



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, THANE, MAHARASHTRA, INDIA

in the field of

TESTING

Certificate Number: TC-6905

Issue Date: 27/02/2020 Valid Until: 26/02/2022

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)

Signed for and on behalf of NABL

N. Venkateswaran Chief Executive Officer





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

1 of 94

Validity

27/02/2020 to 26/02/2022

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
		Permanen	t Facility	
1	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IEC 62321-3-1
2	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA
3	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IEC 62321-3-1
4	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
5	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IEC 62321-3-1
6	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
7	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IEC 62321-3-1
8	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
9	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Cadmium	IEC 62321-3-1





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

2 of 94

Validity

27/02/2020 to 26/02/2022

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
10	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA
11	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Chromium	IEC 62321-3-1
12	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
13	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Lead	IEC 62321-3-1
14	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
15	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Mercury	IEC 62321-3-1
16	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
17	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Cadmium	IEC 62321-3-1
18	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

3 of 94

Validity

27/02/2020 to 26/02/2022

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
19	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Chromium	IEC 62321-3-1
20	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
21	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Lead	IEC 62321-3-1
22	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
23	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Mercury	IEC 62321-3-1
24	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

4 of 94

Validity

27/02/2020 to 26/02/2022

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
25	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IEC 62321-3-1; 2013, IEC 62321-5
26	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 5): 2014, RA
27	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IEC 62321 -3-1
28	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 5): 2014, RA
29	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium(VI)	IEC 62321-7-1
30	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium(VI)	IS 16197 (Part 7, Sec 1)
31	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IEC 62321-3-1; 2013, IEC 62321-5
32	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 5): 2014, RA
33	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IEC 62321-3-1; 2013, IEC 62321-4
34	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 4): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

5 of 94

Validity

27/02/2020 to 26/02/2022

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
35	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IEC 62321-3-1
36	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IEC 62321-3-1
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	Mercury	IEC 62321-3-1
39	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA
40	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
41	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
42	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
43	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

6 of 94

Validity

27/02/2020 to 26/02/2022

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
44	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
45	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
46	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
47	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Cadmium	IEC 62321-3-1
48	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Chromium	IEC 62321-3-1
49	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Lead	IEC 62321-3-1
50	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Mercury	IEC 62321-3-1
51	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IEC 62321 -3-1





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

7 of 94

Validity

27/02/2020 to 26/02/2022

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
52	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IS 16197 (Part 3: Sec 1) 2014, RA
53	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IEC 62321 (Part 3-1)
54	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
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): 2014, RA
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): 2014, RA
59	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Boron	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
60	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cadmium	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
61	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Cadmium	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
62	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

8 of 94

Validity

27/02/2020 to 26/02/2022

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
63	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Chromium	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
64	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	ASTM E1251
65	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
66	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Copper	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
67	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Iron	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
68	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	ASTM E1251
69	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
70	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Lead	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
71	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
72	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Magnesium	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
73	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
74	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Manganese	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
75	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
76	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Nickel	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

9 of 94

Validity

27/02/2020 to 26/02/2022

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
77	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	ASTM E34
78	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	IS 504 (Part 1) : 2002
79	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Silicon	IS 504 : 1963
80	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Tin	ASTM E1251
81	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
82	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Titanium	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
83	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Vanadium	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
84	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	ASTM E1251
85	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
86	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zinc	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
87	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zirconium	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January
88	CHEMICAL- METALS & ALLOYS	Aluminium & its alloys	Zirconium	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
89	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Iron	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
90	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Tin	TCR-TM-AAS-03-Al Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

10 of 94

Validity

27/02/2020 to 26/02/2022

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
91	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Tin	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
92	CHEMICAL- METALS & ALLOYS	Aluminum & its alloys	Vanadium	TCR-TM-ICP-03-Al Issue No. 1 (2013) 02 January
93	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Antimony	ASTM E1251
94	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Cadmium	ASTM E1251
95	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Chromium	ASTM E1251
96	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Iron	ASTM E1251
97	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Magnesium	ASTM E1251
98	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Manganese	ASTM E1251
99	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Nickel	ASTM E1251
100	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Silicon	ASTM E1251
101	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Titanium	ASTM E1251
102	CHEMICAL- METALS & ALLOYS	Aluminum and its alloys	Zirconium	ASTM E1251
103	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Aluminium	ASTM E415
104	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Aluminium	IS 8811





