National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 1 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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- METALLIC COATINGS & TREATMENT SOLUTIONS	Anodic Coating Of Aluminium & its alloys	Coating thickness	IS 5523/ IS 6012
2	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Anodic Coatings & Other Non conductive Coatings on Non Magnetic Base	Coating thickness	ASTM B 244, IS 6012,IS 9838
3	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Coating Thickness by stripping method	Coating Thickness	ASTM B 767,ASTM B 137,IS 3203,IS 1572,IS 5523
4	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Coatings on Metals and Alloys	Adhesion Test	IS 2629, ASTM D 3359, ASTM B 571
5	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Coatings on Metals and Alloys	Mass of zinc coating	IS 6745/ ASTM A 90
6	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Dry Film Thickness on Magnetic & Non Magnetic Base	Film Thickness	ASTM D 7091 , IS 101 Pt.3 Sec.2
7	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Electro Deposited Nickle Coating on Non Magnetic Base	Coating Thickness	ASTM B 530-2009
8	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Ferrous & Non Ferrous Metals	Salt Spray Test (Up to 2000 hrs)	ASTM B 117, IS 6910 ,IS 9844 ,IS 5528 ,ISO 9227
9	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Non Magnetic Coatings on Magnetic Base	Coating thickness	ASTM B 499-2009
10	CHEMICAL- METALLIC COATINGS & TREATMENT SOLUTIONS	Phosphate Coatings	Coating Weight	IS 3618
11	CHEMICAL- METALS & ALLOYS	Metals & Alloys	C	ASTM E1019
12	CHEMICAL- METALS & ALLOYS	All Carbon & Alloy steels	Mn,Si,Ni,Cr,Mo,Nb,Cu,Ti,V,Fe	ASTM E 1916
13	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	B	ASTM E 1251
14	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Bi	ASTM E 1251

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 2 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
15	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Co	ASTM E 1251
16	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Cr	ASTM E 1251
17	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Cu	ASTM E 1251
18	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Fe	ASTM E 1251
19	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Mg	ASTM E 1251
20	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Mn	ASTM E 1251
21	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Ni	ASTM E 1251
22	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Pb	ASTM E 1251
23	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Si	ASTM E 1251
24	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Si	ASTM E 1251
25	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Sn	ASTM E 1251
26	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Ti	ASTM E 1251
27	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	V	ASTM E 1251
28	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Zn	ASTM E 1251
29	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Zn	ASTM E 1251
30	CHEMICAL- METALS & ALLOYS	Aluminium Alloy	Zr	ASTM E 1251
31	CHEMICAL- METALS & ALLOYS	Aluminium and its alloys	Cu,Fe,Mg,Mn,Si,Zn,Ni,Pb,Cr,Ti,V ,Al	ASTM E 1916
32	CHEMICAL- METALS & ALLOYS	Cast Iron	Al	ASTM E 1999
33	CHEMICAL- METALS & ALLOYS	Cast Iron	As	ASTM E 1999

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 3 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
34	CHEMICAL- METALS & ALLOYS	Cast Iron	C	ASTM E 1999
35	CHEMICAL- METALS & ALLOYS	Cast Iron	Cr	ASTM E 1999
36	CHEMICAL- METALS & ALLOYS	Cast Iron	Cu	ASTM E 1999
37	CHEMICAL- METALS & ALLOYS	Cast Iron	Mg	ASTM E 1999
38	CHEMICAL- METALS & ALLOYS	Cast Iron	Mn	ASTM E 1999
39	CHEMICAL- METALS & ALLOYS	Cast Iron	Ni	ASTM E 1999
40	CHEMICAL- METALS & ALLOYS	Cast Iron	P	ASTM E 1999
41	CHEMICAL- METALS & ALLOYS	Cast Iron	S	ASTM E 1999
42	CHEMICAL- METALS & ALLOYS	Cast Iron	Si	ASTM E 1999
43	CHEMICAL- METALS & ALLOYS	Cast Iron	Ti	ASTM E 1999
44	CHEMICAL- METALS & ALLOYS	Cast Iron	Zn	ASTME 1999
45	CHEMICAL- METALS & ALLOYS	Cast steels	Mo	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
46	CHEMICAL- METALS & ALLOYS	Cast steels	Al	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
47	CHEMICAL- METALS & ALLOYS	Cast steels	C	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
48	CHEMICAL- METALS & ALLOYS	Cast steels	Co	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
49	CHEMICAL- METALS & ALLOYS	Cast steels	Cr	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
50	CHEMICAL- METALS & ALLOYS	Cast steels	Cu	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
51	CHEMICAL- METALS & ALLOYS	Cast steels	Mn	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
52	CHEMICAL- METALS & ALLOYS	Cast steels	Nb	In-house Method (JSAPL/SOP/02/O1) Issue no. 2

