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| **Accreditation Standard** | **ISO/IEC 17025: 2005** |
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| Sl. | Quantity Measured / Instrument | Range/Frequency | *Calibration Measurement Capability (±) | Remarks |
|---|---|---|---|---|
| | **ELECTRO-TECHNICAL CALIBRATION** | | | |
| **I.** | **SOURCE** | | | |
| **1.** | Temperature Simulation (Indicator / Controller / Recorder/ Scanner/ Data Logger) Compartable with K-Type Thermocouple# | 0 °C to 1370.0 °C | 1.0 °C | Using Thermocouple Simulator By Direct Method |
| **2.** | Time Interval# | 60.0 s to 3600.0 s | 0.71 s | Using Digital Timer, By Comparison Method |

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|---|---|---|---|---|
| | | **FLUID-FLOW CALIBRATION** | | |
| **1.** | All Flow Rate Metering Devices such as Digital Flow Meter, Air Flow Meter, Laminar Flow Meter/Element, Mass Flow Controller, Mass Flow Meter, Gas Flow Meter, Rotameter, Blower Flow etc. # | 1 cc/min to 500 cc/min | 1.46 % Rdg. | Using Laminar Flow Calibrator/ Air Flow Calibrator /Orifice Flow Calibrator By Comparison Method |
| | | 200 cc/min to 25000 cc/min | 0.76 % Rdg. | |
| | | 1 lpm to 100 lpm | 0.83 % Rdg. | |
| | | 30 lpm to 250 lpm | 1.32 % Rdg. | |
| | | 180 lpm to 2400 lpm | 1.46 % Rdg | Using Top Loading Orifice Flow Calibrator By Comparison Method |

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| | | **MECHANICAL CALIBRATION** | | |
| **I.** | **ACCOUSTICS** | | | |
| **1.** | Sound Level Calibrator[$] | **1 kHz**<br>73 dB to 114 dB | 1.78 dB | Using Sound Level Meter By Direct Method |
| **2.** | Sound Level Meter[$] | 94 dB @1 kHz<br>114 dB @1 kHz | 1.3 dB | Using Sound Level Calibrator By Direct Method |
| **II.** | **PRESSURE INDICATING DEVICES** | | | |
| **1.** | Analog / Digital Vacuum Gauge, Vacuum Transmitter[#] | (-) 900 mbar to 0 mbar | 0.42 mbar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **2.** | Analog / Digital Pneumatic Pressure Gauge, Manometer, Differential Gauge, Magnehelic Gauge, Transmitter[#] | 0 to 500 Pa | 0.30 Pa | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **3.** | Analog / Digital Pneumatic Pressure Gauge, Manometer, Differential Gauge & Magnehelic Gauge Transmitter[#] | 0 to 2100 Pa | 1.0 Pa | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **4.** | Analog / Digital Pneumatic Pressure Gauge, Manometer, | 0 to 210 mbar | 0.12 mbar | Using Polltech Digital Pressure Calibrators By comparison Method |

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| | Differential Gauge & Magnehelic Gauge Transmitter# | | | (as per DKD-R-6-1) |
| **5.** | Analog / Digital Pneumatic Pressure Gauge, Manometer, Differential Gauge, Transmitter# | 0 to 2100 mbar | 0.36 mbar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **6.** | Analog/Digital Absolute Pressure Gauge Transmitter# | 100 mbar to 1075 mbar Absolute | 0.3 mbar A | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-2) |
| **7.** | Analog / Digital Pneumatic Pressure Gauge, Transmitter Absolute Pressure# | 0 to 10.5 bar Gauge/Absolute | 0.004 bar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-2) |
| **8.** | Analog / Digital Pneumatic Pressure Gauge, Transmitter# | 0 to 30 bar | 0.01 bar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **9.** | Analog / Digital Hydraulic Pressure Gauge, Transmitter# | 0 to 300 bar | 0.48 bar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **10.** | Analog / Digital Hydraulic Pressure Gauge, Transmitter # | 0 to 700 bar | 0.4 bar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |

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| **11.** | Analog / Digital Pneumatic Pressure Gauge, Manometer, Differential Gauge, Transmitter# | 0 to 60 mbar | 0.02 mbar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |
| **12.** | Analog / Digital Pneumatic Pressure Gauge, Manometer, Differential Gauge, Transmitter# | 0 to 600 mbar | 0.20 mbar | Using Polltech Digital Pressure Calibrators By comparison Method (as per DKD-R-6-1) |

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|---|---|---|---|---|
| | **THERMAL CALIBRATION** | | | |
| **I.** | **TEMPERATURE** | | | |
| **1.** | All Type of RTD's, Thermocouples with or without Controller/Indicator/ Data-Logger/ Recorder, Dial Temperature Gauge, Digital Thermometer & Temperature Transmitter ,Digital Thermometer, Thermistor[#] | (-) 35.00 °C to 120.00 °C<br>120.0 °C to 500.0 °C<br>500.0 °C to 1200.0 °C | 0.48 °C<br>3.31 °C<br>4.0 °C | Using Standard Resistance Temperature Meter/with RTD (Pt-100) Sensor/ Thermocouple Temperature Meter with S-Type Thermocouple, 6½ Digital Fluke Multimeter as a Readout & Source : Liquid & Dry Block Temperature Baths By Comparison Method |
| **2.** | Temperature Indicator with Sensor/ Thermocouple of Freezer, Oven Temperature Bath/ Furnace[♣] | (-) 35.00 °C to 120.00 °C<br>120.0 °C to 500.0 °C<br>500.0 °C to 1200.0 °C | 0.48 °C<br>3.31 °C<br>3.46 °C | Using Standard Resistance Temperature Meter/with RTD (Pt-100) Sensor/ Thermocouple Temperature Meter with S-Type Thermocouple, 6½ Digital Fluke Multimeter as a readout By Comparison Method (Single Position Calibration) |
| **3.** | Glass Thermometer[#] | (-) 35.00 °C to 100.00 °C | 0.45 °C | Using Standard Resistance Temperature Meter with RTD (Pt-100) Sensor, Source : Liquid Temperature Bath By Comparison Method |

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| **II.** | **SPECIFIC HEAT & HUMIDITY** | | | |
| **1.** | Relative Humidity Indicator of Humidity Calibrator/Generator / Chamber[#] | 20% RH to 92% RH<br>5 °C to 50 °C | 1.67%RH<br>0.46°C | Using Temperature & Humidity Meter with Sensor By Comparison Method (Single Position Calibration) |
| **2.** | Digital/Analogue Thermo-Hygrometer, Dry & Wet Thermometer[$] | 20 % RH to 92 % RH<br>5°C to 50°C | 1.67%RH<br>0.46°C | Using Temperature & Humidity Meter with Sensor Source RH Calibrator & Thermal Chamber By Comparison Method |

*** 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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