National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : TECHNOLOGY DEVELOPMENT CENTRE- CONSUMABLES(TDC - CONSUMABLES), ADOR WELDING LIMITED, AKURDI CIRCLE, CHINCHWAD, PUNE, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 03/03/2022 to 02/03/2024 **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 Chromium	Carbon	ASTM E1019
2	CHEMICAL- METALS & ALLOYS	Ferro Chromium	Sulphur	ASTM E1019
3	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Carbon	ASTM E1019
4	CHEMICAL- METALS & ALLOYS	Ferro Manganese	Sulphur	ASTM E1019
5	CHEMICAL- METALS & ALLOYS	Ferro Molybdenum	Carbon	ASTM E1019
6	CHEMICAL- METALS & ALLOYS	Ferro Molybdenum	Sulphur	ASTM E1019
7	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Carbon	ASTM E1019
8	CHEMICAL- METALS & ALLOYS	Ferro Silicon	Sulphur	ASTM E1019
9	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Carbon	ASTM E3047
10	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Chromium	ASTM E3047
11	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Cobalt	ASTM E3047
12	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Copper	ASTM E3047
13	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Iron	ASTM E3047
14	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Manganese	ASTM E3047
15	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Molybdenum	ASTM E3047
16	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Phosphorous	ASTM E3047
17	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Silicon	ASTM E3047
18	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Sulphur	ASTM E3047

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19	CHEMICAL- METALS & ALLOYS	Nickel and its Alloys	Tungsten	ASTM E3047
20	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Aluminium	ASTM E415
21	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Aluminium	IS 8811
22	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Carbon	ASTM E415
23	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Carbon	IS 8811
24	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Chromium	ASTM E415
25	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Chromium	IS 8811
26	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Cobalt	ASTM E415
27	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low alloy Steels	Cobalt	IS 8811
28	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Copper	ASTM E415
29	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Copper	IS 8811
30	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Manganese	ASTM E415
31	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Manganese	IS 8811
32	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Molybdenum	ASTM E415
33	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Molybdenum	IS 8811
34	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Nickel	ASTM E415
35	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Nickel	IS 8811
36	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Niobium	ASTM E415
37	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Niobium	IS 8811

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38	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Phosphorous	ASTM E415
39	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Phosphorous	IS 8811
40	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Silicon	ASTM E415
41	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Silicon	IS 8811
42	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Sulphur	ASTM E415
43	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Sulphur	IS 8811
44	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Titanium	ASTM E415
45	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Titanium	IS 8811
46	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Vanadium	IS 8811
47	CHEMICAL- METALS & ALLOYS	Plain Carbon and Low Alloy Steels	Vanadium	IS 8811
48	CHEMICAL- METALS & ALLOYS	Silico Manganese	Carbon	ASTM E1019
49	CHEMICAL- METALS & ALLOYS	Silico Manganese	Sulphur	ASTM E1019
50	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
51	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 9879
52	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E1086
53	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 9879
54	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E1086
55	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 9879
56	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086

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57	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 9879
58	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E1086
59	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 9879
60	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E1086
61	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 9879
62	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorous	ASTM E1086
63	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorous	IS 9879
64	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E1086
65	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 9879
66	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	ASTM E1086
67	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur	IS 9879
68	CHEMICAL- METALS & ALLOYS	Steel, Iron, Nickel and Cobalt Alloys	Carbon	ASTM E1019
69	CHEMICAL- METALS & ALLOYS	Steel, Iron, Nickel and Cobalt Alloys	Nitrogen	ASTM E1019
70	CHEMICAL- METALS & ALLOYS	Steel, Iron, Nickel and Cobalt Alloys	Oxygen	ASTM E1019
71	CHEMICAL- METALS & ALLOYS	Steel, Iron, Nickel and Cobalt Alloys	Sulphur	ASTM E1019
72	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous Materials including Weld Metals	Tensile Test - Ultimate Tensile Strength	ASTM A370
73	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Bend Test	ASME Section II (Part A) SA 370
74	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Bend Test	ASTM A370

