



National Accreditation Board for
Testing and Calibration Laboratories

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: 14/10/2025

Valid Until: 13/10/2029

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 Advanced Engineering Private Limited

Signed for and on behalf of NABL




Anuja Anand
Director


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, VADODARA, GUJARAT, INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

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Validity

14/10/2025 to 13/10/2029

Last Amended on -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Testing				
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	Tool Steel	Aluminum	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
5	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	ASTM E1086
6	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	IS 9879
7	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	ASTM E1086
8	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	IS 9879
9	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
10	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	ASTM E1086
11	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	IS 9879
12	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	ASTM E1086
13	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	IS 9879
14	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	ASTM E1086
15	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	IS 9879
16	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	ASTM E1086
17	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	IS 9879
18	CHEMICAL- METALS & ALLOYS	Tool Steel	Niobium	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
19	CHEMICAL- METALS & ALLOYS	Tool Steel	Nitrogen	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023



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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
20	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorous	ASTM E1086
21	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorous	IS 9879
22	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	ASTM E1086
23	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	IS 9879
24	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulfur	ASTM E1086
25	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulfur	IS 9879
26	CHEMICAL- METALS & ALLOYS	Tool Steel	Titanium	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
27	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
28	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
29	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Bismuth	ASTM E1251
30	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	ASTM E1251
31	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	ASTM E1251
32	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Iron	ASTM E1251
33	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	ASTM E1251
34	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	ASTM E1251
35	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	ASTM E1251
36	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	ASTM E1251
37	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	ASTM E1251
38	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Tin	ASTM E1251
39	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	ASTM E1251



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40	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Vanadium	ASTM E1251
41	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	ASTM E1251
42	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zirconium	ASTM E1251
43	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Aluminum	ASTM E415
44	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Aluminum	IS 8811
45	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Arsenic	ASTM E415
46	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Arsenic	IS 8811
47	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Carbon	ASTM E415
48	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Carbon	IS 8811
49	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Chromium	ASTM E415
50	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Chromium	IS 8811
51	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Cobalt	ASTM E415
52	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Cobalt	IS 8811
53	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Copper	ASTM E415
54	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Copper	IS 8811
55	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Lead	ASTM E415
56	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Manganese	ASTM E415
57	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Manganese	IS 8811
58	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Molybdenum	ASTM E415
59	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Molybdenum	IS 8811



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60	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nickel	ASTM E415
61	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nickel	IS 8811
62	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Niobium	ASTM E415
63	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Niobium	IS 8811
64	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nitrogen	ASTM E415
65	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Nitrogen	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
66	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Phosphorous	ASTM E415
67	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Phosphorous	IS 8811
68	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Silicon	ASTM E415
69	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Silicon	IS 8811
70	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Sulfur	ASTM E415
71	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Sulfur	IS 8811
72	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Tin	ASTM E415
73	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Tin	IS 8811
74	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Titanium	ASTM E415
75	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Titanium	IS 8811
76	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Tungsten	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
77	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Vanadium	ASTM E415
78	CHEMICAL- METALS & ALLOYS	Carbon Steel (low carbon, medium carbon & high carbon)	Vanadium	IS 8811
79	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Aluminum	BS 15079



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80	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	BS 15079
81	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	BS 15079
82	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	BS 15079
83	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	BS 15079
84	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	BS 15079
85	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	BS 15079
86	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	BS 15079
87	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	BS 15079
88	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorous	BS 15079
89	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	BS 15079
90	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	BS 15079
91	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	BS 15079
92	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	BS 15079
93	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	BS 15079
94	CHEMICAL- METALS & ALLOYS	Metallic Material	Aluminium by portable XRF based machine	ASTM E1476
95	CHEMICAL- METALS & ALLOYS	Metallic Material	Aluminum by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
96	CHEMICAL- METALS & ALLOYS	Metallic Material	Antimony by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
97	CHEMICAL- METALS & ALLOYS	Metallic Material	Calcium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
98	CHEMICAL- METALS & ALLOYS	Metallic Material	Carbon by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
99	CHEMICAL- METALS & ALLOYS	Metallic Material	Chlorine by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508

This is annexure to 'Certificate of Accreditation' and does not require any signature.



