

## Scope of Accreditation

### 1. Force

Serial No.	Parameter / Measured quantity / Equipment	Calibration Method / Ref no / Code no.	Range of Measurement	Mode of calibration	CMC ( $\pm\%$ )	Calibration Location
01	Calibration of force - proving instruments used for the verification of uniaxial testing machines	ISO 376: 2011	8 kN / 100 kN	Compression	$3.5 \times 10^{-3}$	In house
02	Verification & calibration of force measuring system	ISO7500-1 : 2004	20 kN / 2000 kN	Compression	$2.2 \times 10^{-1}$	In house / Site

## 2. Mass

Serial No	Parameter / Measured quantity / Equipment	Calibration Method / Ref no / Code no.	Range of Measurement	Calibration and Measurement Capability ( $\pm$ )	Calibration Location
01	Mass/Weight	OIML R-111:2004  (DM/M/TM/02) Double substitution method (ABBA)	1 mg - 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 20 kg	5 $\mu$ g 6 $\mu$ g 6 $\mu$ g 7 $\mu$ g 7 $\mu$ g 8 $\mu$ g 10 $\mu$ g 12 $\mu$ g 14 $\mu$ g 18 $\mu$ g 0.04 mg 0.06 mg 0.10 mg 0.25 mg 0.40 mg 4 mg 10 mg 20 mg 30 mg	In house

Serial No	Parameter / Measured quantity	Calibration Method / Ref no / Code no.	Range of Measurement	Calibration and Measurement Capability ( $\pm$ )	Calibration Location
02	Mass/Weight/Electronic Balance	Calibration of Electronic Balances DM/M/TM/03 Based on Calibration of weights and balance published by National Measurement Laboratory, Australia.	1 mg - 500 mg	0.008 mg	In house
			1 g - 10 g	0.02 mg	
			20 g - 50 g	0.04 mg	
			100 g - 500 g	0.40 mg	
			1 kg - 5 kg	20 mg	
			10 kg - 20 kg	36 mg	
			1 mg - 500 mg	0.01 mg	site
			1 g - 10 g	0.03 mg	
			20 g - 50 g	0.05 mg	
			100 g - 500 g	0.60 mg	
			1 kg - 5 kg	25 mg	
			10 kg - 20 kg	40 mg	

### 03. Temperature

Parameter / Measured quantity /Equipment	Method of Calibration/Evaluation	Range	CMC (±)	Calibration Location
1. Calibration of Liquid- in-glass thermometers	DM/T/TM/01	-80 °C / 50 °C 50 °C / 350 °C 350 °C / 550 °C	0.05 °C 0.06 °C 0.08 °C	In house / site
2. Calibration of Dial Thermometers	DM/T/TM/02	-80 °C / 550 °C	0.2 °C	In house / site
3. Calibration of Calibration of Digital thermometers	DM/T/TM/03	-80 °C / 50 °C 50 °C / 350 °C 350 °C / 550 °C	0.05 °C 0.06 °C 0.08 °C	In house / site
4. Evaluation of Performance of Autoclaves	DM/T/TM/04	50 °C / 150 °C	0.6 °C	In house / site
5. Evaluation of Performance of furnaces	DM/T/TM/05	200 °C / 1000 °C	1.0 °C	In house / site
6. Evaluation of Performance of liquid baths	DM/T/TM/06	-30 °C / 200 °C	0.05 °C	In house / site
7. Evaluation of Performance of ovens	DM/T/TM/07	50 °C / 200 °C	0.8 °C	In house / site
8. Evaluation of Performance of Incubators	DM/T/TM/08	0 °C / 60 °C	0.6 °C	In house / site
9. Evaluation of Performance of Cold rooms	DM/T/TM/09	-80 °C / 20 °C	0.6 °C	site
10. Calibration of Thermocouples	DM/T/TM/10	0 °C, 232 °C & 420 °C	0.5 °C	In house
		961 °C	0.8 °C	
11. Calibration of PRT,s by comparison method	DM/T/TM/11	-80 °C / 0 °C 232 °C, 420 °C & 660 °C	0.05 °C 0.08 °C	In house