National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 1 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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	Coated Products / Panels / Raw Materials	Neutral saltspray test	IS 9844
2	CHEMICAL- CORROSION TESTS	Metals & Alloys and Metallic Products	Neutral Salt Spray	ASTM B 117
3	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steel	Copper	IS 228 part 15
4	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steel	Molybdenum	IS 228 part 10
5	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steel	Molybdenum	IS 228 part 7
6	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steel	Molybdenum	IS 228 part 7
7	CHEMICAL- METALS & ALLOYS	Alloy steels & Tool Steels	Carbon	IS 228 part 1
8	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steels	Chromium	IS 228 part 6
9	CHEMICAL- METALS & ALLOYS	Alloy steels & Tool Steels	Manganese	IS 228 part 2
10	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steels	Molybdenum	IS 228 part 10
11	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steels	Nickel	IS 228 part 5
12	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steels	Phosphorus	IS 228 part 3
13	CHEMICAL- METALS & ALLOYS	Alloy Steels & Tool Steels	Silicon	IS 228 part 8
14	CHEMICAL- METALS & ALLOYS	Alloy steels & Tool Steels	Sulphur	IS 228 part 9
15	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Chromium	ASTM E 1251 - 2017a
16	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Chromium	IS 504 Part 8
17	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Copper	ASTM E 1251 - 2017a
18	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Copper	IS 504 Part 3

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 2 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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	Aluminium Alloy	Copper	IS 7212
20	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Iron	ASTM E 1251 - 2017a
21	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Iron	IS 504 Part 2
22	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Lead	ASTM E 1251 - 2017a
23	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Magnesium	ASTM E 1251 - 2017a
24	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Magnesium	IS 504 Part 6
25	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Manganese	ASTM E 1251 - 2017a
26	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Manganese	IS 504 Part 5
27	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Nickel	ASTM E 1251 - 2017a
28	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Nickel	IS 504 Part 7
29	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Silicon	ASTM E 1251 - 2017a
30	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Silicon	IS 504 Part 1
31	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Tin	ASTM E 1251 - 2017a
32	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Titanium	ASTM E 1251 - 2017a
33	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Vanadium	ASTM E 1251 - 2017a
34	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Zinc	ASTM E 1251 - 2017a
35	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Zinc	IS 504 Part 4
36	CHEMICAL- METALS & ALLOYS	Bronze Brass Copper	Iron	IS 3685
37	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Aluminium	IS 3685

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 3 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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	Bronze, Brass, Copper	Copper	IS 3685
39	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Copper	IS 4027 part 1
40	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Copper	IS 7212
41	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Iron	IS 3685
42	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Iron	IS 4027 part 8
43	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Lead	IS 3685
44	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Lead	IS 4027 part 1
45	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Nickel	IS 3685
46	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Nickel	IS 4027 Part 4
47	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Phosphorus	IS 3685
48	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Phosphorus	IS 4027 part 3
49	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Tin	IS 3685
50	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Tin	IS 4027 part 5
51	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Zinc	IS 3685
52	CHEMICAL- METALS & ALLOYS	Bronze, Brass, Copper	Zinc	IS 4027 part 6
53	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Aluminium	ASTM E 1999
54	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Aluminium	IS 15338
55	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Carbon	ASTM E 1999
56	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Carbon	IS 15338

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 4 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
57	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Chromium	ASTM E 1999
58	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Chromium	IS 15338
59	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Copper	ASTM E 1999
60	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled condition)	Copper	IS 15338
61	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Magnesium	IS 15338
62	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Manganese	ASTM E 1999
63	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Manganese	IS 15338
64	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Molybdenum	ASTM E 1999
65	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Molybdenum	IS 15338
66	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Nickel	ASTM E 1999
67	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Nickel	IS 15338
68	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Phosphorus	ASTM E 1999
69	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Phosphorus	IS 15338
70	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Silicon	ASTM E 1999
71	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Silicon	IS 15338
72	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Sulphur	ASTM E 1999
73	CHEMICAL- METALS & ALLOYS	Cast Iron (Chilled Condition)	Sulphur	IS 15338
74	CHEMICAL- METALS & ALLOYS	Cast Iron and Pig Iron	Carbon	IS 12308 part 11
75	CHEMICAL- METALS & ALLOYS	Cast Iron and Pig Iron	Chromium	IS 12308 part 8

