National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : ADVANCED METALLURGICAL LABORATORY (UNIT II), NO. 6C, VEERASANDRA INDUSTRIAL AREA, BENGALURU, BENGALURU RURAL, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 16/11/2021 to 15/11/2023 **Last Amended on** 16/05/2023

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- CORROSION TESTS	metallic coatings, conversion coatings, anodic oxide coatings, and organic coatings on metallic materials.	Neutral salt spray test	ISO 9227
2	CHEMICAL- CORROSION TESTS	Corrosion Resistance of Electroplated and Anodized Aluminium Coatings	Neutral Salt Spray test	IS: 9844
3	CHEMICAL- CORROSION TESTS	Inorganic & Organic coated produc/ material	Neutral salt spray test	ASTM B117
4	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Coated & Plated Parts	Mass of Zinc coating	IS:6745 No of Amendments 5
5	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Bismuth	ASTM E1251
6	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	ASTM E 1251
7	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	ASTM E 1251
8	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Iron	ASTM E 1251
9	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	ASTM E 1251
10	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	ASTM E 1251
11	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	ASTM E 1251
12	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	ASTM E 1251
13	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	ASTM E 1251
14	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Tin	ASTM E 1251
15	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	ASTM E 1251
16	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Vanadium	ASTM E 1251
17	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	ASTM E 1251
18	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zirconium	ASTM E 1251

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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	Carbon Steel (low carbon, medium carbon & high carbon steel)	Aluminium	ASTM E 415
20	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Aluminium	IS 8811
21	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Aluminium	JIS G 1253
22	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Boron	ASTM E 415
23	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Boron	IS 8811
24	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Boron	JIS G 1253
25	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Carbon	ASTM E 415
26	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Carbon	IS 8811
27	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Carbon	JIS G 1253
28	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Chromium	ASTM E 415
29	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Chromium	IS8811
30	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Chromium	JIS G 1253
31	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Cobalt	ASTM E 415
32	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Cobalt	IS 8811
33	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Cobalt	JIS G 1253
34	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Copper	ASTM E415
35	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Copper	IS 8811
36	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Copper	JIS G 1253
37	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Lead	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
38	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Manganese	ASTM E415
39	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Manganese	IS 8811
40	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Manganese	JIS G 1253
41	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Molybdenum	ASTM E 415
42	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Molybdenum	IS 8811
43	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Molybdenum	JIS G 1253
44	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Nickel	ASTM E 415
45	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Nickel	IS 8811
46	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Nickel	JIS G 1253
47	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Niobium	ASTM E 415
48	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Niobium	IS 8811
49	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Niobium	JIS G 1253
50	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Phosphorous	ASTM E 415
51	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Phosphorous	IS 8811
52	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Phosphorous	JIS G 1253
53	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Silicon	ASTME 415
54	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Silicon	IS 8811
55	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Silicon	JIS G 1253
56	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Sulphur	ASTM E 415

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57	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Sulphur	IS 8811
58	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Sulphur	JIS G 1253
59	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Titanium	ASTM E 415
60	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Titanium	IS 8811
61	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Titanium	JIS G 1253
62	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Tungsten	JIS G 1253
63	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Vanadium	ASTM E 415
64	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Vanadium	IS 8811
65	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon steel)	Vanadium	JIS G 1253
66	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Carbon	ASTM E 1999
67	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Carbon	IS 15338
68	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Carbon	JIS G 1253
69	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Chromium	ASTM E 1999
70	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Chromium	IS 15338
71	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Chromium	JIS G 1253
72	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Copper	ASTM E 1999
73	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Copper	IS 15338
74	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Copper	JIS G 1253
75	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Magnesium	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
76	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Manganese	ASTM E 1999
77	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Manganese	IS 15338
78	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Manganese	JIS G 1253
79	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Molybdenum	ASTM E 1999
80	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Molybdenum	IS 15338
81	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Molybdenum	JIS G 1253
82	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Nickel	ASTM E 1999
83	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Nickel	IS 15338
84	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Nickel	JIS G 1253
85	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Phosphorous	ASTM E 1999
86	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Phosphorous	IS15338
87	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Phosphorous	JIS G 1253
88	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Silicon	ASTM E 1999
89	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Silicon	IS 15338
90	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Silicon	JIS G 1253
91	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Sulphur	ASTM E 1999
92	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Sulphur	IS 15338
93	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Sulphur	JIS G 1253
94	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Vanadium	ASTM E 1999

