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Permanent Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current@ 50 Hz to 1kHz	Using 6.1/2 Multimeter (By Direct Method)	1 A to 9 A	0.20 % to 0.30 %
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current@ 50 Hz to 1kHz	Using 6.1/2 Multimeter (By Direct Method)	1 mA to 200 mA	1.5 % to 0.27 %
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Current@ 50 Hz to 1kHz	Using 6.1/2 Multimeter (By Direct Method)	200 mA to 1 A	0.27 % to 0.20 %
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage @ 50 Hz	Using 6.1/2 Multimeter (By Direct Method)	1 V to 200 V	0.15%

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5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC VOLTAGE@ 50 Hz	Using 6.1/2 Multimeter (By Direct Method)	100 mV to 200 mV	3.55 % to 3.51%
6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage@ 50 Hz	Using 6.1/2 Multimeter (By Direct Method)	200 mV to 1 V	3.50 % to 0.15 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC Voltage@ 50 Hz	Using 6.1/2 Multimeter (By Direct Method)	200 V to 1000 V	0.15 % to 0.20 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	DC VOLTAGE	Using 6.1/2 Multimeter (By Direct Method)	1 mV to 200 mV	0.75 % to 0.60 %
9	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @50Hz	Using 5 1/2 Multifunction Calibrator With Current Coil (By Direct Method)	50 A to 950 A	5.99 % to 1.59 %

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10	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @50Hz	Using 5.1/2 Multifunction Calibrator (By Direct Method)	1.8 V to 180 V	0.25%
11	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	1 A to 10 A	1.98 % to 0.93 %
12	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50Hz	Using 5.1/2 Multifunction Calibrator By direct Method	1 mA to 180 mA	0.40 % to 0.39 %
13	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	180 mA to 1 A	0.39 % to 1.98 %
14	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	10 mV to 180 mV	1.05 % to 0.38 %
15	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	180 mV to 1.8 V	0.38 % to 0.25 %

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16	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 50Hz	Using 5.1/2 Multifunction Calibrator (By Direct Method)	180 V to 1000 V	0.25 % to 0.30 %
17	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using 6.1/2 Multimeter (By Direct Method)	1 A to 10 A	0.20 % to 0.30 %
18	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using 6.1/2 Multimeter (By Direct Method)	1 mA to 200 mA	0.30 % to 0.06 %
19	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC CURRENT	Using 6.1/2 Multimeter (By Direct Method)	200 mA to 1 A	0.06 % to 0.20 %
20	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Multimeter by direct method	1 M Ohm to 100 M Ohm	0.15 to 0.08 %
21	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	10 k ohm to 100 k Ohm	0.02 % to 0.04 %

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22	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	100 k ohm to 1 M ohm	0.04 % to 0.15 %
23	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Multimeter by direct method	100 M ohm to 1 G Ohm	0.08 % to 0.65 %
24	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	100 Ohm to 10 k Ohm	0.02%
25	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (4 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	1 ohm to 100 Ohm	0.36 % to 0.02 %
26	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using 6.1/2 Multimeter (By Direct Method)	200 mV to 200 V	0.74 % to 0.02 %
27	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC VOLTAGE	Using 6.1/2 Multimeter (By Direct Method)	200 V to 1000 V	0.02 % to 0.51 %

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28	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 Multifunction Calibrator (by Direct Method)	1 A to 10 A	1.38 % to 0.90 %
29	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 multifunction calibrator (by direct method)	1 mA to 180 mA	1.55 % to 0.35 %
30	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 Multifunction Calibrator With Current Coil (By Direct Method)	100 A to 900 A	0.95 % to 1.20 %
31	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 Multifunction Calibrator (by Direct Method)	180 mA to 1 A	0.35 % to 1.38 %
32	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 Multifunction Calibrator With Current Coil (By Direct Method)	50 A to 100 A	0.90 % to 1.20 %
33	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	1 Mohm to 100 Mohm	0.96 % to 0.58 %

