National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : DEPARTMENT OF RESEARCH AND DEVELOPMENT (TESTING LABORATORY), SARASWATI COMPLEX, P.O- BHANDARDAHA, HOWRAH, WEST BENGAL, INDIA

Accreditation Standard ISO/IEC 17025:2017

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Metallic coatings	Adhesion Test	IS 2629 (Cl. 6.4.1)
2	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Metallic coatings	Mass of Zinc Coating	IS 6745(Cl.3.1)
3	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Metallic coatings	Thickness of Coating	IS 6012
4	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Metallic coatings	Uniformity of Zinc Coating	IS 2633(Cl. 4)
5	CHEMICAL- METALS & ALLOYS	Alloy steel	Carbon	IS:228 (Part-1)
6	CHEMICAL- METALS & ALLOYS	Alloy steel	Chromium	IS:228 (Part-6)
7	CHEMICAL- METALS & ALLOYS	Alloy steel	Copper	IS:228 (Part-15)
8	CHEMICAL- METALS & ALLOYS	Alloy steel	Manganese	IS:228 (Part-2)
9	CHEMICAL- METALS & ALLOYS	Alloy steel	Nickel	IS:228 (Part-5)
10	CHEMICAL- METALS & ALLOYS	Alloy steel	Phosphorous	IS:228 (Part-3)
11	CHEMICAL- METALS & ALLOYS	Alloy steel	Silicon	IS:228 (Part-8)
12	CHEMICAL- METALS & ALLOYS	Alloy steel	Sulphur	IS:228 (Part-9)
13	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Co	ASTM E 1251
14	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cr	ASTM E 1251
15	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cu	ASTM E 1251
16	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Fe	ASTM E 1251
17	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Mg	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
18	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Mn	ASTM E 1251
19	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Ni	ASTM E 1251
20	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Pb	ASTM E 1251
21	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Si	ASTM E 1251
22	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Sn	ASTM E 1251
23	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Ti	ASTM E 1251
24	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	V	ASTM E 1251
25	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zn	ASTM E 1251
26	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zr	ASTM E 1251
27	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Carbon	IS:12308 (Part-11)
28	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Chromium	IS:12308 (Part-8)
29	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Manganese	IS:12308 (Part-10)
30	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Nickel	IS:12308 (Part-7)
31	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Phosphorous	IS:12308 (Part-5)
32	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Silicon	IS:12308 (Part-6)
33	CHEMICAL- METALS & ALLOYS	Cast Iron & Pig Iron	Sulphur	IS:12308 (Part-2)
34	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Ag	BS:EN 15079
35	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Al	BS EN 15079
36	CHEMICAL- METALS & ALLOYS	Copper & its Alloys	As	BS EN 15079

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37	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bi	BS EN 15079
38	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cd	BS EN 15079
39	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Fe	BS EN 15079
40	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Mercurous Nitrate Test for Surface Crack Determination	IS:2305
41	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Mn	BS EN 15079
42	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Ni	BS EN 15079
43	CHEMICAL- METALS & ALLOYS	Copper & its alloys	P	BS EN 15079
44	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Pb	BS EN 15079
45	CHEMICAL- METALS & ALLOYS	Copper & its alloys	S	BS EN 15079
46	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sb	BS EN 15079
47	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Si	BS EN 15079
48	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sn	BS EN 15079
49	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zn	BS En 15079
50	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Al	ASTM E 415
51	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Al	IS:8811
52	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	As	ASTM E 415
53	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	As	IS:8811
54	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	B	ASTM E 415
55	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	B	IS:8811

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56	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	C	ASTM E 415
57	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	C	IS:8811
58	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Co	ASTM E 415
59	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Co	IS:8811
60	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Cr	ASTM E 415
61	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Cr	IS:8811
62	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Cu	ASTM E 415
63	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Cu	IS:8811
64	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Mn	ASTM E 415
65	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Mn	IS:8811
66	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Mo	ASTM E 415
67	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Mo	IS:8811
68	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	N	IS:228 (Pt-23)
69	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Nb	ASTM E 415
70	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Nb	IS:8811
71	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Ni	ASTM E 415
72	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Ni	IS:8811
73	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	P	ASTM E 415
74	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	P	IS:8811

