

Laboratory **Precise Calibration Centre, A-38, 3rd Floor, Capital Comm. Centre, Ashram Road, Ahmedabad, Gujarat**
Accreditation Standard **ISO/IEC 17025: 2005**
Certificate Number **CC-2325** **Page** **1 of 4**
Validity **22.09.2018 to 21.09.2020** **Last Amended on** -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ($\pm$)	Remarks
<u>MECHANICAL CALIBRATION</u>				
I.	DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)			
1.	Caliper ^s (Vernier, Dial, Electronics) L.C.: 0.01 mm	0 to 600 mm 0 to 1000 mm	13.5 μ m 22.6 μ m	Using Caliper Checker, Slip Gauge & Length Bar by Comparison Method
2.	Depth Gauge ^s L.C.: 0.01 mm	0 to 300 mm	14.5 μ m	Using Slip Gauge & Length Bar by Comparison Method
3.	Height Gauge ^s (Vernier, Dial, Electronics) L.C.: 0.01 mm	0 to 600 mm >600 mm to 1000 mm	15.1 μ m 18.0 μ m	Using Slip Gauge, Caliper Checker & Length Bar by Comparison Method
4.	External Micrometer ^s L.C.: 0.001 mm	0 to 150 mm	3.5 μ m	Using Slip Gauge & Length Bar by Comparison Method
	L.C.: 0.01 mm	150 mm to 600 mm >600 mm to 1000 mm >1000 mm to 1200 mm	7.1 μ m 9.3 μ m 10.3 μ m	
5.	Micrometer Setting Std. ^s	25 mm to 600 mm >600 mm to 1000 mm	7.3 μ m 9.4 μ m	Using Slip Gauge, Length Bar & Electronic Probe by Comparison Method
6.	Depth Micrometer ^s L.C.: 0.01 mm	0 to 300 mm	14.5 μ m	Using Slip Gauge & Length Bar Method of Calibration Based

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Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ($\pm$)	Remarks
7.	Internal Micrometer ^s (Jaw Type) L.C.: 0.01 mm	5 mm to 300 mm	6.8 μ m	Using Slip Gauge, Length Bar & Slip Gauge Accessories Set
8.	Internal Micrometer ^s (Stick Type) L.C.: 0.01 mm	50 mm to 600 mm >600 mm to 1000 mm	8.1 μ m 11.6 μ m	Using LMM Using Slip Gauge, Length Bar & Slip Gauge Accessories Set by Comparison Method
9.	Bore Gauge ^s (For Transmission Accuracy)	Up to 1 mm	4.0 μ m	Using LMM Method of Calibration Based
10.	Plunger Type Dial ^s L.C.: 0.001 mm L.C.: 0.01 mm	0 to 25 mm 0 to 100 mm	1.4 μ m 6.1 μ m	Using LMM
11.	Dial Indicator ^s (Lever Type) L.C.: 0.001 mm L.C.: 0.01 mm L.C.: 0.002 mm	0 to 0.14 mm 0 to 1 mm 0 to 0.20 mm	0.8 μ m 5.8 μ m 1.4 μ m	Using LMM
12.	Dial Thickness Gauge ^s L.C.: 0.001 mm L.C.: 0.01 mm	0 to 1 mm 0 to 25 mm	1.0 μ m 3.0 μ m	Using Slip Gauge Method of Calibration based
13.	Caliper ^s (Pistol/External) L.C.: 0.01 mm	0 to 150 mm	6.5 μ m	Using Slip Gauge Method of Calibration

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14.	Internal Caliper ^{\$} L.C.: 0.01 mm	5 mm to 150 mm	6.6 μ m	Using Slip Gauge & Slip Gauge Accessories Set Method of Calibration
15.	Feeler Gauge / Thickness Foil ^{\$}	0.03 mm to 2 mm	2.9 μ m	Using External Micrometer by Comparison Method
16.	Plain Plug Gauge ^{\$} (Paddle/Width Type / Flush Pin)	3 mm to 100 mm >100 mm to 250 mm	1.3 μ m 4.1 μ m	Using LMM & Length Bar
17.	Thread Plug Gauge ^{\$} (Major & Effective Diameter)	3 mm to 100 mm >100 mm to 200 mm	2.4 μ m 3.0 μ m	Using LMM, Length Bar & Thread Measuring Wire
18.	Spline Plug Gauge ^{\$} (Dia. Over Pin Only)	10 mm to 100 mm	2.2 μ m	Using LMM & Measuring Pin by Comparison Method
19.	Spline Ring Gauge ^{\$} (Dia. Between Pin Only)	10 mm to 100 mm	2.6 μ m	Using Slip Gauge & Measuring Pin by Comparison Method
20.	Snap Gauge ^{\$}	3 mm to 250 mm	2.0 μ m	Using Slip Gauge by Comparison Method
21.	Try Square ^{\$} (Perpendicularity & Parallelism)	150 mm x 400 mm	8.4 μ m	Using Slip Gauge & Granite Square by Comparison Method
22.	Universal Bevel Protractor ^{\$} L.C.: 5 Minute	0° - 180° - 0°	14.9 Min of arc	Using Angle Gauge & Slip Gauge by Comparison Method

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23.	Plain Ring Gauge ^{\$}	3 mm to 100 mm >100 mm to 250 mm	2.0 μ m 4.3 μ m	Using LMM & Master Setting Ring by Comparison Method
24.	Thread Ring Gauge ^{\$} (Minor & Effective Diameter)	3 mm to 100 mm	4.0 μ m	Using LMM by Comparison Method
25.	Length Bar / Long Slip Gauge ^{\$}	25 mm to 600 mm	5.8 μ m	Using LMM & Length Bar by Comparison Method
26.	Measuring Pin ^{\$}	0.5 mm to 20 mm	2.8 μ m	Using LMM by Comparison Method
27.	Thread Measuring Wire ^{\$}	0.17 mm to 6.35 mm	0.5 μ m	Using LMM by Comparison Method

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

\$ Only in Permanent Laboratory