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34	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	1 ohm to 100 ohm	0.29 % to 0.12 %
35	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	10 kohm to 100 kohm	0.14 % to 0.23 %
36	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	100 kohm to 1 Mohm	0.23 % to 0.96 %
37	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	100 Mohm to 900 Mohm	0.58 % to 2.8 %
38	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	100 ohm to 10 kohm	0.12 % to 0.14 %
39	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	1 mohm	1.6%

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40	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	1 ohm	0.29%
41	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	10 mohm	1.42%
42	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	100 µohm	1.43%
43	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	100 mohm	1.43%
44	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	50 µohm	1.44%
45	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5.1/2 multifunction calibrator by direct method	1 mV to 180 mV	1.74 % to 0.14 %

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46	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5 1/2 multifunction calibrator (by direct method)	1.8 V to 180 V	0.17%
47	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5 1/2 Multifunction Calibrator (By Direct Method)	180 mV to 1.8 V	0.14 % to 0.17 %
48	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5 1/2 multifunction calibrator (by direct method)	180 V to 1000 V	0.17 % to 0.21 %
49	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature controller / indicator (TC-K Type)	Using Temperature Calibrator (By Direct Method)	-200 °C to 1200 °C	3.2°C
50	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-J Type)	Using Temperature Calibrator (By Direct Method)	-100 °C to 800 °C	2.75°C
51	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-R Type)	Using Temperature Calibrator (By Direct Method)	200 °C to 1750 °C	4.6°C

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52	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-S Type)	Using Temperature Calibrator (By Direct Method)	200 °C to 1750 °C	4.6°C
53	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-T Type)	Using Temperature Calibrator (By Direct Method)	-200 °C to 400 °C	2.50°C
54	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature controller / indicator/ Temperature Scanner (PT-100)	Using Temperature Calibrator (By Direct Method)	(-100) °C to 600 °C	2.5°C
55	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	frequency	Using 6.1/2 Digital Multimeter with multifunction calibrator by Comparison method	10 Hz to 1 kHz	0.80 % to 1.0 %
56	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Timer / stop watch	Using Time Calibrator (by Direct Method)	0.1 s to 9000 s	4.75 % to 0.7 %
57	MECHANICAL-ACCELERATION AND SPEED	Centrifuge (Contact type)	Using Digital tachometer by direct method	50 rpm to 6000 rpm	2.73 %

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58	MECHANICAL-ACCELERATION AND SPEED	Centrifuge (Non Contact type)	Using Digital Tachometer by direct Method	40 rpm to 50000 rpm	2.1 %
59	MECHANICAL-ACCELERATION AND SPEED	RPM indicator with sensor, Tachometer (Contact type)	Using Digital Tachometer with RPM source by comparison method	50 rpm to 6000 rpm	2.73%
60	MECHANICAL-ACCELERATION AND SPEED	Tachometer pulse engine , stroboscope (non contact type)	Using Digital Tachometer with RPM source by comparison method	40 rpm to 50000 rpm	2.1%
61	MECHANICAL-ACOUSTICS	SOUND LEVEL METER @1kHz	Digital sound calibrator by direct method	94 dB & 114 dB	0.86dB
62	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	AIR GAUGE UNIT	USING STD. RING & PLUG BY comparison method	-40 µm to +40 µm	2.68µm
63	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel /Degree protector (L.C. 5 min)	Using Profile Projector by comparison method	(0-90-0) °	6.3min of arc

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64	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coating Thickness gauge (L.C 0.001 mm)	using master foil by comparison method	0.01 mm to 0.7 mm	2.6µm
65	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Combination set (L.C.1 degree).	using profile projector by comparison method	0 ° to 180 °	34.9min of arc
66	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Comparator stand / Dial Stand (Flatness of Base)	Using Slip Gauge Set, Lever Dial By Comparison Method	upto 400mm x400 mm	4.13µm
67	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth gauge (vernier/dial/ digital) L.C. 0.01	Using slip gauge set /caliper checker ,surface plate by comparison method	0 to 300 mm	12µm
68	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth micrometer (analogue/ digital) L.C. 0.001	using slip gauge set ,surface plate by comparison method	0 to 150 mm	5µm

