National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

FLUID CONTROL RESEARCH INSTITUTE

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

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

for its facilities at

KANJIKODE WEST, PALAKKAD, KERALA, INDIA

in the field of

CALIBRATION

Certificate Number: CC-2395

Issue Date: 01/07/2024 **Valid Until:** 30/06/2026

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of thislaboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: FLUID CONTROL RESEARCH INSTITUTE

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer

SCOPE OF ACCREDITATION

Laboratory Name :	FLUID CONTROL RESEARCH INSTITUTE, KANJIKODE WEST, PALAKKAD, KERALA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
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S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Permanent Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø, AC Power @ (50 Hz, UPF, 60 V to 240 V, 0.5 A to 20 A)	Using Digital Power Meter by Direct Method	30 W to 4.8 kW	0.81 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 1 kHz to 10 kHz	Using 8½ Digit Multimeter by Direct Method	1 A to 10 A	0.11 % to 0.31 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 1 kHz to 10 kHz	Using 8½ Digit Multimeter by Direct Method	10 mA to 1 A	0.26 % to 0.11 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 45 Hz to 1 kHz	Using 8½ Digit Multimeter by Direct Method	1 A to 20 A	0.098 % to 0.12 %

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 45 Hz to 1 kHz	Using 8½ Digit Multimeter by Direct Method	100 µA to 1 A	0.098 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 1 kHz to 100 kHz	Using 8½ Digit Multimeter by Direct Method	100 mV to 100 V	0.1 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 100 kHz to 1 MHz	Using 8½ Digit Multimeter by Direct Method	1 V to 10 V	3.5 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 20 Hz to 1 kHz	Using 8½ Digit Multimeter by Direct Method	10 mV to 100 mV	0.11 % to 0.02 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 20 Hz to 1 kHz	Using 8½ Digit Multimeter by Direct Method	100 mV to 1000 V	0.02 %

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10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	1 A to 10 A	0.075 % to 0.1 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	10 A to 20 A	0.1 % to 0.17 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 45 Hz to 5 kHz	Using Multifunction Calibrator by Direct Method	1 mA to 1 A	0.021 % to 0.025 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50 Hz	Using Multiproduct Calibrator with Current Coil by Direct Method	20 A to 1000 A	0.58 % to 0.35 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 100 kHz	Using Multi Product Calibrator by Direct Method	10 V to 100 V	0.15 % to 0.3 %
15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 1 kHz to 100 kHz	Using Multi Product Calibrator by Direct Method	30 mV to 10 V	0.45 % to 0.15 %

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16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 10 Hz to 45 Hz	Using Multi Product Calibrator by Direct Method	1 mV to 100 mV	0.71 % to 0.019 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 10 Hz to 45 Hz	Using Multi Product Calibrator by Direct Method	100 mV to 33 V	0.019 % to 0.03 %
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	1 mV to 10 mV	0.71 % to 0.102 %
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	1 V to 100 V	0.027 % to 0.033 %
20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	10 mV to 100 mV	0.102 % to 0.019 %
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	100 mV to 1 V	0.019 % to 0.027 %

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22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	100 V to 1000 V	0.033 % to 0.04 %
23	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 8½ Digit Multimeter by Direct Method	1 A to 20 A	0.023 % to 0.049 %
24	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 8½ Digit Multimeter by Direct Method	10 µA to 100 µA	0.007 % to 0.002 %
25	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 8½ Digit Multimeter by Direct Method	100 µA to 100 mA	0.002 % to 0.007 %
26	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 8½ Digit Multimeter by Direct Method	100 mA to 1 A	0.007 % to 0.023 %
27	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 8½ Digit Multimeter by Direct Method	0.1 mV to 100 mV	0.23 % to 0.0009 %

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28	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 8½ Digit Multimeter by Direct Method	100 mV to 1000 V	0.0009 %
29	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance - 4 Wire	Using 8½ Digit Multimeter by Direct Method	0.1 ohm to 1 ohm	0.055 % to 0.0023 %
30	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance - 4 Wire	Using 8½ Digit Multimeter by Direct Method	1 Gohm to 10 Gohm	0.23 % to 0.25 %
31	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance - 4 Wire	Using 8½ Digit Multimeter by Direct Method	1 Mohm to 100 Mohm	0.0015 % to 0.027 %
32	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance - 4 Wire	Using 8½ Digit Multimeter by Direct Method	1 ohm to 1 Mohm	0.0023 % to 0.0015 %
33	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance - 4 Wire	Using Micro Ohm Meter by Direct Method	100 µohm to 1 kohm	5.163 % to 0.1 %

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34	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance - 4 Wire	Using 8½ Digit Multimeter by Direct Method	100 Mohm to 1 Gohm	0.027 % to 0.23 %
35	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multifunction Calibrator by Direct Method	1 mA to 100 mA	0.006 %
36	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct Method	10 A to 20 A	0.054 % to 0.12 %
37	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multifunction Calibrator by Direct Method	100 µA to 1 mA	0.021 % to 0.006 %
38	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multifunction Calibrator by Direct Method	100 mA to 10 A	0.006 % to 0.054 %
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator with Current Coil by Direct Method	20 A to 1000 A	0.31 %

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40	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by Direct Method	1 mV to 10 mV	0.06 % to 0.007 %
41	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by Direct Method	10 mV to 10 V	0.007 % to 0.001 %
42	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct Method	10 V to 1000 V	0.0025 %
43	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multifunction Calibrator by Direct Method	100 µV to 1 mV	0.6 % to 0.06 %
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	1 kohm	0.009 %
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	1 Mohm	0.0023 %

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46	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	1 ohm	0.0006 %
47	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	10 µohm	0.015 %
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	10 kohm	0.009 %
49	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	10 Mohm	0.0045 %
50	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	10 mohm	0.01 %
51	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	10 ohm	0.0004 %

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52	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	100 µohm	0.13 %
53	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	100 kohm	0.009 %
54	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	100 mohm	0.006 %
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	100 Mohm	0.01 %
56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	100 ohm	0.0004 %
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	25 ohm	0.009 %

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58	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Standard Resistor by Direct Method	1 Gohm	0.038 %
59	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Amplitude AC Voltage (Sine Wave) @ 50 ohm Load and 1 kHz	Using Oscilloscope Calibrator by Direct Method	100 mV to 4.8 V	1.7 %
60	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Amplitude AC Voltage (Square Wave) @ 1 Mohm Load and 1 kHz	Using Oscilloscope Calibrator by Direct Method	10 mV to 60 V	0.54 % to 0.17 %
61	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Amplitude DC Voltage @ 1Mohm Load	Using Oscilloscope Calibrator by Direct Method	10 mV to 100 V	0.38 % to 0.08 %
62	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Bandwidth / Flatness (Relative to 50 kHz)	Using Oscilloscope Calibrator by Direct Method	50 kHz to 600 MHz	4.24 %
63	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Time Marker	Using Oscilloscope Calibrator by Direct Method	10 ns to 10 ms	0.14 % to 0.058 %

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64	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	RTD (PT 100)	Using 8½ Digit Multimeter by Direct Method	(-) 200 °C to 800 °C	0.011 °C
65	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	RTD (PT 1000)	Using 8½ Digit Multimeter by Direct Method	(-) 200 °C to 630 °C	0.015 °C
66	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple B Type	Using Multiproduct Calibrator by Direct Method	600 °C to 1820 °C	0.53 °C
67	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple C Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1000 °C	0.39 °C
68	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple E Type	Using Multiproduct Calibrator by Direct Method	(-) 100 °C to 1000 °C	0.25 °C
69	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple J Type	Using Multiproduct Calibrator by Direct Method	(-) 210 °C to 1200 °C	0.28 °C

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70	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple K Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1372 °C	0.45 °C
71	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple N Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1300 °C	0.43 °C
72	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple R Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.6 °C
73	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple S Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.57 °C
74	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple T Type	Using Multiproduct Calibrator by Direct Method	(-) 150 °C to 400 °C	0.32 °C
75	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD (PT 100)	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 800 °C	0.27 °C

