National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : CRYSTAL METALLURGICAL SERVICES AND SOLUTIONS, PLOT NO. L2, SIRULAVENI SQUARE, CFC, PHASE II, IDA CHERLAPALLY, HYDERABAD, MEDCHAL MALKAJGIRI, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- METALS & ALLOYS	Aluminium alloy	chromium	ASTM E1251
2	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Copper	ASTM E1251
3	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Iron	ASTM E1251
4	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Lead	ASTM E1251
5	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Magnesium	ASTM E1251
6	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Manganese	ASTM E1251
7	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Nickel	ASTM E1251
8	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Silicon	ASTM E1251
9	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Tin	ASTM E1251
10	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Titanium	ASTM E1251
11	CHEMICAL- METALS & ALLOYS	Aluminium alloy	Zinc	ASTM E1251
12	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Aluminum	ASTM E415
13	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Aluminum	IS 8811
14	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Carbon	ASTM E415
15	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Carbon	IS 8811
16	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Chromiun	ASTM E415
17	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Chromiun	IS 8811
18	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Cobalt	ASTM E415

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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	Carbon & Low Alloy Steels	Cobalt	IS 8811
20	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Copper	ASTM E415
21	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Copper	IS 8811
22	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Manganese	ASTM E415
23	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Manganese	IS 8811
24	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Molybdenum	ASTM E415
25	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Molybdenum	IS 8811
26	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Nickel	ASTM E415
27	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Nickel	IS 8811
28	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Phosphorus	ASTM E415
29	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Phosphorus	IS 8811
30	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Silicon	ASTM E415
31	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Silicon	IS 8811
32	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Sulphur	ASTM E 415
33	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Sulphur	IS 8811
34	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Vanadium	ASTM E415
35	CHEMICAL- METALS & ALLOYS	Carbon & Low Alloy Steels	Vanadium	IS 8811
36	CHEMICAL- METALS & ALLOYS	Stainless Steels	Carbon	ASTM E1086
37	CHEMICAL- METALS & ALLOYS	Stainless Steels	Carbon	IS 9879

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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- METALS & ALLOYS	Stainless Steels	Chromium	ASTM E1086
39	CHEMICAL- METALS & ALLOYS	Stainless Steels	Chromium	IS 9879
40	CHEMICAL- METALS & ALLOYS	Stainless Steels	Copper	ASTM E1086
41	CHEMICAL- METALS & ALLOYS	Stainless Steels	Copper	IS 9879: 1998
42	CHEMICAL- METALS & ALLOYS	Stainless Steels	Manganese	ASTM E1086
43	CHEMICAL- METALS & ALLOYS	Stainless Steels	Manganese	IS 9879
44	CHEMICAL- METALS & ALLOYS	Stainless Steels	Molybdenum	ASTM E1086
45	CHEMICAL- METALS & ALLOYS	Stainless Steels	Molybdenum	IS 9879
46	CHEMICAL- METALS & ALLOYS	Stainless Steels	Nickel	ASTM E1086
47	CHEMICAL- METALS & ALLOYS	Stainless Steels	Nickel	IS 9879
48	CHEMICAL- METALS & ALLOYS	Stainless Steels	Phosphorus	ASTM E1086
49	CHEMICAL- METALS & ALLOYS	Stainless Steels	Phosphorus	IS 9879
50	CHEMICAL- METALS & ALLOYS	Stainless Steels	Silicon	ASTM E1086
51	CHEMICAL- METALS & ALLOYS	Stainless Steels	Silicon	IS 9879
52	CHEMICAL- METALS & ALLOYS	Stainless Steels	Sulphur	ASTM E1086
53	CHEMICAL- METALS & ALLOYS	Stainless Steels	Sulphur	IS 9879
54	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Brinell Hardness Test	ASTM E10
55	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium Metals & Alloys	% Elongation	ASTM B557

