

Laboratory

Shriniwas Calibration Laboratory, Plot No. 2, R.S. No. 586/1, MIDC
Shiroli, Kolhapur, Maharashtra

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2744

Page

1 of 4

Validity

22.06.2018 to 21.06.2020

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.	Calipers ^s (Vernier, Dial, Digital) L.C.: 10 μ m L.C.: 20 μ m	0 to 600 mm 0 to 600 mm	16.0 μ m 19.41 μ m	Using Caliper Checker as per IS 3651 Part 2 by Comparison Method
2.	Depth Caliper ^s (Vernier, Dial, Digital) L.C.: 10 μ m ϕ	0 to 300 mm	11.0 μ m	Using Gauge Blocks & Surface Plate as per IS 4213 by Comparison Method
3.	Height Gauge ^s (Vernier, Dial, Digital) L.C.: 10 μ m ϕ	0 to 600 mm	16.61 μ m	Using Caliper Checker, Surface Plate as per IS 2921 by Comparison Method
4.	External Micrometer ^s (All type) L.C.: 1 μ m ϕ	0 to 100 mm 100 mm to 400 mm	1.5 μ m 5.23 μ m	Using Gauge Blocks as per IS 2967 by Comparison Method
5.	Internal Micrometer ^s L.C. 10 μ m 2 Points Overall Length Accuracy with Extension Rod	0 to 300 mm	5.46 μ m	Using Gauge Blocks & Slip Accessory Set as per IS 2966 by Comparison Method

Pankaj Varshney
Convenor

Avijit Das
Program Manager

Laboratory

Shriniwas Calibration Laboratory, Plot No. 2, R.S. No. 586/1, MIDC
Shiroli, Kolhapur, Maharashtra

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2744

Page

2 of 4

Validity

22.06.2018 to 21.06.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
6.	Depth Micrometer ^s L.C.: 1 μ m ^φ	0 to 300 mm	7.41 μ m	Using Gauge Blocks by Comparison Method
7.	Dial Indicator ^s (Plunger Type) L.C.: 1 μ m L.C.: 10 μ m	0 to 10 mm 0 to 25 mm	2.6 μ m 3.9 μ m	Using Dial Calibration Tester as per IS 2092 for Plunger Dial by Comparison Method
8.	Dial Indicator ^s (Lever Type) L.C.: 1 μ m L.C.: 10 μ m	0 to 0.14 mm 0 to 1.0 mm	2.6 μ m 3.15 μ m	Using Dial Calibration Tester as IS 11498 by Comparison Method
9.	Bore Gauge ^s (For Transmission Accuracy)	0 to 1 mm	3.0 μ m	Using Dial Calibration Tester by Comparison Method
10.	Plain Plug Gauge/ Width Gauge O.D. Master / Flush Pin Gauge Paddle Gauge ^s	0.5 mm to 100 mm 100 mm to 300 mm 300 mm to 500 mm	2.09 μ m 5.03 μ m 7.20 μ m	Using ULM by Comparison method Using Comparator Stand & Gauge Blocks as per IS 3455 by Comparison Method
11.	Plain Ring Gauge ^s	3 mm to 150 mm 150 mm to 300 mm	3.48 μ m 5.84 μ m	Using ULM & Gauge Blocks by Comparison Method as per IS 3485
12.	Micrometer Setting Standard Setting Piece / Setting Master ^s	0 to 100 mm 100 mm to 400 mm 400 mm to 500 mm	2.08 μ m 5.02 μ m 7.22 μ m	Using Comparator Stand & Gauge Blocks by Comparison Method

Pankaj Varshney
Convenor

Avijit Das
Program Manager

Laboratory

Shriniwas Calibration Laboratory, Plot No. 2, R.S. No. 586/1, MIDC
Shiroli, Kolhapur, Maharashtra

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2744

Page

3 of 4

Validity

22.06.2018 to 21.06.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
13.	Cylindrical Measuring Pin [§]	0.5 mm to 20 mm	1.79 μ m	Using Comparator Stand, Electronic Probe & Gauge Blocks by Comparison Method
14.	Thread Measuring Wires [§]	0.5 mm to 6.5 mm	1.78 μ m	Using Comparator Stand, Electronic Probe & Gauge Blocks by Comparison Method
15.	Cylindrical Setting Master [§]	1 mm to 100 mm 100 mm to 500 mm	2.08 μ m 6.52 μ m	Using Comparator Stand, Electronic Probe & Gauge Blocks by Comparison Method
16.	Snap Gauge [§]	1 mm to 100 mm 100 mm to 500 mm	1.3 μ m 6.05 μ m	Using Gauge Blocks as per IS 3455 by Comparison Method
17.	Dial Snap Gauge [§]	Up to 300 mm	3.36 μ m	Using Gauge Blocks & Plunger Dial as per IS 14271 by Comparison Method
18.	Feeler Gauge [§]	0.01 mm to 1 mm	4.38 μ m	Using Digital Micrometer as per IS 3179 by Comparison Method
19.	Pistol Caliper [§] L.C.: 100 μ m	0 to 100 mm	36.0 μ m	Using Gauge Blocks Comparison Method
20.	Inside Caliper [§] L.C.: 10 μ m ^Φ	0 to 150 mm	5.0 μ m	Using Gauge Blocks & Slip Accessory Set by Comparison Method

Pankaj Varshney
Convenor

Avijit Das
Program Manager

Laboratory Shrinivas Calibration Laboratory, Plot No. 2, R.S. No. 586/1, MIDC
Shiroli, Kolhapur, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2744 **Page** 4 of 4

Validity 22.06.2018 to 21.06.2020 **Last Amended on** -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
21.	Thread Plug Gauge [§] (Effective Diameter) 3 Wire Method	1.25 mm to 100 mm	2.44 μ m	Using ULM and Thread measuring wire as per IS 2334 by Comparison Method
22.	Thread Ring Gauge [§] (Effective Diameter)	3 mm to 100 mm	2.91 μ m	Using ULM & Setting Master Ring by Comparison Method
23.	Taper Thread Ring Gauge [§] (Effective Diameter)	3 mm to 100 mm	2.91 μ m	Using ULM & Setting Master Ring by Comparison Method
24.	Taper Thread Plug Gauge [§] (Effective Diameter)	Up to 100 mm	2.93 μ m	Using ULM & Setting Master Ring by Comparison Method
25.	Taper Plug Gauge [§]	Up to 100 mm	3 μ m	Using ULM & Setting Master Ring by Comparison Method
26.	Taper Ring Gauge [§]	Up to 100 mm	2.92 μ m	Using ULM & Setting Master Ring by Comparison Method
27.	Surface Plate [*]	1000 mm x 1600 mm	4 μ m $\sqrt{\frac{L+W}{200}}$ L & W in mm	Using Level Bottle as per IS 12937

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

[§] Only in Permanent Laboratory

^{*} Only for Site Calibration

[¶] 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.

Pankaj Varshney
Convenor

Avijit Das
Program Manager