National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :	ACTION ENGINEERS, GIDC - VADSAR ROAD, MAKARPURA, VADODARA, GUJARAT, 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)	AC Current (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	0.32 A to 10 A	0.073 % to 0.093 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	10 A to 20 A	0.093 % to 0.168 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	30 µA to 0.32 A	0.54 % to 0.073 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50Hz)	Using 61/2 DMM Fluke 8846A & CT By Direct Method & with Source By Comparison Method	10 A to 100 A	0.35 % to 0.35 %

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50Hz)	Using 61/2 DMM Fluke 8846A & CT By Direct Method & with Source By Comparison Method	100 A to 500 A	0.36 % to 0.58 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50Hz)	Using 61/2 DMM Fluke 8846A & CT By Direct Method & with Source By Comparison Method	500 A to 1000 A	0.58 % to 0.37 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Energy (Wh) (1 Ph / 3 Ph, 50Hz) 110 V to 240 V, 1 A to 5 A, 0.5 PF to 1 PF	Using Power / Energy Meter By Comparison Method	55 Wh to 3.6 kWh	0.33 % to 0.34 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Energy, Online (Wh) (1 Ph / 3 Ph, 50Hz) 110 V to 240 V, 5 A to 1000 A, 0.5 PF to 1 PF	Using Power / Energy Meter with Current Clamp Coil By Comparison Method	275 Wh to 720 kWh	3.07%
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method & with Source By Comparison Method	1 mV to 10 mV	0.53 % to 0.06 %

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10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	10 mV to 100 V	0.06 % to 0.008 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	100 V to 1000 V	0.008 % to 0.016 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (50Hz)	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	1 kV to 15 kV	0.74 % to 0.73 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (50Hz)	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	15 kV to 50 kV	0.73 % to 0.6 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using 81/2 DMM Fluke 8588A By Direct Method	10 µF to 100 mF	0.23 % to 0.094 %

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15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using 81/2 DMM Fluke 8588A By Direct Method	220 pF to 10 µF	0.75 % to 0.24 %
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Transformer Turn Ratio Meter (50Hz)	Using 81/2 DMM Fluke 8588A, 61/2 DMM Fluke 8846A & Standard Ratio Transformer By Comparison Method	1 Ratio to 2000 Ratio	0.17 % to 0.33 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	0.32 A to 10 A	0.054 % to 0.1 %
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	10 A to 20 A	0.1 % to 0.168 %
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	30 µA to 0.32 A	0.53 % to 0.054 %

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20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (50Hz)	Using Fluke 5522A MFC & 50 Turns Current Coil By Direct Method	20 A to 1000 A	0.48 % to 0.38 %
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power Analyzer with / without Current Loop (Active/Reactive/Apparent) W/VAR/VA, 50 to 70 Hz, 0.25 to 1 PF (Lead/Lag), 40 V to 320 V, 20 A to 120 A	Using Fluke 5522A MFC & 50 Turns Current Coil By Direct Method	9.6 kW to 38.4 kW	1.39% to 0.36%
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power Analyzer with / without Current Loop (Active/Reactive/Apparent) W/VAR/VA, 50 to 70 Hz, 0.25 to 1 PF (Lead/Lag), 40 V to 320V, 0.1 A to 20 A	Using Fluke 5522A MFC By Direct Method	1 W to 6.4 kW	0.59% to 0.14%
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	3 mV to 32 mV	0.25 % to 0.04 %

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24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	32 mV to 32 V	0.024 % to 0.02 %
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	32 V to 320 V	0.02 % to 0.023 %
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	320 V to 1000 V	0.023 % to 0.036 %
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Capacitor Box By Direct Method	1 nF to 100 µF	1.3 % to 1.16 %
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Fluke 5522A MFC By Direct Method	220 pF to 100 nF	5.8 % to 0.41 %
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Inductor Box By Direct Method	100 µH to 10 H	1.2 % to 1.15 %

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30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor / Phase Angle (40V,0.5A & 240V,20A @ 50 Hz)	Using Fluke 5522A MFC By Direct Method	0.1 PF (Lag / Lead) to 1 PF (Lag / Lead)	2.34% to 0.13%
31	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	1 A to 20 A	0.027 % to 0.089 %
32	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	10 µA to 100 µA	0.25 % to 0.0017 %
33	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A & DC Shunt By Comparison Method	10 A to 1000 A	0.75 % to 0.72 %
34	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	100 µA to 100 mA	0.0017 % to 0.008 %
35	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	100 mA to 1 A	0.008 % to 0.027 %

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36	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	0.1 mV to 100 mV	0.25 % to 0.001 %
37	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	1 kV to 70 kV	2.44 % to 2.54 %
38	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	10 V to 100 V	0.00047 % to 0.00079 %
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	100 mV to 10 V	0.0012 % to 0.00047 %
40	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	100 V to 1000 V	0.00052 % to 0.00079 %

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41	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Low Resistance (4 Wire)	Using 81/2 DMM, 61/2 DMM & MFC (V/I Method) By Direct Method & with Source By Comparison Method	0.1 mOhm to 20 Ohm	0.504 % to 0.24 %
42	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	1 Ohm to 100 Ohm	0.016 % to 0.0011 %
43	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	10 MOhm to 100 MOhm	0.0067 % to 0.028 %
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	100 MOhm to 10 GOhm	0.028 % to 0.27 %
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	100 Ohm to 10 MOhm	0.0011 % to 0.0067 %

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46	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC By Direct Method	1 A to 20 A	0.028 % to 0.12 %
47	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC By Direct Method	10 µA to 3.2 mA	0.25 % to 0.013 %
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC & 50 Turns Current Coil By Direct Method	20 A to 1000 A	0.38 % to 0.32 %
49	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC By Direct Method	3.2 mA to 1 A	0.013 % to 0.028 %
50	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	0.1 mV to 100 mV	1.22 % to 0.004 %
51	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	100 mV to 3.2 V	0.0036 % to 0.0014 %

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52	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	3.2 V to 32 V	0.0014 % to 0.0015 %
53	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	32 V to 1000 V	0.0015 % to 0.0023 %
54	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Low Resistance (4 Wire)	Using Low Resistance Box, DC Shunt By Direct Method	0.1 mOhm to 20 Ohm	0.5 % to 0.25 %
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	100 kOhm to 100 MOhm	0.003 % to 0.063 %
56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	100 MOhm to 320 MOhm	0.063 % to 0.43 %
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	100 Ohm to 100 kOhm	0.005 % to 0.003 %

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58	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	2 Ohm to 100 Ohm	1.16 % to 0.005 %
59	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	320 MOhm to 1 GOhm	0.43 % to 1.93 %
60	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance / Insulation Tester (upto 5kV)	Using High Resistance Box By Direct Method	1 MOhm to 100 MOhm	0.62 % to 0.30 %
61	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance / Insulation Tester (upto 5kV)	Using High Resistance Box By Direct Method	100 MOhm to 1 TOhm	0.30 % to 1.78 %
62	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope amplitude @ 50 Ohm, 50 kHz (Reference)	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	5 mV p-p to 5.5 V p-p	1.88 % to 4.68 %
63	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Frequency Response (Bandwidth), @ 50 Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	50 kHz to 450 MHz	1.88% to 4.8%

