



(A Constituent Board of Quality Council of India)



### **CERTIFICATE OF ACCREDITATION**

## TRUE VALUE CALIBRATION SERVICES PRIVATE LIMITED

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017** 

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

for its facilities at

NO. 92 S R B NAGAR MAIN ROAD, KOLATHUR, CHENNAI, TAMIL NADU, INDIA

in the field of

#### **CALIBRATION**

**Certificate Number:** CC-2144

Issue Date: 10/05/2019 Valid Until: 09/05/2021

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Signed for and on behalf of NABL



N. Venkateswaran Chief Executive Officer (I/c)





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### **SCOPE OF ACCREDITATION**

Laboratory Name TRUE VALUE CALIBRATION SERVICES PRIVATE LIMITED, NO. 92 S R B NAGAR

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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
		Pe	rmanent Facility		
1	MECHANICAL- ACCELERATION AND SPEED	SPEED ( Non Contact type)Tachometer, Stroboscope, RPM / Speed (Indicator / Meter / Source)	10 RPM to 90000 RPM	7% to 0.01%	Using Digital Tachometer and procedure based on Sanas TR 45-02.
2	MECHANICAL- ACCELERATION AND SPEED	SPEED (Contact type)Tachometer	10 RPM to 8000 RPM	6.2% to 0.04%	Using Digital Tachometer and procedure based on Sanas TR 45-2.
3	MECHANICAL- DENSITY AND VISCOSITY	DENSITYDensity Hydrometer / Brix Hydrometer / Baume Hydrometer / Twaddle Hydrometer/ Specific Gravity Hydrometer / Lactometer / Alcoholmeter	0.6 g/ml to 2.0 g/ml	0.0006g/ml	By Electronic Weighing Balance of readability 0.01/0.1 mg and known liquid density as Per NIST SP 250-78 by Hydrostatic Weighing Method
4	MECHANICAL- MOBILE FORCE MEASURING SYSTEM	Calibration of Push Pull Gauge/ Force Gauge	0 N to 2000 N	0.14%	Using different Denomination of Newton Weights and different loading frames as per VDI/VDE 2624
5	MECHANICAL- PRESSURE INDICATING DEVICES	PRESSURE HYDRAULICPressure Gauge, Pressure Indicator, Pressure controller, Pressure Transmitter, Pressure Recorder	0 bar to 700 bar	0.09% Rdg.	Pressure Calibrator with a uncertainty of 0.091 bar. Procedure based as per DKD R 6- 1





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
6	MECHANICAL- PRESSURE INDICATING DEVICES	PRESSURE PNEUMATIC (Pressure Gauge, Pressure Indicator, Pressure controller, Pressure Transmitter, Maghnelic Gauge, Manometers, Pressure Recorder, Pressure Switch.	0 mmWC to 200 mmWC (0 to 0.20 Bar)	0.29% Rdg.	Using Low Pressure Calibrator with a uncertainty of 0.062 mmWC. Procedure based as per DKD R 6- 1
7	MECHANICAL- PRESSURE INDICATING DEVICES	PRESSURE PNEUMATICPressure Gauge, Pressure Indicator, Pressure controller, Pressure Transmitter, Maghnelic Gauge, Manometers, Pressure Recorder, Pressure Switch.	0 bar to 40 bar	0.15% Rdg.	Using Pressure Calibrator with a uncertainty of 0.0044 bar. Procedure based as per DKD R 6-1
8	MECHANICAL- PRESSURE INDICATING DEVICES	VACUUM PNEUMATIC(Vacuum Gauge, Vacuum Indicator, Vacuum Transmitter, Vacuum Transducer, Vacuum Recorder, Maghnelic Gauge, Low Pressure calibrators/Gauges)	-200 mmWC to 0 mmWC (-0.20 to 0 Bar)	0.29% Rdg.	Using Low Pressure Calibrator with a uncertainty of 0.062 mmWC. Procedure based as per DKD R 6- 1





