Laboratory	**Cross Calibration Center, 553, Sector-23, N.I.T. Faridabad, Haryana**
Accreditation Standard	**ISO/IEC 17025: 2005**
Certificate Number	**CC-2246** **Page 1 of 6**
Validity	**03.12.2017 to 02.12.2019** **Last Amended on 07.02.2018**

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
		ELECTRO-TECHNICAL CALIBRATION		
I.	**MEASURE**			
1.	AC Voltage[$]	**50 Hz** 10 mV to 100 mV 100 mV to 1 V 1 V to 100 V 100 V to 750 V	 0.6 % 0.6 % 0.6 % 0.6 %	Using 6½ Digital Multimeter By Direct / Comparison Method
2.	DC Voltage[$]	1 mV to 100 mV 100 mV to 1 V 1 V to 10 V 10 V to 100 V 100 V to 1000 V	0.6 % 0.6 % 0.6 % 0.6 % 0.6 %	Using 6 ½ Digital Multimeter By Direct / Comparison Method
3.	AC Current[$]	**50 Hz** 100 mA to 1 A 1 A to 3 A	 0.6 % 0.6 %	Using 6½ Digital Multimeter By Direct/ Comparison Method
4.	DC Current[$]	1 mA to 10 mA 10 mA to 100 mA 100 mA to 1 A 1 A to 3 A	0.3 % 0.3 % 0.3 % 0.3%	Using 6½ Digital Multimeter By Direct / Comparison Method
5.	Resistance 4 W[$]	10 Ω to 100 Ω 100 Ω to 1 k Ω 1 k Ω to 10 k Ω 10 k Ω to 100 k Ω	0.1% 0.1% 0.1% 0.1%	Using 6½ Digital Multimeter By Direct / Comparison Method
6.	Resistance 2 W[$]	1 M Ω to 10 M Ω 10 M Ω to 100 M Ω	1% 1%	Using 6½ Digital Multimeter By Direct / Comparison Method
7.	Frequency [$]	10 Hz to 300 K Hz	0.2%	Using 6½ Digital Multimeter By Direct / Comparison Method

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8.	Temperature Simulation# (Temperature Indicator /Controller)			
	RTD/ Pt100	(-) 190 °C to 850 ° C	0.7 %	Using Universal Calibrator/ Digital Process Multimeter By Direct method
	Thermocouple			
	J Type	0 °C to 750 °C	0.7 %	
	K Type	0 °C to 1370 °C	0.7 %	
	R Type	200 °C to 1750 °C	0.7 %	
	S Type	0 °C to 1750 °C	0.7 %	

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
	MECHANICAL CALIBRATION			
I.	**DIMENSION (BASIC MEASURING INSTRUMENT, GAUGE ETC.)**			
1.	Caliper [$] (Digital/Dial/Vernier) L.C.: 10 µm	0 to 600 mm	14.0 µm	Using Caliper Checker & External Micrometer By Comparison Method
2.	Depth Caliper [$] (Digital/Dial/Vernier) L.C.: 10 µm	0 to 300 mm	11.0 µm	Using Gauge Block & Surface Plate By Comparison Method
3.	Height Gauge[$] (Digital/Dial/Vernier) L.C.: 10 µm	0 to 600 mm	15 µm	Using Caliper Checker & Surface Plate By Comparison Method
4.	External Micrometer[$] (Digital/Dial/Vernier) L.C.: 1 µm [Φ]	0 to 100 mm 100 mm to 300 mm	2.1 µm 4.6 µm	Using Gauge Block By Comparison Method
5.	Micrometer Setting Rod[$]	0 to 275 mm	3.9 µm	Using Gauge Block Set, Plunger Dial gauge & Comparator Stand By Comparison Method
6.	Depth Micrometer[$] L.C.: 10 µm	0 to 100 mm	6.8 µm	Using Gauge Block Set & Surface Plate By Comparison Method
7.	Plunger Dial Gauge[$] L.C.: 1 µm L.C.: 10 µm	0 to 10 mm 0 to 25 mm	2.5 µm 3.4 µm	Using Dial Calibration Tester By Comparison Method

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
8.	Lever Type Dial Gauge[$] L.C.: 1 µm L.C.: 10 µm	 0 to 0.14 mm 0 to 1 mm	 2.5 µm 3.4 µm	Using Dial Calibration Tester By Comparison Method
9.	Bore Gauge[$]	1 mm Travel	4.0 µm	Using Dial Calibration Tester By Comparison Method
10.	Plain Plug Gauge[$]	0 to 100 mm 100 mm to 300 mm	4.2 µm 5.3 µm	Using Gauge Block Set, Plunger Dial gauge & Comparator Stand By Comparison Method
11.	Plain Snap gauge[$]	0 to 250 mm	5.4 µm	Using Gauge Block Set By Comparison Method
12.	Width Gauge[$]	0 to 50 mm	2.8 µm	Using Digimatic Micrometer By Comparison Method
13.	Flush Pin Gauge[$]	0 to 200 mm	3.7 µm	Using Gauge Block Set, Plunger Dial gauge & Comparator Stand By Comparison Method
14.	Thread Plug Gauge[$]	3 mm to 50 mm	3.5 µm	Using FCDM & Thread Measuring Wire By Comparison Method
15.	Dial Thickness Gauge[$] L.C.: 10 µm	 0 to 10 mm	 3.6 µm	Using Gauge Block Set By Comparison Method
16.	Pistol Caliper[$] L.C.: 100 µm	 0 to 100 mm	 68.0 µm	Using Gauge Block Set By Comparison Method

Sl.	Quantity Measured / Instrument	Range/Frequency	*Calibration Measurement Capability (±)	Remarks
17.	Dial Inside Caliper [$] L.C.: 10 µm	5 mm to 100 mm	7.1 µm	Using Digimatic Micrometer By Comparison Method
18.	Feeler Gauge[$]	0.05 mm to 1 mm	3.7 µm	Using Digimatic Micrometer By Comparison Method
19.	Thickness Foil[$]	0 to 1 mm	3.6 µm	Using Digimatic Micrometer By Comparison Method
20.	Bevel Protractor[$] L.C.: 5'	0° - 90° - 0°	5' arc	Using Angel Gauge Block & Surface Plate By Comparison Method
21.	Comparator Stand Flatness[$]	200 mm x 200 mm	12.1 µm	Using Height Gauge, Plunger Dial Gauge & Surface Plate By Comparison Method
22.	Vee Block[$] Parallelism Symmetry Squareness	200 mm x 150 mm x 130 mm	12.2 µm	Using Height Gauge, Plunger Dial Gauge, Mandrel & Surface Plate By Comparison Method
23.	Surface Plate [♠]	2000 mm x 1500 mm	$1.5 \times \sqrt{\frac{L+W}{80}}$ µm L & W in mm	Using Electronic Level By Comparison Method

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II.	**PRESSURE INDICATING DEVICES**			
1	Digital/Analog Pressure Gauge, Pressure Transducer with Indicator[#]	0 to 3.5 MPa 0 to 60 MPa	0.026 MPa 0.38 MPa	Using Digital Pressure Gauge Using Oil Based Pump Comparator by Comparison Method based on DKD-R6-1

*** Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%**
[$] Only in Permanent Laboratory
[*] Only for Site Calibration
[#] The laboratory is also capable for site calibration however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.
[Φ] Laboratory can also calibrate instruments/devices of coarser resolution / least count within the accredited range using same reference standard/ master equipment under the scope of accreditation.

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