

Laboratory Tata Steel Limited Tubes Division, P.O. Barma Mines, Dist. East
Singhbhum, Jharkhand

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-6942 (in lieu of T-3754 & T-3755)

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Validity 18.01.2018 to 17.01.2020

Last Amended on 20.02.2018

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
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CHEMICAL TESTING

I.	METALS AND ALLOYS			
1.	Zinc coated mild steel tubes and sockets	Mass of Zinc Coating	IS 6745	200 gm/m ² to 1200 gm/m ²
		Uniformity of Coating	IS 2633	Qualitative
2.	Carbon steel, low alloy steels.	C	IS 8811	0.02 % to 0.16 %
		Si		0.024 % to 0.21 %
		Mn		0.14 % to 0.79 %
		P		0.006 % to 0.010 %
		S		0.006 % to 0.042 %
		Cr		0.020 % to 0.15 %
		Ni		0.04 % to 0.16 %
		Al		0.005 % to 0.036 %
		Cu		0.016 % to 0.29 %

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Program Director

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MECHANICAL TESTING

I.	MECHANICAL PROPERTIES OF METALS			
1.	Ferrous (Pipes , Tubes & Hollow Sections) OD=12.70 mm to 323.90 mm NB=15 mm to 300 mm Section = 20X20 mm to 250X250 mm 30X20 mm to 300X200 mm	Tensile Test (YS , UTS)	IS:1608	20 kN to 1000 kN
		% Elongation		18% to 45%
		Bend Test	IS:1599	Bend Angle 180° NB: 15 mm to 50 mm Tube (Roller dia = 100, 150,225,300,400,500, 575, 725,950)
		Flattening Test	IS: 2328	OD: (-) 15 mm to 170 mm
		Drift Expansion Test	IS: 2335	OD: (-) 15 mm to 170 mm
		Vickers Hardness Test	IS: 1501 (Part 1)	100 HV10 to 420 HV10 110 HV30 to 750 HV30
		Rockwall hardness Test	IS: 1586 (Part 1)	35 HRC to 70 HRC 40 HRB to 100 HRB