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64	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Horizontal Deflection (Time Base), @ 50 Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	2 ns to 5 s	0.22 % to 0.58 %
65	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (AC), @ 1 M Ohm, 1 kHz Square Wave	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV p-p to 130 V p-p	4.8 % to 0.12 %
66	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (AC), @ 50 Ohm, 1 kHz Square Wave	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV p-p to 5 V p-p	0.55 % to 0.31 %
67	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (DC), @ 1 M Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV to 130 V	4.8 % to 0.058 %
68	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (DC), @ 50 Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV to 5 V	0.53 % to 0.31 %
69	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	B -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	600 °C to 1800 °C	0.066 °C

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70	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	E -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1000 °C	0.017 °C
71	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	J -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1200 °C	0.021 °C
72	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	K -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1300 °C	0.034 °C
73	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	N -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1300 °C	0.022 °C
74	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	R -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	0 to 1700 °C	0.049°C
75	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	RTD (Pt-100)	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 600 °C	0.021°C

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76	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	S -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	0 to 1700 °C	0.055 °C
77	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	T -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 400 °C	0.024°C
78	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	B -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	600 °C to 1800 °C	0.51 °C to 0.25 °C
79	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	E -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1000 °C	0.58 °C to 0.25 °C
80	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	J -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1200 °C	0.32 °C to 0.27 °C
81	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	K -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1300 °C	0.39 °C to 0.50 °C

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82	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	N -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1300 °C	0.47 °C to 0.32 °C
83	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	R -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	0 to 1700 °C	0.66 °C to 0.47 °C
84	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 600 °C	0.061 °C to 0.14 °C
85	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	S -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	0 to 1700 °C	0.55°C
86	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	T -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 400 °C	0.73 °C to 0.18 °C
87	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Using 81/2 DMM Fluke 8588A By Direct Method	10 Hz to 2 MHz	0.0003 % to 0.00013 %

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88	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time, Time Interval Meter / Stop Watch	Using Time Interval Meter By Comparison Method	0.01 sec to 900 sec	1.22 msec to 6.0 sec
89	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time, Time Interval Meter / Stop Watch	Using Time Interval Meter By Comparison Method	900 sec to 7200 sec	3.13 sec to 13.0 sec
90	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Fluke 5522A MFC By Direct Method	100 Hz to 2 MHz	0.0003% to 0.0004 %
91	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Fluke 5522A MFC By Direct Method	5 Hz to 100 Hz	0.0014 % to 0.0003 %
92	MECHANICAL-ACCELERATION AND SPEED	RPM Meter / RPM Generator / Centrifuge (Non Contact Type)	Using Tachometer By Direct Method	3000 RPM to 50000 RPM	2.2 RPM to 7.2 RPM
93	MECHANICAL-ACCELERATION AND SPEED	RPM Meter / RPM Generator / Rotary Shaker / Centrifuge (Contact Type)	Using Tachometer By Direct Method	10 RPM to 3000 RPM	1.4 RPM to 2.1 RPM

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94	MECHANICAL-ACCELERATION AND SPEED	RPM Meter / RPM Generator / Rotary Shaker / Centrifuge (Non Contact Type)	Using Tachometer By Direct Method	10 RPM to 3000 RPM	1.3 RPM to 2.2 RPM
95	MECHANICAL-ACCELERATION AND SPEED	Tachometer (Contact Type)	Using Tachometer & Rotational Tacho Generator By Comparison Method	10 RPM to 3000 RPM	1.4 RPM to 2.1 RPM
96	MECHANICAL-ACCELERATION AND SPEED	Tachometer (Non Contact Type)	Using Tachometer and Rotational Tacho Generator By Comparison Method	10 RPM to 3000 RPM	1.3 RPM to 2.2 RPM
97	MECHANICAL-ACCELERATION AND SPEED	Tachometer(Non Contact Type)	Using Tachometer and Rotational Tacho Generator By Comparison Method	3000 RPM to 50000 RPM	2.2 RPM to 7.20 RPM
98	MECHANICAL-ACOUSTICS	Sound Level Meter @ 1 kHz	Using Sound Level Calibrator	94 dB to 114 dB	0.55dB
99	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protector LC 5 minute of arc	Using Angle Gauge Block Set By Direct Method	0 to 90 degree	3.1Min
100	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bore Gauge (2- Point Transmission Accuracy)	Using Dial Gauge Tester By Direct Method	0 to 2 mm	8.4µm

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101	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper (Digital / Dial / Vernier) LC 10 µm	Using Caliper Checker, Gauge Block Set & Accessories By Direct Method	0 to 1000 mm	11.6µm
102	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coating Thickness Gauge LC 0.1 µm	Using Standard Foils By Direct Method	0 to 100 µm	3.4µm
103	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coating Thickness Gauge LC 1 µm	Using Standard Foils By Direct Method	100 µm to 1500 µm	4.6 µm
104	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coating Thickness Gauge LC 10 µm	Using Standard Foils By Direct Method	1 mm to 12 mm	13.6µm
105	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Combination Set / Angle Protector LC 1 Degree	Using Angle Gauge Block Set By Direct Method	0 to 180 degree	35Min

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106	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge (Digital / Dial / Vernier) LC 10 µm	Using Caliper Checker & Gauge Block Set By Direct Method	0 to 450 mm	19.7µm
107	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer LC 1 µm	Using Gauge Block Set & Accessories By Direct Method	>100 mm to 300 mm	9.5 µm
108	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer LC 1 µm	Using Gauge Block Set & Accessories By Direct Method	0 to 100 mm	7.5µm
109	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial / Digital Indicator (Plunger Type) LC 1 µm	Using Dial Gauge Tester, Gauge Block Set & Comparator Stand By Direct Method	0 to 25 mm	1.2 µm
110	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial / Digital Indicator (Plunger Type) LC 10 µm	Using Dial Gauge Tester, Gauge Block Set & Comparator Stand By Direct Method	0 to 50 mm	10.2 µm

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111	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial / Digital Thickness Gauge LC 1 µm	Using Gauge Block Set By Direct Method	0 to 12 mm	1.2 µm
112	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial / Digital Thickness Gauge LC 10 µm	Using Gauge Block Set By Direct Method	0 to 25 mm	7 µm
113	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Calibrator LC 1 µm	Using Electronic Comparator & Gauge Block Set By Comparison Method	0 to 25 mm	2.1µm
114	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Electronic Comparator LC 0.1 µm	Using Gauge Block Set & Comparator Stand By Direct Method	0 to 0.2 mm	1.3µm
115	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Electronic Comparator LC 1 µm	Using Gauge Block Set & Comparator Stand By Direct Method	0 to 2 mm	1.4µm