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
9	MECHANICAL- PRESSURE INDICATING DEVICES	VACUUMVacuum Gauge, Vacuum Indicator, Vacuum Transmitter, Vacuum Transducer, Vacuum Recorder, Maghnelic Gauge, Low Pressure calibrators/Gauges)	(-) 0.85 bar to 0 bar	5.9% Rdg.	Using Pressure Calibrator with a uncertainty of 0.0006 bar. Procedure based as per ISO 3567 & ISO 27893.
10	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Extensometer used in Material Testing Machine - Gauge length Upto 200mm	Upto 12.7 mm	3.45%	Using Digital Comparator as per the IS12872:2010, ISO 9513:2012 & ASTM E83:2016
11	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Universal Testing Machine Tension Mode	50 N to 500 kN	0.36%	Using Load Cell with Indicator as per the IS 1828:2015 Part 1 / ISO7500 Part 1
12	MECHANICAL- VOLUME	VOLUME Piston Operated Volumeteric Apparatus (Micropipette)	10 μl to 100 μl	0.26µl	Using Precision Balance by Gravimetric Method Procedure based on ISO 8655-6
13	MECHANICAL- VOLUME	VOLUME Pipette/Burette/ Measuring Cylinder/Beakers/ Volumetric Flask	10 ml to 20 ml	5.9µl	Using Precision Balance by Gravimetric Method Procedure based on ISO 4787
14	MECHANICAL- VOLUME	VOLUME Piston Operated Volumeteric Apparatus (Micropipette)	1 ml to 10 ml	0.36µl	Using Precision Balance by Gravimetric Method Procedure based on ISO 8655-6





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
15	MECHANICAL- VOLUME	VOLUMEMeasuring Cylinder/Beakers/ Volumetric Flask/Conical Flask	1 L to 5 L	0.2ml	Using Precision Balance ( readability 0.1 mg) by Gravimetric Method Procedure based on ISO 4787
16	MECHANICAL- VOLUME	VOLUMEMeasuring Cylinder/Beakers/ Volumetric Flask/Conical Flask	500 ml to 1 L	0.1ml	Using Precision Balance by Gravimetric Method Procedure based on ISO 4787
17	MECHANICAL- VOLUME	VOLUMEPipette/Burett e/ Measuring Cylinder/Beakers/ Volumetric Flask	1 ml to 10 ml	5.9µl	Using Precision Balance ( readability 0.01 mg) by Gravimetric Method. Procedure based on ISO 4787
18	MECHANICAL- VOLUME	VOLUMEPipette/Burett e/ Measuring Cylinder/Beakers/ Volumetric Flask	100 ml to 500 ml	7.6µl	Using Precision Balance by Gravimetric Method Procedure based on ISO 4787
19	MECHANICAL- VOLUME	VOLUMEPipette/Burett e/ Measuring Cylinder/Beakers/ Volumetric Flask	20 ml to 50 ml	7.6µl	Using Precision Balance by Gravimetric Method Procedure based on ISO 4787
20	MECHANICAL- VOLUME	VOLUMEPipette/Burett e/ Measuring Cylinder/Beakers/ Volumetric Flask	50 ml to 100 ml	7.6µI	Using Precision Balance by Gravimetric Method Procedure based on ISO 4787
21	MECHANICAL- VOLUME	VOLUMEPiston Operated Volumeteric Apparatus (Micropipette)	1 μl to 10 μl	0.094μΙ	Using Precision Balance ( readability 0.001 mg) by Gravimetric Method.  µmProcedure based on ISO 8655-6