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	4 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
53	CHEMICAL- METALS & ALLOYS	Cast steels	Ni	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
54	CHEMICAL- METALS & ALLOYS	Cast steels	P	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
55	CHEMICAL- METALS & ALLOYS	Cast steels	Pb	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
56	CHEMICAL- METALS & ALLOYS	Cast steels	S	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
57	CHEMICAL- METALS & ALLOYS	Cast steels	Si	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
58	CHEMICAL- METALS & ALLOYS	Cast steels	V	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
59	CHEMICAL- METALS & ALLOYS	Cast steels	W	In-house Method (JSAPL/SOP/02/O1) Issue no. 2
60	CHEMICAL- METALS & ALLOYS	Copper and its alloys	Cu,Fe,Pb,Sn,Zn,Al,Si,Mn,Cr,Be	ASTM E 1916
61	CHEMICAL- METALS & ALLOYS	Cu base alloy	Ag	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
62	CHEMICAL- METALS & ALLOYS	Cu base alloy	Al	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
63	CHEMICAL- METALS & ALLOYS	Cu base alloy	Al	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
64	CHEMICAL- METALS & ALLOYS	Cu base alloy	As	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
65	CHEMICAL- METALS & ALLOYS	Cu base alloy	Be	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
66	CHEMICAL- METALS & ALLOYS	Cu base alloy	Bi	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 5 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
67	CHEMICAL- METALS & ALLOYS	Cu base alloy	C	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
68	CHEMICAL- METALS & ALLOYS	Cu base alloy	Co	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
69	CHEMICAL- METALS & ALLOYS	Cu base alloy	Cr	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
70	CHEMICAL- METALS & ALLOYS	Cu base alloy	Fe	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
71	CHEMICAL- METALS & ALLOYS	Cu base alloy	Mg	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
72	CHEMICAL- METALS & ALLOYS	Cu base alloy	Mn	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
73	CHEMICAL- METALS & ALLOYS	Cu base alloy	Ni	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
74	CHEMICAL- METALS & ALLOYS	Cu base alloy	P	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
75	CHEMICAL- METALS & ALLOYS	Cu base alloy	Pb	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
76	CHEMICAL- METALS & ALLOYS	Cu base alloy	S	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
77	CHEMICAL- METALS & ALLOYS	Cu base alloy	Sb	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 6 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
78	CHEMICAL- METALS & ALLOYS	Cu base alloy	Si	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
79	CHEMICAL- METALS & ALLOYS	Cu base alloy	Sn	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
80	CHEMICAL- METALS & ALLOYS	Cu base alloy	Sn	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
81	CHEMICAL- METALS & ALLOYS	Cu base alloy	Zn	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
82	CHEMICAL- METALS & ALLOYS	Cu base alloy	Zn	In house method (JSAPL/SOP/02/I) Issue Date:02.08.2012 & BS EN 15079
83	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Al	In house method (JSAPL/SOP/02/O) Issue No.02
84	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	B	In house method JSAPL/SOP/02/O, Issue No.02
85	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	C	In house method JSAPL/SOP/02/O, Issue No.02
86	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Co	In house method JSAPL/SOP/02/O , Issue No.02
87	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Cr	In house method JSAPL/SOP/02/O , Issue No.02
88	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Cr	In-house Method (JSAPL/SOP/02/O) Issue No.02
89	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Cu	In house method JSAPL/SOP/02/O, Issue No.02
90	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Mn	In house method JSAPL/SOP/02/O , Issue No.02
91	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Mo	In house method JSAPL/SOP/02/O , Issue No.02
92	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	N	In house method JSAPL/SOP/02/O, Issue No.02

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	7 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
93	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Ni	In house method JSAPL/SOP/02/O , Issue No.02
94	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	P	In house method JSAPL/SOP/02/O, Issue No.02
95	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	S	In house method JSAPL/SOP/02/O , Issue No.02
96	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	Si	In house method JSAPL/SOP/02/O, Issue No.02
97	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	V	In house method JSAPL/SOP/02/O , Issue No.02
98	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	W	In house method JSAPL/SOP/02/O , Issue no. 2
99	CHEMICAL- METALS & ALLOYS	High Speed Tools Steel	W	In house method JSAPL/SOP/02/O , Issue No.02
100	CHEMICAL- METALS & ALLOYS	Lead & Its alloys	Pb,Sb,Cu,Fe,Ni,Zn	ASTM E 1916
101	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Ag	In house method JSAPL/SOP/02/N, Issue no. 2
102	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Al	In house method JSAPL/SOP/02/N, Issue no. 2
103	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	As	In house method JSAPL/SOP/02/N, Issue no. 2
104	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Bi	In house method JSAPL/SOP/02/N, Issue no. 2
105	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Cd	In house method JSAPL/SOP/02/N, Issue no. 2
106	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Cu	In house method JSAPL/SOP/02/N, Issue no. 2
107	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Fe	In house method JSAPL/SOP/02/N, Issue no. 2
108	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Ni	In house method JSAPL/SOP/02/N, Issue no. 2
109	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Sb	In house method JSAPL/SOP/02/N, Issue no. 2
110	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Sn	In house method JSAPL/SOP/02/N, Issue no. 2
111	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Sn	In house method JSAPL/SOP/02/N, Issue no. 2

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	8 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
112	CHEMICAL- METALS & ALLOYS	Lead and its Alloys	Ti	In house method JSAPL/SOP/02/N, Issue no. 2
113	CHEMICAL- METALS & ALLOYS	Lead and its alloys	In	In house method JSAPL/SOP/02/N ,Issue no. 2
114	CHEMICAL- METALS & ALLOYS	lead and its alloys	Zn	In house method JSAPL/SOP/02/N ,Issue no. 2
115	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Al	ASTM E415
116	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	As	ASTM E415
117	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	B	ASTM E415
118	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	C	ASTM E415
119	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Co	ASTM E415
120	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Cr	ASTM E415
121	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Cu	ASTM E415
122	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Mn	ASTM E415
123	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Mo	ASTM E415
124	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	N	ASTM E415
125	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Nb	ASTM E415
126	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Ni	ASTM E415
127	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	P	ASTM E415:
128	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	S	ASTM E415
129	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Si	ASTM E415
130	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Sn	ASTM E415

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 9 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
131	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	Ti	ASTM E415
132	CHEMICAL- METALS & ALLOYS	Low Alloy Steels	V	ASTM E415
133	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Ag	ASTM B 954
134	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Al	ASTM B 954
135	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Be	ASTM B 954
136	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Ca	ASTM B 954
137	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Cd	ASTM B 954
138	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Ce	ASTM B 954
139	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Cu	ASTM B 954
140	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Fe	ASTM B 954
141	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	La	ASTM B 954
142	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Mn	ASTM B 954
143	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Ni	ASTM B 954
144	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Pb	ASTM B 954
145	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Si	ASTM B 954
146	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Sn	ASTM B 954
147	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Zn	ASTM B 954
148	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Zr	ASTM B 954
149	CHEMICAL- METALS & ALLOYS	Magnesium and its alloys	Si,Mn,Al,Cu,Zn,Ni,Mg,Fe	ASTM E 1916