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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	Cast Iron & SG Iron	Vanadium	IS 15338
96	CHEMICAL- METALS & ALLOYS	Cast Iron & SG Iron	Vanadium	JIS G 1253
97	CHEMICAL- METALS & ALLOYS	Stainless steel	Aluminium	JIS G 1253
98	CHEMICAL- METALS & ALLOYS	Stainless steel	Carbon	ASTM E1086
99	CHEMICAL- METALS & ALLOYS	Stainless steel	Carbon	IS:9879:1998
100	CHEMICAL- METALS & ALLOYS	Stainless steel	Carbon	JIS G 1253
101	CHEMICAL- METALS & ALLOYS	Stainless steel	Chromium	ASTM E-1086
102	CHEMICAL- METALS & ALLOYS	Stainless steel	Chromium	IS:9879
103	CHEMICAL- METALS & ALLOYS	Stainless steel	Chromium	JIS G 1253
104	CHEMICAL- METALS & ALLOYS	Stainless steel	Cobalt	JIS G 1253
105	CHEMICAL- METALS & ALLOYS	Stainless steel	Copper	ASTM E 1086
106	CHEMICAL- METALS & ALLOYS	Stainless steel	Copper	IS:9879
107	CHEMICAL- METALS & ALLOYS	Stainless steel	Copper	JIS G 1253
108	CHEMICAL- METALS & ALLOYS	Stainless steel	Manganese	ASTME 1086
109	CHEMICAL- METALS & ALLOYS	Stainless steel	Manganese	IS:9879
110	CHEMICAL- METALS & ALLOYS	Stainless steel	Manganese	JIS G 1253
111	CHEMICAL- METALS & ALLOYS	Stainless steel	Molybdenum	ASTM E 1086
112	CHEMICAL- METALS & ALLOYS	Stainless steel	Molybdenum	IS:9879
113	CHEMICAL- METALS & ALLOYS	Stainless steel	Molybdenum	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
114	CHEMICAL- METALS & ALLOYS	Stainless steel	Nickel	ASTM E 1086
115	CHEMICAL- METALS & ALLOYS	Stainless steel	Nickel	IS:9879
116	CHEMICAL- METALS & ALLOYS	Stainless steel	Nickel	JIS G 1253
117	CHEMICAL- METALS & ALLOYS	Stainless steel	Niobium	JIS G 1253
118	CHEMICAL- METALS & ALLOYS	Stainless steel	Phosphorous	ASTM E-1086
119	CHEMICAL- METALS & ALLOYS	Stainless steel	Phosphorous	IS:9879
120	CHEMICAL- METALS & ALLOYS	Stainless steel	Phosphorous	JIS G 1253
121	CHEMICAL- METALS & ALLOYS	Stainless steel	Silicon	ASTM E 1086
122	CHEMICAL- METALS & ALLOYS	Stainless steel	Silicon	IS:9879
123	CHEMICAL- METALS & ALLOYS	Stainless steel	Silicon	JIS G 1253
124	CHEMICAL- METALS & ALLOYS	Stainless steel	Sulphur	ASTM E 1086
125	CHEMICAL- METALS & ALLOYS	Stainless steel	Sulphur	IS:9879
126	CHEMICAL- METALS & ALLOYS	Stainless steel	Sulphur	JIS G 1253
127	CHEMICAL- METALS & ALLOYS	Stainless steel	Titanium	JIS G 1253
128	CHEMICAL- METALS & ALLOYS	Stainless steel	Vanadium	JIS G 1253
129	CHEMICAL- METALS & ALLOYS	Tool steel	Carbon	AML/TM/01 Issue No.1.Dt 01.9.2015
130	CHEMICAL- METALS & ALLOYS	Tool steel	Carbon	JIS G 1253
131	CHEMICAL- METALS & ALLOYS	Tool steel	Chromium	AML/TM/01 Issue No.1. Dt 01.9.2015
132	CHEMICAL- METALS & ALLOYS	Tool steel	Chromium	JIS G 1253