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
22	MECHANICAL- VOLUME	VOLUMEPiston Operated Volumeteric Apparatus (Micropipette)	100 μl to 1000 μl	0.36µl	Using Precision Balance by Gravimetric Method Procedure based on ISO 8655-6
23	MECHANICAL- WEIGHTS	Calibration of weights	1 g	0.003mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles by Substitution method.
24	MECHANICAL- WEIGHTS	Calibration of weights	1 kg	0.16mg	Using E1 Class Weights and Mass Comparator (L.C. 0.1 mg) as per OIML R- 111: 2004 through ABBA Cycles by Substitution Method
25	MECHANICAL- WEIGHTS	Calibration of weights	10 g	0.006mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles.
26	MECHANICAL- WEIGHTS	Calibration of weights	10 kg	48mg	Using E2 Class Weights and Electronic Balance as per OIML R-111: 2004 through ABBA Cycles by Substitution Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
27	MECHANICAL- WEIGHTS	Calibration of weights	100 g	0.0156mg	Using E1 Class Weights and Semi - Micro Balance (L.C. 0.01 mg) as per OIML R-111: 2004 through ABBA Cycles by Substitution Method
28	MECHANICAL- WEIGHTS	Calibration of weights	2 g	0.0032mg	Using E1 Class Weights and Micro Balance (Readability 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles.
29	MECHANICAL- WEIGHTS	Calibration of weights	2 kg	0.28mg	Using E1 Class Weights and Mass Comparator (L.C. 0.1 mg ) as per OIML R- 111 : 2004 through ABBA Cycles by Substitution Method
30	MECHANICAL- WEIGHTS	Calibration of weights	20 g	0.008mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles.
31	MECHANICAL- WEIGHTS	Calibration of weights	20 kg	66mg	Using E2 Class Weights and Electronic Balance as per OIML R-111: 2004 through ABBA Cycles by Substitution Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
32	MECHANICAL- WEIGHTS	Calibration of weights	200 g	0.026mg	Using E1 Class Weights and Semi - Micro Balance (L.C. 0.01 mg) as per OIML R-111: 2004 through ABBA Cycles.
33	MECHANICAL- WEIGHTS	Calibration of weights	5 g	0.005mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles.
34	MECHANICAL- WEIGHTS	Calibration of weights	5 kg	0.51mg	Using E1 Class Weights and Mass Comparator (L.C. 0.1 mg ) as per OIML R- 111 : 2004 through ABBA Cycles by Substitution Method
35	MECHANICAL- WEIGHTS	Calibration of weights	50 g	0.01mg	Using E1 Class Weights and Semi - Micro Balance (L.C. 0.01 mg) as per OIML R-111: 2004 through ABBA Cycles.
36	MECHANICAL- WEIGHTS	Calibration of weights	50 kg	80mg	Using E2 Class Weights and Electronic Balance as per OIML R-111: 2004 through ABBA Cycles by Substitution Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
37	MECHANICAL- WEIGHTS	Calibration of weights	50 mg	0.001mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles by Subdivision method
38	MECHANICAL- WEIGHTS	Calibration of weights	500 g	0.083mg	Using E1 Class Weights and Mass Comparator (L.C. 0.1 mg ) as per OIML R- 111 : 2004 through ABBA Cycles by Substitution Method
39	MECHANICAL- WEIGHTS	Mass - weights	1 mg	0.001mg	Using E1 Class Weights and Micro Balance (readability: 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles by Subdivision method
40	MECHANICAL- WEIGHTS	MASS - weights	10 mg	0.001mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles by Subdivision method.