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100	CHEMICAL- METALS & ALLOYS	Metallic Material	Chromium by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
101	CHEMICAL- METALS & ALLOYS	Metallic Material	Chromium by portable XRF based machine	ASTM E1476
102	CHEMICAL- METALS & ALLOYS	Metallic Material	Cobalt by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
103	CHEMICAL- METALS & ALLOYS	Metallic Material	Cobalt by portable XRF based machine	ASTM E1476
104	CHEMICAL- METALS & ALLOYS	Metallic Material	Copper by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
105	CHEMICAL- METALS & ALLOYS	Metallic Material	Copper by portable XRF based machine	ASTM E1476
106	CHEMICAL- METALS & ALLOYS	Metallic Material	Fluorine by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
107	CHEMICAL- METALS & ALLOYS	Metallic Material	Gold by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
108	CHEMICAL- METALS & ALLOYS	Metallic Material	Iron by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
109	CHEMICAL- METALS & ALLOYS	Metallic Material	Iron by portable XRF based machine	ASTM E1476
110	CHEMICAL- METALS & ALLOYS	Metallic Material	Lead by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
111	CHEMICAL- METALS & ALLOYS	Metallic Material	Lead by portable XRF based machine	ASTM E1476
112	CHEMICAL- METALS & ALLOYS	Metallic Material	Magnesium by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
113	CHEMICAL- METALS & ALLOYS	Metallic Material	Manganese by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
114	CHEMICAL- METALS & ALLOYS	Metallic Material	Manganese by portable XRF based machine	ASTM E1476
115	CHEMICAL- METALS & ALLOYS	Metallic Material	Molybdenum by Energy Dispersive Spectromof X-RAY EDS	ASTM E1508
116	CHEMICAL- METALS & ALLOYS	Metallic Material	Molybdenum by portable XRF based machine	ASTM E1476
117	CHEMICAL- METALS & ALLOYS	Metallic Material	Nickel by portable XRF based machine	ASTM E1476



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118	CHEMICAL- METALS & ALLOYS	Metallic Material	Nickel by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
119	CHEMICAL- METALS & ALLOYS	Metallic Material	Niobium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
120	CHEMICAL- METALS & ALLOYS	Metallic Material	Niobium by portable XRF based machine	ASTM E1476
121	CHEMICAL- METALS & ALLOYS	Metallic Material	Oxygen by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
122	CHEMICAL- METALS & ALLOYS	Metallic Material	Phosphorus by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
123	CHEMICAL- METALS & ALLOYS	Metallic Material	Potassium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
124	CHEMICAL- METALS & ALLOYS	Metallic Material	Silicon by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
125	CHEMICAL- METALS & ALLOYS	Metallic Material	Silver by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
126	CHEMICAL- METALS & ALLOYS	Metallic Material	Sodium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
127	CHEMICAL- METALS & ALLOYS	Metallic Material	Sulfur by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
128	CHEMICAL- METALS & ALLOYS	Metallic Material	Tin by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
129	CHEMICAL- METALS & ALLOYS	Metallic Material	Tin by portable XRF based machine	ASTM E1476
130	CHEMICAL- METALS & ALLOYS	Metallic Material	Titanium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
131	CHEMICAL- METALS & ALLOYS	Metallic Material	Titanium by portable XRF based machine	ASTM E1476
132	CHEMICAL- METALS & ALLOYS	Metallic Material	Tungsten by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
133	CHEMICAL- METALS & ALLOYS	Metallic Material	Tungsten by portable XRF based machine	ASTM E1476
134	CHEMICAL- METALS & ALLOYS	Metallic Material	Vanadium by portable XRF based machine	ASTM E1476
135	CHEMICAL- METALS & ALLOYS	Metallic Material	Vandium by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508
136	CHEMICAL- METALS & ALLOYS	Metallic Material	Zinc by Energy Dispersive Spectrum of X-RAY EDS	ASTM E1508



