONTENT:

7 Calibration of Climatic Chamber

7.1 Understand the equipment and Correct method of handling.

- ✓ Temperature recorder.
- ✓ Thermocouple sensor
- ✓ Oven, incubator, furnace, water bath
- ✓ Humidity sensor

7.2 Care and Maintenance

- ✓ Precautions
- ✓ Pre-Calibration Inspection
- ✓ Environment

7.3 Calibration

- ✓ Step by step procedure based on EURAMET cg-20
- ✓ Step by step installation of sensors and data collection
- ✓ Practice at least 2 models, step by step guiding on calibration procedures

7.4 Estimate uncertainty of test base on ISO Guide

7.5 Uncertainty calculation and presenting calibration result.

7.6 Form and formula

7.7 Work example

8 Calibration of Temperature Controller with Sensor

8.1 Understand the equipment and its use

8.2 Measurement of temperature by Thermoelectricity and Resistance

- ✓ Application laws of thermocouples
- ✓ Measurement of thermal EMF
- ✓ Types of thermocouples
- ✓ Thermo-resistive elements and resistance thermometers
- ✓ Construction of Pt100 input (3 wire, 4 wire)

8.3 Care and Maintenance of the equipment

- ✓ Temperature controller
- ✓ Temperature indicator
- ✓ Temperature recorder

8.4 Calibration, Calculation and Interpretation

- ✓ Step by step procedure based on EURAMET cg-11.
- ✓ Hands-on practice
- ✓ Perform necessary metrological calculation.
- ✓ Estimate uncertainty of test base on ISO Guide.
- ✓ Draft calibration certificate and Interpretation

8.5 Work example

METHODOLOGY :

Lectures, discussion, demonstration, hands-on practice and practical exercises

CERTIFICATE :

Participants are required to complete a project usually at the end of training or within 2 weeks of completion of the training

Certificate of competency - achieves score points above 70 %

Certificate of attendance - score points below 70 % or no submission of assessment

REGISTRATION FORM (E016):

In-house Training

Course Fee : RM 5,000 Per Day

HRDF : **SBL-Khas** Claimable

Maximum No. : 5 - 25 Candidates

Mr / Ms

Participant : .....
Designation : .....
NRIC : .....
Mobile No. : .....

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CANCELLATION / POSTPONEMENT POLICY

1. Ascendent Technology Sdn.Bhd. reserves the right to cancel, postpone or make any changes to the venue and training dates due to unavoidable circumstances.
2. Reservation can be made by telephone or email, but will only be confirmed upon the received of completed registration form and payment.
3. Please do not make any travel arrangements until you have received written confirmation for your registration from us.
4. No cancellation is allowed but a candidate replacement can be arranged.
5. For confirm cancellation: 7 days notice prior to commencement will subjected to RM250 service charge. If less than 7 days notice, there will be no refund.
6. Confirm postponement for in-house training less than 14 days notice prior to commencement will subjected to 50% service charge on total invoice.

PAYMENT DETAILS

All cheques should be crossed and made payable to: **ASCENDENT TECHNOLOGY SDN BHD** Bank A/C No. **Maybank** 5127-6360-6820.
Admittance will be permitted upon receipt of full payment 2 weeks before the course is conducted.
Training certificate will be awarded upon received of full payment.

FOR HR DEPARTMENT

Company Name:

Contact Person: Mr / Ms:

Address:

Designation:

Department:

Email:

Mobile No:

Signature:

Company Stamp:

Training Date:

Telephone:

Type of Industry: