National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : ALFALLOY TESTING AND INSPECTION SERVICES PRIVATE LIMITED, PLOT NO. PAP-28, MIDC TALOJA, NAVADA PHATA, PANVEL, RAIGAD, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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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- CORROSION TESTS	Austenitic and ferritic-austenitic (duplex) stainless steels	Intergranular corrosion test (Huey Test)	ISO 3651-1
2	CHEMICAL- CORROSION TESTS	Austenitic Stainless Steels	Intergranular corrosion-Practice A	ASTM A262
3	CHEMICAL- CORROSION TESTS	Austenitic Stainless Steels	Intergranular corrosion-Practice B	ASTM A262
4	CHEMICAL- CORROSION TESTS	Austenitic Stainless Steels	Intergranular corrosion-Practice C	ASTM A262
5	CHEMICAL- CORROSION TESTS	Austenitic Stainless Steels	Intergranular corrosion-Practice E	ASTM A262
6	CHEMICAL- CORROSION TESTS	Duplex Austenitic/Ferritic Stainless Steels	Detection of Detrimental Intermetallic Phases	ASTM A923 (Method C)
7	CHEMICAL- CORROSION TESTS	Duplex Austenitic/Ferritic Stainless Steels	Detection of Detrimental Intermetallic Phases Method A	ASTM A923
8	CHEMICAL- CORROSION TESTS	Ferritic, Austenitic and ferritic-austenitic (duplex) Stainless Steel	Intergranular corrosion-Method A	ISO 3651-2
9	CHEMICAL- CORROSION TESTS	Wrought, Nickel-Rich, Chromium-Bearing Alloys	Intergranular corrosion-Method A	ASTM G28-02
10	CHEMICAL- CORROSION TESTS	Wrought, Nickel-Rich, Chromium-Bearing Alloys	Intergranular corrosion-Method B	ASTM G28-02
11	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Carbon (C)	IS 9879
12	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Molybdenum (Mo)	IS 9879
13	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Phosphorus (P)	IS 9879
14	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Chromium (Cr)	IS 9879
15	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Copper (Cu)	IS 9879
16	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Manganese (Mn)	IS 9879
17	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Nickel (Ni)	IS 9879
18	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Silicon (Si)	IS 9879

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19	CHEMICAL- METALS & ALLOYS	Austenitic and Ferritic Stainless Steels	Sulphur (S)	IS 9879
20	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Carbon (C)	ASTM E1086
21	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Chromium (Cr)	ASTM E1086
22	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Copper (Cu)	ASTM E1086
23	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Manganese (Mn)	ASTM E1086
24	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Molybdenum (Mo)	ASTM E1086
25	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Nickel (Ni)	ASTM E1086
26	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Phosphorus (P)	ASTM E1086
27	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Silicon (Si)	ASTM E1086
28	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Sulphur (S)	ASTM E1086
29	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Aluminium (Al)	ASTM E415
30	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Aluminium (Al)	IS 8811
31	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Carbon(C)	ASTM E415
32	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Carbon(C)	IS 8811
33	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Chromium (Cr)	ASTM E415
34	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Chromium (Cr)	IS 8811
35	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Copper (Cu)	ASTM E415
36	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Copper (Cu)	IS 8811
37	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Manganese (Mn)	ASTM E415

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38	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Manganese (Mn)	IS 8811
39	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Molybdenum (Mo)	ASTM E415
40	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Molybdenum (Mo)	IS 8811
41	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Nickel (Ni)	ASTM E415
42	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Nickel (Ni)	IS 8811
43	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Niobium (Nb)	ASTM E415
44	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Niobium (Nb)	IS 8811
45	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Phosphorus (P)	ASTM E415
46	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Phosphorus (P)	IS 8811
47	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Silicon (Si)	ASTM E415
48	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Silicon (Si)	IS 8811
49	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Sulphur (S)	ASTM E415
50	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Sulphur (S)	IS 8811
51	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Vanadium (V)	ASTM E415
52	CHEMICAL- METALS & ALLOYS	Carbon and Low-Alloy Steel	Vanadium (V)	IS 8811
53	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Aluminium (Al)	BS 15079
54	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Antimony (Sb)	BS 15079
55	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Arsenic (As)	BS 15079
56	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Cobalt (Co)	BS 15079