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Accreditation Standard	ISO/IEC 17025:2017
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S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
56	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium Metals and Alloys	%RA	ASTM B 557
57	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium Metals and Alloys	0.2% Proof Stress	ASTM B 557
58	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium Metals and Alloys	Tensile Strength	ASTM B 557
59	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium Metals and Alloys	Yield Stress	ASTM B 557
60	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Alloys	CHARPY V NOTCH	IS 1757 (PART 1)
61	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Alloys	CHARPY V NOTCH	IS 1757 (PART 1)
62	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Alloys	ROCKWELL HARDNESS TEST	ASTM A 370
63	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Alloys	Rockwell Hardness Test	IS 1586 (PART 1)
64	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials , Alloys and products	Brinell Hardness Test	ASTM A 370
65	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials , Alloys and products	Brinell Hardness Test	IS 1500 (PART 1)
66	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Brinell Hardness Test	ASTM A 370
67	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Brinell Hardness Test	ASTM E 10
68	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Brinell Hardness Test	IS 1500 Part 1
69	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Charpy V - Notch Impact Test	IS 1757 PART 1

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70	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Izod Impact Test	IS 1598
71	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Izod Impact Test	IS 1598
72	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM A 370
73	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM A370
74	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM A370
75	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM E 18
76	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM E 18
77	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM E18
78	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	ASTM E18
79	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	IS 1586 (PART 1)
80	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	IS 1586 Part 1
81	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials, Alloys & Products	Rockwell Hardness Test	IS 1586 Part 1
82	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	% Elongation	ASTM E8 / E8M
83	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	% Elongation	BS EN ISO 6892 Part 1

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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
84	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	% Elongation	IS 1608 Part 1
85	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	%RA	ASTM E8 / E8M
86	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	%RA	BS EN ISO 6892 Part 1
87	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	%RA	IS 1608 Part 1
88	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	0.2% Proof Stress	ASTM E8 / E8M
89	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	0.2% Proof Stress	BS EN ISO 6892 Part 1
90	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	0.2% Proof Stress	IS 1608 Part 1
91	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	Tensile Strength	ASTM E8 / E8M
92	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	Tensile Strength	BS EN ISO 6892 Part 1
93	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	Tensile Strength	IS 1608 Part 1
94	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	Yield Stress	ASTM E8 / E8M
95	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	Yield Stress	BS EN ISO 6892 Part 1
96	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metals and Alloys	Yield Stress	IS 1608 Part 1
97	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Brinell Hardness Test	ASTM A 370

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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
98	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Brinell Hardness Test	ASTM E 10
99	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Rockwell Hardness Test	ASTM A 370
100	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Rockwell Hardness Test	ASTM E 18
101	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Rockwell Hardness Test	ASTM E 18
102	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Rockwell Hardness Test	ASTM E 18
103	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Rockwell Hardness Test	IS 1586 (Part 1)
104	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Alloys	Rockwell Hardness Test	IS 1586 (Part 1)
105	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Brinell Hardness Test	ASTM A 370
106	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Brinell Hardness Test	ASTM E10
107	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Brinell Hardness Test	IS 1500 Part 1
108	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Rockwell Hardness Test	ASTM A 370
109	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Rockwell Hardness Test	ASTM A370
110	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Rockwell Hardness Test	ASTM E 18
111	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Rockwell Hardness Test	IS 1586 Part 1

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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
112	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Non Ferrous Materials, Alloys and Productd	Rockwell Hardness Test	IS 1586 Part 1
113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Materials	% Elongation	ASTM A 370
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Materials	%RA	ASTM A 370
115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Materials	0.2% Proof Stress	ASTM A 370
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Materials	Tensile Strength	ASTM A 370
117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Materials	Yield Stress	ASTM A 370
118	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weld in Metals	Transverse Bend Test (Face bend, Root Bend, Side Bend)	ASME Sec IX
119	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Weldments	Transverse Bend Test	ASME Sec IX
120	MECHANICAL-METALLOGRAPHY TEST	Aluminium Alloys	Avg. Grain Size by Comparison chart method	ASTM E 112 (Plate I)
121	MECHANICAL-METALLOGRAPHY TEST	Aluminium Alloys	Avg. Grain Size by Comparison chart method	IS 4748
122	MECHANICAL-METALLOGRAPHY TEST	Aluminium Alloys	Macro Examination	ASTM E340
123	MECHANICAL-METALLOGRAPHY TEST	Aluminium Alloys	Micro Structure Examination	ASM Metal Hand Book Vol9
124	MECHANICAL-METALLOGRAPHY TEST	Copper Alloys	Macro Examination	ASTM E 340
125	MECHANICAL-METALLOGRAPHY TEST	Copper Alloys	Micro structure Examination	ASM Metal Hand Book Volume 9
126	MECHANICAL-METALLOGRAPHY TEST	Ferrous (Carbon Steel, Alloy Steel, Stainless Steel)	Micro Structure Examination	ASM Metal Hand Book Volume 9
127	MECHANICAL-METALLOGRAPHY TEST	Ferrous (Carbon Steel, Alloy Steel, Stainless Steel)	Avg. Grain Size by Comparison chart method	ASTM E112 (Plate I and II)