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76	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD (PT 1000)	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 630 °C	0.25 °C
77	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple B Type	Using Multiproduct Calibrator by Direct Method	600 °C to 1820 °C	0.51 °C
78	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple C Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1000 °C	0.37 °C
79	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple E Type	Using Multiproduct Calibrator by Direct Method	(-) 100 °C to 1000 °C	0.26 °C
80	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple J Type	Using Multiproduct Calibrator by Direct Method	(-) 210 °C to 1200 °C	0.31 °C
81	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple K Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1372 °C	0.47 °C

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82	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple N Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1300 °C	0.43 °C
83	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple R Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.66 °C
84	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple S Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.5 °C
85	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple T Type	Using Multiproduct Calibrator by Direct Method	(-) 150 °C to 400 °C	0.28 °C
86	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Using Universal Counter by Direct Method	1 Hz to 225 MHz	0.1 % to 0.00028 %
87	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time	Using Universal Counter by Direct Method	1 s to 5400 s	5 µs to 16 ms

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88	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Function Generator by Direct Method	1 Hz to 9 kHz	1 % to 0.0023 %
89	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using RF Signal Generator by Direct Method	9 kHz to 200 MHz	0.0023 % to 0.0003 %
90	FLUID FLOW-FLOW MEASURING DEVICES	Bell Prover Volume - Medium Air	Using 30 kg Weighing System by Gravimetric Method	0.1 l to 500 l	0.1 %
91	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - High Pressure Conditions (0 - 20 bar) - Medium Air	Using Positive Displacement Meter & Secondary Standards by Comparison Method	0.8 m^3/h to 25 m^3/h	0.5 %
92	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - High Pressure Conditions (0 - 20 bar) - Medium Air	Using Critical Flow Venturi Nozzles & Secondary Standards by Comparison Method	1 kg/h to 1000 kg/h	0.15 %
93	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - High Pressure Conditions (0 - 20 bar) - Medium Air	Using Turbine Meters & Secondary Standard by Comparison Method	10 m^3/h to 400 m^3/h	0.3 %

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94	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - High Pressure Conditions (0 - 20 bar) - Medium Air	Using Gravimetric System & Primary Operating System by Comparison Method	4 kg/h to 1000 kg/h	0.1 %
95	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Thermal Mass Flow Meters & Secondary Standard by Comparison Method	0.00075 l/min to 1000 l/min	1 %
96	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Bell Prover & Primary Operating System by Comparison Method	0.016 m^3/h to 0.25 m^3/h	0.3 %
97	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Bell Prover & Primary Operating System by Comparison Method	0.25 m^3/h to 40 m^3/h	0.12 %rdg
98	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Positive Displacement Meter & Secondary Standard by Comparison Method	0.5 m^3/h to 160 m^3/h	0.5 %
99	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Critical Flow Venturi Nozzles & Secondary Standards by Comparison Method	0.7 m^3/h to 400 m^3/h	0.15 %

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100	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Turbine Meters & Secondary Standard by Comparison Method	200 m^3/h to 4000 m^3/h	0.5 %
101	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Critical Flow Venturi Nozzles & Secondary Standards by Comparison Method	400 m^3/h to 10000 m^3/h	0.25 %
102	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium Air	Using Turbine Meters & Secondary Standard by Comparison Method	90 m^3/h to 1000 m^3/h	0.5 %
103	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium N2	Using Automatic Primary Gas Flow Calibrator / Piston Prover & Primary Operating System by Comparison Method	0.0012 m^3/h to 3 m^3/h	0.2 %
104	FLUID FLOW-FLOW MEASURING DEVICES	Flow Rate - Near Ambient Condition - Medium N2	Using Volume Meter / Piston Prover & Primary Operating System by Comparison Method	0.75 ml/min to 250 ml/min	0.3 %
105	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Oil	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0.05 kg to 25 kg	0.03 %

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106	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Oil	Using 10000 kg Weighing System by Gravimetric Method	1600 kg to 8000 kg	0.03 %
107	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Oil	Using 300 kg Weighing System by Gravimetric Method	25 kg to 250 kg	0.03 %
108	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Oil	Using 2000 kg Weighing System by Gravimetric Method	250 kg to 1600 kg	0.03 %
109	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Water	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0 kg to 30 kg	0.03 %
110	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Water	Using 2000 kg Weighing System by Gravimetric Method	200 kg to 2000 kg	0.03 %
111	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Water	Using 20000 kg Weighing System by Gravimetric Method	2000 kg to 20000 kg	0.03 %
112	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass - Water	Using 300 kg Weighing System by Gravimetric Method	30 kg to 200 kg	0.03 %

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113	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flow Rate	Using Coriolis Mass Flow Meter by Comparison Method	0 t/h to 150 t/h	0.1 2 %
114	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Oil	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0.001 t/h to 0.8 t/h	0.035 %
115	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Oil	Using 300 kg Weighing System by Gravimetric Method	0.8 t/h to 5 t/h	0.035 %
116	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Oil	Using 2000 kg Weighing System by Gravimetric Method	5 t/h to 80 t/h	0.035 %
117	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Oil	Using 10000 kg Weighing System by Gravimetric Method	80 t/h to 500 t/h	0.05 %
118	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Water	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0.001 t/h to 1 t/h	0.035 %
119	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Water	Using 300 kg Weighing System by Gravimetric Method	1 t/h to 6 t/h	0.035 %

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120	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Water	Using 20000 kg Weighing System by Gravimetric Method	200 t/h to 2500 t/h	0.05 %
121	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flowrate - Water	Using 2000 kg Weighing System by Gravimetric Method	6 t/h to 200 t/h	0.035 %
122	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Oil	Using 2000 kg Weighing System by Gravimetric Method	0.2 m^3 to 1.8 m^3	0.04 %
123	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Oil	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0 m^3 to 0.03 m^3	0.04 %
124	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Oil	Using 300 kg Weighing System by Gravimetric Method	0.03 m^3 to 0.2 m^3	0.04 %
125	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Oil	Using 10000 kg Weighing System by Gravimetric Method	1.8 m^3 to 9 m^3	0.04 %
126	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Water	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0.0001 m^3 to 0.03 m^3	0.04 %

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127	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Water	Using 300 kg Weighing System by Gravimetric Method	0.03 m^3 to 0.2 m^3	0.04 %
128	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Water	Using 2000 kg Weighing System by Gravimetric Method	0.2 m^3 to 2 m^3	0.04 %
129	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Water	Using 20000 kg Weighing System by Gravimetric Method	2 m^3 to 20 m^3	0.05 %
130	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume - Water	Using 210 g Weighing System by Gravimetric Method	5 ml to 60 ml	0.4 %
131	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate	Using Coriolis Mass Flow Meter by Comparison Method	0 m^3/h to 150 m^3/h	0.15 %
132	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Oil	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0.001 m^3/h to 1 m^3/h	0.05 %
133	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Oil	Using 300 kg Weighing System by Gravimetric Method	1 m^3/h to 6 m^3/h	0.05 %

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134	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Oil	Using 10000 kg Weighing System by Gravimetric Method	100 m^3/h to 600 m^3/h	0.1 %
135	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Oil	Using 2000 kg Weighing System by Gravimetric Method	6 m^3/h to 100 m^3/h	0.05 %
136	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using 2 kg / 60 kg Weighing System by Gravimetric Method	0.001 m^3/h to 1 m^3/h	0.05 %
137	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using 300 kg Weighing System by Gravimetric Method	1 m^3/h to 6 m^3/h	0.05 %
138	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using 210 g Weighing System by Gravimetric Method	10 ml/h to 1000 ml/h	0.45 %
139	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using 20000 kg Weighing System by Gravimetric Method	200 m^3/h to 2500 m^3/h	0.1 %
140	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using 500 mm Flow Meter by Comparison Method	2500 m^3/h to 4500 m^3/h	0.2 %

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141	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using Electromagnetic Flow Meters by Comparison Method	4500 m^3/h to 10000 m^3/h	0.5 %
142	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate - Water	Using 2000 kg Weighing System by Gravimetric Method	6 m^3/h to 200 m^3/h	0.05 %
143	FLUID FLOW-FLOW MEASURING DEVICES	PVTt Volume - Medium Air	Using 30 kg Weighing System by Gravimetric Method	0.1 l to 2000 l	0.1 %
144	FLUID FLOW-FLOW MEASURING DEVICES	Velocity - Medium Air	Using Thermal Anemometer & Point Velocity Measuring System by Comparison Method	0.2 m/s to 0.5 m/s	0.015 m/s
145	FLUID FLOW-FLOW MEASURING DEVICES	Velocity - Medium Air	Using Thermal Anemometer & Point Velocity Measuring System by Comparison Method	0.5 m/s to 3 m/s	3 %
146	FLUID FLOW-FLOW MEASURING DEVICES	Velocity - Medium Air	Using Pitot Static Tube & Point Velocity Measuring System by Comparison Method	3 m/s to 80 m/s	1.1 %