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 10 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
150	CHEMICAL- METALS & ALLOYS	Manganese Steel	Al	ASTM E 2209
151	CHEMICAL- METALS & ALLOYS	Manganese Steel	C	ASTM E 2209
152	CHEMICAL- METALS & ALLOYS	Manganese Steel	Cr	ASTM E 2209
153	CHEMICAL- METALS & ALLOYS	Manganese Steel	Cu	ASTM E 2209
154	CHEMICAL- METALS & ALLOYS	Manganese Steel	Mn	ASTM E 2209
155	CHEMICAL- METALS & ALLOYS	Manganese Steel	Mo	ASTM E 2209
156	CHEMICAL- METALS & ALLOYS	Manganese Steel	N	ASTM E 2209
157	CHEMICAL- METALS & ALLOYS	Manganese Steel	Ni	ASTM E 2209
158	CHEMICAL- METALS & ALLOYS	Manganese Steel	P	ASTM E 2209
159	CHEMICAL- METALS & ALLOYS	Manganese Steel	S	ASTM E 2209
160	CHEMICAL- METALS & ALLOYS	Manganese Steel	Si	ASTM E 2209
161	CHEMICAL- METALS & ALLOYS	Metals & Alloys	Hydrogen	ASTM E 1019, ASTM E 1409 , ASTM E1447, ASTM E 2575
162	CHEMICAL- METALS & ALLOYS	Metals & Alloys	Nitrogen	ASTM E 1019, ASTM E 1409, ASTM E1447, ASTM E 2575
163	CHEMICAL- METALS & ALLOYS	Metals & Alloys	Oxygen	ASTM E 1019, ASTM E 1409, ASTM E1447, ASTM E 2575
164	CHEMICAL- METALS & ALLOYS	Metals & Alloys	S	ASTM E 1019
165	CHEMICAL- METALS & ALLOYS	Nickel & its alloy	Cu	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
166	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Al,Cr,Mo,Si,B,Cu,Fe,P,W,Mn,S,Ni,Nb	ASTM E 1916
167	CHEMICAL- METALS & ALLOYS	Nickel &its alloy	Mo	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 11 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
168	CHEMICAL- METALS & ALLOYS	Nickel &its alloy	Nb	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
169	CHEMICAL- METALS & ALLOYS	Nickel and its alloy	B	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
170	CHEMICAL- METALS & ALLOYS	NICKEL AND ITS ALLOY	Fe	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
171	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Al	in house method JSAPL/SOP/02/J , Issue no. 2 & ASTM E 2594
172	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	B	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
173	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	C	in house method JSAPL/SOP/02/J , Issue no. 2 & ASTM E 2594
174	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Co	in house method JSAPL/SOP/02/J Issue Date :02.08.2012 & ASTM E 2594 : 2012
175	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Cr	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594 : 2012
176	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Cu	in house method JSAPL/SOP/02/J Issue Date :02.08.2012 & ASTM E 2594 : 2012
177	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Fe	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594 : 2012
178	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Mg	in house method JSAPL/SOP/02/J , Issue no. 2 & ASTM E 2594 : 2012
179	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Mn	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594 : 2012
180	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Mo	in house method JSAPL/SOP/02/J , Issue no. 2 & ASTM E 2594

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 12 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
181	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Nb	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
182	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Ni	in house method JSAPL/SOP/02/J Issue Date :02.08.2012 & ASTM E 2594
183	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	P	in house method JSAPL/SOP/02/J , Issue no. 2 & ASTM E 2594
184	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	S	in house method JSAPL/SOP/02/J , Issue no. 2 & ASTM E 2594 : 2012
185	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Si	in house method JSAPL/SOP/02/J Issue Date :02.08.2012 & ASTM E 2594 : 2012
186	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Ti	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
187	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	V	in house method JSAPL/SOP/02/J Issue Date :02.08.2012 & ASTM E 2594
188	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	W	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
189	CHEMICAL- METALS & ALLOYS	Nickel and its alloys	Zr	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
190	CHEMICAL- METALS & ALLOYS	Nickel& its alloy	Cu	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
191	CHEMICAL- METALS & ALLOYS	Nickel&its alloy	Cr	in house method JSAPL/SOP/02/J, Issue no. 2 & ASTM E 2594
192	CHEMICAL- METALS & ALLOYS	Stainless Steel	C	ASTM E 1086
193	CHEMICAL- METALS & ALLOYS	Stainless Steel	Co	ASTM E 1086
194	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cr	ASTM E 1086

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 13 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
195	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cu	ASTM E 1086
196	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mn	ASTM E 1086
197	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mn	ASTM E 1086
198	CHEMICAL- METALS & ALLOYS	Stainless Steel	Mo	ASTM E 1086
199	CHEMICAL- METALS & ALLOYS	Stainless Steel	N	ASTM E 1086
200	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nb	ASTM E 1086
201	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ni	ASTM E 1086
202	CHEMICAL- METALS & ALLOYS	Stainless Steel	P	ASTM E 1086
203	CHEMICAL- METALS & ALLOYS	Stainless Steel	S	ASTM E 1086
204	CHEMICAL- METALS & ALLOYS	Stainless Steel	Si	ASTM E 1086
205	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sn	ASTM E 1086
206	CHEMICAL- METALS & ALLOYS	Stainless Steel	Ti	ASTM E 1086
207	CHEMICAL- METALS & ALLOYS	Stainless Steel	V	ASTM E 1086
208	CHEMICAL- METALS & ALLOYS	Stainless Steel	W	ASTM E 1086
209	CHEMICAL- METALS & ALLOYS	StainlessSteel	Pb	ASTM E 1086
210	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	As	In house method JSAPL/SOP/02/M, Issue no.02
211	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Ag	In house method JSAPL/SOP/02/M, Issue no.02
212	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Al	In house method JSAPL/SOP/02/M , Issue no.02
213	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Bi	In house method JSAPL/SOP/02/M, Issue no.02

