National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : SCIENTIFIC SERVICES, TATA STEEL, JAMSHEDPUR, BISTUPUR, EAST SINGHBHUM, JAMSHEDPUR, JHARKHAND, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 23/12/2021 to 22/12/2023 **Last Amended on** 31/12/2021

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	Carbon	TATA STEEL Method SS/CHEM/003 Rev 06
2	CHEMICAL- METALS & ALLOYS	Cast Iron	Carbon	ASTM E 1999
3	CHEMICAL- METALS & ALLOYS	Cast Iron	Carbon	IS 15338
4	CHEMICAL- METALS & ALLOYS	Cast Iron	Chromium	ASTM E 1999
5	CHEMICAL- METALS & ALLOYS	Cast Iron	Chromium	IS 15338
6	CHEMICAL- METALS & ALLOYS	Cast Iron	Chromium	TATA STEEL Method SS/CHEM/002 Rev 07
7	CHEMICAL- METALS & ALLOYS	Cast Iron	Copper	ASTM E 1999
8	CHEMICAL- METALS & ALLOYS	Cast Iron	Copper	IS 15338
9	CHEMICAL- METALS & ALLOYS	Cast Iron	Copper	TATA STEEL Method SS/CHEM/002 Rev 07
10	CHEMICAL- METALS & ALLOYS	Cast Iron	Manganese	ASTM E1999
11	CHEMICAL- METALS & ALLOYS	Cast Iron	Manganese	IS 15338
12	CHEMICAL- METALS & ALLOYS	Cast Iron	Manganese	TATA STEEL Method SS/CHEM/002 Rev 07
13	CHEMICAL- METALS & ALLOYS	Cast Iron	Phosphorus	ASTM E 1999
14	CHEMICAL- METALS & ALLOYS	Cast Iron	Phosphorus	IS 15338
15	CHEMICAL- METALS & ALLOYS	Cast Iron	Phosphorus	TATA STEEL Method SS/CHEM/002 Rev 07
16	CHEMICAL- METALS & ALLOYS	Cast Iron	Silicon	ASTM E1999
17	CHEMICAL- METALS & ALLOYS	Cast Iron	Silicon	IS 15338
18	CHEMICAL- METALS & ALLOYS	Cast Iron	Silicon	TATA STEEL Method SS/CHEM/002 Rev 07

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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	Cast Iron	Sulphur	ASTM E 1999
20	CHEMICAL- METALS & ALLOYS	Cast Iron	Sulphur	IS 15338
21	CHEMICAL- METALS & ALLOYS	Cast Iron	Sulphur	IS 228 (Part 20) RA 2019
22	CHEMICAL- METALS & ALLOYS	Cast Iron	Sulphur	TATA STEEL Method SS/CHEM/002 Rev 07
23	CHEMICAL- METALS & ALLOYS	Cast Iron	Titanium	ASTM E 1999
24	CHEMICAL- METALS & ALLOYS	Cast Iron	Titanium	TATA STEEL Method SS/CHEM/002 Rev 07
25	CHEMICAL- METALS & ALLOYS	Ferro Boron	Boron	TATA STEEL Method SS/CHEM/005 Rev 08
26	CHEMICAL- METALS & ALLOYS	Ferro Boron, Ferro Chrome, Ferro Manganese, Ferro Molybdenum, Ferro Niobium, Ferro Phosphorus, Ferro Silicon, Ferro Titanium, Ferro Vandium, Silicon Manganese	Carbon	TATA STEEL METHOD SS/CHEM/003 Rev 06
27	CHEMICAL- METALS & ALLOYS	Ferro Chrome	Chromium	TATA STEEL Method SS/CHEM/005 Rev 08
28	CHEMICAL- METALS & ALLOYS	Ferro Chrome	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
29	CHEMICAL- METALS & ALLOYS	Ferro Chrome	Silicon	TATA STEEL Method SS/CHEM/005 Rev 08
30	CHEMICAL- METALS & ALLOYS	Ferro Chrome	Titanium	TATA STEEL Method SS/CHEM/005 Rev 08
31	CHEMICAL- METALS & ALLOYS	Ferro Chrome, Ferro Manganese, Ferro Molybdenum, Ferro Niobium, Ferro Silicon, Ferro Titanium, Ferro Vandium, Silicon Manganese	Sulphur	TATA STEEL METHOD SS/CHEM/003 Rev No. 06
32	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Manganese	TATA STEEL Method SS/CHEM/005 Rev 08
33	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
34	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Silicon	TATA STEEL Method SS/CHEM/005 Rev 08
35	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Titanium	TATA STEEL Method SS/CHEM/005 Rev 08
36	CHEMICAL- METALS & ALLOYS	Ferro Molybdenum	Molybdenum	TATA STEEL Method SS/CHEM/005 Rev 08

