National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : QA/QC LAB, SS PLANT, KUTCH WORKS, RATNAMANI METALS & TUBES LTD., SURVEY NO. 474, BHACHAU-ANJAR ROAD, VILLAGE BHIMASAR, ANJAR, KACHCHH, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 08/02/2022 to 07/02/2024 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- METALS & ALLOYS	Stainless steel	Aluminum (Al)	ASTM E 1086
2	CHEMICAL- METALS & ALLOYS	Stainless steel	Boron (B)	ASTM E 1086
3	CHEMICAL- METALS & ALLOYS	Stainless steel	Calcium (Ca)	ASTM E 1086
4	CHEMICAL- METALS & ALLOYS	Stainless steel	Carbon (C)	ASTM E 1086
5	CHEMICAL- METALS & ALLOYS	Stainless steel	Chromium (Cr)	ASTM E 1086
6	CHEMICAL- METALS & ALLOYS	Stainless steel	Cobalt (Co)	ASTM E 1086
7	CHEMICAL- METALS & ALLOYS	Stainless steel	Copper (Cu)	ASTM E 1086
8	CHEMICAL- METALS & ALLOYS	Stainless steel	Lead (Pb)	ASTM E 1086
9	CHEMICAL- METALS & ALLOYS	Stainless steel	Manganese (Mn)	ASTM E 1086
10	CHEMICAL- METALS & ALLOYS	Stainless steel	Molybdenum (Mo)	ASTM E 1086
11	CHEMICAL- METALS & ALLOYS	Stainless steel	Nickel (Ni)	ASTM E 1086
12	CHEMICAL- METALS & ALLOYS	Stainless steel	Niobium (Nb)	ASTM E 1086
13	CHEMICAL- METALS & ALLOYS	Stainless steel	Nitrogen (N)	ASTM E 1086
14	CHEMICAL- METALS & ALLOYS	Stainless steel	Phosphorus (P)	ASTM E 1086
15	CHEMICAL- METALS & ALLOYS	Stainless steel	Silicon (Si)	ASTM E 1086
16	CHEMICAL- METALS & ALLOYS	Stainless steel	Sulphur (S)	ASTM E 1086
17	CHEMICAL- METALS & ALLOYS	Stainless steel	Tantalum (Ta)	ASTM E 1086
18	CHEMICAL- METALS & ALLOYS	Stainless steel	Tin (Sn)	ASTM E 1086

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19	CHEMICAL- METALS & ALLOYS	Stainless steel	Titanium (Ti)	ASTM E 1086
20	CHEMICAL- METALS & ALLOYS	Stainless steel	Tungsten (W)	ASTM E 1086
21	CHEMICAL- METALS & ALLOYS	Stainless steel	Vanadium (V)	ASTM E 1086
22	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact test (V Notch) at (Ambient temperature to -90ºC)& at (-)196ºC)	ASTM A370
23	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact test (V Notch) at (Ambient temperature to -90ºC)& at (-)196ºC)	ASTM E23
24	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact test (V Notch) at (Ambient temperature to -90ºC)& at (-)196ºC)	ISO 148-1
25	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes	DRIFT EXPANDING TEST	EN ISO 8493
26	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes	FLARING TEST	ASTM A370
27	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes	REVERSE FLATTENING TEST	ASTM A370
28	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	% Elongation	ASTM A370
29	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	% Elongation	ISO 6892-1
30	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Bend Test	ASTM A370
31	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Bend Test	BS EN ISO 5173:2009+A1
32	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	FLANGING TEST	ASTM A370

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33	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	FLATTENING TEST	ASTM A370
34	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	FLATTENING TEST	EN ISO 8492
35	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR15N)	ISO 6508-1
36	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR15N)	ASTM A370
37	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR15TW)	ASTM A370
38	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR15TW)	ISO 6508-1
39	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR30N)	ASTM A370
40	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR30N)	ISO 6508-1
41	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR30TW)	ASTM A370
42	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR30TW)	ISO 6508-1
43	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR45N)	ASTM A370
44	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR45N)	ISO 6508-1
45	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR45TW)	ASTM A370
46	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HR45TW)	ISO 6508-1

