

**Calibration Charges: D1.02, Length, Dimension and Nanometrology**

**(w.e.f. 01.04.2021)**

**Length, Dimension and Nanometrology**

Sl. No.	Parameter	Item Type / Group	Item Name	Alias Name	Limitation / Condition	Charges per Item Rs.	Additional Charges Rs.	Description for Additional Charges	Remarks, if any	No. of Points for Calibration
1	Length	Line Standard	Reference Standard Meter Bar	Meter Bar	1m	48000	1200	For each additional point above 10 points		10
2	Length	Line Standard	Graticule Scale upto 300 mm	Glass Scale	300 mm	9844	700	For each additional point above 10 points	Laser_UMM	10
3	Length	Line Standard	Graticule Scale >300mm -1000 mm	Glass Scale	>300 upto600 mm	29175	1200	For each additional point above 10 points	Q_vision_CMM	10
4	Length	Line Standard	Glass Grid	10X comparator		10500	4750	For each additional grid with same setting	Mean of upto10 grid spacing of each axis	1
5	Length	Line Standard	Measuring Tape (Steel /woven/glass Fibre .)		50 m	5342	600	For each additional meter	IS: 1270-1991	One point per meter
6	Length	End Standard	single Gauge Block	Slip Gauge	By Comparison Method	15500		for first gauge block and each gauge in case the gauges are odd size	IS: 2984-2003, ISO:3650-1998	for first gauge block or each gauge block of odd size provided NPL-India accepts to calibrate ,Deviation from central length #
7	Length	End Standard	Gauge Block Set	Slip Gauge	By Comparison Method	15500 for first gauge block	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-1998	for first gauge block of set with traditional denomination considered by NPL-india, , Deviation from central length #
8	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method ( Designated M112)	By Comparison Method	54350	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-1998	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
9	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / Designated M125	By Comparison Method	58900	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2000	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
10	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / Designated M122	By Comparison Method	57850	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2001	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
11	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method ( Designated M121)	By Comparison Method	57500	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
12	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / Designated M111	By Comparison Method	54000	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
13	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M105	By Comparison Method	51900	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-

										india, Deviation from central length #
14	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M103	By Comparison Method	51200	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
15	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M87	By Comparison Method	45600	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
16	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M83	By Comparison Method	44200	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
17	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M79	By Comparison Method	42800	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
18	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M78	By Comparison Method	42450	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
19	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M76	By Comparison Method	41750	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
20	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M50	By Comparison Method	32650	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
21	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M47	By Comparison Method	31600	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
22	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M46	By Comparison Method	31250	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #

23	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M41	By Comparison Method	29500	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
24	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M38	By Comparison Method	28450	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
25	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M33	By Comparison Method	26700	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
26	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M32	By Comparison Method	26350	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
27	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M27	By Comparison Method	24600	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
28	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M18	By Comparison Method	21450	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
29	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M10	By Comparison Method	18650	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
30	Length	End Standard	Gauge Block Set	Slip Gauge By Comparison Method / M9	By Comparison Method	18300	350	for subsequent gauge blocks up to 100mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
31	Length	End Standard	single Gauge Block	Slip Gauge	By Interferometric Method	22860	22860	for first gauge block and subsequent gauge block above 102mm	IS: 2984-2003, ISO:3650-1998	Deviation from central length #
32	Length	End Standard	Gauge Blocks as Set	slip gauges submitted as a set	By Interferometric Method	22860	1700	for first gauge block and subsequent gauge block up to 102mm	IS: 2984-2003, ISO:3650-1997	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
33	Length	End Standard	Gauge Block Set	Slip Gauge Set By	By Interferometric Method	211560	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003,	for first gauge block of set with traditional

				Interferometric Method/M112					ISO:3650-1997	denomination considered by NPL-india, Deviation from central length #
34	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M125	By Interferometric Method	233660	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-1998	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
35	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M122	By Interferometric Method	228560	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-1999	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
36	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M121	By Interferometric Method	226860	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2000	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
37	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M111	By Interferometric Method	209860	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2001	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
38	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M105	By Interferometric Method	199660	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2002	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
39	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M103	By Interferometric Method	196260	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2003	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
40	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M87	By Interferometric Method	169060	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2004	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
41	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M83	By Interferometric Method	162260	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2005	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
42	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M79	By Interferometric Method	155460	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2006	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #
43	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M78	By Interferometric Method	153760	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2007	for first gauge block of set with traditional denomination considered by NPL-india, Deviation from central length #