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147	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration Sensor - Amplitude @ 2 Hz to 5000 Hz	Using Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 10 g	1.8 %
148	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration Sensor - Amplitude @ 100 Hz to 160 Hz	Using Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 10 g	1.25 %
149	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration Sensor - Amplitude @ 5000 Hz to 15000 Hz	Using Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 10 g	2.5 %
150	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration sensor - Linearity @ 100 Hz and 160 Hz	Using Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 30 g	1.25 %
151	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration Sensor - Phase	Using Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	2 Hz to 15000 Hz	1.5 ° to 3 °

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152	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration Sensor, Vibration Meter, Vibration Analyzer - Amplitude @ 5 Hz to 10000 Hz	Using Portable Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 10 g	2.64 %
153	MECHANICAL-ACCELERATION AND SPEED	Centrifuge, MST Apparatus, Stroboscope, Speed Sensor	Using Tachometer by Comparison Method	60 rpm to 10000 rpm	1 rpm
154	MECHANICAL-ACCELERATION AND SPEED	Centrifuge, MST Apparatus, Stroboscope, Speed Sensor	Using Tachometer by Comparison Method	10000 rpm to 50000 rpm	2.1 rpm
155	MECHANICAL-ACCELERATION AND SPEED	Charge Amplifier use with Vibration, Acoustic Sensor - Amplitude @ 2 Hz to 20000 Hz	Using Vibration Controller System by Direct Method	1 Gain to 1000 Gain	0.4 %
156	MECHANICAL-ACCELERATION AND SPEED	IEPE Amplifier use with Vibration, Acoustic Sensor - Amplitude @ 2 Hz to 20000 Hz	Using Vibration Controller System by Direct Method	1 Gain to 1000 Gain	0.3 %
157	MECHANICAL-ACCELERATION AND SPEED	Impact Hammer used in Modal Analysis - Sensitivity Verification	Using Pendulum Type Calibration System by Direct Method	0.1 pC/N, mv/N to 10 pC/N, mv/N	2.8 %

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158	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Contact mode	Using Tachometer, Variable Speed Drive and Gear Box Assembly Comparison Method	100 rpm to 10000 rpm	1 rpm
159	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Non Contact Mode	Using Function Generator and Light Source by Comparison Method	60 rpm to 10000 rpm	0.66 rpm
160	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Non Contact Mode	Using Function Generator and Light Source by Comparison Method	10000 rpm to 50000 rpm	1.42 rpm
161	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Non Contact Mode	Using Function Generator and Light Source by Comparison Method	50000 rpm to 100000 rpm	2.48 rpm
162	MECHANICAL-ACCELERATION AND SPEED	Vibration Analyzer, Vibration Meter - (Multipoint) - Amplitude (Acceleration) @ 5 Hz to 5000 Hz	Using Accelerometer reference Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g (pk) to 15 g (pk)	2.4 %
163	MECHANICAL-ACCELERATION AND SPEED	Vibration Analyzer, Vibration Meter - (Multipoint) - Amplitude (Displacement) @ 5 Hz to 800 Hz	Using Accelerometer reference Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.01 mm (pk) to 10 mm (pk)	2.4 %

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164	MECHANICAL-ACCELERATION AND SPEED	Vibration Analyzer, Vibration Meter - (Multipoint) - Amplitude (Velocity) @ 5 Hz to 1250 Hz	Using Accelerometer reference Calibration System by Back to Back Calibration Method as per ISO 16063-21	1 mm/sec (pk) to 240 mm/sec (pk)	2.4 %
165	MECHANICAL-ACCELERATION AND SPEED	Vibration Shaker, Exciter, Calibrator in Acceleration, Velocity and Displacement Mode - Amplitude @ 2 Hz to 10000 Hz	Using Reference Accelerometer and Multimeter by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 30 g	2.5 %
166	MECHANICAL-ACOUSTICS	Acoustic power - sound source	Using Hemi Anechoic chamber, Sound level meter, As per ISO 3745, ISO 6926, Frequency range 20Hz to 20000Hz	30 dB to 140 dB	0.6 dB
167	MECHANICAL-ACOUSTICS	Acoustic Pressure - Free Field Microphone, Microphone with Preamplifier @ 10000 Hz to 20000 Hz	Using Anechoic Chamber, Reference Microphone and Vibration Control Unit as per IEC 61672-3	65 dB to 90 dB	0.42 dB

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168	MECHANICAL-ACOUSTICS	Acoustic Pressure - Free Field Microphone, Microphone with Preamplifier @ 125 Hz to 10000 Hz	Using Anechoic Chamber, Reference Microphone and Vibration Control Unit by Comparison Method as per IEC 61094-8	65 dB to 90 dB	0.26 dB
169	MECHANICAL-ACOUSTICS	Acoustic Pressure - Free Field Sound Level Meter @ > 250 Hz to 5000 Hz	Using Anechoic Chamber, Reference Microphone and Vibration Control Unit as per IEC 61672-3	70 dB to 90 dB	0.31 dB
170	MECHANICAL-ACOUSTICS	Acoustic Pressure - Free Field Sound Level Meter @ > 5000 Hz to 8000 Hz	Using Anechoic Chamber, Reference Microphone and Vibration Control Unit as per IEC 61672-3	70 dB to 90 dB	0.33 dB
171	MECHANICAL-ACOUSTICS	Acoustic Pressure - Free Field Sound Level Meter @ > 8000 Hz to 20000 Hz	Using Anechoic Chamber, Reference Microphone and Vibration Control Unit as per IEC 61672-3	70 dB to 90 dB	0.48 dB

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172	MECHANICAL-ACOUSTICS	Acoustic Pressure - Free Field Sound Level Meter @ 125 Hz to 250 Hz	Using Anechoic Chamber, Reference Microphone and Vibration Control Unit by Comparison Method as per IEC 61672-3	70 dB to 90 dB	0.4 dB
173	MECHANICAL-ACOUSTICS	Acoustic Pressure - Pressure Field Microphone, Sound Level Meter @ 1000Hz	Using Reference Acoustic Calibrator, Vibration Control Unit by Comparison Method	74 dB to 124 dB	0.2 dB
174	MECHANICAL-ACOUSTICS	Acoustic Pressure - Pressure Field Microphone, Sound Level Meter @ 250 Hz	Using Reference Piston Phone, Vibration Control Unit by Comparison Method	124 dB	0.2 dB
175	MECHANICAL-ACOUSTICS	Acoustic Pressure - Pressure Field, Multifunction Acoustic Calibrator @ 31.5 Hz to 16000 Hz	Using Reference Microphone and Control Unit by Comparison Method	64 dB to 140 dB	0.3 dB
176	MECHANICAL-ACOUSTICS	Acoustic Pressure - Pressure Field, Sound Level Calibrator, Piston Phone @ 250 Hz and 1000 Hz	Using Reference Microphone & Reference Control Unit by Measurement Method as per IEC 60942	74 dB to 124 dB	0.2 dB

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177	MECHANICAL-ACOUSTICS	Acoustic Pressure - Pressure Field, Sound Level Calibrator, Piston Phone @ 250 Hz and 1000 Hz	Using Piston Phone, Acoustic Calibrator and Reference Control Unit by Substitution Method as per IEC 60942	94 dB to 124 dB	0.15 dB
178	MECHANICAL-DENSITY AND VISCOSITY	Density Hydrometer, Specific Gravity Hydrometer, Alcoholometer, Twaddle Hydrometer, Baume Hydrometer, Brix Hydrometer, Arbitrary Scale Hydrometer at S	Using Standard Hydrometers by Comparison Method	0.64 g/ml to 1 g/ml	0.0005 g/ml
179	MECHANICAL-DENSITY AND VISCOSITY	Density Hydrometer, Specific Gravity Hydrometer, Alcoholometer, Twaddle Hydrometer, Baume Hydrometer, Brix Hydrometer, Arbitrary Scale Hydrometer at Spe	Using Standard Hydrometers by Comparison Method	> 1 g/ml to 1.65 g/ml	0.00076 g/ml
180	MECHANICAL-DENSITY AND VISCOSITY	Density Indication - Mass Flow Meter, Densitometer	Using Certified Density Liquids and Reference Density Meter by Comparison Method	0.75 g/ml to 1.6 g/ml	0.00003 g/ml

