

**Laboratory** Metrological Services Dept., Opto Electronics Factory, Govt. of India,  
Ministry of Defence, Raipur, Dehradun, Uttarakhand

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

**Certificate Number** CC-2514

**Page** 1 of 2

**Validity** 03.01.2018 to 02.01.2020

**Last Amended on** --

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
<b><u>MECHANICAL CALIBRATION</u></b>				
<b>I.</b>	<b>DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)</b>			
1.	Calipers <sup>s</sup> (Digital/ Vernier) L. C.: 0.01 mm	0 to 300 mm	19 $\mu$ m	Using Gauge Blocks
2.	External Micrometer <sup>s</sup> (Digital/ Mechanical) L. C.: 0.001 mm	0 to 100 mm 100 mm to 300 mm	1.2 $\mu$ m 3.2 $\mu$ m	Using Gauge Blocks
3.	Dial Gauge <sup>s</sup> Plunger Type (Digital/Dial) L.C.: 0.001 mm	0 to 50 mm	2.0 $\mu$ m	Using Gauge Blocks/LMM
4.	Dial Gauge <sup>s</sup> Lever Type L.C.: 0.002 mm	0 to 0.8 mm	2.4 $\mu$ m	Using LMM
5.	Plain Plug Gauge <sup>s</sup>	0.70 mm to 100 mm	1.9 $\mu$ m	Using LMM
6.	Cylindrical Pins <sup>s</sup>	1.00 mm to 10 mm	2 $\mu$ m	Using LMM
7.	Thread Plug Gauge <sup>s</sup> Pitch Pitch Dia	Up to 2 mm Up to 100 mm	6.2 $\mu$ m 3 $\mu$ m	Using LMM/ Thread Measuring Wire

**Shally Sharma**  
Convenor

**Avijit Das**  
Program Director

**Laboratory** Metrological Services Dept., Opto Electronics Factory, Govt. of India,  
Ministry of Defence, Raipur, Dehradun, Uttarakhand

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

**Certificate Number** CC-2514

**Page** 2 of 2

**Validity** 03.01.2018 to 02.01.2020

**Last Amended on** --

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability ( $\pm$ )	Remarks
8.	Height Gauge <sup>§</sup> (Electronic/ Vernier) L.C.: 0.01 mm	0 to 450 mm	9.2 $\mu$ m	Using Gauge Blocks & Surface Plate
9.	Length Rod/ Setting Rod <sup>§</sup>	25 mm to 100 mm	3.5 $\mu$ m	Using LMM
10.	Feeler Gauge <sup>§</sup>	0 to 1 mm	2.0 $\mu$ m	Using Length Measuring Machine
11.	Tool Makers Microscope <sup>§</sup> Length L.C.: 0.001 mm Angle L.C.: 1'	0 to 150 mm 0 to 360°	2.4 $\mu$ m 2.2 min. of arc	Using Slip & Angle Gauge Blocks
12.	Floating Carriage Micrometer <sup>§</sup> L.C.: 0.0002 mm	0 to 25 mm	1.0 $\mu$ m	Using Gauge Blocks
13.	Bevel Protractor <sup>§</sup> L.C.: 5'(min.)	0 to 90° X4 Quadrant	3.0 min. of arc	Using Angle Gauge Blocks and Square Master
II.	<b>DIMENSION (PRECISION INSTRUMENTS)</b>			
1.	Length Measuring Machine <sup>§</sup> L.C.: 0.0001 mm	0 to 300 mm	0.95+2.5 L $\mu$ m 'L' in meter	Using Gauge Blocks

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

<sup>§</sup>Only in Permanent Laboratory

Shally Sharma  
Convenor

Avijit Das  
Program Director