National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : BARATH METALLURGICAL LABORATORY, NO.538/A, KANNAPPA STREET, CHENNAI, THIRUVALLUR, TAMIL NADU, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 26/04/2023 to 25/04/2025 **Last Amended on** 02/05/2023

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- METALS & ALLOYS	Cast iron	Cu	ASTM E1999
2	CHEMICAL- METALS & ALLOYS	Alloy Steel	Al	ASTM E415
3	CHEMICAL- METALS & ALLOYS	Alloy Steel	Al	IS 8811-1998
4	CHEMICAL- METALS & ALLOYS	Alloy Steel	B	ASTM E415
5	CHEMICAL- METALS & ALLOYS	Alloy Steel	B	IS 8811-1998
6	CHEMICAL- METALS & ALLOYS	Alloy Steel	C	ASTM E415
7	CHEMICAL- METALS & ALLOYS	Alloy Steel	C	IS 8811-1998
8	CHEMICAL- METALS & ALLOYS	Alloy Steel	Cr	ASTM E415
9	CHEMICAL- METALS & ALLOYS	Alloy Steel	Cr	IS 8811-1998
10	CHEMICAL- METALS & ALLOYS	Alloy Steel	Cu	ASTM E415
11	CHEMICAL- METALS & ALLOYS	Alloy Steel	Cu	IS 8811-1998
12	CHEMICAL- METALS & ALLOYS	Alloy Steel	Mn	ASTM E415
13	CHEMICAL- METALS & ALLOYS	Alloy Steel	Mn	IS 8811-1998
14	CHEMICAL- METALS & ALLOYS	Alloy Steel	Mo	ASTM E415
15	CHEMICAL- METALS & ALLOYS	Alloy Steel	Mo	IS 8811-1998
16	CHEMICAL- METALS & ALLOYS	Alloy Steel	Nb	ASTM E415
17	CHEMICAL- METALS & ALLOYS	Alloy Steel	Nb	IS 8811-1998
18	CHEMICAL- METALS & ALLOYS	Alloy Steel	Ni	ASTM E415

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19	CHEMICAL- METALS & ALLOYS	Alloy Steel	Ni	IS 8811-1998
20	CHEMICAL- METALS & ALLOYS	Alloy Steel	P	ASTM E415
21	CHEMICAL- METALS & ALLOYS	Alloy Steel	P	IS 8811-1998
22	CHEMICAL- METALS & ALLOYS	Alloy Steel	Pb	JIS G1253-2002
23	CHEMICAL- METALS & ALLOYS	Alloy Steel	S	ASTM E415
24	CHEMICAL- METALS & ALLOYS	Alloy Steel	S	IS 8811-1998
25	CHEMICAL- METALS & ALLOYS	Alloy Steel	S	JIS G-1253-2002
26	CHEMICAL- METALS & ALLOYS	Alloy Steel	Si	ASTM E415
27	CHEMICAL- METALS & ALLOYS	Alloy Steel	Si	IS 8811-1998
28	CHEMICAL- METALS & ALLOYS	Alloy Steel	Ti	ASTM E415
29	CHEMICAL- METALS & ALLOYS	Alloy Steel	Ti	IS 8811-1998
30	CHEMICAL- METALS & ALLOYS	Alloy Steel	V	ASTM E415
31	CHEMICAL- METALS & ALLOYS	Alloy Steel	V	IS 8811-1998
32	CHEMICAL- METALS & ALLOYS	Alloy Steel	Zr	JIS G1253-2002
33	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Cr	ASTM E1251
34	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Cu	ASTM E1251
35	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Fe	ASTM E1251
36	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Mg	ASTM E1251
37	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Mn	ASTM E1251

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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	Aluminium Alloy	Ni	ASTM E1251
39	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Pb	ASTM E1251
40	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Si	ASTM E1251
41	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Ti	ASTM E1251
42	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	V	ASTM E1251
43	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Zn	ASTM E1251
44	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium & High)	Mn	ASTM E415
45	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium & High)	P	ASTM E415
46	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium & High)	S	ASTM E415
47	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium & High)	S	IS 8811-1998
48	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium & High)	Si	IS 8811-1998
49	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium &High)	C	ASTM E415
50	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium &High)	C	IS 8811-1998
51	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium &High)	Mn	IS 8811-1998
52	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium &High)	P	IS 8811-1998
53	CHEMICAL- METALS & ALLOYS	Carbon Steel (Low, Medium &High)	Si	ASTM E415
54	CHEMICAL- METALS & ALLOYS	Cast iron	C	ASTM E1999
55	CHEMICAL- METALS & ALLOYS	Cast iron	Cr	ASTM E 1999
56	CHEMICAL- METALS & ALLOYS	Cast iron	Mg	JIS G1253-2002

