

As an accredited laboratory, this laboratory is entitled to use the following accreditation symbol.



Valid from 17 July 2024
to 16 July 2028
Issued on 21 August 2024



ISO/ IEC 17025
CL 005 - 01

Schedule of Accreditation

Accreditation Scheme for Testing/Calibration Laboratories
Sri Lanka Accreditation Board for Conformity Assessment

Accreditation Number: CL 005 – 01

Industrial Metrology Laboratory
Industrial Technology Institute
No.120/4 A, Vidya Mawatha
Colombo 07.

Scope of Accreditation: Performing Mass and related qualities (Volumetric & Mass), Dimension, Thermal, Electrical and Time & Frequency calibration as per the calibration methods appearing in the schedule.

The laboratory is accredited for the following calibrations appears in the Page 02 of 11.

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Mass						
01	Micro Balance/ Comparator Balances	Comparison with reference weight	MM/MA/01 : Rev 08	0 – 2 g	0.002 to 0.0051 mg	Onsite / Laboratory
				0 – 5 g	0.002 to 0.0061 mg	
				0 – 22 g	0.002 to 0.013 mg	
				0 – 220 g	0.02 mg	
02	Electronic Top Loading Balance/ Comparator balance/ Analytical Balance	Comparison	MM/MA/01 : Rev 07	0 – 22 g	0.002 to 0.013 mg	Onsite / Laboratory
				0 – 220 g	0.02 mg	
				0 – 500 g	0.09 mg	
				0 – 1 kg	0.14 mg	
				1– 5 kg	1.2 mg	
				5 – 10 kg	4 mg	
				10 – 20 kg	18 mg	
03	Single pan two knife edge Balance	Comparison	MM/MA/02 : Rev 04	0 – 200 g	0.03 mg	Onsite / Laboratory
				0 – 500 g	0.13 mg	
				0 – 1kg	1.3 mg	
04	Triple Beam Balance	Comparison	MM/MA/04 : Rev 04	0 – 220 g	0.03 mg	Onsite / Laboratory
				0 – 500 g	0.13 mg	
				0 – 1 kg	1.3 mg	
				1– 5 kg	1.7 mg	
				5 – 10 kg	4 mg	
05	Weighing Scale /Platform Balance (Digital/Analog)	Comparison	MM/MA/07 : Rev 06	0 – 1 kg	1.2 mg	Onsite / Laboratory
				1– 5 kg	1.6 mg	
				5– 10 kg	4 mg	
				10 – 20 kg	18 mg	
				20 – 50 kg	40 mg	
				50 – 100 kg	0.12 g	
				100– 150 kg	0.83 g	
				150 –200 kg	0.88 g	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Mass						
06	Set of weights	Determination of conventional Mass value of weights/ Direct comparison	<i>E2 Class</i>			Mass Laboratory
			MM/MA/05: Rev 06	10000 g	2 mg	
				5000 g	1 mg	
				2000 g	0.3 mg	
				1000 g	0.1 mg	
				500 g	0.09 mg	
				200 g	0.035 mg	
				100 g	0.02 mg	
				50 g	0.01 mg	
				20 g	0.009 mg	
				10 g	0.007 mg	
				5 g	0.006 mg	
				2 g	0.005 mg	
				1 g	0.004 mg	
				0.5 g	0.004 mg	
				0.2 g	0.003 mg	
				0.1 g	0.002 mg	
				0.05 g	0.002 mg	
				0.02 g	0.002 mg	
				0.01 g	0.002 mg	
				0.005 g	0.002 mg	
				0.002 g	0.001 mg	
				0.001 g	0.002 mg	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Mass						
07	Set of weights	Determination of conventional Mass value of weights/ Direct comparison	<i>F1 class</i>			
			MM/MA/05: Rev 06	20000g	100 mg	
				10000 g	3 mg	
				5000 g	2 mg	
				2000 g	1 mg	
				1000 g	0.2 mg	
				500 g	0.1 mg	
				200 g	0.04 mg	
				100 g	0.03 mg	
				50 g	0.03 mg	
