

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



Valid from 14 May 2020  
to 13 May 2023  
Issued on 14 May 2020



ISO/ IEC 17025  
CL 005 - 01

## Schedule of Accreditation

Accreditation Scheme for 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 Mechanical (Dimension & Mass), Electrical, Thermal and Volumetric calibration as per the test methods appearing in the schedule.

The laboratory is accredited for the following tests.

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
<b>Volume</b>						
01	One mark pipette / Graduated pipette	Glassware - Gravimetric Method	MM/VO/01: Rev:05	0-1 ml	0.001 ml	Laboratory
				0-2 ml	0.001 ml	
				0-5 ml	0.001 ml	
				0-10 ml	0.001 ml	
				0-25 ml	0.001 ml	
				0-50 ml	0.001 ml	
				0-100 ml	0.001 ml	
				0-200 ml	0.03 ml	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
02	Burette	Glassware - Gravimetric Method	MM/VO/01: Rev:05	0-10 ml	0.001 ml	Laboratory
				0-25 ml	0.001 ml	
				0-50 ml	0.001 ml	
				0-100 ml	0.001 ml	
03	Volumetric flask	Glassware - Gravimetric Method	MM/VO/01: Rev:05	5 ml	0.001 ml	Laboratory
				10 ml	0.001 ml	
				25 ml	0.001 ml	
				50 ml	0.001 ml	
				100 ml	0.001 ml	
				200 ml	0.03 ml	
				500 ml	0.08 ml	
				1000 ml	0.08 ml	
				2000 ml	0.14 ml	
04	Graduated measuring cylinder	Glassware - Gravimetric Method	MM/VO/01: Rev:05	0-10 ml	0.001 ml	Laboratory
				0-25 ml	0.001 ml	
				0-50 ml	0.001 ml	
				0-100 ml	0.001 ml	
				0-200 ml	0.03 ml	
				0-500 ml	0.08 ml	
				0-1000ml	0.08 ml	
				0-2000 ml	0.14 ml	
05	Piston operated volumetric Apparatus	Gravimetric Method	MM/VO/02: Rev:04	1 µl	0.16 µl	Laboratory
				5 µl	0.18 µl	
				10 µl	0.20 µl	
				20 µl	0.23 µl	
				100 µl	0.24 µl	
				500 µl	0.26 µl	
				1000 µl	0.34 µl	
				5 ml	0.94 µl	
				50 ml	2.3 µl	
				100 ml	4.2µl	
				200 ml	8.2 µl	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
<b>Dimension</b>						
01	Gauge Blocks	Comparison	MM/DI/02 : Rev: 05	0 to 1 1 to 2 2 to 10 10 to 25 25 to 50 50 to 75 75 to 100	0.08 µm 0.08 µm 0.08 µm 0.11 µm 0.16 µm 0.23 µm 0.30 µm	Laboratory
02	Vernier Calliper Digital/Analog scale	Comparison	MM/DI/03 : Rev: 05	0 to 150 150 to 200 200 to 300 300 to 600 600 to 900	20 µm 20 µm 30 µm 50 µm 30 µm	Laboratory
03	Micrometer (External) Digital/Analog scale	Comparison	MM/DI/04 : Rev: 05	0 to 25 25 to 75 75 to 200 200 to 300 300 to 500	2 µm 2 µm 3 µm 3 µm 5 µm	Laboratory
04	Rulers/scales	Comparison	MM/DI/05 : Rev: 05	<i>For steels</i> 0 to 100 100 to 1000 <i>For glass</i> 0 to 1000	450 µm 900 µm 73 µm	Laboratory
05	Dial Gauges Digital/Analog	Comparison	MM/DI/06 : Rev: 05	0 to 25	3 µm	Laboratory
06	Micrometer (Internal) Digital/Analog scale	Comparison	MM/DI/07 : Rev: 05	50 to 75 75 to 100 100 to 125 125 to 150 150 to 175 175 to 200	11 µm 11 µm 11 µm 11 µm 11 µm 11 µm	Laboratory
07	Gauge Block Comparator	Comparison	MM/DI/01	0 -100	0.03 µm	In house calibration
				6	0.01	
08	Tape Calibrator	Comparison	MM/DI/08	Upto 1700	5 µm	In house calibration