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
41	MECHANICAL- WEIGHTS	MASS - weights	100 mg	0.0012mg	Using E1 Class Weights and Micro Balance (readability: 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles by Subdivision Method
42	MECHANICAL- WEIGHTS	MASS - weights	2 mg	0.001mg	Using E1 Class Weights and Micro Balance (L.C. 0.001 mg ) as per OIML R-111: 2004 through ABBA Cycles by Subdivision method.
43	MECHANICAL- WEIGHTS	MASS - weights	20 mg	0.001mg	Using E1 Class Weights and Micro Balance (readability: 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles by Subdivision method
44	MECHANICAL- WEIGHTS	MASS - weights	200 mg	0.0012mg	Using E1 Class Weights and Micro Balance (readability: 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles by Subdivision Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
45	MECHANICAL- WEIGHTS	MASS - weights	5 mg	0.001mg	Using E1 Class Weights and Micro Balance (readability: 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles by Subdivision method.
46	MECHANICAL- WEIGHTS	MASS - weights	500 mg	0.0018mg	Using E1 Class Weights and Micro Balance (readability: 0.001 mg) as per OIML R-111: 2004 through ABBA Cycles by Subdivision Method
47	THERMAL- SPECIFIC HEAT & HUMIDITY	Calibration of Humidity Indicator, Humidity Transmitter, Thermo Hygrometer, Humidity Sensor/ Probe - @50% RH	5 °C to 50 °C	0.7°C	Using Temperature and Humidity Generator with Temperature and Humidity Indicator with Sensor by Comparison Method
48	THERMAL- SPECIFIC HEAT & HUMIDITY	Calibration of Humidity Indicator, Humidity Transmitter, Thermo Hygrometer, Humidity Sensor/ Probe - 20°C to 50°C	20 % to 95 %	1.71%	Using Temperature and Humidity Generator with Temperature and Humidity Indicator with Sensor by Comparison Method
49	THERMAL- TEMPERATURE	Calibration of TemperatureThermom eter, RTD Sensor, Thermocouple, Temperature Indicator/ Controller/ Transmitter/ Recorder with Sensor	400 °C to 650 °C	2°C	Using Multifunction calibrator with N Type TC with Dry Block calibrator by comparison Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
50	THERMAL- TEMPERATURE	Calibration of TemperatureThermom eter, RTD Sensor, Thermocouple, Temperature Indicator/ Controller/ Transmitter/ Recorder with Sensor	50 °C to 400 °C	1.25°C	Using Multifunction calibrator with RTD sensor with Dry Block calibrator by comparison Method
51	THERMAL- TEMPERATURE	Indicator Calibration of TemperatureTemperature Bath, Liquid Bath, Dry Block Calibrator, Temperature Indicator/Recorder/Controller with sensor of Deep Freezer, Freezer, Incubator, Autoclave, Chamber for industrial applications	400 °C to 1200 °C	3.45°C	Using Multifunction calibrator with N Type & S Type TC by comparison Method
52	THERMAL- TEMPERATURE	Indicator Calibration of TemperatureTemperature Bath, Liquid Bath, Dry Block Calibrator, Temperature Indicator/Recorder/Controller with sensor of Deep Freezer, Freezer, Incubator, Autoclave, Chamber for industrial applications	-80 °C to 400 °C	1.25°C	Using Multifunction calibrator with RTD sensor by comparison Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
		Si	te Facility		
1	MECHANICAL- ACCELERATION AND SPEED	SPEED (Non contact)Centrifuge, RPM meters and indicators.	10 RPM to 10000 RPM	0.72RPM to 4.0RPM	Using Digital Tachometer and procedure based as per SANAS TR 45-02.
2	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Brinell Hardness Testing Machine	HBW 10/3000	1.0%	Using Standard Hardness Blocks as per IS 1500(Part II) / ISO 6506-2 By Indirect Method
3	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Brinell Hardness Testing Machine	HBW 5/750	1.4%	Using Standard Hardness Blocks as per IS 1500(Part II) / ISO 6506-2 By Indirect Method
4	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Brinell Hardness Testing Machine	HBW 2.5/187.5	1.6%	Using Standard Hardness Blocks as per IS 1500(Part II) / ISO 6506-2 By Indirect Method
5	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Rockwell Hardness Testing Machine	HRA	0.87HRA	Using Standard Hardness Blocks as per IS 1586(Part II) / ISO 6508-2 By Indirect Method
6	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Rockwell Hardness Testing Machine	HRBW	0.90HRBW	Using Standard Hardness Blocks as per IS 1586(Part II) / ISO 6508-2 By Indirect Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
7	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Rockwell Hardness Testing Machine	HRC	0.87HRC	Using Standard Hardness Blocks as per IS 1586(Part II) / ISO 6508-2 By Indirect Method
8	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Vickers Hardness Testing Machine	HV 10	1.6%	Using Standard Hardness Blocks as per IS 1501(Part II) / ISO 6507-2 By Indirect Method
9	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Vickers Hardness Testing Machine	HV 30	1.3%	Using Standard Hardness Blocks as per IS 1501(Part II) / ISO 6507-2 By Indirect Method
10	MECHANICAL- HARDNESS TESTING MACHINES	Verification of Vickers Hardness Testing Machine	HV 5	1.8%	Using Standard Hardness Blocks as per IS 1501(Part II) / ISO 6507-2 By Indirect Method
11	MECHANICAL- IMPACT TESTING MACHINE	Verification of Impact Testing MachineCharpy/Izod	0 J to 450 J	0.54%	Using traceable Standard Gauges, Clinometer, Load cell, Steel Tape and other equipment's As per ISO 148-2 / ASTM E23-16 / IS 3766 /BS 131 (Part 4)





