National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : METAL AND STEEL FACTORY TESTING LABORATORY, A UNIT OF YANTRA INDIA LIMITED, GOVERNMENT OF INDIA ENTERPRISE, MINISTRY OF DEFENCE, ISHAPORE, P.O. NAWABGANJ, NORTH 24 PARAGANAS, KOLKATA, WEST BENGAL, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 12/05/2022 to 11/05/2024 **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	carbon and low alloy steel	Aluminium(Al)	ASTM E-415
2	CHEMICAL- METALS & ALLOYS	Carbon and low alloy steel	Antimony (Sb)	ASTM E-415
3	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Arsenic (As)	ASTM E-415
4	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Boron(B)	ASTM E-415
5	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Carbon(C)	ASTM E-415
6	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Chromium(Cr)	ASTM E-415
7	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Cobalt(Co)	ASTM E-415
8	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Copper(Cu)	ASTM E-415
9	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Manganese(Mn)	ASTM E-415
10	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Molybdenum(Mo)	ASTM E-415
11	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Nickel(Ni)	ASTM E-415
12	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Phosphorous(P)	ASTM E-415
13	CHEMICAL- METALS & ALLOYS	Carbon and Low Alloy Steel	Silicon(Si)	ASTM E-415
14	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Sulpher(S)	ASTM E-415
15	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Tin(Sn)	ASTM E-415
16	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Titanium(Ti)	ASTM E-415
17	CHEMICAL- METALS & ALLOYS	carbon and low alloy steel	Vanadium(V)	ASTM E-415
18	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Phosphorus (P)	MSF/T.LABY/SOP NO. 21/B

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19	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Aluminium (Al)	MSF/T.LABY/SOP NO. 21/B
20	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Antimony(Sb)	MSF/T.LABY/SOP NO. 21/B
21	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Arsenic(As)	MSF/T.LABY/SOP NO. 21/B
22	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Bismuth(Bi)	MSF/T.LABY/SOP NO. 21/B
23	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Iron(Fe)	MSF/T.LABY/SOP NO. 21/B
24	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Lead(Pb)	MSF/T.LABY/SOP NO. 21/B
25	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Manganese (Mn)	MSF/T.LABY/SOP NO. 21/B
26	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Nickel(Ni)	MSF/T.LABY/SOP NO. 21/B
27	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Silicon (Si)	MSF/T.LABY/SOP NO. 21/B
28	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Tin(Sn)	MSF/T.LABY/SOP NO. 21/B
29	CHEMICAL- METALS & ALLOYS	Copper Base Alloys	Zinc(Zn)	MSF/T.LABY/SOP NO. 21/B
30	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon(C)	ASTM E 1086
31	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium(Cr)	ASTM E 1086
32	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese(Mn)	ASTM E 1086
33	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel(Ni)	ASTM E-1086
34	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus(P)	ASTM E 1086
35	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon(Si)	ASTM E-1086
36	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulphur(S)	ASTM E 1086
37	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon(C)	T.LABY/SOP NO. 21/D

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38	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium(Cr)	MSF/T.LABY/SOP NO. 21/D
39	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt(Co)	MSF/T.LABY/SOP NO. 21/D
40	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese(Mn)	MSF/T.LABY/SOP NO.21/D
41	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum(Mo)	MSF/T.LABY/SOP NO. 21/D
42	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorus(P)	MSF/T.LABY/SOP NO. 21/D
43	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon(Si)	MSF/T.LABY/SOP NO. 21/D
44	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulphur(S)	MSF/T.LABY/SOP NO. 21/D
45	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten(W)	MSF/T.LABY/SOP NO. 21/D
46	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium(V)	MSF/T.LABY/SOP NO. 21/D
47	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Aluminium(Al)	MSF/T.LABY/SOP NO. 21/C
48	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Cadmium(Cd)	MSF/T.LABY/SOP NO. 21/C
49	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Copper(Cu)	MSF/T.LABY/SOP NO. 21/C
50	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Iron(Fe)	MSF/T.LABY/SOP NO. 21/C
51	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Lead(Pb)	MSF/T.LABY/SOP NO. 21/C
52	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Magnesium(Mg)	MSF/T.LABY/SOP NO. 21/C
53	CHEMICAL- METALS & ALLOYS	Zinc Base Alloy	Tin(Sn)	MSF/T.LABY/SOP NO. 21/C
54	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Brass	% Elongation	IS-1608
55	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Brass	0.2% Proof Stress	IS 1608

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56	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Brass	Tensile Strength	IS 1608
57	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	%Elongation	IS 1608
58	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	%Reduction in Area	IS 1608
59	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	0.2% Proof Stress	IS 1608
60	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Charpy impact test U notch at Sub Zero Temparature	IS 1499
61	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Charpy impact test U notch at room temparature	IS 1499
62	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Charpy impact test V notch at room temperature	IS 1757 pt 1
63	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Charpy impact test V notch at Sub Zero Temparature	IS 1757 pt 1
64	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Fracture Toughness test K1c	ASTM E 399
65	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Fracture Toughness test; J1c	ASTM E 1820
66	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	IZOD Impact Test	IS 1598
67	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Limit of Proportionality (LOP)	IS-1608
68	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Tensile Strength	IS-1608
69	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Plain Carbon Steel, Alloy Steel	Yield Strength	IS 1608

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70	MECHANICAL-METALLOGRAPHY TEST	Brass (all grades)	Macro Examination	IS 13484
71	MECHANICAL-METALLOGRAPHY TEST	Plain carbon steel and Alloy steel	Depth of Decarburisation	GOST 1763
72	MECHANICAL-METALLOGRAPHY TEST	Plain carbon steel and Alloy steel	Depth of Decarburisation	IS 6396
73	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Macro Examination	ASTM A 604
74	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Macro Examination	ASTM E 381
75	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Macro Examination	GOST 10243
76	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Macro Examination	GOST B 19032
77	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Macro Examination	IS 13015
78	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Micro structure Examination	ASM Hand Book (Vol-9)
79	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Non Metallic Inclusion Rating	ASTM E 45 Method A
80	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Non Metallic Inclusion Rating	GOST 1778
81	MECHANICAL-METALLOGRAPHY TEST	Plain Carbon Steel, Alloy Steel	Non Metallic Inclusion Rating	IS 4163
82	MECHANICAL-METALLOGRAPHY TEST	Plain carbon steel, Alloy steel and Brass (all grades)	Grain Size by comparison method	ASTM E 112
83	MECHANICAL-METALLOGRAPHY TEST	Plain carbon steel, Alloy steel and Brass (all grades)	Grain Size by comparison method	GOST 5639
84	MECHANICAL-METALLOGRAPHY TEST	Plain carbon steel, Alloy steel and Brass (all grades)	Grain Size by comparison method	IS 4748