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116	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (All Types) LC 1 µm	Using Micrometer Checker & Gauge Block Set By Direct Method	> 100 mm to 1000 mm	9.7µm
117	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (All Types) LC 1 µm	Using Micrometer Checker & Gauge Block Set By Direct Method	> 25 mm to 100 mm	2.6µm
118	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometer (All Types) LC 1 µm	Using Micrometer Checker & Gauge Block Set By Direct Method	0 to 25 mm	0.9µm
119	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler Gauge	Using Electronic Comparator & Gauge Block Set By Comparison Method	0.03 mm to 2.0 mm	2.0µm
120	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge (Digital / Dial / Vernier) LC 10 µm	Using Caliper Checker & Gauge Block Set By Direct Method	0 to 1000 mm	11.1µm

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121	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Industrial Gauge & Template (Weld Gauge, Pit Gauge, Weld Fillet Gauge, Weld HI-LO Gauge, Bridge Cam Weld Gauge, Universal Weld Gauge, Weld Bead Height Gauge, Plain Work Piece) Angular	Using Vision Measuring Mahine, Angle Gauge Set & Gauge Block Set By Direct Method	0 to 180 Deg	3.46Min
122	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Industrial Gauge & Template (Weld Gauge, Pit Gauge, Weld Fillet Gauge, Weld HI-LO Gauge, Bridge Cam Weld Gauge, Universal Weld Gauge, Weld Bead Height Gauge, Plain Work Piece) Linear X, Y Axis	Using Vision Measuring Mahine, Angle Gauge Set & Gauge Block Set By Direct Method	0 to 300 mm	10.3µm
123	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inside Dial Caliper LC 10 µm	Using Gauge Block Set & Accessories By Direct Method	0 to 75 mm	7.3µm

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124	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Internal Micrometer (2 Points) LC 10 µm	Using Gauge Block Set & Accessories By Direct Method	> 500 mm to 1000 mm	11.0µm
125	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Internal Micrometer (2 Points) LC 10 µm	Using Gauge Block Set & Accessories By Direct Method	5 mm to 500 mm	8.6µm
126	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Lever Type Dial Gauge LC 1 µm	Using Dial Gauge Tester, Gauge Block Set & Comparator Stand By Direct Method	0 to 0.2 mm	1.1µm
127	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Lever Type Dial Gauge LC 10 µm	Using Dial Gauge Tester, Gauge Block Set & Comparator Stand By Direct Method	0 to 1 mm	10µm
128	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Foil of Coating Thickness Gauge	Using Electronic Comparator & Gauge Block Set By Comparison Method	0.009 mm to 12 mm	3µm

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129	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring Tape LC 1 mm	Using Scale & Tape Measuring Equipment By Direct Method	0 to 100 Mtr	116 * SQRT (L/1000) µm, L in mm
130	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head LC 1 µm	Using Gauge Block Set & Comparator Stand By Direct Method	0 to 25 mm	1.2µm
131	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Setting Rod / Standard Thickness Block	Using Electronic Comparator & Gauge Block Set By Comparison Method	> 100 mm to 300 mm	7µm
132	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Setting Rod / Standard Thickness Block	Using Electronic Comparator & Gauge Block Set By Comparison Method	> 300 mm to 600 mm	8.5µm
133	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Setting Rod / Standard Thickness Block	Using Electronic Comparator & Gauge Block Set By Comparison Method	> 600 mm to 1000 mm	11.5µm

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134	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Setting Rod / Standard Thickness Block	Using Electronic Comparator & Gauge Block Set By Comparison Method	0.5 mm to 100 mm	3.6 µm
135	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	PIE Tape	Using Scale & Tape Measuring Equipment By Direct Method	Up to 10 meters	40 * SQRT(L/1000) µm, L is in mm
136	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Pin Gauge	Using Electronic Comparator & Gauge Block Set By Comparison Method	1 mm to 10 mm	2µm
137	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Pistol Caliper / Outside Dial Caliper LC 10 µm	Using Gauge Block Set & Accessories By Direct Method	0 to 50 mm	9.1µm
138	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge	Using ULM, Master Setting Plug Gauge and Long slip gauge By Direct Method	3 mm to 325 mm	2µm

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139	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using ULM and Master Setting Ring Gauge By Direct Method	3 mm to 250 mm	2.7µm
140	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Snap Gauge	Using Gauge Block Set By Direct Method	3 mm to 100 mm	3.6µm
141	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Profile Projector / Measuring Microscope - Magnification	Using Glass Scale & Vernier Caliper By Direct Method	1 X to 100 X	1%
142	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Profile Projector / Vision Measuring Machine / Measuring Microscope - Angular	Using Angle Gauge Block Set By Direct Method	0 to 360 Deg	1Min
143	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Profile Projector / Vision Measuring Machine / Measuring Microscope - Linear	Using Gauge Block Set By Direct Method	0 to 300 mm	8.45µm

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144	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Radius Gauge	Using Vision Measuring Machine By Direct Method	1 mm to 40 mm	11.4µm
145	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Scale & Measuring Tape Calibrator	Using Gauge Block Set By Direct Method	0 to 1000 mm	10µm
146	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Spirit Level / Square Frame Type Spirit Level LC 10 µm/m (Sensitivity) 300 mm Base Length	Using Electronic Level, Slip Gauges & Tilting Table By Comparison as per IS 5706	0 to +/- 0.2 mm/m	4.7µm/m
147	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Scale LC 0.5 mm	Using Scale & Tape Measuring Equipment By Direct Method	0 to 1000 mm	116 * SQRT (L/1000) µm, L in mm
148	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate (Granite / Cast Iron)	Using Electronic Level By Direct Method	Up to 3000 X 3000 mm	1.0 Sqrt (L+W/ 125) µm

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149	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	SWG Wire Gauge	Using Vision Measuring Machine By Direct Method	0.19 mm to 7.62 mm	12µm
150	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Gauge / Taper Bore Gauge (Scale Type) LC 0.1 mm	Using VMM By Direct Method	0 to 25 mm	10.3µm
151	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Plug Gauge (Simple Effective Diameter at Gauge Plane)	Using ULM, Thread Measuring Wire, Master Setting Plug Gauge, Master Setting Ring Gauge and long slip gauge By Direct Method	Up to 112 mm	2.0µm
152	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Ring Gauge (Simple Effective Diameter at Gauge Plane)	Using ULM and Master Setting Ring Gauge By Direct Method	Up to 112 mm	1.6µm
153	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve -Aperture Size	Using Vision Measuring Machine By Direct Method	0.037 mm to 5 mm	6.4µm