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57	CHEMICAL- METALS & ALLOYS	Cast iron	Mn	ASTM E1999
58	CHEMICAL- METALS & ALLOYS	Cast iron	Mo	ASTM E1999
59	CHEMICAL- METALS & ALLOYS	Cast iron	Ni	ASTM E1999
60	CHEMICAL- METALS & ALLOYS	Cast iron	P	ASTM E1999
61	CHEMICAL- METALS & ALLOYS	Cast iron	S	ASTM E1999
62	CHEMICAL- METALS & ALLOYS	Cast iron	Si	ASTM E1999
63	CHEMICAL- METALS & ALLOYS	Cast iron	Sn	ASTM E1999
64	CHEMICAL- METALS & ALLOYS	Cast iron	Ti	ASTM E1999
65	CHEMICAL- METALS & ALLOYS	Cast iron	V	ASTM E1999
66	CHEMICAL- METALS & ALLOYS	Copper Alloy	P	BS EN 15079
67	CHEMICAL- METALS & ALLOYS	Copper Alloy	Al	BS EN 15079
68	CHEMICAL- METALS & ALLOYS	Copper Alloy	Bi	BS EN 15079
69	CHEMICAL- METALS & ALLOYS	Copper Alloy	Cu	BML/VAL/Cu/2022
70	CHEMICAL- METALS & ALLOYS	Copper Alloy	Fe	BS EN 15079
71	CHEMICAL- METALS & ALLOYS	Copper Alloy	Mn	BS EN 15079
72	CHEMICAL- METALS & ALLOYS	Copper Alloy	Ni	BS EN 15079
73	CHEMICAL- METALS & ALLOYS	Copper Alloy	Pb	BS EN 15079
74	CHEMICAL- METALS & ALLOYS	Copper Alloy	S	BS EN 15079
75	CHEMICAL- METALS & ALLOYS	Copper Alloy	Si	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 Alloy	Sn	BS EN 15079
77	CHEMICAL- METALS & ALLOYS	Copper Alloy	Zn	BS EN 15079
78	CHEMICAL- METALS & ALLOYS	Stainless Steel	C	ASTM E1086
79	CHEMICAL- METALS & ALLOYS	Stainless Steel	C	IS 9879-1998
80	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cr	ASTM E1086
81	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cr	IS 9879-1998
82	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cr	JIS G1253-2002
83	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cu	ASTM E1086
84	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cu	IS 9879-1998
85	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mn	ASTM E1086
86	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mn	IS 9879-1998
87	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mo	ASTM E1086
88	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mo	IS 9879-1998
89	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nb	JIS G1253-2002
90	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ni	ASTM E1086
91	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ni	IS 9879-1998
92	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ni	JIS G1253-2002
93	CHEMICAL- METALS & ALLOYS	Stainless Steel	P	ASTM E1086
94	CHEMICAL- METALS & ALLOYS	Stainless Steel	P	IS 9879-1998

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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	Stainless Steel	S	ASTM E1086
96	CHEMICAL- METALS & ALLOYS	Stainless Steel	S	IS 9879-1998
97	CHEMICAL- METALS & ALLOYS	Stainless Steel	Si	ASTM E1086
98	CHEMICAL- METALS & ALLOYS	Stainless Steel	Si	IS 9879-1998
99	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ti	JIS G1253-2002
100	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Elongation	IS 1608 PART-1
101	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	0.2% Proof Strength	ASTM A370
102	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	0.2% Proof Strength	IS 1608 PART-1
103	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	0.2% Proof Strength	ISO 6892 PART-1
104	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non-Ferrous Materials, alloys & Products including weld metals	Brinell Hardness Test (2.5/187.5HBW)	ASTM E10
105	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non-Ferrous Materials, alloys & Products including weld metals	Brinell Hardness Test (HBW2.5/187.5)	IS 1500 PART-1
106	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non-Ferrous Materials, alloys & Products including weld metals	Brinell Hardness Test (HBW2.5/187.5)	ISO 6506 PART-1
107	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous &Non Ferrous materials,alloy& products (including weld metals)	Vickers Hardness test (HV10)	ASTM E92
108	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous &Non Ferrous materials,alloy& products (including weld metals)	Vickers Hardness test (HV10)	IS 1501 PART-1
109	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous &Non Ferrous materials,alloy& products (including weld metals)	Vickers Hardness Test (HV10)	ISO 6507 PART-1

