

Laboratory MSME-Testing Centre, 111 & 112 B.T. Road, Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration **Issue Date** 25.12.2013

Certificate Number C-0464 **Valid Until** 24.12.2015

Last Amended on - **Page** 1 of 3

Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (\pm)	Remarks
I. DIMENSION^s			
1. CALIPER OF ALL TYPES			
L.C.0.01mm	Upto 600mm	8.0 μ m	Using Gauge Block/ Length Bars
L.C.0.02mm	Upto 600mm	15.0 μ m	By Comparison Method As per IS:3651
2. EXTERNAL MICROMETER			
L.C.0.001mm	Upto 100mm	1.5 μ m	Using Gauge Block/ Length Bars
L.C.0.01mm	Up to 200mm	6.0 μ m	By Comparison Method As per IS 2967
3. VERNIER HEIGHT GAUGE			
L.C.0.01mm	Upto 600mm	9.0 μ m	Using Gauge Block/ Length Bars.
L.C.0.02mm	Upto 600mm	12.0 μ m	By Comparison Method As per IS:2921
4. SCALE			
L.C.0.5 mm/ 1.0mm	0 to 1000mm	230 μ m	Using Scale & Tape calibration unit By Comparison Method As per IS:1481-1970(RA-1998) IS:1269(Pt-2)-1997

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Last Amended on - **Page** 2 of 3

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5. TAPE L.C.1.0mm	0 to 25m	230 μ m \sqrt{L} (L in m)	Using Scale & Tape calibration unit By Comparison Method As per IS:1481-1970(RA-1998) IS:1269(Pt-2)-1997
6. SLIP GAUGE	Up to 100 mm	0.54 μ m	Using Gauge Block/ Slip Gauge Comparator By Comparison Method As per IS:2984-2003
7. DIAL INDICATOR L.C.0.01 mm	0 to 25 mm	6.0 μ m	Using Digimatic Dial Indicator Tester
L.C.0.001mm	0 to 25 mm	1.7 μ m	By Comparison Method As per IS:2984-2003
II. PRESSURE^s			
1. PNEUMATIC PRESSURE Dial Pressure Gauge, Pressure Indicator	0.2 kg/cm ² to 20kg/cm ²	0.28% FS	Using Digital Pressure Calibrator By Comparison Method based on DKD-R6-1
2. HYDRAULIC PRESSURE Dial Pressure Gauge, Pressure Indicator	0.5 kg/cm ² to 700kg/cm ²	0.093% FS	Using Digital Pressure Calibrator By Comparison Method based on DKD-R6-1

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Last Amended on - **Page** 3 of 3

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III. FORCE*			
1. COMPRESSION TESTING MACHINE	0.15 kN to 0.50 kN 0.30 kN to 2000 kN	0.93%	Using Force Proving Instruments of Class '0' & Class '1', Bow Dynamometer & Load Cell as per IS 1828 (Part 1) : 2005
2. TENSILE TESTING MACHINE	0.20 kN to 1000 kN	0.88%	Using Force Proving Instruments of Class '0' & Class '1', Bow Dynamometer & Load Cell as per IS 1828 (Part 1) : 2005
IV. HARDNESS*			
1. BRINELL HARDNESS TESTING MACHINE	HBW 2.5/187.5 HBW 5/750 HBW 10/3000	3.46% 4.80% 5.48%	Using Std. Hardness Block as per IS 2281 : 2005
2. ROCKWELL HARDNESS TESTING MACHINE	Scale: HRB Scale: HRC	0.61 HRB 0.36 HRC	Using Std. Hardness Block as per IS 1586 : 2000
3. VICKERS HARDNESS TESTING MACHINE	HV 30	2.62%	Using Std. Hardness Block as per IS 1754 : 2002

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

\$Only in Permanent Laboratory

*Only for Site Calibration