

Global-Standard Testing with NABL Accreditation

At TCR Engineering, we take pride in our commitment to quality and global recognition. We are accredited under **NABL ISO/IEC 17025:2017** for our laboratories in **Mumbai** and **Bhubaneswar**, with complete scope and certification details available for your review. Additionally, our state-of-the-art TCR Advanced Lab in **Vadodara** is also NABL accredited.

With a growing pan-India presence and a new lab opening soon in Uttar Pradesh, TCR continues to expand its footprint while maintaining the highest standards.

As NABL is a signatory to ILAC (International Laboratory Accreditation Cooperation), all TCR test certificates are internationally accepted and trusted across the world.



National Accreditation Board for
Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

TCR ENGINEERING SERVICES PVT LTD

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

**"General Requirements for the Competence of Testing &
Calibration Laboratories"**

for its facilities at

VKB HOUSE, PLOT NO. EL 182, MIDC TTC, INDUSTRIAL AREA, ELECTRONIC ZONE MAHAPE NAVI
MUMBAI MAHARASHTRA, NAVI MUMBAI, , MAHARASHTRA, INDIA

in the field of

TESTING

Certificate Number: TC-6905

Issue Date: 03/03/2024

Valid Until: 02/03/2026

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: TCR ENGINEERING SERVICES PVT. LTD.

Signed for and on behalf of NABL



N. Venkateswaran
Chief Executive Officer



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

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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 Testing				
1	CHEMICAL- CORROSION TESTS	Metallic Material	Salt Spray Test	ISO 9227
2	CHEMICAL- CORROSION TESTS	Metallic Materials	Acetic Acid Salt Spray Test	IS 6910
3	CHEMICAL- CORROSION TESTS	Metallic Materials	Copper-Accelerated Acetic Acid-Salt Spray (Fog) CASS Test	ASTM B368
4	CHEMICAL- CORROSION TESTS	Metallic Materials	Salt Spray (Fog) Test	ASTM B117
5	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Bromine	IEC 62321 -3-1
6	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IEC 62321-3-1
7	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IS 16197 (Part 3, Sec 1)
8	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IEC 62321-3-1
9	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IS 16197 (Part 3, Sec 1)
10	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IEC 62321-3-1
11	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IS 16197 (Part 3, Sec 1)
12	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IEC 62321-3-1
13	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IS 16197 (Part 3, Sec 1)
14	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Bromine	IEC 62321 -3-1:



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15	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Cadmium	IEC 62321-3-1
16	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Cadmium	IS 16197 (Part 3, Sec 1)
17	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Chromium	IEC 62321-3-1
18	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Chromium	IS 16197 (Part 3, Sec 1)
19	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Lead	IEC 62321-3-1
20	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Lead	IS 16197 (Part 3, Sec 1)
21	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Mercury	IEC 62321-3-1
22	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Mercury	IS 16197 (Part 3, Sec 1)
23	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Bromine	IEC 62321 -3-1
24	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IEC 62321-3-1; 2013, IEC 62321-5
25	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IS 16197 (Part 3, Sec 1)/IS 16197 (Part 5)
26	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IEC 62321 -3-1
27	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IS 16197 (Part 3, Sec 1)/ IS 16197 (Part 5):
28	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IEC 62321-3-1, IEC 62321-5



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29	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IS 16197 (Part 3, Sec 1):2014/ IS 16197 (Part 5):2014
30	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IEC 62321-3-1; 2013, IEC 62321-4
31	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IS 16197 (Part 3, Sec 1):2014, / IS 16197 (Part 4):2014
32	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Bromine	IEC 62321 -3-1:
33	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IEC 62321-3-1
34	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IS 16197 (Part 3: Sec 1)
35	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IEC 62321-3-1
36	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IS 16197 (Part 3: Sec 1)
37	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Lead	IEC 62321-3-1
38	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Lead	IS 16197 (Part 3: Sec 1)
39	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Mercury	IEC 62321-3-1
40	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Mercury	IS 16197 (Part 3: Sec 1)
41	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Bromine	IEC 62321 -3-1
42	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Cadmium	IS 16197 (Part 3, Sec 1)



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43	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Chromium	IS 16197 (Part 3, Sec 1)
44	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Lead	IS 16197 (Part 3, Sec 1)
45	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Mercury	IS 16197 (Part 3, Sec 1)
46	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Cadmium	IEC 62321-3-1
47	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Chromium	IEC 62321-3-1
48	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Lead	IEC 62321-3-1
49	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Mercury	IEC 62321-3-1
50	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Bromine	IEC 62321-3-1
51	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IEC 62321 -3-1
52	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IS 16197 (Part 3: Sec 1)
53	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IEC 62321-3-1
54	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IS 16197 (Part 3, Sec 1)
55	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Lead	IEC 62321-3-1
56	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Lead	IS 16197 (Part 3-Sec 1)



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57	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Mercury	IEC 62321-3-1
58	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Mercury	IS 16197 (Part 3, Sec 1)
59	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Boron	TCR-TM-ICP-03-AI Issue No. 2
60	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cadmium	TCR-TM-AAS-03-AI Issue No. 2
61	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cadmium	TCR-TM-ICP-03-AI Issue No. 2
62	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	TCR-TM-AAS-03-AI Issue No. 2
63	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	TCR-TM-ICP-03-AI Issue No. 2
64	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	ASTM E1251
65	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	TCR-TM-AAS-03-AI Issue No. 2
66	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	TCR-TM-ICP-03-AI Issue No. 2
67	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Iron	TCR-TM-AAS-03-AI Issue No. 2
68	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	ASTM E1251
69	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	TCR-TM-AAS-03-AI Issue No. 2
70	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	TCR-TM-ICP-03-AI Issue No. 2
71	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	TCR-TM-AAS-03-AI Issue No. 2
72	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	TCR-TM-ICP-03-AI Issue No. 2
73	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	TCR-TM-AAS-03-AI Issue No. 2
74	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	TCR-TM-ICP-03-AI Issue No. 2



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75	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	TCR-TM-AAS-03-AI Issue No. 2
76	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	TCR-TM-ICP-03-AI Issue No. 2
77	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	IS 504 (Part 1)
78	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Tin	ASTM E1251
79	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	TCR-TM-AAS-03-AI Issue No. 2
80	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	TCR-TM-ICP-03-AI Issue No. 2
81	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Vanadium	TCR-TM-AAS-03-AI Issue No. 2
82	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	ASTM E1251
83	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	TCR-TM-AAS-03-AI Issue No. 2
84	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	TCR-TM-ICP-03-AI Issue No. 2
85	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zirconium	TCR-TM-ICP-03-AI Issue No. 2
86	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Iron	TCR-TM-ICP-03-AI Issue No. 2
87	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Tin	TCR-TM-AAS-03-AI Issue No. 2
88	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Tin	TCR-TM-ICP-03-AI Issue No. 2
89	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Vanadium	TCR-TM-ICP-03-AI Issue No. 2
90	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Antimony	ASTM E1251
91	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Chromium	ASTM E1251
92	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Iron	ASTM E1251
93	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Magnesium	ASTM E1251



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94	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Manganese	ASTM E1251
95	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Nickel	ASTM E1251
96	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Silicon	ASTM E1251
97	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Titanium	ASTM E1251
98	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Zirconium	ASTM E1251
99	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Zirconium	TCR-TM-AAS-03-AI Issue No. 2
100	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Aluminium	ASTM E415
101	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Aluminium	IS 8811
102	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Antimony	ASTM E415
103	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Boron	ASTM E415
104	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Boron	IS 8811
105	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Carbon	ASTM E415
106	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Carbon	IS 8811
107	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Chromium	ASTM E415
108	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Chromium	IS 8811
109	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Cobalt	ASTM E415
110	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Cobalt	IS 8811
111	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Copper	ASTM E415
112	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Copper	IS 8811



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113	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Lead	ASTM E415
114	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Manganese	ASTM E415
115	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Manganese	IS 8811
116	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Molybdenum	ASTM E415
117	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Molybdenum	IS 8811
118	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nickel	ASTM E415
119	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nickel	IS 8811
120	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Niobium	ASTM E415
121	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Niobium	IS 8811
122	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nitrogen	ASTM E415
123	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Phosphorus	ASTM E415
124	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Phosphorus	IS 8811
125	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Silicon	ASTM E415
126	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Silicon	IS 8811
127	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Sulfur	ASTM E415
128	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Sulfur	IS 8811
129	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tantalum	TCR/TM-03-OES Issue No. 3
130	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tin	ASTM E415
131	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tin	IS 8811



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132	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Titanium	ASTM E415
133	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Titanium	IS 8811
134	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tungsten	TCR/TM-03-OES Issue No. 3
135	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Vanadium	ASTM E415
136	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Vanadium	IS 8811
137	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Zirconium	ASTM E415
138	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Zirconium	IS 8811
139	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Aluminium	ASTM E350
140	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Chromium	ASTM E350
141	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Copper	ASTM E350
142	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Manganese	ASTM E350
143	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Nickel	ASTM E350
144	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Phosphorus	ASTM E350
145	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Silicon	ASTM E350
146	CHEMICAL- METALS & ALLOYS	Carbon Steel, Low-Alloy Steel, Silicon Electrical Steel, Ingot Iron, and Wrought Iron	Vanadium	ASTM E350
147	CHEMICAL- METALS & ALLOYS	Cast Iron	Carbon	ASTM E1999
148	CHEMICAL- METALS & ALLOYS	Cast Iron	Chromium	ASTM E1999
149	CHEMICAL- METALS & ALLOYS	Cast Iron	Copper	ASTM E1999
150	CHEMICAL- METALS & ALLOYS	Cast Iron	Manganese	ASTM E1999



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151	CHEMICAL- METALS & ALLOYS	Cast Iron	Molybdenum	ASTM E1999
152	CHEMICAL- METALS & ALLOYS	Cast Iron	Nickel	ASTM E1999
153	CHEMICAL- METALS & ALLOYS	Cast Iron	Phosphorus	ASTM E1999
154	CHEMICAL- METALS & ALLOYS	Cast Iron	Silicon	ASTM E1999
155	CHEMICAL- METALS & ALLOYS	Cast Iron	Sulfur	ASTM E1999
156	CHEMICAL- METALS & ALLOYS	Cast Iron	Tin	ASTM E1999
157	CHEMICAL- METALS & ALLOYS	Cast Iron	Titanium	ASTM E1999
158	CHEMICAL- METALS & ALLOYS	Cast Iron	Vanadium	ASTM E1999
159	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Aluminium	BS EN 15079
160	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Aluminum	TCR-TM-AAS-02-Cu Issue No. 2
161	CHEMICAL- METALS & ALLOYS	Copper & Its alloys	Aluminum	TCR-TM-ICP-02-Cu Issue No. 2
162	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	BS EN 15079
163	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	TCR-TM-AAS-02-Cu Issue No. 2
164	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	TCR-TM-ICP-02-Cu Issue No. 2
165	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	BS EN 15079
166	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	TCR-TM-ICP-02-Cu Issue No. 2
167	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	BS EN 15079
168	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	TCR-TM-AAS-02-Cu Issue No. 2
169	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	TCR-TM-ICP-02-Cu Issue No. 2



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170	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	BS EN 15079
171	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	TCR-TM-AAS-02-Cu Issue No. 2
172	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	BS EN 15079
173	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	TCR-TM-AAS-02-Cu Issue No. 2
174	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	TCR-TM-ICP-02-Cu Issue No. 2
175	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Carbon	ASTM E1019
176	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	BS EN 15079
177	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	TCR-TM-AAS-02-Cu Issue No. 2
178	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	TCR-TM-ICP-02-Cu Issue No. 2
179	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	BS EN 15079
180	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	TCR-TM-AAS-02-Cu Issue No. 2
181	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	TCR-TM-ICP-02-Cu Issue No. 2
182	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Copper	IS 3685
183	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Copper	IS 4027 (Part 1)
184	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Copper	IS 440
185	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	BS EN 15079
186	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	IS 3685
187	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	TCR-TM-AAS-02-Cu Issue No. 2
188	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	TCR-TM-ICP-02-Cu Issue No. 2



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189	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	ASTM E478
190	CHEMICAL- METALS & ALLOYS	Copper & Its Alloys	Lead	BS EN 15079
191	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	IS 3685
192	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	IS 4027 (Part 1)
193	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	TCR-TM-AAS-02-Cu Issue No. 2
194	CHEMICAL- METALS & ALLOYS	Copper & Its alloys	Lead	TCR-TM-ICP-02-Cu Issue No. 2
195	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	BS EN 15079
196	CHEMICAL- METALS & ALLOYS	copper & its alloys	Manganese	TCR-TM-AAS-02-Cu Issue No. 2
197	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	TCR-TM-ICP-02-Cu Issue No. 2
198	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Mercury	TCR-TM-ICP-02-Cu Issue No. 2
199	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	ASTM E478
200	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	BS EN 15079
201	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	TCR-TM-AAS-02-Cu Issue No. 2
202	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	TCR-TM-ICP-02-Cu Issue No. 2
203	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorus	BS EN 15079
204	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorus	IS 4027 (Part 3)
205	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorus	IS 3685
206	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Selenium	TCR-TM-AAS-02-Cu Issue No. 2
207	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Selenium	TCR-TM-ICP-02-Cu Issue No. 2



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208	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	BS EN 15079
209	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	IS 4027 (Part 10)
210	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	BS EN 15079
211	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	TCR-TM-AAS-02-Cu Issue No. 2
212	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	ASTM E1019
213	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	BS EN 15079
214	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tellurium	TCR-TM-AAS-02-Cu Issue No. 2
215	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tellurium	TCR-TM-ICP-02-Cu Issue No. 2
216	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	BS EN 15079
217	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	TCR-TM-AAS-02-Cu Issue No. 2
218	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	TCR-TM-ICP-02-Cu Issue No. 2
219	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	ASTM E478
220	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	BS EN 15079
221	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	TCR-TM-AAS-02-Cu Issue No. 2
222	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	TCR-TM-ICP-02-Cu Issue No. 2
223	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Chromium	ASTM E1476(Qualitative)
224	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Cobalt	ASTM E1476 (Qualitative)
225	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Iron	ASTM E1476(Qualitative)
226	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tin	ASTM E1476(Qualitative)