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 14 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
214	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Cd	In house method JSAPL/SOP/02/M , Issue no.02
215	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Cu	In house method JSAPL/SOP/02/M, Issue no.02
216	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Cu	In house method JSAPL/SOP/02/M, Issue no.02
217	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Fe	In house method JSAPL/SOP/02/M, Issue no.02
218	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	In	In house method JSAPL/SOP/02/M, Issue no.02
219	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Ni	In house method JSAPL/SOP/02/M, Issue no.02
220	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Pb	In house method JSAPL/SOP/02/M , Issue no.02
221	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Sb	In house method JSAPL/SOP/02/M, Issue no.02
222	CHEMICAL- METALS & ALLOYS	Tin and its alloys	Sb,Cu,Fe,Sn,Zn	ASTM E 1916
223	CHEMICAL- METALS & ALLOYS	Tin and its Alloys	Zn	In house method JSAPL/SOP/02/M , Issue no.02
224	CHEMICAL- METALS & ALLOYS	Titanium & its alloy	Cr	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
225	CHEMICAL- METALS & ALLOYS	Titanium & its alloy	Ni	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
226	CHEMICAL- METALS & ALLOYS	Titanium & its alloy	Se	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
227	CHEMICAL- METALS & ALLOYS	Titanium & its alloy	Sn	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
228	CHEMICAL- METALS & ALLOYS	Titanium & its alloy	Y	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
229	CHEMICAL- METALS & ALLOYS	Titanium &its alloy	Si	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 15 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
230	CHEMICAL- METALS & ALLOYS	Titanium and its Alloys	Al	In house method JSAPL/SOP/02/K , Issue no.02& ASTM E 2371
231	CHEMICAL- METALS & ALLOYS	Titanium and its Alloys	Fe	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
232	CHEMICAL- METALS & ALLOYS	Titanium and its alloys	Fe, Pd, Al, V, Cr, Sn, Ti, Mo	ASTM E 1916
233	CHEMICAL- METALS & ALLOYS	Titanium and its Alloys	Mo	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
234	CHEMICAL- METALS & ALLOYS	Titanium and its Alloys	V	In house method JSAPL/SOP/02/K, Issue no.02 & ASTM E 2371
235	CHEMICAL- METALS & ALLOYS	Tool Steels,Stainless Steels,	Mn,Si,Ni,Cr,Mo,Nb,Cu,Ti,V,Fe	ASTM E 1916
236	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Al	In house method JSAPL/SOP/02/L Issue no. 2
237	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Cd	In house method JSAPL/SOP/02/L Issue no. 2
238	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Cu	In house method JSAPL/SOP/02/L Issue no. 2
239	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Fe	In house method JSAPL/SOP/02/L Issue no. 2
240	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	In	In house method JSAPL/SOP/02/L Issue no. 2
241	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Mg	In house method JSAPL/SOP/02/L Issue no. 2
242	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Mn	In house method JSAPL/SOP/02/L Issue no. 2
243	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Mn,Mg,Al,Fe,Sn,Pb,Ni,Cu,Zn	ASTM E 1916
244	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Ni	In house method JSAPL/SOP/02/L Issue no. 2
245	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Pb	In house method JSAPL/SOP/02/L Issue no. 2
246	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Sn	In house method JSAPL/SOP/02/L Issue no. 2

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 16 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
247	CHEMICAL- METALS & ALLOYS	Zinc and its alloys	Ti	In house method JSAPL/SOP/02/L Issue no. 2
248	CHEMICAL- ORES & MINERALS	Ferro-Chromium	Si	In-house Method (JSAPL/SOP/02/T)
249	CHEMICAL- ORES & MINERALS	Ordinary Portland Cement	Mn2O3	In-house Methed (JSAPL/SOP/02/U)
250	CHEMICAL- ORES & MINERALS	OrdinaryPortland Cement	Fe2O3	In-house Methed (JSAPL/SOP/02/U)
251	CHEMICAL- ORES & MINERALS	BASIC SLAG	Al2O3	In-house Method (JSAPL/SOP/02/R)
252	CHEMICAL- ORES & MINERALS	BASIC SLAG	CaO	In-house Method (JSAPL/SOP/02/R)
253	CHEMICAL- ORES & MINERALS	BASIC SLAG	Cr2O3	In-house Method (JSAPL/SOP/02/R)
254	CHEMICAL- ORES & MINERALS	BASIC SLAG	MgO	In-house Method (JSAPL/SOP/02/R)
255	CHEMICAL- ORES & MINERALS	BASIC SLAG	MnO	In-house Method (JSAPL/SOP/02/R)
256	CHEMICAL- ORES & MINERALS	BASIC SLAG	P2O5	In-house Method (JSAPL/SOP/02/R)
257	CHEMICAL- ORES & MINERALS	BASIC SLAG	SiO2	In-house Method (JSAPL/SOP/02/R)
258	CHEMICAL- ORES & MINERALS	BASIC SLAG	TiO2	In-house Method (JSAPL/SOP/02/R)
259	CHEMICAL- ORES & MINERALS	BASIC SLAG	TOTAL Fe	In-house Method (JSAPL/SOP/02/R)
260	CHEMICAL- ORES & MINERALS	BASIC SLAG	V2O5	In-house Method (JSAPL/SOP/02/R)
261	CHEMICAL- ORES & MINERALS	BAUXITE	Al2O3	In-house Method (JSAPL/SOP/02/S)
262	CHEMICAL- ORES & MINERALS	BAUXITE	CaO	In-house Method (JSAPL/SOP/02/S)
263	CHEMICAL- ORES & MINERALS	BAUXITE	Fe2O3	In-house Method (JSAPL/SOP/02/S)
264	CHEMICAL- ORES & MINERALS	BAUXITE	LOI	IS 2000 (Part 1)
265	CHEMICAL- ORES & MINERALS	BAUXITE	MgO	In-house Method (JSAPL/SOP/02/S)

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 17 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
266	CHEMICAL- ORES & MINERALS	BAUXITE	SiO2	In-house Method (JSAPL/SOP/02/S)
267	CHEMICAL- ORES & MINERALS	BAUXITE	TiO2	In-house Method (JSAPL/SOP/02/S)
268	CHEMICAL- ORES & MINERALS	Dolomite	Al2O3	In-house Method (JSAPL/SOP/02/P)
269	CHEMICAL- ORES & MINERALS	Dolomite	Fe2O3	n-house Method (JSAPL/SOP/02/P)
270	CHEMICAL- ORES & MINERALS	Dolomite	LOI	IS 1760 (Part 1)
271	CHEMICAL- ORES & MINERALS	Dolomite	MgO	n-house Method (JSAPL/SOP/02/P)
272	CHEMICAL- ORES & MINERALS	Dolomite	MnO	n-house Method (JSAPL/SOP/02/P)
273	CHEMICAL- ORES & MINERALS	Dolomite	SiO2	In-house Method (JSAPL/SOP/02/P)
274	CHEMICAL- ORES & MINERALS	Dolomite	SrO	In-house Method (JSAPL/SOP/02/P)
275	CHEMICAL- ORES & MINERALS	Dolomite	TiO2	In-house Method (JSAPL/SOP/02/P)
276	CHEMICAL- ORES & MINERALS	Ferro-Chromium	C	ASTM E 1019-2018
277	CHEMICAL- ORES & MINERALS	Ferro-Chromium	Co	In-house Method (JSAPL/SOP/02/T)
278	CHEMICAL- ORES & MINERALS	Ferro-Chromium	P	In-house Method (JSAPL/SOP/02/T)
279	CHEMICAL- ORES & MINERALS	Ferro-Chromium	V	In-house Method (JSAPL/SOP/02/T)
280	CHEMICAL- ORES & MINERALS	FERROMANGANESE	C	ASTM E 1019
281	CHEMICAL- ORES & MINERALS	FERROMANGANESE	P	In-house Methed (JSAPL/SOP/02/W)
282	CHEMICAL- ORES & MINERALS	FERROMANGANESE	Si	In_house Methed (JSAPL/SOP/02/W)
283	CHEMICAL- ORES & MINERALS	FERROSILICON	Al	In-house Method (JSAPL/SOP/02/X)
284	CHEMICAL- ORES & MINERALS	FERROSILICON	C	ASTM E 1019

