National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : MITRA S. K. PRIVATE LIMITED, BHUBANESWAR LABORATORY, PLOT NO 178-A, MANCHESWAR INDUSTRIAL ESTATE, BHUBANESWAR, KHORDHA, ODISHA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-5256 **Page No** 1 of 8

Validity 13/12/2021 to 12/12/2023 **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- METALS & ALLOYS	Ferro Manganese	Manganese	IS 1559
2	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Manganese	ISO 4159
3	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Phosphorus	IS 1559
4	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Silicon	IS 1559
5	CHEMICAL- METALS & ALLOYS	High Carbon Ferro Chrome	Chromium	IS 13452 (Part- 5)
6	CHEMICAL- METALS & ALLOYS	High Carbon Ferro Chrome	Chromium	ISO 4140
7	CHEMICAL- METALS & ALLOYS	High Carbon Ferro Chrome	Manganese	IS 1559 (Part-7)
8	CHEMICAL- METALS & ALLOYS	High Carbon Ferro Chrome	Phosphorus	IS 13452 (Part-7)
9	CHEMICAL- METALS & ALLOYS	High Carbon Ferro Chrome	Phosphorus	SOP : TPM/MSK/8/C (Issue No .02 dated 01.04.2011)
10	CHEMICAL- METALS & ALLOYS	High Carbon Ferro Chrome	Silicon	IS 13452 (Part-1)
11	CHEMICAL- METALS & ALLOYS	Pig Iron/ Cast Iron	Carbon	ISO 15350
12	CHEMICAL- METALS & ALLOYS	Pig Iron/ Cast Iron	Manganese	IS12308 (Part-10)
13	CHEMICAL- METALS & ALLOYS	Pig Iron/ Cast Iron	Phosphorus	IS12308 (Part-5)
14	CHEMICAL- METALS & ALLOYS	Pig Iron/ Cast Iron	Silicon	IS 12308 (Part-6)
15	CHEMICAL- METALS & ALLOYS	Pig Iron/ Cast Iron	Sulphur	ISO 15350
16	CHEMICAL- METALS & ALLOYS	Silico Manganese	Carbon	ISO 15350
17	CHEMICAL- METALS & ALLOYS	Silico Manganese	Manganese	IS 1559
18	CHEMICAL- METALS & ALLOYS	Silico Manganese	Manganese	ISO 4159

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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	Silico Manganese	Phosphorus	IS 1559
20	CHEMICAL- METALS & ALLOYS	Silico Manganese	Silicon	IS 1559
21	CHEMICAL- METALS & ALLOYS	Silico Manganese	Silicon	ISO 4158
22	CHEMICAL- METALS & ALLOYS	Silico Manganese	Sulphur	ISO 15350
23	CHEMICAL- ORES & MINERALS	Bauxite	Alumina	IS 2000 (Part-3)
24	CHEMICAL- ORES & MINERALS	Bauxite	Ferric Oxide	IS 2000 (Part-4)
25	CHEMICAL- ORES & MINERALS	Bauxite	Loss on ignition	IS 2000 (Part-1)
26	CHEMICAL- ORES & MINERALS	Bauxite	Silica	IS 2000 (Part-2)
27	CHEMICAL- ORES & MINERALS	Bauxite	Titanium Oxide	IS 2000 (Part-5)
28	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Alumina	IS 4737
29	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Alumina	SOP-TPM/MSK/3/D/1 (Issue No 01 , Dated 01.04.2015
30	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Calcium Oxide	IS 4737
31	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Chromium Oxide	IS 4737
32	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Magnesium Oxide	IS 4737
33	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Phosphorus	Indian Bureau of Mines
34	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Phosphorus	IS 5305
35	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Silica	IS 4737
36	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Sulphur	SOP No. TPM/MSK/2/J1 (Issue No 02 , Dated 01.04.2015)
37	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	TML (Transportable Moisture Limit)	IMSBC Code-2020, Appendix 2, (Proctor Fagerberg Method)