				20 g	0.01 mg	
				10 g	0.007 mg	
				5 g	0.006 mg	
				2 g	0.005 mg	
				1 g	0.005 mg	
				0.5 g	0.007 mg	
				0.2 g	0.003 mg	
				0.1 g	0.004 mg	
				0.05 g	0.003 mg	
				0.02 g	0.002 mg	
				0.01 g	0.001 mg	
				0.005 g	0.002 mg	
				0.002 g	0.002 mg	
				0.001 g	0.002 mg	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Mass						
08	Set of weights	Determination of conventional Mass value of weights/ Direct comparison	<i>Class M1 and Below</i>			
			MM/MA/05: Rev 06	10000 g	3 mg	
				5000 g	2 mg	
				2000 g	2 mg	
				1000 g	1 mg	
				500 g	0.1 mg	
				200 g	0.01 mg	
				100 g	0.01 mg	
				50 g	0.01 mg	
				20 g	0.01 mg	
				10 g	0.008 mg	
				5 g	0.008 mg	
				2 g	0.007 mg	
				1 g	0.007 mg	
				0.5 g	0.007 mg	
				0.2 g	0.006 mg	
				0.1 g	0.004 mg	
				0.05 g	0.004 mg	
				0.02 g	0.003 mg	
				0.01 g	0.003 mg	
				0.005 g	0.003 mg	
				0.002 g	0.003 mg	
				0.001 g	0.003 mg	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Volume						
09	One mark pipette / Graduated pipette	Glassware/ Plastic ware - Gravimetric method	MM/VO/01: Rev 6	0 - 1 ml	0.005 ml	Laboratory/ on site
				0 - 2 ml		
				0 - 5 ml		
				0 - 10 ml		
				0 - 25 ml		
				0 - 50 ml		
				0 - 100ml		
				0 - 200ml		
10	Burette	Glassware / Plastic ware - Gravimetric method	MM/VO/01: Rev:06	0 - 10 ml	0.005 ml	
				0 - 25ml		
				0 - 50 ml	0.01 ml	
				0 - 100 ml	0.01 ml	
11	Graduated measuring cylinder	Glassware / Plastic ware - Gravimetric method	MM/VO/01: Rev:06	5 ml	0.005 ml	
				10 ml		
				25ml		
				50 ml		
				100 ml		
				200 ml	0.01 ml	
				500 ml	0.01 ml	
				1000 ml	0.02 ml	
				2000 ml	0.03 ml	
12	Volumetric Flask	Glassware / Plastic ware - Gravimetric method	MM/VO/01: Rev:06	0 - 10 ml	0.01 ml	
				0 - 25 ml		
				0 - 50 ml		
				0 - 100 ml		
				0 - 200 ml		
				0 - 500 ml		
				0- 1000 ml	0.02 ml	
				0 - 2000 ml	0.03 ml	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Volume						
13	Piston operated volumetric apparatus	Gravimetric method	MM/VO/02: Rev:05	1 µl	0.16 µl	Laboratory / on site
				5 µl	0.18 µl	
				10 µl	0.20 µl	
				20 µl	0.23 µl	
				100 µl	0.20 µl	
				500 µl	0.26 µl	
				1000 µl	0.28 µl	
				5 ml	1 µl	
				50 ml	2.3 µl	
				100 ml	4.2 µl	
				200 ml	8.2 µl	
Dimension						
14	Gauge Blocks	Comparison	MM/DI/02 : Rev: 05	0 to 100 122 pcs	$\sqrt{(0.048)^2 + (2.2 \times 10^{-3} L)^2} \mu m$	Laboratory
15	Vernier Calliper Digital/Analog scale	Comparison	MM/DI/03 : Rev: 05	0 to 150 µm	44 µm	Laboratory
				150 to 200 µm	44 µm	
				200 to 300 µm	44 µm	
				300 to 600 µm	44 µm	
				600 to 900 µm	44 µm	
16	Micrometer (External) Digital/Analog scale	Comparison	MM/DI/04 : Rev: 05	0 to 25 µm	8 µm	Laboratory
				25 to 75 µm	8 µm	
				75 to 200 µm	8 µm	
				200 to 300 µm	8 µm	
				300 to 500 µm	8 µm	
17	Rulers/scales	Comparison	MM/DI/05 : Rev: 05	For steels/glass 0 to 1000 mm	1.4 mm	Laboratory
18	Dial Gauges Digital/Analog	Comparison	MM/DI/06 : Rev: 05	0 to 25 µm	11 µm	Laboratory

