National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 1 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Permanent Facility					
1	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Gear (Spur / Helical) - Profile	Using Gear Testing Machine by Direct Method	Ø 20 mm to Ø 300 mm	2.8 µm
2	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	3 Point Bore Gauge (L.C.: 1 µm)	Using Set of Ring Gauges by Direct Method	6 mm to 200 mm	2 µm
3	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	3 Point Bore Gauge (L.C.: 1 µm)	Using Universal Length Measuring Machine by Direct Method	6 mm to 200 mm	2 µm
4	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Angle Gauge Block	Using Autocollimator & Index Table by Comparison Method	1 second of arc to 90 °	1.2 second of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 2 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
5	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Angle Gauge Block	Using Rotary Table & Electronic Probe with DRO by Comparison Method	1 second of arc to 90 °	1.8 second of arc
6	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ball Bar System - Ball Bar Calibrator - Centre Distance	Using Coordinate Measuring Machine by Direct Method	Up to 300 mm	{1 + (L / 1950)} µm, where L is in mm
7	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Ball Bar System - Ball Bar Transducer @ (100 mm ± 1 mm) (L.C.: 0.01 µm)	Using Universal Length Measuring Machine by Direct Method	(±) 1 mm	0.3 µm
8	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bench Centre - Co-axiality of Centre	Using Coordinate Measuring Machine by Direct Method	50 mm to 600 mm	3 µm
9	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bench Centre - Parallelism of the Axis of Centre	Using Coordinate Measuring Machine by Direct Method	50 mm to 600 mm	3 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	3 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
10	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor - Angle (L.C.: 1 minute of arc)	Using Profile Projector by Direct Method	0 ° to 180 °	2.5 minute of arc
11	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor - Flatness	Using Surface Plate and Electronic Probe by Direct Method	Up to 300 mm	2 µm
12	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor - Parallelism	Using Surface Plate, Electronic Probe by Direct Method	Up to 300 mm	2 µm
13	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bevel Protractor - Straightness	Using Surface Plate, Electronic Probe by Direct Method	Up to 300 mm	2 µm
14	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Bore Dial Gauge - Transmission Error (L.C.: 1 µm)	Using Universal Length Measuring Machine by Direct Method	Up to 2 mm	2 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	4 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
15	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog (L.C.: 0.01 mm)	Using Slip Gauges by Direct Method	0 to 1000 mm	10 µm
16	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Combined Width of Internal Measuring Jaws (L.C.: 0.01 mm)	Using Micrometer by Direct Method	0 to 1000 mm	10 µm
17	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Crossed Knife Edge Distance (L.C.: 0.01 mm)	Using Ring Gauge by Direct Method	0 to 1000 mm	10 µm
18	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Full Surface Contact Error (L.C.: 0.01 mm)	Using Slip Gauges by Direct Method	0 to 1000 mm	10 µm
19	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Line Contact Error (L.C.: 0.01 mm)	Using Cylindrical Measuring Pins by Direct Method	0 to 1000 mm	10 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 5 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
20	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Partial Surface Contact Error (L.C.: 0.01 mm)	Using Slip Gauges by Direct Method	0 to 1000 mm	10 µm
21	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Repeatability of Partial Surface Contact Error (L.C.: 0.01 mm)	Using Slip Gauges by Direct Method	0 to 1000 mm	10 µm
22	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Caliper - Dial / Digital / Analog - Scale Shift Error (L.C.: 0.01 mm)	Using Slip Gauges and Ring Gauge by Direct Method	0 to 1000 mm	10 µm
23	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Clinometer - Angle (L.C.: 60 second of arc)	Using Electronic Level and Rotary Table by Comparison Method	0 ° to 180 °	20 second of arc
24	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Coincidence Level - Sensitivity (Sensitivity: 0.01 mm/m)	Using Electronic Level and Rotary Table by Comparison Method	(±) 200 µm/m	6 µm/m