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227	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Titanium	ASTM E1476(Qualitative)
228	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tungsten	ASTM E1476(Qualitative)
229	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Vanadium	ASTM E1476(Qualitative)
230	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Zinc	ASTM E1476(Qualitative)
231	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Copper	ASTM E1476(Qualitative)
232	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Lead	ASTM E1476(Qualitative)
233	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Manganese	ASTM E1476 (Qualitative)
234	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Molybdenum	ASTM E1476 (Qualitative)
235	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Nickel	ASTM E1476(Qualitative)
236	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Niobium	ASTM E1476(Qualitative)
237	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Aluminum	TCR-TM-AAS-01-Fe Issue No. 2
238	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Aluminum	TCR-TM-ICP-01-Fe Issue No. 2
239	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Arsenic	TCR-TM-ICP-01-Fe Issue No. 2
240	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Boron	TCR-TM-ICP-01-Fe Issue No. 2
241	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Chromium	TCR-TM-AAS-01-Fe Issue No. 2
242	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Chromium	TCR-TM-ICP-01-Fe Issue No. 2
243	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Cobalt	TCR-TM-AAS-01-Fe Issue No.2
244	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Cobalt	TCR-TM-ICP-01-Fe Issue No. 2
245	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Copper	TCR-TM-AAS-01-Fe Issue No. 2



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246	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Copper	TCR-TM-ICP-01-Fe Issue No. 2
247	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Lead	TCR-TM-AAS-01-Fe Issue No. 2
248	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Lead	TCR-TM-ICP-01-Fe Issue No. 2
249	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Magesium	TCR-TM-ICP-01-Fe Issue No. 2
250	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Magnesium	TCR-TM-AAS-01-Fe Issue No. 2
251	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Manganese	TCR-TM-AAS-01-Fe Issue No. 2
252	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Manganese	TCR-TM-ICP-01-Fe Issue No. 2
253	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Molybdenum	TCR-TM-AAS-01-Fe Issue No. 2
254	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Molybdenum	TCR-TM-ICP-01-Fe Issue No. 2
255	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Nickel	TCR-TM-AAS-01-Fe Issue No. 2
256	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Nickel	TCR-TM-ICP-01-Fe Issue No.2
257	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Niobium	TCR-TM-ICP-01-Fe Issue No. 2
258	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tantalum	TCR-TM-ICP-01-Fe Issue No. 2
259	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tin	TCR-TM-AAS-01-Fe Issue No. 2
260	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tin	TCR-TM-ICP-01-Fe Issue No. 2
261	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Titanium	TCR-TM-AAS-01-Fe Issue No. 2
262	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Titanium	TCR-TM-ICP-01-Fe Issue No. 2
263	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tungsten	TCR-TM-ICP-01-Fe Issue No. 2
264	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Vanadium	TCR-TM-AAS-01-Fe Issue No. 2



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265	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Vanadium	TCR-TM-ICP-01-Fe Issue No. 2
266	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Zirconium	TCR-TM-AAS-01-Fe Issue No. 2
267	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Zirconium	TCR-TM-ICP-01-Fe Issue No. 2
268	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Carbon	ASTM E1019
269	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Chromium	TCR/TM-06-(Cr-WET) Issue No. 2
270	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Manganese	IS 228 (Part 02)
271	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Nickel	IS 228 (Part 05)
272	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Nitrogen	IS 228 (Part 19)
273	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Phosphorus	IS 228 (Part 03)
274	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Silicon	IS 228 (Part 08)
275	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel, tool steel, cast iron & Other Similar Chromium-Nickel-Iron Alloys)	Sulfur	ASTM E1019
276	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminium	TCR/TM-03-OES Issue No. 3
277	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E3047
278	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E354
279	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	TCR-TM-AAS-04-Ni Issue No. 2
280	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	TCR-TM-ICP-04-Ni Issue No. 2



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281	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	ASTM E3047
282	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	TCR/TM-03-OES Issue No. 3
283	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	TCR-TM-ICP-04-Ni Issue No. 2
284	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E1019
285	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E3047
286	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	TCR/TM-03-OES Issue No. 3
287	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E3047
288	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E354
289	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	TCR/TM-03-OES Issue No. 3
290	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	TCR-TM-AAS-04-Ni Issue No. 2
291	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	TCR-TM-ICP-04-Ni Issue No. 2
292	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	ASTM E3047
293	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	TCR/TM-03-OES Issue No. 3
294	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	TCR-TM-AAS-04-Ni Issue No. 2
295	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	TCR-TM-ICP-04-Ni Issue No. 2
296	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E3047
297	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E354
298	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	TCR/TM-03-OES Issue No. 3
299	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	TCR-TM-AAS-04-Ni Issue No. 2



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300	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	TCR-TM-ICP-04-Ni Issue No. 2
301	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	ASTM E3047
302	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	TCR/TM-03-OES Issue No. 3
303	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	TCR-TM-AAS-04-Ni Issue No. 2
304	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	TCR-TM-ICP-04-Ni Issue No. 2
305	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Lead	TCR-TM-AAS-04-Ni Issue No. 2
306	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Lead	TCR-TM-ICP-04-Ni Issue No. 2
307	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	ASTM E3047
308	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	TCR/TM-03-OES Issue No. 3
309	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	TCR-TM-AAS-04-Ni Issue No. 2
310	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	TCR-TM-ICP-04-Ni Issue No. 2
311	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	ASTM E3047
312	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	TCR/TM-03-OES Issue No. 3
313	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	TCR-TM-AAS-04-Ni Issue No. 2
314	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	TCR-TM-ICP-04-Ni Issue No. 2
315	CHEMICAL- METALS & ALLOYS	Nickel & Its alloys	Nickel	ASTM E354
316	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	ASTM E3047
317	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	TCR/TM-03-OES Issue No. 3
318	CHEMICAL- METALS & ALLOYS	Nickel & Its Alloys	Niobium	TCR-TM-ICP-04-Ni, Issue No. 2



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319	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Nitrogen	TCR-TM-04-N2 Issue No. 3
320	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorus	ASTM E3047
321	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorus	TCR/TM-03-OES Issue No. 3
322	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	ASTM E3047
323	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	TCR/TM-03-OES Issue No. 3
324	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E1019
325	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E3047
326	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	TCR/TM-03-OES Issue No. 3
327	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	ASTM E3047
328	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	TCR/TM-03-OES Issue No. 3
329	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	TCR-TM-ICP-04-Ni Issue No. 2
330	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	ASTM E3047
331	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	TCR/TM-03-OES Issue No. 3
332	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	TCR-TM-AAS-04-Ni Issue No. 2
333	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	TCR-TM-ICP-04-Ni Issue No. 2
334	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	ASTM E3047
335	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	TCR/TM-03-OES Issue No. 3
336	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	TCR-TM-ICP-04-Ni Issue No. 2
337	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	ASTM E3047



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338	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	TCR/TM-03-OES Issue No. 3
339	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	TCR-TM-AAS-04-Ni Issue No. 2
340	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminium	TCR/TM-03-OES Issue No. 3
341	CHEMICAL- METALS & ALLOYS	Stainless Steel	Antimony	TCR/TM-03-OES Issue No. 3
342	CHEMICAL- METALS & ALLOYS	Stainless Steel	Boron	TCR/TM-03-OES Issue No. 3
343	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
344	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 9879
345	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	TCR/TM-03-OES Issue No. 3
346	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E1086
347	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 9879
348	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	TCR/TM-03-OES Issue No. 3
349	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cobalt	TCR/TM-03-OES Issue No. 3
350	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E1086
351	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 9879
352	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	TCR/TM-03-OES Issue No. 3
353	CHEMICAL- METALS & ALLOYS	Stainless Steel	Lead	TCR/TM-03-OES Issue No. 3
354	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086
355	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 9879
356	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	TCR/TM-03-OES Issue No. 3



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357	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E1086
358	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 9879
359	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	TCR/TM-03-OES Issue No. 3
360	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E1086
361	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 9879
362	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	TCR/TM-03-OES Issue No. 3
363	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium	TCR/TM-03-OES Issue No. 3
364	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nitrogen	TCR/TM-03-OES Issue No. 3
365	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	ASTM E1086
366	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	IS 9879
367	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	TCR/TM-03-OES Issue No. 3
368	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E1086
369	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 9879
370	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	TCR/TM-03-OES Issue No. 3
371	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	ASTM E1086
372	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	IS 9879
373	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	TCR/TM-03-OES Issue No. 3
374	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tantalum	TCR/TM-03-OES Issue No. 3
375	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tin	TCR/TM-03-OES Issue No. 3



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376	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium	TCR/TM-03-OES Issue No. 3
377	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tungsten	TCR/TM-03-OES Issue No. 3
378	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	TCR/TM-03-OES Issue No. 3
379	CHEMICAL- METALS & ALLOYS	Stainless, Heat-Resisting, Maraging, and Other Similar Chromium-Nickel-Iron Alloys	Chromium	ASTM E353
380	CHEMICAL- METALS & ALLOYS	Stainless, Heat-Resisting, Maraging, and Other Similar Chromium-Nickel-Iron Alloys	Nickel	ASTM E353
381	CHEMICAL- METALS & ALLOYS	Stainless, Heat-Resisting, Maraging, and Other Similar Chromium-Nickel-Iron Alloys	Phosphorus	ASTM E353
382	CHEMICAL- METALS & ALLOYS	Stainless, Heat-Resisting, Maraging, and Other Similar Chromium-Nickel-Iron Alloys	Silicon	ASTM E353
383	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Aluminium	ASTM E2994
384	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Carbon	ASTM E2994
385	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Iron	ASTM E2994
386	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Silicon	ASTM E2994
387	CHEMICAL- METALS & ALLOYS	Titanium & Titanium Alloys	Vanadium	ASTM E2994
388	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	TCR/TM-03-OES Issue No. 3
389	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	TCR/TM-03-OES Issue No. 3
390	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt	TCR/TM-03-OES Issue No. 3
391	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	TCR/TM-03-OES Issue No. 3
392	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	TCR/TM-03-OES Issue No. 3
393	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	TCR/TM-03-OES Issue No. 3
394	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	TCR/TM-03-OES Issue No. 3



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395	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorus	TCR/TM-03-OES Issue No. 3
396	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	TCR/TM-03-OES Issue No. 3
397	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulfur	TCR/TM-03-OES Issue No. 3
398	CHEMICAL- METALS & ALLOYS	Tool Steel	Titanium	TCR/TM-03-OES Issue No. 3
399	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten	TCR/TM-03-OES Issue No. 3
400	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium	TCR/TM-03-OES Issue No. 3
401	CHEMICAL- METALS & ALLOYS	Zinc and Zinc Alloys	Aluminium	ASTM E536
402	CHEMICAL- METALS & ALLOYS	Zinc and Zinc Alloys	Cadmium	ASTM E536
403	CHEMICAL- METALS & ALLOYS	Zinc and Zinc Alloys	Copper	ASTM E536
404	CHEMICAL- METALS & ALLOYS	Zinc and Zinc Alloys	Iron	ASTM E536
405	CHEMICAL- METALS & ALLOYS	Zinc and Zinc Alloys	Lead	ASTM E536
406	CHEMICAL- METALS & ALLOYS	Zinc and Zinc Alloys	Magnesium	ASTM E536
407	MECHANICAL- BUILDINGS MATERIALS	Burnt Clay Building Bricks	24 Hours water Absorption	IS 3495 (Part 2)
408	MECHANICAL- BUILDINGS MATERIALS	Burnt Clay Building Bricks	Compressive Strength	IS 3495 (Part 1)
409	MECHANICAL- BUILDINGS MATERIALS	Burnt Clay Building Bricks	Dimensions	IS 1077
410	MECHANICAL- BUILDINGS MATERIALS	Burnt Clay Building Bricks	Dimensions	IS 1077
411	MECHANICAL- BUILDINGS MATERIALS	Burnt Clay Building Bricks	Dimensions	IS 1077
412	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	10% Fine Value	IS 2386 (Part4)
413	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Bulk Density (Loose and Rodded)	IS 2386 (Part3)



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414	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Crushing Value	IS 2386 (Part4)
415	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Elongation Index	IS 2386 (Part1)
416	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Flakiness Index	IS 2386 (Part1)
417	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Impact Value	IS 2386 (Part4)
418	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Sieve Analysis (20 mm sieve)	IS 2386 (Part1)
419	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Sieve Analysis (4.75mm sieve)	IS 2386 (Part1)
420	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Specific Gravity	IS 2386 (Part3)
421	MECHANICAL- BUILDINGS MATERIALS	Coarse Aggregate	Water Absorption	IS 2386 (Part3)
422	MECHANICAL- BUILDINGS MATERIALS	Fine Aggregate	Bulk Density (Loose and Rodded)	IS 2386 (Part3)
423	MECHANICAL- BUILDINGS MATERIALS	Fine Aggregate	Sieve Analysis (4.75 mm sieve)	IS 2386 (Part1)
424	MECHANICAL- BUILDINGS MATERIALS	Fine Aggregate	Specific Gravity	IS 2386 (Part3)
425	MECHANICAL- BUILDINGS MATERIALS	Fine Aggregate	Water Absorption	IS 2386 (Part3)
426	MECHANICAL- BUILDINGS MATERIALS	Hardened Cement Concrete	Compressive Strength - Cores	IS 516 (Part 4)
427	MECHANICAL- BUILDINGS MATERIALS	Hardened Cement Concrete	Compressive Strength - Cubes	IS 516 (Part 1/Sec 1)
428	MECHANICAL- BUILDINGS MATERIALS	Hardened Cement Concrete	Density	IS 516 (Part 2/Sec 1)
429	MECHANICAL- BUILDINGS MATERIALS	Hardened Cement Concrete	Flexural Strength - Beams	IS 516 (Part 1/Sec 1)
430	MECHANICAL- BUILDINGS MATERIALS	Pulverized fuel Ash,	Particles Retained on 45 micron IS Sieve (Wet Sieving)	IS 1727
431	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloys	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	ASTM B645