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133	CHEMICAL- METALS & ALLOYS	Tool steel	Cobalt	AML/TM/01 Issue No.1. Dt 01.9.2015
134	CHEMICAL- METALS & ALLOYS	Tool steel	Cobalt	JIS G 1253
135	CHEMICAL- METALS & ALLOYS	Tool steel	Manganese	AML/TM/01 Issue No.1 Dt 01.9.2015
136	CHEMICAL- METALS & ALLOYS	Tool steel	Manganese	JIS G 1253
137	CHEMICAL- METALS & ALLOYS	Tool steel	Molybdenum	AML/TM/01 Issue No.1. Dt 01.9.2015
138	CHEMICAL- METALS & ALLOYS	Tool steel	Molybdenum	JIS G 1253
139	CHEMICAL- METALS & ALLOYS	Tool steel	Nickel	AML/TM/01 Issue No.1. Dt 01.9.2015
140	CHEMICAL- METALS & ALLOYS	Tool steel	Nickel	JIS G 1253
141	CHEMICAL- METALS & ALLOYS	Tool steel	Phosphorous	AML/TM/01 Issue No.1. Dt 01.9.2015
142	CHEMICAL- METALS & ALLOYS	Tool steel	Phosphorous	JIS G 1253
143	CHEMICAL- METALS & ALLOYS	Tool steel	Silicon	AML/TM/01 Issue No.1 Dt 01.9.2015
144	CHEMICAL- METALS & ALLOYS	Tool steel	Silicon	JIS G 1253
145	CHEMICAL- METALS & ALLOYS	Tool steel	Sulphur	AML/TM/01 Issue No.1. Dt 01.9.2015
146	CHEMICAL- METALS & ALLOYS	Tool steel	Sulphur	JIS G 1253
147	CHEMICAL- METALS & ALLOYS	Tool steel	Tungsten	AML/TM/01 Issue No.1. Dt 01.9.2015
148	CHEMICAL- METALS & ALLOYS	Tool steel	Tungsten	JIS G 1253
149	CHEMICAL- METALS & ALLOYS	Tool steel	Vanadium	AML/TM/01 Issue No.1.Dt 01.9.2015
150	CHEMICAL- METALS & ALLOYS	Tool steel	Vanadium	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
151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Bend test(Face, root & side bend)	ASME SEC IX
152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Bend test(Face, root & side bend)	AWS D1.1
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Bend test(Face, root & side bend)	ISO 5173
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Charpy Impact V Notch amb temp upto -50 degree Celsius	IS:1757-Part1
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Charpy Impact V Notch amb temp upto -50 degree Celsius	ISO 148-1
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Tensile Strength	ASME SEC IX
157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Tensile Strength	ASME SEC IX-2019,AWS D1.1:2020,ISO4136
158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Tensile Strength	AWS D1.1
159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Tensile Strength	ISO 4136
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Yield Strength	ASME SEC IX
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Yield Strength	AWS D1.1
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Tensile Test- Yield Strength	ISO 4136
163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Vickers Hardness HV10	BS EN ISO 9015-1
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Other Non ferrous Weld & welded test specimens	Vickers Hardness HV5	BS EN ISO 9015-1

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165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous material & products	Tensile Test - Tensile strength	EN 2002-1
166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous material and products	IZOD Impact V Notch @ Room Temperature	IS 1598:1977 RA
167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	ferrous material and products	Vickers Hardness(HV10)	IS 12783:1989 RA
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	ferrous material and products	Vickers Hardness(HV30)	IS 12783:1989RA
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	ferrous material and products	Vickers Hardness(HV5)	IS 12783:1989 RA
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness (10/3000)	IS:1500-Part1
171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness (10/3000)	ISO 6506-1
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness (5/750)	IS:1500-Part1
173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV5)	IS:1501-Part1
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV5)	ISO 6507-1
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Bend test	ASTM E290
176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Bend test	IS:1599
177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness (10/3000)	ASTM E10
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness (5/750)	ASTM E10