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154	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve- Aperture Size	Using Digital Caliper By Direct Method	5 mm to 20 mm	20µm
155	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Measuring Wire	Using Universal Length Measuring Machine By Direct Method	0.17 mm to 7.35 mm	1µm
156	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge(Pitch)	Using Vision Measuring Machine By Direct Method	0.17 mm to 7 mm	8.4µm
157	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Effective Diameter, Major Diameter)	Using ULM, Thread Measuring Wire, Master Setting Plug Gauge and Long slip gauge By Direct Method	3 mm to 325 mm	2µm
158	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge (Effective Diameter, Minor Diameter)	Using ULM and Master Setting Ring Gauge By Direct Method	3 mm to 100 mm	1.5µm

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159	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ultrasonic Thickness Gauge LC 10 um	Using Gauge Block Set / Standard Thickness Blocks By Direct Method	0 to 300 mm	46.7µm
160	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Wet Film Thickness Gauge	Using Vision Measuring Machine By Direct Method	5 µm to 3000 µm	6.5µm
161	MECHANICAL-DUROMETER	Rubber Hardness Tester SHORE-A	Rubber Hardness Calibrator (Micrometer Head with Fixture / Gauge Block Set) By Depth Indentation Method As Per ISO 18898	0-100 SHORE-A	0.6 SHORE-A
162	MECHANICAL-DUROMETER	Rubber Hardness Tester SHORE-D	Rubber Hardness Calibrator (Micrometer Head with Fixture / Gauge Block Set) By Depth Indentation Method As Per ISO 18898	0-100 SHORE-D	0.6 SHORE-D

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163	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method as per DKD R-6.	0 to 100 mbar	0.08m bar
164	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	0 to 1000 Pa	18.5Pa
165	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges,6.5 digits DMM & Pneumatic Pump, By Comparison Method	0 to 250 Pa	2.9Pa

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166	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method as per DKD R6-1	0 to 340 mbar	7.03m bar
167	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1	0 to 100 bar	0.065bar
168	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1.	0 to 1000 bar	4.59bar
169	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1.	0 to 350 bar	0.21bar

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170	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1	0 to 40 bar	0.028bar
171	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per the DKD R6-1.	0 to 700 bar	0.43bar
172	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-100 m bar to 0	0.085m bar
173	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-1000 Pa to 0	17.6Pa

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174	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method.	-250 pa to 0	2.25Pa
175	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-340 mbar to 0	7.11mbar
176	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1	0 to 7 bar	0.005bar
177	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R 6-1	0 to 1 bar	0.004bar

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178	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	0 to 1 bar	0.004bar
179	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges & Pneumatic Pump, By Comparison Method	0 to 7 bar	0.005 bar
180	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-0.99 bar to 0	0.005bar
181	MECHANICAL-TORQUE GENERATING DEVICES	Torque Wrench (Type I - Class B & C / Type II - Class A & B)	Using Digital Torque Calibration System with Transducers, Based on ISO 6789-2:2017 in Clockwise Direction only	2 Nm to 20 Nm	1.25%

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182	MECHANICAL-TORQUE GENERATING DEVICES	Torque Wrench (Type I - Class B & C / Type II - Class A & B)	Using Digital Torque Calibration System with Transducers, Based on ISO 6789-2:2017 in Clockwise Direction only	20 Nm to 200 Nm	0.9%
183	MECHANICAL-TORQUE GENERATING DEVICES	Torque Wrench (Type I - Class B & C / Type II - Class A & B)	Using Digital Torque Calibration System with Transducers, Based on ISO 6789-2:2017 in Clockwise Direction only	200 Nm to 2000 Nm	0.68%
184	MECHANICAL-VOLUME	Glass Pipette (Graduated / Non Graduated) Glass Burette	Using Digital Balance Up to 80/200 g, Readability 0.01/0.1 mg & Distilled Water of Known Density By Gravimetric Method	1 ml to 100 ml	10 µl
185	MECHANICAL-VOLUME	Measuring Cylinder / Volumetric Flask / Conical Flask / Beaker	Using Digital Balance Up to 1/5 kg, Readability 0.001/0.01 g & Distilled Water of Known Density By Gravimetric Method	>100 ml to 1000 ml	0.05 ml

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186	MECHANICAL-VOLUME	Measuring Cylinder / Volumetric Flask / Conical Flask / Beaker	Using Digital Balance Up to 5 kg, Readability 0.01 g & Distilled Water of Known Density By Gravimetric Method	>1000 ml to 5000 ml	0.38 ml
187	MECHANICAL-VOLUME	Measuring Cylinder / Volumetric Flask / Conical Flask / Beaker	Using Digital Balance Up to 80/200 g, Readability 0.01/0.1 mg & Distilled Water of Known Density By Gravimetric Method	1 ml to 100 ml	10 µl
188	MECHANICAL-VOLUME	Micro-Pipette (Piston Type)	Using Digital Balance Up to 80/200 g, Readability 0.01/0.1 mg & Distilled Water of Known Density By Gravimetric Method	>100 µl to 5000 µl	0.60 µl
189	MECHANICAL-VOLUME	Micro-Pipette (Piston Type)	Using Digital Balance Up to 80/200 g, Readability 0.01/0.1 mg & Distilled Water of Known Density By Gravimetric Method	10 µl to 100 µl	0.20 µl

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190	MECHANICAL-VOLUME	Micro-Pipette (Piston Type)	Using Digital Balance Up to 80/200 g, Readability 0.01/0.1 mg & Distilled Water of Known Density By Gravimetric Method	>5 ml to 10 ml	1 µl
191	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	1 g	0.02 mg
192	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	10 g	0.02 mg
193	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 200 g Readability 0.1 mg By ABBA Weighing Cycles As Per OIML R 111-1	100 g	0.08 mg

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194	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	100 mg	0.02 mg
195	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	2 g	0.02 mg
196	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	20 g	0.02 mg
197	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 200 g Readability 0.1 mg By ABBA Weighing Cycles As Per OIML R 111-1	200 g	0.11 mg

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198	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	200 mg	0.02 mg
199	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	5 g	0.02 mg
200	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	50 mg	0.01 mg
201	MECHANICAL-WEIGHTS	Weights Accuracy Class F1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	500 mg	0.02 mg

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202	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 1 kg Readability 0.001 g By ABBA Weighing Cycles As Per OIML R 111-1	1 kg	1.33 mg
203	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	1 mg	0.011 mg
204	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	10 mg	0.011 mg
205	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	2 mg	0.011 mg

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206	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	20 mg	0.01 mg
207	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 5.2 kg Readability 0.01 g By ABBA Weighing Cycles As Per OIML R 111-1	5 kg	11.6 mg
208	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	5 mg	0.011 mg
209	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 80 g Readability 0.01 mg By ABBA Weighing Cycles As Per OIML R 111-1	50 g	0.036 mg

