Pune, Maharashtra

Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration Issue Date 31.03.2015

Certificate Number C-0227 Valid Until 30.03.2017

Last Amended on 05.06.2015 Page 1 of 6

	Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
DI	MENSION			
1.	Calipers Vernier / Dial / Digital)			
	L.C. : 0.01mm ^Φ	Upto 600 mm	19.3µm	Caliper Checker & Slip Gauge Using Caliper Checker & Slip Gauges. by Comparison Method as per IS 3651 (Part –II)-1985
	Pistol Caliper L.C. : 0.01mm	Upto 100 mm	19.3 µm	Slip Gauge by Comparison Method
2.	External Micrometer			
	L.C.: 0.001mm	0 to 25 mm 25 mm to 150 mm	0.90 μm 1.75 μm	Slip Gauge. Using Slip Gauges by Comparison
3.	L.C.: 0.01mm Height Gauge (All Type)	Upto 300 mm	6.4 µm	Method as per IS 2967-1983
	L.C.: 0.001mm L.C.: 0.01mm L.C.: 0.02mm	Upto 600mm Upto 600mm Upto 600mm	6.9μm 19.0μm 22.0μm	Using Caliper Checker & Slip Gauge by Comparison Method as per IS 2921-1988
4.	Plunger Dial Gauges			
	L.C. : 0.0005 mm	0.1 mm	0.6 μm	Slip Gauge with Comparator Stand Comparison Method as per IS 2092-1983.

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Pune, Maharashtra

Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration Issue Date 31.03.2015

Certificate Number C-0227 Valid Until 30.03.2017

Last Amended on 05.06.2015 Page 2 of 6

	Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
	L.C. : 0.001 mm ^Φ	Upto 50 mm	2.6 μm	Dial Calibration Tester & Slip Gauge. Comparison Method as per IS 2092-1983.
	Lever Type Dial Gauge.			•
	L.C. : 0.001mm ^Φ	Upto 3 mm	2.6 μm	Dial Calibration Tester & Slip Gauge. Comparison Method IS 11498-1985.
5.	Bore Gauges (Only for Transmission accuracy : 2mm)	Transmission Upto 2 mm	6.60 μm	Dial Calibration Tester Comparison Method as per JIS B 7515
6.	Plain Plug Gauge / Width Gauge / Depth Gauge.	Upto 100 mm 100 mm to 300 mm	1.80 μm 3.20 μm	Slip Gauge & Electronic Comparator With Stand Comparison Method as per IS 3455-1971.
	Cylindrical Setting Masters / O D Masters.	1mm to 100 mm	1.80 μm	Comparison Method as per IS 4349-1987.
	Widstels / O D Widstels.	100 mm to 300 mm	3.20 µm	as per 15 +5+7-1767.
	Pin Gauge	Upto 20 mm	1.80 µm	Comparison Method as per IS 11103-1984.
7.	Snap Gauges / Gap Gauges	Upto 300 mm	1.80 µm	Slip Gauges. Comparison Method as per IS 3455-1971.
8.	Feeler Gauges	Upto 1 mm	2.60 μm	External Micrometer. Comparison Method as per IS 3179-1990.

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Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration Issue Date 31.03.2015

Certificate Number C-0227 Valid Until 30.03.2017

Last Amended on 05.06.2015 Page 3 of 6

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9.	Dial Snap Gauge (Parallelism Check between Gauging Faces)	Upto 200 mm	2.00 μm	Slip Gauge & Electronic Comparator Comparison Method as per IS 14271-1995.
10	Micrometer Setting Standards / Length Bar / Height Setting Masters	Upto 100 mm 100 mm to 300 mm	1.80 μm 3.20 μm	Slip Gauge & Electronic Comparator With Stand Comparison Method
11	Inside Micrometer (2 Point Type) LC: 0.01mm	5 mm to 300 mm	8.0 μm	Slip Gauges & Slip Gauge Accessories. Comparison Method as per IS 2966-1964
12	Dial Thickness Gauge (L. C. 0.001 / 0.01mm)	Upto 50 mm	5.80 μm	Slip Gauges. Comparison Method
13	Vernier Depth Gauge. L C 0.01 mm [©]	Upto 300 mm	14.00 μm	Long Slip / Slip Gauges. Comparison Method as per IS 4213-1991
	Depth Micrometer L C 0.01mm	Upto 300 mm	14.00 μm	Long Slip / Slip Gauges. Comparison Method as per JIS B 7544
14	Dial Calibration Tester	Upto 25 mm	1.80 µm	Slip Gauge & Electronic Comparator Comparison Method