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69	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial / Digital thickness gauge L.C. 0.001mm	using slip gauge set by comparison method	0 to 25 mm	1.5µm
70	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial bore gauge (for transmission mechanism) L.C.: 0.001mm	Using ULM by comparison method	0 to 3.0 mm	1.0µm
71	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External micrometer,Flange,ball,point,blade (analogue /digital) (L.C.0.001)	Using slip gauge set by comparison method	0 to 100 mm	3.6µm
72	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler gauge	Using ULM by comparison method	0.05 mm to 3.0 mm	1.6µm
73	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge (Vernier / Dial / Digital) (L.C.0.01)	using caliper checker, surface plate by comparison method	0 to 600 mm	9.32µm

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74	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Lever type dial gauge (dial/ digital) / L.C. 0.001	Using ULM by comparison method	0 to 2.0 mm	1.37µm
75	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Measuring pin / standard pin	Using ULM by comparison method	0.5 mm to 20 mm	0.9 µm
76	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Metric steel scale L.C.: 0.5 mm & coarser	Using scale & tape calibration unit by comparison method	0 to 2000 mm	200 sqrt (L/1000)µm (where L is in mm)
77	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Metric steel tape /woven metallic tapes L.C.: 1mm	Using Scale & Tape Calibration Unit by comparison method	0 to 50 m	200 x sqrt (L/1000)µm (where L is in mm)
78	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head L.C. 0.001	Using ULM by comparison method	0 to 25 mm	1.06µm

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79	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Setting standard	Using ULM by comparison method	25 mm to 100 mm	2.17µm
80	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain plug gauge / Width gauge	Using ULM by comparison method	1 mm to 100 mm	1.3µm
81	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain plug gauge / Width gauge	Using ULM by comparison method	100 mm to 150 mm	2.0 µm
82	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using ULM by comparison method	100 mm to 150 mm	2.7µm
83	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using ULM by comparison method	3 mm to 100 mm	2.5µm

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84	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain ring gauge / Setting Ring Gauge	Using ULM by comparison method	100 mm to 225 mm	2.90µm
85	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain ring gauge / Setting Ring Gauge	Using ULM by comparison method	3 mm to 100 mm	1.60µm
86	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plunger type dial gauge (dial/ digital) L.C.0.001	Using ULM by comparison method	0 to 10 mm	1.3µm
87	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Radius gauge	Using Profile Projector by comparison method	0.6 mm to 25 mm	30µm
88	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Snap gauge	using slip gauge by comparison method	3 mm to 150 mm	3µm

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89	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	SPLINE PLUG GAUGE(dia over pin)	Using ULM , pin gauge, by direct method	10 mm to 100 mm	2.5µm
90	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	SPLINE RING GAUGE(dia between pin)	Using Slip gauge by direct method	10 mm to 100 mm	2.5µm
91	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Template	Using Profile Projector by comparison method	10 mm to 200 mm	39.2µm
92	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve-Aperture Size	Using Profile Projector by comparison method	0.04 mm to 4.0 mm	7.1µm
93	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thickness Foil	Using ULM by comparison method	0.05 mm to 2.0 mm	2.1µm

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94	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread measuring wire	Using ULM by comparison method	0.17 mm to 3.20 mm	0.90µm
95	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge (Flank angle)	Using Profile Projector by comparison method	0.25 mm to 6.0 mm	1.5 min of arc
96	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge (Pitch)	Using Profile Projector by comparison method	0.25 mm to 6.0 mm	7.6µm
97	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge / WCP Gauge , Effective dia	Using ULM by comparison method	3 mm to 100 mm	2.1µm
98	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge	Using ULM with setting master ring gauge & T shape stylus by direct method	4 mm to 100 mm	2.62µm

