National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : LAKSHMI MACHINE WORKS LIMITED, TEXTILE MACHINERY DIVISION I, METALLURGICAL LABORATORY, S.F. NO. 482, PERIANAICKENPALAYAM, COIMBATORE, TAMIL NADU, 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- CORROSION TESTS	Metallic Coating on Metallic Materials and Products (Anodic / Cathodic - Anodic Oxide & Organic Coatings & Painted Surfaces)	Salt Spray Test	ASTM B117
2	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Chromium	ASTM E1251
3	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Copper	ASTM E1251
4	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Iron	ASTM E1251
5	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Lead	ASTM E1251
6	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Magnesium	ASTM E1251
7	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Manganese	ASTM E1251
8	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Nickel	ASTM E1251
9	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Silicon	ASTM E1251
10	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Titanium	ASTM E1251
11	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Vanadium	ASTM E1251
12	CHEMICAL- METALS & ALLOYS	Aluminum & Aluminum Alloys	Zinc	ASTM E1251
13	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Carbon	IS 9879
14	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Chromium	IS 9879
15	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Copper	IS 9879
16	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Manganese	IS 9879
17	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Molybdenum	IS 9879
18	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Nickel	IS 9879

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19	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Phosphorus	IS 9879
20	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Silicon	IS 9879
21	CHEMICAL- METALS & ALLOYS	Austenitic & Ferritic Stainless Steel	Sulphur	IS 9879
22	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Carbon	ASTM E1086
23	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Chromium	ASTM E1086
24	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Copper	ASTM E1086
25	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Manganese	ASTM E1086
26	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Molybdenum	ASTM E1086
27	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Nickel	ASTM E1086
28	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Phosphorus	ASTM E1086
29	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Silicon	ASTM E1086
30	CHEMICAL- METALS & ALLOYS	Austenitic Stainless Steel	Sulphur	ASTM E1086
31	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Aluminium	JIS G1253
32	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Boron	JIS G1253
33	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Carbon	JIS G1253
34	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Chromium	JIS G1253
35	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Copper	JIS G1253
36	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Lead	JIS G1253
37	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Manganese	JIS G1253

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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	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Molybdenum	JIS G1253
39	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Nickel	JIS G1253
40	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Phosphorus	JIS G1253
41	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Silicon	JIS G1253
42	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Sulphur	JIS G1253
43	CHEMICAL- METALS & ALLOYS	Ferrous Metal & Alloys (Carbon & Alloy Steel)	Vanadium	JIS G1253
44	CHEMICAL- METALS & ALLOYS	High Alloy steel	Carbon	JIS G1253
45	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Chromium	JIS G1253
46	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Cobalt	JIS G 1253
47	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Copper	JIS G1253
48	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Manganese	JIS G1253
49	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Molybdenum	JIS G1253
50	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Nickel	JIS G1253
51	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Phosphorus	JIS G1253
52	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Silicon	JIS G1253
53	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Sulphur	JIS G1253
54	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Tungsten	JIS G1253
55	CHEMICAL- METALS & ALLOYS	High Alloy Steel	Vanadium	JIS G1253
56	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Carbon	JIS G1253

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57	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Chromium	JIS G1253
58	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Copper	JIS G1253
59	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Magnesium	JIS G1253
60	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Manganese	JIS G1253
61	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Nickel	JIS G1253
62	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Phosphorus	JIS G1253
63	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Silicon	JIS G1253
64	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Sulphur	JIS G1253
65	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Titanium	JIS G1253
66	CHEMICAL- METALS & ALLOYS	Iron & Steel – Pig Iron, Cast Iron	Vanadium	JIS G1253
67	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	% Elongation	ASTM B557
68	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	% Elongation (After Fracture)	IS 1608 (Part 1)
69	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	% Elongation (After Fracture)	ISO 6892-1
70	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	Proof Strength (0.2%)	IS 1608 (Part 1)
71	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	Proof Strength (0.2%)	ISO 6892-1
72	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	Tensile Strength	ASTM B557