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432	MECHANICAL-MECHANICAL PROPERTIES OF METALS	"Threaded fasteners, washers, direct tension indicators, and rivets."	Proof Load	ASTM F606
433	MECHANICAL-MECHANICAL PROPERTIES OF METALS	"Threaded fasteners, washers, direct tension indicators, and rivets."	Tensile test	ASTM F606
434	MECHANICAL-MECHANICAL PROPERTIES OF METALS	"Threaded fasteners, washers, direct tension indicators, and rivets."	Wedge Tensile test	ASTM F606
435	MECHANICAL-MECHANICAL PROPERTIES OF METALS	"Welded Rails (Aluminothermic welding of rails)"	Fatigue Test	BS EN 14730-1
436	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) % Elongation	BS EN 10002 (Part 5)
437	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) % Elongation	ASTM E21
438	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) % Elongation	ISO 6892 (Part 2)
439	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) % Reduction in area	ASTM E21
440	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) % Reduction in area	BS EN 10002 (Part 5)
441	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) % Reduction in area	ISO 6892 (Part 2)
442	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) 0.2% Yield Stress	ASTM E21
443	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) 0.2% Yield Stress	BS EN 10002 (Part 5)
444	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) 0.5% Extension Under Load (EUL)	ASTM E21



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445	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) 0.5% Extension Under Load (EUL)	BS EN 10002 (Part 5)
446	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) 1.0% Proof Stress	ASTM E21
447	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) 1.0% Proof Stress	BS EN 10002 (Part 5)
448	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) Ultimate Tensile Strength	ASTM E21
449	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) Ultimate Tensile Strength	BS EN 10002 (Part 5)
450	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminum and Aluminum Alloy Products	Elevated Temperature Tensile Test. (50 deg. C to 300 deg. C) Ultimate Tensile Strength	ISO 6892 (Part 2)
451	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel	Flaring Test	IS 2335
452	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel	Proof Load Test (Nuts)	IS 1367 (Part 6)
453	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel	Running performance test	IS 814
454	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steel and alloy steel (Bolts, screws and studs)	% Elongation	ISO 898 (Part 1)
455	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon steel and alloy steel (Bolts, screws and studs)	Ultimate Tensile Strength	ISO 898 (Part 1)
456	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Carbon Steel and Bolts, Screws and Studs	Proof Load Test (Bolts, Studs & Screws)	IS 1367 (Part 3)
457	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Cast Aluminum- and Magnesium-Alloy Products	0.2% Yield Stress	ASTM B557



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458	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Cast Aluminum- and Magnesium-Alloy Products	0.5% Extension Under Load (EUL)	ASTM B557
459	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Cast Aluminum- and Magnesium-Alloy Products	1.0% Proof Stress	ASTM B557
460	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Copper and copper alloy seamless and welded pipe and tube	Flattening Test	ASTM B968
461	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Copper and copper alloys seamless condenser tubes	Flattening Test	ASTM B111
462	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Copper tubes	Pneumatic Pressure Test (3.18 mm to 60.33 mm OD)	IS 2501
463	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Copper tubes	Flaring Test	IS 2501
464	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Copper tubes	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	IS 2501
465	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Covered electrode	Diffusible hydrogen content (mercury method)	IS 11802
466	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Electrode Remelted Steel Bars and Billets	Macro etch Test	ASTM A604/A604M
467	MECHANICAL- MECHANICAL PROPERTIES OF METALS	ERW carbon steel pipes	Flattening Test	IS 3589
468	MECHANICAL- MECHANICAL PROPERTIES OF METALS	ERW carbon steel pipes	Flattening Test	IS 3589
469	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Nuts)	ISO 898 (Part 2)
470	MECHANICAL- MECHANICAL PROPERTIES OF METALS	FastenersCarbon steel and alloy steel (Bolts, screws and studs)	Proof Load Test (Bolts, Studs & Screws)	ISO 898 (Part 1)
471	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Low and Medium alloy Steel covered electrodes	Moisture Content Test	IS 1395



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472	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Mechanical Splices for Steel Reinforcing Bars	Axial Force Fatigue Test	ASTM A1034/A1034M
473	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Mechanical Splices for Steel Reinforcing Bars	Cyclic Tensile Test	ASTM A1034/A1034M
474	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Mechanical Splices for Steel Reinforcing Bars	High Cycle Fatigue Test	ASTM A1034/A1034M
475	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Mechanical Splices for Steel Reinforcing Bars	Slip Test	ASTM A1034/A1034M
476	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Mechanical Splices for Steel Reinforcing Bars	Static Tensile Test b) %Elongation at Max. Force	ASTM A1034 / A1034M
477	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Mechanical Splices for Steel Reinforcing Bars	Static Tensile Test a) Ultimate Tensile Strength (UTS)	ASTM A1034 / A1034M
478	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test	IS 2328
479	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	AWS B4.0
480	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	AWS B4.0
481	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Fillet Weld Break Tests	AWS B4.0
482	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ASTM E1820
483	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ASTM E1820
484	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Fracture Toughness Test b) Crack-Tip Opening Displacement (CTOD)	ASTM E1820
485	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Fracture Toughness Test b) Crack-Tip Opening Displacement (CTOD)	ASTM E1820



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486	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Fracture Toughness Test b) Crack-Tip Opening Displacement (CTOD)	ASTM E1820
487	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Izod Impact Test	BS 131-1
488	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Izod Impact Test	BS 131-1
489	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Izod Impact Test	BS 131-1
490	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Nick-Break Test	AWS B4.0
491	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test	AWS B4.0
492	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Stress Rupture Test a) % Elongation	ASTM E139
493	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	ASTM E8/E8M
494	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	% Elongation	ASTM E8/E8M
495	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	IS 1608 (Part 1)
496	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ISO 6892-1
497	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E290
498	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	BS EN 910
499	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ISO 5173



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500	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
501	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
502	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
503	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
504	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
505	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
506	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 2)
507	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 2)
508	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 2)
509	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
510	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
511	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
512	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep Rupture Test b) % Elongation	ISO 204
513	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep Rupture Test b) % Elongation	ISO 204



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514	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep test / Creep Rupture test a) Creep rate	ASTM E139
515	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep test / Creep Rupture test a) Creep rate	ASTM E139
516	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep test / Creep Rupture test b) % Elongation	ASTM E139
517	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep test / Creep Rupture test b) % Elongation	ASTM E139
518	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) % Elongation	BS EN 10002 (Part 5)
519	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) % Elongation	ASTM E21
520	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) % Reduction in area	ASTM E21
521	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	BS EN 10002 (Part 5)
522	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flaring Test	ASTM B153
523	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flattening Test	ASTM B111
524	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flattening Test	ASTM B968
525	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flattening Test	IS 2328
526	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ASTM E1290
527	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ASTM E1290



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528	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 7448 (Part 1)
529	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 7448 (Part 2)
530	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 7448 (Part 4)
531	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 7448 (Part 4)
532	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 8571
533	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 8571
534	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	BS 8571
535	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ISO 12135
536	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ISO 12135
537	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ISO 15653
538	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ASTM E647
539	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ASTM E647
540	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ISO 12108
541	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ISO 12108



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542	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ISO 12108
543	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ASTM E399
544	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	BS 7448 (Part 3)
545	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ISO 12737
546	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ASTM E399
547	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	BS 7448 (Part 3)
548	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	BS 7448 (Part 3)
549	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ISO 12737
550	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ASTM E399
551	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ASTM E1820
552	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Crack-Tip Opening Displacement (CTOD)	ASTM E1820
553	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Crack-Tip Opening Displacement (CTOD)	BS 7448 (Part 3)
554	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) J- integral (J _{Ic})	BS 8571
555	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) J- integral (J _{Ic})	BS 8571



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556	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) J- integral (J _{IC})	BS 8571
557	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	BS 7448 (Part 1)
558	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	BS 7448 (Part 4)
559	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	BS 7448 (Part 4)
560	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	ISO 12135
561	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	BS 7448 (Part 1)
562	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	BS 7448 (Part 2)
563	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	BS 7448 (Part 4)
564	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	ISO 12135
565	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	ISO 15653
566	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (J _{IC})	ASTM E1820
567	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (J _{IC})	BS 7448 (Part 1)
568	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (J _{IC})	BS 7448 (Part 2)
569	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (J _{IC})	BS 7448 (Part 3)



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570	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (Jlc)	BS 7448 (Part 4)
571	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (Jlc)	ISO 12135
572	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (Jlc)	ISO 15653
573	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (Jlc)	BS 7448 (Part 1)
574	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (Jlc)	BS 7448 (Part 3)
575	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrogen Embrittlement Susceptibility Test	ASTM B577
576	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrogen Embrittlement Susceptibility Test	IS 6243
577	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrogen Embrittlement Test	ASTM F519
578	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	ASTM E23
579	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	ASTM E23
580	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	IS 1598
581	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ASTM E340
582	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ISO 17639
583	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leak Path	ASME BPVC.IX



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584	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leak Path	ASME Section VIII
585	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	API 1104
586	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	ASME BPVC.IX
587	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	ASME Section VIII
588	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	AWS D 1.1
589	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Throat Length	ASME BPVC.IX
590	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Throat Length	ASME Section VIII
591	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Throat Length	AWS D 1.1
592	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Pneumatic Pressure Test (3.18 mm to 60.33 mm OD)	ASTM B111
593	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Pneumatic Pressure Test (3.18 mm to 60.33 mm OD)	ASTM B75
594	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
595	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
596	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 1)
597	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 1)



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598	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 1)
599	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 1)
600	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Strain Controlled Fatigue Test	ISO 12106
601	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Stress Rupture Test a) % Elongation	ASTM E139
602	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Stress Rupture Test b) % Reduction in area	ASTM E139
603	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Stress Rupture Test b) % Reduction in area	ASTM E139
604	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Time-for-Rupture Notch Tension Tests a) %Elongation	ASTM E292
605	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Time-for-Rupture Notch Tension Tests b) % Reduction in area	ASTM E292
606	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
607	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
608	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
609	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
610	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	AWS B4.0
611	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	AWS B4.0



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612	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	BS EN 1043 (Part 1)
613	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	BS EN 1043 (Part 1)
614	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
615	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
616	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
617	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
618	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
619	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
620	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 9015 (Part 1)
621	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 9015 (Part 1)
622	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	AWS B4.0
623	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
624	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
625	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384



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626	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
627	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
628	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
629	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	AWS B4.0
630	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	AWS B4.0
631	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	AWS B4.0
632	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
633	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
634	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
635	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
636	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
637	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
638	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
639	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)



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640	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
641	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
642	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
643	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
644	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
645	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
646	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
647	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
648	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
649	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
650	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
651	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
652	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	IS 1608 (Part 1)
653	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	0.5% Extension Under Load (EUL)	ASTM E8/E8M



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654	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	IS 1608 (Part 1)
655	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	1.0% Proof Stress	ASTM E8/E8M
656	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	BS EN 10002 (Part 1)
657	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	IS 1608 (Part 1)
658	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ISO 6892 (Part 1)
659	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ASTM E8 / E8M
660	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	BS EN 10002 (Part 1)
661	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	IS 1608 (Part 1)
662	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ISO 6892 (Part 1)
663	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ISO 6892-1
664	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ASTM E23
665	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ASTM E23
666	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	IS 1757 (Part 1)
667	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	BS EN 10045 (Part 1)



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668	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	IS 1757 (Part 1)
669	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ISO 148 (Part 1)
670	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ISO 148 (Part 1)
671	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.2%Yield Stress	ISO 6892 (Part 2)
672	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.2% Yield Stress	ASTM E21
673	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.2% Yield Stress	ISO 6892 (Part 2)
674	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.2% Yield Stress	BS EN 10002 (Part 5)
675	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.2%Yield Stress	BS EN 10002 (Part 5)
676	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) Ultimate Tensile Strength	BS EN 10002 (Part 5)
677	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.2% Yield Stress	ASTM E21
678	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.2% Yield Stress	BS EN 10002 (Part 5)
679	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.2% Yield Stress	ISO 6892 (Part 2)
680	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) Ultimate Tensile Strength	ISO 6892 (Part 2)
681	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASTM E8/E8M



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682	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IS 1608 (Part 1)
683	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	ASTM A370
684	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	ASTM B557
685	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	ASTM E8/E8M
686	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	ASTM E8/E8M
687	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	BS EN 10002 (Part 1)
688	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	BS EN 10002 (Part 1)
689	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Reduction in area	IS 1608 (Part 1)
690	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	0.2% Yield Stress	ASTM E8/E8M
691	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ISO 898 (Part 1)
692	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ASTM E8/E8M
693	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	BS EN 10002 (Part 1)
694	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ISO 6892 (Part 1)
695	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ISO 6892-1



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696	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	BS EN 10002 (Part 1)
697	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ISO 6892 (Part 1)
698	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ASTM A370
699	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ASTM E8/E8M
700	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	BS EN 10002 (Part 1)
701	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ISO 6892 (Part 1)
702	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ISO 898 (Part 1)
703	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	API 1104
704	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ASME Section IX
705	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ASTM A370
706	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ASTM E8/E8M
707	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ASTM E8/E8M
708	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	AWS D 1.1
709	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	BS EN 10002 (Part 1)



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710	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	BS EN 10002 (Part 1)
711	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	BS EN 895
712	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	BS EN ISO 4136
713	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	IS 1608 (Part 1)
714	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	IS 1608 (Part 1)
715	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ISO 6892 (Part 1)
716	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ISO 6892 (Part 1)
717	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	% Elongation	ISO 898 (Part 1)
718	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ASTM A370
719	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ASTM E8/E8M
720	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	BS EN 10002 (Part 1)
721	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	BS EN 10002 (Part 1)
722	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	IS 1608 (Part 1)
723	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.2% Yield Stress	ISO 6892 (Part 1)



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724	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load	IS 1608 (Part 1)
725	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ASTM A370
726	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ASTM E8/E8M
727	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	BS EN 10002 (Part 1)
728	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	IS 1608 (Part 1)
729	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	0.5% Extension Under Load (EUL)	ISO 898 (Part 1)
730	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ASTM E8/E8M
731	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	BS EN 10002 (Part 1)
732	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	IS 1608 (Part 1)
733	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	IS 1608 (Part 1)
734	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	1.0% Proof Stress	ISO 6892-1
735	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Adhesion (Pull-Off) Strength Test - Method E)	ASTM D4541
736	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Adhesion test - (Tape test - Method A)	ASTM D3359
737	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Adhesion test - (Tape test - Method B)	ASTM D3359



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738	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Axial Force Fatigue Test	IS 5074
739	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	API 1104
740	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASME Section IX
741	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E190
742	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E290
743	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	AWS D 1.1
744	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IS 1599
745	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ISO 7438
746	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness test	ASTM E10
747	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
748	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
749	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
750	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
751	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)