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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- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Total Iron	IS 4737
39	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Total Moisture	IS 4737
40	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Total Moisture	IS 8562
41	CHEMICAL- ORES & MINERALS	Chromite Ore/ Chrome Concentrate	Transportable Moisture limit & flow Moisture Point	IMSBC Code (Appendix 2) 2020 (Flow table method
42	CHEMICAL- ORES & MINERALS	Copper Ore & Copper Concentrate	Total Moisture	ISO 10251
43	CHEMICAL- ORES & MINERALS	Copper Ore & Copper Concentrate	Transportable Moisture limit & flow Moisture Point	IMSBC Code Appendix 2 (Flow table method)
44	CHEMICAL- ORES & MINERALS	Copper Ore & Copper Concentrate	Transportable Moisture limit & flow Moisture Point	ISO 12742
45	CHEMICAL- ORES & MINERALS	Dolomite	Alumina	IS 1760 (Part-3)
46	CHEMICAL- ORES & MINERALS	Dolomite	Calcium Oxide	IS 1760 (Part-3)
47	CHEMICAL- ORES & MINERALS	Dolomite	Ferric Oxide	SOP : TPM/MSK/5/C3 (Issue No:1 Dated 22.09.2012)
48	CHEMICAL- ORES & MINERALS	Dolomite	Loss on ignition	IS 1760 (Part-1)
49	CHEMICAL- ORES & MINERALS	Dolomite	Magnesium Oxide	IS 1760 (Part-3)
50	CHEMICAL- ORES & MINERALS	Dolomite	Potassium Oxide	IS 9497
51	CHEMICAL- ORES & MINERALS	Dolomite	Silica	IS 1760 (Part-2)
52	CHEMICAL- ORES & MINERALS	Dolomite	Sodium Oxide	IS 9497
53	CHEMICAL- ORES & MINERALS	Gypsum	Calcium Oxide	ASTM C471M-20ae1
54	CHEMICAL- ORES & MINERALS	Gypsum	Calcium Oxide	IS 1288
55	CHEMICAL- ORES & MINERALS	Gypsum	Calcium Sulfate Dihydrate	ASTM C471M-20ae1
56	CHEMICAL- ORES & MINERALS	Gypsum	Calcium Sulfate Dihydrate	IS 1288

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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
57	CHEMICAL- ORES & MINERALS	Gypsum	Combined water	ASTM C471M-20ae1
58	CHEMICAL- ORES & MINERALS	Gypsum	Combined water	IS 1288
59	CHEMICAL- ORES & MINERALS	Gypsum	Free water	ASTM C471M-20ae1
60	CHEMICAL- ORES & MINERALS	Gypsum	Free water	IS 1288
61	CHEMICAL- ORES & MINERALS	Gypsum	Magnesium Oxide	ASTM C471M-20ae1
62	CHEMICAL- ORES & MINERALS	Gypsum	Magnesium Oxide	IS 1288
63	CHEMICAL- ORES & MINERALS	Gypsum	Mixed Oxide (Ferric Oxide +Alumina)	ASTM C471M-20ae1
64	CHEMICAL- ORES & MINERALS	Gypsum	Mixed Oxide (Ferric Oxide +Alumina)	IS 1288
65	CHEMICAL- ORES & MINERALS	Gypsum	Purity	ASTM C471M-20ae1
66	CHEMICAL- ORES & MINERALS	Gypsum	Silica (SiO2) and Acid Insoluble	ASTM C471M-20ae1
67	CHEMICAL- ORES & MINERALS	Gypsum	Silica (SiO2) and Acid Insoluble	IS 1288
68	CHEMICAL- ORES & MINERALS	Gypsum	Sulphur Trioxide	ASTM C471M-20ae1
69	CHEMICAL- ORES & MINERALS	Gypsum	Sulphur Trioxide	IS 1288
70	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Alumina	IS 1493 (Part-1)
71	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Angle of repose	IMSBC Code (Appendix 2)
72	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Crushing Strength Testing	IS 8625
73	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Crushing Strength Testing	ISO 4700
74	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Ferrous Iron	ISO 9035
75	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Loss on Ignition	ISO 11536

