National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : L & T SPECIAL STEELS AND HEAVY FORGINGS LABORATORY, HAZIRA MANUFACTURING COMPLEX, PO: BHATHA, SURAT, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 07/06/2023 to 06/06/2025 **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 steels, Alloy steels & Forgings	Aluminium	ASTM E415
2	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Aluminium	ASTM E415
3	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Aluminium	IS 8811
4	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Aluminium	IS 8811
5	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Antimony	ASTM E415
6	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Antimony	IS 8811
7	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Arsenic	ASTM E415
8	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Arsenic	IS 8811
9	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Boron	ASTM E415
10	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Boron	IS 8811
11	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Calcium	ASTM E415
12	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Calcium	IS 8811
13	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Carbon	ASTM E415
14	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Carbon	IS 8811
15	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Chromium	ASTM E415
16	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Chromium	IS 8811
17	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Cobalt	ASTM E415
18	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Cobalt	IS 8811

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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 steels, Alloy steels & Forgings	Copper	ASTM E415
20	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Copper	IS 8811
21	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Manganese	ASTM E415
22	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Manganese	IS 8811
23	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Molybdenum	ASTM E415
24	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Molybdenum	IS 8811
25	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Nickel	ASTM E415
26	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Nickel	IS 8811
27	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Niobium	ASTM E415
28	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Niobium	IS 8811
29	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Nitrogen	ASTM E415
30	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Nitrogen	IS 8811
31	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Phosphorus	ASTM E415
32	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Phosphorus	IS 8811
33	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Silicon	ASTM E415
34	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Silicon	IS 8811
35	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Sulfur	ASTM E415
36	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Sulfur	IS 8811
37	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Tantalum	ASTM E415

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38	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Tantalum	IS 8811
39	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Tin	ASTM E415
40	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Tin	IS 8811
41	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Titanium	ASTM E415
42	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Titanium	IS 8811
43	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Tungsten	ASTM E415
44	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Tungsten	IS 8811
45	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Vanadium	ASTM E415
46	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels & Forgings	Vanadium	IS 8811
47	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Aluminium	ASTM E1476
48	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Aluminium	ASTM E572
49	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Carbon	ASTM E1019
50	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Chromium	ASTM E1476
51	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Chromium	ASTM E572
52	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Cobalt	ASTM E1476
53	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Cobalt	ASTM E572
54	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Copper	ASTM E1476
55	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Copper	ASTM E572
56	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Hydrogen	ASTM E1019

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57	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Iron	ASTM E1476
58	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Iron	ASTM E572
59	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Manganese	ASTM E1476
60	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Manganese	ASTM E572
61	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Molybdenum	ASTM E1476
62	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Molybdenum	ASTM E572
63	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Nickel	ASTM E1476
64	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Nickel	ASTM E572
65	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Niobium	ASTM E1476
66	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Niobium	ASTM E572
67	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Nitrogen	ASTM E1019
68	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Oxygen	ASTM E1019
69	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Silicon	ASTM E1476
70	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Silicon	ASTM E572
71	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Sulfur	ASTM E1019
72	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Sulfur	ASTM E1476
73	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Sulfur	ASTM E572
74	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Tin	ASTM E1476
75	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Tin	ASTM E572

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76	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Titanium	ASTM E1476
77	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Titanium	ASTM E572
78	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Tungsten	ASTM E1476
79	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Tungsten	ASTM E572
80	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Vanadium	ASTM E1476
81	CHEMICAL- METALS & ALLOYS	Carbon steels, Alloy steels, Stainless Steels & Forgings	Vanadium	ASTM E572
82	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Aluminium	ASTM E1086
83	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Aluminium	IS 9879
84	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Antimony	ASTM E1086
85	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Antimony	IS 9879
86	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Arsenic	ASTM E1086
87	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Arsenic	IS 9879
88	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Boron	ASTM E1086
89	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Boron	IS 9879
90	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Calcium	ASTM E1086
91	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Calcium	IS 9879
92	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Carbon	ASTM E1086
93	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Carbon	IS 9879
94	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Chromium	ASTM E1086