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752	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
753	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
754	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
755	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
756	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
757	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
758	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
759	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	BS EN 875
760	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ISO 9016
761	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ASTM E23
762	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	BS EN 10045
763	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	BS EN 10045 (Part 1)
764	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	IS 1757 (Part 1)
765	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ISO 148 (Part 1)



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766	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep Rupture Test a) Creep rate	ISO 204
767	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep Rupture Test a) Creep rate	ISO 204
768	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep test / Creep Rupture test a) Creep rate	ASTM E139
769	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.5% Extension Under Load (EUL)	ASTM E21
770	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 1.0% Proof Stress	ASTM E21
771	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 1.0% Proof Stress	BS EN 10002 (Part 5)
772	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 1.0% Proof Stress	ISO 6892 (Part 2)
773	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) , 0.5% Extension Under Load (EUL)	ISO 6892 (Part 2)
774	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.5% Extension Under Load (EUL)	BS EN 10002 (Part 5)
775	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 0.5% Extension Under Load (EUL)	ISO 6892 (Part 2)
776	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 1.0% Proof Stress	BS EN 10002 (Part 5)
777	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C) 1.0% Proof Stress	ISO 6892 (Part 2)



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778	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (50 deg. C to 1100 deg. C), 0.5% Extension Under Load (EUL)	BS EN 10002 (Part 5)
779	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.5% Extension Under Load	ISO 6892 (Part 2)
780	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 1.0% Proof Stress	ASTM E21
781	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 1.0% Proof Stress	BS EN 10002 (Part 5)
782	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.5% Extension Under Load	ASTM E21
783	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.5% Extension Under Load	BS EN 10002 (Part 5)
784	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 0.5% Extension Under Load (EUL)	ISO 6892 (Part 2)
785	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (50 deg. C to 500 deg. C) 1.0% Proof Stress	ISO 6892 (Part 2)
786	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction in area	ASTM E21
787	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction in area	BS EN 10002 (Part 5)
788	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction in area	ISO 6892 (Part 2)
789	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 500 deg. C) % Reduction in area	BS EN 10002 (Part 5)
790	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 500 deg. C) % Reduction in area	ISO 6892 (Part 2)



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791	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	ASTM E21
792	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	BS EN 10002 (Part 5)
793	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	ISO 6892 (Part 2)
794	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 500 deg. C) % Elongation	BS EN 10002 (Part 5)
795	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 500 deg. C) % Elongation	ISO 6892 (Part 2)
796	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate tensile strength	ASTM E21
797	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensile Strength	ASTM E21
798	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensile Strength	ISO 6892 (Part 2)
799	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensile Strength test	BS EN 10002 (Part 5)
800	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 500 deg. C) Ultimate Tensile Strength	ASTM E21
801	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 500 deg. C) Ultimate Tensile Strength	BS EN 10002(Part 5)
802	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Erichsen Cupping Test	IS 10175 (Part 1)
803	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Erichsen Cupping Test	IS 10175 (Part 1)



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804	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flaring Test	IS 2335
805	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flaring Test	IS 2335
806	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Force Controlled Constant Amplitude Axial Fatigue Test	ASTM E466
807	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Force Controlled Constant Amplitude Axial Fatigue Tests	ASTM E466
808	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Test	ASME Section IX
809	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Test	ASME Section VIII
810	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Test	AWS D 1.1
811	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ASTM E1290
812	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Crack-Tip Opening Displacement (CTOD)	ISO 12135
813	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) Linear-Elastic Plane-Strain Fracture Toughness (K _{Ic})	ISO 12135
814	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (J _{Ic})	ASTM E1820
815	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J- integral (J _{Ic})	ISO 12135
816	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ASTM E647
817	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Fatigue Crack Growth Rate (FCGR)	ISO 12108



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818	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) Linear-Elastic Plane-Strain Fracture Toughness (K _{IC})	ASTM E399
819	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Leak Test (6 mm to 168.3 mm OD)	ASTM E1003
820	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM A450
821	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM A530
822	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM A999
823	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM B111
824	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM B75
825	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM E1003
826	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	ASTM E23
827	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	IS 1598
828	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Macro etch Test	ASME Section IX
829	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ASTM E381
830	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro Examination Test a) Metal Expansion	ASME Section IX
831	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Metal Expansion	ASME Section VIII



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832	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Mercurous Nitrate Test	ASTM B154
833	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Mercurous Nitrate Test	IS 2305
834	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Nick Break Test	API 1104
835	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Peel Test	ASME Section IX
836	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Peel Test	ASME Section VIII
837	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
838	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
839	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 2)
840	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 2)
841	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 2)
842	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 2)
843	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 2)
844	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Load (Pull-out) Test	ASME Section IX
845	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Load (Pull-out) Test	ASME Section VIII



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846	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Test	ASME Section IX
847	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Test	ASME Section VIII
848	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Strain Controlled Fatigue Test	ASTM E606/E606M
849	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ASTM B557
850	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ASTM E8/E8M
851	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ASTM E8/E8M
852	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	BS EN 10002 (Part 1)
853	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	BS EN 10002 (Part 1)
854	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	IS 1608 (Part 1)
855	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ISO 6892 (Part 1)
856	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ISO 898 (Part 1)
857	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Time-for-Rupture Notch Tension Tests a) %Elongation	ASTM E292
858	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	API 1104
859	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	API 1104



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860	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASME Section IX
861	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASME Section IX
862	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASTM B557
863	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASTM E8/E8M
864	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ASTM E8/E8M
865	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	AWS D 1.1
866	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	AWS D 1.1
867	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN 10002 (Part 1)
868	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN 10002 (Part 1)
869	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN 10002 (Part 1)
870	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN 895
871	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN 895
872	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN ISO 4136
873	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	BS EN ISO 4136



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874	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IS 1367 (Part 14)
875	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IS 1608 (Part 1)
876	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	IS 1608 (Part 1)
877	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 6892 (Part 1)
878	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 6892 (Part 1)
879	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 6892 (Part 1)
880	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 898 (Part 1)
881	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
882	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
883	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
884	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
885	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
886	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
887	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384



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888	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
889	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
890	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
891	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
892	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
893	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
894	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
895	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
896	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
897	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
898	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
899	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
900	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
901	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)



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902	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	API 1104
903	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	API 1104
904	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	ASME Section IX
905	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	ASME Section IX
906	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	AWS D 1.1
907	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	AWS D 1.1
908	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	BS EN 895
909	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	BS EN 895
910	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	ISO 4136
911	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress	ISO 4136
912	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Tubes	Flattening Test	IS 2328
913	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Wire	Reverse bend Test	IS 1716
914	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Non-metallic Coatings	Adhesion (Pull-Off) Strength Test - Method E)	ISO 4624
915	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Non-metallic Coatings	Adhesion (Pull-Off) Strength Test - Method E)	ASTM D4541



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916	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Rails / Welded Rails	Fatigue Test	ISO 23300-1
917	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Rails / Welded Rails	Fatigue Test	BS EN 14587-1
918	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Rails / Welded Rails	Fatigue Test	BS EN 14587-2
919	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Rails / Welded Rails	Fatigue Test	IRST-19
920	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Rails / Welded Rails	Fatigue Test	ISO 23300-1
921	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Rails / Welded Rails	Fatigue Test	BS EN 14587-2
922	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar	Fatigue Test	IS 16651
923	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar	Re-Bend Test	IS 16651
924	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Low cycle fatigue test	IS 16172
925	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test b) %Extension Under Load (EUL) at Max. Force	IS 16172
926	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test a) Ultimate Tensile Strength (UTS)	IS 16172
927	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Cyclic Tensile Test	IS 16172
928	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical splices	High Cycle Fatigue Test	IS 16172
929	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical splices	Slip Test	IS 16172



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930	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement couplers for mechanical splices of bars	High Cycle Fatigue Test	ISO 15835-2
931	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement couplers for mechanical splices of bars	Low cycle fatigue test	ISO 15835-2
932	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement couplers for mechanical splices of bars	Slip Test	ISO 15835-2
933	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement couplers for mechanical splices of bars	Tensile test	ISO 15835-2
934	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcing bars, rods and wire	Axial Force Fatigue Test	ISO 15630 (Part 1)
935	MECHANICAL- MECHANICAL PROPERTIES OF METALS	SAW carbon steel pipes	Bend Test	IS 3589
936	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Seamless copper tubes	Flattening Test	IS 2501
937	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Seamless copper tubes	Flattening Test	IS 2501
938	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Seamless copper tubes	Flattening Test	IS 2501
939	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Seamless copper tubes	Flattening Test	IS 2501
940	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Sheet and strip	Ball Punch Deformation Test	ASTM E643
941	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Sheet and strip	Erichsen cupping test	ISO 20482
942	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Sheet Materials	Plastic Strain Ratio 'r' bar	ASTM E517
943	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Sheet Materials	Plastic Strain Ratio 'r' bar	ISO 10113



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944	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Sheet Materials	Strain hardening exponent 'n' bar	ASTM E646
945	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Sheet Materials	Strain hardening exponent 'n' bar	ISO 10275
946	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Stainless steel Fasteners	Proof Load Test (Bolts, Screws & Studs)	IS 1367 : Part 14/Sec.1
947	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Stainless steel Fasteners	Proof Load Test (Nuts)	IS 1367 : Part 14/Sec. 2
948	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Strain hardening exponent 'n' bar	IS 15756
949	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Tensile Creep Test a) Creep rate	IS 3407 (Part 1)
950	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Nonmetallic Inclusion	IS 4163
951	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Plastic Strain Ratio 'r' bar	IS 11999
952	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Tensile Creep stress rupture test a) % Elongation	IS 3407 (Part 2)
953	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Tensile Creep stress rupture test b) % Reduction	IS 3407 (Part 2)
954	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Tensile Creep Test b) % Elongation	IS 3407 (Part 1)
955	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel	Tensile Creep stress rupture test a) % Reduction	IS 3407 (Part 1)
956	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel (Bolts, Screws, Studs and Nuts)	% Elongation	IS 1367 (Part 1)
957	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel (Bolts, Screws, Studs and Nuts)	0.5% Extension Under Load (EUL)	IS 1367 (Part 1)



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958	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel (Bolts, Screws, Studs and Nuts)	1.0% Proof Stress	IS 1367 (Part 1)
959	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel (Bolts, Screws, Studs and Nuts)	0.2% Yield Stress	IS 1367 (Part 1)
960	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Bars and wires	Re-Bend Test	IS 1786
961	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Bars, Billets, Blooms, and Forgings	Macro etch Test	ASTM E381
962	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Plates	Through Thickness Tensile Test	ASTM A770/A770M
963	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel products	Through Thickness Tensile Test	ISO 7778
964	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Bend Test	ASTM A370
965	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Brinell Hardness Test	ASTM A370
966	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Brinell Hardness Test	ASTM A370
967	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Brinell Hardness Test	ASTM A370
968	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Flaring Test	ASTM A370
969	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Flattening Test	ASTM A370
970	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Proof Load Test (Nuts)	ASTM A370
971	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Proof Load Test (Bolts, Studs & Screws)	ASTM A370



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972	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Rockwell Hardness Test	ASTM A370
973	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Rockwell Hardness Test	ASTM A370
974	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Charpy Impact Test (+80 deg. C to -101 deg. C & -196 deg. C)	ASTM A370
975	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel, Stainless Steel and Related Alloys	Ultimate Tensile Strength	ASTM A370
976	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welding electrode	Determination of efficiency, Metal recovery and deposition Co-Efficient	IS 13043
977	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Zinc Coated Iron & Steel	Mass Of Coating (Stripping Method)	ASTM A90/90M
978	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Zinc Coated Iron & Steel	Mass Of Coating (Stripping Method)	IS 6745
979	MECHANICAL- METALLOGRAPHY TEST	Aluminium Alloys Products	Stress Corrosion Cracking Test	ASTM G47
980	MECHANICAL- METALLOGRAPHY TEST	Aluminum Alloys Products	EXCO Test	ASTM G34-01
981	MECHANICAL- METALLOGRAPHY TEST	Aluminum Alloys Products	Intergranular corrosion Nitric Acid (NAML Test) Test	ASTM G67
982	MECHANICAL- METALLOGRAPHY TEST	Austenitic and ferritic-austenitic (duplex) stainless steels	Intergranular corrosion (IGC) Method A	DIN EN ISO 3651 (Part 2)
983	MECHANICAL- METALLOGRAPHY TEST	Austenitic and ferritic-austenitic (duplex) stainless steels	Intergranular corrosion (IGC) Method B	DIN EN ISO 3651 (Part 2)
984	MECHANICAL- METALLOGRAPHY TEST	Austenitic and ferritic-austenitic (duplex) stainless steels	Intergranular corrosion (IGC) Method C	DIN EN ISO 3651 (Part 2)
985	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (HUEY Test) Test	IS 10461-1
986	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular corrosion (IGC) Practice A	ASTM A262 (2021)
987	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular corrosion (IGC) Practice B	ASTM A262



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988	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular corrosion (IGC) Practice C	ASTM A262
989	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular corrosion (IGC) Practice E	ASTM A262
990	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (Strauss Test) Test	IS 10461-2
991	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steels	Intergranular corrosion (IGC) Practice F	ASTM A262
992	MECHANICAL-METALLOGRAPHY TEST	Cast iron	Determination of Graphite in Cast Iron (Type Size, & Distribution)	ASTM A247
993	MECHANICAL-METALLOGRAPHY TEST	Cast Iron	Determination of Graphite in Cast Iron (Type, Shape, Size, %)	ASTM A247
994	MECHANICAL-METALLOGRAPHY TEST	Cast Iron	Determination of Graphite in Cast Iron (Type, Shape, Size, %)	IS 7754
995	MECHANICAL-METALLOGRAPHY TEST	Copper materials, alloys & products	Ammonia Vapor Test (Susceptibility to Stress Corrosion Cracking)	ASTM B858
996	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic/Ferritic Stainless Steels	Detection of detrimental Intermetallic Phases (Method A)	ASTM A923
997	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic/Ferritic Stainless Steels	Determination of Detrimental Intermetallic Phases (Method C)	ASTM A923
998	MECHANICAL-METALLOGRAPHY TEST	Ferritic Stainless Steel	Intergranular corrosion (IGC) Practice W	ASTM A763
999	MECHANICAL-METALLOGRAPHY TEST	Ferritic Stainless Steel	Intergranular corrosion (IGC) Practice X	ASTM A763
1000	MECHANICAL-METALLOGRAPHY TEST	Ferritic Stainless Steel	Intergranular corrosion (IGC) Practice Y	ASTM A763
1001	MECHANICAL-METALLOGRAPHY TEST	Ferritic Stainless Steel	Intergranular corrosion (IGC) Practice Z	ASTM A763
1002	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Nodularity in SG Iron	IS 1865
1003	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Nodularity in SG Iron	IS 7754



