

Laboratory

Microtech Calibration Laboratory, Shanti Niketan Society,
S.No.-136/1B1, Off. No.-15, Pune-Nashik Road, Sadguru Nagar,
Bhosari, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

CC-2437 (in lieu of C-1275)

Page 1 of 5

Validity

26.10.2017 to 25.10.2019

Last Amended on 30.10.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
<u>MECHANICAL CALIBRATION</u>				
1.	DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)			
1.	External Micrometer [§] L.C.: 0.001 mm ^ϕ	Upto 300 mm Upto 1000mm	4.4 μ m 8.8 μ m	Using Slip Gauge Blocks & Micrometer Setting Stick by Comparison Method
2.	Depth Micrometer [§] L.C.: 0.01 mm	Upto 300 mm	7.0 μ m	Using Slip Gauge Blocks & Surface Plate by Comparison Method
3.	Internal Micrometer [§] L.C.: 0.01 mm	Upto 300mm Upto 1000 mm	7.20 μ m 10.7 μ m	Using Slip Gauges, Electronic Probe & Surface Plate by Comparison Method
4.	Calipers (Vernier/Dial/Digital) [§] L.C.: 0.01 mm ^ϕ	Upto 600 mm 600 mm to 1000 mm	16.0 μ m 22.0 μ m	Using Slip Gauge Blocks & Caliper Checker by Comparison Method
5.	Height Gauge (Vernier/Dial/Digital) [§] L.C.: 0.01 mm ^ϕ	Upto 600 mm 600 mm to 1000 mm	16.0 μ m 22.0 μ m	Using Slip Gauge Block, Caliper Checker & Surface Plate by Comparison Method
6.	Depth Gauge (Vernier/Dial/Digital) [§] L.C.: 0.01 mm ^ϕ	Upto 300 mm 600 mm to 600 mm	15.0 μ m 20.0 μ m	Using Slip Gauge Block, Caliper Checker & Surface Plate by Comparison Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory

**Microtech Calibration Laboratory, Shanti Niketan Society,
S.No.-136/1B1, Off. No.-15, Pune-Nashik Road, Sadguru Nagar,
Bhosari, Pune, Maharashtra**

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2437 (in lieu of C-1275)

Page

2 of 5

Validity

26.10.2017 to 25.10.2019

Last Amended on 30.10.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
7.	Plunger Dial / Digital Indicator [§] L.C.: 0.0005 mm ϕ	Upto 25 mm	2.50 μ m	Using Electronic Dial Calibration Tester by Comparison Method
8.	Lever Dial Gauge [§] L.C.: 0.001 mm ϕ	Upto 1 mm	1.5 μ m	Using Electronic Dial Calibration Tester by Comparison Method
9.	Bore Gauge [§] L.C.: 0.001 mm	Upto 1 mm (Transmission)	4.5 μ m	Using Electronic Dial Calibration Tester by Comparison Method
10.	Pistol Caliper [§] L.C.: 0.1 mm	Upto 50 mm	80.0 μ m	Using Slip Gauges by Comparison Method
11.	Dial Thickness Gauge [§] L.C.: 0.001 mm ϕ	Upto 10 mm	1.5 μ m	Using Slip Gauges by Comparison Method
12.	Coating Thickness Gauge / DFT Meter [§]	Upto 1200 μ m	2.7 μ m	Using Coating Thickness Foils by Comparison Method
13.	Bevel Protractor / Angle Protractor / Combination Square Set [§] L.C.: 5 minute	0 to 360°	4.0 minute of arc	Using Slip Gauge, Angle Gauge, Sine Bar & Surface Plate by Comparison Method
14.	V-Block [§] Parallelism Symmetricity Squareness	Upto 300 mm	7.6 μ m 8.2 μ m 15.8 μ m	Using Plunger Dial, Master Square, Slip Gauge & Surface Plate by Comparison Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory

**Microtech Calibration Laboratory, Shanti Niketan Society,
S.No.-136/1B1, Off. No.-15, Pune-Nashik Road, Sadguru Nagar,
Bhosari, Pune, Maharashtra**

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2437 (in lieu of C-1275)