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76	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Manganese	IS 1493
77	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Phosphorus	Indian Bureau of Mines. Procedure Manual
78	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Phosphorus	IS 1493 (Part-1)
79	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Silica	IS 1493 (Part-1)
80	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Silica	ISO 2598-1
81	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Sulphur	ISO 4689-3
82	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	TML (Transportable Moisture Limit)	IMSBC Code, Appendix 2, (Modified Proctor Fagerberg Method)
83	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Total Iron	IS 1493 (Part-1)
84	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Total Iron	ISO 2597-1
85	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Total Moisture	IS 11690
86	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Total Moisture	IS 1493 (Part-1)
87	CHEMICAL- ORES & MINERALS	Iron Ore (Lumps/ Fines/ Pellets)	Transportable Moisture limit & flow Moisture Point	IMSBC Code Appendix 2 (Flow table method)
88	CHEMICAL- ORES & MINERALS	Limestone	Alumina	IS 1760 (Part-3)
89	CHEMICAL- ORES & MINERALS	Limestone	Calcium Oxide	IS 1760 (Part-3)
90	CHEMICAL- ORES & MINERALS	Limestone	Ferric Oxide	SOP : TPM/MSK/5/C3 (Issue No:1 Dated 22.09.2012)
91	CHEMICAL- ORES & MINERALS	Limestone	Loss on ignition	IS 1760 (Part-1)
92	CHEMICAL- ORES & MINERALS	Limestone	Magnesium Oxide	IS 1760 (Part-3)
93	CHEMICAL- ORES & MINERALS	Limestone	Potassium Oxide	IS 9497

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94	CHEMICAL- ORES & MINERALS	Limestone	Silica	IS 1760 (Part-2)
95	CHEMICAL- ORES & MINERALS	Limestone	Sodium Oxide	IS 9497
96	CHEMICAL- ORES & MINERALS	Manganese Ore	Alumina	IS 1473
97	CHEMICAL- ORES & MINERALS	Manganese Ore	Iron	IS 1473
98	CHEMICAL- ORES & MINERALS	Manganese Ore	Manganese	IS 1473
99	CHEMICAL- ORES & MINERALS	Manganese Ore	Manganese	ISO 4298
100	CHEMICAL- ORES & MINERALS	Manganese Ore	Manganese Dioxide	IS 1473
101	CHEMICAL- ORES & MINERALS	Manganese Ore	Phosphorus	Indian Bureau of Mines. Procedure Manual
102	CHEMICAL- ORES & MINERALS	Manganese Ore	Phosphorus	IS 1473
103	CHEMICAL- ORES & MINERALS	Manganese Ore	Silica	IS 1473
104	CHEMICAL- ORES & MINERALS	Manganese Ore	Sulphur	SOP No. TPM/MSK/2/J1 (Issue No 02 , Dated 01.04.2015
105	CHEMICAL- ORES & MINERALS	Manganese Ore	Total Moisture	IS 1449
106	CHEMICAL- ORES & MINERALS	Manganese Ore	Total Moisture	IS 1473
107	CHEMICAL- ORES & MINERALS	Manganese Ore	Transportable Moisture limit & flow Moisture Point	IMSBC Code Appendix 2 (Flow table method)
108	CHEMICAL- ORES & MINERALS	Zinc Ore & Zinc Concentrate	Total Moisture	ISO 10251
109	CHEMICAL- ORES & MINERALS	Zinc Ore & Zinc Concentrate	Transportable Moisture limit & flow Moisture Point	IMSBC Code Appendix 2 (Flow table method)
110	CHEMICAL- ORES & MINERALS	Zinc Ore & Zinc Concentrate	Transportable Moisture limit & flow Moisture Point	ISO 12742
111	CHEMICAL- SOLID FUELS	Coal	Ash	ASTM D 3174-12 e1
112	CHEMICAL- SOLID FUELS	Coal	Ash	IS 1350 Part-1
113	CHEMICAL- SOLID FUELS	Coal	Ash	ISO 1171

