

**Laboratory** Magna Casting & Machine Works Pvt. Ltd.- Metallurgical Lab,  
 Gat No. 777, At Post - Velu, Tal. Bhor, Dist. Pune, Maharashtra

**Accreditation Standard** ISO/IEC 17025: 2005

**Discipline** Mechanical Testing **Issue Date** 26.06.2015

**Certificate Number** T-3479 **Valid Until** 25.06.2017

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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
<b>I. MECHANICAL PROPERTIES OF MATERIAL</b>				
1.	<b>Metallic Materials</b>	Tensile Test	ASTM A370: 14 ASTM E8/E8M-13a	Upto 400 kN (89923.58 lbf)
		Ultimate Tensile Strength	ASTM A370: 14 ASTM E8/E8M-13a	Upto 1725 MPa (250000 lbf/inch <sup>2</sup> )
		Yield Strength (0.2 % Proof Stress)	ASTM A370: 14 ASTM E8/E8M-13a	Upto 1400 MPa (200000 lbf/inch <sup>2</sup> )
		% Elongation	ASTM A370: 14 ASTM E8/E8M-13a	5 % to 75 %
		% Reduction in Area	ASTM A370: 14 ASTM E8/E8M-13a	5 % to 85 %
		Bend Test	ASTM A370: 14 ASTM E190: 14 ASTM A290: 14	Qualitative (Mandrel Dia: 15, 20, 24, 31, 40) mm
		Charpy Impact (V-Notch) Test	ASTM A370: 14 ASTM E23-12c (-60 °C to Room Temperature (-76 °F to Room Temperature	5 J to 240 J ( 3.7 ftlbf to 177 ftlbf )
		Brinell Hardness Test	ASTM A370: 14 ASTM E10: 14	100 HBW to 450 HBW 2.5 mm Ø/187.5 kgf
		Vickers Hardness Test	ASTM A370: 14 ASTM E384: 14	100 HV to 700 HV (HV 5 kgf, HV10 kgf)

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