

Laboratory Electrosteel Castings Limited, 30, B.T. Road, Khardah, Sukchar, 24 Parganas (N), Kolkata, West Bengal

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7429 (in lieu of T-1428 & T-1429)

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Validity 28.06.2018 to 27.06.2020

Last Amended on --

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 & ALLOYS			
1.	Ductile and Cast Iron	Carbon	ASTM E1999	1.9 % to 4.15 %
		Silicon	IS 15338	0.50 % to 2.70 %
		Manganese		0.10 % to 1.8 %
		Sulphur		0.005 % to 0.10 %
		Phosphorus		0.005 % to 0.15 %
		Magnesium	ECL-KW/SOP/LAB-01 Issue date: 05.05.2018	0.005 % to 0.10 %

K. Siribabu
Convenor

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Program Manager

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MECHANICAL TESTING

I.	MECHANICAL PROPERTIES OF METALS			
1.	Ferrous and Non-Ferrous Materials	Brinell Hardness	IS 1500 ISO 6506-1	130 HBW to 300 HBW (5 mm/750 kgf)
		Ultimate Tensile strength	IS 1608 BS EN ISO 6892-1	100 MPa to 800 MPa
		0.2% Proof stress	ASTM E-8M	100 MPa to 500 MPa
		Elongation		1 % to 30 %
		Charpy Impact -At room temperature to Up to (-)40 °C	ASTM E23	3.75 J to 150 J
II.	METALLOGRAPHY TEST			
1.	Cast Iron, Carbon Steel, Alloy Steel	Microstructure -Optical Microscopy	ISO 945-1 Metals Handbook (ASM Vol-7) IS 7739 (Part V)	Qualitative (Magnification 100X)