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75	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Bend Test	IS 1599
76	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Brinell Hardness Test (10 mm / 3000 Kgf)	ASTM E10
77	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Brinell Hardness Test (10 mm / 3000 Kgf)	IS 1500 (Part 1)
78	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Rockwell Hardness Test	ASTM E18
79	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Rockwell Hardness Test	ASTM E18
80	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Rockwell Hardness Test	IS 1586 (Part 1)
81	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Rockwell Hardness Test	IS 1586 (Part 1)
82	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Vickers Hardness Test (HV30)	ASTM E92
83	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Vickers Hardness Test (HV30)	IS 1501 (Part 1)
84	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Vickers Hardness Test (HV5)	ASTM E92
85	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials	Vickers Hardness Test (HV5)	IS 1501 (Part 1)
86	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Elongation	ASME Section II (Part A) SA 370
87	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Elongation	ASME SECTION IX
88	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Elongation	ASTM E8 / E8M

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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
89	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Elongation	IS 1608 - Part 1
90	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Reduction in Area	ASME Section II (Part A) SA 370
91	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Reduction in Area	ASME SECTION IX
92	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Reduction in Area	ASTM E8 / E8M
93	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Proof stress (0.2%&0.5%)	IS 1608 Part 1
94	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Proof Stress (0.2 to 0.5%)	ASME Section II (Part A) SA 370
95	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Ultimate Tensile Strength	ASME Section II (Part A) SA 370
96	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Ultimate Tensile Strength	ASME SECTION IX
97	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Ultimate Tensile Strength	ASTM E8 / E8M
98	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Ultimate Tensile Strength	IS 1608 Part 1
99	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Yield Stress under extension (0.2%&0.5%)	ASTM E8 / E8M
100	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - Yield Stress under extension(0.2%&0.5%)	ASME SECTION IX
101	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Charpy V Notch Impact Test at - (-) 196ºC & (+) 35ºC	ASTM E23
102	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Charpy V Notch Impact Test at (-) 196ºC & (+) 35ºC	ASME Section IX

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103	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Charpy V Notch Impact Test at (-) 196ºC & (+) 35ºC	ASME Section II (Part A) SA 370
104	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous and Non Ferrous Materials including Weld Metals	Tensile Test - % of Reduction in Area	IS 1608 -Part 1
105	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials including Weld Metals	Tensile Test - % of Elongation	ASTM A370
106	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials including Weld Metals	Tensile Test - % of Reduction in Area	ASTM A370
107	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials including Weld Metals	Tensile Test - Yield Stress under extension (0.2% & 0.5%)	ASTM A370
108	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials including Weld Metals	Charpy V Notch Impact Test at -196 Deg C and -110 Deg C to +35 Deg C	ASTM A370
109	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep/Creep Rupture/Stress Rupture Test at 25 Deg C to 1000 Deg C, Load 5kN to 60 kN	ASTM E139-11
110	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test	ASME Section II (Part A) SA450
111	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test	ASME Section II (Part A) SA 370
112	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test	ASTM A370
113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test	IS 2328
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens - Ferrous and Non Ferrous Materials	Bend Test (Transverse, Root , Face, Side Bend Test)	ASME SEC IX
115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens - Ferrous and Non Ferrous Materials	Bend Test (Transverse, Root , Face, Side Bend Test)	IS 3600 (Part 5)
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens - Ferrous and Non Ferrous Materials	Bend Test (Transverse, Root , Face, Side Bend Test)	IS 3600 (Part 6)

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117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welds & Welded Test Specimens - Ferrous and Non Ferrous Materials	Bend Test (Transverse, Root , Face, Side Bend Test)	IS 3600 (Part 7)
118	MECHANICAL-METALLOGRAPHY TEST	Austenitic and Duplex Stainless Steel Weld	Ferrite Number	EN ISO 8249
119	MECHANICAL-METALLOGRAPHY TEST	Austenitic and Duplex Stainless Steel Weld	Ferrite Number	AWS A4.2
120	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steels	IGC Practice E	ASTM A262
121	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials including Weld Metals	Average Grain Size Measurement by Comparison Method	ASTM E112
122	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials including Weld Metals	Macro Examination	ASTM E340
123	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials including Weld Metals	Micro Examination	ASM Hand Book Vol 9
124	MECHANICAL-METALLOGRAPHY TEST	Ferrous and Non Ferrous Materials including Weld Metals	Micro Examination	ASTM E407-2015/ASM Hand Book Vol 9
125	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials	Macro Examination	IS 13015
126	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials including Weld Metals	Average Grain Size Measurement by Comparison Method	IS 4748
127	MECHANICAL-METALLOGRAPHY TEST	Materials including	Macro Examination	IS 11371