

Laboratory TTP Technologies Pvt. Ltd., #36, KIADB Industrial Area, Hirehalli
Tumkur, Karnataka

Accreditation Standard ISO/IEC 17025: 2005

Certificate Number TC-5249

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Validity 08.02.2017 to 07.02.2019

Last Amended on 26.12.2017

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.	Plain Carbon & Low Alloy Steel	C	IS:8811 & TTP/OES/SOP/02 10-10-2017	0.01 % to 0.62 %
		Mn		0.079 % to 2.0 %
		Si		0.05 % to 1.05 %
		P		0.002 % to 0.07 %
		S		0.002 % to 0.07 %
		Cr		0.08 % to 1.6 %
		Ni		0.015 % to 0.6 %
		Mo		0.005 % to 0.96 %
		Al		0.01 % to 0.4 %
		Cu		0.015 % to 0.065 %
		As		0.002 % to 0.060 %
2.	Austenitic & Ferrite Stainless Steels	C	IS: 9879 & TTP/OES/SOP/03 10-10-2017	0.01 % to 0.27 %
		Si		0.2 % to 1.6 %
		S		0.0007 % to 0.075 %
		P		0.01 % to 0.075 %
		Mn		0.3 % to 2.0 %
		Ni		3.0 % to 17 %
		Cr		11.0 % to 29.0 %
		Mo		0.08 % to 7.73 %
		Cu		0.045 % to 1.7 %
		Co		0.04 % to 0.35 %
3.	Copper & its Alloys	Nb	EN BS 15079	0.007 % to 0.9 %
		Al		0.0088 % to 0.03 %
		Pb		0.0072 % to 1.2 %

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		Fe		0.015 % to 0.6 %
		Ni		0.0099 % to 0.02 %
		Al		0.0006 % to 0.0008 %
		P		0.008 % to 0.02 %
		As		0.0006 % to 0.0008 %
		Zr		0.06 % to 0.09 %
		Cr		0.0004 % to 0.0008 %
		Ag		0.0035 % to 0.005 %
		S		0.0013 % to 0.0017 %
4.	Zinc & its Alloys	Fe	TTP/OES/SOP/01-16-06-2016	0.0009 % to 0.04 %
		Sn		0.0036 % to 0.088 %
		Pb		0.001 % to 0.2 %
		Ni		0.0015 % to 0.03 %
		Al		0.01 % to 0.04 %
		Cu		0.0025 % to 1.68 %
		Cd		0.00036 % to 0.04 %
II.	CORROSION TESTS			
1.	Salt Spray Tests	Ferrous Metals with different corrosion resistance coating (Paint, HDG, Passivation etc)	ASTM B 117	Qualitative Test

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MECHANICAL TESTING

I.	METALLOGRAPHY TEST			
1.	“Weld and Weld Test Specimen” (Stainless Steel, Hot and Cold Rolled Products Etc)	Macrostructural Analysis by visual and low magnification examination, Weld Qualification, Depth of Penetration	IS 17639 (E) EN ISO 5817 IS 7739	Magnifications : 6x, 7.5x, 10x, 10.05x, 12x, 12.5x, 13.4x, 15x, 16x, 17.5x, 18x, 20x, 22.5x, 24x, 30x, 37.5x, 40x, 45x, 50x, 52.5x, 60x and 67.5x