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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
179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness (5/750)	ISO 6506-1
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness(2.5/187.5)	ASTM E10
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness(2.5/187.5)	IS:1500-Part 1
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Brinell Hardness(2.5/187.5)	ISO 6506-1
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Charpy Impact U Notch amb temp to -50 degrees Celsius	IS 1499:1977 RA
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Charpy Impact U Notch amb temp to -50 degrees Celsius	IS:1757-Part1
185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Charpy Impact U Notch amb temp to -50 degrees Celsius	ISO:148-1
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Charpy Impact V Notch amb temp upto -50 degree Celsius	IS:1757-Part1
187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Charpy Impact V Notch amb temp upto -50 degree Celsius	ISO 148-1
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Flattening Test(Seamless & Welded pipes 40 NB to 300NB)	IS 2328
189	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness HRA	ASTM E18
190	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness HRA	IS:1586:Part1
191	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness HRA	ISO 6508-1
192	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness(HRB)	ASTM E18

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193	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness(HRB)	IS:1586:Part1
194	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness(HRB)	ISO 6508-1
195	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness(HRC)	ASTM E18
196	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness(HRC)	IS:1586:Part1
197	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Rockwell Hardness(HRC)	ISO 6508-1
198	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - % Elongation after Fracture	ASTM A370
199	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - % Elongation after Fracture	ASTM E8/E8M
200	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - % Elongation after Fracture	EN 2002-1
201	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - % Elongation after Fracture	IS:1608-Part1
202	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - % Elongation after Fracture	ISO 6892-1
203	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - Proof Stress (0.1%-0.5%)	EN 2002-1
204	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - Proof Stress (0.1%-0.5%)	IS:1608-Part1
205	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - Proof Stress (0.1%-0.5%)	ISO 6892-1
206	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & Products	Tensile Test - Tensile strength	ASTM A370

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207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test - Tensile strength	ASTM E8/E8M
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- % Reduction of area	ASTM A370
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- % Reduction of area	ASTM E8/E8M
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- % Reduction of area	EN 2002-1
211	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- % Reduction of area	IS:1608-Part1
212	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- % Reduction of area	ISO 6892-1
213	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- Yield Strength	ASTM A370
214	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- Yield Strength	ASTM E8/E8M
215	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- Yield Strength	EN 2002-1
216	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- Yield Strength	IS:1608-Part1
217	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test- Yield Strength	ISO 6892-1
218	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test -Yield Strength(offset = 0.2%)	ASTM A370
219	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test -Yield Strength(offset = 0.2%)	ASTM E8/E8M
220	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test-Modulus of Elasticity (Young's Modulus)	ASTM E8/E8M

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221	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test-Modulus of Elasticity (Young's Modulus)-	ASTM A370
222	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test-Modulus of Elasticity (Young's Modulus)-	EN 2002-1
223	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test-Modulus of Elasticity (Young's Modulus)-	IS:1608-Part1
224	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile Test-Modulus of Elasticity (Young's Modulus)-	ISO 6892-1
225	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile test-Tensile Strength	IS:1608-Part1
226	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Tensile test-Tensile Strength	ISO 6892-1
227	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV10)	ASTM E92
228	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV10)	IS:1501-Part1
229	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV10)	ISO 6507-1
230	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV30)	ASTM E92
231	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV30)	IS:1501-Part1
232	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV30)	ISO 6507-1
233	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Vickers Hardness(HV5)	ASTM E92
234	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement	Tensile Test-%Elongation after fracture	IS 1608 Part I

