National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : INO ANALYTICAL LABORATORIES, W-208, MIDC PHASE II, SAGAON, DOMBIVLI, THANE, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 07/06/2022 to 12/09/2023 **Last Amended on** 12/01/2023

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- METALLIC COATINGS & TREATMENT SOLUTIONS	Zinc coated iron and steel articles	Mass Of Zinc Coating	IS 6745
2	CHEMICAL- METALS & ALLOYS	Aluminium & Aluminium Base Alloys	Lead	ASTM E 1251
3	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Chromium	ASTM E 1251
4	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Copper	ASTM E 1251
5	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Iron	ASTM E 1251
6	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Magnesium	ASTM E 1251
7	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Manganese	ASTM E 1251
8	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Nickel	ASTM E 1251
9	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Silicon	ASTM E 1251
10	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Titanium	ASTM E 1251
11	CHEMICAL- METALS & ALLOYS	Aluminium And Aluminium Base Alloys	Zinc	ASTM E 1251
12	CHEMICAL- METALS & ALLOYS	aluminum And Aluminium Base Alloys	Tin	ASTM E 1251
13	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Carbon	IS 9879
14	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Chromium	IS 9879
15	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Copper	IS 9879
16	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Manganese	IS 9879
17	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Molybednum	IS 9879
18	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Nickel	IS 9879

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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
19	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Phosphorus	IS 9879
20	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Silicon	IS 9879
21	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Sulphur	IS 9879
22	CHEMICAL- METALS & ALLOYS	Carbon & Alloy Steel	Silicon	IS 8811
23	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Aluminium	ASTM E 415
24	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Arsenic	ASTM E 415
25	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Arsenic	IS 8811
26	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Boron	ASTM E 415
27	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Boron	IS 8811
28	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Carbon	ASTM E 415
29	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Carbon	IS 8811
30	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Chromium	ASTM E 415
31	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Chromium	IS 8811
32	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Chromium	JIS G 1253
33	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Cobalt	ASTM E 415
34	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Cobalt	IS 8811
35	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Cobalt	JIS G 1253
36	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Copper	ASTM E 415
37	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Copper	IS 8811

SCOPE OF ACCREDITATION

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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
38	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Copper	JIS G 1253
39	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Lead	JIS G 1253
40	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Lead	JIS G1253
41	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Manganese	ASTM E 415
42	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Manganese	IS 8811
43	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Molybednum	ASTM E 415
44	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Molybednum	IS 8811
45	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Molybednum	JIS G 1253
46	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Nickel	ASTM E 415
47	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Nickel	JIS G 1253
48	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Niobium	ASTM E 415
49	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Niobium	JIS G 1253
50	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Phosphorus	ASTM E 415
51	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Silicon	ASTM E 415
52	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Silicon	JIS G 1253
53	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Sulphur	ASTM E 415
54	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Sulphur	IS 8811
55	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Sulphur	JIS G 1253
56	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Sulphur	JIS G 1253

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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
57	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Tin	ASTM E 415
58	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Tin	IS 8811
59	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Titanium	ASTM E 415
60	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Titanium	IS 8811
61	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Titanium	JIS G 1253
62	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Vanadium	ASTM E 415
63	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Vanadium	IS 8811
64	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Vanadium	JIS G 1253
65	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Zirconium	ASTM E 415
66	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steel	Zirconium	IS 8811
67	CHEMICAL- METALS & ALLOYS	Carbon & Low AlloySteel	Phosphorus	IS 8811
68	CHEMICAL- METALS & ALLOYS	Carbon Steel	Nickel	IS 8811
69	CHEMICAL- METALS & ALLOYS	Carbon Steel	Niobium	IS 8811
70	CHEMICAL- METALS & ALLOYS	Carbon Steel & Low Alloy Steel	Aluminium	IS 8811
71	CHEMICAL- METALS & ALLOYS	Copper and Copper Alloys	Arsenic	BS EN 15079
72	CHEMICAL- METALS & ALLOYS	Copper and Copper Alloys	Cobalt	BS EN 15079
73	CHEMICAL- METALS & ALLOYS	Copper And Copper Alloys	Iron	BS EN 15079
74	CHEMICAL- METALS & ALLOYS	Copper And Copper Alloys	Zinc	BS EN 15079
75	CHEMICAL- METALS & ALLOYS	Copper And Copper Base Alloys	Aluminium	BS EN 15079