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 5 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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 and Pig Iron	Nickel	IS 12308 part 7
77	CHEMICAL- METALS & ALLOYS	Cast Iron and Pig Iron	Phosphorus	IS 12308 part 5
78	CHEMICAL- METALS & ALLOYS	Cast Iron and Pig Iron	Silicon	IS 12308 part 6
79	CHEMICAL- METALS & ALLOYS	Cast Iron and Pig Iron	Sulphur	IS 12308 (Part 2)
80	CHEMICAL- METALS & ALLOYS	Cast Iron Pig Iron	Manganese	IS 12308 part 10
81	CHEMICAL- METALS & ALLOYS	Copper Alloy	Aluminium	BS En 15079
82	CHEMICAL- METALS & ALLOYS	Copper Alloy	Antimony	BS En 15079
83	CHEMICAL- METALS & ALLOYS	Copper Alloy	Arsenic	BS En 15079
84	CHEMICAL- METALS & ALLOYS	Copper Alloy	Bismuth	BS En 15079
85	CHEMICAL- METALS & ALLOYS	Copper Alloy	Chromium	BS En 15079
86	CHEMICAL- METALS & ALLOYS	Copper Alloy	Iron	BS En 15079
87	CHEMICAL- METALS & ALLOYS	Copper Alloy	Lead	BS En 15079
88	CHEMICAL- METALS & ALLOYS	Copper Alloy	Manganese	En 15079
89	CHEMICAL- METALS & ALLOYS	Copper Alloy	Nickel	BS En 15079
90	CHEMICAL- METALS & ALLOYS	Copper Alloy	Phosphorus	BS En 15079
91	CHEMICAL- METALS & ALLOYS	Copper Alloy	Silicon	BS En 15079
92	CHEMICAL- METALS & ALLOYS	Copper Alloy	Silver	BS En 15079
93	CHEMICAL- METALS & ALLOYS	Copper Alloy	Sulphur	BS En 15079
94	CHEMICAL- METALS & ALLOYS	Copper Alloy	Tin	BS En 15079

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 6 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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	Copper Alloy	Zinc	BS En 15079
96	CHEMICAL- METALS & ALLOYS	Ferro Chromium	Carbon	IS 1559
97	CHEMICAL- METALS & ALLOYS	Ferro Chromium	Chromium	IS 13452 (Part 5)
98	CHEMICAL- METALS & ALLOYS	Ferro Chromium	Chromium	IS 1559
99	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Carbon	IS 1559
100	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Manganese	IS 1559
101	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Carbon	IS 1559
102	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Silicon	IS 1559
103	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Carbon	JIS G 1253
104	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Chromium	JIS G 1253
105	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Copper	JIS G 1253
106	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Manganese	JIS G 1253
107	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Molybdenum	JIS G 1253
108	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Nickel	JIS G 1253
109	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Niobium	JIS G 1253
110	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Phosphorus	JIS G 1253
111	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Silicon	JIS G 1253
112	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Sulphur	JIS G 1253
113	CHEMICAL- METALS & ALLOYS	High Carbon High Chromium	Vanadium	JIS G 1253

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 7 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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	Low Alloy Steel	Aluminium	IS 8811
115	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Aluminium	ASTM E 415
116	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Arsenic	IS 8811
117	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Assenic	ASTM E 415
118	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Boron	IS 8811
119	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Boron	ASTM E 415
120	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Carbon	ASTM E 415
121	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Carbon	IS 8811
122	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Chromium	ASTM E 415
123	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Chromium	IS 8811
124	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Cobalt	ASTM E 415
125	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Cobalt	IS 8811
126	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Copper	ASTM E 415
127	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Copper	IS 8811
128	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Lead	ASTM E 415
129	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Lead	IS 8811
130	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Manganese	ASTM E 415
131	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Manganese	IS 8811
132	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Molybdenum	ASTM E 415