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235	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement upto 40 mm	Bend Test	IS 1599
236	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement upto 40 mm diameter.	Tensile Test- %Total Elongation after frature	ISO:15630-1
237	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement 4 to 40 mm(TMT Bars)	Tensile Test-Yield Strength	IS 1608 Part I
238	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement 4mm to 40 mm(TMT Bars)	Tensile Test- Tensile strength	IS 1608 Part I
239	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement up to 40mm	Rebend Test	IS 1786:2008 RA
240	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement up to 40mm(TMT Bars)	Weight/meter (Kg)	IS 1786
241	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High strength deformed steel Bars For Concrete Reinforcement upto to 40 mm diameter	Tensile Test- 0.2% Proof stress	IS 1608 Part I
242	MECHANICAL-MECHANICAL PROPERTIES OF METALS	non ferrous material and products	Bend test	IS 1599
243	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Nonferrous material and products	Charpy Impact U Notch amb temp to -50 degrees Celsius	IS 1499
244	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - % Elongation after Fracture	ASTM B557M
245	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - % Elongation after Fracture	ASTM E8/E8M
246	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - % Elongation after Fracture	EN 2002-1
247	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - % Elongation after Fracture	IS:1608-Part1
248	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - % Elongation after Fracture	ISO 6892-1

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249	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Proof Stress (0.1%-0.5%)	EN 2002-1
250	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Proof Stress (0.1%-0.5%)	IS:1608-Part1
251	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Proof Stress (0.1%-0.5%)	ISO 6892-1
252	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Tensile strength	ASTM B557M
253	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Tensile strength	ASTM E8/E8M
254	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Tensile strength	EN 2002-1
255	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Tensile strength	IS:1608-Part1
256	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test - Tensile strength	ISO 6892-1
257	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- % Reduction of area	ASTM B557M
258	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- % Reduction of area	ASTM E8/E8M
259	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- % Reduction of area	EN 2002-1
260	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- % Reduction of area	IS:1608-Part1
261	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- % Reduction of area	ISO 6892-1
262	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- Yield Strength	ASTM E8/E8M

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263	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- Yield Strength	ASTM B557M
264	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- Yield Strength	EN 2002-1
265	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- Yield Strength	IS:1608-Part1
266	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test- Yield Strength	ISO 6892-1
267	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test -Yield Strength(offset = 0.2%)	ASTM B557M
268	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non ferrous metals, alloys & products	Tensile Test -Yield Strength(offset = 0.2%)	ASTM E8/E8M
269	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other non ferrous products	Charpy Impact U Notch amb temp to -50 degrees Celsius	IS 1757 Part 1
270	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other non ferrous products	Charpy Impact V Notch amb temp upto -50 degree Celsius	ISO 148-1
271	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Bend test	ASTM E290
272	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Bend test	IS:1599
273	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Brinell Hardness (10/1000)	ASTM E10
274	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Brinell Hardness (10/1000)	IS:1500-Part1
275	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Brinell Hardness (10/1000)	ISO 6506-1
276	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Brinell Hardness (5/250)	ASTM E10

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277	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Brinell Hardness (5/250)	IS:1500-Part1
278	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Brinell Hardness (5/250)	ISO 6506-1
279	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Charpy Impact U Notch amb temp to -50 degrees Celsius	ISO 148-1
280	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Charpy Impact V Notch amb temp upto -50 degree Celsius	IS:1757-Part1
281	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Charpy Impact V Notch amb temp upto -50 degree Celsius	ISO 148-1
282	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	IZOD Impact V Notch @ Room Temperature	IS:1598:1977 RA
283	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Rockwell Hardness(HRB)	ASTM E18
284	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Rockwell Hardness(HRB)	IS:1586:Part1
285	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Rockwell Hardness(HRB)	ISO 6508-1
286	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Tensile Test-Modulus of Elasticity (Young’s Modulus)	IS:1608-Part1
287	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Tensile Test-Modulus of Elasticity (Young’s Modulus)	ISO 6892-1
288	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Tensile Test-Modulus of Elasticity (Young’s Modulus)-	ASTM B557M
289	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Tensile Test-Modulus of Elasticity (Young’s Modulus)-	ASTM E8/E8M
290	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Tensile Test-Modulus of Elasticity (Young’s Modulus)-	EN 2002-1

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291	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV10)	ASTM E92
292	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV10)	IS:1501-Part1
293	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV10)	ISO 6507-1
294	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV30)	ASTM E92
295	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV30)	IS:1501-Part1
296	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV30)	ISO 6507-1
297	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV5)	ASTM E92
298	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV5)	IS:1501-Part1
299	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Other Non- Ferrous metals, alloys & products	Vickers Hardness(HV5)	ISO 6507-1
300	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Seamless and Welded Pipes, Tubes ,40NB to 300NB	Flattening Test	ASTM A 370
301	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Seamless and Welded Pipes, Tubes ,40NB to 300NB	Flattening Test	IS 2328
302	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Seamless and Welded Pipes, Tubes ,40NB to 300NB	Flattening Test	IS:2328
303	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Tubes	Bend test	IS 2329:2005 RA
304	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Tubes	Bend test	IS 2329:2005RA

