

Laboratory	Prompt Metallurgical Services, 5, 2nd Floor, Sharma Chamber, Karve Road, Nal-Stop, Pune, Maharashtra Location 1: 5, 2 nd Floor, Sharma Chamber, Karve Road, Nal-Stop, Pune, Maharashtra Location 2: B-8 & B-9, Samartha Complex, S. No.-37/5, Dhankawadi, Pune, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	21.03.2014
Certificate Number	T-0812	Valid Until	20.03.2016
Last Amended on	-	Page	1 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
--------------	-----------------------------------	--------------------------------	--	---

Location 1

I. METAL & METAL PRODUCTS

1. Steel & Cast Iron Specimen & Components	Brinell Hardness Test	IS 1500-2013	95 to 400 HBW 2.5 mm dia / 187.5 kg load
	Rockwell Hardness Scale- A	IS 1586-2000	45 to 75 HRA >75 to 88 HRA
	Rockwell Hardness Scale- B	IS 1586-2000	20 to 45 HRB >45 to 80 HRB >80 to 100 HRB
	Rockwell Hardness Scale- C	IS 1586-2000	20 to 65 HRC
	Vickers Hardness (HV1)	IS 1501-2002	Upto 100 HV1 101 to 400 HV1 400 to 1000 HV1
2. Copper & its alloys	Rockwell Hardness Scale – B	IS 1586-2000	20 to 45 HRB >45 to 80 HRB >80 to 100 HRB
	Brinell Hardness Test	IS 1500-2013	30 to 250 HBW 2.5 mm dia / 62.5 kg load
	Vickers Hardness (HV1)	IS 1501-2002	Upto 100 HV1 101 to 500 HV1

Laboratory	Prompt Metallurgical Services, 5, 2nd Floor, Sharma Chamber, Karve Road, Nal-Stop, Pune, Maharashtra Location 1: 5, 2 nd Floor, Sharma Chamber, Karve Road, Nal-Stop, Pune, Maharashtra Location 2: B-8 & B-9, Samartha Complex, S. No.-37/5, Dhankawadi, Pune, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	21.03.2014
Certificate Number	T-0812	Valid Until	20.03.2016
Last Amended on	-	Page	2 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
Location 1				
3.	Aluminium & Its Alloys	Rockwell Hardness Scale – B	IS 1586- 2000	20 to 45 HRB >45 to 80 HRB >80 to 100 HRB
		Brinell Hardness Test	IS 1500 -2013	30 to 150 HBW 2.5 mm dia / 62.5 kg load
		Vickers Hardness (HV1)	IS 1501-2002	Upto 100 HV1 101 to 500 HV1
4.	Steel & Cast Iron Specimen % Component	Microstructure	ASM Handbook Vol- 9 Atlas of Microstructure of Industrial Alloys	Magnification 100 X, 200X, 500X & 1000 X
		Determination of Graphite Type & Size in Cast Iron	IS 7754 -1975 For Cast Iron	100 X
		Grain Size (Comparison Method)	IS 4748-2009	100 X Grain Size: 1 to10
		Non Metallic Inclusion Rating	IS 4163-2004	100 X
		Case Depth Measurement by Microscopic Method,	IS 6416-1988	100 X
		Hardness Method		400 X 0 to10 mm

Laboratory Prompt Metallurgical Services, 5, 2nd Floor, Sharma Chamber, Karve Road, Nal-Stop, Pune, Maharashtra
 Location 1: 5, 2nd Floor, Sharma Chamber, Karve Road, Nal-Stop, Pune, Maharashtra
 Location 2: B-8 & B-9, Samartha Complex, S. No.-37/5, Dhankawadi, Pune, Maharashtra

Accreditation Standard ISO/IEC 17025: 2005

Discipline Mechanical Testing **Issue Date** 21.03.2014

Certificate Number T-0812 **Valid Until** 20.03.2016

Last Amended on - **Page** 3 of 3

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
-------	----------------------------	-------------------------	---	--

Location 2

I. METAL & METAL PRODUCTS

1.	Ferrous Material (Steel & Cast Iron), Aluminum Alloy, Copper Alloy	Tensile Strength, Yield Strength by graph % Elongation, % Reduction in Area	IS 1608- 2005	0.02 to 400 kN L.C.: 20 N
		Bend Test	IS 1599-1985	30 mm diameter Mandrel

-X-X-X-X-X-X-X-X-X-X-X-X-