

Laboratory Microvision Calibration Laboratory's Pvt. Ltd., 1st Floor, Sukhwani Fortunes, Morwadi, Pimpri, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2540 (In lieu of C-0259)

Page 1 of 6

Validity 18.01.2018 to 17.01.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
<u>MECHANICAL CALIBRATION</u>				
1.	DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)			
1.	Slip Gauge Set ^s	Upto 20 mm 20 mm to 50 mm 50 mm to 100 mm	0.12 μ m 0.14 μ m 0.18 μ m	Using Slip Gauge Calibrator & 'k' Grade Slip by Comparison Method
2.	Measuring Pin/Thread Measuring Wire ^s	Upto 20mm	0.8 μ m	Using Length Measuring Machine by Comparison Method
3.	Micrometer Setting Rod ^s	Upto 175 mm 175 mm to 300mm 300 mm to 600 mm	2.0 μ m 3.0 μ m 5.0 μ m	Using Slip Gauges, Length Bar, & Comparator by Comparison Method
4.	Od Master / Cylindrical Setting Master / Height Master ^s	Upto 50 mm 50 mm to 100 mm	1.2 μ m 1.3 μ m	Using Slip Gauge Blocks, & Comparator by Comparison Method
5.	Plain Plug Gauge ^s	Upto 50 mm 50 mm to 175 mm 175 mm to 300 mm	1.2 μ m 1.6 μ m 3.6 μ m	Using Slip Gauge Blocks, Length Bars & Comparator by Comparison Method
6.	Plain Ring Gauge ^s	4 mm to 100 mm 100 mm to 300mm	2.0 μ m 3.0 μ m	Using Length Measuring Machine by Comparison Method
7.	Snap Gauge ^s	Upto 50 mm 50 mm to 175mm 175 mm to 300 mm	2.0 μ m 2.2 μ m 3.5 μ m	Using Slip Gauge Blocks by Comparison Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory Microvision Calibration Laboratory's Pvt. Ltd., 1st Floor, Sukhwani Fortunes, Morwadi, Pimpri, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2540 (In lieu of C-0259)

Page 2 of 6

Validity 18.01.2018 to 17.01.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
8.	Feeler Gauge Set [§]	Upto 1 mm	3.0 μ m	Using Digimatic Micrometer by Comparison Method
9.	Thread Plug Gauge [§] (Major & Pitch Diameter)	Upto 100 mm	3.5 μ m	Using Floating Carriage Dia. Measuring Machine by Comparison Method
10.	Taper Thread Plug Gauge [§] (Pitch Dia. Only)	Upto 100 mm	5.0 μ m	Using Floating Carriage Dia. Measuring Machine by Comparison Method
11.	Thread Ring Gauge [§] (Pitch Dia. Only)	4 mm to 100 mm 100 mm to 300 mm	2.0 μ m 3.0 μ m	Using Length Measuring Machine by Comparison Method
12.	Taper Thread Ring Gauge [§]	Upto 100 mm	3.5 μ m	Using Length Measuring Machine by Comparison Method
13.	Comparator Stand [§] (Flatness)	Upto 300 mm	2.5 μ m	Using Supramess Dial by Comparison Method
14.	V-Block [§] Parallelism/Symmetry/ Squareness	Upto 300 mm	7.0/7.0/16.0	Using Supramess Dial, Lever Dial & Mandrel by Comparison Method
15.	Angle Plate [§] (Flatness/Parallelism/ Squareness)	Upto 300 x 300	5.0/7.0/16.0	Using Supramess Dial, Lever Dial by Comparison Method
16.	Engineer's Square [§] (Squareness/ Parallelism)	Upto 300 mm	14.0/5.0	Using Supramess Dial, Lever Dial by Comparison Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory Microvision Calibration Laboratory's Pvt. Ltd., 1st Floor, Sukhwani Fortunes, Morwadi, Pimpri, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2540 (In lieu of C-0259)

Page 3 of 6

Validity 18.01.2018 to 17.01.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
17.	Dial Calibration Tester ^s L.C. 0.0001 mm	Upto 25 mm	0.8 μ m	Using Electronic Probe & Slip Gauges by Comparison Method
18.	Electronic Probe/Comparator ^s L.C. 0.0001 mm	Upto 25mm	0.4 μ m	Using 'k' Grade Slip Gauge by Comparison Method
19.	Calipers ^s (Vernier/dial/digital) L.C. 0.01mm	0 to 600 mm 0 to 1000 mm	13.0 μ m 14.0 μ m	Using Slip Gauges Block, Caliper Checker & Length Bars by Comparison Method
20.	Height Gauge ^s (Vernier/dial/digital) L.C. 0.01mm	0 to 600 mm 0 to 1000 mm	13.2 μ m 14.0 μ m	Using Slip Gauges Block, Caliper Checker & Length Bars by Comparison Method
21.	Depth Gauge ^s (Vernier/dial/digital) L.C. 0.01 mm L.C. 0.02 mm	0 to 300 mm 0 to 600 mm	14.0 μ m 18.0 μ m	Using Slip Gauges Block, Caliper Checker & Length Bars by Comparison Method
22.	External Micrometer ^b L.C. 0.001 mm	Upto 100 mm	1.4 μ m	Using Slip Gauges