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305	MECHANICAL-METALLOGRAPHY TEST	Aluminum alloy rolled & Forged products	Macroetch Test	ASTM E340
306	MECHANICAL-METALLOGRAPHY TEST	Aluminum materials, alloys & products	Microstructure analysis	ASM Metal Hand Book Vol-9
307	MECHANICAL-METALLOGRAPHY TEST	Anodized Aluminum component	Anodizing layer Thickness by Microscopic Method	ASTM B487
308	MECHANICAL-METALLOGRAPHY TEST	Anodized Aluminum component	Anodizing layer Thickness by Microscopic Method	IS:5523:1983 RA
309	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless steel	Inter Granular Corrosion Practice B	ASTM A 262
310	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless steel	Inter Granular Corrosion Practice C	ASTM A 262
311	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless steel	Inter Granular Corrosion Practice F	ASTM A 262
312	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless steel	Inter Granular Corrosion Test. Practice E	ASTM A 262
313	MECHANICAL-METALLOGRAPHY TEST	Case hardened steel	Effective Case Depth Measurement by Transverse Hardness method	IS 6416-1988 RA
314	MECHANICAL-METALLOGRAPHY TEST	Case hardened steel	Total Case Depth Measurement by Microscopic method	IS 6416-1988 RA
315	MECHANICAL-METALLOGRAPHY TEST	Case hardened steel and nitrided steel Components & parts	Effective Case Depth Measurement by Transverse Hardness method & TCD by Microscopic method	IS 13691-1993 RA
316	MECHANICAL-METALLOGRAPHY TEST	Cast Iron	Microstructure Analysis	IS 7754-1978 RA
317	MECHANICAL-METALLOGRAPHY TEST	Cast Iron & SG Iron	Microstructure Analysis of Graphite flake form, size of noudles or flakes, nodule count, distribution characteristics and matrix	ASTM A 247
318	MECHANICAL-METALLOGRAPHY TEST	Cast Iron & SG Iron Castings	Microstructure Analysis of Graphite flake form, size of noudles or flakes, nodule count, distribution characteristics and matrix	ISO 945-1
319	MECHANICAL-METALLOGRAPHY TEST	Coated and Plated parts	Coating Thickness by Microscopic Method	IS:3203:1982 RA

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320	MECHANICAL-METALLOGRAPHY TEST	Coated and Plated parts	Coating Thickness by Microscopic Method	ASTM B487
321	MECHANICAL-METALLOGRAPHY TEST	Copper materials , alloys & products	Microstructure analysis	ASM Metal Hand Book Vol-9
322	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Decarburization depth measured by Microscopic Method	ASTM E1077
323	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Decarburization depth measured by Microscopic Method	IS:6396
324	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Grain Size by Comparison method	ASTM E112
325	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Grain Size by Comparison method	IS:4748
326	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Grain Size by Comparison method	ISO 643
327	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Inclusion Rating (Worst field method A)	ASTM E45
328	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Inclusion Rating (Worst field method A)	IS:4163
329	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Macrostructure Analysis	ASTM E 340
330	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Macrostructure Analysis	ASTM E381
331	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Macrostructure Analysis	IS:11371
332	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Macrostructure Analysis	IS:13015
333	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 100 g Load (HV 0.1)	ASTM E384
334	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 100 g Load (HV 0.1)	IS:1501-Part1
335	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 100 g Load (HV 0.1)	ISO 6507-1
336	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 1000 g Load (HV1)	ASTM E384
337	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 1000 g Load (HV1)	IS:1501-Part1