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Dimension						
19	Micrometer (Internal) Digital/Analog scale	Comparison	MM/DI/07 : Rev: 05	50 to 75 μm	12 μm	Laboratory
				75 to 100 μm	12 μm	
				100 to 125 μm	12 μm	
				125 to 150 μm	12 μm	
				150 to 175 μm	12 μm	
				175 to 200 μm	12 μm	
Thermal						
20	Liquid-in glass Thermometer	Comparison	MM/TE/02	-30 °C to 250 °C	66mK	Laboratory
21	Dial Thermometer	Comparison	MM/TE/03	-30 °C to 50°C	70mK	Laboratory /Onsite
				50 °C to 250 °C	75mK	
				250 °C to 650°C	75mK	
22	PRT	Comparison	MM/TE/04	-39 ⁰ C	12 mK	Laboratory
				0.01 ⁰ C	5 mK	
				29 ⁰ C	15 mK	
				156 ⁰ C	18 mK	
				231 ⁰ C	34 mK	
				420 ⁰ C	23 mK	
23	Digital Thermometers with temperature sensors	Comparison	MM/TE/05	-30 °C to 250°C	70mK	Laboratory/ Onsite
				250 °C to 660°C	75mK	
				660 °C to 1000 °C	0.85K	
24	Thermocouple	Comparison	MM/TE/06	-30 °C to 1000°C	0.9K	Laboratory
25	Block Calibrators	Comparison	MM/TE/08	-60 °C to 600°C	52mK	Laboratory
26	LaboratoryOven/ Incubators(multi-site)	Comparison	MM/TE/09	50 °C to 250°C for ovens	0.46 °C	Onsite
				15 °C to 60°C for incubators	0.46 °C	
27	LaboratoryOven/ Incubators(three-site)	Comparison	MM/TE/10	50 °C to 250°C for ovens	0.46 °C	Onsite
				15 °C to 60°C for incubators	0.46 °C	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Thermal						
28	Stirred Liquid Baths	Comparison	MM/TE/11	-30°C to 600°C	48mK	Laboratory/ Onsite
29	Autoclaves	Comparison	MM/TE/12	100°C to 130°C	0.1 °C	Laboratory/ Onsite
30	Muffle Furnace	Comparison	MM/TE/13	250°C to 1000°C	0.9 °C	Laboratory/ Onsite
31	Laboratory Water Baths	Comparison	MM/TE/14	5°C to 95°C	0.1 °C	Laboratory/ Onsite
Electrical						
32	Digital Multimeter (up to 6.5) Voltmeter, etc	MM/EL/01: REV11	DC Voltage	100 mV to 200 mV	62-75 μ V/V	Laboratory
				0.22 V to 2 V	48-99 μ V/V	
				2.2 V to 200 V	0.06-0.12 mV/V	
				220 V to 1 kV	0.066-0.11 mV/V	
			AC Voltage	200 mV (10 Hz to 100 kHz)	1.1 -15 mV/V	
				2 V (10 Hz to 100 kHz)	0.019-0.35 V/V	
				20 V (10 Hz to 100 kHz)	19-73 mV/V	
				200 V (30 Hz to 20 kHz)	17-59 mV/V	
33	Digital Multimeter (up to 6.5) Ammeters, Clamp on meters, etc.	MM/EL/01: REV11	DC Current	100 μ A to 200 μ A	0.66-0.73 mA/A	Laboratory
				0.21 mA to 20 mA	0.64-2.8 mA/A	
				21 mA to 200 mA	0.59 mA/A	
				0.21 A to 2 A	1.4-1.6 mA/A	
				2 A to 10 A	2.0-2.9 mA/A	
			AC Current	200 μ A (10 Hz to 10 kHz)	2.3-15 mA/A	
				2 mA (10 Hz to 10 kHz)	2.6-11 mA/A	
				20 mA (10 Hz to 10 kHz)	2.2 -30 mA/A	
				200 mA (10 Hz to 10 kHz)	2.4- 80 mA/A	
				2 A (10 Hz to 5 kHz)	2.6 -12 mA/A	
				10 A (10 Hz to 2 kHz)	3.8 -11 mA/A	
				100 A	25 mA/A	
				500 A	5.5 mA/A	