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 8 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
133	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Molybdenum	IS 8811
134	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Nickel	ASTM E415
135	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Nickel	IS 8811
136	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Niobium	ASTM E 415
137	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Niobium	IS 8811
138	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Nitrogen	ASTM E 415
139	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Nitrogen	IS 8811
140	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Phosphorus	ASTM E 415
141	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Silicon	ASTM E 415
142	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Silicon	IS 8811
143	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Sulphur	ASTM E 415
144	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Tin	ASTM E 415
145	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Tin	IS 8811
146	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Titanium	ASTM E 415
147	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Titanium	IS 8811
148	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Tungsten	ASTM E 415
149	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Tungsten	IS 8811
150	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Vanadium	IS 8811
151	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Vanadium	ASTM E 415

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 9 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
152	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Aluminium	ASTM E 3047-16
153	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Carbon	ASTM E 3047-16
154	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Chromium	ASTM E 3047-16
155	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Cobalt	ASTM E 3047-16
156	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Copper	ASTM E 3047-16
157	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Iron	ASTM E 3047-16
158	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Manganese	ASTM E 3047-16
159	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Molybdenum	ASTM E 3047-16
160	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Niobium	ASTM E 3047-16
161	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Phosphorus	ASTM E 3047-16
162	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Silicon	ASTM E 3047-16
163	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Sulphur	ASTM E 3047-16
164	CHEMICAL- METALS & ALLOYS	Nickel Alloy	Titanium	ASTM E 3047-16
165	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Carbon	IS 228 part 1
166	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Chromium	IS 228 part 6
167	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Copper	IS 228 part 15
168	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Manganese	IS 228 part 2
169	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Manganese	IS 228 part 2
170	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Molybdenum	IS 228 part 10

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 10 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
171	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Molybdenum	IS 228 part 7
172	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Molybdenum	IS 228 part 7
173	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Nickel	IS 228 part 5
174	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Phosphorus	IS 228 part 3
175	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Silicon	IS 228 part 8
176	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Silicon	IS 228 part 8
177	CHEMICAL- METALS & ALLOYS	Plain Carbon Steel	Sulphur	IS 228 part 9
178	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E 1086
179	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 228 part 1
180	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	JIS G 1253
181	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chomium	IS 228 part 6
182	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 228 part 6
183	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	JIS G 1253
184	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cobalt	JIS G 1253
185	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 228 part 15
186	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	JIS G 1253
187	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 228 part 2
188	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	JIS G 1253
189	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 228 part 10

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 11 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
190	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 228 part 7
191	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	JIS G 1253
192	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 228 part 5
193	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	JIS G 1253
194	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium	JIS G 1253
195	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nitrogen	JIS G 1253
196	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	IS 228 part 3
197	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	JIS G 1253
198	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 228 part 8
199	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	JIS G 1253
200	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	IS 228 part 9
201	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	JIS G 1253
202	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium	JIS G 1253
203	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	IS 228 part 6
204	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	JIS G 1253
205	CHEMICAL- METALS & ALLOYS	Stainless Steel/High Carbon High Chromium	Carbon	ASTM E1086
206	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Aluminium	ASTM E 2994
207	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Carbon	ASTM E 2994
208	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Chromium	ASTM E 2994

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 12 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
209	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Iron	ASTM E 2994
210	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Manganese	ASTM E 2994
211	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Molybdenum	ASTM E 2994
212	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Silicon	ASTM E 2994
213	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Vanadium	ASTM E 2994
214	CHEMICAL- METALS & ALLOYS	Titanium Alloy	Zirconium	ASTM E 2994
215	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	IS 9879
216	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	IS 9879
217	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt	IS 9879
218	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	IS 9879
219	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	IS 9879
220	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	IS 9879
221	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	IS 9879
222	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorus	IS 9879
223	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	IS 9879
224	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulphur	IS 9879
225	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten	IS 9879
226	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium	IS 9879
227	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Aluminium	ISO 3815-1

