

Laboratory **Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot, Hosur, Tamil Nadu**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **CC-2878** Page **1 of 8**

Validity **26.10.2018 to 25.10.2020** Last Amended on **03.12.2018**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
<u>MECHANICAL CALIBRATION</u>				
I.	DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)			
1.	Cylindrical Measuring Pins (Grade 1 & Coarser) [§]	0.1 mm to 20 mm	0.84 μ m	Using Electronic Probe & Slip Gauge Blocks by Comparison Method
2.	Setting Standard [§]	Upto 100 mm 100 mm to 600 mm	1.2 μ m 9.3 μ m	Using Gauge Blocks, Electronic Probe and Long Gauge Block by Comparison Method
3.	Feeler Gauges [§]	0.01mm to 2 mm	2.4 μ m	Using Digital Micrometer by Comparison Method
4.	Plain Plug Gauges [§]	0.1 mm to 100 mm 100 mm to 200mm	1.8 μ m 4.4 μ m	Using Electronic Probe & Slip Gauge by Comparison Method
5.	Snap/ Gap Gauges [§]	Upto 100 mm 100 mm to 400 mm	2.5 μ m 6.1 μ m	Using Gauge Blocks, Long Gauge Blocks by Comparison Method
6.	V – Blocks [§]	Upto 300 mm Flatness Parallelism Symmetricity	3.3 μ m 4.9 μ m 4.9 μ m	Using Lever Dial & Mandrel, Square Master & Surface Plate by Comparison Method

Rajeshwar Kumar
Convenor

Avijit Das
Program Manager

Laboratory

Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot,
Hosur, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

CC-2878

Page

3 of 8

Validity

26.10.2018 to 25.10.2020

Last Amended on 03.12.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
14.	External Micrometer ^s L. C. 0.001mm ^ϕ	Upto 600 mm	6.4 μ m	Using Caliper Checker/ Gauge Blocks/ Long Gauge Blocks by Comparison Method
15.	Depth Micrometer ^s L. C. 0.001mm ^ϕ	Upto 300 mm	2.7 μ m	Using Gauge Blocks by Comparison Method
16.	Plunger Dial Gauge ^s L. C. 0.001mm ^ϕ L. C. 0.01 mm	Upto 5 mm Upto 50 mm	2.2 μ m 6.2 μ m	Using Dial Calibration Tester/ Gauge Blocks by Comparison Method
17.	Lever Type Dial Gauge ^s L. C. 0.001 mm L. C. 0.001 mm L. C. 0.01 mm	Upto 0.14 mm Upto 0.2 mm Upto 2 mm	2.2 μ m 2.4 μ m 6.2 μ m	Using Dial Calibration Tester by Comparison Method
18.	Electronic Indicator ^s L. C. 0.001mm ^ϕ	Upto 50 mm	1.5 μ m	Using Slip Gauge by Comparison Method

Rajeshwar Kumar
Convenor

Avijit Das
Program Manager

Laboratory

Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot,
Hosur, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

CC-2878

Page

4 of 8

Validity

26.10.2018 to 25.10.2020

Last Amended on 03.12.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
19.	Bore Gauge – Analog/Digital ^s (Only Transmission Error)	Dia. Range: 6mm to 400mm Probing Range: Upto 1.0mm	4.0 μ m	Using Dial Calibration Tester by Comparison Method
20.	Dial Thickness Gauge ^s L. C. 0.001mm ^{ϕ} L. C. 0.01mm	Upto 2 mm Upto 50mm	1.0 μ m 6.0 μ m	Using Gauge Blocks by Comparison Method
21.	Dial Snap Gauge ^s L. C. 0.001mm ^{ϕ}	Upto 200 mm	3.1 μ m	Using Gauge Blocks by Comparison Method
22.	Micrometer Head ^s L. C. 0.0001 mm ^{ϕ}	Upto 25 mm	1.8 μ m	Using Electronic Probe by Comparison Method
23.	Dial Caliper Gauge ^s (External) L. C. 0.01mm ^{ϕ}	Upto 500 mm	7.0 μ m	Using Gauge Blocks Accessories by Comparison Method
24.	Internal Micrometer ^s (Two Point) L. C. 0.001 mm ^{ϕ}	0 to 300mm	3.7 μ m	Using Slip Gauge & Slip Gauge Accessories Set by Comparison Method

Rajeshwar Kumar
Convenor

Avijit Das
Program Manager

Laboratory **Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot, Hosur, Tamil Nadu**