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99	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V BLOCK Flatness	using mandrel lever dial gauge height gauge & surface plate by comparison method	upto 200 mm	7.99 µm
100	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V BLOCK Parallelism	Using mandrel lever dial gauge height gauge & surface plate by comparison method	Upto 200 mm	8.02µm
101	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V BLOCK Symmetricity	Using mandrel lever dial gauge height gauge & surface plate by comparison method:	upto 200 mm	7.98µm
102	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Vernier Caliper (dial/ digital) / L.C.0.01	using caliper checker by comparison method	0 to 600 mm	12µm
103	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic probe with DRO / L.C.0.0001 mm	Using slip gauge set by comparison method	0 to 25 mm	1.1 µm

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104	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length bar	Using ULM by comparison method	25 mm to 100 mm	2.17µm
105	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure gauges (dial,digital) / Pressure transmitter / Indicator of pressure switches (Hydraulic)	Using Digital Pressure Gauge,DMM & Comparator Based on DKD-R6-1	0 to 700 bar	0.83bar
106	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure gauges (dial,digital) / Pressure transmitter / Indicator of Pressure switches (Pnematic)	Using Digital Pressure Gauge & DMM & Comparator Based on DKD-R6-1	0 to 30 bar	0.10bar
107	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure gauges (dial,digital) / Pressure transmitter / Indicator of Pressure switches (Pneumatic)	Using Digital Pressure Gauge & DMM & Comparator Based on DKD-R-6-1	0 to 10 bar	0.092bar
108	MECHANICAL-PRESSURE INDICATING DEVICES	VACUUM GAUGE	using digital vacuum gauge & comparator based on DKD-R6-1	(-) 0.9 bar to 0	0.008bar

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109	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using M1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	1 g	0.16mg
110	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	10 g	0.19mg
111	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	100 g	0.23mg
112	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	20 g	0.19mg

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113	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	200 g	0.23mg
114	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using M1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	5 g	0.19mg
115	MECHANICAL-WEIGHTS	weight F2 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	50 g	0.19mg
116	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using F2 Accuracy Class Weights & Weighing Balance of d= 1 mg based on OIML R111-1 ABBA method	1 kg	9.4mg

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117	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using F1 Accuracy Class Weights & Weighing Balance of d= 0.1g based on OIML R111-1 ABBA method	10 kg	111mg
118	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	100 mg	0.11mg
119	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	2 g	0.19mg
120	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	200 mg	0.16mg

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121	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	50 mg	0.11mg
122	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using M2 Accuracy Class Weights & Weighing Balance of d= 1g based on OIML R111-1 ABBA method	500 g	9.4mg
123	MECHANICAL-WEIGHTS	weight M1 accuracy class & coarser	By using E1 Accuracy Class Weights & Weighing Balance of d= 0.1 mg based on OIML R111-1 ABBA method	500 mg	0.16mg
124	MECHANICAL-WEIGHTS	weight M2 accuracy class & coarser	By using F2 Accuracy Class Weights & Weighing Balance of d= 10 mg based on OIML R111-1 ABBA method	2 kg	82mg

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125	MECHANICAL-WEIGHTS	weight M2 accuracy class & coarser	By using F1 Accuracy Class Weights & Weighing Balance of d= 0.1g based on OIML R111-1 ABBA method	20 kg	400mg
126	MECHANICAL-WEIGHTS	weight M2 accuracy class & coarser	By using F2 Accuracy Class Weights & Weighing Balance of d= 10 mg based on OIML R111-1 ABBA method	5 kg	93mg
127	THERMAL-SPECIFIC HEAT & HUMIDITY	digital /analogue thermo-hygrometer RH sensor with indicator /controller/data logger/recorder (relative humidity)@25°C	using temp & RH indicator with sensor & humidity generator (by comparison method)	20 % to 95 %	2.72%
128	THERMAL-SPECIFIC HEAT & HUMIDITY	digital /analogue thermo-hygrometer RH sensor with indicator /controller/data logger/recorder (temprature)@50% RH	using temp & RH indicator with sensor & humidity generator (by comparison method)	10 °C to 50 °C	1.8°C