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	6 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
25	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Cylindrical Roller / Pin	Using Universal Length Measuring Machine by Direct Method	0.1 mm to 20 mm	0.5 µm
26	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge - Digital / Dial / Analog (L.C.: 10 µm)	Using Slip Gauges by Direct Method	0 to 300 mm	10 µm
27	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge - Digital / Dial / Analog - Partial Surface Contact Error (L.C.: 10 µm)	Using Slip Gauges by Direct Method	0 to 300 mm	10 µm
28	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge - Digital / Dial / Analog - Repeatability of Partial Surface Contact Error (L.C.: 10 µm)	Using Slip Gauges by Direct Method	0 to 300 mm	10 µm
29	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer (L.C.: 1 µm)	Using Slip Gauges by Direct Method	0 to 100 mm	1 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	7 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
30	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer (L.C.: 1 µm)	Using Slip Gauges by Direct Method	> 100 mm to 300 mm	2 µm
31	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Micrometer - Flatness of Anvils (L.C.: 1 µm)	Using Optical Flat by Direct Method	0 to 300 mm	1 µm
32	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge - Lever Type - Analog / Digital - Sensitivity & Hysteresis (L.C.: 2 µm)	Using Precision Mandrel (Eccentric) by Direct Method	(±) 0.2 mm	3.2 µm
33	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge - Lever Type - Analog / Digital - Repeatability (L.C. : 2 µm)	Using Precision Mandrel by Direct Method	(±) 0.2 mm	2 µm
34	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Lever Type - Analog / Digital (L.C.: 2 µm)	Using Universal Length Measuring Machine by Comparison method	(±) 0.2 mm	0.4 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	8 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
35	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Lever Type - Analog / Digital (L.C.: 1 µm)	Using Universal Length Measuring Machine by Comparison Method	(±) 0.14 mm	0.3 µm
36	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Lever Type - Analog / Digital - Repeatability (L.C.: 1 µm)	Using Precision Mandrel by Direct Method	(±) 0.14 mm	2 µm
37	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Lever Type - Analog / Digital - Sensitivity & Hysteresis (L.C.: 1 µm)	Using Precision Mandrel (Eccentric) by Direct Method	(±) 0.14 mm	3.2 µm
38	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog (L.C.: 1 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	0 to 5 mm	0.8 µm
39	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog (L.C.: 0.1 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	(±) 0.05 mm	0.3 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	9 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
40	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog / Digital (L.C.: 0.2 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	(±) 0.4 mm	0.4 µm
41	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog / Digital (L.C.: 0.5 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	(±) 0.9 mm	0.5 µm
42	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog / Digital (L.C.: 10 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	0 to 100 mm	7 µm
43	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog / Digital - Repeatability (L.C.: 1 µm & coarser)	Using Precision Mandrel by Direct Method	0 to 100 mm	2 µm
44	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Analog / Digital - Sensitivity & Hysteresis (L.C.: 1 µm & Coarser)	Using Precision Mandrel (Eccentric) by Direct Method	0 to 100 mm	2 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	10 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
45	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Digital / Comparator (L.C.: 1 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	0 to 50 mm	0.8 µm
46	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge Plunger Type - Digital / Comparator (L.C.: 0.1 µm & Coarser)	Using Universal Length Measuring Machine by Comparison Method	0 to 25 mm	0.3 µm
47	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Engineer's Parallel - Equality of Pairs	Using Electronic Probe by Direct Method	50 mm to 1000 mm	2 µm
48	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Engineer's Parallel - Parallelism	Using Electronic Probe by Direct Method	50 mm to 1000 mm	2 µm
49	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Engineer's Parallel - Thickness and Width	Using Micrometer by Direct Method	50 mm to 1000 mm	5 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 11 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
50	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Engineer's Parallel - Variation in Thickness	Using Micrometer by Direct Method	50 mm to 1000 mm	5 µm
51	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler Gauge	Using Digital Micrometer (L.C: 1 µm) by Direct Method	0.03 mm to 1 mm	2 µm
52	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Frame Level - Flatness of Base	Using Surface Plate and Electronic Probe with DRO, Screw Jacks by Direct Method	Up to 250 mm	1.5 µm
53	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Frame Level - Parallelism between the Faces	Using Surface Plate and Electronic Probe with DRO by Direct Method	Up to 250 mm	1.5 µm
54	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Frame Level - Parallelism of “V” with respect to Base Flat	Using Electronic Probe with DRO and Cylindrical Test Mandrel by Direct Method	Up to 250 mm	1.5 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 12 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
55	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Frame Level - Sensitivity (Sensitivity: 0.01 mm/m)	Using Electronic Level & Rotary Table by Comparison Method	(±) 200 µm/m	6 µm/m
56	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Frame Level - Squareness	Using Electronic Height Gauge & Cylindrical Test Mandrel by Direct Method	Up to 250 mm	2.8 µm
57	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Granite Square / Try Square / Granite Cube - Flatness	Using Coordinate Measuring Machine by Direct Method	Up to 800 x 1300 mm	3.2 µm
58	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Granite Square / Try Square / Granite Cube - Parallelity	Using Coordinate Measuring Machine by Direct Method	Up to 800 x 1300 mm	3.2 µm
59	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Granite Square / Try Square / Granite Cube - Squareness	Using Coordinate Measuring Machine by Direct Method	Up to 800 x 1300 mm	3.2 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 13 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
60	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge - Digital / Vernier - Flatness (L.C.: 10 µm)	Using Electronic Probe by Comparison Method	0 to 1000 mm	2 µm
61	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge - Digital / Vernier - Linear (L.C.: 10 µm)	Using Step Gauge, Slip Gauges, Electronic Probe by Comparison Method	0 to 1000 mm	{8 + (L / 846)} µm, where L is in mm
62	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge - Digital / Vernier - Parallelism (L.C.: 10 µm)	Using Electronic Probe by Comparison Method	Up to 1000 mm	2 µm
63	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge - Digital / Vernier - Squareness (L.C.: 10 µm)	Using Granite Square by Comparison Method	Up to 1000 mm	4 µm
64	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height Gauge - Digital / Vernier - Squareness (L.C.: 10 µm)	Using Master Cylinder by Comparison Method	Up to 500 mm	2.8 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 14 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
65	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Inclinometer (L.C.: 1°)	Using Rotary Table by Comparison Method	Up to 90 °	18 minute of arc
66	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Indentor (Ball Type) - Size	Using Universal Length Measuring Machine by Direct Method	1 mm to 10 mm	0.3 µm
67	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Indentor (Conical Type) - Angle	Using Profile Projector by Direct Method	120 °	1 minute of arc
68	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Indentor (Conical Type) - Cone Tip Radius	Using Profile Projector by Direct Method	0.2 mm	5 µm
69	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Indentor (Square Type) - Angle	Using Profile Projector by Direct Method	90° & 136 °	1 minute of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 15 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
70	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Index Table	Using Autocollimator & Polygon Mirror by Comparison Method	0 to 360 °	1.1 second of arc
71	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Involute & Lead Master (Spur / Helical) - Helix Angle Error (Ø 20 mm to 300 mm) (LH & RH)	Using Gear Testing Machine by Direct Method	0 ° to 45 °	2.8 µm
72	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Involute & Lead Master (Spur / Helical) - Profile	Using Gear Testing Machine by Direct Method	Ø 20 mm to Ø 300 mm	2.8 µm
73	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Lever Arm - Linear Distance	Using Coordinate Measuring Machine by Direct Method	(±) 1200 mm	{2 + (L / 450)} µm, where L is in mm
74	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Disc - Circularity (Ø 50 mm to 300 mm)	Using Form Tester by Direct Method	Up to 20 µm	0.1 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 16 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
75	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Disc - Diameter	Using Universal Length Measuring Machine by Comparison Method	Ø 50 mm to Ø 300 mm	{0.5 + (L / 500)} µm, where L is in mm
76	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Disc - Diameter	Using CMM by Direct Method	Ø 50 mm to Ø 300 mm	{0.8 + (L / 500)} µm, where L is in mm
77	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Gear (Spur / Helical) - Pitch (Ø 20 mm to 300 mm)	Using Gear Testing Machine by Direct Method	Up to 20 mm	2.8 µm
78	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Gear (Spur / Helical) - Helix Angle Error	Using Gear Testing Machine by Direct Method	Ø 20 mm to Ø 300 mm	2.8 µm
79	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Master Gear (Spur / Helical) - Run Out	Using Gear Testing Machine by Direct Method	Ø 20 mm to Ø 300 mm	2.8 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 17 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
80	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer - Flatness of Anvils (L.C.: 1 µm)	Using Optical Flat by Direct Method	Up to 1000 mm	1 µm
81	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer - Parallelity of Anvils (L.C.: 1 µm)	Using Optical Parallel by Direct Method	Up to 1000 mm	1 µm
82	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer - Thimble Accuracy (L.C.: 1 µm)	Using Slip Gauges by Direct Method	>100 mm to 300 mm	2 µm
83	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer - Thimble Accuracy (L.C.: 1 µm)	Using Slip Gauges by Direct Method	Up to 100 mm	1 µm
84	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer - Thimble Accuracy (L.C.: 1 µm)	Using Slip Gauges by Direct Method	> 300 mm to 1000 mm	5 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 18 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
85	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head - Flatness of Anvils (L.C.: 1 µm)	Using Optical Flat by Direct Method	Up to 100 mm	1 µm
86	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Head - Thimble Accuracy (L.C.: 1 µm)	Using Universal Length Measuring Machine by Direct Method	Up to 50 mm	1 µm
87	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Pi Tape (L.C.: 0.5 mm)	Using Length Measuring Machine by Direct Method	> 200 mm to 15 m	{25 + (L / 250)} µm, where L is in mm
88	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Pi Tape (L.C.: 0.5 mm)	Using Profile Projector by Direct Method	Up to 200 mm	10 µm
89	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Radius Gauge	Using Profile Projector by Direct Method	0.6 mm to 25 mm	20 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 19 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
90	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Radius Gauge	Using Vision Measuring System by Direct Method	0.6 mm to 25 mm	20 µm
91	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Rotary Table, Optical Dividing Head (L.C.: 1 second of arc)	Using Autocollimator & Polygon Mirror by Comparison Method	0 ° to 360 °	1.2 second of arc
92	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Gauge Rod / Extension Rod	Using Slip Gauges & Electronic Probe by Comparison Method	> 100 mm to 300 mm	{1 + (L / 800)} µm, where L is in mm
93	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Gauge Rod / Extension Rod	Using Slip Gauges & Electronic Probe by Comparison Method	25 mm to 100 mm	1 µm
94	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Gauge Rod / Extension Rod	Using Universal Length Measuring Machine by Direct Method	25 mm to 1000 mm	{1.2 + (L / 650)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	20 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
95	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Gauge Rod / Extension Rod	Using Laser Measurement System by Direct Method	25 mm to 1000 mm	{3 + (L / 2000)} µm, where L is in mm
96	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Master for Electronic Height Gauge - Size & Parallelity	Using Slip Gauges & Electronic Probe by Comparison Method	Up to 50 mm	1 µm
97	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Plug Gauge - Circularity (Ø 1 mm to 300 mm)	Using Form Tester by Direct Method	Up to 20 µm	0.1 µm
98	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Plug Gauge - Diameter	Using Universal Length Measuring Machine by Direct Method	> 100 mm to 300 mm	{0.5 + (L / 500)} µm, where L is in mm
99	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Plug Gauge - Diameter	Using Universal Length Measuring Machine by Direct Method	1 mm to 100 mm	{0.3 + (L / 550)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 21 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
100	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Plug Gauge - Diameter	Using CMM by Direct Method	3 mm to 300 mm	{0.8 + (L / 500)} µm, where L is in mm
101	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Plug Gauge / Master Disc - Roughness (Ra)	Using Roughness Tester by Direct Method	Up to 10 µm	5.5 %
102	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Ring Gauge - Circularity (Ø 3 mm to 275 mm)	Using Form Tester by Direct Method	Up to 20 µm	0.1 µm
103	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Ring Gauge - Diameter	Using CMM by Direct Method	3 mm to 275 mm	{0.98 + (L / 975)} µm, where L is in mm
104	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Ring Gauge - Diameter	Using Universal Length Measuring Machine, Master Ring Gauge by Comparison Method	3 mm to 300 mm	{0.56 + (L / 490)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	22 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
105	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Setting Ring Gauge - Roughness (Ra) (Ø Up to 275 mm)	Using Roughness Tester by Direct Method	Up to 10 µm	5.5 %
106	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar - Angle (Length - 100 mm to 500 mm)	Using Slip Gauges, Angle Gauges & Electronic Probe by Comparison Method	Up to 45 °	3.3 second of arc
107	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar - Centre Distance between Rollers	Using CMM by Direct Method	Up to 500 mm	1.2 µm
108	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar - Diameter of Rollers	Using CMM by Direct Method	Up to Ø 50 mm	1.2 µm
109	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar - Flatness of Working Faces	Using CMM by Direct Method	Up to 500 mm	1.2 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 23 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
110	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar - Parallelism of Working Faces to Contact Surface	Using CMM by Direct Method	Up to 500 mm	1.2 µm
111	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Sine Bar - Perpendicularity	Using CMM by Direct Method	Up to 500 mm	1.2 µm
112	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Spirit Level - Flatness of Base	Using Surface Plate, Electronic Probe by Direct Method	Up to 250 mm (Base length)	1.5 µm
113	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Spirit Level - Parallelism of “V” with respect to Base Flat	Using Surface Plate, Electronic Probe and Cylindrical Test Mandrel by Direct Method	Up to 250 mm (Base Length)	1.5 µm
114	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Spirit Level - Sensitivity (Sensitivity: 0.01 mm/m)	Using Electronic Level & Tilting Table by Comparison Method	(±) 200 µm/m	6 µm/m