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338	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 1000 g Load (HV1)	ISO 6507-1
339	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 200 g Load(HV0.2)	ASTM E384
340	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 200 g Load(HV0.2)	IS:1501-Part1
341	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 200 g Load(HV0.2)	ISO 6507-1
342	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 300 g Load (HV0.3)	ASTM E384
343	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 300 g Load (HV0.3)	IS:1501-Part1
344	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 300 g Load (HV0.3)	ISO 6507-1
345	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 500 g Load(HV0.5)	ASTM E384
346	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 500 g Load(HV0.5)	IS:1501-Part1
347	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Micro Vickers Hardness Test 500 g Load(HV0.5)	ISO 6507-1
348	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Microstructure analysis	ASM Metal Hand Book Vol-9
349	MECHANICAL-METALLOGRAPHY TEST	Non Ferrous Products	Grain size measurement	ASTM E 112 (by comparison method)
350	MECHANICAL-METALLOGRAPHY TEST	Other Non ferrous Products	Macrostructure Analysis	ASTM E 340
351	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 100 g Load (HV 0.1)	ASTM E384
352	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 100 g Load (HV 0.1)	IS:1501-Part1
353	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 100 g Load (HV 0.1)	ISO 6507-1
354	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 1000 g Load(HV1)	ASTM E384
355	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 1000 g Load(HV1)	IS:1501-Part1
356	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 1000 g Load(HV1)	ISO 6507-1

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357	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 200 g Load(HV0.2)	ASTM E384
358	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 200 g Load(HV0.2)	IS:1501-Part1
359	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 200 g Load(HV0.2)	ISO 6507-1
360	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 300 g Load(HV0.3)	ASTM E384
361	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 300 g Load(HV0.3)	IS:1501-Part1
362	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 300 g Load(HV0.3)	ISO 6507-1
363	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 500 g Load(HV0.5)	ASTM E384
364	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 500 g Load(HV0.5)	IS:1501-Part1
365	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Micro Vickers Hardness Test 500 g Load(HV0.5)	ISO 6507-1
366	MECHANICAL-METALLOGRAPHY TEST	Other Non- Ferrous metals, alloys & products	Microstructure analysis	ASM Metal Hand Book Vol-9
367	MECHANICAL-METALLOGRAPHY TEST	Weld joints, fillet weld, butt weld, lap weld, stud weld	Macro Examination & Microscopic Examination (Visual)	ISO 17639
368	MECHANICAL-METALLOGRAPHY TEST	Weld joints, fillet weld, butt weld, lap weld, stud weld	Macro Examination (Visual & measurements)	AWS D1.1
369	MECHANICAL-METALLOGRAPHY TEST	Weld joints, fillet weld, butt weld, lap weld, stud weld	Macro Examination(Visual & measurements)	ASME SEC IX
370	MECHANICAL-METALLOGRAPHY TEST	Weld joints, fillet weld, butt weld, lap weld, stud weld	Macro Examination(Visual & measurements)	ISO 24394
371	MECHANICAL-METALLOGRAPHY TEST	Weld joints, fillet weld, butt weld, lap weld, stud weld	Macro Examination(Visual & measurements)	ISO 5817
372	MECHANICAL-METALLOGRAPHY TEST	Weld joints, fillet weld, butt weld, lap weld, stud weld	Macrostructure Analysis/Visual Examination	ISO 15614-1
373	MECHANICAL-METALLOGRAPHY TEST	Welded products	Micro Vickers Hardness Test 1000 g Load (HV1)	ASTM E384
374	MECHANICAL-METALLOGRAPHY TEST	welded products	Micro Vickers Hardness Test 1000 g Load (HV1)	IS:1501-Part1

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375	MECHANICAL-METALLOGRAPHY TEST	welded products	Micro Vickers Hardness Test 1000 g Load (HV1)	ISO 6507-1
376	MECHANICAL-METALLOGRAPHY TEST	Welded steel	Macrostructure Examination	AWS D 17.1
377	MECHANICAL-METALLOGRAPHY TEST	Welded steel specimens	Macrostructure Analysis	AWS D1.1
378	MECHANICAL-METALLOGRAPHY TEST	Welded steel specimens	Macrostructure Analysis/Visual Examination	AWS DI.1
379	MECHANICAL-METALLOGRAPHY TEST	Welds	Macro Examination	ASME SEC IX