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
<b>Mass</b>						
01	Micro Balance/ Comparator Balances	Comparison with reference weight	MM/MA/01 : Rev 07	0 – 2 g 0 – 5 g 0 – 22 g 0 – 220 g	0.006 – 0.010 mg 0.006 – 0.016 mg 0.006 – 0.023 mg 0.03 mg	Onsite / Laboratory
02	Electronic Top Loading Balance / Comparator balance/ Analytical Balance	Comparison with reference weight	MM/MA/01 : Rev 07	0 – 22 g 0 – 220 g 0 – 500 g 0 – 1 kg 1 – 5 kg 5 – 10 kg 10 – 20 kg	0.006 – 0.023 mg 0.03 mg 0.13 mg 1.3 mg 1.7 mg 4 mg 18 mg	Onsite / Laboratory
03	Single pan two knife edge Balance	Comparison	MM/MA/02 : Rev 04	0 – 200 g 0 – 500 g 0 – 1kg	0.03 mg 0.13 mg 1.3 mg	Onsite / Laboratory
04	Triple Beam Balance	Comparison	MM/MA/04 : Rev 04	0 – 220 g 0 – 500 g 0 – 1 kg 1 – 5 kg 5 – 10 kg	0.03 mg 0.13 mg 1.3 mg 1.7 mg 4 mg	Onsite / Laboratory
05	Weighing Scale /Platform Balance (Digital/Analog)	Comparison	MM/MA/07 : Rev 06	0 – 1 kg 1 – 5 kg 5 – 10 kg 10 – 20 kg 20 – 50 kg 50 – 100 kg 100 – 150 kg 150 – 200 kg	1.2 mg 1.6 mg 4 mg 18 mg 40 mg 122 mg 826 mg 880 mg	Onsite / Laboratory

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
<b>Mass</b>						
06	Set of weights	Determination of conventional Mass value of weights/ Direct comparison	<i>E2 Class</i> MM/MA/05: Rev 04	10000 g	3 mg	Laboratory
				5000 g	1 mg	
				2000 g	0.9 mg	
				1000 g	0.1 mg	
				500 g	0.09 mg	
				200 g	0.02 mg	
				100 g	0.03 mg	
				50 g	0.02 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	0.003 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	0.002 mg		
0.001 g	0.002 mg					
			<i>F1 class</i>			
			MM/MA/05: Rev 04	20000	100mg	

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
<b>Thermal</b>						
01	Liquid-in glass Thermometer	Comparison	MM/TE/02 : Rev: 05	-60 to +35 <sup>0</sup> C 35 to 250 <sup>0</sup> C 250 to 500 <sup>0</sup> C	30mK 40mK 44mK	Laboratory/ Onsite
02	Dial Thermometer	Comparison	MM/TE/03 : Rev: 04	-60 to +35 <sup>0</sup> C 35 to 250 <sup>0</sup> C 250 to 550 <sup>0</sup> C	16mK 44mK 40mK	Laboratory /Onsite
03	PRT	Comparison	MM/TE/04 : Rev: 05	-39 <sup>0</sup> C 0.01 <sup>0</sup> C 29 <sup>0</sup> C 156 <sup>0</sup> C 231 <sup>0</sup> C 420 <sup>0</sup> C	12 mK 5 mK 15 mK 18 mK 34 mK 23 mK	Laboratory
04	Digital thermometer with a sensor	Comparison	MM/TE/05 : Rev: 06	-60 to +35 <sup>0</sup> C 35 to 250 <sup>0</sup> C 250 to 1200 <sup>0</sup> C	16mK 44mK 40mK	Laboratory/ Onsite
05	Thermocouple	Comparison	MM/TE/06 : Rev: 03	-60 to +35 <sup>0</sup> C 35 to 250 <sup>0</sup> C 250 to 500 <sup>0</sup> C 500 to 1100 <sup>0</sup> C	0.7 <sup>0</sup> C 0.7 <sup>0</sup> C 0.7 <sup>0</sup> C 0.6 <sup>0</sup> C	Laboratory
06	Temperature indicators, Controllers and Simulators	Comparison	MM/TE/07 : Rev: 05	-100 to 1500 <sup>0</sup> C	0.01 <sup>0</sup> C 1.6μv 1.2mΩ 1μA	Laboratory/ Onsite
07	Performance test of Block Calibrator	Comparison	MM/TE/08 : Rev: 04	-60 to +600 <sup>0</sup> C	0.053 <sup>0</sup> C (53 mK)	Laboratory
08	Performance test of laboratory Oven/Incubator – multi points	Comparison	MM/TE/09 : Rev: 04	50 to 250 <sup>0</sup> C for Ovens 15 to 60 <sup>0</sup> C for incubators	0.5 <sup>0</sup> C 0.5 <sup>0</sup> C	Onsite
09	Performance test of laboratory Oven/Incubator – three points	Comparison	MM/TE/10 : Rev: 04	50 to 250 <sup>0</sup> C for Ovens 15 <sup>0</sup> C to 60 <sup>0</sup> C for incubators	0.5 <sup>0</sup> C 0.5 <sup>0</sup> C	Laboratory/ Onsite
10	Performance test of Stirred liquid bath	Comparison	MM/TE/11 : Rev:03	-60 to +600 <sup>0</sup> C	21 mK	Laboratory/ Onsite
11	Performance test of Autoclave	Comparison	MM/TE/12 : Rev:03	100 to 130 <sup>0</sup> C	0.1 <sup>0</sup> C	Laboratory/ Onsite
12	Performance test of muffle furnace	Comparison	MM/TE/13 : Rev:03	250 to 1100 <sup>0</sup> C	0.6 <sup>0</sup> C	Laboratory/ Onsite
13	Performance test of Water bath	Comparison	MM/TE/14 : Rev: 03	5 to 95 <sup>0</sup> C	0.1 <sup>0</sup> C	Laboratory/ Onsite