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 24 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
115	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Scale (L.C.: 0.5 mm)	Using Profile Projector by Direct Method	0 to 200 mm	10 µm
116	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Scale (L.C.: 1 mm)	Using Length Measuring Machine by Direct Method	> 200 mm to 2000 mm	{13 + (L / 125)} µm, where L is in mm
117	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Tape (L.C.: 1 mm)	Using Length Measuring Machine by Direct Method	> 200 mm to 15 m	{25 + (L / 250)} µm, where L is in mm
118	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Steel Tape (L.C.: 1 mm)	Using Profile Projector by Direct Method	Up to 200 mm	10 µm
119	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Stick Type Internal Micrometer - Thimble Accuracy (L.C.: 1 µm)	Using Universal Length Measuring Machine by Direct Method	0 to 25 mm	3 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	25 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
120	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Stick Type Internal Micrometer, Extension Rod	Using Universal Length Measuring Machine by Direct Method	50 mm to 1000 mm	{5.3 + (L / 109)} µm, where L is in mm
121	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Straight Edge - Parallelism	Using Electronic Probe by Direct Method	50 mm to 2000 mm	2 µm
122	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Straight Edge - Straightness	Using Electronic Level by Direct Method	50 mm to 2000 mm	2 µm
123	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Straight Edge - Straightness	Using Electronic Probe by Direct Method	50 mm to 2000 mm	2 µm
124	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate	Using CMM by Direct Method	Up to 630 x 630 mm	2.5 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 26 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
125	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate	Using Electronic Level by Direct Method	Up to 5000 x 3000 mm	0.74 x Sqrt {(L + W) / 100} µm, where L & W are in mm
126	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Circularity (Ø Up to 200 mm)	Using Form Tester by Direct Method	Up to 20 µm	0.1 µm
127	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Diameter	Using CMM by Direct Method	10 mm to 200 mm	1.5 µm
128	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Diameter	Using Universal Length Measuring Machine, Cylindrical Measuring Pin, Slip Gauge Block by Comparison Method	10 mm to 200 mm	{0.6 + (L / 550)} µm, where L is in mm
129	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Half Taper Angle	Using Universal Length Measuring Machine, Cylindrical Measuring Pin, Slip Gauge Block by Comparison Method	10 mm to 200 mm	1.5 second of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 27 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
130	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Half Taper Angle	Using CMM by Direct Method	Up to 10 °	4 second of arc
131	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Roughness (Ra)	Using Roughness Tester by Direct Method	Up to 10 µm	5.5 %
132	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Straightness	Using CMM by Direct Method	10 mm to 450 mm	2 µm
133	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Plug Gauge - Straightness	Using Form Tester by Direct Method	10 mm to 450 mm	1 µm
134	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Circularity (Ø Up to 200 mm)	Using Form Tester by Direct Method	Up to 20 µm	0.1 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 28 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
135	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Diameter	Using CMM by Direct Method	10 mm to 200 mm	1.5 µm
136	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Diameter	Using Universal Length Measuring Machine, Master Setting Ring Gauge by Comparison Method	10 mm to 200 mm	{0.8 + (L / 400)} µm, where L is in mm
137	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Half Taper Angle	Using Universal Length Measuring Machine, Master Setting Ring Gauge by Comparison Method	10 mm to 200 mm	2 second of arc
138	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Half Taper Angle (Ø 200 mm x 450 mm)	Using CMM by Direct Method	Up to 10 °	4 second of arc
139	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Roughness (Ra)	Using Roughness Tester by Direct Method	0.01 µm to 10 µm	5.5 %