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181	MECHANICAL-DENSITY AND VISCOSITY	Density, Specific Gravity - Unknown Sample (DUC) Liquid	Using Certified Density Liquids and Reference Density Meter by Comparison Method	0.65 g/ml to 1.6 g/ml	0.00003 g/ml
182	MECHANICAL-DENSITY AND VISCOSITY	Digital Densitymeter - Range 0 to 3 g/ml (L.C.: 0.000001 g/ml)	Using Certified Density Liquids and Reference Density Meter by Comparison Method	0.75 g/ml to 1.6 g/ml	0.000025 g/ml
183	MECHANICAL-DENSITY AND VISCOSITY	Dynamic Viscosity - Brookfield Viscometer	Using Certified Viscosity Liquids by Comparison Method	1 mPas to 23000 mPas	1 % FS
184	MECHANICAL-DENSITY AND VISCOSITY	Dynamic Viscosity - Falling Ball Viscometer	Using Certified Viscosity Liquid and Constant Temperature Bath by Comparison Method	1 mPas to 85000 mPas	0.7 % rdg
185	MECHANICAL-DENSITY AND VISCOSITY	Dynamic, Kinematic Viscosity - Unknown Sample (DUC) Liquid	Using Falling Ball Viscometer / Ubbelohde Capillary Viscometer by Comparison Method as per ISO 3104:2020	1 mPa.s to 23000 mPa.s	1 % rdg

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186	MECHANICAL-DENSITY AND VISCOSITY	Dynamic, Kinematic Viscosity - Zahn Cup, Ford Cup, Flow Cup, Viscosity Cup, Sheen Cup	Using Ubbelohde Capillary Viscometer / Falling Ball Viscometer, Certified Viscosity Liquids as per IS 3944: 2020, ASTM D 1200	1 mPas / cSt to 23,000 mPas / cSt	1.1 % rdg
187	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor (L.C.: 5 minute of arc)	Using Angle Gauge Blocks by Direct Method	0° - 90° - 0 °	4 minute of arc
188	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bore Gauge - Transmission Error (L.C.: 1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 2 mm	2.9 µm
189	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Vernier / Dial / Digital (L.C.: 10 µm)	Using Caliper Checker, Slip Gauge Set and Long Gauge Blocks by Comparison Method	0 to 600 mm	10 µm
190	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Comparator Stand - Flatness	Using Coordinate Measuring Machine by Comparison Method	Up to 300 x 300 mm	6 µm

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191	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer - Analog / Dial / Digital (L.C.: 1 µm)	Using Gauge Blocks Set by Direct Method	0 to 300 mm	6.7 µm
192	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Thickness Gauge (L.C.: 1 µm)	Using Gauge Blocks Set by Direct Method	0 to 25 mm	2.2 µm
193	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer - Analog / Dial / Digital (L.C.: 1 µm)	Using Gauge Block, Long Gauge Blocks by Comparison Method	> 100 mm to 1000 mm	6 µm
194	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer - Analog / Dial / Digital (L.C.: 1 µm)	Using Slip Gauge Set by Comparison Method	0 to 100 mm	3 µm
195	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler Gauge	Using Universal Length Measuring Machine by Direct Method	0.1 mm to 2 mm	3.27 µm

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196	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inclinometer, Spirit Level (L.C.: 0.01 µm/m)	Using Electronic Level by Comparison Method	0 to 2000 µm/m	5 µm/m
197	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside / Stick Micrometer - Dial / Digital (L.C.: 1 µm)	Using Universal Length Measuring Machine and Gauge Blocks by Comparison Method	> 100 mm to 600 mm	4.7 µm
198	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside / Stick Micrometer - Dial / Digital (L.C.: 1 µm)	Using Universal Length Measuring Machine, Gauge Blocks by Comparison Method	5 to 100 mm	2 µm
199	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Lever Type Dial Gauge (L.C.: 0.001 mm)	Using Universal Length Measuring Machine by Comparison Method	0 to 2 mm	1 µm
200	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring Scale (L.C.: 0.5 mm)	Using Tape and Scale Calibrator by Comparison Method	0 to 1000 mm	145 µm

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201	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring Tape (L.C.: 1 mm)	Using Tape and Scale Calibrator by Comparison Method	> 1 m to 100 m	290 x Sqrt (L) µm, where L is in m
202	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Pie Tape (L.C.: 1 mm)	Using Tape and Scale Calibrator by Comparison Method	Up to 6 m	290 x Sqrt (L) µm, where L is in m
203	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Pin Gauge	Using Universal Length Measuring Machine by Comparison Method	0.5 mm to 20 mm	3.6 µm
204	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge	Using Universal Length Measuring Machine by Direct Method	1 mm to 100 mm	1 µm
205	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using Universal Length Measuring Machine & Setting Rings by Comparison Method	> 100 mm to 200 mm	2 µm

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206	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using Universal Length Measuring Machine & Setting Rings by Comparison Method	> 200 mm to 225 mm	6 µm
207	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using Universal Length Measuring Machine, Setting Rings by Comparison Method	3 mm to 100 mm	1.5 µm
208	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plunger Type Dial Gauge - Analog / Digital (L.C.:1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 100 mm	1.5 µm
209	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Radius Gauge	Using Profile Projector by Comparison Method	0.5 mm to 50 mm	4 µm
210	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Reference Sphere - Diameter	Using Universal Length Measuring Machine by Comparison Method	0.4 mm to 50 mm	0.37 µm

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211	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Rod, Extension Rod	Using Universal Length Measuring Machine & Gauge Blocks Set by Comparison Method	25 mm to 600 mm	2.9 µm
212	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate - Granite / Cast Iron	Using Electronic Level by Direct Method	325 x 325 mm to 2000 x 2000 mm	1.8 x sqrt {(L + W) / 150} µm, where L & W are in mm
213	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Tape and Scale Calibrator (L.C.: 1 µm)	Using Slip Gauge and Long Slip Gauges by Comparison Method	0 to 1000 mm	10.32 µm
214	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve	Using Profile Projector by Direct Method	0.032 mm to 25 mm	4 µm
215	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Measuring Wire	Using Universal Length Measuring Machine by Direct Method	0.15 mm to 7 mm	0.3 µm

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216	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge - Angle	Using Profile Projector by Direct Method	30 & 40 ° to 55 & 60 °	10 minute of arc
217	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge - Linear	Using Profile Projector by Comparison Method	0.2 mm to 8 mm	4 µm
218	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge - Major Diameter & Effective Diameter	Using Universal Length Measuring Machine and Thread Measuring Wire by Comparison Method	3 mm to 100 mm	1 µm
219	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Three Point Internal Micrometer (L.C.: 1 µm)	Using Set of Ring Gauges by Comparison Method	3 mm to 100 mm	3.5 µm
220	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V - Block - Flatness	Using Coordinate Measuring Machine by Comparison Method	Up to 50 x 150 mm	5.5 µm

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221	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V - Block - Parallelism	Using Coordinate Measuring Machine by Comparison Method	Up to 50 x 150 mm	5.5 µm
222	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V - Block - Symmetry	Using Coordinate Measuring Machine by Comparison Method	Up to 50 x 150 mm	5.5 µm
223	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker, Step Gauge, Check Master	Using Coordinate Measuring Machine and Gauge Blocks by Comparison Method	20 mm to 600 mm	5.44 µm
224	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Co-Ordinate Measuring Machine (L.C.: 0.1 µm)	Using Gauge Blocks, Master Sphere by Comparison Method	0 to 800 mm	5.15 µm
225	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Depth Micro Checker	Using Gauge Blocks & Coordinate Measuring Machine by Comparison Method	2.5 mm to 150 mm	5.43 µm
226	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Dial Calibration Tester (L.C.: 0.1 µm)	Using Gauge Blocks, Electronic Probe by Comparison Method	0 to 25 mm	1 µm

