

Laboratory	Material Inspection Laboratory, Unit No: 2, Regal Industrial Estate, Ground Floor, A. D. Marg, Sewree (W), Mumbai, Maharashtra		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Mechanical Testing	Issue Date	24.11.2015
Certificate Number	T-2709	Valid Until	23.11.2017
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S. No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
I.	MECHANICAL PROPERTIES OF MATERIAL			
1.	Ferrous & Non-Ferrous Material	Tensile Test	IS 1608: 2005	
		Tensile Strength	ASTM E 8/8M: 2013a	10 N to 400 kN
		Yield Strength	ASTM A370: 2014	
			DIN EN ISO 6892-1: (2009-12)	10 N to 400 kN
		0.2% P.S		10 N to 400 kN
		% of Elongation		2 % to 85 %
		% Reduction		2 % to 85 %
		Hardness Test		
		Rockwell- HRBW	ASTM E 18: 2015	20 HRBW to 100 HRBW
		HRC		20 HRC to 65 HRC
		Brinell- HBW	IS 1500: 2013	100 to 300 HBW 5/750
			ASTM E 10: 2014	100 to 600 HBW 10/3000
		Charpy “V” Notch Impact Test	ASTM E23: 2012c	5 J to 300 J 23 °C to 60 °C
	Bend Test	IS 1599: 2012 ASTM A 370: 2014 IS 2329: 2005	Mandrel Dia: 1 mm to 350 mm Qualitative	
	Reverse Bend Test	ASTM A 1016 / 1016M: 2014	OD : 9.5 mm to 101.6 mm Qualitative	
	Flattening Test	ASTM A 370: 2014 IS 2328: 2005	OD : 6 mm to 762 mm Qualitative	

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	Ferrous & Non-Ferrous Material	Reverse Flattening Test	ASTM A 370: 2014	OD : 12.7 mm to 101.6 mm Qualitative	
		Flaring Test	ASTM A 370: 2014 ASTM B 153: 2011	OD : 6 mm to 101.6 mm Qualitative	
		Proof Load Test	ASTM A 370: 2014	Upto 370 kN Qualitative	
		Welding Qualification Test (Procedure & Performance Qualification)			
		Tension Test	ASME B & PV code (Sec IX): 2015	10 kN to 400 kN	
		Bend Test (Root, Face & Side)		180 °/ 4 T Qualitative	
II. METALLOGRAPHY TEST					
1.	Ferrous & Non Ferrous Materials	Grain Size Measurement	ASTM E 112: 2013 (Comparison Method)	ASTM grain size No: 1 to 8 / 100 x Qualitative	
		Macro Etch Test	ASTM E 340: 2013	Qualitative	
2.	Austenitic Stainless Steels	Inter Granular Corrosion Test Practice "E"	ASTM A262: 2014	180°/ 1 X thickness, Visual Examination: (5 x & 20 x) Qualitative	

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