

Laboratory **Material Testing Laboratory, Controllerate of Quality Assurance
(Special Vehicles), Dehu Road, Pune, Maharashtra**

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

Certificate Number **TC-7275 (in lieu of T-1667 & T-1668)**

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Validity **30.05.2018 to 29.05.2020**

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.	Carbon Steel, Stainless Steel, Low Alloy Steel	Carbon	IS 228 (Part-20):2003 (RA 2014)	Up to 3.50 %
		Sulphur		0.001% to 0.40 %
		Silicon	IS 228 (Part-8):2009 (RA 2014)	0.05 % to 2.0 %
		Manganese	IS 228 (Part-2): 1987 (RA 2012)	0.06 % to 1.50 %
		Phosphorus	IS 228 (Part-3): 1987 (RA 2012)	0.01 % to 0.06 %
		Chromium	IS 228 (Part-6): 1987 (RA 2014)	0.1 % to 25.0 %
		Nickel	IS 228 (Part-5): 1987 (RA 2014)	0.1 % to 20.0 %
	Molybdenum	IS 228 (Part-7): 1974 (RA 2012)	0.05 % to 1.0 %	

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MECHANICAL TESTING

I.	MECHANICAL PROPERTIES OF METALS			
1.	Steel Alloys, Cu Alloys, Al Alloys	Tensile strength Yield Strength Elongation Reduction in Area	IS 1608:2005 (RA 2017)	8 kN to 400 kN 5 kN to 50 kN 2 kN to 20 kN 5 % to 80 % 10 % to 80 %
		Hardness Brinell HBW2.5/187.5 HBW2.5/62.5 HBW2.5/31.25	IS 1500(Part-1):2013	96 HBW to 653 HBW (2.5mm Ø /187.5 kgf) 31.8 HBW to 210 HBW (2.5mm Ø /62.5 kgf) 15.9 HBW to 109 HBW (2.5 mm Ø /31.25 kgf)
		Hardness Vickers (HV 5, HV10, HV 30)	IS 1501(Part-1):2013	80 HV to 940 HV5 80 HV to 940 HV10 80 HV to 940 HV30
		Hardness Rockwell (HRA, HRBW,HRC)	IS 1586(Part-1):2012 (RA 2017)	20 HRA to 90 HRA 20 HRBW to 100 HRBW 20 HRC to 70 HRC