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	29 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
140	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Straightness (Ø 10 mm to 450 mm)	Using Form Tester by Direct Method	Up to 100 mm	1.0 µm
141	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Ring Gauge - Straightness	Using CMM by Direct Method	10 mm to 450 mm	2 µm
142	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Plug Gauge - Effective Diameter	Using Universal Length Measuring Machine, Thread Measuring Wires by Comparison Method	10 mm to 200 mm	1.5 µm
143	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Plug Gauge - Taper Angle	Using Universal Length Measuring Machine, Thread Measuring Wires by Comparison Method	10 mm to 200 mm	2 second of arc
144	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Ring Gauge - Effective Diameter	Using Universal Length Measuring Machine, Master Setting Ring Gauge by Comparison Method	10 mm to 100 mm	2.5 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	30 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
145	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Taper Thread Ring Gauge - Taper Angle	Using Universal Length Measuring Machine, Master Setting Ring Gauge by Comparison Method	10 mm to 100 mm	2.5 second of arc
146	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Concentricity	Using CMM by Direct Method	Up to 1000 mm	2 µm
147	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Concentricity	Using Form Tester by Direct Method	Up to 450 mm	1.2 µm
148	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Cylindricity	Using CMM by Direct Method	Up to 1000 mm	2 µm
149	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Cylindricity	Using Form Tester by Direct Method	Up to 450 mm	1.2 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 31 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
150	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Half Taper Angle (Up to 1000 mm Long of Taper Mandrel)	Using CMM by Direct Method	Up to 30 °	4 second of arc
151	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Roughness (Ra) (Up to 1000 mm)	Using Roughness Tester by Direct Method	Up to 10 µm	5.5 %
152	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Roundness (Up to 1000 mm)	Using CMM by Direct Method	Up to 20 µm	2 µm
153	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Roundness (Up to 450 mm)	Using Form Tester by Direct Method	Up to 20 µm	1.2 µm
154	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Run out	Using Bench Center, Electronic Probe by Direct Method	Up to 600 mm	2 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	32 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
155	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Runout	Using Bench Center, Electronic Probe by Direct Method	Up to 450 mm	1.2 µm
156	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Straightness	Using CMM by Direct Method	Up to 1000 mm	2 µm
157	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Straightness	Using Form Tester by Direct Method	Up to 450 mm	1.2 µm
158	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Mandrel - Variation in Diameter (Length - Up to 1000 mm)	Using Indicating Snap Gauge by Direct Method	Up to Ø 50 mm	2 µm
159	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve - Perforated Plate	Using Vernier Caliper by Direct Method	> 10 mm to 125 mm	100 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 33 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
160	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve - Wire Clothe	Using Profile Projector by Direct Method	32 µm to 4 mm	3 µm
161	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Test Sieve - Wire Clothe / Mesh of Wire	Using Profile Projector by Direct Method	> 4 mm to 10 mm	10 µm
162	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Measuring Wire	Using Universal Length Measuring Machine by Direct Method	0.17 mm to 6.35 mm	0.5 µm
163	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge - Flank Angle (Half angle)	Using Profile Projector by Direct Method	Up to 30 °	1.2 minute of arc
164	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge - Flank Angle (Half angle)	Using Vision Measuring System by Direct Method	Up to 30 °	1.2 minute of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 34 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
165	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge - Pitch	Using Profile Projector by Direct Method	0.4 mm to 6 mm	1.4 µm
166	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Pitch Gauge - Pitch	Using Vision Measuring System by Direct Method	0.4 mm to 6 mm	2.6 µm
167	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge - Diameter	Using Universal Length Measuring Machine, Thread Measuring Wire by Comparison Method	1 mm to 125 mm	1 µm
168	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge - Flank Angle (Half Angle)	Using Profile Projector by Direct Method	Up to 30 °	2.5 minute of arc
169	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge - Pitch	Using Profile Projector by Direct Method	0.2 mm to 6 mm	1 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 35 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
170	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge - Effective Diameter & Minor Diameter	Using Universal Length Measuring Machine, Master Setting Ring Gauge by Direct Method	> 10 mm to 125 mm	2 µm
171	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge - Effective Diameter & Minor Diameter	Using Universal Length Measuring Machine, Master Setting Ring Gauge by Direct Method	3 mm to 10 mm	3.5 µm
172	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge - Flank Angle (Half Angle)	Using Profile Projector by Direct Method	Up to 30 °	2.5 minute of arc
173	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge - Pitch	Using Profile Projector by Direct Method	0.5 mm to 6 mm	2 µm
174	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V Block - Parallelism	Using Electronic Probe with DRO, Mandrel by Direct Method	50 x 40 x 40 mm to 200 x 125 x 90 mm	3 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 36 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
175	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V Block - Squareness	Using Electronic Height Gauge with Squareness Probe by Direct Method	50 x 40 x 40 mm to 200 x 125 x 90 mm	3 µm
176	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	V Block - Symmetry of V Axis	Using Electronic Probe with DRO & Mandrel by Direct Method	50 x 40 x 40 mm to 200 x 125 x 90 mm	3 µm
177	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Check Master	Using Step Gauge & Coordinate Measuring Machine by Comparison Method	Up to 1100 mm	{0.4 + (L / 1200)} µm, where L is in mm
178	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	2D Height Gauge, Height Measuring Instrument - Linear (L.C.: 0.1 µm)	Using Step Gauge, Slip Gauges, Electronic Probe by Comparison Method	Up to 1000 mm	{0.85 + (L / 342)} µm, where L is in mm
179	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	2D Height Gauge, Height Measuring Instrument - Squareness (L.C.: 0.1 µm)	Using Master Cylinder by Comparison Method	Up to 500 mm	1.7 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 37 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
180	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	2D Height Gauge, Height Measuring Instrument - Squareness (L.C.: 0.1 µm)	Using Granite Square by Comparison Method	Up to 1000 mm	4 µm
181	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Angular Graticule (L.C.: 1 minute of arc)	Using Profile Projector by Direct Method	0 ° to 360 °	66 second of arc
182	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Angular Graticule (L.C.: 1 minute of arc)	Using Vision Measuring System by Direct Method	0 ° to 360 °	66 second of arc
183	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Articulated Arm CMM (Portable Arm CMM) - Linear Error (L.C.: 1 µm)	Using Long Slip Gauge by Direct Method	Up to Ø 2.5 m	{6.44 + (L / 960)} µm, where L is in mm
184	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Articulated Arm CMM (Portable Arm CMM) - Location Error (L.C.: 1 µm)	Using Master Sphere by Direct Method	Up to Ø 2.5 m	3 µm
185	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Articulated Arm CMM (Portable Arm CMM) - Size Error (L.C.: 1 µm)	Using Master Sphere by Direct Method	Up to Ø 2.5 m	3 µm
186	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Autocollimator (L.C.: 0.05 second of arc)	Using Autocollimator, Double Sided Plane Parallel Reflector by Comparison Method	Up to 2000 second of arc	0.5 second of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 38 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
187	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Caliper Checker	Using Step Gauge & Coordinate Measuring Machine by Comparison Method	Up to 1100 mm	{0.4 + (L / 1200)} µm, where L is in mm
188	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Co-ordinate Measuring Machine - Maximum Permissible Error (PFTU, MPE) (L.C.: 0.01 µm)	Using Master Sphere by Direct Method	Ø 15 mm to Ø 50 mm	0.1 µm
189	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Co-ordinate Measuring Machine - Maximum Permissible Error (E0, MPE) (L.C.: 0.01 µm)	Using Step Gauge, Slip Gauges by Direct Method	120 x 120 x 80 mm to 1300 x 900 x 700 mm	{0.33 + (L / 1950)} µm, where L is in mm
190	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Co-ordinate Measuring Machine - Rotary FA, FR and FT (L.C.: 0.5 second of arc)	Using Spheres by Direct Method	Up to Ø 400 mm	0.4 µm
191	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Collar Master - Length (Ø Up to 100 mm)	Using CMM by Direct Method	Up to 700 mm	{0.4 + (L / 1200)} µm, where L is in mm
192	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Depth Microchecker - Parallelity	Using Slip Gauges, Electronic Probe by Comparison Method	Up to 300 mm	2 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	39 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
193	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Depth Microchecker - Pitch Block Accuracy	Using Slip Gauges, Electronic Probe by Comparison Method	Up to 300 mm	{0.65 + (L / 500)} µm, where L is in mm
194	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Dial Gauge Calibrator, Dial Gauge Tester (L.C.: 0.1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 25 mm	0.3 µm
195	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Dial Gauge Calibrator, Dial Gauge Tester (L.C.: 0.1 µm)	Using Slip Gauges, Electronic Probe by Comparison Method	0 to 25 mm	0.5 µm
196	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Diameter Master - Diameter	Using CMM by Direct Method	Up to Ø 200 mm	{0.4 + (L / 1200)} µm, where L is in mm
197	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Angle (L.C.: 0.1 second of arc)	Using Rotary Table by Comparison Method	1000 second of arc to 45 °	2.5 second of arc
198	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Angle (L.C.: 0.1 second of arc)	Using Autocollimator, Plane Mirror, Tilting Table by Comparison Method	(±) 1000 second of arc	0.7 second of arc
199	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Angle (L.C.: 0.1 second of arc)	Using Electronic Level, Tilting Table by Comparison Method	(±) 1000 second of arc	1.5 second of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 40 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
200	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Flatness	Using Coordinate Measuring Machine by Direct Method	Up to 200 mm	2 µm
201	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Parallelism between Faces	Using Surface Plate & Electronic Probe by Direct Method	Up to 200 mm	2 µm
202	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Parallelism of V with respect to Base Flat	Using Surface Plate, Electronic Probe and Cylindrical Test Mandrel by Direct Method	Up to 200 mm	2 µm
203	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Level - Perpendicularity	Using Surface Plate and Digital Height Gauge by Direct Method	Up to 200 mm	2 µm
204	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Probe - Lever Type (L.C.: 0.1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 2 mm	0.3 µm
205	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Probe - Plunger Type (L.C.: 0.1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 25 mm	0.3 µm
206	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Electronic Probe - Plunger Type (L.C.: 1 µm)	Using Universal Length Measuring Machine by Comparison Method	0 to 50 mm	0.7 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 41 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
207	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Extensometer - Drift in DRO (L.C.: 1 µm)	By Visual Method	Up to 5 mm	1.7 µm
208	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Extensometer - Relative Bias Error (L.C.: 1 µm)	Using Digital Height Gauge (L.C.: 0.1 µm) by Direct Method	Up to 5 mm	1.7 µm
209	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Extensometer - Relative Gauge Length Error (L.C.: 1 µm)	Using Profile Projector by Direct Method	Up to 5 mm	1.7 µm
210	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Extensometer - Relative Gauge Length Error (L.C.: 1 µm)	Using Vernier Caliper by Direct Method	Up to 5 mm	1.7 µm
211	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Flatness Interferometer	Using Reference (Transmission) Flat by Direct Method	Up to Ø 100 mm	40 nm
212	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gear Testing Machine	Using Lead & Profile Master, Master Gear by Direct Method	Up to Ø 300 mm	2.6 µm
213	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Glass Grid - Circular / Square / Rectangle (L.C.: 0.1 mm)	Using Profile Projector by Direct Method	Up to 200 mm	2.8 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 42 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
214	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Glass Grid - Circular / Square / Rectangle (L.C.: 0.1 mm)	Using Vision Measuring System by Direct Method	Up to 200 mm	2.8 µm
215	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Glass Grid - Grating (L.C.: 0.1 mm)	Using Profile Projector by Direct Method	Up to 200 mm	2.6 µm
216	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Glass Grid - Grating (L.C.: 0.1 mm)	Using Vision Measuring System by Direct Method	Up to 200 mm	2.6 µm
217	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Glass Scale, Glass Grid - Grating (L.C.: 0.01 mm)	Using Ultra Precision CMM by Direct Method	Up to 100 mm	0.9 µm
218	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Glass Scale, Glass Grid - Grating (L.C.: 0.1 mm)	Using Laser Measurement System by Direct Method	Up to 400 mm	{0.3 + (L / 500)} µm, where L is in mm
219	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Height Master (L.C.: 0.1 µm)	Using Step Gauge & Coordinate Measuring Machine by Comparison Method	Up to 1000 mm	{0.4 + (L / 1200)} µm, where L is in mm
220	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Height Master (L.C.: 0.1 µm)	Using Slip Gauges, Electronic Probe by Comparison Method	Up to 1000 mm	{0.4 + (L / 1200)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	43 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
221	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Inside Micro Checker	Using Step Gauge & Coordinate Measuring Machine by Comparison Method	Up to 1100 mm	{0.4 + (L / 1200)} µm, where L is in mm
222	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Bar	Using Slip Gauges & Electronic Probe by Comparison Method	> 100 mm to 300 mm	{0.45 + (L / 1000)} µm, where L is in mm
223	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Bar	Using CMM & Long Slip Gauges by Comparison Method	> 300 mm to 1000 mm	{0.6 + (L / 925)} µm, where L is in mm
224	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Bar	Using Slip Gauges & Slip Gauge Comparator by Comparison Method	10 mm to 100 mm	{0.056 + (L / 1600)} µm, where L is in mm
225	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Bar	Using Slip Gauges & Universal Length Measuring Machine by Comparison Method	10 mm to 500 mm	{0.3 + (L / 940)} µm, where L is in mm
226	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Measuring Machine (L.C.: 1 µm)	Using Laser Measuring System by Direct Method	0 to 2.5 m	{3 + (L / 110)} µm, where L is in mm
227	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Magnification Master (Flick Standard)	Using Form Tester by Direct Method	> 20 µm to 300 µm	{0.4 + (L / 400)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 44 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
228	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Magnification Master (Flick Standard)	Using Form Tester by Direct Method	Up to 20 µm	0.4 µm
229	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Circularity	Using Form Tester by Direct Method	> 300 mm to 500 mm	0.1 µm
230	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Circularity	Using Form Tester by Direct Method	Up to 300 mm	0.1 µm
231	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Cylindricity	Using Form Tester by Direct Method	> 300 mm to 500 mm	1 µm
232	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Cylindricity	Using Form Tester by Direct Method	Up to 300 mm	0.6 µm
233	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Flatness	Using Form Tester by Direct Method	> 300 mm to 500 mm	1.2 µm
234	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Flatness	Using Form Tester by Direct Method	Up to 300 mm	1 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 45 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
235	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Squareness	Using Form Tester by Direct Method	> 300 mm to 500 mm	1.2 µm
236	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Squareness	Using Form Tester by Direct Method	Up to 300 mm	1 µm
237	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Straightness	Using Form Tester by Direct Method	> 300 mm to 500 mm	1 µm
238	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Straightness	Using Form Tester by Direct Method	Up to 300 mm	0.6 µm
239	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Master Cylinder - Surface Roughness (Ra) (Up to 500 mm)	Using Roughness Tester by Direct Method	Up to 10 µm	6.8 %
240	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Flat (Ø 250 mm) - Straightness of Horizontal Surface	Using Form Tester by Direct Method	Over 200 mm	0.4 µm
241	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Flat - Flatness	Using Flatness Interferometer & Reference (Transmission) Flat by Direct Method	Up to Ø 100 mm	0.041 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	46 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
242	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Parallel - Flatness	Using Flatness Interferometer & Reference (Transmission) Flat by Direct Method	Up to Ø 100 mm	0.041 µm
243	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Parallel - Parallelism	Using Flatness Interferometer & Reference (Transmission) Flat by Direct Method	Up to Ø 100 mm	0.067 µm
244	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Optical Parallel - Thickness	Using Universal Length Measuring Machine & Slip Gauges by Comparison Method	Up to Ø 100 mm	0.2 µm
245	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Polygon Mirror - Adjacent Error between Faces	Using Autocollimator & Index Table by Comparison Method	30 ° to 360 °	1.3 second of arc
246	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Polygon Mirror - Cumulative Error between Faces	Using Autocollimator & Index Table by Comparison Method	30 ° to 360 °	1.3 second of arc
247	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Prism - Adjacent Error between Faces	Using Autocollimator, plane mirror & index table by comparison method	90 °	1.3 second arc sec