Accreditation Standard **ISO/IEC 17025: 2005**

Certificate Number **CC-2878** **Page** **5 of 8**

Validity **26.10.2018 to 25.10.2020** **Last Amended on 03.12.2018**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
25.	Dial Calibration Tester [§] L. C. 0.0001 ^φ	Upto 50 mm	1.5 μm	Using Slip Gauge & Slip Gauge Accessories Set by Comparison Method
26.	Dial Caliper Gauge [§] (Internal) L. C. 0.01mm ^φ	5 mm to 300 mm	8.0μm	Using Slip Gauge Blocks & Slip Gauge Accessories by Comparison Method
27.	Electronic Probe [§] L.C.0.0001 ^φ	0 to 25 mm	0.34μm	Using Gauge Blocks by Comparison Method
28.	Comparator Stand / Dial Stand [§]	Upto 300mm X 300mm	3.9 μm	Using Lever Gauge by Comparison Method
29.	Coating Thickness Gauge [§]	0.01mm to 1 mm	2.5μm	Using Master Foils by Comparison Method
30.	Master Foils [§]	0.01mm to 2 mm	1.2μm	Using Electronic Probe by Comparison Method
31.	Bevel Protractor / Combination Set [§] L.C. 5' ^φ	Upto 360 °	6.5 min.	Using Profile Projector by Comparison Method

Laboratory

Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot, Hosur, Tamil Nadu

Accreditation Standard

ISO/IEC 17025: 2005

Certificate Number

CC-2878

Page

6 of 8

Validity

26.10.2018 to 25.10.2020

Last Amended on 03.12.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
32.	Floating Carriage Diameter Machine ^s L.C. 0.0001mm	Upto 175 mm	3.3 μ m	Using Cylindrical Setting master and Lever Dial by Comparison Method
33.	Steel Scale ^s L.C. 1.0 mm	Upto 300 mm	150 μ m	Using Profile Projector by Comparison Method
34.	Thread Pitch Gauge ^s	Pitch: 0.6mm to 25mm Angle: 90°	7.4 μ m 10 arc min	Using Profile Projector by Comparison Method
35.	Taper Scale ^s	1 mm to 45 mm	13.6 μ m	Using Profile Projector by Comparison Method
36.	Three Point Internal Micrometer ^s L.C 0.001 mm	4mm to 100 mm	5.3 μ m	Using Setting Ring Gauge by Comparison Method
37.	Thread Plug Gauge/ Wear Check Plug Gauge ^s	3 mm to 100 mm	3.5 μ m	Using FCDM & Cylindrical Master and Thread Measuring Wire by Comparison Method
38.	Taper Thread Plug Gauge ^s	3 mm to 100 mm	3.7 μ m	Using FCDM & Cylindrical Master and Thread Measuring Wire by Comparison Method

Rajeshwar Kumar
Convenor

Avijit Das
Program Manager

Laboratory

Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot,
Hosur, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number

CC-2878

Page

7 of 8

Validity

26.10.2018 to 25.10.2020

Last Amended on 03.12.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
39.	Radius Gauge ³	0.5 mm to 25 mm	7.5 μ m	Using Profile Projector by Direct Method
40.	Surface Plate [#]	3000mm X 3000mm	1.7 $\sqrt{(W+L)/100}$ μ m Where W & L are in mm	Using Electronic Level by Comparison Method
41.	Electronic Height Gauge [#] L.C. 0.1 μ m	Upto 600 mm	7.5 μ m	Using Gauge Blocks/ Long Gauge Blocks by Comparison Method
42.	Bench Center [#]	Upto 600 mm	6.3 μ m	Using Mandrel and Dial Indicator by Direct Method
II.	PRESSURE INDICATING DEVICES			
1.	Pneumatic Pressure Gauge [#]	0 bar to 20 bar	0.14 %	Using Pressure Calibrator as per DKD-R-6-1
2.	Hydraulic Pressure Gauge [#]	0 bar to 700 bar	0.14 %	Using Pressure Calibrator as per DKD-R-6-1
3.	Vacuum Gauge [#]	(-)1 bar to 0.8 bar	0.91 %	Using Pressure Calibrator as per DKD-R-6-1

Rajeshwar Kumar
Convenor

Avijit Das
Program Manager

Laboratory Accurate India Instruments, No. 33, SLV Nagar, Zuzuwadi, Sipcot,
Hosur, Tamil Nadu

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number CC-2878 Page 8 of 8

Validity 26.10.2018 to 25.10.2020 Last Amended on 03.12.2018

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (\pm)	Remarks
III.	WEIGHING SCALE AND BALANCE			
1.	Electronics Weighing Balance* Readability: 0.001g 0.01g 0.2g 1g 10g	100mg to 310g 200mg to 2.1kg 100g to 6kg 500g to 15kg 500g to 100kg	1.6mg 18mg 0.16g 0.78g 8.6g	Using F1 class standard weights for 1mg to 200g Using F2 class standard weights for 500g to 20kg as per OIML-R-76

* 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.

⊕ 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.

Rajeshwar Kumar
Convenor

Avijit Das
Program Manager