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75	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	S	ASTM E 415
76	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	S	IS:8811
77	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Si	ASTM E 415
78	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Si	IS:8811
79	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Sn	ASTM E 415
80	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Sn	IS:8811
81	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Ti	ASTM E 415
82	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	Ti	IS:8811
83	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	V	ASTM E 415
84	CHEMICAL- METALS & ALLOYS	Plain Carbon & Low Alloy Steel	V	IS:8811
85	CHEMICAL- METALS & ALLOYS	Stainless Steel	C	ASTM E1086
86	CHEMICAL- METALS & ALLOYS	Stainless Steel	C	IS 9879
87	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cr	ASTM E 1086
88	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cr	IS 9879
89	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cu	ASTM E 1086
90	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cu	IS 9879
91	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mn	ASTM E 1086
92	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mn	IS 9879
93	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mo	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
94	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mo	IS 9879
95	CHEMICAL- METALS & ALLOYS	Stainless steel	N	IS:228 (Part-23)
96	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ni	ASTM E 1086
97	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ni	IS 9879
98	CHEMICAL- METALS & ALLOYS	Stainless Steel	P	ASTM E 1086
99	CHEMICAL- METALS & ALLOYS	Stainless Steel	P	IS 9879
100	CHEMICAL- METALS & ALLOYS	Stainless Steel	S	ASTM E1086
101	CHEMICAL- METALS & ALLOYS	Stainless Steel	S	IS 9879
102	CHEMICAL- METALS & ALLOYS	Stainless Steel	Si	ASTM E 1086
103	CHEMICAL- METALS & ALLOYS	Stainless Steel	Si	IS 9879
104	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Covered electrodes for Manual metal arc welding of Carbon and Carbon manganese steels	Tensile Test	IS 814
105	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	0.2% Proof Stress	ASTM A 370
106	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	0.2% Proof Stress	IS 1608(Part-1)
107	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	Tensile Strength	ASTM A 370
108	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	Tensile Strength	ISO 6892-1
109	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	Yield Stress	ASTM A 370

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110	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	Yield Stress	IS 1608(Part-1)
111	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloy	Yield Stress	ISO 6892-1
112	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	% Elongation	ASTM A 370
113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	% Elongation	IS 1608(Part-1)
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	% Elongation	ISO 6892-1
115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	% RA	ASTM A 370
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	% RA	IS 1608(Part-1)
117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Bend Test	ASTM A 370
118	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Bend Test	IS 1599
119	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Breaking Load	ASTM A 370
120	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Breaking Load	IS 1608(Part-1)
121	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Brinell Hardness 10/3000	IS 1500(Part-1)
122	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Brinell Hardness 10/3000HBW	ASTM A 370
123	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Brinell Hardness HBW (10/750)	ASTM A 370

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124	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Brinell Hardness HBW(10/750)	IS 1608(Part-1)
125	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Charpy Impact Test (V-Notch) at - 40 degree Centigrade	IS 1757(Part-1)
126	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Charpy Impact Test(V-Notch) at Room Temp.	IS 1757(Part-1)
127	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Flattening Test	IS 2328
128	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Flattening Test of Pipe & Tube	ASTM A 370
129	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Izod Impact Test at room Temp.(V-Notch Single,Double & Triple)	IS 1598
130	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Macro Examination	API 1104
131	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Macro Examination	ASME Sec-IX
132	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Macro Examination	ASTM E340
133	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Macro Examination	IS 11371
134	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Macro Examination	IS 2525
135	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Macro Examination	IS 7307(Part-1)
136	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Pipe Bend Test	IS 2329
137	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Rockwell Hardness	ASTM A 370

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138	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Rockwell Hardness	ASTM A 370
139	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Rockwell Hardness	IS 1586(Part`-1)
140	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Rockwell Hardness	IS 1586(Part-1)
141	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Rockwell Hardness	ISO 6508-1
142	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Shear Strength Test (Rivet)	IS 5242
143	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Tensile Strength	IS 1608(Part-1)
144	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Vickers Hardness	IS 1501(Part-1)
145	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Vickers Hardness Test	ASTM A 370
146	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Vickers Hardness Test	ASTM A370
147	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Vickers Hardness Test	ASTM A370
148	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Vickers Hardness Test	IS 1501(Part-1)
149	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys	Vickers Hardness Test	IS 1501(Part-1)
150	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys (Pipe & Socket)	Drift Expansion Test	IS 2335
151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys (tube & Pipe)	Dimension Checking	IS 1161

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152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys (Tube & Pipe)	Dimension Checking	IS 1239(Part-1)
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys (Tube & Pipe)	Doubling Over Test	IS 2501
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non Ferrous Materials & Alloys(Pipe, Socket)	Drift Expansion Test	IS 1239(Part-1)
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Face Bend Test	API 1104
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Face Bend Test	ASME Sec-IX
157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Face Bend Test	AWS D 1.5M/D1.5
158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Face Bend Test	IS 2825
159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Fillet Fracture Test	ASME Sec-IX
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Fillet fracture Test	AWS D1.5M/D1.5
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Lap joint Test	ASME Sec-IX
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Macro Examination Test	ASME Sec-IX
163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Macro Examination Test	AWS D1.5M//D1.5
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Nick Break Test	API 1104
165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Root Ben Test	IS 2825