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
<b>Electrical</b>						
01	Digital multi meter	DC Voltage	MM/EL/01: Rev: 07	100 mV 1 V 10 V 100 V 1000 V	8 $\mu$ V/V 5 $\mu$ V/V 5 $\mu$ V/V 8 $\mu$ V/V 7 $\mu$ V/V	Laboratory
		AC Voltage		100 mV 1 V 10 V 100 V 1000 V	96 $\mu$ V/V 51 $\mu$ V/V 51 $\mu$ V/V 59 $\mu$ V/V 69 $\mu$ V/V	Laboratory
		DC Current	MM/EL/01: Rev: 07	100 $\mu$ A 1 mA 10 mA 100 mA 1 A 10 A 20 A	53 $\mu$ A/A 32 $\mu$ A/A 32 $\mu$ A/A 38 $\mu$ A/A 52 $\mu$ A/A 67 $\mu$ A/A 645 $\mu$ A/A	Laboratory
		AC Current		100 $\mu$ A 1 mA 10 mA 100 mA 1 A 10 A 20 A	143 $\mu$ A/A 117 $\mu$ A/A 99 $\mu$ A/A 97 $\mu$ A/A 402 $\mu$ A/A 290 $\mu$ A/A 1009 $\mu$ A/A	Laboratory
		Resistance		1 $\Omega$ 10 $\Omega$ 100 $\Omega$ 1k $\Omega$ 10 k $\Omega$ 100 k $\Omega$ 1 M $\Omega$ 10 M $\Omega$ 100 M $\Omega$	86 $\mu\Omega/\Omega$ 22 $\mu\Omega/\Omega$ 19 $\mu\Omega/\Omega$ 18 $\mu\Omega/\Omega$ 22 $\mu\Omega/\Omega$ 37 $\mu\Omega/\Omega$ 79 $\mu\Omega/\Omega$ 145 $\mu\Omega/\Omega$ 289 $\mu\Omega/\Omega$	Laboratory

SI No	Type of Instrument	Calibration Perform	Calibration Method/ Measurement Procedure	Range of calibration	CMC	Location
02	Clamp on Meters	DC Voltage	MM/EL/03: Rev: 01	4 V 40 V 400 V 600 V	0.1 mV/V 0.1 mV/V 0.1 mV/V 0.1 mV/V	Laboratory
		AC Voltage		4 V 40 V 400 V 600 V	0.2 mV/V 0.2 mV/V 0.2 mV/V 0.2 mV/V	Laboratory
		DC Current		40 A 400 A 1000 A	0.2 mA/A 0.2 mA/A 0.6 mA/A	Laboratory
		AC Current		40 A 400 A 1000 A	0.2 mA/A 0.1 mA/A 0.2 mA/A	Laboratory