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47	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HRBW)	ASTM A370
48	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HRBW)	ISO 6508-1
49	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HRC)	ASTM A370
50	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Hardness test (HRC)	ISO 6508-1
51	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	REVERSE BEND TEST	ASTM A1016/1016M
52	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Ultimate Tensile Strength	ASTM A370
53	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Yield Stress (0.2% proof test)	ASTM A370
54	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Yield Stress (0.2% proof test)	ISO 6892-1
55	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Yield Stress (1.0% proof test)	ASTM A370
56	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Steel Welded & Seamless tubes & pipes, Coils, Plates, Round bar	Yield Stress (1.0% proof test)	ISO 6892-1
57	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless steel welded & seamless tubes and pipes, coils, plates, round bar	Ultimate tensile strength	ISO 6892-1
58	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	% Elongation	ASTM A370
59	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	% Elongation	ISO 6892-1
60	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	FLARING TEST	ASTM B/SB338

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61	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	FLATTENING TEST	ASTM B/SB338
62	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	REVERSE FLATTENING TEST	ASTM A370
63	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	Ultimate Tensile Strength	ASTM A370
64	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	Ultimate Tensile Strength	ISO 6892-1
65	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	Yield Stress (0.2% proof test)	ASTM A370
66	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	Yield Stress (0.2% proof test)	ISO 6892-1
67	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	Yield Stress (1.0% proof test)	ASTM A370
68	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Titanium welded tubes & coils	Yield Stress (1.0% proof test)	ISO 6892-1
69	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel	Method A [16% Sulfuric acid/copper sulfate test (Strauss test)]	EN ISO 3651-2
70	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel	Practice A (Oxalic Acid Etch Test for Classification of Etch Structures of Austenitic Stainless Steels)	ASTM A262
71	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel	Practice B (Ferric Sulfate-Sulfuric Acid Test for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels)	ASTM A262
72	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel	Practice C (Nitric Acid Test for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels)	ASTM A262

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73	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel	Practice E (Copper–Copper Sulfate–Sulfuric Acid Test for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels)	ASTM A262
74	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel, Duplex Ferritic/Austenitic Stainless Steel	Determining Average Grain Size	ASTM E112
75	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel, Duplex Ferritic/Austenitic Stainless Steel	Determining Volume Fraction by Systematic Manual Point Count	ASTM E562
76	MECHANICAL-METALLOGRAPHY TEST	Austenitic stainless steel, Duplex Ferritic/Austenitic Stainless Steel	Micro structure	ASM Handbook Vol.9
77	MECHANICAL-METALLOGRAPHY TEST	Duplex Ferritic/Austenitic Stainless Steel	Ferrite Content Measurement	ASTM A800 / A800M
78	MECHANICAL-METALLOGRAPHY TEST	Duplex Ferritic/Austenitic Stainless Steel	Method A (Ferric chloride pitting test)	ASTM G48
79	MECHANICAL-METALLOGRAPHY TEST	Duplex Ferritic/Austenitic Stainless Steel	Method A (Ferric Sulfate-Sulfuric Acid Test)	ASTM G28
80	MECHANICAL-METALLOGRAPHY TEST	Duplex Ferritic/Austenitic Stainless Steel	Method C (Ferric Chloride Corrosion Test for Classification of Structures of Duplex Stainless Steels)	ASTM A923
81	MECHANICAL-METALLOGRAPHY TEST	Duplex Ferritic/Austenitic Stainless Steel	Test Method A (Sodium Hydroxide Etch Test for Classification of Etch Structures of Duplex Stainless Steels)	ASTM A923
82	MECHANICAL-METALLOGRAPHY TEST	Ferritic Stainless Steel	Practice W (Oxalic acid etch test for detecting susceptibility to intergranular attack)	ASTM A763
83	MECHANICAL-METALLOGRAPHY TEST	Ferritic Stainless Steel	Practice Z (Copper-copper sulfate-16 % sulfuric acid test for detecting susceptibility to intergranular attack)	ASTM A763