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

11 of 94

Validity

27/02/2020 to 26/02/2022

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
105	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Antimony	ASTM E415
106	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Antimony	IS 8811
107	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Boron	ASTM E415
108	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Boron	IS 8811
109	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Carbon	ASTM E415
110	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Carbon	IS 8811
111	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Chromium	ASTM E415
112	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Chromium	IS 8811
113	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Cobalt	ASTM E415
114	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Cobalt	IS 8811
115	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Copper	ASTM E415
116	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Copper	IS 8811
117	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Lead	ASTM E415
118	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Lead	IS 8811





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

12 of 94

Validity

27/02/2020 to 26/02/2022

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
119	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Manganese	ASTM E415
120	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Manganese	IS 8811
121	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Molybdenum	ASTM E415
122	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Molybdenum	IS 8811
123	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nickel	ASTM E415
124	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nickel	IS 8811
125	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Niobium	ASTM E415
126	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Niobium	IS 8811
127	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nitrogen	ASTM E415
128	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Nitrogen	IS 8811
129	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Phosphorus	ASTM E415
130	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Phosphorus	IS 8811
131	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Silicon	ASTM E415
132	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Silicon	IS 8811





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

13 of 94

Validity

27/02/2020 to 26/02/2022

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
133	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Sulfur	ASTM E415
134	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Sulfur	IS 8811
135	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tantalum	TCR/TM-03-OES Issue No. 2 (2013) January 02
136	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tin	ASTM E415
137	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tin	IS 8811
138	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Titanium	ASTM E415
139	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Titanium	IS 8811
140	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tungsten	ASTM E415
141	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Tungsten	IS 8811
142	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Vanadium	ASTM E415
143	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Vanadium	IS 8811
144	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Zirconium	ASTM E415
145	CHEMICAL- METALS & ALLOYS	Carbon Steel & Alloy Steel	Zirconium	IS 8811
146	CHEMICAL- METALS & ALLOYS	Cast Iron	Aluminum	ASTM E1999





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

14 of 94

Validity

27/02/2020 to 26/02/2022

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
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
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 S	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. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

15 of 94

Validity

27/02/2020 to 26/02/2022

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
161	CHEMICAL- METALS & ALLOYS	Copper & Its alloys	Aluminum	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
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. 1 (2013) 02 January
164	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Antimony	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
165	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	BS EN 15079
166	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
167	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Arsenic	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
168	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	BS EN 15079
169	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
170	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Beryllium	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
171	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	BS EN 15079
172	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
173	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Bismuth	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
174	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	BS EN 15079





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

16 of 94

Validity

27/02/2020 to 26/02/2022

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
175	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
176	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cadmium	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
177	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Carbon	ASTM E1019
178	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	BS EN 15079
179	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
180	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Chromium	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
181	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	BS EN 15079
182	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
183	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Cobalt	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
184	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Copper	IS 3685 : 1966
185	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Copper	IS 4027 (Part 1) :1987
186	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Copper	IS 440 : 1964
187	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	BS EN 15079
188	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	IS 3685 : 1966





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

17 of 94

Validity

27/02/2020 to 26/02/2022

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
189	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
190	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Iron	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
191	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	ASTM E478 : 2008
192	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	BS EN 15079
193	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	IS 3685 : 1966
194	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	IS 4027 (Part 1) : 1987
195	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Lead	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
196	CHEMICAL- METALS & ALLOYS	Copper & Its alloys	Lead	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
197	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	BS EN 15079
198	CHEMICAL- METALS & ALLOYS	copper & its alloys	Manganese	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
199	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Manganese	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
200	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Mercury	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
201	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	ASTM E478 : 2008
202	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	BS EN 15079





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

18 of 94

Validity

27/02/2020 to 26/02/2022

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
203	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
204	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Nickel	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
205	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorus	BS EN 15079
206	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosphorus	IS 4027 (Part 3) : 1987
207	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Phosporus	IS 3685 : 1966
208	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Selenium	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
209	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Selenium	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
210	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	BS EN 15079
211	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silicon	IS 4027 (Part 10) : 1987
212	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	BS EN 15079
213	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
214	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Silver	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
215	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	ASTM E1019
216	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Sulfur	BS EN 15079