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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
76	CHEMICAL- METALS & ALLOYS	Copper and Copper Base Alloys	Lead	BS EN 15079
77	CHEMICAL- METALS & ALLOYS	Copper And Copper Base Alloys	Manganese	BS EN 15079
78	CHEMICAL- METALS & ALLOYS	Copper and Copper Base Alloys	Nickel	BS EN 15079
79	CHEMICAL- METALS & ALLOYS	Copper and Copper Base Alloys	Phosphorus	BS EN 15079
80	CHEMICAL- METALS & ALLOYS	Copper and Copper Base Alloys	Silicon	BS EN 15079
81	CHEMICAL- METALS & ALLOYS	Copper And Copper Base Alloys	Sulphur	BS EN15079
82	CHEMICAL- METALS & ALLOYS	Copper And Copper Base Alloys	Tin	BS EN 15079
83	CHEMICAL- METALS & ALLOYS	NIckel And Nickel Base Alloys	Aluminium	ASTM E 3047
84	CHEMICAL- METALS & ALLOYS	Nickel And Nickel Base Alloys	Boron	ASTM E 3047
85	CHEMICAL- METALS & ALLOYS	Nickel And Nickel Base alloys	Carbon	ASTM E 3047
86	CHEMICAL- METALS & ALLOYS	NIckel And Nickel Base Alloys	Chromium	ASTM E 3047
87	CHEMICAL- METALS & ALLOYS	NIckel And NIckel Base Alloys	Cobalt	ASTM E 3047
88	CHEMICAL- METALS & ALLOYS	NIckel And NIckel Base Alloys	Copper	ASTM E 3047
89	CHEMICAL- METALS & ALLOYS	Nickel and Nickel Base Alloys	Iron	ASTM E 3047
90	CHEMICAL- METALS & ALLOYS	NIckel And NIckel Base Alloys	Manganese	ASTM E 3047
91	CHEMICAL- METALS & ALLOYS	NIckel And Nickel Base Alloys	Molybednum	ASTM E 3047
92	CHEMICAL- METALS & ALLOYS	Nickel and Nickel base Alloys	Nickel	ASTM E 3047
93	CHEMICAL- METALS & ALLOYS	Nickel And Nickel Base Alloys	Niobium	ASTM E 3047
94	CHEMICAL- METALS & ALLOYS	NIckel and NIckel Base Alloys	Phosphorus	ASTM E 3047

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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
95	CHEMICAL- METALS & ALLOYS	NIckel And Nickel Base Alloys	Silicon	ASTM E 3047
96	CHEMICAL- METALS & ALLOYS	NIckel And NIckel Base Alloys	Sulphur	ASTM E 3047
97	CHEMICAL- METALS & ALLOYS	Nickel And NIckel Base Alloys	Titanium	ASTM E 3047
98	CHEMICAL- METALS & ALLOYS	Nickel And Nickel Base alloys	Tungsten	ASTM E 3047
99	CHEMICAL- METALS & ALLOYS	NIckel And Nickel Base Alloys	Vanadium	ASTM E 3047
100	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminium	JIS G 1253
101	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E 1086
102	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E 1086
103	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	JIS G 1253
104	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E 1086
105	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	JIS G 1253
106	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E 1086
107	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybednum	ASTM E 1086
108	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybednum	JIS G 1253
109	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E 1086
110	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	JIS G 1253
111	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium	JIS G 1253
112	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nitrogen	JIS G 1253
113	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	ASTM E 1086

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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
114	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E 1086
115	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	ASTM E 1086
116	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	JIS G 1253
117	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium	JIS G 1253
118	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tungsten	JIS G 1253
119	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	JIS G 1253
120	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Vanadium	ASTM E 2994
121	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Zirconium	ASTM E 2994
122	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Alloys	Aluminium	ASTM E 2994
123	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Alloys	Nickel	ASTM E 2994
124	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Alloys	Silicon	ASTM E 2994
125	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Alloys	Tin	ASTM E 2994
126	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Base Alloys	Chromium	ASTM E 2994
127	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Base Alloys	Copper	ASTM E 2994
128	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Base Alloys	Iron	ASTM E 2994
129	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Base Alloys	Manganese	ASTM E 2994
130	CHEMICAL- METALS & ALLOYS	Titanium and Titanium Base Alloys	Molybednum	ASTM E 2994
131	CHEMICAL- METALS & ALLOYS	Tool steel	Carbon	JIS G 1253
132	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	JIS G 1253

