Laboratory Mechanical Laboratory, Jindal Stainless (Hisar) Limited,

Hot Rolling Division, O.P. Jindal Marg, Hisar, Haryana

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7074 Page 1 of 1

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I	SI.	Product / Material	Specific Test	Test Method Specification	Range of Testing /
		of Test	Performed	against which tests are	Limits of Detection
				performed	

## **MECHANICAL TESTING**

I.	MECHANICAL PROPERTIES OF METALS				
1.	Ferrous Material	Tensile Strength	IS 1608: 2005 (RA 2017)	100 MPa to 2300 MPa	
	Alloys & Products	0.2% proof stress	ASTM A 370: 2017	100 MPa to 2200 MPa	
		Yield strength	ASTM E 8: 2016a		
		% Elongation		0.4 % to 80.0 %	
		% Reduction area		5.0 % to 80.0 %	
		Charpy impact test V	IS 1757 (Part 1): 2014	2 J to 240 J	
		Notch	ASTM A 370-2017		
		(At ambient temp. & up	ISO 148-1-2016		
		to (-)196 deg. C)	ASTM E 23 – 16b		
		Rockwell Hardness	IS 1586 (Part 1): 2012	60 HRBW to 100 HRBW	
			ASTM A 370: 2017	20 HRC to 70 HRC	
		Bend	ASTM A 370: 2017	Qualitative	
			ASTM A 480: 2017	(Mandrel diameter in mm:	
			ASTM E 290: 2014	6, 7, 8, 9, 9.5, 10, 12, 14,	
			IS 1599: 2012 (RA 2017)	16, 18, 20, 24, 25)	
II.	I. METALLOGRAPHY TEST				
1.	Austenitic	Estimation of grain size	ASTM E-112: 2013	ASTM No. 1.0 to 10.0 at	
	stainless steel	by Microscopic	IS 4748: 2009	100 X	
		comparison method			
		Non metallic Inclusion	ASTM E-45-2013	A,B,C,D (Thin & Thick)	
		Rating -Method A & E	IS 4163: 2004	0.5 to 3.0 at 100X	
		Intergranular test	ASTM A 262: 2015	Qualitative	
		Practice A	IS 10461 (Part 2): 1994	250X	
		Practice E	(RA 2007)	500X	
				1T/180°	
				Etching area upto 190mm	
		Intergranular corrosion	ISO 3651-2-1998	1T/180°	
		Method A		(Qualitative)	