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 47 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
248	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Angular (L.C.: 1 second of arc)	Using Angle Gauge Blocks by Direct Method	0 ° to 360 °	17 second of arc
249	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Linear (L.C.: 0.1 µm)	Using Laser Measuring System by Direct Method	Up to 200 mm	{0.7 + (L / 650)} µm, where L is in mm
250	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Linear (L.C.: 0.1 µm)	Using Glass Scale by Direct Method	Up to 200 mm	{0.85 + (L / 325) µm, where L is in mm
251	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Magnification	Using Glass Scale & Vernier Caliper by Direct Method	5 X to 100 X	0.4 %
252	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Radius Standard, Contour Master - Circularity	Using Form Tester by Direct Method	Up to 100 mm	0.06 µm
253	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Radius Standard, Contour Master - Contour Master Step Height	Using CMM by Direct Method	Up to 100 mm	1.5 µm
254	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Radius Standard, Contour Master - Flatness	Using CMM by Direct Method	Up to 100 mm	1.5 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 48 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
255	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Radius Standard, Contour Master - Roughness (Ra)	Using Roughness Tester by Direct Method	0.01 µm to 10 µm	5.5 %
256	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Radius Standard, Contour Master - Size	Using Universal Length Measuring Machine by Comparison Method	Up to 100 mm	0.3 µm
257	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Radius Standard, Contour Master - Size	Using CMM by Direct Method	Up to 100 mm	1.5 µm
258	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Rotary Encoder (L.C.: 0.001°)	Using Laser Measuring System with Rotary Indexer by Direct Method	0 ° to 3000 °	30 second of arc
259	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Rotary Indexer with Laser Measuring System (L.C.: 0.1 second of arc)	Using Indexing Table by Direct Method	Up to 360 °	2.1 second of arc
260	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roughness Tester - Portable (L.C.: 1 nm)	Using Depth Master & Surface Roughness Masters by Direct Method	0.01 µm to 25 µm	5.5 %
261	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roughness Tester - Stand Alone (L.C.: 0.3 nm)	Using Depth Master & Surface Roughness Masters by Direct Method	0.01 µm to 25 µm	4.1 %