Sl. No.	Quantity	Description	Material	Method	Tolerance	Grade	Material	Tolerance	Reference	Remarks
44	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M76	By Interferometric Method	150360	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2008	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
45	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M50	By Interferometric Method	106160	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2009	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
46	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M47	By Interferometric Method	101060	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2010	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
47	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M46	By Interferometric Method	99360	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2011	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
48	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M41	By Interferometric Method	90860	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2012	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
49	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M38	By Interferometric Method	85760	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2013	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
50	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M33	By Interferometric Method	77260	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2014	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
50	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M27	By Interferometric Method	67060	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2016	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
53	Length	End Standard	Gauge Block Set	Slip Gauge By Interferometric Method / M18	By Interferometric Method	51760	1700	for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2017	for first gauge block of set with traditional denomination considered by NPL-India, Deviation from central length #
57	Length	End Standard	Gauge Block Set for Mechanical comparator calibration	Special Gauge Set viz. M10/M11/M12/M18 (Excluding bridge type Gauge)	By Interferometric Method	55000 for first ten gauges	3500	for first ten gauges and for subsequent gauge blocks up to 102mm	IS: 2984-2003, ISO:3650-2018, Euramet-Cg-2,2011	Deviation from central length by interferometry and (Fo, Fu by comparison or Length variation 1mm, 1.005mm, 1.01mm size of gauge blocks)
58	Length	End Standard	Length Bar	Long Slip Gauge	By Comparison Method (	8200	above 100mm upto 300 mm	per gauge Single Point (length)	IS: 7014-1973 (Reaffirmed	per gauge (central length dev)

					Horizontal)				2005)	
59	Length	End Standard	Length Bar	Long Slip Gauge	By Comparison Method ( Horizontal)	8500	above300mm upto 500 mm	per gauge Single Point (length)	IS: 7014-1973 (Reaffirmed 2005)	per gauge (central length dev)
60	Length	End Standard	Length Bar	Long Slip Gauge	By Comparison Method ( Horizontal)	11500	above 500 to 1000 mm	per gauge Single Point (length)	IS: 7014-1973 (Reaffirmed 2005)	per gauge (central length dev)
61	Length	Thickness Standard	Feeler Gauge	Leaf Gauge / Slip	By Comparison Method ( Horizontal)	6000	3000 each leaf	for first leaf and subsequent leaf	IS: 3179-1990 (Reaffirmed 2005)	Thickness
62	Length	Diameter Standard	Plain Ring / Plug Gauge/sphere		By Comparison Method ( Horizontal)	8500		(Upto 100 mm)	IS: 3484-1993 / IS: 3485-1993 (Reaffirmed 1998)	Diameter and Variation in Diameter
63	Length	Dia Standard	Plain Ring / Plug Gauge/sphere		By Comparison Method ( Horizontal)	11000		>100 to 300 mm	IS: 3484-1993 / IS: 3485-1993 (Reaffirmed 1998)	Diameter and Variation in Diameter
64	Length	Dia Standard	Taper Plug/ Ring Gauge		By Comparison Method ( Horizontal)	11500	Upto 250 mm			Taper
65	Length	Instrument	Dial Gauge, Plunger Type		By Comparison Method ( Horizontal)	8000	0 to 50 mm			IS: 2092-1993
66	Length	Instrument	Dial Gauge, Lever Type		By Comparison Method ( Horizontal)	8000	0 to 10 mm			IS: 11498-1995
67	Length	Instrument	Engineering Parallel			3880	Upto 1000 mm			IS: 4241-1995
68	Length	Instrument	Gauge Block Calibrator *	Comparator	By Comparison Method	18715				Single Scale only
69	Length	Instrument	Gauge Block Calibrator	Comparator	By Comparison Method	37500				Three Scales
70	Length	Instrument	Mechanical Comparator		By Comparison Method	24500				
71	Length	Instrument	Floating Carriage Diameter Measuring Machine	FCDMM	By Comparison Method	30000				
72	Error of Indiacate Displacement	Instrument	Length Measuring Machine / Dial Gauge Tester	LMM / Horinzontal Metroscope / I Checker /Universal Measuring Machine /Digital Height Gauge		20500			wavelength compensated	Upto 25 mm (per Axis )
73	Length	Instrument	Length Measuring Machine / Dial Gauge Tester	LMM or Horinzontal Metroscope or Universal Measuring Machine/Digital Height Gauge		20500	2500	for subsequent 100 mm up to 1000 mm	wavelength compensated	for first 100mm (above 25 mm upto 100mm) of Single Axis in one orientation /each axis
74	Length	Instrument	Length Measuring Machine (Single Axis)	LMM or Horinzontal Metroscope or Universal Measuring Machine /Digital Height Gauge		46000	8800	For each additional meter		up to 1000 mm (Single Axis/each axis)
75	Length	Instrument	Caliper Checker/ Check Master	step gauge		28000	3000	for subsequent 100 mm up to 1000 mm(above 300 mm upto 1000mm)		for first 300mm / upto 300mm
76	Length	Instrument	3D-Coordnate Measuring Machine	CMM/Articulated CMM		48000	8800	subsequent 1 mm per axis above 1 m	single axis	up to 1m (addiotnal charges for subsequent 1m )
77	Length	Instrument	3D-Coordnate Measuring Machine	CMM/Articulated CMM		150000	8800	For each additional meter	three axis	Three axes, upto 1000 mm per axis
78	Length	Instrument	CNC Machine	Boring Machine /automatic moving machine up to 30m single axis		50000	8800	subsequent 1m per axis above 1m		up to 1m x1m x 1m (addiotnal charges for subsequent 1m per axis )