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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
37	CHEMICAL- METALS & ALLOYS	Ferro Niobium	Niobium	TATA STEEL Method SS/CHEM/002 Rev 07
38	CHEMICAL- METALS & ALLOYS	Ferro Niobium	Niobium	TATA STEEL Method SS/CHEM/005 Rev 08
39	CHEMICAL- METALS & ALLOYS	Ferro Niobium	Phosphorus	TATA STEEL Method SS/CHEM/002 Rev 07
40	CHEMICAL- METALS & ALLOYS	Ferro Niobium	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
41	CHEMICAL- METALS & ALLOYS	Ferro Phosphorus	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
42	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Aluminum	TATA STEEL Method SS/CHEM/002 Rev 07
43	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Aluminum	TATA STEEL Method SS/CHEM/005 Rev 08
44	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Silicon	TATA STEEL Method SS/CHEM/002 Rev 07
45	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Silicon	TATA STEEL Method SS/CHEM/005 Rev 08
46	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Titanium	TATA STEEL Method SS/CHEM/002 Rev 07
47	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Titanium	TATA STEEL Method SS/CHEM/005 Rev 08
48	CHEMICAL- METALS & ALLOYS	Ferro Titanium	Silicon	TATA STEEL Method SS/CHEM/005 Rev 08
49	CHEMICAL- METALS & ALLOYS	Ferro Titanium	Titanium	TATA STEEL Method SS/CHEM/005 Rev 08
50	CHEMICAL- METALS & ALLOYS	Ferro Vanadium	Phosphorus	TATA STEEL Method SS/CHEM/002 Rev 07
51	CHEMICAL- METALS & ALLOYS	Ferro Vanadium	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
52	CHEMICAL- METALS & ALLOYS	Ferro Vanadium	Vanadium	TATA STEEL Method SS/CHEM/002 Rev 07
53	CHEMICAL- METALS & ALLOYS	Ferro Vanadium	Vanadium	TATA STEEL Method SS/CHEM/005 Rev 08
54	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Aluminium	ASTM E415
55	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Aluminium	IS 8811

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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
56	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Antimony	ASTM E 415
57	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Arsenic	ASTM E415
58	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Arsenic	IS 8811
59	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Boron	ASTM E415
60	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Boron	IS 8811
61	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Calcium	ASTM E 415
62	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Carbon	JIS 1253
63	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Carbon	ASTM E415
64	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Carbon	IS 8811
65	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Chromium	ASTM E415
66	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Chromium	IS 8811
67	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Cobalt	ASTM E 415
68	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Cobalt	IS 8811
69	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Copper	ASTM E415
70	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Copper	IS 8811
71	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Manganese	ASTM E415
72	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Manganese	IS 8811
73	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Molybdenum	ASTM E415
74	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Molybdenum	IS 8811