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 49 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
262	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness Master (Roundness) : Up to 300 mm	Using Form Tester by Direct Method	1 nm to 20 µm	0.05 µm
263	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Perpendicularity of Vertical Column	Using Master Cylinder by Direct Method	Up to Ø 350 x 500 mm	1 µm
264	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Roundness (L.C.: 0.3 nm)	Using Glass Hemisphere by Direct Method	Up to Ø 350 x 500 mm	0.04 µm
265	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Straightness of Vertical Column	Using Master Cylinder by Direct Method	Up to Ø 350 x 500 mm	1 µm
266	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Magnification	Using Magnification (Flick) Standard by Direct Method	Up to Ø 350 x 500 mm	0.4 µm
267	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Straightness of Horizontal Arm	Using Optical Flat by Direct Method	Up to Ø 350 x 500 mm	1 µm
268	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block)	Using Gauge Block Interferometer by Direct Method	> 100 mm to 300 mm	{0.02 + (L / 1007)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 50 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
269	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block)	Using Slip Gauge & Universal Length Measuring Machine by Comparison Method	101 mm to 1000 mm	{0.3 + (L / 2000)} µm, where L is in mm
270	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block)	Using Slip Gauges & Electronic Probe by Comparison Method	> 100 mm to 300 mm	{0.45 + (L / 1000)} µm, where L is in mm
271	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block)	Using CMM & Long Slip Gauges by Comparison Method	> 300 mm to 1000 mm	{0.6 + (L / 925)} µm, where L is in mm
272	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block) - Inch	Using Gauge Block Interferometer by Direct Method	0.5 mm to 101.6 mm	{0.03 + (L / 1666)} µm, where L is in mm
273	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block) - Inch	Using Slip Gauges & Slip Gauge Comparator by Comparison Method	0.5 mm to 101.6 mm	{0.056 + (L / 1560)} µm, where L is in mm
274	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block) - Metric	Using Gauge Block Interferometer by Direct Method	0.5 mm to 100 mm	{0.02 + (L / 3000)} µm, where L is in mm
275	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge (Gauge Block) - Metric	Using Slip Gauges & Slip Gauge Comparator by Comparison Method	0.5 mm to 100 mm	{0.043 + (L / 1600)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 51 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
276	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge / Gauge Block Calibrator - (Probe Range : (±) 10 µm) (L.C.: 1 nm)	Using Slip Gauges by Direct Method	Up to 100 mm	0.024 µm
277	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Spherical Master, Thread Measuring Ball, Master Steel Ball - Surface Roughness (Ra)	Using Roughness Tester by Direct Method	Up to 10 µm	5.5 %
278	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Spherical Master, Thread Measuring Ball, Master Steel Ball - Circularity	Using Form Tester by Direct Method	0.8 mm to 50 mm	0.06 µm
279	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Spherical Master, Thread Measuring Ball, Master Steel Ball - Full Sphere	Using Universal Length Measuring Machine by Comparison Method	0.8 mm to 50 mm	0.3 µm
280	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Spherical Master, Thread Measuring Ball, Master Steel Ball - Hemisphere	Using CMM by Direct Method	0.8 mm to 50 mm	2 µm
281	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Step Gauge	Using Step Gauge & CMM by Comparison Method	Up to 1100 mm	{0.38 + (L / 1325)} µm, where L is in mm
282	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Surface Roughness Master - Depth	Using Roughness Tester by Direct Method	0.01 µm to 10 µm	5.5 %