79	Length	Instrument	CNC Machine	Boring Machine /automatic moving machine up to 30m three axis		139000	8800	For each additional meter		Three axes, upto 1000 mm per axis
80	Length	Instrument	Dial Gauge Tester / Extensometer	(Except I Checker / Motorized dial tester)		24500	5000	per additional orientation/axis	(Except I Checker / Motorized dial tester)	
81	Length	Instrument	Electronic Probe			24500	5000	per additional scale		
82	Length	Accessory	Test Sieve	Sieve	IS: 460- 1985	16000				
83	Angle	Angle Standard	Angle Gauge block		IS: 6231-1994	9500	2000	for subsequent angle measurement on each angle block or on same block		
84	Angle	Angle Standard	Angle square block		IS: 6231-1994	15500				
85	Angle	Instrument	Polygon /Indexing Table/Optical Dividing Head with Scale	angular encoder,optical level	IS: 6987 / and	55000	3300	upto 12 Faces and For each additional face beyond 12 faces		
86	Angle	Instrument	Spirit Level	Level meter/Point laser level/optical level/line laser level/ Inclinometer	IS: 5706-1991	14000				
87	Angle	Instrument	Electronic Level	Level meter/Point laser level/optical level/line laser level		34000	6000	per point after 10 points		Angle
88	Angle	Instrument	Auto-collimeter (Single Axis)	Collimator/ thodolite station collimator/Angle dekker		28000				Angle
89	Angle	Instrument	Auto-collimeter (Dual Axis)	Collimator/ thodolite station collimator/Angle dekker		42000				Angle
90	Length & Angle	Instrument	Profile Projector	vedio profiler/vedio measuring machine		48000	8800	for subsequent 100 mm up to 1000 mm		Linear Scales up to 300mm and magnifications only
91	Length & Angle	Instrument	Profile Projector	vedio profiler/vedio measuring machine		24000				Angular Scale only
92	Length & Angle	Instrument	Profile Projector	vedio profiler/vedio measuring machine		65500	8800	for subsequent 100 mm up to 1000 mm		Linear scales up to 300mm, magnifications
93	Length & Angle	Instrument	Profile Projector	vedio profiler/vedio measuring machine		72000	8800	for subsequent 100 mm up to 1000 mm		Linear up to 300mm, Angular Scales & magnifications
94	Length & Angle	Instrument	Sine Bar / tilting table	Sine Bar	IS:5359-1993 / IS: 5979-1991	30000			up to 300mm	Centre distance of rollers, Flatness of Face, parallelism of rollers
95	Length & Angle	Instrument	Sine Bar / tilting table	Sine Bar	IS:5359-1993 / IS: 5979-1991	34000			above 300 mm	Centre distance of rollers, Flatness of Face, parallelism of rollers
96	Length & Frequency	Laser Source	Laser Interferrometer	Customer needs to ensure its frequency stablity (preferable by its prior calibration-certificate)	Distance / fringe count	48000				Linear Displacement

