

Laboratory Material Testing Laboratory, Ordnance Factory, Ministry of Defence, Govt. of India, Ambarnath
Accreditation Standard ISO/IEC 17025:2005
Field Mechanical Testing **Issue Date** 06.10.2011
Certificate Number T-0013 **Valid Until** 05.10.2013
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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
1.	CAST, WROUGHT PRODUCTS OF FERROUS, NON-FERROUS ALLOYS	A) Tensile Testing Tensile Strength, Proof Stress, % Elongation, % Reduction of Area at Room Temperature	IS- 1608-2005	Upto 400kN Least count – 0.2kN INSTRON – Upto 300 kN Least count – 0.1kN
		B) Tensile Testing Tensile Strength, % E at Room Temperature	IS- 1608-2005	Upto 20kN Least count – 0.02kN
		C) Hardness Test (Vickers)	IS-1501-2002	50 to 400 HV5 50 to 400 HV10 225 to 700 HV30
		D) Bend Test	IS 2768-1982 (RA'09) IS 410-1977 (RA'06) JSS 9535-2, 2008 (Revision No. 2) IS 1599-1985 (RA'96)	Mandrel dia. upto 30 mm Max. thickness : 5 mm
		E) Reverse Bend Test	IS 1403 (Pt-1): 1993 (RA'03) IS 2768-1982 (RA'09) JSS 9535-2, 2008 (Revision No. 2) IS 1599-1985 (RA'96)	Mandrel dia. Upto 6 mm Max. thickness : 3 mm
		F) Macro Examination Aluminium alloys	ASM handbook 9 th edition, 1988 Vol. IX, Page 351 IS 12573-1988 (RA07)	Upto Magnification 20 X

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		G) Micro Examination	ASM handbook 9 th edition 1988 Vol. IX	Magnification 50 X to 1000 X
		H) Grain Size Estimation	IS 4748:2009 ASTM E-112, 2010	Grain Size upto No. 10 for Steel Grain Size from 0.005 to 0.2 mm for copper alloys

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