

Laboratory Chemical & Metallurgical Laboratory, Diesel Loco Modernization Works, Patiala, Punjab

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-7075

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Validity 27.03.2018 to 26.03.2020

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 AND ALLOYS			
1.	Low Alloy Steel	C	IS 8811 (Revision 1)	0.01 % to 1.50 %
		Si		0.05 % to 2.30 %
		Mn		0.01 % to 2.50 %
		P		0.001 % to 0.120 %
		S		0.001 % to 0.150 %
		Cr		0.01 % to 4.00 %
		Mo		0.001 % to 1.70 %
		Ni		0.01 % to 6.00 %
		Al		0.01 % to 1.2 %
		Cu		0.01 % to 0.80 %
		V		0.005 % to 0.60 %

Naveen Jangra
Convenor

N. Venkateswaran
Program Director

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MECHANICAL TESTING

I.	MECHANICAL PROPERTIES OF METALS			
1.	Metallic Materials	Ultimate Tensile Strength	IS 1608	40 kN to 400 kN
		Yield Strength	IS 1608	40 kN to 400 kN
		% Elongation	IS 1608	5 % to 80 %
		% Reduction Area	IS 1608	10 % to 80 %
		Brinell Hardness	IS 1500 (Part 1)	100 HBW to 400 HBW (10/3000)
		Rockwell Hardness	IS 1586 (Part 1)	20 HRC to 65 HRC

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