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 18 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
285	CHEMICAL- ORES & MINERALS	FERROSILICON	Ca	In-house Methed (JSAPL/SOP/02/X)
286	CHEMICAL- ORES & MINERALS	FERROSILICON	Cu	In-house Method (JSAPL/SOP/02/X)
287	CHEMICAL- ORES & MINERALS	FERROSILICON	Fe	In-house Method (JSAPL/SOP/02/X)
288	CHEMICAL- ORES & MINERALS	FERROSILICON	Mn	In-house Method (JSAPL/SOP/02/X)
289	CHEMICAL- ORES & MINERALS	FERROSILICON	P	In-house Method (JSAPL/SOP/02/X)
290	CHEMICAL- ORES & MINERALS	FERROSILICON	Si	In-house Methed (JSAPL/SOP/02/X)
291	CHEMICAL- ORES & MINERALS	FERROSILICON	Ti	In-house Method (JSAPL/SOP/02/X)
292	CHEMICAL- ORES & MINERALS	FERRRO MANGANESE	Mn	In-house Method (JSAPL/SOP/02/W)
293	CHEMICAL- ORES & MINERALS	FIRE BRICKS	Al	In-house Methed (JSAPL/SOP/02/Y)
294	CHEMICAL- ORES & MINERALS	FIRE BRICKS	Ca	In-house Methed (JSAPL/SOP/02/Y)
295	CHEMICAL- ORES & MINERALS	FIRE BRICKS	Cr	In-house Methed (JSAPL/SOP/02/Y)
296	CHEMICAL- ORES & MINERALS	FIRE BRICKS	Fe	In-house Methed (JSAPL/SOP/02/Y)
297	CHEMICAL- ORES & MINERALS	FIRE BRICKS	K	In-house Methed (JSAPL/SOP/02/Y)
298	CHEMICAL- ORES & MINERALS	FIRE BRICKS	Mg	In-house Methed (JSAPL/SOP/02/Y)
299	CHEMICAL- ORES & MINERALS	FIRE BRICKS	P	In-house Methed (JSAPL/SOP/02/Y)
300	CHEMICAL- ORES & MINERALS	FIRE BRICKS	Ti	In-house Methed (JSAPL/SOP/02/Y)
301	CHEMICAL- ORES & MINERALS	IRON ORE	Al	In-house Metho (JSAPL/SOP/02/Z)
302	CHEMICAL- ORES & MINERALS	IRON ORE	Ca	In-house Method (JSAPL/SOP/02/Z)
303	CHEMICAL- ORES & MINERALS	IRON ORE	Cr	In-house Method (JSAPL/SOP/02/Z)

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 19 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
304	CHEMICAL- ORES & MINERALS	IRON ORE	K	In-house Method (JSAPL/SOP/02/Z)
305	CHEMICAL- ORES & MINERALS	IRON ORE	Mg	In-house Method (JSAPL/SOP/02/Z)
306	CHEMICAL- ORES & MINERALS	IRON ORE	Mn	In-house Method (JSAPL/SOP/02/Z)
307	CHEMICAL- ORES & MINERALS	IRON ORE	P	In-house Method (JSAPL/SOP/02/Z) 08.01.2021
308	CHEMICAL- ORES & MINERALS	IRON ORE	Si	In-house Method (JSAPL/SOP/02/Z)
309	CHEMICAL- ORES & MINERALS	IRON ORE	Ti	In-house Method (JSAPL/SOP/02/Z)
310	CHEMICAL- ORES & MINERALS	IRON ORE	V	In-house Method (JSAPL/SOP/02/Z)
311	CHEMICAL- ORES & MINERALS	LIME STONE	Al2O3	In-house Method(JSAPL/SOP/02/Q)
312	CHEMICAL- ORES & MINERALS	LIME STONE	CaO	In-house Method(JSAPL/SOP/02/Q)
313	CHEMICAL- ORES & MINERALS	LIME STONE	Cr2O3	In-house Method(JSAPL/SOP/02/Q)
314	CHEMICAL- ORES & MINERALS	LIME STONE	Fe2O3	In-house Method(JSAPL/SOP/02/Q)
315	CHEMICAL- ORES & MINERALS	LIME STONE	K2O	In-house Method(JSAPL/SOP/02/Q)
316	CHEMICAL- ORES & MINERALS	LIME STONE	LOI	IS 1760 (Part 1)
317	CHEMICAL- ORES & MINERALS	LIME STONE	MgO	In-house Method(JSAPL/SOP/02/Q)
318	CHEMICAL- ORES & MINERALS	LIME STONE	MnO	In-house Method(JSAPL/SOP/02/Q)
319	CHEMICAL- ORES & MINERALS	LIME STONE	Pb	In-house Method(JSAPL/SOP/02/Q)
320	CHEMICAL- ORES & MINERALS	LIME STONE	SiO2	In-house Method(JSAPL/SOP/02/Q)
321	CHEMICAL- ORES & MINERALS	LIME STONE	SrO	In-house Method(JSAPL/SOP/02/Q)
322	CHEMICAL- ORES & MINERALS	LIME STONE	Zn	In-house Method(JSAPL/SOP/02/Q)