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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
75	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Nickel	ASTM E 415
76	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Nickel	IS 8811
77	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Niobium	ASTM E415
78	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Niobium	IS 8811
79	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Nitrogen	IS 228 (Part 23)
80	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Phosphorus	ASTM E415
81	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Phosphorus	IS 8811
82	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Silicon	ASTM E415
83	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Silicon	IS 8811
84	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Sulphur	ASTM E415
85	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Sulphur	IS 8811
86	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Tin	ASTM E 415
87	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Tin	IS 8811
88	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Titanium	ASTM E415
89	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Titanium	IS 8811
90	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Vanadium	ASTM E415
91	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Vanadium	IS 8811
92	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Zirconium	ASTM E 415
93	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steel	Zirconium	IS 8811

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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	Silico Manganese	Manganese	TATA STEEL Method SS/CHEM/005 Rev 08
95	CHEMICAL- METALS & ALLOYS	Silico Manganese	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
96	CHEMICAL- METALS & ALLOYS	Silico Manganese	Silicon	TATA STEEL Method SS/CHEM/005 Rev 08
97	CHEMICAL- METALS & ALLOYS	Silico Manganese	Titanium	TATA STEEL Method SS/CHEM/005 Rev 08
98	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
99	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 9879
100	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E 1086
101	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 9879
102	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E 1086
103	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 9879
104	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086
105	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 9879
106	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E 1086
107	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 9879
108	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E 1086
109	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 9879
110	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	ASTM E1086
111	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	IS 9879
112	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	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
113	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 9879
114	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	ASTM E1086
115	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	IS 9879
116	CHEMICAL- METALS & ALLOYS	Steel	Carbon	IS 228 (Part 20)
117	CHEMICAL- METALS & ALLOYS	Steel	Carbon	TATA STEEL Method SS/CHEM/003 Rev 05
118	CHEMICAL- METALS & ALLOYS	Steel	Nitrogen	IS 228 (Part 24)
119	CHEMICAL- METALS & ALLOYS	Steel	Oxygen	IS 228 (Part 18)
120	CHEMICAL- METALS & ALLOYS	Steel	Sulphur	IS 228 (Part 20)
121	CHEMICAL- METALS & ALLOYS	Steel	Sulphur	TATA STEEL Method SS/CHEM/003 Rev 05
122	CHEMICAL- ORES & MINERALS	Alumina based Refractories	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
123	CHEMICAL- ORES & MINERALS	Alumina based Refractories	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
124	CHEMICAL- ORES & MINERALS	Alumina based Refractories	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
125	CHEMICAL- ORES & MINERALS	Alumina based Refractories	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
126	CHEMICAL- ORES & MINERALS	Alumina based Refractories	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
127	CHEMICAL- ORES & MINERALS	Alumina based Refractories	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
128	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Chromium(III) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
129	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
130	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
131	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08

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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
132	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
133	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
134	CHEMICAL- ORES & MINERALS	Chrome Ore and High Chrome Refractories	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
135	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
136	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
137	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
138	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
139	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
140	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
141	CHEMICAL- ORES & MINERALS	Coal and Coke Ash	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
142	CHEMICAL- ORES & MINERALS	Dunite	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
143	CHEMICAL- ORES & MINERALS	Dunite	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
144	CHEMICAL- ORES & MINERALS	Dunite	Chromium(III) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
145	CHEMICAL- ORES & MINERALS	Dunite	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
146	CHEMICAL- ORES & MINERALS	Dunite	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
147	CHEMICAL- ORES & MINERALS	Dunite	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
148	CHEMICAL- ORES & MINERALS	High Alumina Refractories	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 04
149	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
150	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08