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
12	MECHANICAL- PRESSURE INDICATING DEVICES	PRESSURE HYDRAULICPressure Gauge, Pressure Indicator, Pressure controller, Pressure Transmitter, Pressure Recorder	0 bar to 700 bar	0.09% Rdg.	Pressure Calibrator with a uncertainty of 0.091 bar. Procedure based as per DKD R 6- 1
13	MECHANICAL- PRESSURE INDICATING DEVICES	PRESSURE PNEUMATIC (Pressure Gauge, Pressure Indicator, Pressure controller, Pressure Transmitter, Maghnelic Gauge, Manometers, Pressure Recorder, Pressure Switch.	0 mmWC to 200 mmWC (0 to 0.20 Bar)	0.29% Rdg.	Using Low Pressure Calibrator with a uncertainty of 0.062 mmWC. Procedure based as per DKD R 6- 1
14	MECHANICAL- PRESSURE INDICATING DEVICES	PRESSURE PNEUMATICPressure Gauge, Pressure Indicator, Pressure controller, Pressure Transmitter, Maghnelic Gauge, Manometers, Pressure Recorder, Pressure Switch.	0 bar to 40 bar	0.15% Rdg.	Using Pressure Calibrator with a uncertainty of 0.0044 bar. Procedure based as per DKD R 6-1
15	MECHANICAL- PRESSURE INDICATING DEVICES	VACUUM PNEUMATIC(Vacuum Gauge, Vacuum Indicator, Vacuum Transmitter, Vacuum Transducer, Vacuum Recorder, Maghnelic Gauge, Low Pressure calibrators/Gauges)	-200 mmWC to 0 mmWC (-0.20 to 0 Bar)	0.29% Rdg.	Using Low Pressure Calibrator with a uncertainty of 0.062 mmWC. Procedure based as per DKD R 6- 1





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16	MECHANICAL- PRESSURE INDICATING DEVICES	VACUUMVacuum Gauge, Vacuum Indicator, Vacuum Transmitter, Vacuum Transducer, Vacuum Recorder, Maghnelic Gauge, Low Pressure calibrators/Gauges)	(-) 0.85 bar to 0 bar	5.9% Rdg.	Using Pressure Calibrator with a uncertainty of 0.0006 bar. Procedure based as per ISO 3567 & ISO 27893.
17	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Displacement Measuring System and Devices used in Material Testing Machine	0 mm to 600 mm	0.5mm	Using Height gauge As per ASTM E 2309 by Comparison Method
18	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Extensometer used in Material Testing Machine - Gauge length Upto 200mm	Upto 12.7 mm	3.45%	Using Digital Comparator as per the IS12872:2010, ISO 9513:2012 & ASTM E83:2016
19	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Speed for Material Testing Machine	Upto 500 mm/min	0.22mm/min	As per ASTM E 2658 by Comparison Method
20	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Universal Testing Machine Tension Mode	50 N to 500 kN	0.36%	Using Load Cell with Indicator as per the IS 1828:2015 Part 1 / ISO7500 Part 1
21	MECHANICAL- UTM, TENSION CREEP AND TORSION TESTING MACHINE	Verification of Universal Testing MachineCompression Mode	50 N to 1000 kN	0.32%	Using Load Cell with Indicator as per the IS 1828:2015 Part 1 / ISO7500 Part 1