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

19 of 94

Validity

27/02/2020 to 26/02/2022

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
217	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tellurium	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
218	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tellurium	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
219	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	ASTM E478 :2008
220	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	BS EN 15079
221	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	IS 4027 (Part 5) : 1987
222	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
223	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Tin	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
224	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	ASTM E478 : 2008
225	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	BS EN 15079
226	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	TCR-TM-AAS-02-Cu Issue No. 1 (2013) 02 January
227	CHEMICAL- METALS & ALLOYS	Copper & its alloys	Zinc	TCR-TM-ICP-02-Cu Issue No. 1 (2013) 02 January
228	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Chromium	ASTM E1476 (2004)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

20 of 94

Validity

27/02/2020 to 26/02/2022

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
229	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Cobalt	ASTM E1476 (2004)
230	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Iron 4	ASTM E1476
231	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tin	ASTM E1476 (2004)
232	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Titanium	ASTM E1476 (2004)
233	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tungsten	ASTM E1476 (2004)
234	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Vanadium	ASTM E1476 (2004)
235	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Zinc	ASTM E1476 (2004)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

21 of 94

Validity

27/02/2020 to 26/02/2022

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
236	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Copper	ASTM E1476 (2004)
237	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Lead	ASTM E1476 (2004)
238	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Manganese	ASTM E1476 (2004)
239	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Molybdenum	ASTM E1476 (2004)
240	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Nickel	ASTM E1476 (2004)
241	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Niobium	ASTM E1476 (2004)
242	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Aluminum	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
243	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Aluminum	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
244	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Arsenic	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

22 of 94

Validity

27/02/2020 to 26/02/2022

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
245	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Boron	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
246	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Chromium	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
247	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Chromium	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
248	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Cobalt	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
249	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Cobalt	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
250	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Copper	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
251	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Copper	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
252	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Lead	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
253	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Lead	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
254	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Magesium	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
255	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Magnesium	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
256	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Manganese	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
257	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Manganese	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
258	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Molybdenum	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

23 of 94

Validity

27/02/2020 to 26/02/2022

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
259	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Molybdenum	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
260	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Nickel	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
261	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Nickel	TCR-TM-ICP-01-Fe Issue No.1 (2013) January 02
262	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Niobium	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
263	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tin	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
264	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tin	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
265	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Titanium	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
266	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Titanium	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
267	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Tungsten	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
268	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Vanadium	TCR-TM-AAS-01-Fe Issue No. 1 (2013) 02 Jan
269	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Vanadium	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January
270	CHEMICAL- METALS & ALLOYS	Iron base & its alloys	Zirconium	TCR-TM-ICP-01-Fe Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

24 of 94

Validity

27/02/2020 to 26/02/2022

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
271	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
272	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel,tool steel, cast iron & Other Similar Chromium-Nickel- Iron Alloys)	Chromium	IS 228 (Part 06) 1987
273	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. 1 (2016) 15 January
274	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) 1987





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

25 of 94

Validity

27/02/2020 to 26/02/2022

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
275	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) 1987
276	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) 1998
277	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) 1987
278	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) 1989





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

26 of 94

Validity

27/02/2020 to 26/02/2022

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
279	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
280	CHEMICAL- METALS & ALLOYS	Iron base & its alloys (Stainless steel, carbon & alloy steel,tool steel, cast iron & Other Similar Chromium-Nickel- Iron Alloys)	Tungsten	IS 228 (Part 16) 1992
281	CHEMICAL- METALS & ALLOYS	Metallic Material	Salt Spray Test	ASTM B117
282	CHEMICAL- METALS & ALLOYS	Metallic Material	Salt Spray Test	ASTM B368-09
283	CHEMICAL- METALS & ALLOYS	Metallic Material	Salt Spray Test	IS 6910 : 1985
284	CHEMICAL- METALS & ALLOYS	Metallic Material	Salt Spray Test	ISO 9227
285	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminium	TCR/TM-03-OES Issue No. 2 (2013) January 02
286	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E3047
287	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	ASTM E354
288	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