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210	MECHANICAL-WEIGHTS	Weights Accuracy Class F2 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 1 kg Readability 0.001 g By ABBA Weighing Cycles As Per OIML R 111-1	500 g	1 mg
211	MECHANICAL-WEIGHTS	Weights Accuracy Class M1 & Coarser	Using Weights of Accuracy Class F1 & Digital Balance 20 kg Readability 0.1 g By ABBA Weighing Cycles As Per OIML R 111-1	10 kg	112.81mg
212	MECHANICAL-WEIGHTS	Weights Accuracy Class M1 & Coarser	Using Weights of Accuracy Class E2 & Digital Balance 5.2 kg Readability 0.01 g By ABBA Weighing Cycles As Per OIML R 111-1	2 kg	9.45 mg
213	MECHANICAL-WEIGHTS	Weights Accuracy Class M1 & Coarser	Using Weights of Accuracy Class F1 & Digital Balance 20 kg Readability 0.1 g By ABBA Weighing Cycles As Per OIML R 111-1	20 kg	128.63mg

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214	THERMAL-SPECIFIC HEAT & HUMIDITY	Environmental Chamber @ 50 %RH	Using Humidity/Temperature Data Logger with Sensor (9 Numbers) By spatial Mapping Method as per DKD R5-7	10 °C to 50 °C	2.44°C
215	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity Chamber / Environmental Chamber @25°C	Using Humidity/Temperature Data Logger with Sensor (9 Numbers) By Spatial Mapping Method as per DKD R5-7	30 %RH to 90 %RH	4.2%RH
216	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity Indicator of Humidity Chamber / Environmental Chamber @25°C (Single Position)	Using Humidity/Temperature Indicator with Sensor -By Direct Method	30 %RH to 90 %RH	3.09%RH
217	THERMAL-SPECIFIC HEAT & HUMIDITY	Thermo-Hygrometer, Humidity Indicator / Controller / Transmitter / Data Logger / Recorder with Sensor @25°C	Using Humidity Indicator with Sensor & Temperature - Humidity Chamber - By Comparison Method	30 %RH to 90 %RH	3.09%RH

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218	THERMAL-SPECIFIC HEAT & HUMIDITY	Thermo-Hygrometer, Temperature-Humidity Indicator / Controller / Transmitter / Scanner / Recorder / Data Logger with Sensor @ 50 %RH	Using Temperature Indicator with Sensor, 6.5 digits DMM temperature-humidity Chamber By Comparison Method	10 °C to 50 °C	0.82°C
219	THERMAL-TEMPERATURE	Digital, / Analogue thermometer, Thermocouple, RTD Sensor, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using RTD-Sensor With Indicator & Liquid Bath , 51/2 Multimeter- By Comparison Method	-35 °C to 50 °C	0.27°C
220	THERMAL-TEMPERATURE	Freezer / Cold Temperature Chamber	Using RTD Sensors (9 numbers) With Temperature Scanner By Spatial Mapping Method as per DKD R5-7	-35 °C to 50 °C	2°C

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221	THERMAL-TEMPERATURE	Hot Air Oven / Furnace / Temperature Chamber / (Autoclave- for non medical purpose only)	Using RTD Sensors (9 numbers) With Temperature Scanner By Spatial Mapping Method as per DKD - R5-7	30 °C to 300 °C	2.0°C
222	THERMAL-TEMPERATURE	Infrared Thermometer / Pyrometer / Thermal Image Camera @ emissivity 0.95	Using IR Thermometer and Black Body Source with Emissivity 0.95 - By Comparison Method	50 °C to 500 °C	1.8 °C to 3.4 °C
223	THERMAL-TEMPERATURE	Liquid Bath / Water Bath / (Incubator - for non medical purpose only)	Using RTD Sensors (9 numbers) With Temperature Scanner By Spatial Mapping Method as per DKD - R5-7	-35 °C to 250 °C	2°C
224	THERMAL-TEMPERATURE	Liquid In Glass Thermometer / Dial Temperature Gauge	Using RTD Sensor With Indicator & Temperature Liquid Bath By Comparison Method	-35 °C to 250 °C	0.84°C
225	THERMAL-TEMPERATURE	Temperature Indicator of Freezer / Temperature Indicator of Rotary Shaker & Centrifuge (Single Position)	Using RTD- Sensor with Indicator By Direct Method	-80 °C to 50 °C	0.5°C

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226	THERMAL-TEMPERATURE	Temperature Indicator of Liquid Bath / Water Bath / (Incubator- for non medical purpose only) (Single Position)	Using RTD- Sensor with Indicator By Direct Method	-35 °C to 250 °C	0.58°C
227	THERMAL-TEMPERATURE	Temperature Indicator of Oven / Dry Block Temperature Calibrator / Furnace / Temperature Chamber (Single Position)	Using R-Thermocouple, with Temperature Indicator By Direct Method	400 °C to 1200 °C	1.77°C
228	THERMAL-TEMPERATURE	Temperature Indicator of Oven/Dry Block Temperature Calibrator/Furnace/Temperature Chamber / Temperature Indicator of Rotary Shaker & Centrifuge / (Autoclave / Incubator - for non medical purpose only	Using RTD- Sensor with Indicator By Direct Method	30 °C to 400 °C	0.5°C

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229	THERMAL-TEMPERATURE	Thermometer, Thermocouple, RTD Sensor, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using Thermocouple / RTD-Sensor With Indicator Dry Block Calibrator, 51/2 Multimeter - By Comparison Method	50 °C to 400 °C	0.6°C
230	THERMAL-TEMPERATURE	Thermometer, Thermocouple, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using R-Thermocouple With Indicator & Dry Block Calibrator, 51/2 Multimeter - By Comparison Method	400 °C to 600 °C	1.6°C
231	THERMAL-TEMPERATURE	Thermometer, Thermocouple, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using R-Thermocouple With Indicator & Dry Block Calibrator , 5 1/2 Multimeter- By Comparison Method	600 °C to 1200 °C	1.8°C

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Site Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	0.32 A to 10 A	0.073 % to 0.093 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	10 A to 20 A	0.093 % to 0.168 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	30 µA to 0.32 A	0.54 % to 0.073 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50Hz)	Using 61/2 DMM Fluke 8846A & CT By Direct Method & with Source By Comparison Method	10 A to 100 A	0.35 % to 0.35 %

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50Hz)	Using 61/2 DMM Fluke 8846A & CT By Direct Method & with Source By Comparison Method	100 A to 500 A	0.36 % to 0.58 %
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current (50Hz)	Using 61/2 DMM Fluke 8846A & CT By Direct Method & with Source By Comparison Method	500 A to 1000 A	0.58 % to 0.37 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Energy (Wh) (1 Ph / 3 Ph, 50Hz) 110 V to 240 V, 1 A to 5 A, 0.5 PF to 1 PF	Using Power / Energy Meter By Comparison Method	55 Wh to 3.6 kWh	0.33 % to 0.34 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Energy, Online (Wh) (1 Ph / 3 Ph, 50Hz) 110 V to 240 V, 5 A to 1000 A, 0.5 PF to 1 PF	Using Power / Energy Meter with Current Clamp Coil By Comparison Method	275 Wh to 720 kWh	3.07%
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method & with Source By Comparison Method	1 mV to 10 mV	0.53 % to 0.06 %

