

Laboratory	Spectro Analytical Labs Ltd., E-41, Okhla Industrial Area, Phase-II, New Delhi		
Accreditation Standard	ISO/IEC 17025: 2005		
Discipline	Non-Destructive Testing	Issue Date	02.03.2014
Certificate Number	T-0832	Valid Until	01.03.2016
Last Amended on	11.03.2014	Page	1 of 5

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				
A. Magnetic Particle Testing				
1.	Ferromagnetic Materials[#]	Magnetic Particle Testing for Sub Surface Flaws (Yoke)	ASTM E709- 2010 Vol 3.03 (Yoke Method only)/ ASME Sec-5, 2013 (Article-7), ASTM E-1444 2012, ASTM A275-2008, IS-5334-2003, IS: 6410-2013, IS: 6752-2013, IS: 3703-2004, IS: 10724-1990, IS: 7743-2006, IS:10543-1983, AWS D1.1-2010, ASME Sec VIII 2013, API 1104-2010, BS EN-1369-2012, ISO 9934 (Part 1,2 & 3)-2001 & 2002 BS EN ISO 17638-2009	Upto 5 mm Depth (Subsurface)
B. Penetrant Testing				
1.	Ferrous and Nonferrous Metals[#]	Liquid penetrant testing	ASME Sec V, 2013 Article VI/ ASTM- E 1220-2010 (Vol 3.03) , ASTM- E 1219-2010 (Vol 3.03), ASTM- E 1417 -2013 (Vol 3.03) ASTM E165 2012 (Vol 3.03), IS-3658-1999, IS: 11732-1995, IS:12889-2005, AWS D1.1-2010, ASME Sec VIII-2013, API 1104 – 2010	Flaws open to surface

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C.	Ultrasonic Testing			
1.	Ferrous / Non Ferrous Metal #	Ultrasonic Testing for Detection and Location of Defects	IS: 4225-2004, ASME-A-435-90(2012), ASTM-A-577-90(2012), ASME-Sec-IX-2013	
	a. Steel plates		ASME-Sec-V-2013, IS: 11630-2005	10mm to 500mm
	b. Tube		ASTM-E-273-2010 (Vol 3.03), ASTM-E-213-2009 (Vol 3.03)	10mm to 50mm
	c. Pipe		ASME-Sec-IX-2013, ASME-Sec-V-2013, ASME-B-31.3-2012, ASTM-E-213-2009 (Vol 3.03), ASTM-E-273-2010 (Vol 3.03), ANSI-1104, API 1104-2010,	10mm to 50mm
	d. Forging		IS: 11626-1986, ASME-SA388-2011	10mm to 5000mm
	e. Casting		IS: 9565-1995, ASME-609-2007	10mm to 300 mm
	f. Structure		AWS D1.1-2010, ASME SecVIII-2013 BS EN ISO 17640-2010	Upto 500 mm

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D.	Radiography Testing			
1.	Ferrous / Non Ferrous Metal #	Radiography	IS: 1182-1983, ASME-Sec-V-2013, ASME-Sec-IX-2013,	Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)
	a. Steel plates			
	b. Pipe/Tube		IS: 4853-1982, ASME-Sec-V-2013, ASME-Sec-IX-2013, ASME-B-31.3-2012, API 1104-2010	Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)
	c. Welds		IS: 1182-1983, IS: 7810-1999, IS: 14419-1996, ASME-B-31.3-2012, ASTM-E-1032-2012 (Vol 3.03)	Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)
	d. Casting		IS: 12938-1990,IS: 2953-1985, ASTM-E-446-2010 (Vol 3.03), ASTM-E-505-01(2011) (Vol 3.03), ASTM-E-1030-2005 (2011) (Vol 3.03) ASTM-E-155-2010 (Vol 3.03) ASTM-E-192-2013 (Vol 3.03)	Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)

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	e. Structure		AWS D1.1-2010, BS EN-12517-2006 ASME Sec VIII-2013	Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)
	f. Pressure vessel		ASME Sec II-2013	Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)
	g. Welding Rod/Filler Material/Welding Electrode			Steel thickness 3 to 30mm (x-ray) Steel thickness upto 4 to 65mm (Ir-192)
2.	Metal *	X-ray Fluorescence PMI	ASTM E 1476-2004 (Vol 3.03), API 578 -2010	Grade identification Alloy steel, stainless Steel
3.	Ferrous / Non Ferrous *	Ultrasonic Thickness Test	ASTM-E-797- 2010 (Vol 3.03)	2 mm to 200 mm
		Oxide Layer Measurement	MIL-STD-810F BS EN 15317 – 2007	0.08mm to 635mm
II. BUILDING MATERIALS				
1.	Concrete Pile *	Pile Integrity Test	ASTM-D 5882-2007	5 to 40 m
2.	Concrete *	Ultrasonic Pulse Velocity	IS-13311-1992 (P-1) EN 12504.4 - 2004 ASTM C 597 - 97 (2002)	Upto 1.5 m

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		Cover Meter	BS 1881 (P-204) - 1988	Upto 100mm
		Crack depth measurement	ASTM C 597 -2002	Upto 1.5 mm
		Rebound Hammer	IS 13311 (P-2)-1992 ASTM C805 - 2002 EN 12504 (P-1) – 2000	10 to 70 N/mm ²
		Half Cell Potentiome	ASTM C 876 - 2009	+ 999 to - 999 Mv
		Carbonation Test	ASTM C 586 - 2011	Qualitative
		Capo Test	ASTM C900-1999 EN 12504-3-2005 BS 1881 P-207-1992	0 to 100 kN
III.	NON CONDUCTIVE PROTECTIVE COATING ON CONDUCTIVE SUBSTRATE *	Holiday Testing	NACE-RP-0188-2006	0.2 to 4 mm

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*Only for Site Testing

The laboratory is also capable for site Testing however, the uncertainty at site depends on the prevailing actual environmental conditions and master equipment used.