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95	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Chromium	IS 9879
96	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Cobalt	ASTM E1086
97	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Cobalt	IS 9879
98	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Copper	ASTM E1086
99	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Copper	IS 9879
100	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Manganese	ASTM E1086
101	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Manganese	IS 9879
102	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Molybdenum	ASTM E1086
103	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Molybdenum	IS 9879
104	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Nickel	ASTM E1086
105	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Nickel	IS 9879
106	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Niobium	ASTM E1086
107	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Niobium	IS 9879
108	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Nitrogen	ASTM E1086
109	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Nitrogen	IS 9879
110	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Phosphorus	ASTM E1086
111	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Phosphorus	IS 9879
112	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Silicon	ASTM E1086
113	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Silicon	IS 9879

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114	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Sulfur	ASTM E1086
115	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Sulfur	IS 9879
116	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Tantalum	ASTM E1086
117	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Tantalum	IS 9879
118	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Tin	ASTM E1086
119	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Tin	IS 9879
120	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Titanium	ASTM E1086
121	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Titanium	IS 9879
122	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Tungsten	ASTM E1086
123	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Tungsten	IS 9879
124	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Vanadium	ASTM E1086
125	CHEMICAL- METALS & ALLOYS	Stainless Steels & Forgings.	Vanadium	IS 9879
126	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Room Temperature	ASME SA370
127	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Room Temperature	ISO 6892-1
128	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Room Temperature	ASME SA370
129	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength at Room Temperature	ASME SA370
130	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength at Room Temperature	ASTM A370

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131	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength at Room Temperature	ASTM E8/E8M
132	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength at Room Temperature	DIN EN ISO 6892-1
133	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength at Room Temperature	IS 1608-1
134	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength at Room Temperature	ISO 6892-1
135	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress / Yield Strength for All weld Tensile at Room Temperature	ASME Sec.IX
136	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress/Yield Strength at Elevated Temperature	ASTM E21
137	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress/Yield Strength at Elevated Temperature	DIN EN ISO 6892-2
138	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress/Yield Strength at Elevated Temperature	IS 1608-2
139	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	0.2% Proof Stress/Yield Strength at Elevated Temperature	ISO 6892-2
140	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Bend Testing	ASME SA370
141	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Bend Testing	ASTM A370
142	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Bend Testing	ASTM E190
143	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Bend Testing	ASTM E290
144	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Bend Testing	IS 1599

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145	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Brinell Hardness (Dia 2.5mm/187.5Kg)	ASME SA370
146	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Brinell Hardness (Dia 2.5mm/187.5Kg)	ASTM E10
147	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Brinell Hardness (Dia 2.5mm/187.5Kg)	IS 1500-1
148	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Brinell Hardness (Dia 2.5mm/187.5Kg)	ISO 6506-1
149	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Brinell Hardness (Dia 2.5mm/187.5Kg)	ASTM A370
150	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp. - 196° C)	ASTM A370
151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp. +100° C to -196° C)	ASME SA370
152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp. +100° C to -196° C)	ASTM A370
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp. +100° C to -196° C)	ISO 148-1
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp. +100° C to -196° C)	ISO 148-1
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp. 0° C)	ASTM E23
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact (Temp.: +100° C to -196° C)	ASTM E23
157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact test: %Shear	ASME SA370
158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact test: %Shear	ASTM A370