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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
133	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt	JIS G 1253
134	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	JIS G 1253
135	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybednum	JIS G 1253
136	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorus	JIS G 1253
137	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	JIS G 1253
138	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulphur	JIS G 1253
139	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten	JIS G 1253
140	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium	JIS G 1253
141	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Alloy & Stainless Steel Pipe	Flattening Test	ASTM A 999/A999 M
142	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon & Alloy Steel (Bolt & Screws)	Tensile Test Under Wedge Load (Full Size Bolt & Screw)	IS 1367-3
143	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon & Alloy Steel (Pipes)	Flattening test	ASTM A 530
144	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon and Low Alloy Steel Tubes	Reverse Flattening Test	ASTM A 450/A 450M
145	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Low Alloy Steel Tubes	Drift Expansion / Flaring Test	ASTM A 450/ A 450M
146	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Low Alloy Steel Tubes	Flanging Test	ASTM A450/A450 M
147	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Low Alloy Steel Tubes	Flattening Test	ASTM A 450/450M
148	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel Fasteners	Proof Load	ISO 898-2

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149	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper & Copper Alloy Pipe & Tubes	Drift Expansion/Flaring Test	ASTM B 153
150	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper & Copper Alloy Steel (Tubes and Ferrule)	Flattening Test	ASTM B 111
151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Deformed Steel Bars & Wires	Bend/Rebend Test	IS 1786
152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Deformed Steel Bars & Wires	Mass Per unit Length	IS 1786
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferritic Alloy, Austenite Alloy & Stainless Steel Tubes	Drift Expansion / Flaring Test	ASTM A 1016/A 1016M
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferritic Alloy, Austenitic Alloy & Stainless Steel Tubes	Reverse Flattening Test	ASTM A 1016/A 1016M
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferritic Alloy, Austenitic Alloy & Stainless Steel Welded Tubes	Reverse Bend Test	ASTM A 1016/A1016M
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferritic Alloy, Austenitic Alloy, Stainless Steel Tubes	Flattening Test	ASTM A 1016/A1016M
157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material	Flattening Test	ASTM A 370
158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material	Guided Bend Test	ASTM A 370
159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material	Reduction of Area (%)	ASTM A 370
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material	Rockwell Hardness Test (Rockwell B @100kgf)	ASTM A 370
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material	Rockwell Hardness Test (Rockwell C @ 150 Kgf)	ASTM A 370
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material	Tensile Strength (UTS)	ASTM A 370

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163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material (Pipes & Tubes)	Full Section Bend Test	ASTM A 370
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material (Tubes)	Drift expansion / Flaring Test	ASTM A 370
165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material- Tubes & Pipe	Crush Test	ASTM A 370
166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material-Tubes	Flanging test	ASTM A 370
167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous material-Tubes	Reverse Flattening Test	ASTM A 370
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Elongation (%)	ASTM A 370
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Proof Stress (0.1% to 1%)	ASTM A 370
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Yield Stress	ASTM A 370
171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Hard Metals	Vickers Hardness Test	IS 12783
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Hard Metals	Vickers Hardness Test	IS 12783
173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Hard Metals	Vickers Hardness Test	IS 12783
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Guided Bend Test	ASTM E 290
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Guided Bend test	BS EN ISO 7438
176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Guided Bend Test	IS 1599

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177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Impact Test (Charpy V Notch)	ASTME 23
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Impact test (Charpy V Notch) - (Test Temperature 35°C to -196°C)	IS 1757 Part I
179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Impact test (Charpy V Notch) (Test Temperature 35°C to -196°C)	BS EN ISO 148-1
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress (0.1% to 1%)	BS EN 6892-1
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction of Area (%)	ASTM E8/E8M
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction of Area (%)	BS EN 6892-1
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction of Area (%)	IS 1608 -1
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (Rockwell B @100 kgf)	ISO 6508-1
185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (Rockwell B @100kgf)	ASTM E 18
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (Rockwell B @100kgf)	IS 1586 Part I
187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (Rockwell C @ 150 Kgf)	ISO 6508-1
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (Rockwell C @150 kgf)	IS 1586 Part-I
189	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (Rockwell C 150 Kgf)	ASTM E 18
190	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Strength (UTS)	BS EN 6892-1

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191	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Strength (UTS)	IS 1608 -1
192	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E 92
193	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E 92
194	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E 92
195	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic material	Vickers Hardness Test	IS 1501 Part 1
196	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 Part -1
197	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 Part I
198	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507-1
199	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507-1
200	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV10)	ISO 6507-1
201	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress	ASTM E8/E8M
202	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress	BS EN ISO 6892-1
203	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress	IS 1608-1
204	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Ferrous, Non-Ferrous Metals & Alloys)	Brinell Hardness Test	ASTM E 10