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227	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Comparator (L.C.: 0.01 µm)	Using K Grade Slip Gauges by Comparison Method	0 to 25 mm	0.16 µm
228	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Probe, LVDT Probe (L.C.: 0.1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 25 mm	1.7 µm
229	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block	Using Gauge Block Comparator and Grade K Gauge Blocks by Comparison Method	> 10 mm to 50 mm	0.09 µm
230	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block	Using Gauge Block Comparator and Grade K Gauge Blocks by Comparison Method	> 50 mm to 100 mm	0.3 µm
231	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gauge Block	Using Gauge Block Comparator and Grade K Gauge Blocks by Comparison Method	0.5 mm to 10 mm	0.06 µm
232	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Long Slip Gauge, Length Bar	Using ULM & Gauge Blocks by Comparison Method	100 mm to 500 mm	2.79 µm

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233	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Angle (L.C.: 1 minute of arc)	Using Angle Gauge Blocks by Comparison Method	0 ° to 360 °	1 minute of arc
234	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Linear (L.C.: 1 µm)	Using Glass Scale by Comparison Method	0 to 50 mm	2 µm
235	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Magnification	Using Glass Scale and Vernier Caliper by Comparison Method	2 X to 50 X	0.05 %
236	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.1 µm)	Using K Grade Slip Gauges by Comparison Method	0 to 100 mm	0.15 + (L / 200) µm, where L is in mm
237	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.1 µm)	Using Long K Grade Gauge Blocks by Comparison Method	> 100 mm to 600 mm	0.2 +(L / 200) µm, where L is in mm
238	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Dead Weight Tester	Using Dead Weight Tester by Comparison Method through Cross Float as per EURAMET cg-3	> 60 bar (g) to 1200 bar (g)	0.0081 % rdg

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239	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Dead Weight Tester	Using Dead Weight Tester by Comparison Method through Cross Float Method as per Euramet cg-3	6 bar (g) to 60 bar (g)	0.0081 % rdg
240	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Dead Weight Tester	Using Dead Weight Tester by Effective Area Determination through Cross- Float as per EURAMET cg-3	6 bar (g) to 60 bar (g)	0.0083 % rdg
241	MECHANICAL-PRESSURE BALANCE OR DEAD WEIGHT TESTER	Hydraulic Dead Weight Tester	Using Dead Weight Tester by Effective Area Determination through Cross Float as per EURAMET cg-3	60 bar (g) to 1200 bar (g)	0.0081 % rdg
242	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R6-1	110 mbar (abs) to 2000 mbar (abs)	0.016 % rdg

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243	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, and Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R6-1	2 bar (abs) to 20 bar (abs)	0.0041 bar
244	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	0.14 bar (abs) to 70 bar (abs)	0.0053 % rdg
245	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	0.5 bar (abs) to 20 bar (abs)	0.0075 % rdg

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246	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch, Pressure Transmitter, Pressure Transducer - Pneumatic Pressure	Using Precision Pressure Calibrator and Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	100 mbar (abs) to 2000 mbar (abs)	0.4 mbar
247	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Differential Pressure Gauge, Pressure Gauge, Differential Pressure Transducer, Differential Pressure Transmitter, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	10 mbar to 150 mbar	0.068 % rdg

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248	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Differential Pressure Gauge, Pressure Gauge, Differential Pressure Transducer, Differential Pressure Transmitter, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	0.2 mbar (g) to 10 mbar (g)	0.018 % rdg
249	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Differential Pressure Gauge, Pressure Gauge, Differential Pressure Transducer, Differential Pressure Transmitter, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	10 mbar to 100 mbar	0.06 mbar

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250	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Differential Pressure Gauge, Pressure Gauge, Indicator of Pressure Switch, Pressure Transducer, Pressure Transmitter, Differential Pressure Transmitter, Differential Pressure Transducer - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	(-) 10 mbar (g) to 10 mbar (g)	0.04 mbar
251	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	110 mbar (g) to 2000 mbar (g)	0.34 mbar
252	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Hydraulic Pressure	Using Precision Pressure Calibrator, Pressure Comparator, Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	1 bar (g) to 250 bar (g)	0.043 bar

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253	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Hydraulic Pressure	Using Precision Pressure Calibrator, Pressure Comparator and Multimeter by Comparison Method as per DKD R 6-1	100 bar (g) to 1000 bar (g)	0.017 bar
254	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Hydraulic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	6 bar (g) to 60 bar (g)	0.014 % rdg
255	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Hydraulic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	> 60 bar (g) to 1200 bar (g)	0.0083 % rdg

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256	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	2 bar (g) to 20 bar (g)	0.0034 bar
257	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	110 mbar (g) to 2000 mbar (g)	0.017 % rdg
258	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	0.5 bar (g) to 20 bar (g)	0.008 % rdg

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259	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	0.14 bar (g) to 70 bar (g)	0.063 % rdg
260	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Vacuum Gauge, Vacuum Transducer, Vacuum Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	(-) 0.96 bar (g) to (-) 0.11 bar (g)	0.00037 bar
261	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Vacuum Gauge, Vacuum Transducer, Vacuum Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Dead Weight Tester, Multimeter by Comparison Method as per DKD R 6-1	(-) 0.96 bar to (-) 0.11 bar	0.029 % rdg
262	MECHANICAL-TORQUE GENERATING DEVICES	Torque Wrench Type I (Class B, C), Torque Wrench - Type II (Type A, B, C)	Using Torque Transducers with Indicator by Comparison Method as per ISO 6789-1:2017	2 Nm to 1500 Nm	2 % rdg.

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263	MECHANICAL-TORQUE MEASURING DEVICES	Torque Transducer, Torque Meter, Torque Master	Using Lever Arm Beam and Dead Weights by Direct Method as per BS 7882	10 Nm to 1500 Nm	0.4 % rdg
264	MECHANICAL-VOLUME	Micropipette	Using Semi Micro Balance of Range 11 g (Readability : 0.001 mg) and Distilled Water by Gravimetric Method as per ISO 8655-6:2022	> 10 µl to 100 µl	0.3 µl
265	MECHANICAL-VOLUME	Micropipette	Using Semi Micro Balance of Range 11 g (Readability : 0.001 mg) and Distilled Water by Gravimetric Method as per ISO 8655-6:2022	1 µl to 10 µl	0.1 µl
266	MECHANICAL-VOLUME	Micropipette	Using Precision Weighing Balance of Range 210 g (Readability : 0.01 mg) and Distilled Water by Gravimetric Method as per ISO 8655-6:2022	100 µl to 10000 µl	1.5 µl

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267	MECHANICAL-VOLUME	Pipette, Burette, Volumetric Flask, Graduated Measuring Cylinder	Using Precision Weighing Balance of Range 220 g (Readability : 0.01 mg) and Distilled Water by Gravimetric Method as per ISO 4787:2021	> 10 ml to 100 ml	0.024 ml
268	MECHANICAL-VOLUME	Pipette, Burette, Volumetric Flask, Graduated Measuring Cylinder, Volume Can	Using Precision Weighing Balance of Range 2.5 kg (Readability : 0.1 mg) and Distilled Water by Gravimetric Method as per ISO 4787:2021	> 100 ml to 2000 ml	0.2 ml
269	MECHANICAL-VOLUME	Volume Can, Volume Tank	Using Precision Weighing Balance of Range 3000 kg (Readability : 0.001 kg) by Weighing Method as per ISO 4787:2021	> 20 l to 100 l	5 ml

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270	MECHANICAL-VOLUME	Volume Can, Volume Tank	Using Precision Weighing Balance of Range 3000 kg (Readability : 0.001 kg) by Weighing Method as per ISO 4787:2021	> 100 l to 250 l	14 ml
271	MECHANICAL-VOLUME	Volumetric Flask, Graduated Measuring Cylinder, Volume Can	Using Precision Weighing Balance of Range 5 kg (Readability : 1 mg) and Distilled Water by Gravimetric Method as per ISO 4787:2021	> 2000 ml to 4000 ml	0.3 ml
272	MECHANICAL-VOLUME	Volumetric Flask, Graduated Measuring Cylinder, Volume Can	Using Precision Weighing Balance of Range 64 kg (Readability : 0.01 g) and Distilled Water by Gravimetric Method as per ISO 4787:2021	> 4000 ml to 5000 ml	0.5 ml
273	MECHANICAL-VOLUME	Volumetric Flask, Graduated Measuring Cylinder, Volume Can	Using Precision Weighing Balance of Range 64 kg (Readability : 0.01 g) by Weighing Method as per ISO 4787: 2021	5 l to 20 l	2 ml