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137	CHEMICAL- METALS & ALLOYS	Metallic Material	Zinc by portable XRF based machine	ASTM E1476
138	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E3047
139	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E3047
140	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E3047
141	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	ASTM E3047
142	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E3047
143	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	ASTM E3047
144	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	ASTM E3047
145	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	ASTM E3047
146	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	ASTM E3047
147	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorous	ASTM E3047
148	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	ASTM E3047
149	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E3047
150	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	ASTM E3047
151	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	ASTM E3047
152	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	ASTM E3047
153	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminum	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
154	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
155	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	IS 9879
156	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E1086



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157	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	IS 9879
158	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cobalt	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
159	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E1086
160	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	IS 9879
161	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086
162	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	IS 9879
163	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E1086
164	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	IS 9879
165	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E1086
166	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	IS 9879
167	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
168	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nitrogen	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
169	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorous	ASTM E1086
170	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorous	IS 9879
171	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E1086
172	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	IS 9879
173	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	ASTM E1086
174	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	IS 9879
175	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
176	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tungsten	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023



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177	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	TCR/INT/WI01 Rev. 02 Rev. date: 14.05.2023
178	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Aluminium	ASTM E2994
179	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Carbon	TCR/INT/WI05 Rev. 01, Rev Date: 14.10.2023
180	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Iron	ASTM E2994
181	CHEMICAL- METALS & ALLOYS	Titanium & its alloys	Vanadium	ASTM E2994
182	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Elongation	ASTM B557
183	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Reduction in Area	ASTM B557
184	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Ultimate Tensile Strength	ASTM B557
185	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium & Magnesium Alloys	Yield Stress, Yield Stress by electronic extensometer	ASTM B557
186	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium Products	Breaking Load	IS 398 (Part 4)
187	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Aluminium Products	Elongation	IS 398 (Part 4)
188	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Copper and Copper Alloy Tubes	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	ASTM B111
189	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Surface Roughness Measurement	ASME B46.1
190	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Drift Expansion Test (Tubes)	ISO 8493
191	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Flattening	ISO 8492
192	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Accelerated Creep/Stress Rupture Test (Elongation)	ASTM E139



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193	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	ASME Sec IX
194	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	ASTM E190
195	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	ASTM E290
196	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	AWS D1.1
197	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	EN 5173
198	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	IS 1599
199	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	IS 3600 (Part 5)
200	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	ISO 7438
201	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW10/3000	ASTM E10
202	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW10/3000	IS 1500 (Part I)
203	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW10/3000	ISO 6506_1
204	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW2.5/187.5	ASTM E10
205	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW2.5/187.5	IS 1500 (Part I)
206	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW2.5/187.5	ISO 6506_1



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207	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW5/750	ASTM E10
208	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW5/750	IS 1500 (Part I)
209	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Brinell Hardness Test - HBW5/750	ISO 6506_1
210	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (-196 degree centigrade)	ASTM E23
211	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (-196 degree centigrade)	IS 1757 Part 1
212	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (-196 degree centigrade)	IS 3600 (Part 2)
213	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (-196 degree centigrade)	ISO 148-1
214	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (-196 degree centigrade)	ISO 9016
215	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -110 degree centigrade)	ASTM E23
216	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -110 degree centigrade)	IS 1757 Part 1
217	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -110 degree centigrade)	IS 3600 (Part 2)
218	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -110 degree centigrade)	ISO 148-1
219	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Charpy V notch Impact Test (+30 to -110 degree centigrade)	ISO 9016
220	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Dynamic Hardness (Leeb)	ASTM A956



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221	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	ASTM E8
222	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	EN 4136
223	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	EN ISO 6892_1
224	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Elongation	IS 1608(Part-1)
225	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	ASTM A1016
226	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Flattening Test (Tubes / Pipes)	IS 2328
227	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	ASTM A194
228	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	IS 1367 (Part 6)
229	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	ISO 898-2
230	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Nuts	SA 194
231	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof load - Studs & Bolts	ASTM A193
232	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Studs & bolts	IS 1367 (Part 3)
233	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Studs & Bolts	ISO 898-1
234	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Load - Studs & Bolts	SA 193



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235	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	ASTM E8
236	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	EN 4136
237	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	EN ISO 6892-1
238	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Proof Stress	IS 1608 (Part-1)
239	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rebend test of Reinforcement bar/TMT bar (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	IS 1786
240	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	ASTM A770
241	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	ASTM E8
242	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	EN 4136
243	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Reduction in Area	EN ISO 6892-1
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 (A scale)	ASTM E18
246	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (A scale)	IS 1586 (Part I)
247	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (A scale)	ISO 6508-1
248	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (B Scale)	ASTM E18