Page 3 of 5

Validity 26.10.2017 to 25.10.2019

Last Amended on 30.10.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
15.	Engineers Square [§] Parallelism Straightness Flatness Perpendicularity	Upto 300 mm	5.0 μ m 5.0 μ m 5.0 μ m 15.8 μ m	Using Plunger Dial, Master Square, Slip Gauge & Surface Plate by Comparison Method
16.	Angle Plate [§] Parallelism Flatness Perpendicularity	Upto 300 mm	7.6 μ m 7.6 μ m 15.8 μ m	Using Plunger Dial, Master Square, Slip Gauge & Surface Plate by Comparison Method
17.	Comparator Stand [§]	Upto 300 mm	2.8 μ m	Using Electronic Probe by Comparison Method
18.	Measuring Pin [§]	Upto 20 mm	2.5 μ m	Using Slip Gauges & Electronic Comparator with Stand by Comparison Method
19.	Plain Plug Gauge / Width Gauge [§]	Upto 100 mm > 100 mm to 300 mm	2.0 μ m 3.0 μ m	Using Slip Gauges & Electronic Comparator with Stand by Comparison Method
20.	Micrometer Setting Stick / Height Block [§]	Upto 300 mm 300 mm to 1000 mm	3.0 μ m 7.30 μ m	Using Slip Gauges & Electronic Comparator with Stand by Comparison Method
21.	Feeler Gauge Set [§]	Upto 1 mm	1.4 μ m	Using Electronic Comparator with Stand by Comparison Method
22.	Coating Thickness Foil [§]	Upto 1 mm	1.3 μ m	Using Electronic Comparator with Stand by Comparison Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory

**Microtech Calibration Laboratory, Shanti Niketan Society,
S.No.-136/1B1, Off. No.-15, Pune-Nashik Road, Sadguru Nagar,
Bhosari, Pune, Maharashtra**

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

CC-2437 (in lieu of C-1275)

Page 4 of 5

Validity

26.10.2017 to 25.10.2019

Last Amended on 30.10.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
23.	Snap Gauge [§]	Upto 300 mm	2.5 μ m	Using Slip Gauge Blocks by Comparison Method
24.	Cylindrical Setting Master (Dia /Run Out) [§]	Upto 100 mm	3.20 μ m	Slip Gauge Blocks, Electronic Comparator With Stand by Comparison Method as per IS 4349
25.	Thread Plug Gauge [§]	Upto 100 mm	4.5 μ m	Floating Carriage Diameter Measuring Machine, Cylindrical Setting Master, Thread Measuring Wire by Comparison Method as per IS 4218, 2334, 14962
26.	Taper Thread Plug Gauge [§]	Upto 100 mm	6.4 μ m	Using Floating Carriage Diameter Measuring Machine, Cylindrical Setting Master, Thread Measuring Wire by Comparison Method as per IS 8999, 9121
27.	Dial Snap Gauge [§]	Upto 150 mm	2.0 μ m	Using Slip Gauges, Plunger Dial, Comparison Method as per IS 14271
28.	Ultrasonic Gauge [§] L.C.: 0.1mm	Upto 100 mm	143 μ m	Using Slip Gauge / Comparison Method

**Dheeraj Chawla
Convenor**

**Avijit Das
Program Director**

Laboratory Microtech Calibration Laboratory, Shanti Niketan Society,
S.No.-136/1B1, Off. No.-15, Pune-Nashik Road, Sadguru Nagar,
Bhosari, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2437 (in lieu of C-1275)

Page 5 of 5

Validity 26.10.2017 to 25.10.2019

Last Amended on 30.10.2017

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
29.	Inside Dial Caliper [§]	Upto 100 mm	9.1 μ m	Using Digital Micrometer/ Comparison Method
30.	Linear Height Gauge [#]	Upto 300 mm	6.0 μ m	Using Slip Gauges & Length Bar Set By Comparison Method as per IS 2921
31.	Surface Plate [#]	Upto 3000 mm x 3000 mm	$2.7\sqrt{\frac{L+W}{125}}\mu m$	Using Precision Spirit Level (L.C.0.01 mm/mtr.) /Comparison Method as per IS 12937
32.	Profile Projector Linear X-Y [#] L.C.0.001 mm Angular 0-360° Magnification	Upto 200 mm Upto 360° Upto 100 X	9.6 19 min of arc 1 %	Using Slip Gauge, Angle Gauge, Glass Scale & Digital Caliper / Comparison Method

* Measurement Capability is expressed as an uncertainty (\pm) 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.

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.

Dheeraj Chawla
Convenor

Avijit Das
Program Director