

Laboratory

Sohm Analytical Services (I) Pvt. Ltd., Gala No. B-39, Ground Floor,
Plot No. J7, J8 & J9, Kohinoor Industrial Complex, Taloja, MIDC, Tal.
Panvel, Dist., Raigad, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-6651

Page 1 of 4

Validity 18.12.2017 to 17.12.2019

Last Amended on 26.04.2019

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
-----	----------------------------	-------------------------	---	--

MECHANICAL TESTING

I. MECHANICAL PROPERTIES OF METALS				
1.	Ferrous, Non Ferrous Metals & Alloys	Tensile Test Y.S,U.T.S,1%0.2%by offset Method /Proof Stress %Elongation %R.A)	IS 1608-2005ASTM A 370-2017aASTM E8/E8M-2016BS EN ISO 6892-1:2016ASTM B557-15	10 kN to 580 kN 2 % to 80 % 2 % to 85 %
2.	Ferrous Metals & Alloys	Through Thickness Tensile (%R.A)	ASTM A770-03(2012),BS EN 10164-2004	5 % to 80 %
3.	Weld Metal	Tensile Test U.T.S.	ASME SEC.IX -2017 ISO 4136:2012	50 MPa to 800 MPa
		Face Bend ,Root Bend, Side Bend Test	ISO 5173:2010+AI :2011IS 2825:1969(Ra2002)AWS D1.2015ASME SEC.IX – 2017API 1104-2013 Addenda -2(2016)	(Qualitative) Mandrel Dia: 6 mm to120 mm
4.	Cladded Steel Plate	Shear Test	ASTM A 263-2012/SA 263-2015ASTM A 264-2012 /SA 264-2015ASTM A 265-2012/SA 265-2015	10kN to 580kN
5.	Steel Semi's like Plates, Bars, Rods	Bend Test	IS 1599-2012, ASTM A 370-2017 aASTM E 290-2014	(Qualitative) Mandrel Dia: 6 mm to 256 mm
6.	Ferrous, Non Ferrous Metals & Alloy (Weld)	Nick break Test	API 1104:2013 Addenda -2 (2016) IBR RULE:2016 in force	(Qualitative) 10 kN to 58 0kN
7.	Steel bar for concrete Reinforcement (TMT Bar)	Bend TestRe –Bend TestMass per meter	IS 1599-2012/IS1786-2008 IS 1786-2008 IS 1786-2008	(Qualitative) 10 kN to 580 kN Mandrel Dia: 8 mm to 260 mm

Kanhav Joshi
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

Sohm Analytical Services (I) Pvt. Ltd., Gala No. B-39, Ground Floor,
Plot No. J7, J8 & J9, Kohinoor Industrial Complex, Taloja, MIDC, Tal.
Panvel, Dist., Raigad, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number

TC-6651

Page 2 of 4

Validity

18.12.2017 to 17.12.2019

Last Amended on 26.04.2019

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
8.	Ferrous , Non Ferrous Metals & Alloys	Hardness Rockwell B & C Scales	ASTM A 370-2017a ASTM E 18-2017 IS 1586 (Part 1) 2018 IS 6508-1:2016	20 HRBW to 100 HRBW
9.	Weld Metal	Pull Out Test	ASME SEC.VIII DIV.1:2017	Qualitative 10 kN to 580 kN
10.	Ferrous Metals & Alloys	Charpy 'V' notch Impact Test (-196 °C to 100°C)	ASTM E 23-2016b ASTM E 370-2017	2 J to 280 J
11.	Steel Tubes & Pipes	Flattening Reverse flattening Test	IS 2328-2005 ASTM A 370-2017 ASTM A 1016-2018 ASTM A 999-2018	(Qualitative) 50 mm to 660 mm
12.	Ferrous, Non Ferrous Metals & Alloys Tube / Pipe	Flaring Test / Draft Expansion Test (30°, 45°, 60°)	IS 2335-2005 ASTM A 370-2017 ASTM B 153-11(2017) IS 2501-1995(2006) ASTM A 1061-2016	Qualitative 6 mm to 168 mm
II.	METALLOGRAPHY TEST			
1.	Ferrous, Non Ferrous Metals, Alloys & Welded Joints	Macro Examination/Analysis	ASTM E 381-2017 ASTM E 340-2015 IS 11371-1985 EN ISO 17639-2013 ASME Sec. IX - 2017 QW 181.1	(Qualitative) 5 x to 50 x
2.	Ferrous & Non Ferrous Alloys	Microstructure Examination/ Analysis	ASM Hand book Vol 9-2004 ASTM E 407: 2015 ASTM E3: 2011 IS 7754: 1975 (RA 2003) ASTM A 247: 2017 IS 1865: 1991 (RA 2005)	(Qualitative) 50 x, 100x, 200x, 250x 500x, 1000x
		Grain size / austenitic grain size by comparative method	ASTM E 112-2018 (Comparison method) IS 4748:2009	(Qualitative) 100x