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1004	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Coating Thickness by Magnetic-Field or Eddy Current (Electromagnetic) Testing Methods	ASTM E376
1005	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Macro-Examination a) Metal Expansion	ASME Section IX
1006	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Thickness of Coating (Magnetic Method)	ASTM B499
1007	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Case Depth (By Microscopic Method)	IS 6416
1008	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Case Depth (Hardness Method)	IS 6416
1009	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Decarburization Test (By Microscopic Method)	ASTM E1077
1010	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Decarburization Test (By Microscopic Method)	IS 6396
1011	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Ferrite Content Test (By Microscopic Method)	ASTM E562
1012	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Inclusion Rating Method A, D	ASTM E45
1013	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Inclusion Rating Method M & K	DIN 50602
1014	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Macroscopic and Microscopic Examination test	BS EN 1321
1015	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Examination	ISO 17639
1016	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Examination (General Structure)	ASM Volume 9
1017	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Examination (General Structure)	ASM Volume 9
1018	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112 (2021)
1019	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112 (2021)
1020	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112 (2021)
1021	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Nodularity in SG Iron	ASTM A247



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1022	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking and Stress Corrosion Cracking	NACE TM0177
1023	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking and Stress Corrosion Cracking	NACE TM0177
1024	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Thickness of Coating (Microscopic Method)	ASTM B487
1025	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Stress Oriented Hydrogen Induced Cracking Test	EFC 16 (Third Edition)
1026	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Alternate Immersion Stress Corrosion Test	ASTM G44
1027	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Bent-Beam Stress-Corrosion	ASTM G39
1028	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Chloride Stress Corrosion Cracking (CSCC & MgCl ₂) Test	ASTM G36 (2018)
1029	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Hydrogen Induced Cracking Test (HIC)	NACE TM0284
1030	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Stress Oriented Hydrogen Induced Cracking Test	EFC 16 (Third Edition)
1031	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Stress Oriented Hydrogen Induced Cracking Test	NACE MR0175/NACE TM0177
1032	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Stress Oriented Hydrogen Induced Cracking Test	NACE TM0103
1033	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC) Test t(Annex B, Clause 8.3.4)	IS 15490
1034	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC) Test	EFC 16 (Third Edition)
1035	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC) Test	EFC 17 (Third Edition)
1036	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC) Test	ISO 11439 (Annex A, Clause A.3)
1037	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC) Test	NACE TM0316
1038	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC)	ASTM G39 (2021)
1039	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC)	EFC 16 (Third Edition)
1040	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC)	EFC 17 (Second Edition)



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1041	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC)	IS 15490
1042	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Sulfide Stress Cracking (SSC)	ISO 11439
1043	MECHANICAL-METALLOGRAPHY TEST	Nickel based and Chromium Bearing Alloys	Critical Pitting Temperature Test (Method C)	ASTM G48
1044	MECHANICAL-METALLOGRAPHY TEST	Nickel based and Chromium Bearing Alloys	Critical Crevice Temperature Test (Method D)	ASTM G48
1045	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich Chromium -Bearing Alloys	Ferric Sulfate-Sulfuric Acid Test (Method A)	ASTM G28
1046	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich Chromium -Bearing Alloys	Mixed Acid -Oxidating Salt (Method B) Test	ASTM G28
1047	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Determination of Detrimental Intermetallic Phases (Method B)	ASTM A923
1048	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel Castings Containing Both Ferrite and Austenite	Ferrite Content Test (By Ferrite-scope)	ASTM A800/A800M
1049	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Critical Crevice Temperature Test (Method F)	ASTM G48
1050	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Critical Pitting Temperature Test (Method E)	ASTM G48
1051	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Ferric Chloride Crevice Corrosion Test (Method B)	ASTM G48
1052	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Ferric Chloride Pitting Test (Method A)	ASTM G48
1053	MECHANICAL-METALLOGRAPHY TEST	Steel	Inclusion Content (Method A, D)	ASTM E45
1054	MECHANICAL-METALLOGRAPHY TEST	Steel	Micro Examination (Grain Size by Comparison Method)	IS 4748
1055	MECHANICAL-METALLOGRAPHY TEST	Steel	Micro Examination (Grain Size by Comparison Method)	ISO 643
1056	MECHANICAL-METALLOGRAPHY TEST	Steel Castings, Stainless	Ferrite Content Test (By Ferrite-scope)	ASTM A799
1057	NON-DESTRUCTIVE-METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASME Sec. V Article 7
1058	NON-DESTRUCTIVE-METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASME SE709



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1059	NON-DESTRUCTIVE-METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASTM E709
1060	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	Liquid Penetrant Test by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME SE165
1061	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	Liquid Penetrant Test by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME Sec. V Article 6
1062	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	Liquid Penetrant Test by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASTM E165
1063	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASME SA609
1064	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASTM A609
1065	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE213
1066	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE273
1067	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASTM E213
1068	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA435
1069	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA577
1070	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA578
1071	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASTM A577
1072	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASTM A578
1073	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASME SA388



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1074	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASTM A 388
1075	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME SE164
1076	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME Sec. V Article 4
1077	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASTM E164
1078	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys, Welds, Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	IS 1182
1079	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys, Welds, Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 94
1080	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys, Welds, Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	ASME Sec. V Article 2 & 22
1081	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys, Welds, Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 94



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Site Testing				
1	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Bromine	IEC 62321 -3-1
2	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IEC 62321-3-1
3	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IS 16197 (Part 3, Sec 1)
4	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IEC 62321-3-1
5	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IS 16197 (Part 3, Sec 1)
6	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IEC 62321-3-1
7	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IS 16197 (Part 3, Sec 1)
8	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IEC 62321-3-1
9	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IS 16197 (Part 3, Sec 1)
10	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Bromine	IEC 62321 -3-1:
11	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Cadmium	IEC 62321-3-1
12	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Cadmium	IS 16197 (Part 3, Sec 1)
13	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Chromium	IEC 62321-3-1



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14	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Chromium	IS 16197 (Part 3, Sec 1)
15	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Lead	IEC 62321-3-1
16	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Lead	IS 16197 (Part 3, Sec 1)
17	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Mercury	IEC 62321-3-1
18	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighting fixtures,light bulb,electrical wrings	Mercury	IS 16197 (Part 3, Sec 1)
19	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Bromine	IEC 62321 -3-1
20	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IEC 62321-3-1; 2013, IEC 62321-5
21	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IS 16197 (Part 3, Sec 1)/IS 16197 (Part 5)
22	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IEC 62321 -3-1
23	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IS 16197 (Part 3, Sec 1)/ IS 16197 (Part 5):
24	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IEC 62321-3-1, IEC 62321-5
25	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IS 16197 (Part 3, Sec 1):2014/ IS 16197 (Part 5):2014
26	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IEC 62321-3-1; 2013, IEC 62321-4
27	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IS 16197 (Part 3, Sec 1):2014, / IS 16197 (Part 4):2014



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28	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Bromine	IEC 62321 -3-1:
29	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IEC 62321-3-1
30	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IS 16197 (Part 3: Sec 1)
31	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IEC 62321-3-1
32	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IS 16197 (Part 3: Sec 1)
33	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Lead	IEC 62321-3-1
34	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Lead	IS 16197 (Part 3: Sec 1)
35	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Mercury	IEC 62321-3-1
36	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Mercury	IS 16197 (Part 3: Sec 1)
37	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Bromine	IEC 62321 -3-1
38	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Cadmium	IS 16197 (Part 3, Sec 1)
39	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Chromium	IS 16197 (Part 3, Sec 1)
40	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Lead	IS 16197 (Part 3, Sec 1)
41	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues	Mercury	IS 16197 (Part 3, Sec 1)



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42	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Cadmium	IEC 62321-3-1
43	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Chromium	IEC 62321-3-1
44	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Lead	IEC 62321-3-1
45	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glues,	Mercury	IEC 62321-3-1
46	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Bromine	IEC 62321-3-1
47	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IEC 62321 -3-1
48	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IS 16197 (Part 3: Sec 1)
49	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IEC 62321-3-1
50	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IS 16197 (Part 3, Sec 1)
51	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Lead	IEC 62321-3-1
52	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Lead	IS 16197 (Part 3-Sec 1)
53	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Mercury	IEC 62321-3-1
54	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Mercury	IS 16197 (Part 3, Sec 1)
55	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Chromium	ASTM E1476(Qualitative)



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56	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Cobalt	ASTM E1476 (Qualitative)
57	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Iron	ASTM E1476(Qualitative)
58	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tin	ASTM E1476(Qualitative)
59	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Titanium	ASTM E1476(Qualitative)
60	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tungsten	ASTM E1476(Qualitative)
61	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Vanadium	ASTM E1476(Qualitative)
62	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Zinc	ASTM E1476(Qualitative)
63	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Copper	ASTM E1476(Qualitative)
64	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Lead	ASTM E1476(Qualitative)
65	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Manganese	ASTM E1476 (Qualitative)
66	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Molybdenum	ASTM E1476 (Qualitative)
67	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Nickel	ASTM E1476(Qualitative)
68	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Niobium	ASTM E1476(Qualitative)
69	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASME Sec. V Article 7
70	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASME SE709
71	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASTM E709
72	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	Liquid Penetrant Test by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME SE165



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73	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	Liquid Penetrant Test by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME Sec. V Article 6
74	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	Liquid Penetrant Test by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASTM E165
75	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASME SA609
76	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASTM A609
77	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE213
78	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE273
79	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASTM E213
80	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA435
81	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA577
82	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA578
83	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASTM A577
84	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASTM A578
85	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASME SA388
86	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASTM A 388
87	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME SE164
88	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME Sec. V Article 4
89	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASTM E164



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SCOPE OF ACCREDITATION

Laboratory Name :

TCR ENGINEERING SERVICES PVT LTD, VKB HOUSE, PLOT NO. EL 182, MIDC TTC,
INDUSTRIAL AREA, ELECTRONIC ZONE MAHAPE NAVI MUMBAI MAHARASHTRA, NAVI
MUMBAI, MAHARASHTRA, INDIA

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14/06/2024

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
90	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 94
91	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	ASME Sec. V Article 2 & 22
92	NON-DESTRUCTIVE-METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X-Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 94



National Accreditation Board for
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CERTIFICATE OF ACCREDITATION

TCR ENGINEERING SERVICES PRIVATE LIMITED

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

**"General Requirements for the Competence of Testing &
Calibration Laboratories"**

for its facilities at

PLOT NO. 125/2094, VISHNU VIHAR, JAYAPUR PAHALA, BHUBANESWAR, KHORDHA, ODISHA, INDIA

in the field of

TESTING

Certificate Number: TC-15993

Issue Date: 30/04/2025

Valid Until: 29/04/2029

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: TCR ENGINEERING SERVICES PRIVATE LIMITED

Signed for and on behalf of NABL




Anita Rani
Director


N. Venkateswaran
Chief Executive Officer



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

TCR ENGINEERING SERVICES PRIVATE LIMITED, PLOT NO. 125/2094, VISHNU VIHAR, JAYAPUR
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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 Testing				
1	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	ASTM E1251
2	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Iron	ASTM E1251
3	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	ASTM E1251
4	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	ASTM E1251
5	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	ASTM E1251
6	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Chromium	ASTM E1251
7	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Magnesium	ASTM E1251
8	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Nickel	ASTM E1251
9	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Silicon	ASTM E1251
10	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Titanium	ASTM E1251
11	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Vanadium	ASTM E1251
12	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Zirconium	ASTM E1251
13	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Aluminium	ASTM E415
14	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Aluminium	IS 8811
15	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Arsenic	ASTM E415
16	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Arsenic	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
17	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Boron	ASTM E415
18	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Boron	IS 8811
19	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Carbon	ASTM E415
20	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Carbon	IS 8811
21	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Chromium	ASTM E415
22	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Chromium	IS 8811
23	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Cobalt	ASTM E415
24	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Cobalt	IS 8811
25	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Copper	ASTM E415
26	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Copper	IS 8811
27	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Manganese	ASTM E415
28	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Manganese	IS 8811
29	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Molybdenum	ASTM E415
30	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Molybdenum	IS 8811
31	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nickel	ASTM E415
32	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nickel	IS 8811



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33	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Niobium	IS 8811
34	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Phosphorus	ASTM E415
35	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Phosphorus	IS 8811
36	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Silicon	ASTM E415
37	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Silicon	IS 8811
38	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Sulfur	ASTM E415
39	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Sulfur	IS 8811
40	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tin	ASTM E415
41	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tin	IS 8811
42	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Titanium	ASTM E415
43	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Titanium	IS 8811
44	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Vanadium	ASTM E415
45	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Vanadium	IS 8811
46	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Zirconium	IS 8811
47	CHEMICAL- METALS & ALLOYS	Cast Iron	Carbon	ASTM E1999
48	CHEMICAL- METALS & ALLOYS	Cast Iron	Chromium	ASTM E1999



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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
49	CHEMICAL- METALS & ALLOYS	Cast Iron	Copper	ASTM E1999
50	CHEMICAL- METALS & ALLOYS	Cast Iron	Manganese	ASTM E1999
51	CHEMICAL- METALS & ALLOYS	Cast Iron	Molybdenum	ASTM E1999
52	CHEMICAL- METALS & ALLOYS	Cast Iron	Nickel	ASTM E1999
53	CHEMICAL- METALS & ALLOYS	Cast Iron	Phosphorus	ASTM E1999
54	CHEMICAL- METALS & ALLOYS	Cast Iron	Silicon	ASTM E1999
55	CHEMICAL- METALS & ALLOYS	Cast Iron	Sulfur	ASTM E1999
56	CHEMICAL- METALS & ALLOYS	Cast Iron	Tin	ASTM E1999
57	CHEMICAL- METALS & ALLOYS	Cast Iron	Titanium	ASTM E1999
58	CHEMICAL- METALS & ALLOYS	Cast Iron	Vanadium	ASTM E1999
59	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	BS EN 15079
60	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	BS EN 15079
61	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	BS EN 15079
62	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	BS EN 15079
63	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	BS EN 15079
64	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	BS EN 15079



