

Laboratory Quality Services & Laboratories, Plot No-10, DSIDC Scheme No.- III, Okhla Industrial Area, Phase – II, New Delhi

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Calibration **Issue Date** 19.08.2014

Certificate Number C- 1105 **Valid Until** 18.08.2016

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Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
I. DIMENSION			
1. VERNIER CALIPER[§] L.C.: 0.01 mm	0 to 600 mm	16 µm	Using Slip Gauge Set, Grade '0' & Caliper Checker
2. DIAL CALIPER[§] L.C. : 0.02mm	0 to 10 mm	15 µm	Using Slip Gauge Set & Grade '0'
3. OUTSIDE MICROMETER[§] L.C.: 0.001mm	0 to 100 mm	1.5 µm	Using Slip Gauge Set & Grade '0'
4. MICROMETER SETTING RODS[§] (Flat Ended)	Upto 100 mm	4 µm	Using Comparator Stand with Dial Gauge & Slip Gauge Set
5. DIAL GAUGE[§] (Plunger Type) L.C. :0.001mm	0 to 25 mm	11.8 µm	Using Dial Calibration Tester
6. DIAL GAUGE[§] (Lever Type) L.C.: 0.001mm	0 to 2 mm	11.8 µm	Using Dial Calibration Tester
7. DIAL THICKNESS GAUGE[§] L.C.:0.01mm	0 to 25 mm	11.4 µm	Using Slip Gauge Set, Grade '0'
8. FEELER GAUGE[§]	Up to 2 mm	4.3 µm	Digital Micrometer
9. DIAL BORE GAUGE[§] (Transmission only)	0 to 2 mm	6 µm	Using Dial Calibration Tester

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10. VERNIER DEPTH GAUGE [§] L. C. : 0.01 mm	0 to 300 mm	10.2 µm	Using Slip Gauge Set, Grade '0' & Caliper Checker
11. DEPTH MICROMETER [§] L. C.: 0.01 mm	0 to 100 mm	8 µm	Using Slip Gauge Set & Grade '0'
12. PLAIN PLUG GAUGE [§]	Upto 100 mm	6.2 µm	Using Comparator Stand with Dial Gauge
13. DIAL SNAP GAUGE [§]	0 to 100 mm	16 µm	Using Slip Gauge Set & Grade '0'
14. COATING THICKNESS GAUGE [§]	0 to 2000 µm	10 µm	Using Standard Foils
15. HEIGHT GAUGE [§] L. C. : 0.01 mm	0 to 600 mm	14µm	Using Slip Gauge Set, Caliper Checker, Surface Plate & Lever Type Dial Gauge
II. VOLUME[§]			
1. CALIBRATION OF VOLUMETRIC MEASURES (Burette/Pipettes/Flasks/ Cylinder/Beaker Glassware)	1 ml to 10 ml	0.17 ml	Using Standard Weights And Precision Weighing Balance with Resolutions 0.1 mg upto 200 g and F1 Class of weights upto 200 g
	>10 ml to 100 ml	0.6 ml	
	>100 ml to 200 ml	1.1 ml	
	>200 ml to 5000 ml	2.0 ml	

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III. PRESSURE AND VACUUM			
1. HYDRAULIC PRESSURE[#] (Dial Pressure Gauge, Digital Pressure Gauge, Pressure transmitter)	0 to 30 kg/cm ²	1.1 % rdg	Using Digital Pressure Gauge with Comparator by Comparison Method as per DKD R 6.1
	0 to 700 kg/cm ²	0.8 % rdg	
IV. MASS			
1. WEIGHTS-Conventional[§] (Class M1 & Coarser)	1 mg	0.05 mg	Using F1 Class Standard Weights & Mass Comparator as per OIML R 111
	2 mg	0.05 mg	
	5 mg	0.05 mg	
	10 mg	0.05 mg	
	20 mg	0.05 mg	
	50 mg	0.05 mg	
	100 mg	0.06 mg	
	200 mg	0.06 mg	
	500 mg	0.06 mg	
	1 g	0.06 mg	
	2 g	0.07 mg	
	5 g	0.07 mg	
	10 g	0.08 mg	
	20 g	0.15 mg	
	50 g	0.15 mg	
	100 g	0.20 mg	
	200 g	0.40 mg	
	500 g	11.0 mg	
	1 kg	15.0 mg	
	2 kg	15.0 mg	
5 kg	35.0 mg		
10 kg	100.0 mg		
20 kg	150.0 mg		
50 kg	5.0 g		
			Using F2 Class Standard weights & Mass Comparator as per OIML R-111

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2. ELECTRONIC WEIGHING BALANCE [#] Readability 0.1 mg	Upto 200 g	1.5 mg	Using F1 Class Standard Weights as per OIML R 76-1
Readability 0.01 mg Readability 10 g	>200 g to 5 kg > 5kg to 100 g	0.030 g 13.0 g	Using F2 Class Standard Weights as per OIML R 76-1

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

^{\$}Only in Permanent Laboratory

[#] The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.

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