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249	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (B scale)	IS 1586 (Part I)
250	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (B scale)	ISO 6508_1
251	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (C scale)	ASTM E18
252	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (C scale)	IS 1586 (Part I)
253	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Rockwell Hardness Test (C scale)	ISO 6508-1
254	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic material	UCI Hardness (Brinell)	ASTM A1038
255	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	UCI Hardness (Vickers)	ASTM A1038
256	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	ASTM E8
257	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	EN 4136
258	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	EN ISO 6892-1
259	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Ultimate Tensile Strength	IS 1608 (Part I)
260	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness (HV5)	ASTM E92
261	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.1)	ASTM E384
262	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.1)	ASTM E92



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263	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.1)	IS 1501 (Part 1)
264	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.1)	ISO 6507_1
265	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.5)	ASTM E384
266	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.5)	ASTM E92
267	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.5)	IS 1501 (Part 1)
268	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV0.5)	ISO 6507_1
269	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV1)	ASTM E384
270	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV1)	ASTM E92
271	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV1)	IS 1501 (Part I)
272	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV1)	ISO 6507-1
273	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV10)	ASTM E92
274	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV10)	EN ISO 9015-1
275	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV10)	IS 1501 (Part 1)
276	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV10)	ISO 6507_1



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277	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV3)	IS 1501 (part 1)
278	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV3)	ISO 6507_1
279	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV30)	ASTM E92
280	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV30)	IS 1501 (Part 1)
281	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV30)	ISO 6507_1
282	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV5)	EN ISO 9015-1
283	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV5)	IS 1501 (Part 1)
284	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test (HV5)	ISO 6507_1
285	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test HV3	ASTM E92
286	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test - Micro Hardness (HV1)	EN ISO 9015-2
287	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test, Micro Hardness (HV0.1)	EN ISO 9015-2
288	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test, Micro Hardness (HV0.3)	ASTM E92
289	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic material	Vickers Hardness Test, Micro Hardness (HV0.3)	ASTM E384
290	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic material	Vickers Hardness Test, Micro Hardness (HV0.3)	EN ISO 9015-2



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291	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic material	Vickers Hardness Test, Micro Hardness (HV0.3)	IS 1501 (Part 1)
292	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic material	Vickers Hardness Test, Micro Hardness (HV0.3)	ISO 6507_1
293	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Vickers Hardness Test, Micro Hardness (HV0.5)	EN ISO 9015-2
294	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	ASTM E8
295	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	EN 4136
296	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	EN ISO 6892-1
297	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	Yield Stress, Yield Stress by electronic extensometer	IS 1608 (Part I)
298	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Reinforcement bar	Bend test of Reinforcement bar (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	IS 1599
299	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	ASTM A370
300	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Bend Test (Mandrel dia. in mm: 4, 6, 10, 12, 17, 20, 24, 25, 30, 32, 40, 44, 50, 55, 57, 60, 75)	SA 370
301	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test - HBW10/3000	ASTM A370
302	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test - HBW10/3000	SA 370
303	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test - HBW2.5/187.5	ASTM A370
304	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test - HBW2.5/187.5	SA 370



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305	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test - HBW5/750	ASTM A370
306	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Brinell Hardness Test - HBW5/750	SA 370
307	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V notch Impact Test (-196 degree centigrade)	ASTM A370
308	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V notch Impact Test (-196 degree centigrade)	SA 370
309	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V notch Impact Test (+30 to -110 degree centigrade)	ASTM A370
310	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Charpy V notch Impact Test (+30 to -110 degree centigrade)	SA 370
311	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Elongation	ASTM A370
312	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Elongation	SA 370
313	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	ASTM A370
314	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Flattening / Flaring Test / Drift Expansion Test (Tubes / Pipes)	SA 370
315	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Full size breaking	ASTM A370
316	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Full size breaking	SA 370
317	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Nuts	ASTM A370
318	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Nuts	SA 370