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205	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Ferrous, Non-Ferrous Metals & Alloys)	Brinell Hardness Test	IS 1500 Part 1
206	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Ferrous, Non-Ferrous Metals & Alloys)	Brinell Hardness Test	ISO 6506-1
207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Ferrous, Non-Ferrous Metals & Alloys)	Elongation (%)	ASTM E8/E8M
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Ferrous, Non-Ferrous Metals & Alloys)	Elongation (%)	BS EN 6892-1
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Ferrous, Non-Ferrous Metals & Alloys)	Elongation (%)	IS 1608-1
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Tube)	Flanging Test	IS 2330
211	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Tube)	Flattening test	IS 2328
212	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material (Tube)	Full Section Bend Test	IS 2329
213	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material Tubes	Drift Expansion/ Flaring Test	IS 2335
214	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Proof Stress (0.1% to 1%)	ASTM E8/E8M
215	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Proof Stress (0.1% to 1%)	IS 1608 -1
216	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals	Impact Test (Izod V Notch) (Room Temperature)	BS 131-1
217	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals	Impact Test (IZOD V Notch) (Room Temperature)	IS 1598
218	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Mettalic Material	Tensile Strength (UTS)	ASTM E8/E8M

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219	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Nickel & Nickel Alloy Welded Tubes	Drift Expansion / Flaring test	ASTM B 751
220	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Nickel & Nickel Alloys Welded Tubes	Flanging Test	ASTM B 751
221	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Nickel & Nickel Base Alloy- Clad Steel	Shear strength	ASTM A 265
222	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Chromium Nickel Steel-Clad Plate	Shear strength	ASTM A 264
223	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Stainless Chromium Steel Clad Plate	Shear strength	ASTM A 263
224	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fastners	Proof Load Test	IS 1367 Part 6
225	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Plates	Through Thickness	ASTM A 770/770M
226	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Plates & Flats	Through Thickness	ISO 7778
227	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in metallic material	Impact test (Charpy V Notch) - (Test Temperature 35°C to -196°C)	ISO 9016
228	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld Metallic Material	Vickers Hardness Test	BS EN ISO 9015-1
229	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld Metallic Material	Vickers Hardness Test	BS EN ISO 9015-1
230	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Austenite Stainless Tube	Reverse Bend Test	ASTM A249/A249M
231	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Fracture	IS 2825
232	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Fracture,	ASME SEC IX

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233	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Guided Bend Test for Weld (Face, Root and Side)	ASME SEC IX
234	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Macro Etch Test	IS 2825
235	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Macro Examination Leg Length	ASME SEC IX
236	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded ferrous & Non Ferrous Metals	Macro Examination Leg Length	IS 2825
237	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded ferrous & Non ferrous Metals	Macro Examination Minimum Leak Path	ASME SEC IX
238	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Macro examination Test	ASME SEC IX
239	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Macro Examination Throat Thickness	ASME SEC IX
240	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded ferrous & Non Ferrous Metals	Macro Examination Throat Thickness	IS 2825
241	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Nick Break	IS 2825
242	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Peel Test	ASME SEC VIII Div 1
243	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Shear strength	ASME SEC IX
244	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Tensile Strength- All weld/ longitudinal	IS 2825
245	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Metals	Tensile Strength- UTS	ASME Sec IX
246	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous & Non Ferrous Products	Tansverse/ Longitudinal(Face, Root and Side)	ASTM E 190

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247	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Ferrous And Non Ferrous Metals	Peel Test	ASME SEC IX
248	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Joints & Metals	Longitudinal Root & Face Bend	IS 3600 Part 7
249	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Joints & Metals	Transverse Root & Face Bend	IS 3600 Part 5
250	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded joints & Weld Metals	Nick Break	IS 3600-8
251	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Metallic Material	Guided Bend test for Weld (Face, Root and Side)	BS EN ISO 5173
252	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Metallic Material	Guided Bend Test for Weld (Root, Face and Side)	BS EN 910
253	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Metallic Material	Macro Etch Test	BS EN ISO 17639
254	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Metallic Material	Transverse Tensile Strength (UTS)	ISO 4136
255	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Steel	Macro Examination Throat Thickness	AWS D 1.1
256	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Steel	Fracture	AWS D1.1/D1.1 M
257	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Steel	Guided Bend Test for Weld (Root, Face and Side)	AWS D 1.1/D 1.1M
258	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Steel	Macro etch test	AWS D 1.1/D 1.1 M
259	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Steel	Macro Examination Leg Length	AWS D 1.1
260	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Steel	Tensile Strength (UTS)	AWS D1.1/ D1.1M