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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	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Aluminum oxide	TATA STEEL Method SS/CHEM/002 Rev 07
152	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Calcium oxide	TATA STEEL Method SS/CHEM/002 Rev 07
153	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
154	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Chromium(III) oxide	TATA STEEL Method SS/CHEM/002 Rev 07
155	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Magnesium oxide	TATA STEEL Method SS/CHEM/002 Rev 07
156	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
157	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Manganese(II) oxide	TATA STEEL Method SS/CHEM/002 Rev 07
158	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Manganese(II) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
159	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Phosphorus pentoxide	TATA STEEL Method SS/CHEM/002 Rev 07
160	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Phosphorus pentoxide	TATA STEEL Method SS/CHEM/005 Rev 08
161	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Potassium oxide	TATA STEEL Method SS/CHEM/002 Rev 07
162	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Silicon dioxide	TATA STEEL Method SS/CHEM/002 Rev 07
163	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
164	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Sulphur	TATA STEEL Method SS/CHEM/002 Rev 07
165	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Titanium dioxide	TATA STEEL Method SS/CHEM/002 Rev 07
166	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Total Iron	TATA STEEL Method SS/CHEM/002 Rev 07
167	CHEMICAL- ORES & MINERALS	Iron and Steel Making Slags	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
168	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Aluminium oxide	TATA STEEL Method SS/CHEM/002 Rev 07
169	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08

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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
170	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Calcium oxide	TATA STEEL Method SS/CHEM/002 Rev 07
171	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
172	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Chromium(III) oxide	TATA STEEL Method SS/CHEM/002 Rev 07
173	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Chromium(III) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
174	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Magnesium oxide	TATA STEEL Method SS/CHEM/002 Rev 07
175	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
176	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Manganese(II) oxide	TATA STEEL Method SS/CHEM/002 Rev 07
177	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Manganese(II) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
178	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Phosphorus	TATA STEEL Method SS/CHEM/002 Rev 07
179	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08
180	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Potassium oxide	TATA STEEL Method SS/CHEM/002 Rev 05
181	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Silicon dioxide	TATA STEEL Method SS/CHEM/002 Rev 07
182	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
183	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Titanium dioxide	TATA STEEL Method SS/CHEM/002 Rev 07
184	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
185	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Total Iron	TATA STEEL Method SS/CHEM/002 Rev 07
186	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter and Pellet	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
187	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter, Pellet, Process Solid Materials	Iron Metallic	TATA STEEL Method SS/CHEM/011 Rev 07
188	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter, Pellet, Process Solid Materials	Iron(II) oxide	ASTM D 3872

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189	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter, Pellet, Process Solid Materials	Iron(II) oxide	TATA STEEL Method SS/CHEM/010 Rev 09
190	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter, Pellet, Process Solid Materials	Total Iron	ASTM E 246 RA 2015 Method B
191	CHEMICAL- ORES & MINERALS	Iron Ore, Sinter, Pellet, Process Solid Materials	Total Iron	TATA STEEL Method SS/CHEM/012 Rev 07
192	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
193	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
194	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
195	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Ferric Oxide	TATA STEEL Method SS/CHEM/005 Rev 08
196	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
197	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Manganese(II) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
198	CHEMICAL- ORES & MINERALS	Limestone, Dolomite and Allied Materials	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
199	CHEMICAL- ORES & MINERALS	Magnesia based Refractories	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
200	CHEMICAL- ORES & MINERALS	Magnesia based Refractories	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
201	CHEMICAL- ORES & MINERALS	Magnesia based Refractories	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
202	CHEMICAL- ORES & MINERALS	Magnesia based Refractories	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
203	CHEMICAL- ORES & MINERALS	Magnesia based Refractories	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
204	CHEMICAL- ORES & MINERALS	Manganese Ore	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
205	CHEMICAL- ORES & MINERALS	Manganese Ore	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
206	CHEMICAL- ORES & MINERALS	Manganese Ore	Manganese	TATA STEEL Method SS/CHEM/005 Rev 08
207	CHEMICAL- ORES & MINERALS	Manganese Ore	Phosphorus	TATA STEEL Method SS/CHEM/005 Rev 08