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	20 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
323	CHEMICAL- ORES & MINERALS	Ordinary Portland Cement	Al2O3	In_house Methed (JSAPL/SOP/02/U)
324	CHEMICAL- ORES & MINERALS	Ordinary Portland Cement	MgO	In-house Methed (JSAPL/SOP/02/U)
325	CHEMICAL- ORES & MINERALS	Ordinary Portland Cement	SiO2	In-house Method (JSAPL/SOP/02/U)
326	CHEMICAL- ORES & MINERALS	Ordinary Portland Cement	TiO2	In-house Methed (JSAPL/SOP/02/U)
327	CHEMICAL- ORES & MINERALS	SILIMINATE	Al2O3	In-house Methed (JSAPL/SOP/02/V)
328	CHEMICAL- ORES & MINERALS	SILIMINATE	CaO	In-house Method (JSAPL/SOP/02/V)
329	CHEMICAL- ORES & MINERALS	SILIMINATE	Fe2O3	In-house Method (JSAPL/SOP/02/V)
330	CHEMICAL- ORES & MINERALS	SILIMINATE	K2O	In-house Method (JSAPL/SOP/02/V)
331	CHEMICAL- ORES & MINERALS	SILIMINATE	MgO	In-house Method (JSAPL/SOP/02/V)
332	CHEMICAL- ORES & MINERALS	SILIMINATE	Na2O	In-house Method (JSAPL/SOP/02/V)21
333	CHEMICAL- ORES & MINERALS	SILIMINATE	TiO2	In-house Method (JSAPL/SOP/02/V)
334	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Covered Electrodes for MMAW of C-Mn & Steel, Brazing Rods (Ferrous & Non ferrous Metal Alloys)	Tensile test (Ys,UTS,%E) UTM Range 2.5N to 1000kN	IS 814, ASMS Sec-II Pt. C , IS 1608, AWS B 4.0M, ASTM E8M
335	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metal & Alloys (Ferrous & Non Ferrous)	Elongation (UTM Range 2.5N to 1000kN)	AWS D-1.1:2015, ASME Sect. IX : 2019, IBR:2011, API 1104-22nd edition., EIL Spec, GAIL Spec, IS 3600-1985, IS 7273, 1974 RA 2013 MECON Spec., EN 895-1985 ,IS7307 2013,IS 7310 Part -1 RA 2011 ,BS EN ISO 5178-2019, BS EN ISO 4136:2012
336	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic wires	Wrapping Test(Wires)	ASTM A 370, IS 1755
337	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloy Sheet	Erichsen cuppingTest	IS 10175

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	21 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
338	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flanging Test	ASTM A 370 / ASTM A 1016:2019
339	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flanging Test	ASTM A 370, ASTM A 1016
340	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flaring Test / Drift Expansion test	IS 2335-05 / ISO 8493 / ASTM A 1016 /ASTM A 370/ ASTM B153
341	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flaring Test/Drift Expansion test	IS 2335-05, ISO 8493, ASTM A 1016, ASTM A 370, ASTM B 153
342	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flaring Test/Drift Expansion test	IS 2335-05,ISO 8493, ASTM A 1016, ASTM A 370, ASTM B 153
343	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flattening Test	ASTM A-530-12, IS: 2328, ASTM A 999, ASTM A 1016, ASTM A 370, ASTM B111, ASTM A 450
344	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Flattening Test	ASTM A-530/ IS: 2328/ ASTM A 999 / ASTM A 1016 / ASTM A 370 /ASTM B111 /ASTM A 450
345	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys	Pullout test	ASME Sec VIII Div.I:Appendix A
346	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness Test (HV)	ASTM E 110
347	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Bolts , Nuts,Screws,Studs & Washers)	Proof Load Test ,Breaking Load test Shear Load,Wedge load (UTM Range 2.5N to 1000kN)	IS 1367, ASTM-F 606, ASTM A 370, ISO 898, IS 3063, IS 12427, IS 14394, IS 12427, ASTM A 325
348	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Micro Vickers (10g - 2 Kg)	ASTM E 384, ASTM E 92, ASTM B 578, IS 1501-1,ISO 6507, EN 1043-1
349	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness (BHN)	ASTM E 110
350	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness (HRB)	ASTM E 110

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 22 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
351	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness (HRC)	ASTM E 110
352	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non ferrous)	Fracture Test	ISO 9017, IS 7273, ASME Sec.IX, IBR:2011
353	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non ferrous)	Rockwell hardness Test (HRA)	IS 1586 Part-1,ASTM E-18,ASTM A 370 ,ISO 6508-1
354	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Rockwell Hardness Test (HRB)	IS 1586 Part-1,ASTM E-18,ASTM A 370 ,ISO 6508-1
355	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Rockwell Hardness Test (HRC)	IS 1586 Part-1 ,ASTM E-18,ASTM A 370 ,ISO 6508-1
356	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non ferrous)	Tensile Strength (UTM Range 2.5N to 1000kN)	AWS D-1.1, ASME Sect. IX , IBR: 2011, API 1104-22nd edition., EIL Spec, GAIL Spec, IS 3600, IS 7273, MECON Spec., EN 895, IS 7307 ,IS 7310 Part -1 ,BS EN ISO 5178, BS EN ISO 4136
357	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non ferrous)	Vickers Hardness Test	IS 1501:Pt.1 ,EN ISO 6507-1, BS EN 1043-1,BS 427
358	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Forrous & Non ferrous)	Brinell hardness Test (5/750. 10/3000 2.5/187.5	IS 1500 Part 1 ,ASTM E-10 ,BS EN ISO 6506-1, ASTM A 370
359	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys , Cladding Materials	Shear Tests	IS 5242, IS 12982, ASTM A 263, ASTM A 264, ASTM A 265, ASTM B 432
360	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys , Cladding Samples	Shear Test	IS 5242, IS 12982, ASTM A 263, ASTM A 264, ASTM A 265, ASTM B 432
361	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys	Bend Test	IS 1599, ASTM A 370, IS 2329, ASTM E 290, IBR-2011, BS EN ISO 5173 ,API 1104 21st Edition, ISO 9017 ,ISO 9606, EN 910, ISO 5173,SANS 1063, BS EN ISO 7438