				1000 A	2.8 mA/A	
				1500 A	1.9 mA/A	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Electrical & Time and Frequency						
34	Digital Multimeter (up to 6.5) Resistance meters, Insulation tester, Continuity tester, etc.	MM/EL/01: REV11	Direct comparison with fixed resistors (2 Wires)	0 Ω to 1000 M Ω	0.13-26 m Ω/Ω	Laboratory
			Direct comparison with resistance simulator (2 Wires)	0 Ω to 1000 M Ω	0.006 m Ω/Ω - 607 Ω/Ω	
			Direct comparison with fixed resistors (4 Wires)	0 Ω to 100 k Ω	58 $\mu\Omega/\Omega$ - 6.8 m Ω/Ω	
35	Digital Multimeter (up to 6.5) Capacitance, etc.	MM/EL/01: REV11	Capacitance	100 μ F	19 mF/F	Laboratory
				1 mF	22 mF/F	
				10 mF	22 mF/F	
36	Digital Multimeter (up to 6.5) Frequency meter, Counter, Timer, Digital Tachometer, etc.	MM/EL/01: REV11	Frequency	100 Hz	0.12 mHz/Hz	Laboratory
				1 kHz	0.12 mHz/Hz	
				10 kHz	0.12 mHz/Hz	
				20 kHz	0.12 mHz/Hz	
				50 kHz	0.12 mHz/Hz	
				100 kHz	0.12 mHz/Hz	
				1 MHz	0.12 mHz/Hz	
37	Inductance meter	MM/EL/01: REV11	Inductance	1mH	24 mH/H	Laboratory
				10mH	6.2 mH/H	
				19mH	5.9 mH/H	
				29mH	5.8 mH/H	
				50mH	5.8 mH/H	
				100mH	5.8 mH/H	
				1H	6.2 mH/H	
				10H	6.3 mH/H	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
Electrical						
38	Temperature Simulator	MM/EL/03: REV11	Temperature (CJC on)			Laboratory
			Type K	-200 to 1369 °C	0.62 °C	
			Type J	-200 to 1200 °C	0.62 °C	
			Type T	-250 °C to 350 °C	0.62 - 0.64 °C	
			Type R	0 to 1700 °C	0.62 - 0.63 °C	
			Type S	0 to 1760 °C	0.62 °C	
			Temperature (CJC off)			
			Type K	-200 to 1369°C	0.10 - 0.11 °C	
			Type J	-250 °C to 1200 °C	0.10 - 0.11 °C	
			Type T	-250 °C to 350 °C	0.10 - 0.12 °C	
			Type R	0 °C to 1700 °C	0.10 - 0.11 °C	
			Type S	0 °C to 1760 °C	0.11 - 0.13 °C	
			Type N	-200 to 1300°C	0.11 °C	
			Type B	600 °C to 1820 °C	0.11 - 0.13 °C	
			Type E	-250 °C to 1000 °C	0.10 - 0.11 °C	
			RTD	-30 to 500°C	0.01 – 0.02 °C	
39	Temperature Indicator/ Controller	MM/EL/03: REV11	Temperature (CJC on)			
			Type K	-200 to 1370 °C	0.64 °C	
			Type J	-210 to 1200 °C	0.56 - 0.57 °C	
			Type T	-250 °C to 400 °C	0.51°C - 0.62°C	
			Type R	0 to 1760 °C	1.49 °C	
			Type S	0 to 1760 °C	1.49 °C	
			Temperature (CJC off)			
			Type K	-200 to 1370°C	0.19 °C	
			Type J	-210 °C to 1200 °C	0.17 °C	
			Type T	-250 °C to 400 °C	0.18 °C - 0.37 °C	
			Type R	0 to 1760 °C	0.47 °C	
			Type S	0 °C to 1760 °C	0.47 °C	
			Type N	-200 to 1300°C	0.44 °C	
			Type B	600 °C to 1820 °C	0.46 °C	
			Type E	-250 °C to 1000 °C	0.41 - 0.76 °C	
			Type L	-200 °C to 900 °C	0.41 °C	
Type U	-200 °C to 600 °C	0.42 °C				
Type C	0 °C to 2316 °C	0.42 °C				
RTD	-100 to 800°C	0.02 - 0.14 °C				