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114	CHEMICAL- SOLID FUELS	Coal	Equilibrate Moisture	IS 1350 Part-1
115	CHEMICAL- SOLID FUELS	Coal	Fixed Carbon (By Difference)	ASTM D 3172-13e1
116	CHEMICAL- SOLID FUELS	Coal	Fixed Carbon (By Difference)	IS 1350 Part-1
117	CHEMICAL- SOLID FUELS	Coal	Fixed Carbon (By Difference)	ISO 17246
118	CHEMICAL- SOLID FUELS	Coal	Gross Calorific Value	ASTM D 5865/ D5865M-19
119	CHEMICAL- SOLID FUELS	Coal	Gross Calorific Value	IS 1350(Part 2)
120	CHEMICAL- SOLID FUELS	Coal	Gross Calorific Value	ISO 1928
121	CHEMICAL- SOLID FUELS	Coal	Moisture	ASTM D3173 / D3173M-17a
122	CHEMICAL- SOLID FUELS	Coal	Moisture	IS 1350 Part-1
123	CHEMICAL- SOLID FUELS	Coal	Moisture	ISO 11722
124	CHEMICAL- SOLID FUELS	Coal	Phosphorus	IS 1350 : Part - 5
125	CHEMICAL- SOLID FUELS	Coal	Sulphur	IS 1350 Part-3
126	CHEMICAL- SOLID FUELS	Coal	Sulphur	ISO 334
127	CHEMICAL- SOLID FUELS	Coal	TML (Transportable Moisture Limit)	IMSBC Code (Appendix 2) 2020 (Modified Proctor Fagerberg Method)
128	CHEMICAL- SOLID FUELS	Coal	Total Moisture	ASTM D 3302/D 3302M-19
129	CHEMICAL- SOLID FUELS	Coal	Total Moisture	IS 1350 Part-1
130	CHEMICAL- SOLID FUELS	Coal	Total Moisture	ISO 589
131	CHEMICAL- SOLID FUELS	Coal	Volatile Matter	ASTM D 3175 -20
132	CHEMICAL- SOLID FUELS	Coal	Volatile Matter	IS 1350 Part-1
133	CHEMICAL- SOLID FUELS	Coal	Volatile Matter	ISO 562
134	CHEMICAL- SOLID FUELS	Coke	Ash	ASTM D 3174 -12(2018)e1
135	CHEMICAL- SOLID FUELS	Coke	Ash	IS 1350 Part-1
136	CHEMICAL- SOLID FUELS	Coke	Ash	ISO 1171
137	CHEMICAL- SOLID FUELS	Coke	Fixed Carbon (By Difference)	ISO 17246
138	CHEMICAL- SOLID FUELS	Coke	Fixed Carbon (By Difference)	ASTM D 3172 -13(2021)e1
139	CHEMICAL- SOLID FUELS	Coke	Fixed Carbon (By Difference)	IS 1350 Part-1
140	CHEMICAL- SOLID FUELS	Coke	Gross Calorific Value	ASTM D 5865/ D5865M-19
141	CHEMICAL- SOLID FUELS	Coke	Gross Calorific Value	IS 1350 Part 2
142	CHEMICAL- SOLID FUELS	Coke	Gross Calorific Value	ISO 1928

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143	CHEMICAL- SOLID FUELS	Coke	Moisture	ASTM D3173 / D3173M-17a
144	CHEMICAL- SOLID FUELS	Coke	Moisture	IS 1350 Part-1
145	CHEMICAL- SOLID FUELS	Coke	Moisture	ISO 687
146	CHEMICAL- SOLID FUELS	Coke	Phosphorus	IS 1350 Part - 5
147	CHEMICAL- SOLID FUELS	Coke	Sulphur	IS 1350 Part -3
148	CHEMICAL- SOLID FUELS	Coke	Sulphur	ISO 334
149	CHEMICAL- SOLID FUELS	Coke	Total Moisture	IS 1350 Part-1
150	CHEMICAL- SOLID FUELS	Coke	Total Moisture	ISO 579
151	CHEMICAL- SOLID FUELS	Coke	Volatile Matter	ASTM D 3175 -20
152	CHEMICAL- SOLID FUELS	Coke	Volatile Matter	IS 1350 Part-1
153	CHEMICAL- SOLID FUELS	Coke	Volatile Matter	ISO 562