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 23 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
362	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	Bend Test	IS 1599, ASTM A 370, IS 2329, ASTM E 290, IBR-2011, BS EN ISO 5173, API 1104 21st Edition ISO 9017, ISO 9606, EN 910, ISO 5173, SANS 1063, BS EN ISO 7438
363	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	% Elongation (UTM Range 2.5N to 1000kN)	IS 1608-1, ASTM-A370, ASTM : B557, ASTM: E8, BS EN :10002: 1-2001, ISO 6892-1, IS 2141, ISO 9606-1 ,IS 814 , IS 210, EN 910, ASTM E 290
364	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	0.2% Proof stress & Yield Strength (2.5N to 1000kN)	IS 1608-1,ASTM-A370, ASTM : B557 ,ASTM: E8a, BS EN :10002: 1, ISO 6892-1, IS 2141, IS 9017, IS 814, IS 210, EN 910, ASTM E 290
365	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	0.2% Proof stress (UTM Range 2.5N to 1000kN)	IS 1608, ASTM-A370, ASTM : B557, ASTM: E8-a, BS EN :10002:1, ISO 6892-1, IS 2141,IS 9017,ISO 9606, IS 814 ,IS 210, EN 910 ,ASTM E 290
366	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	Bend Test	IS 1599, ASTM A 370, IS 2329, ASTM E 290, IBR-2011 ,BS EN ISO 5173, API 1104 22ndEdition, ISO 9017, ISO 9606, EN 910, ISO 5173, SANS 1063, BS EN ISO 7438
367	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	Elongation (UTM Range 2.5N to 1000kN)	ASTM A 370, ASTM E 8,IS 1608-1, BS EN 10002-1:2001
368	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	Reduction Area (UTM Range 2.5N to 1000kN)	ASTM A 370,IS 1608,ASTM E 8,BS EN 10002-1:2001:2016
369	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous products)	Ultimate Tensile Strength (UTM Range 2.5N to 1000kN)	ASTM A 370,ASTM E 8,IS 1608-1,BS EN 10002-1:2001:2016
370	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Metal Alloys (Ferrous & Non Ferrous)	Impact Test (Charpy & Izod)	ASME Sect. IX : 2019, IBR:2011, API 1104-22nd edition., EIL Spec, GAIL Spec,, EN 875,IS 7307 ,IS 7310 ,IS 7273, ASME Sec.IX ,MECON Spec., EN ISO 9016

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 24 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
371	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & nAlloys	Flattening Test	ASTM: A-530, IS: 2328, ASTM A 999, ASTM A 1016, ASTM A 370, ASTM B111, ASTM A 450
372	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	0.2% Proof Stress & Yield Stress	ASTM A 370, ASTM E 8 ,IS 1608-1, BS EN 10002-1:2001
373	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Elongation (UTM Range 2.5N to 1000kN)	IS 1608,ASTM-A370,ASTM : B557, ASTM: E8-a, BS EN :10002:1,ISO 6892-1, IS 2141,IS 9017,ISO 9606,IS 814 , IS 210, EN 910 ,ASTM E 290
374	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Impact Test (-80 to 100°C) Charpy & Izod	IS 1757 : Part1, IS 1598, ASTM A 370, IS 1499, EN 10045 Pt.1, IS 3600, BS EN ISO 148-1
375	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Impact Test (-80 to 100°C) Charpy & Izod	IS 1757, IS 1598 ,ASTM A 370, IS 1499, EN 10045 Pt.1, IS 3600, BS EN ISO 148-1
376	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Reduction Area (UTM Range 2.5N to 1000kN)	IS 1608, ASTM-A370, ASTM : B557, ASTM: E8-a, BS EN :10002:1 ,ISO 6892-1, IS 2141,IS 9017,ISO 9606, IS 814,IS 210, EN 910, ASTM E 290
377	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Reduction Area (UTM Range 2.5N to 1000kN)	IS 1608-1, ASTM-A370 ,ASTM : B557,ASTM: E8-a, BS EN :10002: 1 ,ISO 6892-1,IS 2141,IS 9017,ISO 9606-1, IS 814,IS 210, EN 910, ASTM E 290
378	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Tensile Test-Ultimate Tensile strength (UTM Range: 2.5N to 1000kN)	IS 1608, ASTM-A370 ,ASTM : B557 ,ASTM: E8-a ,BS EN :10002:1, ISO 6892-1, IS 2141, IS 9017,ISO 9606, IS 814 , IS 210, EN 910, ASTM E 290
379	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals &Metal Alloys	Ultimate Tensile Strength (UTM Range 2.5N to 1000kN)	IS1608-1, ASTM-A370,ASTM : B557,ASTM: E8-a, BS EN :10002:1, ISO 6892-1,IS 2141 ,IS 9017 ,ISO 9606, IS 814 ,IS 210 ,EN 910 ,ASTM E 290
380	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement steel	Tensile Test Re Bend Test Bend Test Weight Per Meter Crush/Compression (UTM Range 2.5N to 1000kN)	IS 1608, IS 1599, IS 1786, IS 16172, IS1959, IS 9417

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	25 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
381	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld Metals & Alloys (Ferrous & Non Ferrous)	Bend Test (Root,Face,Side)	AWS D-1.1, ASME Sect. IX ,IBR:2011, API 1104-22nd edition., EIL Spec, GAIL Spec, API Spec ,EN 910 ,IS 7307,IS 7310, IS 7273,EN ISO 5173, IS 3600 ,MECON Spec
382	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Samples (Ferrous & Non Ferrous products)	Nick Break Test	API 1104 22nd edition, API 5L 45th edition, IBR 2011,IS 2825, GAIL, EIL SPEC, EN 15614 ,IS 814,IS 3600 , MECON Spec.
383	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless steels	IGC Practice A,B,C,D E & F	ASTM A262,ASTM G28-02,2015
384	MECHANICAL-METALLOGRAPHY TEST	Cast Irons	Nodularity , Nodularity by Image Analysis	IS 7754 , ASTM A 247, DIN EN 1563, ISO 945 ,ASTM E 2567:a
385	MECHANICAL-METALLOGRAPHY TEST	Ferrous & Non ferrous metals	Grain Size by comparison method & Grain Size by Image Analysis	IS 4748 ,ASTM E 112 ,ASTM B390, ISO 643 ,ASTM B930, IS 4005 ,ASTM E 1382:1997 RA 2019,ASTM E 1181:2002 RA 2015,
386	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metals	Depth of De carburization	ASTM E 1077-2014 IS 6396 :2000 RA 2019, IS 1367 Pt.3-2017
387	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metals	Detecting Presence of inter-metallic phases (For Ferritic Steels)	ASTM A 923:2014
388	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metals	Determination of Inclusion Content	DIN 50602,ASTM E 45, ASTM E 1245 ,IS 4163
389	MECHANICAL-METALLOGRAPHY TEST	Ferrous Metals& Non ferrous Metals	Determination of Volume fraction Ferrite Content	ASTM E1245,ASTM A 800 -2014:2019
390	MECHANICAL-METALLOGRAPHY TEST	Hardened Steels	Measurement of Case Depth	IS 6416, IS 7739, ASTM E 3 ,SAE J 423
391	MECHANICAL-METALLOGRAPHY TEST	Metal & Metal Alloys (Ferrous & Non Ferrous)	Coating / Plating Thickness	IS 3203 ,ASTM B 487
392	MECHANICAL-METALLOGRAPHY TEST	Metal & Metal Alloys (Ferrous & Non ferrous)	Surface Finish	ISO 9017, BS EN ISO 9017
393	MECHANICAL-METALLOGRAPHY TEST	Metal & Metal Alloys,Castings & Welds	Macro Etch Test	IS 11371 , ASTM E 340 ,ASTM E 381 ,IS 13015 ,IS 12573, ASME SecIX, IBR : 2015, AWS D1.1, BS EN 1321, EN ISO 5817, IS 3600, IS 7273, ASTM A 604, EN 1321, EN 25817