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319	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Studs & Bolts	ASTM A370
320	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Load - Studs & bolts	SA 370
321	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Stress	ASTM A370
322	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Proof Stress	SA 370
323	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction in Area	ASTM A370
324	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction in Area	EN ISO 10164
325	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction in Area	EN ISO 7778
326	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Reduction in Area	SA 370
327	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test (A scale)	ASTM A370
328	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test (A scale)	SA 370
329	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test (B scale)	ASTM A370
330	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test (B scale)	SA 370
331	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test (C scale)	ASTM A370
332	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Rockwell Hardness Test (C scale)	SA 370



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333	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Ultimate Tensile Strength	ASTM A370
334	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Ultimate Tensile Strength	SA 370
335	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Steel Products	Yield Stress, Yield Stress by electronic extensometer	ASTM A370
336	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	API 1104
337	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	API 5L
338	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	ASME Sec IX
339	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	AWS B4.0
340	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	AWS D1.1
341	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	EN 15614_1
342	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Elongation	EN ISO 5178
343	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Proof Stress	API 1104
344	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Proof Stress	ASME Sec IX
345	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Proof Stress	EN 15614-1
346	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Pull out test / push out test - Tube to tube sheet mock up	ASME Sec VIII Div 1



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347	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	API 1104
348	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	API 5L
349	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	ASME Sec IX
350	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	AWS B4.0
351	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	AWS D1.1
352	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	EN 15614_1
353	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Reduction in Area	EN ISO 5178
354	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	API 1104
355	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate tensile strength	API 5L
356	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	ASME Sec IX
357	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	AWS B4.0
358	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	AWS D1.1
359	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	EN 15614-1
360	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Ultimate Tensile Strength	EN ISO 5178



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361	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	API 1104
362	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	API 5L
363	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	ASME Sec IX
364	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	AWS B4.0
365	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	AWS D1.1
366	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	EN 15614-1
367	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Welded Products	Yield Stress, Yield Stress by electronic extensometer	EN ISO 5178
368	MECHANICAL-METALLOGRAPHY TEST	Cast iron	Micro Structure Examination for graphite/ nodules	ASTM A247
369	MECHANICAL-METALLOGRAPHY TEST	Duplex austenitic /ferritic stainless steel	Determination of Intermetallic phase in Duplex austenitic /ferritic stainless steel - Method C	ASTM A923
370	MECHANICAL-METALLOGRAPHY TEST	Duplex austenitic / ferritic stainless steel	Determination of Inter metallic phase in Duplex austenitic / ferritic stainless steel - Method A	ASTM A923
371	MECHANICAL-METALLOGRAPHY TEST	Duplex austenitic / ferritic stainless steel	Determination of Inter metallic phase in Duplex austenitic / ferritic stainless steel - Method B	ASTM A923
372	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Carbide streak and carbide distribution	SEP 1520
373	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Ferrite Measurement by Ferritoscope	ASTM A800/800M
374	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Grain Size Measurement	ASTM E112
375	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Linear Measurement	TCR/MET/WI17 Rev. 01, Rev date: 14.08.2020



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376	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ASME Sec IX
377	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ASTM E340
378	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	AWS D1.1/D1.1M
379	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	EN ISO 17639
380	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	EN ISO 5817
381	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	IS 3600 (Part 9)
382	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macro Etch Test	ISO/TR 16060
383	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Macroetch testing of consumable electrode remelted steel bar and billets	ASTM A604/A604M
384	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Micro Structure Examination	ASM Handbook Volume 9
385	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Replica Micro Structure Examination	ASTM E1351
386	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	SEM Analysis	ASM Handbook Volume 9
387	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Thickness of Coating	ASTM B487
388	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Volume Fraction	ASTM E562
389	MECHANICAL-METALLOGRAPHY TEST	Metallography Test	Macro Etch Test	EN ISO 15614-1
390	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich, Chromium-Bearing Alloys	Method A FerricSulfate-Sulfuric AcidTest	ASTM G28
391	MECHANICAL-METALLOGRAPHY TEST	Nickel-Rich, Chromium-Bearing Alloys	Mixed Acid-Oxidating Salt Test asper Method B	ASTM G28
392	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Huey test	DIN EN ISO 3651-1
393	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice A	ASTM A262
394	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice B	ASTM A262
395	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice C	ASTM A262