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 13 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
228	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Cadmium	ISO 3815-1
229	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Chromium	ISO 3815-1
230	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Copper	ISO 3815-1
231	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Iron	ISO 3815-1
232	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Lead	ISO 3815-1
233	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Magnesium	ISO 3815-1
234	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Manganese	ISO 3815-1
235	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Nickel	ISO 3815-1
236	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots & Pure Zinc	Tin	ISO 3815-1
237	CHEMICAL- METALS & ALLOYS	Zinc Alloy, Ingots, Pure Zinc	Antimony	ISO 3815-1
238	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Aluminum Oxide	IS 11477
239	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Aluminum Oxide	IS 12107 part 3
240	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Aluminum Oxide	IS 9749
241	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Calcium Oxide	IS 11477
242	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Calcium Oxide	IS 12107 part 8
243	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Calcium Oxide	IS 9749
244	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Ferric Oxide	IS 2000 part 4
245	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Loss On Ignition	IS 11477
246	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Loss on Ignition	IS 12107 part 1

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 14 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
247	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Loss On Ignition	IS 9749
248	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Magnesium Oxide	IS 12107 part 8
249	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Magnesium Oxide	IS 9749
250	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Potassium Oxide	IS 11477
251	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Potassium Oxide	IS 12107 part 9
252	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Potassium Oxide	IS 9749
253	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Silicon dioxide	IS 11477
254	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Silicon dioxide	IS 12107 Part 2
255	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Silicon dioxide	IS 9749
256	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Sodium Oxide	IS 11477
257	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Sodium Oxide	IS 12107 Part 9
258	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Sodium Oxide	IS 9749
259	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Titanium dioxide	IS 11477
260	CHEMICAL- ORES & MINERALS	Clays & other Silica Minerals	Titanium dioxide	IS 12107 part 5
261	CHEMICAL- ORES & MINERALS	Iron ores	Aluminum Oxide	IS 1493 part 1
262	CHEMICAL- ORES & MINERALS	iron ores	Ferric Oxide	IS 1493 part 1
263	CHEMICAL- ORES & MINERALS	iron ores	Phosphorus	IS 1493 Part 1
264	CHEMICAL- ORES & MINERALS	iron ores	Silicon Dioxide	IS 1493 part 1
265	CHEMICAL- ORES & MINERALS	iron ores	Sulphur	IS 1493 Part 1

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 15 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
266	CHEMICAL- ORES & MINERALS	Limestone, Calcite, Magnesite, Dolomite	Aluminum Oxide	IS 1760 part 3
267	CHEMICAL- ORES & MINERALS	Limestone, Calcite, Magnesite, Dolomite	Calcium Oxide	IS 1760 part 3
268	CHEMICAL- ORES & MINERALS	Limestone, Calcite, Magnesite, Dolomite	Loss On Ignition	IS 1760 part 1
269	CHEMICAL- ORES & MINERALS	Limestone, Calcite, Magnesite, Dolomite	Magnesium Oxide	IS 1760 part 3
270	CHEMICAL- ORES & MINERALS	Limestone, Calcite, Magnesite, Dolomite	Silicon dioxide	IS 1760 part 2
271	CHEMICAL- ORES & MINERALS	Limestone, Calcite, Magnesite, Dolomite	Sodium Oxide	IS 11477
272	CHEMICAL- ORES & MINERALS	manganese ores	Aluminum Oxide	IS 1473
273	CHEMICAL- ORES & MINERALS	manganese ores	Ferric Oxide	IS 1473
274	CHEMICAL- ORES & MINERALS	manganese ores	Manganese	IS 1473
275	CHEMICAL- ORES & MINERALS	manganese ores	Phosphorus	IS 1473
276	CHEMICAL- ORES & MINERALS	manganese ores	Silicon Dioxide	IS 1473
277	CHEMICAL- ORES & MINERALS	manganese ores	Sulphur	IS 1473
278	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Alumina	Loss On Ignition	IS 9749
279	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Aluminum Oxide	IS 12107 part 3
280	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Aluminum Oxide	IS 1335
281	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Aluminum Oxide	IS 1527
282	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Aluminum Oxide	IS 9749
283	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Calcium Oxide	IS 12107 part 8
284	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Calcium Oxide	IS 1527