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166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Root Bend Test	API 1104
167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Root Bend Test	ASME Sec-IX
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Root Bend Test	AWS D1.5M/D1.5
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Side bend Test	ASME Sec-IX
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Side Bend test	IS 2825
171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Tensile Test	API 1104
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Tensile Test	ASME Sec IX
173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Tensile Test	AWS D 1.5 M/D 1.5
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous & Non ferrous Welded test Coupons	Tensile Test	IS 2825
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials & Alloys	Head Soundness Test (Rivet)``	IS 5242
176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials & Alloys	Permanent Set Test of Spring Washer	IS 3063
177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials & Alloys	Twisted Test of Spring Washer	IS 3063
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials & Alloys (Deformed Steel Bar)	Bend Test	IS 1786
179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials & Alloys (Deformed Steel Bar)	Mass Per Meter Run	IS 1786

SCOPE OF ACCREDITATION

Laboratory Name : DEPARTMENT OF RESEARCH AND DEVELOPMENT (TESTING LABORATORY), SARASWATI COMPLEX, P.O- BHANDARDAHA, HOWRAH, WEST BENGAL, INDIA

Accreditation Standard ISO/IEC 17025:2017

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials & Alloys (Deformed Steel Bar)	Re-Bend Test	IS 1786
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials (Deformed Steel Bar)	Tensile Test	IS 1786
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials Welded test Coupon	Macro Examination	AWS D1.5M/D1.5
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners (Bolt,Stud,Screw)	Proof Load Test	ASTM A 194 M
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners (Bolt,Stud,Screw)	Tensile/Wedge Load Test	ASTM A 194/194M
185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners (Bolt,Stud,Screw)	Tensile/Wedge Load Test	IS 1367(part-3)
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners (Nut	Proof Load Test	ASTM A 193
187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel fasteners (Nut)	Proof Load test	IS 1367(part-6)
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Fasteners(Bolt,Stud,Screw)	Proof Load Test	IS 1367(part-3)
189	MECHANICAL-METALLOGRAPHY TEST	Cast Iron	Microstructure Analysis	IS 7754
190	MECHANICAL-METALLOGRAPHY TEST	Ductile Iron (SGCI)	Nodularity %	ASTM A 536
191	MECHANICAL-METALLOGRAPHY TEST	Ductile Iron (SGCI)	Nodule Count	ISO 945/ASm METAL HANDBOOK VOL IX
192	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non Ferrous alloys	Grain size by Microscopic method (comparison method)	Is 4748
193	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non Ferrous Materials & Alloys	Coating Thickness (Ag,Sn,Zn,Cd,Cu,Ni,Cr) by Microscopic Method	IS 3203
194	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non Ferrous Materials & Alloys & Various cast Iron	Macro Structural Examination	IS 11371

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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
195	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non Ferrous Materials & Alloys & Various cast Iron	Macro Structural Examination	IS 13015
196	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials & Alloys	Case depth of Steel	IS 6416 Cl-8
197	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials & Alloys	Grain Size	ASM Metal hand Book Vol-7 & 9
198	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metal & Alloys (welded or fabricated item)	Macro Examination	ASME Sec-IX
199	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metal & Alloys (welded or fabricated item)	Macro Examination	ASTM E 340
200	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metal & Alloys (welded or fabricated item)	Macro Examination	IS 2825
201	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metal & Alloys various Cast Iron	Micro Structure analysis	IS 7739(part-I to V)
202	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Susceptibility to Inter Granular Corrosion Test by Microscopic Method	ASTM A262(Practice A)
203	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Susceptibility to Inter Granular Corrosion Test by Microscopic Method	IS 10461 (Part I)
204	MECHANICAL-METALLOGRAPHY TEST	Steel	Depth of Decarburized layer by Microscopic Method	IS 6396
205	MECHANICAL-METALLOGRAPHY TEST	Steel	Grain Size by Microscopic method (comparison method)	ASTM E 112
206	MECHANICAL-METALLOGRAPHY TEST	Steel	Non Metallic Inclusion Rating by Microscopic method	ASTM E 45
207	MECHANICAL-METALLOGRAPHY TEST	Steel	Non-Metalic Inclusion Rating by Microscopic method	IS 4163
208	MECHANICAL-METALLOGRAPHY TEST	Steel	Total Case Depth by Microscopic Method	IS:6416