27 of 94

Validity

27/02/2020 to 26/02/2022

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
289	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Aluminum	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
290	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	ASTM E3047
291	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
292	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Boron	TCR/TM-03-OES Issue No. 2 (2013) January 02
293	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E1019
294	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	ASTM E3047
295	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Carbon	TCR/TM-03-OES Issue No. 2 (2013) January 02
296	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E3047
297	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	ASTM E354
298	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
299	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
300	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Chromium	TCR/TM-03-OES Issue No. 2 (2013) January 02
301	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	ASTM E3047
302	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

28 of 94

Validity

27/02/2020 to 26/02/2022

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
303	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Cobalt	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
304	CHEMICAL- METALS & ALLOYS	Nickel & Its alloys	Cobalt	TCR/TM-03-OES Issue No. 2 (2013) January 02
305	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E3047
306	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	ASTM E354
307	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
308	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
309	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Copper	TCR/TM-03-OES Issue No. 2 (2013) January 02
310	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	ASTM E3047
311	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
312	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
313	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Iron	TCR/TM-03-OES Issue No. 2 (2013) January 02
314	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Lead	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
315	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Lead	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
316	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Managnese	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

29 of 94

Validity

27/02/2020 to 26/02/2022

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
317	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	ASTM E3047
318	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
319	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Manganese	TCR/TM-03-OES Issue No. 2 (2013) January 02
320	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	ASTM E3047
321	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	ASTM E354
322	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
323	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
324	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Molybdenum	TCR/TM-03-OES Issue No. 2 (2013) January 02
325	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	ASTM E3047
326	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Niobium	TCR/TM-03-OES Issue No. 2 (2013) January 02
327	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Nitrogen	TCR-TM-04-N2 Issue No. 2 (2013) 02 January
328	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorus	ASTM E3047
329	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorus	ASTM E354
330	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Phosphorus	TCR/TM-03-OES Issue No. 2 (2013) January 02





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

30 of 94

Validity

27/02/2020 to 26/02/2022

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
331	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	ASTM E3047
332	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	ASTM E354
333	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Silicon	TCR/TM-03-OES Issue No. 2 (2013) January 02
334	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E1019
335	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	ASTM E3047
336	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Sulfur	TCR/TM-03-OES Issue No. 2 (2013) January 02
337	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	ASTM E3047
338	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
339	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tantalum	TCR/TM-03-OES Issue No. 2 (2013) January 02
340	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	ASTM E3047
341	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
342	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
343	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Titanium	TCR/TM-03-OES Issue No. 2 (2013) January 02
344	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	ASTM E3047





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

31 of 94

Validity

27/02/2020 to 26/02/2022

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
345	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Tungsten	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
346	CHEMICAL- METALS & ALLOYS	Nickel & Its alloys	Tungsten	TCR/TM-03-OES Issue No. 2 (2013) January 02
347	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	ASTM E3047
348	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	TCR-TM-AAS-04-Ni Issue No. 1 (2013) 02 January
349	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	TCR-TM-ICP-04-Ni Issue No. 1 (2013) 02 January
350	CHEMICAL- METALS & ALLOYS	Nickel & its alloys	Vanadium	TCR/TM-03-OES Issue No. 2 (2013) January 02
351	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminium	TCR/TM-03-OES Issue No. 2(2013) January 02
352	CHEMICAL- METALS & ALLOYS	Stainless Steel	Antimony	TCR/TM-03-OES Issue No. 2 (2013) January 02
353	CHEMICAL- METALS & ALLOYS	Stainless Steel	Boron	TCR/TM-03-OES Issue No. 2 (2013) January 02
354	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	ASTM E1086
355	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon	TCR/TM-03-OES Issue No. 2
356	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	ASTM E1086
357	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium	TCR/TM-03-OES Issue No. 2 (2013) January 02
358	CHEMICAL- METALS & ALLOYS	Stainless Steel	Cobalt	TCR/TM-03-OES Issue No. 2 (2013) January 02