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory

Microvision Calibration Laboratory's Pvt. Ltd., 1st Floor, Sukhwani Fortunes, Morwadi, Pimpri, Pune, Maharashtra

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2540 (In lieu of C-0259)

Page

4 of 6

Validity

18.01.2018 to 17.01.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
		100 mm to 300 mm	2.2 μ m	Block, Length Bars by Comparison Method
	L.C. 0.01 mm	300 mm to 600 mm	7.4 μ m	
23.	Internal Micrometer ^s L.C. 0.01 mm	Traverse upto 13mm (50 to 63 mm)	4.1 μ m	Using Slip Gauges Block, Supramess Dial, by Comparison Method
24.	Depth Micrometer ^s L.C. 0.01 mm	Upto 300 mm	7.1 μ m	Using Slip Gauges, Caliper Checker & Length Bars by Comparison Method
25.	Inside Dial Caliper Gauge ^s L.C. 0.01 mm	Upto 25mm traverse	3.0 μ m	Using Electronic Dial Calibration Tester & Slip Gauges by Comparison Method
26.	Plunger Dial ^s L.C. 0.0005 mm L.C. 0.001 mm L.C. 0.001 mm	\pm 0.025 mm upto 10 mm above 10 to 50 mm	1.0 μ m 2.3 μ m 4.3 μ m	Using Electronic Dial Calibration Tester by Comparison Method
27.	Lever Dial Gauge ^s L.C. 0.001 mm L.C. 0.002 mm L.C. 0.01 mm	Upto 0.14 mm Upto 0.2 mm Upto 2.0 mm	2.0 μ m 2.5 μ m 3.0 μ m	Using Electronic Dial Calibration Tester by Comparison Method
28.	Bore Gauge ^s	1 mm (Transmission)	3.8 μ m	Using Electronic Dial Calibration Tester by Comparison Method

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory

Microvision Calibration Laboratory's Pvt. Ltd., 1st Floor, Sukhwani Fortunes, Morwadi, Pimpri, Pune, Maharashtra

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2540 (In lieu of C-0259)

Page

5 of 6

Validity

18.01.2018 to 17.01.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
29.	Dial Snap Gauge/ Adjustable Snap Gauge ^s L.C. 0.0005 mm	Upto 150 mm	3.0 μ m	Using Slip Gauges by Comparison Method
30.	Dial Thickness Gauge ^s L.C. 0.01 mm	Upto 25 mm	3.0 μ m	Using Slip Gauges by Comparison Method
31.	Pistol Caliper ^s L.C. 0.01 Mm	Upto 50 mm	12.6 μ m	Using Slip Gauges by Comparison Method
32.	Bevel Protractor / Combination Set ^s L.C. 5 min L.C. 1°	0-360° 0-180°	3.5 min 33 min	Using Sine Bar & Slip Gauges by Comparison Method
33.	Spirit Level ^s L.C. 0.02 mm/mtr	\pm 120 μ m/mtr	20 μ m/mtr	Using Electronic Mini Level by Comparison Method
34.	Measuring Scale ^s L.C. 0.5 mm, 1 mm	Upto 1 mtr 1 mtr to 2 mtr	90 μ m 90 \sqrt{L} L in meter	Using Tape & Scale Measuring Machine by Direct Method
35.	Measuring Tape ^s L.C. 1mm. L in meter	Upto 50 mtr	90 \sqrt{L}	Using Tape & Scale Measuring Machine by Direct Method
36.	Linear Height Measuring Instrument*			

Dheeraj Chawla
Convenor

Avijit Das
Program Director

Laboratory Microvision Calibration Laboratory's Pvt. Ltd., 1st Floor, Sukhwani Fortunes, Morwadi, Pimpri, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2540 (In lieu of C-0259)

Page 6 of 6

Validity 18.01.2018 to 17.01.2020

Last Amended on -

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
	L.C. 0.0001mm	Upto 600 mm	6.4 μ m	Using Length Bar, Slip Gauges by Comparison Method

37.	Profile Projector [*]	For Linear For Angle Magnification	10.0 μ m 2.8 min 2%	Using Glass Scale, Glass Angular Graticule & Slip Gauge by Comparison Method
38.	Surface Plate [#]	Any length (L) x Width (W)	1.25 $\sqrt{L+W}/125$ L & W is in mm	Using Electronic Mini Level by 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.

[^] Only for Site Calibration

Dheeraj Chawla
Convenor

Avijit Das
Program Director