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208	CHEMICAL- ORES & MINERALS	Manganese Ore	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
209	CHEMICAL- ORES & MINERALS	Manganese Ore	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
210	CHEMICAL- ORES & MINERALS	Pyroxenite	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
211	CHEMICAL- ORES & MINERALS	Pyroxenite	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
212	CHEMICAL- ORES & MINERALS	Pyroxenite	Chromium(III) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
213	CHEMICAL- ORES & MINERALS	Pyroxenite	Magnesium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
214	CHEMICAL- ORES & MINERALS	Pyroxenite	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
215	CHEMICAL- ORES & MINERALS	Pyroxenite	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
216	CHEMICAL- ORES & MINERALS	Silica based Refractories	Aluminum oxide	TATA STEEL Method SS/CHEM/005 Rev 08
217	CHEMICAL- ORES & MINERALS	Silica based Refractories	Calcium oxide	TATA STEEL Method SS/CHEM/005 Rev 08
218	CHEMICAL- ORES & MINERALS	Silica based Refractories	Manganese(II) oxide	TATA STEEL Method SS/CHEM/005 Rev 08
219	CHEMICAL- ORES & MINERALS	Silica based Refractories	Silicon dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
220	CHEMICAL- ORES & MINERALS	Silica based Refractories	Titanium dioxide	TATA STEEL Method SS/CHEM/005 Rev 08
221	CHEMICAL- ORES & MINERALS	Silica based Refractories	Total Iron	TATA STEEL Method SS/CHEM/005 Rev 08
222	CHEMICAL- SOLID FUELS	Coal and Coke	Ash	ASTM D 7582
223	CHEMICAL- SOLID FUELS	Coal and Coke	Ash	ASTM D 7582
224	CHEMICAL- SOLID FUELS	Coal and Coke	Ash	IS 1350 (Part 1) RA 2019
225	CHEMICAL- SOLID FUELS	Coal and Coke	Ash	IS 1350 (Part 1) RA 2019
226	CHEMICAL- SOLID FUELS	Coal and Coke	Ash	TATA STEEL Method SS/CHEM/007 Rev 08
227	CHEMICAL- SOLID FUELS	Coal and Coke	Ash	TATA STEEL Method SS/CHEM/007 Rev 08
228	CHEMICAL- SOLID FUELS	Coal and Coke	Volatile Matter	ASTM D 7582

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229	CHEMICAL- SOLID FUELS	Coal and Coke	Volatile Matter	ASTM D 7582
230	CHEMICAL- SOLID FUELS	Coal and Coke	Volatile Matter	IS 1350 (Part 1) RA 2019
231	CHEMICAL- SOLID FUELS	Coal and Coke	Volatile Matter	IS 1350 (Part 1) RA2019
232	CHEMICAL- SOLID FUELS	Coal and Coke	Volatile Matter	TATA STEEL Method SS/CHEM/007 Rev 08
233	CHEMICAL- SOLID FUELS	Coal and Coke	Volatile Matter	TATA STEEL Method SS/CHEM/007 Rev 08
234	CHEMICAL- SOLID FUELS	Coke	Coke Reactivity Index (CRI)	IS 4023
235	CHEMICAL- SOLID FUELS	Coke	Coke Strength after Reaction (CSR)	IS 4023
236	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Cast Iron, Steel	Rockwell Hardness	ASTM E18
237	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed Bars (TMT)	Bend	IS 1599
238	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed Bars (TMT)	Mass per Meter	IS 1786
239	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed Bars (TMT)	Re-bend	IS 1786
240	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed Steel Bar (TMT)	Percentage total elongation at maximum force	IS 1608 (Part 1)
241	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed Steel Bar (TMT)	Tensile Test (%El)	IS 1608 (Part 1)
242	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed Steel Bar (TMT)	Tensile Test (YS)	IS 1608 (Part 1)
243	MECHANICAL-MECHANICAL PROPERTIES OF METALS	High Strength Deformed steel Bars (TMT)	Tensile Test (UTS)	IS 1608 Part 1
244	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Fines	Blaine Number	TATA STEEL Method SS/CRMT/034 Rev 03
245	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Fines	Particle Size Analysis	ISO 13320