Kanhav Joshi
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

Sohm Analytical Services (I) Pvt. Ltd., Gala No. B-39, Ground Floor,
Plot No. J7, J8 & J9, Kohinoor Industrial Complex, Taloja, MIDC, Tal.
Panvel, Dist., Raigad, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number TC-6651

Page 3 of 4

Validity 18.12.2017 to 17.12.2019

Last Amended on 26.04.2019

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
3.	Ferrous Alloys	Inclusion Rating	ASTM E 45-2018a Comparison Method IS 4163:2004	(Qualitative) 100x
4.	Thin Surface Hardened Steels	Total case depth / compound (white) layer thickness by microscopic method	IS 13691:1993 (RA 2000) IS 6416:1988 (RA 2003)	0.002 mm to 0.3 mm
5.	Metallic / Non Metallic Coatings on Ferrous, Aluminum, Copper Base	Coating Thickness by Microscopic Method	ASTM B487-1985IS 3203: 1982 (RA2010)	0.01 mm to 1.6 mm
6.	Steel Products	Depth of Decarburization by Microscopic method	IS-6396:2000 (Ra.2012) ASTM E1077-2014	100 x Magnification 0.01 mm to 1.6 mm
7.	Case Hardened Steels	Case Depth (Microscopic method)	IS 6416:1988 (RA 2012)	100 x
8.	Austenitic Stainless Steel	IGC Practice A	ASTM A 262-2015	Qualitative 100 x to 1000 x
		IGC Practice B		Weight loss Method, 0.002 to 220 g
		IGC Practice C		Weight loss Method, 0.002 to 220 g
		IGC Practice E		Qualitative 5x to 500x
		IGC Practice F		Weight loss Method, 0.002 to 220 g
9.	Ferritic, Austenitic and Duplex Stainless Steel	IGC Method –C (Huey Test)	ISO 3651 (Part 2): 1998	Weight loss Method 1 to 2500Mills/Year
		IGC Method A	ISO 3651 (Part 2): 1998	Magnification 5X to 20X (1t & 4t Bendmin 90 degree)

Kanhav Joshi
Convenor

Birendra Prasad Murmu
Program Manager

Laboratory

Sohm Analytical Services (I) Pvt. Ltd., Gala No. B-39, Ground Floor,
Plot No. J7, J8 & J9, Kohinoor Industrial Complex, Taloja, MIDC, Tal.
Panvel, Dist., Raigad, Maharashtra

Accreditation Standard ISO/IEC 17025: 2017

Certificate Number

TC-6651

Page 4 of 4

Validity

18.12.2017 to 17.12.2019

Last Amended on 26.04.2019

Sl.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
10.	Nickel Rich Chromium Bearing Alloys	IGC Method –A, IGC Method –B	ASTM G 28-02(2015)ASTM G 28-02(2015)	Weight loss Method, 0.002 to 220 g Weight loss Method, 0.002 to 220 g
11.	Stainless Steel and Related Alloys	Ferric Chloride pitting test	ASTM G 48-2015 (Method A)	Visual & Weight loss Method, 22 °C and 50 °C, 0.002 g to 220 g.
		Ferric Chloride Crevice test	ASTM G 48-2015 (Method B)	Visual & Weight loss Method, 22 °C and 50 °C, 0.002 to 220g.
12.	Nickel Base & Chromium Bearing Alloy	Critical Pitting temperature test	ASTM G 48-2015 (Method C)	Qualitative
		Critical Crevice temperature	ASTM G 48-2015 (Method D)	Qualitative
13.	Ferrous Metals & Alloys	Ferrite Content Test (By Metallography) Ferrite Content Test (Ferritescope Method)	ASTM E 562-11ASTM A 800-14/ A799-15	25 % to 65 % 0.10 % to 85 % 0.10 FN to 110 FN
14.	Duplex Stainless Steel	Detection of Detrimental Intermetallic Phases (Method A,C)	ASTM A923-2014ASTM A923-2014	400 X / 500 X 0.001 mdd to 20 mdd
15.	(Tubes & Tube Sheets) Joint	Macro etch Test (Minimum Leak Path & Leg Length)	ASME Sec. IX – 2017	5 X to 20 X 1 mm to 20 mm

Kanhav Joshi
Convenor

Birendra Prasad Murmu
Program Manager