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274	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 11 g	0.009 mg
275	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 2 g	0.004 mg
276	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 20 g	0.01 mg
277	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 5 g	0.004 mg
278	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.01 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 220 g	0.05 mg
279	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.1 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 2.5 kg	0.0004 g
280	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 1 g)	Using F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 600 kg	0.02 kg

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281	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 1 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 5 kg	0.004 g
282	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 10 mg)	Using E1, F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 64 kg	0.15 g
283	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class IIII and Coarser (Readability: 0.001 kg)	Using F1, M1 Class Weights by Comparison Method as per OIML R 76-1	0 to 3000 kg	0.02 kg
284	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class IIII and Coarser (Readability: 0.05 kg)	Using F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 2000 kg	0.1 kg
285	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class IIII and Coarser (Readability: 2 kg)	Using F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 20000 kg	1.9 kg
286	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	1 g	0.004 mg

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287	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Weighing Balance of Range 2.5 kg (Readability : 0.1 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	1 kg	0.5 mg
288	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	1 mg	0.002 mg
289	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	10 g	0.01 mg

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290	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	10 mg	0.002 mg
291	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	100 mg	0.002 mg
292	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	2 g	0.005 mg

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293	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Weighing Balance of Range 2.5 kg (Readability : 0.1 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	2 kg	0.8 mg
294	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	2 mg	0.002 mg
295	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Semi Micro Balance of Range 220 g (Readability: 0.01 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	20 g	0.02 mg

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296	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Weighing Balance of Range 64 kg (Readability : 10 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	20 kg	10 mg
297	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	20 mg	0.002 mg
298	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Semi Micro Balance of Range 220 g (Readability: 0.01 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	200 g	0.08 mg

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299	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	200 mg	0.003 mg
300	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Weighing Balance of Range 5 kg (Readability : 1 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	5 kg	2.2 mg
301	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	5 mg	0.002 mg

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302	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Semi Micro Balance of Range 220 g (Readability: 0.01 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	50 g	0.02 mg
303	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Weighing Balance of Range 64 kg (Readability : 10 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	50 kg	22 mg
304	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	50 mg	0.002 mg

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305	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Weighing Balance of Range 2.5 kg (Readability : 0.1 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	500 g	0.1 mg
306	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	500 mg	0.003 mg
307	MECHANICAL-WEIGHTS	Accuracy Class E2 & Coarser	Using E1 Class Weight and Micro Balance of Range 11 g (Readability : 0.001 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	5 g	0.005 mg

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308	MECHANICAL-WEIGHTS	Accuracy Class F1 & Coarser	Using E1 Class Weight and Weighing Balance of Range 64 kg (Readability : 10 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	10 kg	9 mg
309	MECHANICAL-WEIGHTS	Accuracy Class F1 & Coarser	Using E1 Class Weight and Semi Micro Balance of Range 220 g (Readability: 0.01 mg) by Substitution Method (ABBA Cycle) as per OIML R 111-1	100 g	0.06 mg
310	MECHANICAL-WEIGHTS	Accuracy Class F2 & Coarser	Using F1 Class Weight and Weighing Balance of Range 150 kg (Readability : 0.1 g) by Substitution Method (ABBA Cycle) as per OIML R 111-1	100 kg	150 mg

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311	MECHANICAL-WEIGHTS	Accuracy Class F2 & Coarser	Using F1 Class Weight and Weighing Balance of Range 600 kg (Readability : 1 g) by Substitution Method (ABBA Cycle) as per OIML R 111-1	500 kg	903 mg
312	MECHANICAL-WEIGHTS	Accuracy Class F2 & Coarser	Using F1 Class Weight and Weighing Balance of Range 600 kg (Readability : 1 g) by Substitution Method (ABBA Cycle) as per OIML R 111-1	200 kg	830 mg
313	THERMAL-SPECIFIC HEAT & HUMIDITY	Hygrometer, RH Indicator with Sensor, RH Transmitter with or without Indicator @ 10°C to 60°C	Using 6½ DMM, Humidity / Temperature Generator by Comparison Method	10 % RH to 95 % RH	0.72 % RH
314	THERMAL-SPECIFIC HEAT & HUMIDITY	Temperature Indicator with Sensor, Transmitter with or without Indicator, Thermo Hygrometer @ 50%RH	Using Humidity / Temperature Generator, RTD with Indicator, 6½ DMM by Comparison Method	5 °C to 70 °C	0.14 °C

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315	THERMAL-TEMPERATURE	Indicator with Sensor of Furnace, Dry Block Calibrator - Single Position	Using S Type Thermocouple with Digital Temperature Indicator by Comparison Method	660 °C to 1200 °C	1.6 °C
316	THERMAL-TEMPERATURE	Indicator with Sensor of Oven, Furnace, Dry Block Calibrator, Bath, Chamber - Single Position	Using RTD with Digital Temperature Indicator by Comparison Method	(-) 95 °C to 660 °C	0.2 °C
317	THERMAL-TEMPERATURE	IR Thermometer (Emissivity 0.95)	Using IR Calibrator, IR Thermometer by Comparison Method	100 °C to 500 °C	1.65 °C
318	THERMAL-TEMPERATURE	IR Thermometer (For Non - Medical Purpose) - (Emissivity 0.95)	Using IR Calibrator, RTD with Indicator by Comparison Method	10 °C to 100 °C	1 °C
319	THERMAL-TEMPERATURE	Liquid In Glass Thermometer	Using SPRT with 8½ DMM and Oil baths by Comparison Method	(-) 25 °C to 300 °C	0.045 °C
320	THERMAL-TEMPERATURE	RTD, Temperature Indicator with Sensor / Transmitter with Sensor	Using SPRT with 8½ DMM, Dry Block Calibrator by Comparison Method	300 °C to 660 °C	0.063 °C

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321	THERMAL-TEMPERATURE	RTD, Thermistor, Temperature Indicator / Transmitter with Sensor, Temperature Gauge	Using SPRT with 8½ DMM, Dry Block Calibrator by Comparison Method	(-) 95 °C to (-) 25 °C	0.043 °C
322	THERMAL-TEMPERATURE	RTD, Thermocouple, Thermistor, Temperature Indicator / Transmitter with Sensor, Temperature Gauge	Using SPRT with 8½ DMM, 6½ DMM, Oil Bath by Comparison Method	(-) 25 °C to 300 °C	0.043
323	THERMAL-TEMPERATURE	SPRT, HTPRT, PRT, Temperature Indicator with Sensor – Fp of Al Cell	Using SPRT, 8½ DMM, Realization Furnace by Fixed Point Method	660.323 °C	9.4 m°C
324	THERMAL-TEMPERATURE	SPRT, HTPRT, PRT, Temperature Indicator with Sensor – Fp of In Cell	Using SPRT, 8½ DMM, Realization Furnace by Fixed Point Method	156.5985 °C	5.56 m°C
325	THERMAL-TEMPERATURE	SPRT, HTPRT, PRT, Temperature Indicator with Sensor – Fp of Sn Cell	Using SPRT, 8½ DMM, Realization Furnace by Fixed Point Method	231.928 °C	5.23 m°C

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326	THERMAL-TEMPERATURE	SPRT, HTPRT, PRT, Temperature Indicator with Sensor – Fp of Zn Cell	Using SPRT, 8½ DMM, Realization Furnace by Fixed Point Method	419.527 °C	6.6 m°C
327	THERMAL-TEMPERATURE	SPRT, HTPRT, PRT, Temperature Indicator with Sensor – Mp of Ga Cell	Using SPRT, 8½ DMM, Realization Apparatus by Fixed Point Method	29.7646 °C	4.04 m°C
328	THERMAL-TEMPERATURE	SPRT, HTPRT, PRT, Temperature Indicator with Sensor – Tp of Water Cell	Using SPRT, 8½ DMM, Realization Apparatus by Fixed Point Method	0.01 °C	4.09 m°C
329	THERMAL-TEMPERATURE	SPRT, PRT, Temperature Indicator with Sensor – Tp of Hg Cell	Using SPRT, 8½ DMM, Realization Apparatus by Fixed Point Method	(-) 38.8344 °C	6.75 m°C
330	THERMAL-TEMPERATURE	SPRT, PRT, Temperature Indicator with Sensors	Using SPRT with 8½ DMM & Liquid Nitrogen Apparatus by Comparison Method	(-) 196 °C	0.084 °C