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 52 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
283	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Surface Roughness Master - Ra	Using Roughness Tester by Direct Method	0.01 µm to 7 µm	5.5 %
284	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Surface Roughness Master - Rmax	Using Roughness Tester by Direct Method	0.03 µm to 25 µm	5.5 %
285	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Surface Roughness Master - Rz	Using Roughness Tester by Direct Method	0.03 µm to 25 µm	5.5 %
286	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Ultra Precision Co-Ordinate Measuring Machine (L.C.: 0.001 µm)	Using Slip Gauges & Glass Scale by Direct Method	130 x 130 x 100 mm	0.6 µm
287	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.01 µm)	Using Slip Gauges by Direct Method	Up to 100 mm	{0.16 + (L / 500)} µm, where L is in mm
288	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.01 µm)	Using Laser Measuring System by Direct Method	Up to 1600 mm	{0.04 + (L / 2000)} µm, where L is in mm
289	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring System - Angular (L.C.: 1 second of arc)	Using Angle Gauge Block by Direct Method	0 ° to 360 °	5 second of arc

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	53 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
290	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring System - Linear (L.C.: 0.1 µm)	Using Glass Scale by Direct Method	Up to 300 x 200 mm	{0.7 + (L / 385)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 54 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
Site Facility					
1	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Rotary / Indexing Table (Multi Rotation)	Using Autocollimator by Comparison Method	0 ° to 360 °	1.5 second of arc
2	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Rotary / Indexing Table (Multi Rotation)	Using Laser Measuring System with Rotary Indexer by Comparison Method	0 ° to 360 °	2.8 second of arc
3	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate	Using Electronic Level by Direct Method	Up to 5000 x 3000 mm	0.74 x Sqrt {(L + W) / 100} µm, where L & W are in mm
4	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	2D Height Gauge, Height Measuring Instrument - Linear (L.C.: 0.1 µm)	Using Step Gauge, Slip Gauges, Electronic Probe by Comparison Method	Up to 1000 mm	{0.85 + (L / 342)} µm, where L is in mm
5	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	2D Height Gauge, Height Measuring Instrument - Squareness (L.C.: 0.1 µm)	Using Master Cylinder by Comparison Method	Up to 500 mm	1.7 µm

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	55 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
6	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	2D Height Gauge, Height Measuring Instrument - Squareness (L.C.: 0.1 µm)	Using Granite Square by Comparison Method	Up to 1000 mm	4 µm
7	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Articulated Arm CMM (Portable Arm CMM) - Linear Error (L.C.: 1 µm)	Using Long Slip Gauge by Direct Method	Up to Ø 2.5 m	{6.44 + (L / 960)} µm, where L is in mm
8	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Articulated Arm CMM (Portable Arm CMM) - Location Error (L.C.: 1 µm)	Using Master Sphere by Direct Method	Up to Ø 2.5 m	3 µm
9	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Articulated Arm CMM (Portable Arm CMM) - Size Error (L.C.: 1 µm)	Using Master Sphere by Direct Method	Up to Ø 2.5 m	3 µm
10	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Pitch	Using Laser Measuring System by Direct Method	Up to 10 m	2.4 second of arc
11	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Positioning / Indexing Accuracy (L.C.: 0.0001°)	Using Laser Measuring System with Rotary Indexer by Direct Method	0 ° to 360 °	2.8 second of arc
12	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Positioning / Indexing Accuracy (L.C.: 0.0001°)	Using Autocollimator by Direct Method	0 ° to 360 °	2.8 second of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 56 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
13	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Roll	Using Electronic Level by Direct Method	Up to 10 m	2 second of arc
14	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Squareness	Using Laser Measuring System by Direct Method	> 4 m to 10 m	2 second of arc
15	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Squareness	Using Granite Square by Direct Method	100 mm to 700 mm	5.35 µm
16	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Squareness	Using Laser Measuring System by Direct Method	Up to 4 m	1.5 second of arc
17	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Straightness (Axial Length - Up to 4 m)	Using Laser Measuring System by Direct Method	(±) 2.5 mm	{1 + (L / 500)} µm, where L is in mm
18	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Straightness (Axial Length - > 4 m to 10 m)	Using Laser Measuring System by Direct Method	(±) 2.5 mm	{6 + (L / 1500)} µm, where L is in mm
19	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tool - Yaw	Using Laser Measuring System by Direct Method	Up to 10 m	2.4 second of arc