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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
110	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys & Products	Bend Test (Mandrel Diameter: 6,8,10,12,16,20,24,30,32,36,40,44, 50,75,90 in mm)	IS 1599
111	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys & Products	Rockwell Hardness Test (HRC)	ASTM E18
112	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys & Products	Rockwell Hardness Test (HRC)	IS 1586 PART-1
113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys & Products	Rockwell Hardness Test (HRC)	ISO 6508 PART-1
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials, Alloys & Products (including weld Metals)	Vickers Hardness test (HV30)	IS 1501 PART-1
115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys &Products	Micro Vickers Hardness test (HV0.5)	ASTM E384
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials, Alloys &Products	Micro Vickers Hardness test (HV0.5)	IS 1501 PART 1
117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials, Alloys &Products	Micro Vickers hardness test (HV0.5)	ISO 6507 PART 1
118	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys& Products	Micro Vicker Hardness test (HV0.2)	IS 1501 PART 1
119	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials, Alloys& Products	Micro Vickers Hardness test (HV0.2)	ASTM E92
120	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,alloys & products (including weld metals)	Vickers Hardness Test (HV30)	ASTM E92
121	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,Alloys & Products (including weld metals)	Vickers Hardness Test (HV30)	ISO 6507 PART-1
122	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,Alloys &Products	Micro vickers Hardness test (HV0.2)	ASTM E384
123	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,Alloys& Products	Brinell Hardness Test (HBW 10/3000)	ISO 6506 PART 1

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124	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,Alloys& Products	Micro Vickers Hardness test (HV1.0)	ASTM E384
125	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials,Alloys& Products	Micro Vickers Hardness test(HV1.0)	ASTM E92
126	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,Alloys& Products	Micro Vickers Hardness test(HV1.0)	IS 1501 PART 1
127	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materials,Alloys& Products	Micro Vickers Hardness test(HV1.0)	ISO 6507 PART 1
128	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materilas, Alloys& products	Brinell Hardness test (HBW10/3000)	ASTM E10
129	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materilas, Alloys& Products	Brinell Hardness Test(HBW10/3000)	IS 1500 PART1
130	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materilas, Alloys& Products	Micro Vickers Hardness test(HV0.2)	ISO 6507 PART 1
131	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous materilas, Alloys& Products	Micro Vickers Hardness test(HV0.5)	ASTM E92
132	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Piipes & Tubes (Including Welded Piipes)	Flattening Test	IS 2328
133	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Elongation	ASTM A370
134	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Elongation	ASTM E8/E8M
135	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Elongation	ISO 6892 PART-1
136	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Reduction Area	ASTM A370
137	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Reduction Area	ASTM E8/E8M

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138	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Reduction Area	IS 1608 PART -1
139	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	% Reduction Area	ISO 6892 PART-1
140	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	0.2% Proof Strength	ASTM E8/E8M
141	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Bend Test (Mandrel Diameter: 6,8,10,12,16,20,24,30,32,36, 40,44,50,75,90 in mm)	ASTM A370
142	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Mass Per Meter	IS 1786-2008
143	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rebend Test (Mandrel Diameter: 32,40,48,50,56,60,70,84,96,112, 128,140,150,160,168,175,196, 200 ,224,256 in mm)	IS 1786-2008
144	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test (HRBW)	ASTM E18
145	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test (HRBW)	IS 1586 PART-1
146	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test (HRBW)	ISO 6508 PART- 1
147	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Tensile Strength	ASTM A370
148	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Tensile Strength	ASTM E8/E8M
149	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Tensile Strength	IS 1608 PART-1
150	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Tensile Strength	ISO 6892 PART- 1