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331	THERMAL-TEMPERATURE	Thermocouple, Temperature Indicator with Sensor	Using S Type Thermocouple with Indicator, High Temperature Calibration System by Comparison Method	660 °C to 1200 °C	1.6 °C
332	THERMAL-TEMPERATURE	Thermocouple, Temperature Indicator with Sensor / Transmitter with Sensor	Using SPRT with 8½ DMM, Dry Block Calibrator by Comparison Method	300 °C to 660 °C	0.35 °C
333	THERMAL-TEMPERATURE	Thermocouple, Thermistor, Temperature Indicator / Transmitter with Sensor, Temperature Gauge	Using SPRT with 8½ DMM, Dry Block Calibrator by Comparison Method	(-) 95 °C to (-) 25 °C	0.12 °C

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Site Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	1Ø, AC Power @ (50 Hz, UPF, 60 V to 240 V, 0.5 A to 20 A)	Using Digital Power Meter by Direct Method	30 W to 4.8 kW	0.81 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 40 Hz to 1 kHz	Using 6½ Digit Multimeter by Direct Method	0.1 A to 1 A	0.85 % to 0.2 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current @ 40 Hz to 1 kHz	Using 6½ Digit Multimeter by Direct Method	1 A to 3 A	0.2 % to 0.35 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 40 Hz to 1 kHz	Using 6½ Digit Multimeter by Direct Method	1 V to 750 V	0.12 % to 0.15 %

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 40 Hz to 1 kHz	Using 6½ Digit Multimeter by Direct Method	10 mV to 1 V	0.55 % to 0.12 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 1 kHz to 5 kHz	Using Multi Product Calibrator by Direct Method	1 A to 20 A	0.85 % to 3.5 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 1 kHz to 5 kHz	Using Multi Product Calibrator by Direct Method	20 mA to 1 A	0.4 % to 0.85 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	1 A to 20 A	0.1 % to 0.18 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	190 µA to 1 A	0.25 % to 0.1 %

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10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50 Hz	Using Multiproduct Calibrator with Current Coil by Direct Method	20 A to 1000 A	0.6 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	1 mV to 33 mV	0.8 % to 0.04 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	33 mV to 330 V	0.04 % to 0.03 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 45 Hz to 1 kHz	Using Multi Product Calibrator by Direct Method	330 V to 1000 V	0.03 % to 0.038 %
14	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 6½ Digit Multimeter by Direct Method	0.1 mA to 10 mA	0.3 % to 0.1 %
15	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 6½ Digit Multimeter by Direct Method	10 mA to 100 mA	0.1 % to 0.07 %

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16	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 6½ Digit Multimeter by Direct Method	100 mA to 3 A	0.07 % to 0.17 %
17	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance	Using 6½ Digit Multimeter by Direct Method	1 Mohm to 10 Mohm	0.025 % to 0.048 %
18	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance	Using 6½ Digit Multimeter by Direct Method	10 Mohm to 100 Mohm	0.048 % to 1 %
19	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance	Using 6½ Digit Multimeter by Direct Method	10 ohm to 100 ohm	0.13 % to 0.015 %
20	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance	Using Micro Ohm Meter by Direct Method	100 µohm to 1 kohm	5.143 % to 0.4 %
21	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance	Using 6½ Digit Multimeter by Direct Method	100 ohm to 1 Mohm	0.015 % to 0.025 %

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22	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 6½ Digit Multimeter by Direct Method	1 mV to 100 mV	0.44 % to 0.01 %
23	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 6½ Digit Multimeter by Direct Method	1 V to 1000 V	0.007 %
24	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 6½ Digit Multimeter by Direct Method	100 mV to 1 V	0.01 % to 0.007 %
25	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct Method	190 µA to 3 A	0.05 %
26	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator with Current Coil by Direct Method	20 A to 1000 A	0.58 % to 0.35 %
27	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Multiproduct Calibrator by Direct Method	3 A to 20 A	0.05 % to 0.12 %

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28	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct Method	0.3 mV to 100 mV	0.8 % to 0.007 %
29	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Multiproduct Calibrator by Direct Method	100 mV to 1000 V	0.007 % to 0.006 %
30	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 2 Wire	Using Multiproduct Calibrator by Direct Method	100 Mohm to 300 Mohm	0.071 % to 0.39 %
31	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Multiproduct Calibrator by Direct Method	1 ohm to 10 Mohm	0.12 % to 0.02 %
32	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance - 4 Wire	Using Multiproduct Calibrator by Direct Method	10 Mohm to 100 Mohm	0.02 % to 0.95 %
33	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Amplitude AC Voltage (Sine Wave) @ 50 ohm Load and 1 kHz	Using Oscilloscope Calibrator by Direct Method	100 mV to 4.8 V	1.7 %

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34	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Amplitude AC Voltage (Square Wave) @ 1 Mohm Load and 1 kHz	Using Oscilloscope Calibrator by Direct Method	10 mV to 60 V	0.54 % to 0.17 %
35	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Amplitude DC Voltage @ 1Mohm Load	Using Oscilloscope Calibrator by Direct Method	10 mV to 100 V	0.38 % to 0.08 %
36	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Bandwidth / Flatness (Relative to 50 kHz)	Using Oscilloscope Calibrator by Direct Method	50 kHz to 600 MHz	4.24 %
37	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Time Marker	Using Oscilloscope Calibrator by Direct Method	10 ns to 10 ms	0.14 % to 0.058 %
38	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple B Type	Using Multiproduct Calibrator by Direct Method	600 °C to 1820 °C	0.53 °C
39	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple C Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1000 °C	0.39 °C

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40	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple E Type	Using Multiproduct Calibrator by Direct Method	(-) 100 °C to 1000 °C	0.25 °C
41	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple J Type	Using Multiproduct Calibrator by Direct Method	(-) 210 °C to 1200 °C	0.28 °C
42	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple K Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1372 °C	0.45 °C
43	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple N Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1300 °C	0.43 °C
44	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple R Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.6 °C
45	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple S Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.57 °C

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46	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	Thermocouple T Type	Using Multiproduct Calibrator by Direct Method	(-) 150 °C to 400 °C	0.32 °C
47	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD (PT 100)	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 800 °C	0.27 °C
48	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD (PT 1000)	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 630 °C	0.25 °C
49	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple B Type	Using Multiproduct Calibrator by Direct Method	600 °C to 1820 °C	0.51 °C
50	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple C Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1000 °C	0.37 °C
51	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple E Type	Using Multiproduct Calibrator by Direct Method	(-) 100 °C to 1000 °C	0.26 °C

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52	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple J Type	Using Multiproduct Calibrator by Direct Method	(-) 210 °C to 1200 °C	0.31 °C
53	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple K Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1372 °C	0.47 °C
54	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple N Type	Using Multiproduct Calibrator by Direct Method	(-) 200 °C to 1300 °C	0.43 °C
55	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple R Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.66 °C
56	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple S Type	Using Multiproduct Calibrator by Direct Method	0 °C to 1767 °C	0.5 °C
57	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Thermocouple T Type	Using Multiproduct Calibrator by Direct Method	(-) 150 °C to 400 °C	0.28 °C

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58	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Using Universal Counter by Direct Method	1 Hz to 225 MHz	0.1 % to 0.00028 %
59	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time	Using Universal Counter by Direct Method	1 s to 5400 s	5 µs to 16 ms
60	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Function Generator by Direct Method	1 Hz to 9 kHz	1 % to 0.0023 %
61	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using RF Signal Generator by Direct Method	9 kHz to 200 MHz	0.0023 % to 0.0003 %
62	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Mass Flow Rate	Using Coriolis Mass Flow Meter by Comparison Method	0 t/h to 150 t/h	0.1 2 %
63	FLUID FLOW-FLOW MEASURING DEVICES	Liquid Volume Flowrate	Using Coriolis Mass Flow Meter by Comparison Method	0 m^3/h to 150 m^3/h	0.15 %