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 26 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
394	MECHANICAL-METALLOGRAPHY TEST	Metal & Metal Alloys,Castings & Welds	Microstructure	IS 11959 Volume 9 ASM Handbook, ASTM A247,IS 7754,ASTM E 1268-01, ASTM E 1268-01, ASTM B657, ISO 945, IS 3600 ,ASTM E 407 ,ISO 17639 (E), IBR , ASME SEC-IX
395	MECHANICAL-METALLOGRAPHY TEST	Stainless steels	Ferrite content in % & No.	ISO 8249
396	NON-DESTRUCTIVE-METALS & ALLOYS	FERRO-MAGENETIC MATERIALS (General Requirements)	Magnetic Particle Examination (Yoke) (Fluorescent & Visible Method)	ASME Sec V Art.7 ,ASTM E 709, ASTM E-1444-e1,IS 3703
397	NON-DESTRUCTIVE-METALS & ALLOYS	FERRO-MAGENETIC MATERIALS-Steel Castings	Magnetic Particle Examination (Yoke) (Fluorescent & Visible Method)	ASTM A 903
398	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Metals (Welds, Pipes Forgings, Castings)	Liquid Penetrant Examination (Solvent Removable)	ASME Sec V, Article 6, ASTM E165, ASTM- E 1220 ,ASTM- E 1219, ASTM- E 1417, IS-3658, ASTM A 903
399	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous metals & alloys General requirements for ultrasonic Examinations	Ferrous & Non Ferrous metals & alloys (Ultrasonic Testing)	ASME Sec. V:Article 4,5 ,IS:3664
400	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous and Non-Ferrous Metal	Ultrasonic Thickness Testing (THK)	ASTM E 797/E 797, M, IS:15435
401	NON-DESTRUCTIVE-METALS & ALLOYS	Metal Pipe and Tubing (Ferrous & Non Ferrous metals & alloys)	Ultrasonic Testing	ASTM E 213e, IS:6394
402	NON-DESTRUCTIVE-METALS & ALLOYS	Steel Casting (Ferrous & Non Ferrous metals & alloys)	Ultrasonic Testing	ASTM A 609/609M, IS 7666
403	NON-DESTRUCTIVE-METALS & ALLOYS	Steel Forging	Magnetic Particle Examination (Yoke) (Fluorescent & Visible Method)	ASTM A275, IS 7743
404	NON-DESTRUCTIVE-METALS & ALLOYS	Steel forging (ferrous & nonferrous metals & allloy	Steel forging (ferrous & non ferrous metals & alloys)	ASTM A 388/388M, IS 8791
405	NON-DESTRUCTIVE-METALS & ALLOYS	Steel Plates & Bars (Ferrous & Non Ferrous metals & alloys)	Ultrasonic Testing	ASTM-A-435, ASTM-A-577, ASTM-A-578 ,IS 4225, BS EN 10160, BS EN 10308
406	NON-DESTRUCTIVE-METALS & ALLOYS	Tube & Pipe	Magnetic Particle Examination (Yoke) (Fluorescent & Visible Method)	IS 6752
407	NON-DESTRUCTIVE-METALS & ALLOYS	Welded Plate,Weld Zone of welded pipe & Tubings	Ultrasonic Testing	ASTM E 273, ASTM E 164, IS:4260, AWS D1.1/D1.1M, Part F Clause 6.19 to 6.31

SCOPE OF ACCREDITATION

Laboratory Name : JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6112 **Page No** 27 of 28

Validity 21/07/2021 to 20/07/2023 **Last Amended on** 18/11/2021

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
408	NON-DESTRUCTIVE-METALS & ALLOYS	Welds	Magnetic Particle Examination (Yoke) (Fluorescent & Visible Method)	IS 5334
409	NON-DESTRUCTIVE-METALS & ALLOYS	Wrought Products (Bars,Plates , Tubes, Pipes , Flats , Blocks)	Ultrasonic Testing	ASTM E 2375:2016

SCOPE OF ACCREDITATION

Laboratory Name :	JYOTHI SPECTRO ANALYSIS PVT LTD., A 30, APIE, BALANAGAR, HYDERABAD, TELANGANA, INDIA		
Accreditation Standard	ISO/IEC 17025:2017		
Certificate Number	TC-6112	**Page No**	28 of 28
Validity	21/07/2021 to 20/07/2023	**Last Amended on**	18/11/2021

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
Site Facility				
1	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness (BHN)	ASTM E 110
2	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness (HRB)	ASTM E 110
3	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals & Alloys (Ferrous & Non Ferrous)	Dynamic Hardness (HRC)	ASTM E 110
4	MECHANICAL-METALLOGRAPHY TEST	Stainless steels	Ferrite content in % & No.	ISO 8249
5	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous metals & alloys General requirements for ultrasonic Examinations	Ferrous & Non Ferrous metals & alloys (Ultrasonic Testing)	ASME Sec. V:Article 4,5 ,IS:3664
6	NON-DESTRUCTIVE-METALS & ALLOYS	Steel Casting (Ferrous & Non Ferrous metals & alloys)	Ultrasonic Testing	ASTM A 609/609M, IS 7666
7	NON-DESTRUCTIVE-METALS & ALLOYS	Steel Forging	Magnetic Particle Examination (Yoke) (Fluorescent & Visible Method)	ASTM A275, IS 7743
8	NON-DESTRUCTIVE-METALS & ALLOYS	Welded Plate,Weld Zone of welded pipe & Tubings	Ultrasonic Testing	ASTM E 273, ASTM E 164, IS:4260, AWS D1.1/D1.1M, Part F Clause 6.19 to 6.31
9	NON-DESTRUCTIVE-METALS & ALLOYS	Wrought Products (Bars,Plates , Tubes, Pipes , Flats , Blocks)	Ultrasonic Testing	ASTM E 2375:2016