

Laboratory Labtest Services, 'Shantiniketan', 1, Baroda Avenue (Extn.), Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2662 **Page** 1 of 2

Validity 26.04.2018 to 25.04.2020 **Last Amended on** -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
MECHANICAL CALIBRATION				
I. UTM, TENSION CREEP AND TORSION TESTING MACHINE				
1.	Force Uniaxial Static Testing Machines Compression* (CTM / UTM) Tension (TTM / UTM)	10 N to 2000 kN 10 N to 100 kN	0.42 % 0.47 %	Using Force Proving Instruments
2.	Extensometer*	0 to 5 mm	6.5 μ m	Using Extensometer Calibration with Dial Gauge
3.	Impact Verification of Impact Testing Machine* CHARPY IZOD	0 to 300 J 0 to 170 J	0.70 % 0.70 %	Using Clinometer , Load Cell, Stop watch and Other Measuring Instruments and Gauges
II. HARDNESS TESTING MACHINES				
1.	Rockwell Hardness Testing Machine for Indirect verification*	HRA HRBW HRC	0.80 HRA 0.80 HRBW 0.80 HRC	Using Reference Blocks Based by Indirect Method
2.	Rockwell Hardness Testing Machine for verification of Test Force*	98.07 N to 1471 N	0.40 %	Using Load cell with Indicator by Direct Method
3.	Vickers Hardness Testing Machine for	HV 1 HV 5	2.6 % 2.0 %	Using Reference Blocks Based by Indirect

Abhinav Thakur
Convenor

Avijit Das
Program Director

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	Indirect verification*	HV 10 HV 30	2.0 % 1.5 %	Method
4.	Vickers Hardness Testing Machine for verification of Test Force*	49.03 N to 490.35 N	0.40 %	Using Load cell with Indicator Based by Direct Method
5.	Brinell Hardness Testing Machine for Indirect verification*	HBW 2.5 / 187.5 HBW 5/750 HBW 10/3000	1.60 % 1.65 % 1.34 %	Using Reference Blocks Based by Indirect Method
6.	Brinell Hardness Testing Machine for verification of Test Force*	1.839 kN to 29.42 kN	0.40 %	Using Load Cell with Indicator by Direct Method
III.	PRESSURE INDICATING DEVICES			
1.	Hydraulic Digital / Analogue Pressure Gauges*	0 to 700 bar	0.30 % of rdg.	Using Digital Pressure Gauge Using Hydraulic Comparator Pump (Oil Based) Based on DKD-R6-1
2.	Pneumatic Digital / Analogue Pressure Gauges*	0 to 30 bar	0.23 % of rdg.	Using Digital Pressure Gauge Using AIR Pump Comparator Based on DKD-R6-1
3.	Digital / Analogue Vacuum Gauges*	0 to (-) 0.95 bar	1.43 % of rdg.	Using Digital Pressure Gauge Using Vacuum / Air Pump Comparator Based on DKD-R6-2

* Measurement Capability is expressed as an uncertainty (\pm) at a confidence probability of 95%

*Only for Site Calibration

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