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128	MECHANICAL-METALLOGRAPHY TEST	Ferrous (Carbon Steel, Alloy Steel, Stainless Steel)	Macro Examination	ASTM E340
129	MECHANICAL-METALLOGRAPHY TEST	Ferrous (Steel, Stainless Steel)	Avg. Grain Size by Comparison chart method	IS 4748
130	MECHANICAL-METALLOGRAPHY TEST	Ferrous (Steel, Stainless Steel)	Macro Examination	ASTM E381
131	MECHANICAL-METALLOGRAPHY TEST	Nickel Alloys	Macro Examination	ASTM E340
132	MECHANICAL-METALLOGRAPHY TEST	Nickel Alloys	Macro Examination	ASTM E381
133	MECHANICAL-METALLOGRAPHY TEST	Nickel Alloys	Micro Structure Examination	ASM Metal Hand Book Volume 9
134	MECHANICAL-METALLOGRAPHY TEST	Nickel and Nickel Based Alloys	Avg. Grain Size by Comparison chart method	ASTM E 112 (Plate II)
135	MECHANICAL-METALLOGRAPHY TEST	Non Ferrous Aluminun Alloys	Macro Examination	ASTM E381
136	MECHANICAL-METALLOGRAPHY TEST	Non Ferrous Copper Alloys	Macro Structure Examination	ASTM E 381
137	MECHANICAL-METALLOGRAPHY TEST	Non Ferrous Titanium Alloys	Macro Structure Examination	ASTM E 381
138	MECHANICAL-METALLOGRAPHY TEST	Steel Materials	Non Metallic Inclusion	IS 4163
139	MECHANICAL-METALLOGRAPHY TEST	Steel Materials	Non Metallic Inclusion Method A	ASTM E45
140	MECHANICAL-METALLOGRAPHY TEST	Titanium Alloys	Micro Structure Examination	ASM Metal Hand Book Volume 9
141	MECHANICAL-METALLOGRAPHY TEST	Titanium Alloys Macro Examination	Macro Examination	ASTM E 340
142	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	ASME Sec V Article 4,5 & 23
143	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	BS EN 12680 1,2,3
144	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	BS EN ISO 17640
145	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	ISO 23279

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146	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 7666 (RA 2014),ASME Sec V Art 4,5,& 23,2017, IS 4225-2014, IS 4260, RA 2015, IS 7343, RA 2014, IS 9565, 2017, BS EN 12680- 1,2,3 RA 2011, ISO 23279, RA 2017, BS EN ISO 1760, RA 2017
147	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 7666 ,ASME Sec V Art 4,5,& 23, IS 4225, IS 4260, IS 7343, IS 9565, BS EN 12680- 1,2,3 , ISO 23279, BS EN ISO 1760
148	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 7666 ,ASME Sec V Art 4,5,& 23, IS 4225, IS 4260, IS 7343, IS 9565, BS EN 12680- 1,2,3, ISO 23279,BS EN ISO 1760
149	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 9565
150	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Plates	Ultrasonic Examination (Contract Type)	IS 4225
151	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Plates	Ultrasonic Examination (Contract Type)	IS 4225 2004
152	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Welds	Ultrasonic Examination (Contract Type)	IS 4260
153	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Welds	Ultrasonic Examination (Contract Type)	IS 7343
154	NON-DESTRUCTIVE-METALS & ALLOYS	Penetrant Examination (Visible, Florescent & Solvent Removable)	Penetrant Examination (Visible, Florescent & Solvent Removable)	EN 1371 1&2
155	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	ASME Sec V Article 24, 6
156	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	EN 571 1
157	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 11732 (RA 2017), ASME Sec V, Art 6 & 24, 2017, IS 3658:1999, EN 13711 & 22015, EN 571-1, RA 1997
158	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 11732 ,ASME Sec V, Art 6 & 24, 2017, IS 3658:1999, EN 13711 & 22015, EN 571-1