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57	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Iron (Fe)	BS 15079
58	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Lead (Pb)	BS 15079
59	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Nickel (Ni)	BS 15079
60	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Phosphorus (P)	BS 15079
61	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Silicon (Si)	BS 15079
62	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Sulphur (S)	BS 15079
63	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Tin (Sn)	BS 15079
64	CHEMICAL- METALS & ALLOYS	copper and copper alloys	Zinc (Zn)	BS 15079
65	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Weld in Metal	Yield Strength	AWS B4.0
66	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Weld in Metal	Nick break Test	IBR Rule (18th edition)
67	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Alloy and stainless-steel Pipe	Flattening Test	ASTM A370
68	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	0.2% Yield Strength	IS 1367 (Part 03)
69	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	0.2% Yield Strength	ASTM F606/ F606M
70	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	0.2% Yield Strength	ISO 898-1
71	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Elongation	ASTM F606/ F606M
72	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Reduction Area	ASTM F606/ F606M

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73	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Reduction Area	IS 1367 (Part 3)
74	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Ultimate Tensile Strength	ASTM F606/ F606M
75	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Ultimate Tensile Strength	ISO 898-1
76	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Yield Strength	ASTM F606/ F606M
77	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Yield Strength	IS 1367 (Part 03)
78	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Yield Strength	ISO 898-1
79	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Nuts)	Proof Load	ASTM A370
80	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper and Copper Alloy Pipes and Tubes	Flaring / Expansion Test (Tube & Pipes)	ASTM B153
81	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper and Copper Alloy Pipes and Tubes	Flattening Test (Tube & Pipes)	ASTM B 968/B968M
82	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper and Copper Alloy Pipes and Tubes	Flattening Test (Tube)	IS 2501
83	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferritic alloy, Austenitic alloy and stainless-steel tubes	Flaring Test/Drift Test	ASTM A1016/1016M
84	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferritic alloy, Austenitic alloy and stainless-steel tubes	Flattening Test	ASTM A1016
85	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength deformed Steel Bar and Wires	Mass Per Meter	IS 1786
86	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength deformed Steel Bar and Wires	Re-Bend Test	IS 1786

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87	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Strength	ASTM E8/E8M
88	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Strength	ASTM E8/E8M
89	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Strength	IBR Rule (18th edition)
90	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Strength	IS 1608 (Part 01)
91	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Strength	ISO 6892-1
92	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Strength	ISO 6892-1
93	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	1% Yield Strength	ASTM E8/E8M
94	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	1% Yield Strength	IS 1608 (Part 01)
95	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	1% Yield Strength	ISO 6892-1
96	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E 290
97	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E290
98	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IBR Rule (18th edition)
99	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IS 1599
100	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ISO 7438

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101	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness (2.5 Diax187.5 Kg)	ASTM E10
102	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness (2.5 Diax187.5 Kg)	IBR Rule (18th edition)
103	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness (2.5 Diax187.5 Kg)	IS 1500 (Part 01)
104	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness (2.5 Diax187.5 Kg)	ISO 6506-1
105	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ISO 148-1
106	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ASTM E 23
107	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	IS 1757 (Part 01)
108	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy V-Notch Impact Test (20°C to 50°C)	IBR Rule (18th edition)
109	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	ISO 6892-1
110	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	ASTM E8/E8M
111	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	ASTM E8/E8M
112	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	IBR Rule (18th edition)
113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	IS 1608 (Part 01)
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	IS 1608 (Part 01)

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115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	ISO 6892-1
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Reduction of Area	ASTM E8/E8M
117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Reduction of Area	ASTM E8/E8M
118	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Reduction of Area	IBR Rule (18th edition)
119	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Reduction of Area	IS 1608 (Part 01)
120	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Reduction of Area	ISO 6892-1
121	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness (HRB)	ASTM E 18
122	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness (HRB)	IBR Rule (18th edition)
123	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness (HRB)	IS 1586 (Part 01)
124	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness (HRC)	ASTM E 18
125	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness (HRC)	IS 1586 (Part 01)
126	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness (HRC)	ISO 6508-1
127	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASTM E8/E8M
128	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASTM E8/E8M