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65	CHEMICAL- METALS & ALLOYS	Copper & Its Alloys	Lead	BS EN 15079
66	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	BS EN 15079
67	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	BS EN 15079
68	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorus	BS EN 15079
69	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	BS EN 15079
70	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	BS EN 15079
71	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	BS EN 15079
72	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	BS EN 15079
73	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	BS EN 15079
74	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Aluminium	BS EN 15079
75	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	BS EN 15079
76	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	BS EN 15079
77	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E3047
78	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	ASTM E3047
79	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E3047
80	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E3047



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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
81	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	ASTM E3047
82	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E3047
83	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	ASTM E3047
84	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Magnesium	ASTM E3047
85	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	ASTM E3047
86	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	ASTM E3047
87	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	ASTM E3047
88	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorus	ASTM E3047
89	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	ASTM E3047
90	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E3047
91	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	ASTM E3047
92	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	ASTM E3047
93	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	ASTM E3047
94	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	ASTM E3047
95	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
96	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E1086



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97	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E1086
98	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 9879
99	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086
100	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E1086
101	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 9879
102	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E1086
103	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 9879
104	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	ASTM E1086
105	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E1086
106	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	ASTM E1086
107	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	IS 9879
108	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 9879
109	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 9879
110	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 9879
111	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	IS 9879
112	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 9879



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113	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon Steel (Bolts, Screws and Studs)	Proof Load Test	IS 1367 (Part 3)
114	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel (Bolts, Screws and Studs)	% Elongation	ISO 898-1
115	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel (Bolts, Screws and Studs)	Ultimate Tensile Strength	ISO 898-1
116	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Carbon Steel and Alloy Steel (Nuts)	Proof Load Test	IS 1367 (Part 6)
117	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Fasteners - Carbon Steel and Alloy Steel (Bolts, Screws and Studs)	Proof Load Test	ISO 898-1
118	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	% Elongation	ASTM E8/E8M
119	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	% Elongation	IS 1608 (Part 1)
120	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	% Elongation	ISO 6892-1
121	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	% Reduction in Area	ASTM E8/E8M



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122	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	0.2 % Yield Stress	IS 1608 (Part 1)
123	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	0.2 % Yield Stress	ASTM E8/E8M
124	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	0.2 % Yield Stress	ISO 6892-1
125	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	0.5 % Extension Under Load	IS 1608 (Part 1)
126	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	0.5 % Extension Under Load (EUL)	ASTM E8/E8M
127	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	0.5 % Extension Under Load (EUL)	ISO 6892-1
128	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	1.0 % Proof Stress	IS 1608 (Part 1)
129	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	1.0 % Proof Stress	ASTM E8/E8M
130	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	1.0 % Proof Stress	ISO 6892-1



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131	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Brinell Hardness (HBW 2.5/187.5)	ASTM E10
132	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Brinell Hardness (HBW 2.5/187.5)	ISO 6506-1
133	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Brinell Hardness (HBW 2.5/31.25)	ASTM E10
134	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Brinell Hardness (HBW 2.5/31.25)	ISO 6506-1
135	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Brinell Hardness (HBW 2.5/62.5)	ASTM E10
136	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Brinell Hardness (HBW 2.5/62.5)	ISO 6506-1
137	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ASTM E23
138	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Rockwell Hardness (HRB)	ISO 6508-1
139	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Rockwell Hardness (HRC)	ASTM E18



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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
140	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Rockwell Hardness (HRC)	ISO 6508-1
141	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Ultimate Tensile Strength	ASTM E8/E8M
142	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Ultimate Tensile Strength	IS 1608 (Part 1)
143	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Ultimate Tensile Strength	ISO 6892-1
144	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Macro Indentation, HV 10)	ASTM E92
145	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Macro Indentation, HV 5)	ASTM E92
146	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Macro Indentation, HV 5)	IS 1501 (Part 1)
147	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.3)	ASTM E384
148	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.3)	ISO 6507-1



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149	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.5)	ASTM E384
150	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 1)	ASTM E384
151	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Yield Stress	API 1104
152	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper) - Tube	Flaring Test	IS 2335
153	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)- Tube	Flattening Test	IS 2328
154	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	% Elongation	ASTM E8/E8M
155	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	% Elongation	IS 1608 (Part 1)
156	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	% Elongation	ISO 6892-1
157	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	% Reduction in Area	ASTM E8/E8M



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158	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.2 % Yield Stress	IS 1608 (Part 1)
159	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.2 % Yield Stress	ISO 6892-1
160	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.5 % Extension Under Load (EUL)	ASTM E8/E8M
161	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.5 % Extension Under Load (EUL)	ISO 898-1
162	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.5 % Extension Under Load (EUL)	IS 1608 (Part 1)
163	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.5% Extension Under Load (EUL)	ISO 6892-1
164	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	1.0 % Proof Stress	ASTM E8/E8M
165	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	1.0 % Proof Stress	IS 1608 (Part 1)
166	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	1.0 % Proof Stress	ISO 6892-1



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167	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	1.0 % Proof Stress	ISO 898-1
168	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Bend Test	IS 1599
169	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (2.5/62.5)	ISO 6506-1
170	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/187.5)	ASTM E10
171	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/187.5)	IS 1500 (Part 1)
172	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/187.5)	ISO 6506-1
173	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/31.25)	ASTM E10
174	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/31.25)	IS 1500 (Part 1)
175	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/31.25)	ISO 6506-1



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176	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/62.5)	ASTM E10
177	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Brinell Hardness (HBW 2.5/62.5)	IS 1500 (Part 1)
178	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ASTM E23
179	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ISO 148-1
180	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Rockwell Hardness (HRB)	ASTM E18
181	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Rockwell Hardness (HRB)	ISO 6508-1
182	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Rockwell Hardness (HRC)	ASTM E18
183	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Rockwell Hardness (HRC)	IS 1586 (Part 1)
184	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Rockwell Hardness (HRC)	ISO 6508-1



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185	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Ultimate Tensile Strength	ASTM E8/E8M
186	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Ultimate Tensile Strength	ISO 6892-1
187	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Ultimate Tensile Strength	IS 1608 (Part 1)
188	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Macro Indentation, HV 10)	ASTM E92
189	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Macro Indentation, HV 10)	IS 1501 (Part 1)
190	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Macro Indentation, HV 10)	ISO 6507-1
191	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Macro Indentation, HV 5)	IS 1501 (Part 1)
192	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Macro Indentation, HV 5)	ISO 6507-1
193	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Macro Indentation, HV5)	ASTM E92



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194	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.1)	ASTM E384
195	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.1)	IS 1501 (Part 1)
196	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.1)	ISO 6507 (Part 1)
197	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.2)	IS 1501 (Part 1)
198	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.2)	ISO 6507-1
199	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.3)	IS 1501 (Part 1)
200	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.5)	ISO 6507-1
201	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 0.5)	IS 1501 (Part 1)
202	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 1)	ASTM E384



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203	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 1)	IS 1501 (Part 1)
204	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV 1)	ISO 6507-1
205	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous) - Tube	Flaring Test	IS 2335
206	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous) - Tube	Flattening Test	IS 2328
207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	% Elongation	IS 1608 (Part 1)
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	% Elongation	ISO 6892-1
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	% Elongation	ASTM E8/E8M
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	% Elongation	ISO 898-1
211	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	% Reduction in Area	ASTM E8/E8M



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212	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	% Reduction in Area	IS 1608 (Part 1)
213	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	0.2 % Yield Stress	ASTM E8/E8M
214	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	0.2 % Yield Stress	ISO 6892-1
215	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	0.2% Yield Stress	IS 1608 (Part 1)
216	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	0.5 % Extension Under Load (EUL)	ASTM E8/E8M
217	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	0.5 % Extension Under Load (EUL)	IS 1608 (Part 1)
218	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	0.5 % Extension Under Load (EUL)	ISO 6892-1
219	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	1.0 % Proof Stress	IS 1608 (Part 1)
220	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	1.0 % Proof Stress	ASTM E8/E8M



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221	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	1.0% Proof Stress	ISO 6892-1
222	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Bend Test	IS 1599
223	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/187.5)	ASTM E10
224	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/187.5)	IS 1500 (Part 1)
225	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/187.5)	ISO 6506-1
226	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/31.25)	IS 1500 (Part 1)
227	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/31.25)	ISO 6506-1
228	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/31.25)	ASTM E10
229	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/62.5)	ASTM E10



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230	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/62.5)	IS 1500 (Part 1)
231	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Brinell Hardness (HBW 2.5/62.5)	ISO 6506-1
232	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ASTM E23
233	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ISO 148-1
234	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Rockwell Hardness (HRB)	IS 1586 (Part 1)
235	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Rockwell Hardness (HRB)	ISO 6508-1
236	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Rockwell Hardness (HRC)	ASTM E18
237	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Rockwell Hardness (HRC)	IS 1586 (Part 1)
238	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Rockwell Hardness (HRC)	ISO 6508-1



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239	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Ultimate Tensile Strength	ASTM E8/E8M
240	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Ultimate Tensile Strength	IS 1608 (Part 1)
241	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Ultimate Tensile Strength	ISO 6892-1
242	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Ultimate Tensile Strength	ISO 898-1
243	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Macro Indentation, HV 10)	ASTM E92
244	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Macro Indentation, HV 10)	IS 1501 (Part 1)
245	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Macro Indentation, HV 10)	ISO 6507-1
246	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Macro Indentation, HV 5)	ASTM E92
247	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Macro Indentation, HV 5)	IS 1501 (Part 1)



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248	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Macro Indentation, HV 5)	ISO 6507-1
249	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.1)	ASTM E384
250	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.1)	IS 1501 (Part 1)
251	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.1)	ISO 6507-1
252	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.2)	ASTM E384
253	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.2)	IS 1501 (Part 1)
254	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.2)	ISO 6507-1
255	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.3)	ASTM E384
256	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.3)	IS 1501 (Part 1)



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257	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.3)	ISO 6507-1
258	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.5)	ASTM E384
259	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.5)	IS 1501 (Part 1)
260	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 0.5)	ISO 6507-1
261	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 1)	ASTM E384
262	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 1)	IS 1501 (Part 1)
263	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)	Vickers Hardness (Micro Indentation, HV 1)	ISO 6507-1
264	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous) - Tube	Flaring Test	IS 2335
265	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Non-Ferrous)- Tube	Flattening Test	IS 2328



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266	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Solid Drawn Copper Tubes	Flattening Test	IS 2501
267	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Tubular Product	Flaring Test	ASTM A370
268	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Tubular Product	Flattening Test	ASTM A370
269	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	% Elongation	API 1104 (Clause 10.3.6.2)
270	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	% Elongation	ASME BPVC Section IX (Clause QW-152)
271	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Bend Test	API 1104 (Clause 10.3.6.2)
272	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Bend Test	ASME BPVC Section IX (Clause QW-160)
273	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Fracture Test	ASME BPVC Section IX (Clause QW-182)
274	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Macro Etch Test	ASME BPVC Section IX (Clause QW-183)



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275	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Macro Examination Test - Metal Expansion	ASME BPVC Section IX (Clause QW-183)
276	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Macro-Examination - Leak Path	ASME BPVC Section IX (Clause QW-183)
277	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Macro-Examination - Leg Lengths	API 1104 (Clause B.2.5.4)
278	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Macro-Examination - Leg Lengths	ASME BPVC Section IX (Clause QW-183)
279	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Macro-Examination - Throat Length	ASME BPVC Section IX (Clause QW-183)
280	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Nick Break Test	API 1104 (Clause 5.6.3)
281	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Peel Test	ASME BPVC Section IX (Clause QB-170)
282	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Peel Test	ASME Section VIII (Figure 17-16)
283	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Shear Load (Pull-out) Test	ASME BPVC Section IX (Clause QW-196.2.1)



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284	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Shear Test	ASME BPVC Section IX (Clause QW-196.2.1)
285	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Ultimate Tensile Strength	API 1104 (Clause 10.3.6.2)
286	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Ultimate Tensile Strength	ASME BPVC Section IX (Clause QW-152)
287	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welded Specimens	Yield Stress	ASME BPVC Section IX (Clause QW-152)
288	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Fracture Test	ASME Section VIII
289	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ISO 148-1
290	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Rockwell Hardness (HRB)	ASTM E18
291	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Macro Indentation, HV 10)	IS 1501 (Part 1)
292	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Macro Indentation, HV 10)	ISO 6507-1



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293	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Macro Indentation, HV 5)	ISO 6507-1
294	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.1)	ASTM E384
295	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.1)	IS 1501 (Part 1)
296	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.1)	ISO 6507-1
297	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.1)	ISO 6507-1
298	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.2)	ASTM E384
299	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.2)	IS 1501 (Part 1)
300	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.2)	ISO 6507-1
301	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.3)	IS 1501 (Part 1)



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302	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.5)	IS 1501 (Part 1)
303	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 0.5)	ISO 6507-1
304	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Copper)	Vickers Hardness (Micro Indentation, HV 1)	IS 1501 (Part 1)
305	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.2% Yield Stress	ASTM E8/E8M
306	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	0.2% Yield Stress	ISO 898-1
307	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV0.2)	ASTM E384
308	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV0.3)	ASTM E384
309	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials (Ferrous)	Vickers Hardness (Micro Indentation, HV0.5)	ASTM E384
310	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	% Elongation	ASTM A370



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311	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	% Reduction in Area	ASTM A370
312	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	0.2% Yield Stress	ASTM A370
313	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	0.5% Extension Under Load (EUL)	ASTM A370
314	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	1.0% Proof Stress	ASTM A370
315	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Bend Test	ASTM A370
316	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Brinell Hardness (HBW 2.5/187.5)	ASTM A370
317	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Brinell Hardness (HBW 2.5/31.25)	ASTM A370
318	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Brinell Hardness (HBW 2.5/62.5)	ASTM A370
319	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ASTM A370



