

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

Accreditation Standard ISO/IEC 17025: 2005

Discipline Chemical Testing **Issue Date** 26.06.2015

Certificate Number T-3480 **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
I. METALS & ALLOYS				
1.	Carbon Steel & Low Alloy Steel	Carbon	ASTM E415: 2014	0.050 % to 1.100 %
		Silicon	ASTM E415: 2014	0.100 % to 1.500 %
		Manganese	ASTM E415: 2014	0.100 % to 1.500 %
		Sulphur	ASTM E415: 2014	0.002 % to 0.060 %
		Phosphorus	ASTM E415: 2014	0.006 % to 0.050 %
		Chromium	ASTM E415: 2014	0.030 % to 2.000 %
		Nickel	ASTM E415: 2014	0.010 % to 2.150 %
		Molybdenum	ASTM E415: 2014	0.001 % to 0.500 %
		Aluminium	ASTM E415: 2014	0.005 % to 1.100 %
		Cobalt	ASTM E415: 2014	0.003 % to 0.700 %
		Vanadium	ASTM E415: 2014	0.001 % to 0.350 %
		Copper	ASTM E415: 2014	0.010 % to 0.500 %
		Niobium	ASTM E415: 2014	0.002 % to 0.150 %
		Titanium	ASTM E415: 2014	0.001 % to 0.300 %
Tungsten	ASTM E415: 2014	0.003 % to 0.320 %		

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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
2.	Stainless Steel	Carbon	ASTM E1086: 2014	0.010 % to 0.300 %
		Silicon	ASTM E1086: 2014	0.200 % to 1.750 %
		Manganese	ASTM E1086: 2014	0.200 % to 1.900 %
		Sulphur	ASTM E1086: 2014	0.002 % to 0.080 %
		Phosphorus	ASTM E1086: 2014	0.004 % to 0.080 %
		Chromium	ASTM E1086: 2014	7.400 % to 28.50 %
		Nickel	ASTM E1086: 2014	0.100 % to 15.00 %
		Molybdenum	ASTM E1086: 2014	0.050 % to 4.300 %
		Vanadium	ASTM E1086: 2014	0.005 % to 0.250 %
		Copper	ASTM E1086: 2014	0.020 % to 6.000 %
		Niobium	ASTM E1086: 2014	0.005 % to 0.450 %
		Titanium	ASTM E1086: 2014	0.001 % to 1.200 %
		Nitrogen	ASTM E1086: 2014	0.005 % to 0.300 %
		Cobalt	ASTM E1086: 2014	0.005 % to 0.750 %
Aluminium	ASTM E1086: 2014	0.002 % to 0.300 %		

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