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129	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IBR Rule (18th edition)
130	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IS 1608 (Part 01)
131	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IS 1608 (Part 01)
132	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 6892-1
133	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 6892-1
134	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV10	ASTM E92
135	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV10	IS 1501 (Part 01)
136	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV10	IS 1501 (Part 01)
137	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV10	ISO 6507-1
138	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV10	ISO 6507-1
139	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV30	ASTM E92
140	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV30	IS 1501 (Part 01)
141	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV30	ISO 6507-1
142	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV5	ASTM E92

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143	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV5	ASTM E92
144	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV5	IS 1501 (Part 01)
145	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV5	IS 1501 (Part 01)
146	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness HV5	ISO 6507-1
147	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Strength	ASTM E8/E8M
148	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Strength	ASTM E8/E8M
149	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Strength	IBR Rule (18th edition)
150	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Strength	IS 1608 (Part 01)
151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Strength	ISO 6892-1
152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Strength	ISO 6892-1
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Bend Test	IS 2329
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flaring / Drift Test (Tubes)	IS 2335
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test (Tube & Pipes)	IS 2328
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes / Pipes	Bend Test	ASTM A370

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157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and alloys (Tube to tube sheet Mockup)	Pull Out Test	ASME SEC.VIII DIV.1
158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Nickel and Nickel-Base Alloy-Clad Steel Plate	Shear Strength Test	ASME SA 265
159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Seamless & Welded Steel Pipe	Bend Test	API-5L
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Seamless & Welded Steel Pipe	Flattening Test	API 5L
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Chromium Steel-Clad Plate	Shear Strength Test	ASME SA 263
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Chromium-Nickel Steel-Clad Plate	Shear Strength Test	ASME SA 264
163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Elongation	IS 1367 (Part 03)
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Elongation	ISO 898-1
165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Reduction Area	ISO 898-1
166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Bolts)	Ultimate Tensile Strength	IS 1367 (PART 03)
167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Nuts)	Proof Load	IS 1367 (Part 06)
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners (Nuts)	Proof Load	ISO 898-2
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Plate	Through Thickness Tensile (% R.A)	BS EN 10164
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Plates	Through Thickness Tensile	API 2H

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171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Plates	Through Thickness Tensile Test (% R.A)	ASTM A770
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Product	Flattening Test (Tube & Pipes)	ASTM A370
173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	0.2% Yield Strength	ASTM A370
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	0.2% Yield Strength	IS 1608 (Part 01)
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	1% Yield Strength	ASTM A370
176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Bend Test	ASTM A370
177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ASTM A370
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Elongation	ASTM A370
179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Flaring Test (Tubes)	ASTM A370
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction of Area	ASTM A370
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Ultimate Tensile Strength	ASTM A370
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Yield Strength	ASTM A370
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Yield Strength	IS 1608 (Part 01)
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Fillet Weld Test	AWS D1.1/D1.1M

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185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	0.2% Yield Strength	AWS B4.0
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	0.2% Yield Strength	IS 2825
187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Bend Test (Root, Face & Side)	ASME SEC-IX
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Bend Test (Root, Face & Side)	IS 2825
189	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Bend Test (Root, Face & Side)	AWS D1.1/D1.1M
190	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Bend Test (Root, Face & Side)	IBR Rule (18th edition)
191	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Bend Test (Root, Face & Side)	BS EN ISO 5173
192	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ASME SEC VIII DIV 1
193	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ASME SEC VIII DIV 2
194	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	AWS D1.1/D1.1M
195	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	IS 2825
196	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ISO 9016
197	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Charpy V-Notch Impact Test (20°C to 50°C)	IBR Rule (18th edition)
198	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Elongation	AWS B4.0

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199	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Fracture Test	ASME SEC-IX
200	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Fracture Test	IS 2825
201	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Fracture Test	IS 3600 (Part 8)
202	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Fracture Test	ISO 9017
203	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Nick Break Test	IS 2825
204	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Nick break Test	IS 3600 (Part 8)
205	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Peel Test	ASME SEC-IX
206	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Reduction of Area	AWS B4.0
207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Ultimate Tensile Strength	ASME SEC IX
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Ultimate Tensile Strength	AWS B4.0
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Ultimate Tensile Strength	AWS D1.1/D1.1M
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Ultimate Tensile Strength	IBR Rule (18th edition)
211	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Ultimate Tensile Strength	IS 2825
212	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Ultimate Tensile Strength	ISO 4136