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129	THERMAL-TEMPERATURE	RTD,Thermocouple with or without indicator / controller digital thermometer temperature gauges	By using RTD sensor (PT-100) with indicator, dry block calibrator & Process calibratorby comparison method	200 °C to 400 °C	0.61°C
130	THERMAL-TEMPERATURE	RTD,Thermocouple with or without indicator / controller digital thermometer temperature gauges liquid in glass thermometer	By using RTD sensor (PT-100) with indicator, liquid bath & Process calibrator by comparison method	50 °C to 200 °C	0.67°C
131	THERMAL-TEMPERATURE	RTD,Thermocouple with or without indicator / controller digital thermometer temperature gauges liquid in glass thermometer	Using RTD sensor (PT-100) with indicator, low temperature bath calibrator & Process calibrator by comparison method	-80 °C to 50°C	0.32 °C
132	THERMAL-TEMPERATURE	Temperature indicator with sensor of Liquid Bath, Freezer, Negative Bath (single position)	By Using RTD with indicator by comparison method	-80°C to 50 °C	0.6°C

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133	THERMAL-TEMPERATURE	Temperature indicator with sensor of muffle furnace / Dry block furnace /oven (single position)	Using R type Thermocouple with indicator by comparison method	200°C to 1000°C	3.12°C
134	THERMAL-TEMPERATURE	Temperature indicator with sensor of Oven frurnace, Dry Block Calibrator (single position)	By using RTD with indicator by comparison method	50 °C to 200 °C	0.61°C
135	THERMAL-TEMPERATURE	Thermocouple with or without indicator / controller digital thermometer, data logger, temperature gauges	Using R type thermocouple with indicator, dry block calibrator & process calibrator by comparison method	400°C to 1000°C	1.86 °C

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Site Facility					
1	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC ENERGY (kWh) (1PH/3PH@50Hz, 240V, 1A to 100A, 0.5PF to UPF (lag & lead)	Using reference standard meter by the direct method	0.005 kwh to 24 kwh	1.55%
2	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Measure)	AC High Voltage @50 Hz	Using High Voltage Probe With DMM (by Direct Method)	1 kV to 5 kV	6.20%
3	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @50Hz	Using 5.1/2 Multifunction Calibrator (By Direct Method)	1.8 V to 180 V	0.25%
4	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	1 A to 10 A	1.98 % to 0.93 %
5	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50Hz	Using 5.1/2 Multifunction Calibrator By direct Method	1 mA to 180 mA	0.40 % to 0.39 %

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6	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Current @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	180 mA to 1 A	0.39 % to 1.98 %
7	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 50Hz	Using 5.1/2 Multifunction Calibrator By Direct Method	180 mV to 1.8 V	0.38 % to 0.25 %
8	ELECTRO-TECHNICAL-Alternating Current (< 1 GHz) (Source)	AC Voltage @ 50Hz	Using 5.1/2 Multifunction Calibrator (By Direct Method)	180 V to 1000 V	0.25 % to 0.30 %
9	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC High Voltage	Using high voltage probe with DMM (by direct method)	1 kV to 6 kV	6.35 % to 2.04 %
10	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Multimeter by direct method	1 M Ohm to 100 M Ohm	0.15 to 0.08 %
11	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	10 k ohm to 100 k Ohm	0.02 % to 0.04 %

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12	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	100 k ohm to 1 M ohm	0.04 % to 0.15 %
13	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Multimeter by direct method	100 M ohm to 1 G Ohm	0.08 % to 0.65 %
14	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (2 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	100 Ohm to 10 k Ohm	0.02%
15	ELECTRO-TECHNICAL-DIRECT CURRENT (Measure)	DC Resistance (4 wire)	Using 6.1/2 Digital Multimeter (By Direct Method)	1 ohm to 100 Ohm	0.36 % to 0.02 %
16	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 Multifunction Calibrator (by Direct Method)	1 A to 10 A	1.38 % to 0.90 %
17	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 multifunction calibrator (by direct method)	1 mA to 180 mA	1.55 % to 0.35 %

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18	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC current	Using 5 1/2 Multifunction Calibrator (by Direct Method)	180 mA to 1 A	0.35 % to 1.38 %
19	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	1 Mohm to 100 Mohm	0.96 % to 0.58 %
20	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	1 ohm to 100 ohm	0.29 % to 0.12 %
21	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	10 kohm to 100 kohm	0.14 % to 0.23 %
22	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	100 kohm to 1 Mohm	0.23 % to 0.96 %
23	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	100 Mohm to 900 Mohm	0.58 % to 2.8 %