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320	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Rockwell Hardness (HRB)	ASTM A370
321	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Rockwell Hardness (HRC)	ASTM A370
322	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products	Ultimate Tensile Strength	ASTM A370
323	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products (Bolts, Studs & Screws)	Proof Load Test	ASTM A370
324	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Steel Products (Nuts)	Proof Load Test	ASTM A370
325	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Bend Test	ASTM E190
326	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Charpy Impact Test (+80 °C to -101 °C & -196 °C)	ISO 9016
327	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Macro Etch Test	ISO 17639
328	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Macro-Examination - Leak Path	ASME Section VIII



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329	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Macro-Examination - Leg Lengths	ASME Section VIII
330	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Macro-Examination - Metal Expansion	ASME Section VIII
331	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Macro-Examination - Throat Length	ASME Section VIII
332	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Shear Load (Pull-out) Test	ASME Section VIII
333	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Shear Test	ASME Section VIII
334	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Vickers Hardness (Micro Indentation, HV 0.1)	IS 1501 (Part 1)
335	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Materials - Welds & Welded Specimens	Vickers Hardness (Micro Indentation, HV 1)	ASTM E384
336	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Bar/Mechanical Splices	Slip Test	IS 16172
337	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Bar/Mechanical Splices	Static Tensile Test - % Extension Under Load (EUL) at Max. Force	IS 16172



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338	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Bar/Mechanical Splices	Static Tensile Test - Ultimate Tensile Strength (UTS)	IS 16172
339	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Couplers for Mechanical Splices of Bars	% Elongation	ISO 15835-2
340	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Couplers for Mechanical Splices of Bars	% Reduction in Area	ISO 15835-2
341	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Couplers for Mechanical Splices of Bars	0.2 % Yield Stress	ISO 15835-2
342	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Couplers for Mechanical Splices of Bars	Slip Test	ISO 15835-2
343	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement Couplers for Mechanical Splices of Bars	Ultimate Tensile Strength	ISO 15835-2
344	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Plates	Through Thickness Tensile Test	ASTM A770/A770M
345	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Carbon Steel Pipes	Bend Test	IS 3589
346	MECHANICAL-METALLOGRAPHY TEST	Aluminium Alloys Products	Stress Corrosion Cracking Test	ASTM G47



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347	MECHANICAL-METALLOGRAPHY TEST	Aluminum Alloys Products	EXCO Test	ASTM G34
348	MECHANICAL-METALLOGRAPHY TEST	Aluminum Alloys Products	Intergranular Corrosion Nitric Acid (NAMLT Test)	ASTM G67
349	MECHANICAL-METALLOGRAPHY TEST	Austenitic and Ferritic-austenitic (Duplex) Stainless Steel	Intergranular Corrosion (IGC) - Method A	DIN EN ISO 3651 (Part 2)
350	MECHANICAL-METALLOGRAPHY TEST	Austenitic and Ferritic-austenitic (Duplex) Stainless Steel	Intergranular Corrosion (IGC) - Method B	DIN EN ISO 3651 (Part 2)
351	MECHANICAL-METALLOGRAPHY TEST	Austenitic and Ferritic-austenitic (Duplex) Stainless Steel	Intergranular Corrosion (IGC) - Method C	DIN EN ISO 3651 (Part 2)
352	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (IGC) - Practice A	ASTM A262
353	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (IGC) - Practice B	ASTM A262
354	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (IGC) - Practice C	ASTM A262
355	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (IGC) - Practice E	ASTM A262
356	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (IGC) - Practice F	ASTM A262
357	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (Strauss Test)	IS 10461-2
358	MECHANICAL-METALLOGRAPHY TEST	Austenitic Stainless Steel	Intergranular Corrosion (Huey Test)	IS 10461-1



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359	MECHANICAL-METALLOGRAPHY TEST	Copper Materials, Alloys & Products	Ammonia Vapor Test (Susceptibility to Stress Corrosion Cracking)	ASTM B858
360	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic/Ferritic Stainless Steel	Detection of Detrimental Intermetallic Phases (Method A)	ASTM A923
361	MECHANICAL-METALLOGRAPHY TEST	Duplex Austenitic/Ferritic Stainless Steel	Determination of Detrimental Intermetallic Phases (Method C)	ASTM A923
362	MECHANICAL-METALLOGRAPHY TEST	Metallic Material (SG Iron)	Nodularity	IS 7754
363	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Aluminium)	Alternate Immersion Stress Corrosion Test	ASTM G44
364	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Copper)	Micro Examination (Grain Size)	ASTM E112 (by Comparison Method)
365	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Bent-Beam Stress-Corrosion	ASTM G39
366	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Case Depth	IS 6416 (by Microscopic Method)
367	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Case Depth (Hardness Method)	IS 6416
368	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Chloride Stress Corrosion Cracking (CSCC & MgCl ₂) Test	ASTM G36
369	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Decarburization Test	ASTM E1077 (by Microscopic Method)
370	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Decarburization Test	IS 6396 (by Microscopic Method)



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371	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Ferrite Content	ASTM E562 (by Microscopic Method)
372	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Hydrogen Induced Cracking Test (HIC)	NACE TM0284
373	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Inclusion Rating (Method A, D)	ASTM E45
374	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Micro Examination (General Structure)	ASM Volume 9
375	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Micro Examination (Grain Size)	ASTM E112 (by Comparison Method)
376	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Stress Oriented Hydrogen Induced Cracking Test	NACE MR0175/NACE TM0177
377	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Stress Oriented Hydrogen Induced Cracking Test	NACE TM0103
378	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Sulfide Stress Cracking (SSC) Test	EFC 16, Third Edition
379	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Sulfide Stress Cracking (SSC) Test	EFC 17, Second Edition
380	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Sulfide Stress Cracking (SSC) Test	ISO 11439 (Annex A, Clause A.3)
381	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Sulfide Stress Cracking (SSC) Test	NACE TM0316
382	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Sulfide Stress Cracking and Stress Corrosion Cracking	NACE TM0177



National Accreditation Board for Testing and Calibration Laboratories

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TCR ENGINEERING SERVICES PRIVATE LIMITED, PLOT NO. 125/2094, VISHNU VIHAR, JAYAPUR
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383	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Thickness of Coating	ASTM B499 (by Magnetic Method)
384	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Bent-Beam Stress-Corrosion	ASTM G39
385	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Chloride Stress Corrosion Cracking (MgCl ₂) Test	ASTM G36
386	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Hydrogen Induced Cracking Test	NACE TM0284
387	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Micro Examination (General Structure)	ASM Volume 9
388	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Micro Examination (Grain Size)	ASTM E112 (by Comparison Method)
389	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Stress Oriented Hydrogen Induced Cracking Test	NACE TM0103
390	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Stress Oriented Hydrogen Induced Cracking Test	EFC 16, Third Edition
391	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Sulfide Stress Cracking (SSC)	ASTM G39
392	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Sulfide Stress Cracking (SSC)	IS 15490
393	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Non-Ferrous)	Sulfide Stress Cracking and Stress Corrosion Cracking	NACE TM0177
394	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (SG Iron)	Nodularity	ASTM A247



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395	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Welded Specimen)	Macro-Examination - Metal Expansion	ASME Section IX
396	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Welded Specimen)	Micro Examination	ISO 17639
397	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials (Ferrous)	Sulfide Stress Cracking (SSC) Test	IS 15490 (Annex B, Clause 8.3.4)
398	MECHANICAL-METALLOGRAPHY TEST	Nickel Based and Chromium Bearing Alloys	Critical Crevice Temperature Test	ASTM G48 (Method D)
399	MECHANICAL-METALLOGRAPHY TEST	Nickel Based and Chromium Bearing Alloys	Critical Pitting Temperature Test	ASTM G48 (Method C)
400	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich Chromium Bearing Alloys	Ferric Sulfate-Sulfuric Acid Test (Method A)	ASTM G28
401	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich Chromium Bearing Alloys	Mixed Acid - Oxidating Salt (Method B) Test	ASTM G28
402	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Determination of Detrimental Intermetallic Phases (Method B)	ASTM A923
403	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Ferric Chloride Crevice Corrosion Test (Method B)	ASTM G48
404	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Critical Crevice Temperature Test (Method F)	ASTM G48
405	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Critical Pitting Temperature Test (Method E)	ASTM G48
406	MECHANICAL-METALLOGRAPHY TEST	Stainless Steels and Related Alloys	Ferric Chloride Pitting Test (Method A)	ASTM G48



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407	MECHANICAL-METALLOGRAPHY TEST	Steel	Micro Examination (Grain Size)	IS 4748 (by Comparison Method)
408	MECHANICAL-METALLOGRAPHY TEST	Steel	Micro Examination (Grain Size)	ISO 643 (by Comparison Method)
409	MECHANICAL-METALLOGRAPHY TEST	Steel	Inclusion Content (Method A, D)	ASTM E45



National Accreditation Board for
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CERTIFICATE OF ACCREDITATION

TCR ADVANCED ENGINEERING PRIVATE LIMITED

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

**"General Requirements for the Competence of Testing &
Calibration Laboratories"**

for its facilities at

250-252/9, GIDC, MAKARPURA, VADODARA, GUJARAT, INDIA

in the field of

TESTING

Certificate Number: TC-6739

Issue Date: 14/10/2023

Valid Until: 13/10/2025

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: TCR Advanced Engineering Private Limited

Signed for and on behalf of NABL



N. Venkateswaran
Chief Executive Officer



National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name :

TCR ADVANCED ENGINEERING PRIVATE LIMITED, 250-252/9, GIDC, MAKARPURA,
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Permanent Facility				
1	CHEMICAL- CORROSION TESTS	Metallic Material	Salt Spray Test	ASTM B117
2	CHEMICAL- CORROSION TESTS	Metallic Material	Salt Spray Test	IS 9844
3	CHEMICAL- CORROSION TESTS	Metallic Material	Salt Spray Test	ISO 9227
4	CHEMICAL- METALS & ALLOYS	Aluminium % its alloys	Cadmium	ASTM E1251
5	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Iron	ASTM E1251
6	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Bismuth	ASTM E1251
7	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	ASTM E1251
8	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cobalt	ASTM E1251
9	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	ASTM E1251
10	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	ASTM E1251
11	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	ASTM E1251
12	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	ASTM E1251
13	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	ASTM E1251
14	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	ASTM E1251
15	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Tin	ASTM E1251
16	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	ASTM E1251
17	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Vanadium	ASTM E1251
18	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	ASTM E1251



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19	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zirconium	ASTM E1251
20	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Aluminum	ASTM E415
21	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Aluminum	IS 8811
22	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Arsenic	ASTM E415
23	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Arsenic	IS 8811
24	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Carbon	ASTM E415
25	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Carbon	IS 8811
26	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Chromium	ASTM E415
27	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Chromium	IS 8811
28	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Cobalt	ASTM E415
29	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Cobalt	IS 8811
30	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Copper	ASTM E415
31	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Copper	IS 8811
32	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Lead	ASTM E415
33	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Manganese	ASTM E415
34	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Manganese	IS 8811
35	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Molybdenum	ASTM E415
36	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Molybdenum	IS 8811
37	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nickel	ASTM E415



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38	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nickel	IS 8811
39	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Niobium	ASTM E415
40	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Niobium	IS 8811
41	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nitrogen	ASTM E415
42	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nitrogen	TCR/INT/WI 01
43	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Phosphorous	ASTM E415
44	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Phosphorous	IS 8811
45	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Silicon	ASTM E415
46	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Silicon	IS 8811
47	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Sulfur	ASTM E415
48	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Sulfur	IS 8811
49	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Tin	ASTM E415
50	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Tin	IS 8811
51	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Titanium	ASTM E415
52	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Titanium	IS 8811
53	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Tungsten	TCR/INT/WI 01
54	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Vanadium	ASTM E415
55	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Vanadium	IS 8811
56	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Aluminum	BS 15079



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57	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	BS 15079
58	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	BS 15079
59	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	BS 15079
60	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	BS 15079
61	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	BS 15079
62	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	BS 15079
63	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	BS 15079
64	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	BS 15079
65	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorous	BS 15079
66	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	BS 15079
67	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	BS 15079
68	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	BS 15079
69	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	BS 15079
70	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	BS 15079
71	CHEMICAL- METALS & ALLOYS	Metallic Material	Aluminum by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
72	CHEMICAL- METALS & ALLOYS	Metallic Material	Antimony by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
73	CHEMICAL- METALS & ALLOYS	Metallic Material	Calcium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
74	CHEMICAL- METALS & ALLOYS	Metallic Material	Carbon by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508



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75	CHEMICAL- METALS & ALLOYS	Metallic Material	Chlorine by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
76	CHEMICAL- METALS & ALLOYS	Metallic material	Chromium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
77	CHEMICAL- METALS & ALLOYS	Metallic Material	Chromium by portable XRF based machine	ASTM E1476
78	CHEMICAL- METALS & ALLOYS	Metallic Material	Cobalt by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
79	CHEMICAL- METALS & ALLOYS	Metallic Material	Cobalt by portable XRF based machine	ASTM E1476
80	CHEMICAL- METALS & ALLOYS	Metallic Material	Copper by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
81	CHEMICAL- METALS & ALLOYS	Metallic Material	Copper by portable XRF based machine	ASTM E1476
82	CHEMICAL- METALS & ALLOYS	Metallic Material	Fluorine by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
83	CHEMICAL- METALS & ALLOYS	Metallic Material	Gold by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
84	CHEMICAL- METALS & ALLOYS	Metallic material	Iron by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
85	CHEMICAL- METALS & ALLOYS	Metallic Material	Iron by portable XRF based machine	ASTM E1476
86	CHEMICAL- METALS & ALLOYS	Metallic Material	Lead by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
87	CHEMICAL- METALS & ALLOYS	Metallic Material	Lead by portable XRF based machine	ASTM E1476
88	CHEMICAL- METALS & ALLOYS	Metallic Material	Magnesium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
89	CHEMICAL- METALS & ALLOYS	Metallic Material	Manganese by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
90	CHEMICAL- METALS & ALLOYS	Metallic Material	Manganese by portable XRF based machine	ASTM E1476
91	CHEMICAL- METALS & ALLOYS	Metallic Material	Molybdenum by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508