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 16 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
285	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Calcium Oxide	IS 9749
286	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Ferric Oxide	IS 2000 part 4
287	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Ferric Oxide	IS 9749
288	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Loss On Ignition	IS 12107 part 1
289	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Loss On Ignition	IS 1527
290	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Magnesium Oxide	IS 12107 part 8
291	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Magnesium Oxide	IS 1527
292	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Magnesium Oxide	IS 9749
293	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Potassium Oxide	IS 12107 part 9
294	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Potassium Oxide	IS 1527
295	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Potassium Oxide	IS 9749
296	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Silicon Dioxide	IS 12107 Part 2
297	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Silicon Dioxide	IS 1527
298	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Silicon dioxide	IS 9749
299	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Sodium Oxide	IS 12107 part9
300	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Sodium Oxide	IS 1527
301	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Sodium oxide	IS 9749
302	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Titanium dioxide	IS 12107 Part 5
303	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Titanium dioxide	IS 1527

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 17 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
304	CHEMICAL- ORES & MINERALS	Refractories Silica, Refractories Alumina, Refractories Quartz	Titanium dioxide	IS 9749
305	CHEMICAL- RUBBER & RUBBER PRODUCTS	Rubbers & Polymers	Ash Content	IS 3708 (Part 9)
306	CHEMICAL- RUBBER & RUBBER PRODUCTS	Rubbers and Polymers	Ash content	ASTM D 5630
307	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous (WELD Plates, Plates, Rods, Tubes, Pipes)	Tensile Strength	IS 1608 (Part 1)
308	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys	Charpy Impact Test (U-Notch) 20 to -80 deg C	IS 1499
309	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	Hardness - Rockwell HRC	IS 1586 part 1
310	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	Hardness Test - Rockwell HRB	IS 1586 part 1
311	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	Hardness Test - Brinell Hardness 2.5 mm/187.5 kgf	IS 1500 part 1
312	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	% Elongation	IS 1608 (Part 1)
313	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	% Reduction in Area	IS 1608 (Part 1)
314	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	0.2% proof Stress	IS 1608 (Part 1)
315	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	Bend Test	IS 1599
316	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (including weld metals), Pipes, Rods, Plates	Yield Strength	IS 1608 (Part 1)
317	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (Pipes, Rods, Plates)	% Elongation	ASTM E8/E8M

SCOPE OF ACCREDITATION

Laboratory Name : MINERAL AND METALLURGICAL LABORATORIES, C-206 1ST FLOOR, 4TH CROSS, PEENYA 1ST STAGE, BENGALURU, KARNATAKA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-7421 **Page No** 18 of 18

Validity 19/03/2023 to 18/03/2025 **Last Amended on** -

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
318	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (Pipes, Rods, Plates)	% Reduction in Area	ASTM E8/E8M
319	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (Pipes, Rods, Plates)	0.2% proof Stress	ASTM E8/E8M
320	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous metals and alloys (Pipes, Rods, Plates)	Yield Strength	ASTM E8/E8M
321	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Material and Alloys (Weld Plates, Rods, Plates Tubes and Pipes)	Tensile Strength	IS 1608 (Part 1)
322	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous metals and alloys Pipes, Rods, Plates	Hardness - Brinell Hardness 5 mm/250 kgf	IS 1500 part 1
323	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	% Elongation	ASTM A370
324	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	% Reduction in Area	ASTM A370
325	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	0.2% proof Stress (10 to 600 kN)	ASTM A370
326	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	Bend Test	ASTM A370
327	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	Root Bend, Face Bend, Side Bend	ASTM A370
328	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	Tensile Strength	ASTM A370
329	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products (including weld metals), Pipes, Rods, Plates	Yield Strength	ASTM A370
330	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Tension Testing of Metallic Materials (Pipes, Rods, Plates)	Tensile Strength	ASTM E8/E8M