97	Form	Instrument	Tool Maker's Microscope	Universal Measuring Microscope		41000	11000	For Z axis		Linear Scales and magnifications only
98	Form	Instrument	Tool Maker's Microscope	Universal Measuring Microscope		26500				Angular Scale only
99	Form	Instrument	Tool Maker's Microscope	Universal Measuring Microscope		67500	10000	For Z axis		Linear, Angular Scales & magnifications
100	Form	Instrument	Formtester	Formtester/Roundness measuring machine		26200				Roundness,
101	Form	Instrument	Formtester	Formtester/Roundness measuring machine	up to 100mm straightness wayguide length	50400		up to 100mm straightness wayguide length		Roundness, Staightness,
102	Form	Instrument	Formtester	Formtester/Roundness measuring machine	up to 100mm straightness wayguide length	115000		up to 100mm straightness wayguide length		Roundness, Staightness, R-axis, Z-axis
103	Roughness	Roughness Standard@	Groov Depth Standards (Type D) / Roughness Comparison Specimen	Groov Depth Standards (Type D) / Roughness Comparison Specimen	ISO: 5436 (Type D) / IS: 4290-1992, IS: 3073-1991	9500	1000	per subsquent roughness paramter	up to 50µm	upto one roughness paramter on the same specimen
104	Roughness	Roughness Standard@	Roughness measuring machine	Roughness measuring machine/ Roughness tester	ISO: 5436 (Type D) / IS: 4290-1992, IS: 3073-1991	28500	8800	per axis calibration with a dispalcement standard(laser interferometer/ dial indicator/ glass scale)		with atleast three Groov Depth Standards (Type D) /three Roughness Comparison Specimen
105	Roundness	Roundness Standard	Hemispherical Standard			26200				Roundness
106	Roundness	Roundness Standard	Flick Standard	magnification standard		26200				Roundness
107	Squareness	Squareness Standard	Engineer's Square		IS: 2103-1980 reaffirmed 2006	15900				Squareness
108	Squareness	sqness, straightness, roundness, parallelism	Reference /Standard cylinder		Roundness , parallelism (four readings) ,cylindricilty	74500				Roundness , parallelism (four readings) ,cylindricilty
109	Squareness	Squareness Standard	Cylindrical Square		On CMM	18300			IS: 6952-1990 reaffirmed 2006	Squareness
110	Squareness	Squareness Standard	Engineer's Square		On CMM	24200			IS: 2103-1980 reaffirmed 2006	Squareness
111	Squareness	Squareness Standard	Cylindrical standard		On roundness Machine	24200				Squareness /Parallelism
112	Squareness	Squareness Standard	Angle Plate, Cast Iron		Upto 300 mm	16300			IS: 2554-1971 (Reaffirmed 2005) On CMM	Squareness / Angularity
113	Squareness	Squareness Standard	Angle Plate, Cast Iron		>300 to 600 mm	24400			IS: 2554-1971 (Reaffirmed 2005) On CMM	Squareness / Angularity
114	Squareness	Squareness Standard	Precision Box Angle Plate		Upto 300 mm	30300			IS: 6985-1973 (Reaffirmed 2005) ,On CMM	Squareness / Angularity
115	Squareness	Squareness Standard	Precision Box Angle Plate		>300 to 600 mm	44500		On CMM	IS: 6985-1973 (Reaffirmed 2005), On CMM	Squareness / Angularity
116	Straightness	Accessory	Straight Edge (Bow Shaped)/ (Camel Back type)/ (I-Section)/ (Parallel)	(Bow Shaped)/ (Camel Back type)/ (I-Section)/ (Parallel)	Upto 500 mm	11800			IS: 2220-1995 (Reaffirmed 2005)	Straightness
117	Straightness	Accessory	Straight Edge (Bow Shaped)/ (Camel Back type)/ (I-Section)/ (Parallel)	(Bow Shaped)/ (Camel Back type)/ (I-Section)/ (Parallel)	>500 to 1000 mm	18300			IS: 2220-1995 (Reaffirmed 2005)	Straightness
118	Flatness	Accessory	Surface Plate		160 x 160 mm	11114			IS: 2285-2003 IS: 7327-	Flatness