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92	CHEMICAL- METALS & ALLOYS	Metallic Material	Molybdenum by portable XRF based machine	ASTM E1476
93	CHEMICAL- METALS & ALLOYS	Metallic Material	Nickel by portable XRF based machine	ASTM E1476
94	CHEMICAL- METALS & ALLOYS	Metallic Material	Nickel by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
95	CHEMICAL- METALS & ALLOYS	Metallic Material	Niobium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
96	CHEMICAL- METALS & ALLOYS	Metallic Material	Niobium by portable XRF based machine	ASTM E1476
97	CHEMICAL- METALS & ALLOYS	Metallic Material	Oxygen by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
98	CHEMICAL- METALS & ALLOYS	Metallic Material	Phosphorus by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
99	CHEMICAL- METALS & ALLOYS	Metallic Material	Potassium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
100	CHEMICAL- METALS & ALLOYS	Metallic material	Silicon by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
101	CHEMICAL- METALS & ALLOYS	Metallic Material	Silver by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
102	CHEMICAL- METALS & ALLOYS	Metallic Material	Sodium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
103	CHEMICAL- METALS & ALLOYS	Metallic Material	Sulfur by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
104	CHEMICAL- METALS & ALLOYS	Metallic Material	Tin by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
105	CHEMICAL- METALS & ALLOYS	Metallic Material	Tin by portable XRF based machine	ASTM E1476
106	CHEMICAL- METALS & ALLOYS	Metallic Material	Titanium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
107	CHEMICAL- METALS & ALLOYS	Metallic Material	Titanium by portable XRF based machine	ASTM E1476
108	CHEMICAL- METALS & ALLOYS	Metallic Material	Tungsten by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
109	CHEMICAL- METALS & ALLOYS	Metallic Material	Tungsten by portable XRF based machine	ASTM E1476



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110	CHEMICAL- METALS & ALLOYS	Metallic Material	Vanadium by portable XRF based machine	ASTM E1476
111	CHEMICAL- METALS & ALLOYS	Metallic Material	Vanadium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
112	CHEMICAL- METALS & ALLOYS	Metallic Material	Zinc by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
113	CHEMICAL- METALS & ALLOYS	Metallic Material	Zinc by portable XRF based machine	ASTM E1476
114	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E3047
115	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E3047
116	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E3047
117	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	ASTM E3047
118	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E3047
119	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	ASTM E3047
120	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	ASTM E3047
121	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	ASTM E3047
122	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	ASTM E3047
123	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorous	ASTM E3047
124	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	ASTM E3047
125	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E3047
126	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	ASTM E3047
127	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	ASTM E3047
128	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	ASTM E3047



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129	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminum	IS 9879
130	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminum	TCR/INT/WI01
131	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
132	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 9879
133	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E1086
134	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 9879
135	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cobalt	TCR/INT/WI01
136	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E1086
137	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 9879
138	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086
139	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 9879
140	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E1086
141	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 9879
142	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E1086
143	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 9879
144	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium	TCR/INT/WI01
145	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nitrogen	TCR/INT/WI01
146	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorous	ASTM E1086
147	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorous	IS 9879



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148	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E1086
149	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 9879
150	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	ASTM E1086
151	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	IS 9879
152	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium	TCR/INT/WI01
153	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tungsten	TCR/INT/WI01
154	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	TCR/INT/WI01
155	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Aluminium	ASTM E2994
156	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Carbon	TCR/INT/WI05
157	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Iron	ASTM E2994
158	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Vanadium	ASTM E2994
159	CHEMICAL- METALS & ALLOYS	Tool Steel	Aluminum	TCR/INT/WI01
160	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium	TCR/INT/WI01
161	CHEMICAL- METALS & ALLOYS	Tool Steel	Aluminum	IS 9879
162	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	ASTM E1086
163	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	IS 9879
164	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	ASTM E1086
165	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	IS 9879
166	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt	TCR/INT/WI01



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167	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	ASTM E1086
168	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	IS 9879
169	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	ASTM E1086
170	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	IS 9879
171	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	ASTM E1086
172	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	IS 9879
173	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	ASTM E1086
174	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	IS 9879
175	CHEMICAL- METALS & ALLOYS	Tool Steel	Niobium	TCR/INT/WI01
176	CHEMICAL- METALS & ALLOYS	Tool Steel	Nitrogen	TCR/INT/WI01
177	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorous	ASTM E1086
178	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorous	IS 9879
179	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	ASTM E1086
180	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	IS 9879
181	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulfur	ASTM E1086
182	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulfur	IS 9879
183	CHEMICAL- METALS & ALLOYS	Tool Steel	Titanium	TCR/INT/WI01
184	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten	TCR/INT/WI01



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185	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Reduction in Area	ASTM B557
186	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Tensile Test	ASTM B557
187	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Ultimate Tensile Strength	ASTM B557
188	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Yield Stress, Yield Stress by electronic extensometer	ASTM B557
189	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Elongation	ASTM B557
190	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium Products	Elongation	IS 398 (Part 4)
191	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Ferrite Measurement by Ferritoscope	ASTM A800/A800M
192	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Surface Roughness Measurement	ASME B46.1
193	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Accelerated Creep/Stress Rupture Test (Elongation)	ASTM E139
194	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	ASME Sec IX
195	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	ASTM E190
196	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	ASTM E290
197	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	AWS D1.1
198	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	EN 5173



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199	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	IS 1599
200	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	IS 3600 (Part 5)
201	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test	ISO 7438
202	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend test of Reinforcement bar	IS 1786
203	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	ASTM E10
204	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	ASTM E10
205	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	ASTM E10
206	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	IS 1500 (Part I)
207	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	IS 1500 (Part I)
208	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	IS 1500 (Part I)
209	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	ISO 6506_1
210	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	ISO 6506_1
211	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test	ISO 6506_1
212	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -196 degree centigrade)	ASTM E23



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213	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -196 degree centigrade)	IS 1757 Part 1
214	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -196 degree centigrade)	IS 3600 (Part 2)
215	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -196 degree centigrade)	ISO 9016
216	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -196 degree centigrade)	SA 370
217	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Dynamic Hardness (Leeb)	ASTM A956
218	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	ASTM E8
219	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	EN 4136
220	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	EN ISO 6892_1
221	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	IS 1608(Part-1)
222	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	ASTM A1016
223	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Flattening Test (Tubes / Pipes)	IS 2328
224	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Full size breaking	IS 1367 (Part 3)
225	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	ASTM A194
226	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	IS 1367 (Part 6)



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227	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	ISO 898-2
228	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	SA 194
229	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof load - Studs & Bolts	ASTM A193
230	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Studs & bolts	IS 1367 (Part 3)
231	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Studs & Bolts	ISO 898-1
232	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic material	Proof Load - Studs & Bolts	SA 193
233	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	ASTM E8
234	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	EN 4136
235	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	EN ISO 6892-1
236	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	IS 1608 (Part-1)
237	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rebend test of Reinforcement bar/TMT bar	IS 1786
238	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	ASTM A770
239	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	ASTM E8
240	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	EN 4136



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241	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	EN ISO 10164
242	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	EN ISO 6892-1
243	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	EN ISO 7778
244	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	IS 1608 (Part-1)
245	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	ASTM E18
246	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	ASTM E18
247	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	ASTM E18
248	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	IS 1586 (Part I)
249	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	IS 1586 (Part I)
250	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	IS 1586 (Part I)
251	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	ISO 6508_1
252	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	ISO 6508-1
253	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test	ISO 6508-1
254	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test	ASTM E8



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255	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test	EN 4136
256	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile test	EN ISO 6892-1
257	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test	IS 1608 (Part I)
258	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test	IS 3600 (Part 1)
259	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile test	ISO 898-1
260	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	ASTM E8
261	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	EN 4136
262	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	EN ISO 6892-1
263	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	IS 1608 (Part I)
264	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness	ASTM E92
265	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E384
266	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E384
267	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E384
268	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E92



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269	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E92
270	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E92
271	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E92
272	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E92
273	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ASTM E92
274	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	EN ISO 9015-1
275	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	EN ISO 9015-1
276	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (Part 1)
277	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (part 1)
278	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (Part 1)
279	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (Part 1)
280	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (Part 1)
281	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (Part 1)
282	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	IS 1501 (Part I)



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283	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507 (Part 1)
284	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507_1
285	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507_1
286	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507_1
287	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507_1
288	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507_1
289	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test	ISO 6507-1
290	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test - Micro Hardness	EN ISO 9015-2
291	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test, Micro Hardness	EN ISO 9015-2
292	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test, Micro Hardness	EN ISO 9015-2
293	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	ASTM E8
294	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	EN 4136
295	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	EN ISO 6892-1
296	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	IS 1608 (Part I)



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297	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test	IS 1367 (Part 3)
298	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel product	Proof Load - Studs & Bolts	ASTM A370
299	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Stress	SA 370
300	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction in Area	ASTM A370
301	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test	ASTM A370
302	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test	ASTM A370
303	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test	ASTM A370
304	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test	SA 370
305	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test	SA 370
306	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test	SA 370
307	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Tensile Test	ASTM A370
308	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Tensile Test	ASTM A370
309	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Tensile Test	SA 370
310	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Ultimate Tensile Strength	ASTM A370



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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
311	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Ultimate Tensile Strength	SA 370
312	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Yield Stress, Yield Stress by electronic extensometer	ASTM A370
313	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Bend Test	ASTM A370
314	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Bend Test	SA 370
315	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test	ASTM A370
316	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V notch Impact Test (+30 to -196 degree centigrade)	ASTM A370
317	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V notch Impact Test (+30 to -196 degree centigrade)	SA 370
318	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Elongation	ASTM A370
319	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Tensile Test	SA 370
320	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Elongation	SA 370
321	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	ASTM A370
322	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	SA 370
323	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Full size breaking	ASTM A370
324	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Full size breaking	SA 370



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325	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Nuts	ASTM A370
326	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Nuts	SA 370
327	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Studs & bolts	SA 370
328	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Stress	ASTM A370
329	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Stress	SA 370
330	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction in Area	SA 370
331	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Proof Stress	API 1104
332	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Proof Stress	ASME Sec IX
333	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	API 1104
334	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	API 5L
335	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	ASME Sec IX
336	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	AWS B4.0
337	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	AWS D1.1
338	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	EN 15614_1



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339	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	EN ISO 5178
340	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	API 1104
341	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	API 5L
342	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	ASME Sec IX
343	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	AWS B4.0
344	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	AWS D1.1
345	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	EN 15614-1
346	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Tensile Test	EN ISO 5178
347	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	API 1104
348	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	ASME Sec IX
349	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	AWS B4.0
350	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	AWS D1.1
351	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	EN 15614-1
352	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	EN ISO 5178



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353	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	API 1104
354	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	API 5L
355	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	ASME Sec IX
356	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	AWS B4.0
357	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	AWS D1.1
358	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	EN 15614-1
359	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensiometer	EN ISO 5178
360	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	API 1104
361	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	API 5L
362	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	ASME Sec IX
363	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	AWS B4.0
364	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	AWS D1.1
365	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	EN 15614_1
366	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	EN ISO 5178



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367	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Proof Stress	EN 15614-1
368	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Welded Products	Pull out test / push out test - Tube to tube sheet mock up	ASME Sec VIII Div 1
369	MECHANICAL- METALLOGRAPHY TEST	Cast iron	Micro Structure Examination	ASTM A247
370	MECHANICAL- METALLOGRAPHY TEST	Duplex austenitic / ferritic stainless steel	Determination of Inter metallic phase in Duplex austenitic / ferritic stainless steel - Method C	ASTM A923
371	MECHANICAL- METALLOGRAPHY TEST	Duplex austenitic / ferritic stainless steel	Determination of Inter metallic phase in Duplex austenitic / ferritic stainless steel - Method A	ASTM A923
372	MECHANICAL- METALLOGRAPHY TEST	Duplex austenitic / ferritic stainless steel	Determination of Inter metallic phase in Duplex austenitic / ferritic stainless steel - Method B	ASTM A923
373	MECHANICAL- METALLOGRAPHY TEST	Ferrous materials, alloys & products	Carbide streak and carbide distribution	SEP 1520
374	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Case Depth Measurement	IS 6416
375	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	De-carburization Depth	ASTM E1077
376	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	De-carburization Depth	IS 6396
377	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Grain Size Measurement	ASTM E112
378	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Grain Size Measurement	IS 4748
379	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Grain Size Measurement	ISO 643
380	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Inclusion Rating	IS 4163
381	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Inclusion Rating A	ASTM E45
382	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Inclusion ration	ISO 4967



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383	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Linear Measurement	TCR/MET/WI17
384	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ASME Sec IX
385	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ASTM E340
386	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ASTM E381
387	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	AWS D1.1/D1.1M
388	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	EN ISO 17639
389	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	IS 3600 (Part 9)
390	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ISO/TR 16060
391	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Micro Structure Examination	ASM Handbook Volume 9
392	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Quantitative Metallography	ASTM E562
393	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Replica Micro Structure Examination	ASTM E1351
394	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	SEM Analysis	ASM Handbook Volume 9
395	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Thickness of Coating	ASTM B487
396	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Macro Etch Test	EN ISO 5817
397	MECHANICAL-METALLOGRAPHY TEST	Metallic Materials	Macroetch testing of consumable electrode remelted steel bar and billets	ASTM A604
398	MECHANICAL-METALLOGRAPHY TEST	Metallography Test	Macro Etch Test	EN ISO 15614-1
399	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich, Chromium-Bearing Alloys	Method A Ferric Sulfate-Sulfuric Acid Test	ASTM G28
400	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich, Chromium-Bearing Alloys	Mixed Acid-Oxidating Salt Test as per Method B	ASTM G28



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401	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Huey Test	DIN 3651-1
402	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice A	ASTM A262
403	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice B	ASTM A262
404	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice C	ASTM A262
405	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice E	ASTM A262
406	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Method A	DIN 3651-2
407	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Method B	DIN 3651-2
408	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Method C	DIN 3651-2
409	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel and its alloys	Crevice Corrosion Method B	ASTM G48
410	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel and its alloys	Pitting Corrosion Method A	ASTM G48



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Site Facility				
1	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Ferrite Measurement by Ferritoscope	ASTM A800/A800M
2	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Surface Roughness Measurement	ASME B46.1
3	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Dynamic Hardness (Leeb)	ASTM A956
4	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Replica Micro Structure Examination	ASTM E1351