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261	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought & Cast Aluminium & Magnesium Alloys Products	Reduction (%)	ASTM B 557
262	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought & Cast Aluminum & Magnesium Alloys Products	Proof Stress (0.1% to 1%)	ASTM B 557
263	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought & Cast Aluminum & Magnesium Alloys Products	Tensile Strength (UTS)	ASTM B 557
264	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Wrought and cast aluminum and alloys products.	Elongation (%)	ASTM B 557
265	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Test Practice A (Oxalic Acid Etch Test)	ASTM A 262
266	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Test Practice B (Ferric Sulphate- Sulphuric Acid Test)	ASTM A 262
267	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Test Practice C (Nitric Acid Etch Test)	ASTM A 262
268	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Test Practice E (Copper Sulphate -16% Sulphuric Acid Test)	ASTM A 262
269	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Test Practice-F (Copper Sulfate -50% Sulphuric Acid Test)	ASTM A 262
270	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic / Ferritic Stainless Steel	Detecting Detrimental Intermetallic Phase (Charpy Impact Test) (Method B) (temp –40°C and –46°C)	ASTM A 923
271	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic/ Ferritic Stainless Steel	Detecting Detrimental Intermetallic Phase (Ferric Chloride Corrosion Test) Method C	ASTM A 923
272	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic/ Ferritic Stainless Steel	Detecting Detrimental Intermetallic Phase (Method A) (Sodium Hydroxide Etch Test)	ASTM A 923
273	MECHANICAL-METALLOGRAPHY TEST	Duplex Steel	Phase Content Test by Volume fraction Method	ASTM E 562
274	MECHANICAL-METALLOGRAPHY TEST	Electroplated coatings	Thickness of Coating (Microscopic Method)	IS 3203
275	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non Ferrous Coated Material	Metal & oxide coatings	ASTM B 487

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276	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non Ferrous Metal & Alloys	Average Grain Size (Comparison Method)	ASTM E 112
277	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Metals & Alloys	Macro Etch Examination Test	ASTM E 340
278	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Metals & Alloys	Micro Structural Examination	ASM Handbook Vol-9
279	MECHANICAL-METALLOGRAPHY TEST	Ferrous Material Alloys & Products	Average Grain Size (Comparison Method)	IS 4748
280	MECHANICAL-METALLOGRAPHY TEST	Ferrous Material Alloys & Products	Average Grain Size (Comparison Method)	BS EN ISO 643
281	MECHANICAL-METALLOGRAPHY TEST	Hardened & Carburized Steel	Case Depth Measurement (Microscopic method) (Magnification 100X)	IS 6416
282	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel & related alloys	Ferric Chloride Pitting Test (Method A) (25°C ± 2°C & 35°C ±2°C) for 24 Hrs	IAL/MV/CORROSION/01
283	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel and related Alloys	Ferric Chloride Pitting Test (Method A) (Temp 22 ± 2°C and 50 ±2°C.)	ASTM G48
284	MECHANICAL-METALLOGRAPHY TEST	Steel Bars, Billets, Blooms & Forging	Macro Etch Examination Test	ASTM E 381
285	MECHANICAL-METALLOGRAPHY TEST	Steel Casting, Stainless & Austenitic Alloys	Ferrite Content (By Ferrite Scope)	ASTM A800/A800M
286	MECHANICAL-METALLOGRAPHY TEST	Steel Casting, Stainless & Austenitic Alloys	Ferrite Content (By Ferrite Scope)	ASTM A800/A800M
287	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Depth of Decarburization (Microscopic Method)	ASTM E 1077
288	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Depth of Decarburization (Microscopic Method)	IS 6396
289	MECHANICAL-METALLOGRAPHY TEST	Wrought Steel Products	Inclusion rating by Method "A"	ASTM E 45
290	MECHANICAL-METALLOGRAPHY TEST	Wrought Steel Products	Inclusion Rating by Method "A"	IS 4163
291	MECHANICAL-METALLOGRAPHY TEST	Wrought Steel Products	Macro Etch Examination Test	IS 11371
292	MECHANICAL-METALLOGRAPHY TEST	Wrought, Nickel-rich Chromium Bearing Alloys	IGC Test (G 28 Method A)	ASTM G 28 (Method A)