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396	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	IGC Test - Practice E	ASTM A262
397	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Method A (Strauss Test)	DIN EN ISO 3651-2
398	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Method B (35% Sulfuric acid/Copper sulfate test)	DIN EN ISO 3651-2
399	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel	Method C (40% Sulfuric acid/Ferric sulfate test)	DIN EN ISO 3651-2
400	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel and its alloys	Crevice Corrosion Method B	ASTM G48
401	MECHANICAL-METALLOGRAPHY TEST	Stainless Steel and its alloys	Pitting Corrosion Method A	ASTM G48
402	MECHANICAL-METALLOGRAPHY TEST	Steel Products	Case Depth Measurement	IS 6416
403	MECHANICAL-METALLOGRAPHY TEST	Steel products	De-carburization Depth	ASTM E1077
404	MECHANICAL-METALLOGRAPHY TEST	Steel products	De-carburization Depth	IS 6396
405	MECHANICAL-METALLOGRAPHY TEST	Steel products	Grain Size Measurement	IS 4748
406	MECHANICAL-METALLOGRAPHY TEST	Steel products	Grain Size Measurement	ISO 643
407	MECHANICAL-METALLOGRAPHY TEST	Steel products	Inclusion Rating method A	ASTM E45
408	MECHANICAL-METALLOGRAPHY TEST	Steel products	Inclusion Rating method A	IS 4163
409	MECHANICAL-METALLOGRAPHY TEST	Steel products	Inclusion Rating method A	ISO 4967
410	MECHANICAL-METALLOGRAPHY TEST	Steel products	Macro Etch Test	ASTM E381



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Site Testing				
1	CHEMICAL- METALS & ALLOYS	Metallic Material	Aluminium by portable XRF based machine	ASTM E1476
2	CHEMICAL- METALS & ALLOYS	Metallic Material	Chromium by portable XRF based machine	ASTM E1476
3	CHEMICAL- METALS & ALLOYS	Metallic Material	Cobalt by portable XRF based machine	ASTM E1476
4	CHEMICAL- METALS & ALLOYS	Metallic Material	Copper by portable XRF based machine	ASTM E1476
5	CHEMICAL- METALS & ALLOYS	Metallic Material	Iron by portable XRF based machine	ASTM E1476
6	CHEMICAL- METALS & ALLOYS	Metallic Material	Lead by portable XRF based machine	ASTM E1476
7	CHEMICAL- METALS & ALLOYS	Metallic Material	Manganese by portable XRF based machine	ASTM E1476
8	CHEMICAL- METALS & ALLOYS	Metallic Material	Molybdenum by portable XRF based machine	ASTM E1476
9	CHEMICAL- METALS & ALLOYS	Metallic Material	Nickel by portable XRF based machine	ASTM E1476
10	CHEMICAL- METALS & ALLOYS	Metallic Material	Niobium by portable XRF based machine	ASTM E1476
11	CHEMICAL- METALS & ALLOYS	Metallic Material	Tin by portable XRF based machine	ASTM E1476
12	CHEMICAL- METALS & ALLOYS	Metallic Material	Titanium by portable XRF based machine	ASTM E1476
13	CHEMICAL- METALS & ALLOYS	Metallic Material	Tungsten by portable XRF based machine	ASTM E1476
14	CHEMICAL- METALS & ALLOYS	Metallic Material	Vanadium by portable XRF based machine	ASTM E1476
15	CHEMICAL- METALS & ALLOYS	Metallic Material	Zinc by portable XRF based machine	ASTM E1476
16	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials, alloys & products	Surface Roughness Measurement	ASME B46.1
17	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Dynamic Hardness (Leeb)	ASTM A956
18	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic material	UCI Hardness (Brinell)	ASTM A1038



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19	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Metallic Material	UCI Hardness (Vickers)	ASTM A1038
20	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials, alloys & products	Ferrite Measurement by Ferritoscope	ASTM A800/800M
21	MECHANICAL-METALLOGRAPHY TEST	Metallic Material	Replica Micro Structure Examination	ASTM E1351