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 57 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
20	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	CNC Machine Tools - Positioning Accuracy (L.C.: 0.00001 mm)	Using Laser Measuring System by Direct Method	Up to 10 m	{0.2 + (L / 600)} µm, where L is in mm
21	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Co-Ordinate Measuring Machine - Maximum Permissible Error (L.C.: 0.1 µm)	Using Master Sphere by Direct Method	Ø 15 mm to Ø 50 mm	0.4 µm
22	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Co-Ordinate Measuring Machine - Maximum Permissible Error (L.C.: 0.1 µm)	Using Step Gauge, Slip Gauges by Direct Method	120 x 120 x 80 mm to 3000 x 2000 x 1500 mm	{0.41 + (L / 1956)} µm, where L is in mm
23	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Gear Testing Machine	Using Lead & Profile Master, Master Gear by Direct Method	Up to Ø 300 mm	2.6 µm
24	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Laser Micrometer (L.C.: 0.1 µm)	Using Cylindrical Pin, Plug Gauge by Direct Method	Up to 50 mm	{0.3 + (L / 400)} µm, where L is in mm
25	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Length Measuring Machine (L.C.: 1 µm)	Using Laser Measuring System by Direct Method	0 to 5 m	{1.3 + (L / 300)} µm, where L is in mm
26	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Metallurgical Microscope - Length (L.C.: 0.1 µm)	Using Glass Scale by Direct Method	Up to 100 mm	{0.9 + (L / 402)} µm, where L is in mm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 58 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
27	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Metallurgical Microscope - Magnification	Using Glass Scale by Direct Method	50 X to 1000 X	0.4 %
28	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Angular (L.C.: 1 second of arc)	Using Angle Gauge Blocks by Direct Method	0 ° to 360 °	17 second of arc
29	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Linear (L.C.: 0.1 µm)	Using Glass Scale by Direct Method	Up to 200 mm	{0.85 + (L / 325) µm, where L is in mm
30	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Linear (L.C.: 0.1 µm)	Using Laser Measuring System by Direct Method	Up to 500 mm	{0.7 + (L / 400)} µm, where L is in mm
31	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Profile Projector - Magnification	Using Glass Scale & Vernier Caliper by Direct Method	5 X to 100 X	0.4 %
32	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roughness Tester - Portable (L.C.: 1 nm)	Using Depth Master & Surface Roughness Masters by Direct Method	0.01 µm to 25 µm	5.5 %
33	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roughness Tester - Stand Alone (L.C.: 0.3 nm)	Using Depth Master & Surface Roughness Masters by Direct Method	0.01 µm to 25 µm	4.1 %

SCOPE OF ACCREDITATION

Laboratory Name :	METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	CC-2153	**Page No**	59 of 60
Validity	08/09/2024 to 07/09/2026	**Last Amended on**	-

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
34	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Perpendicularity of Vertical Column	Using Master Cylinder by Direct Method	Up to Ø 350 x 500 mm	1 µm
35	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Roundness (L.C.: 0.3 nm)	Using Glass Hemisphere by Direct Method	Up to Ø 350 x 500 mm	0.04 µm
36	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Straightness of Vertical Column	Using Master Cylinder by Direct Method	Up to Ø 350 x 500 mm	1 µm
37	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Magnification	Using Magnification (Flick) Standard by Direct Method	Up to Ø 350 x 500 mm	0.4 µm
38	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Roundness, Form Tester - Straightness of Horizontal Arm	Using Optical Flat by Direct Method	Up to Ø 350 x 500 mm	1 µm
39	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Setting Bench - Positional Accuracy	Using Laser Measurement System by Direct Method	Up to 1000 mm	{0.2 + (L / 345)} µm, where L is in mm
40	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Slip Gauge / Gauge Block Calibrator - (Probe Range : (±) 10 µm) (L.C.: 1 nm)	Using Slip Gauges by Direct Method	Up to 100 mm	0.024 µm

SCOPE OF ACCREDITATION

Laboratory Name : METROLOGY LABORATORY, CMTI, TUMKUR ROAD, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number CC-2153 **Page No** 60 of 60

Validity 08/09/2024 to 07/09/2026 **Last Amended on** -

S.No	Discipline / Group	Measurand or Reference Material/Type of instrument or material to be calibrated or measured / Quantity Measured /Instrument	Calibration or Measurement Method or procedure	Measurement range and additional parameters where applicable(Range and Frequency)	* Calibration and Measurement Capability(CMC)(±)
41	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.01 µm)	Using Slip Gauges by Direct Method	> 100 mm to 300 mm	{0.55 + (L / 1000)} µm, where L is in mm
42	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.01 µm)	Using Laser Measuring System by Direct Method	Up to 1000 mm	{0.1 + (L / 345)} µm, where L is in mm
43	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Length Measuring Machine (L.C.: 0.01 µm)	Using Slip Gauges by Direct Method	Up to 100 mm	{0.2 + (L / 500)} µm, where L is in mm
44	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Measuring Microscope (L.C.: 1 µm)	Using Slip Gauges & Electronic Probe by Direct Method	Up to 200 mm	{0.6 + (L / 500)} µm, where L is in mm
45	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Universal Measuring Microscope (L.C.: 1 µm)	Using Laser Measuring System by Direct Method	Up to 500 mm	{0.7 + (L / 400)} µm, where L is in mm
46	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring System - Angular (L.C.: 1 second of arc)	Using Angle Gauge Block by Direct Method	0 ° to 360 °	5 second of arc
47	MECHANICAL-DIMENSION (PRECISION INSTRUMENTS)	Video Measuring System - Linear (L.C.: 0.1 µm)	Using Glass Scale by Direct Method	Up to 300 x 200 mm	{0.7 + (L / 385)} µm, where L is in mm

*** CMCs represent expanded uncertainties expressed at approximately the 95% level of confidence, using a coverage factor of k = 2.**