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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
159	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 11732, ASME Sec V, Art 6 & 24, IS 3658:1999, EN 13711 & 22015, EN 571-1
160	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 3658
161	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	ASME Sec V Article7,25
162	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	BS EN 1369
163	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 10724
164	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 3703
165	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 5334
166	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 7743, ASME Sec V Art 7, 25, 2017, IS 3703 , IS 10724 , IS 5334 , BS EN 1369
167	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 7743, ASME Sec V Art 7, 25, IS 3703 , IS 10724 , IS 5334 , BS EN 1369
168	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 7743, ASME Sec V Art 7, 25, IS 3703, IS 10724 , IS 5334 , BS EN 1369

SCOPE OF ACCREDITATION

Laboratory Name : CRYSTAL METALLURGICAL SERVICES AND SOLUTIONS, PLOT NO. L2, SIRULAVENI SQUARE, CFC, PHASE II, IDA CHERLAPALLY, HYDERABAD, MEDCHAL MALKAJGIRI, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 20/10/2022 to 16/12/2023 **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
Site Facility				
1	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	ASME Sec V Article 4,5 & 23
2	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	BS EN 12680 1,2,3
3	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	BS EN ISO 17640
4	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Plates, Welds, Forgings & Casting	Ultrasonic Examination (Contract Type)	ISO 23279
5	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 7666 (RA 2014),ASME Sec V Art 4,5,& 23,2017, IS 4225-2014, IS 4260, RA 2015, IS 7343, RA 2014, IS 9565, 2017, BS EN 12680- 1,2,3 RA 2011, ISO 23279, RA 2017, BS EN ISO 1760, RA 2017
6	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 7666 ,ASME Sec V Art 4,5,& 23, IS 4225, IS 4260, IS 7343, IS 9565, BS EN 12680- 1,2,3 , ISO 23279, BS EN ISO 1760
7	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 7666 ,ASME Sec V Art 4,5,& 23, IS 4225, IS 4260, IS 7343, IS 9565, BS EN 12680- 1,2,3, ISO 23279,BS EN ISO 1760
8	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Castings	Ultrasonic Examination (Contract Type)	IS 9565
9	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Plates	Ultrasonic Examination (Contract Type)	IS 4225
10	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Plates	Ultrasonic Examination (Contract Type)	IS 4225 2004
11	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Welds	Ultrasonic Examination (Contract Type)	IS 4260
12	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous Welds	Ultrasonic Examination (Contract Type)	IS 7343
13	NON-DESTRUCTIVE-METALS & ALLOYS	Penetrant Examination (Visible, Florescent & Solvent Removable)	Penetrant Examination (Visible, Florescent & Solvent Removable)	EN 1371 1&2
14	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	ASME Sec V Article 24, 6

SCOPE OF ACCREDITATION

Laboratory Name : CRYSTAL METALLURGICAL SERVICES AND SOLUTIONS, PLOT NO. L2, SIRULAVENI SQUARE, CFC, PHASE II, IDA CHERLAPALLY, HYDERABAD, MEDCHAL MALKAJGIRI, TELANGANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 20/10/2022 to 16/12/2023 **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
15	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	EN 571 1
16	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 11732 (RA 2017), ASME Sec V, Art 6 & 24, 2017, IS 3658:1999, EN 13711 & 22015, EN 571-1, RA 1997
17	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 11732 ,ASME Sec V, Art 6 & 24, 2017, IS 3658:1999, EN 13711 & 22015, EN 571-1
18	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 11732, ASME Sec V, Art 6 & 24, IS 3658:1999, EN 13711 & 22015, EN 571-1
19	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous & Non Ferrous)	Penetrant Examination (Visible, Florescent & Solvent Removable)	IS 3658
20	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	ASME Sec V Article7,25
21	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	BS EN 1369
22	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 10724
23	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 3703
24	NON-DESTRUCTIVE-METALS & ALLOYS	Welds, Forgings & Castings (Ferrous)	Magnetic Particle Examination (Wet, Dry- Visible, Fluorescent), (Prod & Yoke)	IS 5334