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10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	10 mV to 100 V	0.06 % to 0.008 %
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (40Hz to 1 kHz)	Using 81/2 DMM Fluke 8588A By Direct Method	100 V to 1000 V	0.008 % to 0.016 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (50Hz)	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	1 kV to 15 kV	0.74 % to 0.73 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (50Hz)	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	100 kV to 150 kV	0.6 % to 1.58 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage (50Hz)	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	15 kV to 100 kV	0.733 % to 0.6 %

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15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using 81/2 DMM Fluke 8588A By Direct Method	10 µF to 100 mF	0.23 % to 0.094 %
16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Capacitance @ 1 kHz	Using 81/2 DMM Fluke 8588A By Direct Method	220 pF to 10 µF	0.75 % to 0.24 %
17	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	Transformer Turn Ratio Meter (50Hz)	Using 81/2 DMM Fluke 8588A, 61/2 DMM Fluke 8846A & Standard Ratio Transformer By Comparison Method	1 Ratio to 2000 Ratio	0.17 % to 0.33 %
18	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	0.32 A to 10 A	0.054 % to 0.1 %
19	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	10 A to 20 A	0.1 % to 0.168 %

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20	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	30 µA to 0.32 A	0.53 % to 0.054 %
21	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current (50Hz)	Using Fluke 5522A MFC & 50 Turns Current Coil By Direct Method	20 A to 1000 A	0.48 % to 0.38 %
22	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power Analyzer with / without Current Loop (Active/Reactive/Apparent) W/VAR/VA, 50 to 70 Hz, 0.25 to 1 PF (Lead/Lag), 40 V to 320 V, 20 A to 120 A	Using Fluke 5522A MFC & 50 Turns Current Coil By Direct Method	9.6 kW to 38.4 kW	1.39% to 0.36%
23	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Power Analyzer with / without Current Loop (Active/Reactive/Apparent) W/VAR/VA, 50 to 70 Hz, 0.25 to 1 PF (Lead/Lag), 40 V to 320V, 0.1 A to 20 A	Using Fluke 5522A MFC By Direct Method	1 W to 6.4 kW	0.59% to 0.14%

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24	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	3 mV to 32 mV	0.25 % to 0.04 %
25	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	32 mV to 32 V	0.024 % to 0.02 %
26	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	32 V to 320 V	0.02 % to 0.023 %
27	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage (40Hz to 1kHz)	Using Fluke 5522A MFC By Direct Method	320 V to 1000 V	0.023 % to 0.036 %
28	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Capacitor Box By Direct Method	1 nF to 100 µF	1.3 % to 1.16 %
29	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Capacitance @ 1 kHz	Using Fluke 5522A MFC By Direct Method	220 pF to 100 nF	5.8 % to 0.41 %

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30	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Inductance @ 1 kHz	Using Inductor Box By Direct Method	100 µH to 10 H	1.2 % to 1.15 %
31	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	Power Factor / Phase Angle (40V,0.5A & 240V,20A @ 50 Hz)	Using Fluke 5522A MFC By Direct Method	0.1 PF (Lag / Lead) to 1 PF (Lag / Lead)	2.34% to 0.13%
32	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	1 A to 20 A	0.027 % to 0.089 %
33	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	10 µA to 100 µA	0.25 % to 0.0017 %
34	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A & DC Shunt By Comparison Method	10 A to 1000 A	0.75 % to 0.72 %
35	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	100 µA to 100 mA	0.0017 % to 0.008 %

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36	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Current	Using 81/2 DMM Fluke 8588A By Direct Method	100 mA to 1 A	0.008 % to 0.027 %
37	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	0.1 mV to 100 mV	0.25 % to 0.001 %
38	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using High Voltage Divider with Display By Direct Method & with Source By Comparison Method	1 kV to 100 kV	2.2 % to 2.54 %
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	10 V to 100 V	0.00047 % to 0.00079 %
40	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	100 mV to 10 V	0.0012 % to 0.00047 %
41	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Voltage	Using 81/2 DMM Fluke 8588A By Direct Method	100 V to 1000 V	0.00052 % to 0.00079 %

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42	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Low Resistance (4 Wire)	Using 81/2 DMM, 61/2 DMM & MFC (V/I Method) By Direct Method & with Source By Comparison Method	0.1 mOhm to 20 Ohm	0.504 % to 0.24 %
43	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	1 Ohm to 100 Ohm	0.016 % to 0.0011 %
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	10 MOhm to 100 MOhm	0.0067 % to 0.028 %
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	100 MOhm to 10 GOhm	0.028 % to 0.27 %
46	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	Resistance	Using 81/2 DMM Fluke 8588A By Direct Method	100 Ohm to 10 MOhm	0.0011 % to 0.0067 %

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47	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC By Direct Method	1 A to 20 A	0.028 % to 0.12 %
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC By Direct Method	10 µA to 3.2 mA	0.25 % to 0.013 %
49	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC & 50 Turns Current Coil By Direct Method	20 A to 1000 A	0.38 % to 0.32 %
50	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Current	Using Fluke 5522A MFC By Direct Method	3.2 mA to 1 A	0.013 % to 0.028 %
51	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	0.1 mV to 100 mV	1.22 % to 0.004 %
52	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	100 mV to 3.2 V	0.0036 % to 0.0014 %

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53	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	3.2 V to 32 V	0.0014 % to 0.0015 %
54	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Voltage	Using Fluke 5522A MFC By Direct Method	32 V to 1000 V	0.0015 % to 0.0023 %
55	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Low Resistance (4 Wire)	Using Low Resistance Box, DC Shunt By Direct Method	0.1 mOhm to 20 Ohm	0.5 % to 0.25 %
56	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	100 kOhm to 100 MOhm	0.003 % to 0.063 %
57	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	100 MOhm to 320 MOhm	0.063 % to 0.43 %
58	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	100 Ohm to 100 kOhm	0.005 % to 0.003 %

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59	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	2 Ohm to 100 Ohm	1.16 % to 0.005 %
60	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance	Using Fluke 5522A MFC By Direct Method	320 MOhm to 1 GOhm	0.43 % to 1.93 %
61	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance / Insulation Tester (upto 5kV)	Using High Resistance Box By Direct Method	1 MOhm to 100 MOhm	0.62 % to 0.30 %
62	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	Resistance / Insulation Tester (upto 5kV)	Using High Resistance Box By Direct Method	100 MOhm to 1 TOhm	0.30 % to 1.78 %
63	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope amplitude @ 50 Ohm, 50 kHz (Reference)	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	5 mV p-p to 5.5 V p-p	1.88 % to 4.68 %
64	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Frequency Response (Bandwidth), @ 50 Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	50 kHz to 450 MHz	1.88% to 4.8%