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246	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Pellet	Cold Crushing Strength Test	IS 8625
247	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Pellet	Porosity	Tata Steel Method SS/CRMT/013 Rev 00: 2020
248	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Pellet	Reducibility Index (RI)	Tata Steel Method SS/CRMT/011 Rev 04: 2021
249	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Pellet	Reduction Degradation Index (RDI)	Tata Steel Method SS/CRMT/010 Rev 04: 2021
250	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Pellet	Swelling Index (SI)	IS 8624
251	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Sinter	Porosity	Tata steel Method SS/CRMT/013 Rev 00: 2020
252	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Sinter	Reducibility Index (RI)	TATA STEEL Method SS/CRMT/011 Rev 04
253	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Iron Ore Sinter	Reduction Degradation Index (RDI)	TATA STEEL Method SS/CRMT/010 Rev 03
254	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel	Charpy Impact V-Notch @ room temperature.	IS 1757 Part-1
255	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel ,Cast Iron	Vickers Hardness	IS 1501 (Part 1)
256	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Brinell Hardness	IS 1500 (Part 1)
257	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Rockwell Hardness	ASTM E18
258	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Rockwell Hardness	ASTM E18
259	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Rockwell Hardness	IS 1586 (Part 1)

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260	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Rockwell Hardness	IS 1586 (Part 1)
261	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	ASTM E 384
262	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	ASTM E 384
263	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	ASTM E92
264	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	ASTM E92
265	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	ASTM E92
266	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	IS 1501 (Part 1)
267	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	IS 1501 (Part 1)
268	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	IS 1501 (Part 1)
269	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel, Cast Iron	Vickers Hardness	IS 1501 (Part 1)
270	MECHANICAL-METALLOGRAPHY TEST	Steel	Decarburization Depth	ASTM E 1077 (Cl. 7.2 & Cl. 7.3)
271	MECHANICAL-METALLOGRAPHY TEST	Steel	Decarburization Depth	IS 6396 (RA 2018) (Cl. 6)
272	MECHANICAL-METALLOGRAPHY TEST	Steel	Grain Size by Comparison Method	ASTM E112
273	MECHANICAL-METALLOGRAPHY TEST	Steel	Grain Size by Comparison Method	IS 4748 (RA 2017)
274	MECHANICAL-METALLOGRAPHY TEST	Steel	Grain Size by Planimetric Method	ASTM E112

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275	MECHANICAL-METALLOGRAPHY TEST	Steel	Grain Size by Planimetric Method	IS 4748 (RA 2017)
276	MECHANICAL-METALLOGRAPHY TEST	Steel	Inclusion Rating by Comparison Method	ASTM E45 Method A
277	MECHANICAL-METALLOGRAPHY TEST	Steel	Inclusion Rating by Comparison Method	IS 4163 (RA 2017)
278	MECHANICAL-METALLOGRAPHY TEST	Steel	Macro Etch Test by Visual Examination	ASTM E381
279	MECHANICAL-METALLOGRAPHY TEST	Steel, Cast Iron ,Other Alloys	Macro Etch Test by Visual Observation	ASTM E340
280	MECHANICAL-METALLOGRAPHY TEST	Steel, Cast Iron, Other Alloys	Metallographic Examination by Microscopic Method	ASM (Vol#9)
281	MECHANICAL-METALLOGRAPHY TEST	Steel, Cast Iron, Other Alloys	Metallographic Examination by Scanning Electron Microscopic Method and Qualitative Analysis by Energy Dispersive Spectrometry	ASM Vol#9
282	MECHANICAL-METALLOGRAPHY TEST	Steel, Cast Iron, Other Alloys	Metallographic Examination by Scanning Electron Microscopic Method and Qualitative Analysis by Energy Dispersive Spectrometry	ASTM E1508 12A