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24	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (2 wire)	using standard resistance box by direct method	100 ohm to 10 kohm	0.12 % to 0.14 %
25	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	1 mohm	1.6%
26	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	1 ohm	0.29%
27	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	10 mohm	1.42%
28	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	100 µohm	1.43%
29	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	100 mohm	1.43%

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30	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC Resistance (4 wire)	using discrete standard 4 wire low resistance box by direct method	50 µohm	1.44%
31	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5.1/2 multifunction calibrator by direct method	1 mV to 180 mV	1.74 % to 0.14 %
32	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5 1/2 multifunction calibrator (by direct method)	1.8 V to 180 V	0.17%
33	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5 1/2 Multifunction Calibrator (By Direct Method)	180 mV to 1.8 V	0.14 % to 0.17 %
34	ELECTRO-TECHNICAL-DIRECT CURRENT (Source)	DC voltage	Using 5 1/2 multifunction calibrator (by direct method)	180 V to 1000 V	0.17 % to 0.21 %
35	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature controller / indicator (TC-K Type)	Using Temperature Calibrator (By Direct Method)	-200 °C to 1200 °C	3.2°C

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36	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-J Type)	Using Temperature Calibrator (By Direct Method)	-100 °C to 800 °C	2.75°C
37	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-R Type)	Using Temperature Calibrator (By Direct Method)	200 °C to 1750 °C	4.6°C
38	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-S Type)	Using Temperature Calibrator (By Direct Method)	200 °C to 1750 °C	4.6°C
39	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature Controller / Indicator /Scanner (TC-T Type)	Using Temperature Calibrator (By Direct Method)	-200 °C to 400 °C	2.50°C
40	ELECTRO-TECHNICAL-TEMPERATURE SIMULATION (Source)	Temperature controller / indicator/ Temperature Scanner (PT-100)	Using Temperature Calibrator (By Direct Method)	(-100) °C to 600 °C	2.5°C
41	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	frequency	Using 6.1/2 Digital Multimeter with multifunction calibrator by Comparison method	10 Hz to 1 kHz	0.80 % to 1.0 %

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42	ELECTRO-TECHNICAL-TIME & FREQUENCY (Measure)	Timer / stop watch	Using Time Calibrator (by Direct Method)	0.1 s to 9000 s	4.75 % to 0.7 %
43	MECHANICAL-ACCELERATION AND SPEED	Centrifuge (Contact type)	Using Digital tachometer by direct method	50 rpm to 6000 rpm	2.73 %
44	MECHANICAL-ACCELERATION AND SPEED	Centrifuge (Non Contact type)	Using Digital Tachometer by direct Method	40 rpm to 50000 rpm	2.1 %
45	MECHANICAL-ACCELERATION AND SPEED	RPM indicator with sensor, Tachometer (Contact type)	Using Digital Tachometer with RPM source by comparison method	50 rpm to 6000 rpm	2.73%
46	MECHANICAL-ACCELERATION AND SPEED	Tachometer pulse engine , stroboscope (non contact type)	Using Digital Tachometer with RPM source by comparison method	40 rpm to 50000 rpm	2.1%
47	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate	using electronic level	upto 2000x2000 mm	3.16 x sqrt L+W /125µm (where L & W in mm)