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65	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Horizontal Deflection (Time Base), @ 50 Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	2 ns to 5 s	0.22 % to 0.58 %
66	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (AC), @ 1 M Ohm, 1 kHz Square Wave	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV p-p to 130 V p-p	4.8 % to 0.12 %
67	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (AC), @ 50 Ohm, 1 kHz Square Wave	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV p-p to 5 V p-p	0.55 % to 0.31 %
68	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (DC), @ 1 M Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV to 130 V	4.8 % to 0.058 %
69	ELECTRO-TECHNICAL-ELECTRICAL EQUIPMENT (Source)	Oscilloscope Vertical Deflection V/Div (DC), @ 50 Ohm	Using Fluke 5522A MFC with SC600 Scope Option By Direct Method	1 mV to 5 V	0.53 % to 0.31 %
70	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	B -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	600 °C to 1800 °C	0.066 °C

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71	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	E -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1000 °C	0.017 °C
72	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	J -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1200 °C	0.021 °C
73	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	K -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1300 °C	0.034 °C
74	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	N -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 1300 °C	0.022 °C
75	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	R -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	0 to 1700 °C	0.049°C
76	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	RTD (Pt-100)	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 600 °C	0.021°C

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77	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	S -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	0 to 1700 °C	0.055 °C
78	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Measure)	T -Type Thermocouple	Using 81/2 DMM Fluke 8588A As per ITS90 Scale -By Simulation Method	-200 °C to 400 °C	0.024°C
79	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	B -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	600 °C to 1800 °C	0.51 °C to 0.25 °C
80	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	E -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1000 °C	0.58 °C to 0.25 °C
81	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	J -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1200 °C	0.32 °C to 0.27 °C
82	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	K -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1300 °C	0.39 °C to 0.50 °C

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83	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	N -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 1300 °C	0.47 °C to 0.32 °C
84	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	R -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	0 to 1700 °C	0.66 °C to 0.47 °C
85	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	RTD	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 600 °C	0.061 °C to 0.14 °C
86	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	S -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	0 to 1700 °C	0.55°C
87	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	T -Type Thermocouple	Using MFC Fluke 5522A As per ITS90 Scale - By Simulation Method	-200 °C to 400 °C	0.73 °C to 0.18 °C
88	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Frequency	Using 81/2 DMM Fluke 8588A By Direct Method	10 Hz to 2 MHz	0.0003 % to 0.00013 %

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89	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time, Time Interval Meter / Stop Watch	Using Time Interval Meter By Comparison Method	0.01 sec to 900 sec	1.22 msec to 6.0 sec
90	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Time, Time Interval Meter / Stop Watch	Using Time Interval Meter By Comparison Method	900 sec to 7200 sec	3.13 sec to 13.0 sec
91	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Fluke 5522A MFC By Direct Method	100 Hz to 2 MHz	0.0003% to 0.0004 %
92	ELECTRO-TECHNICAL-TIME & FREQUENCY (Source)	Frequency	Using Fluke 5522A MFC By Direct Method	5 Hz to 100 Hz	0.0014 % to 0.0003 %
93	MECHANICAL-ACCELERATION AND SPEED	RPM Meter / RPM Generator / Centrifuge (Non Contact Type)	Using Tachometer By Direct Method	3000 RPM to 50000 RPM	2.2 RPM to 7.2 RPM
94	MECHANICAL-ACCELERATION AND SPEED	RPM Meter / RPM Generator / Rotary Shaker / Centrifuge (Contact Type)	Using Tachometer By Direct Method	10 RPM to 3000 RPM	1.4 RPM to 2.1 RPM

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95	MECHANICAL-ACCELERATION AND SPEED	RPM Meter / RPM Generator / Rotary Shaker / Centrifuge (Non Contact Type)	Using Tachometer By Direct Method	10 RPM to 3000 RPM	1.3 RPM to 2.2 RPM
96	MECHANICAL-ACCELERATION AND SPEED	Tachometer (Contact Type)	Using Tachometer & Rotational Tacho Generator By Comparison Method	10 RPM to 3000 RPM	1.4 RPM to 2.1 RPM
97	MECHANICAL-ACCELERATION AND SPEED	Tachometer (Non Contact Type)	Using Tachometer and Rotational Tacho Generator By Comparison Method	10 RPM to 3000 RPM	1.3 RPM to 2.2 RPM
98	MECHANICAL-ACCELERATION AND SPEED	Tachometer(Non Contact Type)	Using Tachometer and Rotational Tacho Generator By Comparison Method	3000 RPM to 50000 RPM	2.2 RPM to 7.20 RPM
99	MECHANICAL-ACOUSTICS	Sound Level Meter @ 1 kHz	Using Sound Level Calibrator	94 dB to 114 dB	0.55dB
100	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Profile Projector / Measuring Microscope - Magnification	Using Glass Scale & Vernier Caliper By Direct Method	1 X to 100 X	1%
101	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Profile Projector / Vision Measuring Machine / Measuring Microscope - Angular	Using Angle Gauge Block Set By Direct Method	0 to 360 Deg	1Min

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102	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Profile Projector / Vision Measuring Machine / Measuring Microscope - Linear	Using Gauge Block Set By Direct Method	0 to 300 mm	8.45µm
103	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Scale & Measuring Tape Calibrator	Using Gauge Block Set By Direct Method	0 to 1000 mm	10µm
104	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate (Granite / Cast Iron)	Using Electronic Level By Direct Method	Up to 3000 X 3000 mm	1.0 Sqrt (L+W/ 125) µm
105	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method as per DKD R-6.	0 to 100 mbar	0.08m bar

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106	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	0 to 1000 Pa	18.5Pa
107	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges,6.5 digits DMM & Pneumatic Pump, By Comparison Method	0 to 250 Pa	2.9Pa
108	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method as per DKD R6-1	0 to 340 mbar	7.03m bar
109	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1	0 to 100 bar	0.065bar

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110	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1.	0 to 1000 bar	4.59bar
111	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1.	0 to 350 bar	0.21bar
112	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1	0 to 40 bar	0.028bar
113	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder (Hydraulic)	Using Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per the DKD R6-1.	0 to 700 bar	0.43bar

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114	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-100 m bar to 0	0.085m bar
115	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-1000 Pa to 0	17.6Pa
116	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method.	-250 pa to 0	2.25Pa

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117	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Magnehelic Gauge, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-340 mbar to 0	7.11mbar
118	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R6-1	0 to 7 bar	0.005bar
119	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Hydraulic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Hydraulic Pump, By Comparison Method as per DKD R 6-1	0 to 1 bar	0.004bar
120	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	0 to 1 bar	0.004bar