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64	FLUID FLOW-FLOW MEASURING DEVICES	Site Calibration of Flow meters (Medium Air)	Using Thermal mass flow meters & Secondary standard by Comparison method	0.00075 l/min to 1000 l/min	1 %
65	MECHANICAL-ACCELERATION AND SPEED	Accelerometer, Vibration Sensor, Vibration Meter, Vibration Analyzer - Amplitude @ 5 Hz to 10000 Hz	Using Portable Accelerometer Calibration System by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 10 g	2.64 %
66	MECHANICAL-ACCELERATION AND SPEED	Centrifuge, MST Apparatus, Stroboscope, Speed Sensor	Using Tachometer by Comparison Method	60 rpm to 10000 rpm	1 rpm
67	MECHANICAL-ACCELERATION AND SPEED	Centrifuge, MST Apparatus, Stroboscope, Speed Sensor	Using Tachometer by Comparison Method	10000 rpm to 50000 rpm	2.1 rpm
68	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Non Contact Mode	Using Function Generator and Light Source by Comparison Method	60 rpm to 10000 rpm	0.66 rpm
69	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Non Contact Mode	Using Function Generator and Light Source by Comparison Method	10000 rpm to 50000 rpm	1.42 rpm

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70	MECHANICAL-ACCELERATION AND SPEED	Tachometer, Speed Indicator - Non Contact Mode	Using Function Generator and Light Source by Comparison Method	50000 rpm to 100000 rpm	2.48 rpm
71	MECHANICAL-ACCELERATION AND SPEED	Vibration Shaker, Exciter, Calibrator in Acceleration, Velocity and Displacement Mode - Amplitude @ 2 Hz to 10000 Hz	Using Reference Accelerometer and Multimeter by Back to Back Calibration Method as per ISO 16063-21	0.1 g to 30 g	2.5 %
72	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate - Granite / Cast Iron	Using Electronic Level by Direct Method	325 x 325 mm to 3000 x 3000 mm	1.8 x sqrt {(L + W) / 150} µm, where L & W are in mm
73	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Angle (L.C.: 1 minute of arc)	Using Angle Gauge Blocks by Comparison Method	0 ° to 360 °	1 minute of arc
74	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Linear (L.C.: 1 µm)	Using Glass Scale by Comparison Method	0 to 50 mm	2 µm
75	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Magnification	Using Glass Scale and Vernier Caliper by Comparison Method	2 X to 50 X	0.05 %

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76	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, and Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R6-1	2 bar (abs) to 20 bar (abs)	0.0041 bar
77	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Absolute Pressure Gauge, Absolute Pressure Transducer, Absolute Pressure Transmitter, Indicator of Pressure Switch, Pressure Transmitter, Pressure Transducer - Pneumatic Pressure	Using Precision Pressure Calibrator and Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	100 mbar (abs) to 2000 mbar (abs)	0.4 mbar

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78	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Differential Pressure Gauge, Pressure Gauge, Differential Pressure Transducer, Differential Pressure Transmitter, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	10 mbar to 100 mbar	0.06 mbar
79	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Differential Pressure Gauge, Pressure Gauge, Indicator of Pressure Switch, Pressure Transducer, Pressure Transmitter, Differential Pressure Transmitter, Differential Pressure Transducer - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	(-) 10 mbar (g) to 10 mbar (g)	0.04 mbar

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S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
80	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	110 mbar (g) to 2000 mbar (g)	0.34 mbar
81	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Hydraulic Pressure	Using Precision Pressure Calibrator, Pressure Comparator, Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	1 bar (g) to 250 bar (g)	0.043 bar
82	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Hydraulic Pressure	Using Precision Pressure Calibrator, Pressure Comparator and Multimeter by Comparison Method as per DKD R 6-1	100 bar (g) to 1000 bar (g)	0.017 bar

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83	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Pressure Gauge, Pressure Transducer, Pressure Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	2 bar (g) to 20 bar (g)	0.0034 bar
84	MECHANICAL-PRESSURE INDICATING DEVICES	Analog / Digital - Vacuum Gauge, Vacuum Transducer, Vacuum Transmitter, Indicator of Pressure Switch - Pneumatic Pressure	Using Precision Pressure Calibrator, Pressure Comparator / Hand Pump, Multimeter by Comparison Method as per DKD R 6-1	(-) 0.96 bar (g) to (-) 0.11 bar (g)	0.00037 bar
85	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 11 g	0.009 mg
86	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 2 g	0.004 mg
87	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 20 g	0.01 mg

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88	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.001 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 5 g	0.004 mg
89	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.01 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 220 g	0.05 mg
90	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.1 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 2.5 kg	0.0004 g
91	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 0.1 mg)	Using E1 Class Weights by Comparison Method as per OIML R 76-1	0 to 5 kg	0.004 g
92	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 1 g)	Using F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 600 kg	0.05 g
93	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class I and Coarser (Readability: 10 mg)	Using E1, F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 64 kg	0.15 g
94	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class IIII and Coarser (Readability: 0.001 kg)	Using F1, M1 Class Weights by Comparison Method as per OIML R 76-1	0 to 3000 kg	0.02 kg

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95	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class IIII and Coarser (Readability: 0.05 kg)	Using F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 2000 kg	0.1 kg
96	MECHANICAL-WEIGHING SCALE AND BALANCE	Electronic Balance Accuracy Class IIII and Coarser (Readability: 2 kg)	Using F1 Class Weights by Comparison Method as per OIML R 76-1	0 to 20000 kg	1.9 kg
97	THERMAL-SPECIFIC HEAT & HUMIDITY	Relative Humidity Indicator with Sensor of Chamber @ 25°C to 60°C - Single Position	Using Thermo Hygrometer by Comparison Method	10 % RH to 95 % RH	1.5 % RH
98	THERMAL-TEMPERATURE	Freezer, Deep Freezer, Chamber, Oven, Auto Clave & Incubator (For Non Medical Purpose Only) - Multi Position (Minimum 9 Sensors)	Using PRTs with Data Logger by Comparison Method	(-) 40 °C to 180 °C	0.6 °C

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99	THERMAL-TEMPERATURE	Indicator with Sensor of Deep Freezer, Refrigerator, Incubator, Liquid Bath, Oven, Dry Block (For Non Medical Purpose Only) - Single Position	Using Digital Temperature Indicator with RTD by Comparison Method	(-) 40 °C to 50 °C	0.2 °C
100	THERMAL-TEMPERATURE	Indicator with Sensor of Dry Block, Furnace - Single Position	Using S Type Thermocouple with Digital Temperature Indicator by Comparison Method	600 °C to 1200 °C	1.6 °C
101	THERMAL-TEMPERATURE	Indicator with Sensor of Incubator, Liquid Bath, Oven, Auto Clave, Dry Block, Furnace (For Non Medical Purpose Only) - Single Position	Using Digital Temperature Indicator with RTD by Comparison Method	50 °C to 300 °C	0.2 °C
102	THERMAL-TEMPERATURE	Indicator with Sensor of Oven, Dry Block, Furnace (For Non Medical Purpose Only)	Using Digital Temperature Indicator with RTD by Comparison Method	300 °C to 600 °C	0.2 °C

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103	THERMAL-TEMPERATURE	RTD, Thermistor, Temperature Indicator / Transmitter with Sensor	Using RTD, 6½ DMM, Digital Temperature Indicator, Dry Block Calibrator by Comparison Method	140 °C to 600 °C	0.064 °C
104	THERMAL-TEMPERATURE	RTD, Thermocouple, Thermistor, Temperature Indicator / Transmitter with Sensor	Using RTD & Digital Temperature Indicator, Dry Block Calibrator, 6½ DMM by Comparison Method	(-) 40 °C to 140 °C	0.06 °C
105	THERMAL-TEMPERATURE	RTD, Thermocouple, Thermistor, Temperature Indicator / Transmitter with Sensor	Using RTD, Digital Temperature Indicator, 6½ DMM, Dry Block Calibrator by Comparison Method	600 °C to 700 °C	1.3 °C
106	THERMAL-TEMPERATURE	Thermocouple, Thermistor, Temperature Indicator /Transmitter with Sensor	Using RTD & Digital Temperature Indicator,6½ DMM, Dry Block Calibrator by Comparison Method	140 °C to 600 °C	1.3 °C

*** CMCs represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of k = 2.**