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Pune, Maharashtra

Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration Issue Date 31.03.2015

Certificate Number C-0227 Valid Until 30.03.2017

Last Amended on 05.06.2015 Page 4 of 6

	Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
15	Plain Ring Gauge	4 mm to 150 mm	1.80 μm	Length Measuring Machine. Comparison Method as per IS 3485-1993
16	Bevel Protractor / Degree Protractor (L C : 5')	0 ° to 360 °	3' 47"	Sine Bar & Slip Gauges. Comparison Method as per IS 4239-1970
17	Parallel Thread Plug Gauge	0 to 100 mm	4.30 μm	Floating Carriage Micrometer. Comparison Method as per IS 2334-2001
	Taper Thread Plug Gauge	0 to 100 mm	4.30 μm	Floating Carriage Micrometer. Comparison Method
18	Straight Edge	Upto 750 mm Long	6.0 μm	Micro Indicator & Surface Plate. Comparison Method as per IS 12937-1990
19	Thread Ring Gauge	3 mm to 100 mm	2.40 μm	Length Measuring Machine. Comparison Method as per IS 2334-2001

Vishal Shukla Convenor

Pune, Maharashtra

Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration Issue Date 31.03.2015

Certificate Number C-0227 Valid Until 30.03.2017

Last Amended on 05.06.2015 Page 5 of 6

	Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
20	Thread Pitch Gauge	For Pitch	25.0 μm	Vision Measuring System Comparison Method as per IS 4211-1993
21	Radius Gauge	For Radius	25.0 μm	Vision Measuring System Comparison Method as per IS 5273-1969.
22	Electronic Height Gauge* L C: 0.001 mm	Upto 600 mm	10.90 μm	Caliper Checker, Slip Gauge & Long Slip Gauge. Comparison Method
23	Profile Projector * a. Angular Measurement	Upto 360 °	2' 5"	Angle Gauge Block. Comparison Method as per JIS B 7184
	b. Linear Measurement (X & Y Axis)	Upto 100 mm	7.40 µm	Slip Gauge. Comparison Method as per JIS B 7184
	c. Magnification Accuracy	Upto 100 x	0.80 %	Slip Gauge & Dial Caliper. Comparison Method as per JIS B 7184

Vishal Shukla Convenor

Pune, Maharashtra

Accreditation Standard ISO/IEC 17025:2005

Discipline Mechanical Calibration Issue Date 31.03.2015

Certificate Number C-0227 Valid Until 30.03.2017

Last Amended on 05.06.2015 Page 6 of 6

	Quantity Measured/ Instrument	Range / Frequency	*Calibration Measurement Capability (±)	Remarks
24	Surface Plate *	Upto 3000 mm x 3000 mm	6.9 x Ö (L+W) µm (L & W in mm)	Sprit Level (Precision Level.) Comparison Method as per IS: 7327-2003 & IS: 2285-2003
25	Vee Block ^{\$} a. Parallelism / b. Squareness c. Symmetry	Upto 150 mm	7.00 μm 11.60 μm 7.00 μm	Micro Indicator, Squareness Cylinder & Surface Plate by Comparison Method as per IS 4960-1968

^{*} Measurement Capability is expressed as an uncertainty (±) at a confidence probability of 95%

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^{*}Only for Site Calibration

^{\$}Only in Permanent Laboratory

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.