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213	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness (HV10)	ISO 9015
214	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness (HV5)	ISO 9015
215	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness HV10	ASME Sec IX
216	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness HV10	AWS D1.1/D1.1M
217	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness HV10	ISO 15614-1
218	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness HV5	ASME Sec IX
219	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Vickers Hardness HV5	AWS D1.1/D1.1M
220	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal	Yield Strength	IS 2825
221	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	Yield Strength	ISO 5178
222	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	Elongation	IS 2825
223	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	Elongation	ISO 5178
224	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	Reduction of Area	IS 2825
225	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	Reduction of Area	ISO 5178
226	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	Ultimate Tensile Strength	ISO 5178

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227	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (Welding Procedure Test)	Bend Test (Root, Face & Side)	ISO 15614-1
228	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (Welding procedure test)	Charpy V-Notch Impact Test (-196°C, -101°C to +50°C)	ISO 15614-1
229	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (Welding procedure test)	Ultimate Tensile Strength	ISO 15614-1
230	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metal- (All weld metal Tensile)	0.2% Yield Strength	ISO 5178
231	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metals	Bend Test	ASTM E190
232	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welding Electrodes	0.2% Yield Strength	ASME BPVC.II.C
233	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welding Electrodes	Elongation	ASME BPVC.II. C
234	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welding Electrodes	Reduction of Area	ASME BPVC.II. C
235	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welding Electrodes	Ultimate Tensile Strength	ASME BPVC.II. C
236	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welding Electrodes	Yield Strength	ASME BPVC.II. C
237	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds in carbon and low-alloy steel piping	Nick break Test	API 1104
238	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds in carbon and low-alloy steel piping	Ultimate Tensile Strength	API 1104
239	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought and Cast Aluminum- and Magnesium-Alloy Products	0.2% Yield Strength	ASTM B557
240	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought and Cast Aluminum- and Magnesium-Alloy Products	Elongation	ASTM B557

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241	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought and Cast Aluminum- and Magnesium-Alloy Products	Reduction of Area	ASTM B557
242	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought and Cast Aluminum- and Magnesium-Alloy Products	Ultimate Tensile Strength	ASTM B557
243	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought and Cast Aluminum- and Magnesium-Alloy Products	Yield Strength	ASTM B557
244	MECHANICAL-METALLOGRAPHY TEST	Case Hardened Steel	Case Depth (Microscope Method)	IS 6416
245	MECHANICAL-METALLOGRAPHY TEST	Cast Iron	Microstructure of Graphite in Cast Iron Type, Size, & Distribution	ASTM A247
246	MECHANICAL-METALLOGRAPHY TEST	Cast iron	Microstructure of Graphite in Cast Iron Type, Size, & Distribution	IS 7754
247	MECHANICAL-METALLOGRAPHY TEST	Coating in Metal	Thickness of coating (Microscope Method)	ASTM B487
248	MECHANICAL-METALLOGRAPHY TEST	Graphite in Iron Castings	Nodularity	ASTM A247
249	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Ferrite Content Test (By Metallography)	ASTM E562
250	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Grain Size (Comparison Method)	ASTM E112
251	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Structure Examination	ASM Handbook Volume 9
252	MECHANICAL-METALLOGRAPHY TEST	Metals and Alloys	Macro etch Test	ASTM E340
253	MECHANICAL-METALLOGRAPHY TEST	Steel Bars, Billets, Blooms, and Forgings	Macro etch Test	ASTM E381
254	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Decarburization	ASTM E1077
255	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Decarburization	IS 6396
256	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Grain Size (Comparison Method)	IS 4748
257	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Inclusion Rating (Non metallic Inclusions micrographic Method A & Method D)	ASTM E45

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258	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Inclusion Rating (Non metallic Inclusions micrographic Method A & Method D)	IS 4163
259	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Macro etch Test	IS 11371
260	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Macro Etch Test	AWS D1.1/D1.1M
261	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Macro etch Test	IBR Rule (18th Edition)
262	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Macro etch Test	IS 2825
263	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Macro etch Test (Minimum Leak Path & Leg Length)	ASME Section IX
264	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Macro Examination	EN ISO 17639
265	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Macro Examination	ISO 15614-1
266	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Micro Examination	EN ISO 17639
267	MECHANICAL-METALLOGRAPHY TEST	Weld in Metal	Micro Structure Examination	IBR Rule (18th Edition)