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121	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges & Pneumatic Pump, By Comparison Method	0 to 7 bar	0.005 bar
122	MECHANICAL-PRESSURE INDICATING DEVICES	Dial / Digital Pressure Gauge, Transmitter, Transducer, Switch, Recorder, Manometer (Pneumatic)	Using Digital Manometer, Pressure Gauges, 6.5 digits DMM & Pneumatic Pump, By Comparison Method	-0.99 bar to 0	0.005bar
123	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I and Coarser d = 0.01 mg and Coarser	Using Standard Weights of Accuracy Class E1 as per OIML R-76-1	0 to 80 g	0.032 mg
124	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I and Coarser d = 0.1 mg and Coarser	Using Standard Weights of Accuracy Class E1 as per OIML R-76-1	> 80 g to 220 g	0.1 mg
125	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I, II and Coarser d = 0.02 g and Coarser	Using Standard Weights Of Accuracy Class E2, F1 & F2 As Per OIML R-76-1	> 1000 g to 5 kg	30 mg

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126	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I, II and Coarser d = 0.2 g and Coarser	Using Standard Weights Of Accuracy Class E2, F1 & F2 As Per OIML R-76-1	> 5 kg to 20 kg	200 mg
127	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I, II and Coarser d = 1 g and Coarser	Using Standard Weights Of Accuracy Class E2, F1 & F2 As Per OIML R-76-1	> 20 kg to 30 kg	1.2 g
128	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I, II and Coarser d = 5 g and Coarser	Using Standard Weights Of Accuracy Class E2, F1 & F2 As Per OIML R-76-1	> 30 kg to 60 kg	3.5 g
129	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class I, II and Coarser d = 5 mg and Coarser	Using Standard Weights Of Accuracy Class E2, F1 & F2 As Per OIML R-76-1	> 200 g to 1000 g	5 mg
130	MECHANICAL-WEIGHING SCALE AND BALANCE	Weighing Balance / Electronic Balance of Class III and Coarser d = 5g and Coarser	Using Standard Weights Of Accuracy Class E2, F1 & F2 As Per OIML R-76-1	> 60 kg to 100 kg	5.7 g

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131	THERMAL-SPECIFIC HEAT & HUMIDITY	Environmental Chamber @ 50 %RH	Using Humidity/Temperature Data Logger with Sensor (9 Numbers) By spatial Mapping Method as per DKD R5-7	10 °C to 50 °C	2.44°C
132	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity Chamber / Environmental Chamber @25°C	Using Humidity/Temperature Data Logger with Sensor (9 Numbers) By Spatial Mapping Method as per DKD R5-7	30 %RH to 90 %RH	4.2%RH
133	THERMAL-SPECIFIC HEAT & HUMIDITY	Humidity Indicator of Humidity Chamber / Environmental Chamber @25°C (Single Position)	Using Humidity/Temperature Indicator with Sensor -By Direct Method	30 %RH to 90 %RH	3.09%RH
134	THERMAL-SPECIFIC HEAT & HUMIDITY	Thermo-Hygrometer, Humidity Indicator / Controller / Transmitter / Data Logger / Recorder with Sensor @25°C	Using Humidity Indicator with Sensor & Temperature - Humidity Chamber - By Comparison Method	30 %RH to 90 %RH	3.09%RH

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135	THERMAL-SPECIFIC HEAT & HUMIDITY	Thermo-Hygrometer, Temperature-Humidity Indicator / Controller / Transmitter / Scanner / Recorder / Data Logger with Sensor @ 50 %RH	Using Temperature Indicator with Sensor, 6.5 digits DMM temperature-humidity Chamber By Comparison Method	10 °C to 50 °C	0.82°C
136	THERMAL-TEMPERATURE	Digital, / Analogue thermometer, Thermocouple, RTD Sensor, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using RTD-Sensor With Indicator & Liquid Bath , 51/2 Multimeter- By Comparison Method	-35 °C to 50 °C	0.27°C
137	THERMAL-TEMPERATURE	Freezer / Cold Temperature Chamber	Using RTD Sensors (9 numbers) With Temperature Scanner By Spatial Mapping Method as per DKD R5-7	-35 °C to 50 °C	2°C

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138	THERMAL-TEMPERATURE	Hot Air Oven / Furnace / Temperature Chamber / (Autoclave- for non medical purpose only)	Using RTD Sensors (9 numbers) With Temperature Scanner By Spatial Mapping Method as per DKD - R5-7	30 °C to 300 °C	2.0°C
139	THERMAL-TEMPERATURE	Infrared Thermometer / Pyrometer / Thermal Image Camera @ emissivity 0.95	Using IR Thermometer and Black Body Source with Emissivity 0.95 - By Comparison Method	50 °C to 500 °C	1.8 °C to 3.4 °C
140	THERMAL-TEMPERATURE	Liquid Bath / Water Bath / (Incubator - for non medical purpose only)	Using RTD Sensors (9 numbers) With Temperature Scanner By Spatial Mapping Method as per DKD - R5-7	-35 °C to 250 °C	2°C
141	THERMAL-TEMPERATURE	Liquid In Glass Thermometer / Dial Temperature Gauge	Using RTD Sensor With Indicator & Temperature Liquid Bath By Comparison Method	-35 °C to 250 °C	0.84°C
142	THERMAL-TEMPERATURE	Temperature Indicator of Freezer / Temperature Indicator of Rotary Shaker & Centrifuge (Single Position)	Using RTD- Sensor with Indicator By Direct Method	-80 °C to 50 °C	0.5°C

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143	THERMAL-TEMPERATURE	Temperature Indicator of Liquid Bath / Water Bath / (Incubator- for non medical purpose only) (Single Position)	Using RTD- Sensor with Indicator By Direct Method	-35 °C to 250 °C	0.58°C
144	THERMAL-TEMPERATURE	Temperature Indicator of Oven / Dry Block Temperature Calibrator / Furnace / Temperature Chamber (Single Position)	Using R-Thermocouple, with Temperature Indicator By Direct Method	400 °C to 1200 °C	1.77°C
145	THERMAL-TEMPERATURE	Temperature Indicator of Oven/Dry Block Temperature Calibrator/Furnace/Temperature Chamber / Temperature Indicator of Rotary Shaker & Centrifuge / (Autoclave / Incubator - for non medical purpose only	Using RTD- Sensor with Indicator By Direct Method	30 °C to 400 °C	0.5°C

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146	THERMAL-TEMPERATURE	Thermometer, Thermocouple, RTD Sensor, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using Thermocouple / RTD-Sensor With Indicator Dry Block Calibrator, 51/2 Multimeter - By Comparison Method	50 °C to 400 °C	0.6°C
147	THERMAL-TEMPERATURE	Thermometer, Thermocouple, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using R-Thermocouple With Indicator & Dry Block Calibrator, 51/2 Multimeter - By Comparison Method	400 °C to 600 °C	1.6°C
148	THERMAL-TEMPERATURE	Thermometer, Thermocouple, Temperature Gauge, Temperature Sensor with Indicator / Controller / Scanner / Transmitter / Data Logger / Thermal Switch	Using R-Thermocouple With Indicator & Dry Block Calibrator , 5 1/2 Multimeter- By Comparison Method	600 °C to 1200 °C	1.8°C

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