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159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact test: %Shear	ASTM E23
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact test: %Shear	ISO 148-1
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact: Lateral Expansion (mm)	ASME SA370
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact: Lateral Expansion (mm)	ASTM A370
163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact: Lateral Expansion (mm)	ISO 148-1
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Charpy Impact: Lateral Expansion (mm)	ASTM E23
165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Drop Weight Test-Nil Ductility Transition Temperature	ASTM E208
166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Elevated Temperature	IS 1608-2
167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Room Temperature	ASTM A370
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Room Temperature	ASTM E8/E8M
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Room Temperature	DIN EN ISO 6892-1
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Room Temperature	IS 1608-1
171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Elevated Temperature	ASTM E21
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Elevated Temperature	DIN EN ISO 6892-2

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173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Elongation at Elevated Temperature	ISO 6892-2
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV0.2	ASTM E384
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV0.2	IS 1501-1
176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV0.2	ISO 6507-1
177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV0.5	ASTM E384
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV0.5	IS 1501-1
179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV0.5	ISO 6507-1
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV1	ASTM E384
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV1	IS 1501-1
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Micro Vickers Hardness - HV1	ISO 6507-1
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Elevated Temperature	ASTM E21
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Elevated Temperature	DIN EN ISO 6892-2
185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Elevated Temperature	IS 1608-2
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Elevated Temperature	ISO 6892-2

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187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Room Temperature	ASTM A370
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Room Temperature	ASTM E8/E8M
189	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Room Temperature	DIN EN ISO 6892-1
190	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Room Temperature	IS 1608-1
191	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Reduction in area at Room Temperature	ISO 6892-1
192	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'B' scale	ASTM A370
193	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'B' scale	ASTM E18
194	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'B' scale	IS 1586-1
195	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'B' scale	ISO 6508-1
196	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'C' scale	ASTM A370
197	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'C' scale	ASTM E18
198	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'C' scale	IS 1586-1
199	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Rockwell Hardness in 'C' scale	ISO 6508-1
200	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Elevated Temperature	ASTM E21

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201	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Elevated Temperature	DIN EN ISO 6892-2
202	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Elevated Temperature	IS 1608-2
203	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Elevated Temperature	ISO 6892-2
204	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Room Temperature	ASME SA370
205	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Room Temperature	ASTM A370
206	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Room Temperature	ASTM E8/E8M
207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Room Temperature	DIN EN ISO 6892-1
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Room Temperature	IS 1608-1
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Tensile strength at Room Temperature	ISO 6892-1
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Vickers Hardness - HV10	ASTM E92
211	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Vickers Hardness - HV10	IS 1501-1
212	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Vickers Hardness - HV10	ISO 6507-1
213	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Vickers Hardness - HV5	ASTM E92
214	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Vickers Hardness - HV5	IS 1501-1

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215	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Vickers Hardness - HV5	ISO 6507-1
216	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials, Forgings & Welded items	Bend Test	ASME Sec.IX
217	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon steels, Alloy steels, Stainless Steels, Metallic materials, Forgings & Welded items	Tensile strength at Room Temperature	ASME Sec.IX
218	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Delta Ferrite Measurement by Feritscope	ASTM A800
219	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Grain Size	ASTM E112
220	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Grain Size	IS 4748
221	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Grain Size	ISO 643
222	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Inclusion Rating	ASTM E45
223	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Inclusion Rating	EN 10247
224	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Inclusion Rating	IS 4163
225	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Inclusion Rating	ISO 4967
226	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Macro Examination	ASTM E340
227	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Macro Examination	ASTM E381
228	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Macro Examination	IS 11371
229	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Microstructure	ASM Vol 9
230	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Microstructure	ASTM E3
231	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Microstructure	ASTM E407
232	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Microstructure	ASTM E562

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233	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Microstructure	IS 7739-1
234	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Microstructure	IS 7739-5
235	MECHANICAL-METALLOGRAPHY TEST	Carbon steels, Alloy steels, Stainless Steels, Metallic materials & Forgings	Sulfur Print Examination	ASTM E1180
236	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels & Forgings	Inter Granular Corrosion (IGC)	ASTM A262
237	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels & Forgings	Inter Granular Corrosion (IGC)	ISO 3651-2