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22	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass I Electronic Weighing Balances & Mass Comparators (L.C = 0.1 g)	5.1 kg to 64 kg	0.07g	Using E2 Class Reference Standard Weights and procedure based as per OIML R- 76
23	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass I Electronic Weighing Balances & Mass Comparators (L.C = 0.1mg)	220 g to 5.1 kg	0.6mg	Using E1 Class Reference Standard Weights as per OIML R- 76
24	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass I Electronic Weighing Balances & Mass Comparators (readability: 0.001mg)	upto 21 g	0.003mg	Using E1 Class Reference Standard Weights and procedure based as per OIML R- 76
25	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass I Electronic Weighing Balances & Mass Comparators (L.C = 0.01mg)	21 g to 220 g	0.028mg	Using E1 Class Reference Standard Weights and procedure based as per OIML R- 76
26	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass III Electronic Weighing Balances (readability: 10 g)	64 kg to 100 kg	20g	Using F2 Class Reference Standard Weights and procedure based as per OIML R- 76
27	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass III Electronic Weighing Balances (readability: 100 g)	100 kg to 500 kg	350g	Using F2 Class Reference Standard Weights and procedure based as per OIML R-





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Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2144 Page No.: 17 / 18

S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
28	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass III Electronic Weighing Balances (readability: 200 g)	500 kg to 1000 kg	498g	Using F2 Class Reference Standard Weights as per OIML R- 76
29	MECHANICAL- WEIGHING SCALE AND BALANCE	MASSClass III Electronic Weighing Balances (readability: 500 g)	1000 kg to 3000 kg	818g	Using F2 & M1 Class Reference Standard Weights and procedure based as per OIML R- 76
30	THERMAL- SPECIFIC HEAT & HUMIDITY	Calibration of Humidity Chamber, Climatic Chamber, Environment Chamber(Multi- Position)	20 % to 95 %	3.95%	Using Humidity and Temperature Data Logger by Comparison Method
31	THERMAL- TEMPERATURE	Calibration of TemperatureDeep Freezer, Freezer, Incubator, Hot Air Oven, Water Bath, Furnace (Multi- Position) for industrial applications	-40 °C to 400 °C	2.33°C	Using Data Logger, RTD Sensor, N Type TC by Comparison Method
32	THERMAL- TEMPERATURE	Calibration of TemperatureDeep Freezer, Freezer, Incubator, Hot Air Oven, Water Bath, Furnace (Multi- Position) for industrial applications	400 °C to 1000 °C	6.84°C	Using Data Logger, N Type TC by Comparison Method





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S.No	Discipline / Group	Quantity Measured/ Instrument	Range / Frequency	* Calibration Measurement Capability(±)	Remarks
33	THERMAL- TEMPERATURE	Indicator Calibration of TemperatureTemperat ure Bath, Liquid Bath, Dry Block Calibrator, Temperature Indicator/Recorder/Con troller with sensor of Deep Freezer, Freezer, Incubator, Autoclave, Chamber for industrial applications	400 °C to 1200 °C	3.45°C	Using Multifunction calibrator with N Type & S Type TC by comparison Method
34	THERMAL- TEMPERATURE	Indicator Calibration of TemperatureTemperature Bath, Liquid Bath, Dry Block Calibrator, Temperature Indicator/Recorder/Controller with sensor of Deep Freezer, Freezer, Incubator, Autoclave, Chamber for industrial applications	-80 °C to 400 °C	1.25°C	Using Multifunction calibrator with RTD sensor by comparison Method