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73	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	Tensile Strength	IS 1608 (Part 1)
74	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	Tensile Strength	ISO 6892-1
75	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminium & Aluminium Alloy Materials & Prodcuts	Yield Strength (0.2% Offset)	ASTM B557
76	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum Materials, Alloys & Products	Brinell Hardness Test (HBW 10/1000)	ASTM E10
77	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	% Elongation	ASTM E8/E8M
78	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	% Elongation (After Fracture)	IS 1608 (Part 1)
79	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	% Elongation (After Fracture)	ISO 6892-1
80	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Brinell Hardness Test (HBW 10/1000)	ASTM E10
81	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Proof Strength (0.2%)	IS 1608 (Part 1)
82	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Proof Strength (0.2%)	ISO 6892-1
83	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Tensile Strength	ASTM E8/E8M
84	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Tensile Strength	IS 1608 (Part 1)
85	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Tensile Strength	ISO 6892-1
86	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Copper Materials, Alloys & Products	Yield Strength (0.2% Offset)	ASTM E8/E8M

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87	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	% Elongation	ASTM A370
88	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	% Elongation (After Fracture)	IS 1608 (Part 1)
89	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	% Elongation (After Fracture)	ISO 6892-1
90	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Brinell Hardness Test (10/3000)	ASTM E10
91	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Brinell hardness Test (HBW 10/3000)	IS 1500:1
92	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Brinell Hardness Test (HBW 10/3000)	ISO 6506:1
93	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Brinell Hardness Test (HBW 2.5/187.5)	IS 1500 (Part 1)
94	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Brinell Hardness Test (HBW 2.5/187.5)	ISO 6506:1
95	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV0.3)	ASTM E384
96	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV0.3)	IS 1501 (Part 1)
97	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV0.3)	ISO 6507-1
98	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV0.5)	ASTM E384
99	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV0.5)	IS 1501 (Part 1)
100	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV0.5)	ISO 6507-1

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101	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV1)	ASTM E384
102	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV1)	IS 1501 (Part 1)
103	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Micro Vickers Hardness (HV1)	ISO 6507-1
104	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Proof Strength (0.2%)	IS 1608 (Part 1)
105	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Proof Strength (0.2%)	ISO 6892-1
106	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Rockwell Hardness (HRBW)	ASTM E18
107	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Rockwell Hardness (HRBW)	IS 1586 (Part 1)
108	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Rockwell Hardness (HRBW)	ISO 6508-1
109	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Rockwell Hardness (HRC)	ASTM E18
110	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Rockwell Hardness (HRC)	IS 1586 (Part 1)
111	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Rockwell Hardness (HRC)	ISO 6508-1
112	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Tensile Strength	ASTM A370
113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Tensile Strength	IS 1608 (Part 1)
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Tensile Strength	ISO 6892-1

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115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV10)	ASTM E92
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV10)	IS 1501 (Part 1)
117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV10)	ISO 6507-1
118	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV30)	ASTM E92
119	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV30)	IS 1501 (Part 1)
120	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV30)	ISO 6507-1
121	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV5)	ASTM E92
122	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV5)	IS 1501 (Part 1)
123	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Vickers Hardness Test (HV5)	ISO 6507-1
124	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Material, Alloys & Products	Yield Strength (0.2% Offset)	ASTM A370
125	MECHANICAL-METALLOGRAPHY TEST	Ferrous Material, Alloys and Products (Case Hardened Steel)	Effective Case Depth by Hardness method	IS 6416
126	MECHANICAL-METALLOGRAPHY TEST	Ferrous Material, Alloys and Products (Case Hardened Steel)	Total Case Depth by Microscopic method	IS 6416
127	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials Alloys & Products (Carbon & Alloy Steel)	Micro Examination	ASM Metal Hand Book Volume 9
128	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials Alloys & Products (Grey Cast Iron & SG Iron)	Micro Examination for Graphite Flakes/Nodules Types & Size, Distribution Characteristics & Matrix Analysis	ASTM A247