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48	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure gauges (dial,digital) / Pressure transmitter / Indicator of pressure switches (Hydraulic)	Using Digital Pressure Gauge,DMM & Comparator Based on DKD-R6-1	0 to 700 bar	0.83bar
49	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure gauges (dial,digital) / Pressure transmitter / Indicator of Pressure switches (Pnematic)	Using Digital Pressure Gauge & DMM & Comparator Based on DKD-R6-1	0 to 30 bar	0.10bar
50	MECHANICAL-PRESSURE INDICATING DEVICES	Pressure gauges (dial,digital) / Pressure transmitter / Indicator of Pressure switches (Pneumatic)	Using Digital Pressure Gauge & DMM & Comparator Based on DKD-R-6-1	0 to 10 bar	0.092bar
51	MECHANICAL-PRESSURE INDICATING DEVICES	VACUUM GAUGE	using digital vacuum gauge & comparator based on DKD-R6-1	(-) 0.9 bar to 0	0.008bar
52	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class I readability 0.01mg & coarser	using E1class weight based on OIML R-76-1	0 g to 80 g	0.05mg
53	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class I readability 0.1mg & coarser	using E1class weight based on OIML R-76-1	>80 g to 220 g	0.2mg

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54	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class II readability 1mg & coarser	using E1 class weight based on OIML R-76-1	>220 g to 500 g	0.003g
55	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class III readability 0.5g & coarser	using F1class weight based on OIML R-76-1	>500 g to 5 kg	2.0g
56	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class III readability 1 g & coarser	using F1 class weight based on OIML R-76-1	>5 kg to 50 kg	3g
57	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class IIII readability 5 g & coarser	using F1 class weight based on OIML R-76-1	>50 kg to 100 kg	5g
58	MECHANICAL-WEIGHING SCALE AND BALANCE	weiging scale /balance Class IV readability 10 g & coarser	using F1 / F2 class weight based on OIML R-76-1	>100 kg to 200 kg	20g
59	THERMAL-SPECIFIC HEAT & HUMIDITY	Indicator with sensor of Humidity Chamber @ 25°C	Using RH Indicator with Sensor by Comparison Method	20 % to 95 %	2%
60	THERMAL-SPECIFIC HEAT & HUMIDITY	Indicator with sensor of Humidity Chamber @50%RH	Using RH & TEMP. Indicator with Sensor by Comparison Method	15 °C to 50 °C	0.4°C

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61	THERMAL-TEMPERATURE	Freezer , environment chamber liquid bath, autoclave (Industrial Purpose only), incubator (Industrial Purpose only) Multi position	Using RTD (PT-100) 3 wire with scanner (minimum 9 sensor) by comparison method	-30°C to 50°C	2.6°C
62	THERMAL-TEMPERATURE	Oven , furnace , autoclave (Industrial Purpose only), incubator (Industrial Purpose only) Multi position	Using RTD (PT-100) 3 Wire With Scanner (minimum 9 sensor) by comparison method	50 °C to 200 °C	2.6°C
63	THERMAL-TEMPERATURE	Oven ,Industrial furnace (Multiposition)	Using N type thermocouple (minimum 9 sensor with scanner by comparison method	200 °C to 1000°C	5.2°C
64	THERMAL-TEMPERATURE	RTD,Thermocouple with or without indicator / controller digital thermometer temperature gauges	By using RTD sensor (PT-100) with indicator, dry block calibrator & Process calibratorby comparison method	200 °C to 400 °C	0.61°C

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65	THERMAL-TEMPERATURE	RTD,Thermocouple with or without indicator / controller digital thermometer temperature gauges liquid in glass thermometer	By using RTD sensor (PT-100) with indicator, liquid bath & Process calibrator by comparison method	50 °C to 200 °C	0.67°C
66	THERMAL-TEMPERATURE	Temperature indicator with sensor of Liquid Bath, Freezer, Negative Bath (single position)	By Using RTD with indicator by comparison method	-80°C to 50 °C	0.6°C
67	THERMAL-TEMPERATURE	Temperature indicator with sensor of muffle furnace / Dry block furnace /oven (single position)	Using R type Thermocouple with indicator by comparison method	200°C to 1000°C	3.12°C
68	THERMAL-TEMPERATURE	Temperature indicator with sensor of Oven frurnace, Dry Block Calibrator (single position)	By using RTD with indicator by comparison method	50 °C to 200 °C	0.61°C
69	THERMAL-TEMPERATURE	Thermocouple with or without indicator / controller digital thermometer, data logger, temperature gauges	Using R type thermocouple with indicator, dry block calibrator & process calibrator by comparison method	400°C to 1000°C	1.86 °C

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