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151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Yield Strength	ASTM A370
152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Yield Strength	ASTM E8/E8M
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Yield Strength	IS 1608 PART-1
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Yield Strength	ISO 6892 PART- 1
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products including Weld Metals	Impact Test Charpy "V" Notch (Room Temperature to 101 °C & -196 °C	IS 1757 PART-1
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products including Weld Metals	Impact Test Charpy "V" Notch (Room Temperature to 101 °C & -196 °C	ISO 148 PART-1
157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products including Weld Metals	Impact Test Izod "V" Notch @ ROOM TEMPERATURE	IS 1598-1977
158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous pipe and tubes	Crush Test	ASTM A370
159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Pipes & Tubes (Including Welded Pipes)	Flattening Test	ASTM A370
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Pipes and Tubes	Flaring test	ASTM A370
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	% Elongation	ASTM E8/E8M
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	% Elongation	IS1608 PART-1
163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	% Elongation	ISO 6892 PART-1
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	% Reduction Area	ASTM E8/E8M

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165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	% Reduction Area	IS 1608 PART-1
166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	% Reduction Area	ISO 6892 PART-1
167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	0.2% Proof Strength	ASTM E8/E8M
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	0.2% Proof Strength	IS 1608 PART-1
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	0.2% Proof Strength	ISO6892 PART-1
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Impact Test Charpy "V" Notch (Room Temperature to 101 °C & -196 °C	IS 1757 PART-1
171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Impact Test Izod "v" Notch @ Room Temperature	IS 1598-1977
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Rockwell Hardness Test (HRBW)	ASTM E18
173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Rockwell Hardness Test (HRBW)	IS 1586 PART-1
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Rockwell Hardness Test (HRBW)	ISO 6508 PART-1
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Tensile Strength	ASTM E8/E8M
176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Tensile Strength	IS 1608 PART-1
177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Tensile Strength	ISO 6892 PART-1
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Yield Strength	ASTM E8/E8M

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179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Yield Strength	IS 1608 PART-1
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Metals, Alloys & Products	Yield Strength	ISO 6892 PART-1
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non-Ferrous metals, alloys & products Including Weld metals	Impact Test Charpy "V" Notch (Room Temperature to 101 °C & -196 °C	ISO 148 PART-1
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners	Proof Load Test	ASTM A194/194M
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners	Proof Load Test	IS 1367 PART-3
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners	Proof Load Test	IS 1367 PART-6
185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners	Proof Load Test	ISO 898 PART-1
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners	Proof Load Test	ISO 898 PART-2
187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fastneres	Proof Load Test	ASTM A193/193M
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Face Bend/ Root Bend/ Side Bend (Mandrel Diameter: 90 in mm)	API 1104 (5.6.4&5.6.5)
189	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test specimens	Face Bend/ Root bend/ Side Bend (Mandrel Diameter: 38.1,50.8,63.5in mm)	AWS D1.1/D1.1M
190	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Face Bend/ Root Bend/ Side Bend (Mandrel Diameter: 38.1,50.8,63.5in mm)	AWS D1.6/D1.6M
191	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test specimens	Face Bend/ Root Bend/ Side Bend (Mandrel Diameter: 6,8,10,12,16,20,24,30,32, 36,38,40,63.1,56 in mm)	ASME SEC IX (QW-160)

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192	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Fracture Test	ASME SEC IX (QW-182), ASME SEC 2 Part C (SFA 5.5 5.5/M & 5.1/5.1M)
193	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Fracture Test	ASME SEC-II PART-C (SFA-5.5/5.5M&5.1/5.1M)
194	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Fracture Test	AWS D1.1/D1.1M
195	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Fracture Test	AWS D1.6/D1.6M
196	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Longitudinal Root/Face Bend (Mandrel Diameter: 16,20,24,30,32,36,38,40,48,56 in mm)	IS 3600 PART-7- 1985
197	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Nick Break Test	API 1104 (5.6.3)
198	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test specimens	Pull Load Test	ASME SEC VIII.DIV-1 (UW 20)
199	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Tensile Strength	API 1104 (5.6.2)
200	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Tensile Strength	ASME SEC IX (QW-150)
201	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Tensile Strength	AWS D1.1/D1.1M
202	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Tensile Strength	AWS D1.6/D1.6M
203	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Transverse Root/Face Bend (Mandrel Diameter: 16,20,24,30,32,36,38,40,48,56 in mm)	IS 3600 PART-5
204	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Transverse Side Bend (Mandrel Diameter: 16,20,24,30,32,36, 38,40,48,56 in mm)	IS 3600 PART-6-1983

