

Laboratory Shweta Instruments, 1, Vedkiran Apartment, Kamatwada, Ambad Link Road, Ambad, Nashik, Maharashtra
Accreditation Standard ISO/IEC 17025: 2005
Certificate Number CC-2324 (In lieu of C-0960) **Page** 1 of 4
Validity 01.08.2017 to 31.07.2019 **Last Amended on** 04.09.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
<u>MECHANICAL CALIBRATION</u>				
I. DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)				
1.	Caliper [§] (Vernier, Dial, Electronic) L.C: : 0.01mm ^φ	Up to 600 mm	18.0 μ m	Using Caliper Checker By Comparison Method
2.	Height Gauge [§] (Vernier, Dial & Electronic) L.C: : 0.01 mm ^φ	Up to 600 mm	16.0 μ m	Using Caliper Checker and Slip Gauge By Comparison Method
3.	Vernier Depth Gauge [§] L.C: : 0.01 mm	Up to 300 mm	15.0 μ m	Using Caliper Checker and Slip Gauge By Comparison Method
4.	External Micrometer [§] (Vernier, Dial, Electronic) L.C: : 0.01 mm L.C: : 0.001 mm	Up to 400 mm Up to 300 mm	6.5 μ m 3.0 μ m	Using Slip Gauge Set By Comparison Method
5.	Micrometer Setting Standard [§]	Up to 375 mm	7.1 μ m	Using Slip Gauge Set & Comparator With Stand By Comparison Method
6.	Internal Micrometer-2 Points [§] L.C: : 0.01 mm	Up to 250 mm	3.7 μ m	Using ULM

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7.	Depth Micrometer [§] L.C: : 0.001 mm	Up to 300 mm	3.0 μ m	Using Slip Gauge Set By Comparison Method
8.	Dial Gauge - Plunger Type [§] L.C: 0.001 mm	Up to 25 mm	3.0 μ m	Using Dial Caliper Tester By Comparison Method
9.	Dial Gauge – Lever Type [§] L.C: 0.001 mm	Up to 2.0 mm	2.6 μ m	Using Dial Calibration Tester By Comparison Method
10.	Bore Gauge [§] (For Transmission Accuracy) L.C: 0.001 mm	Up to 1.0 mm	4.0 μ m	Using Dial Calibration Tester by Comparison Method
11.	Inside Micrometer [§] L.C: 0.01 mm	5 mm to 30 mm	3.9 μ m	Using Slip Gauge Set & Accessories Set by Comparison Method
12.	Dial Thickness Gauge [§] L.C: 0.001 mm ϕ	Up to 25 mm	1.0 μ m	Using Slip Gauge Set by Direct Comparison Method
13.	Pistol Caliper [§] L.C: 0.01mm	Up to 200 mm	6.0 μ m	Using Slip Gauge Set by Direct/Comparison Method
14.	Dial Snap Gauge [§] L.C: 0.001mm	Up to 150 mm	4.4 μ m	Using Slip Gauge Set By Comparison Method
15.	Bevel Protractor [§] L.C: 5 min	0°-90°-0°	4.6 min	Using Angle Gauge Block Comparison Method

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16.	Degree Protractor [§] L.C: 1°C	0°- 90°- 0°	35 min	Using Angle Gauge Block By Comparison Method
17.	Combination Set [§] L.C: 1°C	0°-90°-0°	35 min	Using Angle Gauge Block By Comparison Method
18.	Engineer's Square [§] (Squareness)	Up to 150 mm	11.0 μ m	Using Slip Gauge Set & Cylindrical Square By Comparison Method
19.	Feeler Gauge/ Shims (Foil) Of Coating Thickness Gauge [§]	Up to 2 mm	3.0 μ m	Using Digital Micrometer By Comparison Method
20.	Plain Plug Gauge/ Measuring Pin /Width Gauge/Length Gauge [§]	Up to 300 mm	2.0 μ m	Using ULM
21.	Thread Measuring Wires [§]	0.17 mm to 6.350 mm	1.5 μ m	Using ULM
22.	Plain Snap Gauge [§]	Up to 2.0 mm > 2.0 mm to 300 mm	2.0 μ m 2.0 μ m	Using ULM
23.	Thread Plug Gauge [§] (Effective Diameter Only)	Up to 100 mm	4.0 μ m	Using FCDM, Cylindrical Setting Master & Thread Measuring Wire
24.	V-Block [§] Parallelism Symmetricity Squareness	Up to 150 mm	9.0 μ m 9.0 μ m 10.0 μ m	Using Master Cylinders Square/ Slip Gauge Set & Comparator
25.	Internal Plain Ring Gauge [§]	3 mm to 300 mm	2.0 μ m	Using ULM

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26.	Internal Thread Ring Gauge [§]	3 mm to 100 mm	1.5 μ m	Using ULM
27.	Holtest /Three Point Micrometer [§] L.C: 0.001 mm	Up to 100 mm	4.5 μ m	Using Setting Ring Set
28.	Cylindrical Setting Master [§]	Up to 100 mm	1.6 μ m	Using ULM
29.	Inside Caliper – Dial Type [§] L.C: 0.01 mm	Up to 200 mm	5.0 μ m	Using Caliper Checker, Slip Gauge & Accessories Set By Comparison Method
30.	Surface Plate [*]	3000 mm X 3000 mm	$4.6 \sqrt{\frac{L+W}{100}}$ μ m	Using Precision Spirit Level of L.C: 0.01 mm/m
31.	Electronic Height Gauge [*] L.C: 0.1 μ m	Up to 600 mm	3.0 μ m	Using Slip Gauge
II.	PRESSURE INDICATING DEVICES			
1.	Pressure Gauge [#]	Up to 0 to 700 kg/cm ² Up to 0 to 30 kg/cm ²	6.3 kg/cm ² 0.6 kg/cm ²	Using Digital Pressure Gauge by Comparison Method as per DKD R6-1

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

[§]Only in Permanent Laboratory

^{*}Only for Site Calibration

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

^φ Laboratory can also calibrate instruments/devices of coarser resolution / least count within the accredited range using same reference standard/ master equipment under the scope of accreditation.

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