									2003 /On CMM	
119	Flatness	Accessory	Surface Plate		450 x 450 mm	11114			IS: 2285-2003 IS: 7327-2003/On CMM	Flatness
120	Flatness	Accessory	Surface Plate		630 x 630 mm	18018			IS: 2285-2003 IS: 7327-2003	Flatness
121	Flatness	Accessory	Surface Plate		1000 x 630 mm	22620			IS: 2285-2003 IS: 7327-2003	Flatness
122	Flatness	Accessory	Surface Plate		1000 x 1000 mm	29524			IS: 2285-2003 IS: 7327-2003	Flatness
123	Flatness	Accessory	Surface Plate		1600 x 1000 mm	50235			IS: 2285-2003 IS: 7327-2003	Flatness
124	Flatness	Accessory	Surface Plate		2000 x 1000 mm	59440			IS: 2285-2003 IS: 7327-2003	Flatness
125	Flatness	Accessory	Surface Plate		2000 x 1400 mm	59440			IS: 2285-2003 IS: 7327-2003	Flatness
126	Flatness	Accessory	Surface Plate		3000 x 2000 mm	87055			IS: 2285-2003 IS: 7327-2003	Flatness
127	Flatness	Accessory	Optical Flat/Parallel		up to 100mm Diameter	22315			IS: 5440-1969 (Reaffirmed 2005)	Flatness of one surface
128	Flatness	Accessory	Optical Flat/Parallel		up to 100mm Diameter	32876			IS: 5440-1969 (Reaffirmed 2005)	Flatness of both surface
129	Flatness	Accessory	Optical Flat/Parallel		up to 100mm Diameter	46454			IS: 5440-1969 (Reaffirmed 2005)	Flatness and parallelism/ wedge angle between two surface
130	Flatness	Accessory	Optical Flat/Parallel		>100mm to 150mm Diameter	46454			IS: 5440-1969 (Reaffirmed 2005)	Flatness of one surface
131	Flatness	Accessory	Optical Flat/Parallel		>100mm to 150mm Diameter	55506			IS: 5440-1969 (Reaffirmed 2005)	Flatness of both surface
132	Laser frequency	frequency standard	Laser head		frequency Standard	51877				
133	Step height	End standard	step height	End standard	above 50 µm upto to 2 mm	14142			ISO 5436	height of the step/ groove
134	Length	Instrument	Vernier Caliper	instrument	up to 300 mm	7200	100	per additional 100 mm	IS 3651	Linear scale including vernier scale
135	Length	Instrument	Micrometer / Micrometer Head	instrument	up to 25 mm	7200	150	per additional 25 mm	IS 2967	Linear scale including vernier scale
136	Length	Instrument	Hardness tester Scale	depth measuring system	When the requisite fixtures and accessories are facilitated by customer	48000			0.0003 mm accuracy up to 100mm	Nonmagnetic method
137	Angle	Instrument	Theodolite calibration station	universal station/ 3D simulator	When the requisite fixtures and accessories are facilitated by customer	60000			Three pitch angle and a rotary axis up to 10 readings	Three pitch angle and a rotary axis with reference to ground level
138	Angle	Instrument	Theodolite calibration station	universal station/ 3D simulator	When the requisite fixtures and accessories are facilitated by customer	60000	43000	Additional dual axis collimator upto 40 readings	Three pitch angle and a rotary axis up to 10 readings	Three pitch angle and a rotary axis with reference to ground level
139	Length	artifact	Test rail	Defects in test rail	Notch size (length:5mm to 10 mm)X (width: 0.4mm to 5 mm)X(depth: up to 2 mm)	47500	2500	subsequent each Notche/ hole	length Xwidth Xdepth	up to 20 Notches or holes

<b>NOTE</b>	<b># Rs 100 per gauge will be charged extra for addition of fo , fu using comparator (except for special guage block set of Mech. comparator calibrator)</b>
	<b># Rs 300 per gauge block for flatness and length variation by interferometric method (in case interferometric central deviation calibration)</b>
	<b># Given below are charges for Gauge block calibration by interferometry. For the gauge block set which is sent to NPL for first time by interferometry, charges of comparison method stated above as well as interferometric metod will be charged</b>