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205	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Transverse Tensile Test	IS 3600 PART 3
206	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens	Weld Shear Test	ASTM A1064/A1064M
207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds in Metallic Materials	Fracture test	ISO 9017
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds in Metallic Materials	Root/Face/Side Bend test (Mandral Diameter: 6,8,10,12,16,20,24,30,32,36,38,40,63.1,56 in mm)	ISO 5173- 2009
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds in Metallic Materials (Spot weld)	Shear test	ISO 14273
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds& Welded Test Specimens	Fracture Test	IS 3600 PART 8- 1985
211	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel (Wrought & Cast Products)	Intergranular Corrosion (PRACTICE B)	ASTM A262-2015
212	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel (Wrought & Cast Products)	Intergranular Corrosion (PRACTICE C)	ASTM A262-2015
213	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel (Wrought & Cast products)	Intergranular Corrosion (PRACTICE A)	ASTM A262-2015
214	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel (Wrought & Cast Products)	Intergranular Corrosion(PRACTICE E)	ASTM A262-2015
215	MECHANICAL-METALLOGRAPHY TEST	Duplex Stainless Steel	Detrimental Intermetallic Phases (METHOD A)	ASTM A923
216	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Alloy & Products	Metallic Coating Thickness by Microscopic Method	ASTM B487
217	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non ferrous Materials, Alloys & Products	Average Grain Size by Comparison Method	ASTM E112-2013
218	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials, Alloys & Products	Average Grain Size by Comparison Method	IS 4748
219	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials, Alloys & Products	Macro test	ASTM E340
220	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials, Alloys & Products	Microstructure	ASM HAND BOOK VOL-09

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221	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Depth of Decarburization by Microscopic Method	ASTM E1077 - 2014
222	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Depth of Decarburization by Microscopic Method	IS 6396- 2000
223	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Macro test	ASTM E381
224	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Macro test	IS 11371
225	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Non- Metallic Inclusion Rating	ASTM E45
226	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Non- Metallic Inclusion Rating	IS 4163
227	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products	Total Case Depth by Microscopic Method	IS 6416
228	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products (Gray Cast Iron, SG Iron)	Micro Examination for Graphite Flakes/ Nodules Type and Size, Distribution Characteristics and Matrix Analysis	IS 7754-1975
229	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials, Alloys & Products (Gray Cast Iron, SG Iron)	Micro Examination for Graphite Flakes/ Nodules Type and Size, Distribution Characteristics and Matrix Analysis	ASTM A247
230	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials,Alloys & Products	Case depth by Hardness Method	IS 6416
231	MECHANICAL-METALLOGRAPHY TEST	Welds & Welded test Specimens	Macro Test	ASME SEC- IX (QW-183& 184))
232	MECHANICAL-METALLOGRAPHY TEST	Welds & welded test Specimens	Macro Test	ASME SEC-II PART-C (SFA 5.1/5.1M& 5.5/5.5M)
233	MECHANICAL-METALLOGRAPHY TEST	Welds in Metallic Materials	Macro test	ISO 17639
234	MECHANICAL-METALLOGRAPHY TEST	Welds in Metallic Materials	Micro Test	ISO 17639
235	MECHANICAL-METALLOGRAPHY TEST	Wrought, Nickel-Rich, Chromium Bearing Alloys	Susceptiblity to Intergranular Corrosion (METHOD A)	ASTM G28-2002
236	MECHANICAL-METALLOGRAPHY TEST	Wrought,Nickel- Rich, Chromium Bearing Alloys	Susceptibility to Intergranular Corrosion (METHOD B)	ASTM G28-2002
237	MECHANICAL-METALLOGRAPHY TEST	Zinc Coated iron and Steel	Mass of Zinc Coating	ASTM A90/A90M

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238	MECHANICAL-METALLOGRAPHY TEST	Zinc Coated Iron and Steel	Mass of Zinc Coating	IS 6745 - 1972