National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

DEPARTMENT OF METROLOGY & CALIBRATION LABORATORY, INSTITUTE FOR AUTO PARTS & HAND TOOLS TECHNOLOGY

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

A9, PHASE-V, FOCAL POINT, LUDHIANA, PUNJAB, INDIA

in the field of

CALIBRATION

Certificate Number: CC-2308

Issue Date: 07/08/2019 **Valid Until:** 06/08/2021*

***The validity is extended for one year up to 06.08.2022**

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity : DEPARTMENT OF METROLOGY & CALIBRATION LABORATORY, INSTITUTE FOR AUTO PARTS & HAND TOOLS TECHNOLOGY

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer

National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

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Validity 07/08/2019 to 06/08/2021* **Last Amended on** -

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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.)	Calipers(Vernier/Dial /Digital) L.C. 0.01/0.020 mm	Using slip gauges	0 to 450 mm	17µm
2	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Depth Gauge (Vernier/Dial/Digital) L.C. 0.01mm	Using Slip Gauges	0 to 300 mm	17µm
3	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauge (Lever Type) L.C. 0.001mm & L.C. 0.010mm	Using ULM	0 to 10 mm	1.90 µm (L.C. 0.001 mm) 6.0 µm (L.C. 0.010 mm)
4	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Dial Gauges (Plunger Type) L.C. 0.001mm	Using ULM	0 to 10 mm	1.90 µm

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5	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	External Micrometers L.C. 0.001/0.010mm	Using Slip Gauges	0 to 100 mm	3.6 µm
6	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Feeler Gauge	Using ULM	0 to 1 mm	2.1 µm
7	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Gauges Block Steel	Using Comparator Block , Gauges Blocks	0.5 to 100 mm	0.30 µm to 0.66 µm
8	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Height gauges (Vernier/Dial/Digital) L.C. 0.01/0.020 mm	Using slip Gauges	0 to 450 mm	18.1 µm

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9	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Micrometer Setting Rod	Using ULM	0 to 75 mm	2.7 µm
10	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Plug Gauge	Using ULM	3 to 100 mm	3.0 µm
11	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Plain Ring Gauge	Using ULM	20 to 100 mm	7.7 µm
12	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Snap Gauges	Using Slip Gauges	5 to 100 mm	3.0 µm

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13	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Plug Gauge (Major Diameter & Effective Diameter)	Using ULM ,Thread measuring Wires	5 to 100 mm	2.91 µm
14	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Thread Ring Gauge (Minor Diameter & Effective Diameter)	Using ULM	20 to 100 mm	5.90 µm

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Site Facility					
1	MECHANICAL-DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)	Surface Plate (Grade 0,1,2,3)	Using Electronic Leveler	100 to 2500 mm	2.0 Sq.root (L+W)/125,L&W in mm

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