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

32 of 94

Validity

27/02/2020 to 26/02/2022

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
359	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	ASTM E1086
360	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper	TCR/TM-03-OES Issue No. 2 (2013) January 02
361	CHEMICAL- METALS & ALLOYS	Stainless Steel	Lead	TCR/TM-03-OES Issue No. 2 (2013) January 02
362	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	ASTM E1086
363	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese	TCR/TM-03-OES Issue No. 2 (2013) January 02
364	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	ASTM E1086
365	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum	TCR/TM-03-OES Issue No. 2 (2013) January 02
366	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	ASTM E1086
367	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel	TCR/TM-03-OES Issue No. 2 (2013) January 02
368	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium	TCR/TM-03-OES Issue No. 2 (2013) January 02
369	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nitrogen	TCR/TM-03-OES Issue No. 2 (2013) January 02
370	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	ASTM E1086
371	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus	TCR/TM-03-OES Issue No. 2 (2013) January 02
372	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	ASTM E1086





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

33 of 94

Validity

27/02/2020 to 26/02/2022

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
373	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon	TCR/TM-03-OES Issue No. 2 (2013) January 02
374	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	ASTM E1086
375	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur	TCR/TM-03-OES Issue No. 2, January 02
376	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tantalum	ASTM E1086
377	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tantalum	TCR/TM-03-OES Issue No. 2, January 02
378	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tin	TCR/TM-03-OES Issue No. 2 (2013) January 02
379	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium	TCR/TM-03-OES Issue No. 2 (2013) January 02
380	CHEMICAL- METALS & ALLOYS	Stainless Steel	Tungsten	TCR/TM-03-OES Issue No. 2 (2013) January 02
381	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium	TCR/TM-03-OES Issue No. 2 (2013) January 02
382	CHEMICAL- METALS & ALLOYS	Tool Steel	Carbon	TCR/TM-03-OES Issue No. 2 (2013) January 02
383	CHEMICAL- METALS & ALLOYS	Tool Steel	Chromium	TCR/TM-03-OES Issue No. 2 (2013) January 02
384	CHEMICAL- METALS & ALLOYS	Tool Steel	Cobalt	TCR/TM-03-OES Issue No. 2 (2013) January 02
385	CHEMICAL- METALS & ALLOYS	Tool Steel	Copper	TCR/TM-03-OES Issue No. 2 (2013) January 02
386	CHEMICAL- METALS & ALLOYS	Tool Steel	Manganese	TCR/TM-03-OES Issue No. 2 (2013) January 02





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

34 of 94

Validity

27/02/2020 to 26/02/2022

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
387	CHEMICAL- METALS & ALLOYS	Tool Steel	Molybdenum	TCR/TM-03-OES Issue No. 2 (2013) January 02
388	CHEMICAL- METALS & ALLOYS	Tool Steel	Nickel	TCR/TM-03-OES Issue No. 2 (2013) January 02
389	CHEMICAL- METALS & ALLOYS	Tool Steel	Phosphorus	TCR/TM-03-OES Issue No. 2 (2013) January 02
390	CHEMICAL- METALS & ALLOYS	Tool Steel	Silicon	TCR/TM-03-OES Issue No. 2 (2013) January 02
391	CHEMICAL- METALS & ALLOYS	Tool Steel	Sulfur	TCR/TM-03-OES Issue No. 2 (2013) January 02
392	CHEMICAL- METALS & ALLOYS	Tool Steel	Titanium	TCR/TM-03-OES Issue No. 2 (2013) January 02
393	CHEMICAL- METALS & ALLOYS	Tool Steel	Tungsten	TCR/TM-03-OES Issue No. 2 (2013) January 02
394	CHEMICAL- METALS & ALLOYS	Tool Steel	Vanadium	TCR/TM-03-OES Issue No. 2 (2013) January 02
395	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Nuts)	IS 1367 (Part 6)
396	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Bolts, Studs & Screws)	ASTM A370
397	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Bolts, Studs & Screws)	IS 1367 (Part 3)
398	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Bolts, Studs & Screws)	ISO 898 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

35 of 94

Validity

27/02/2020 to 26/02/2022

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
399	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Nuts)	ISO 898 (Part 2)
400	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Fasteners	Proof Load Test (Screws)	IS 1367 (Part 14), Sec 3
401	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM A370
402	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 6892-1
403	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM E8
404	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Material	Tensile Test Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	IS 1608 (Part 1)
405	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Axial Force Fatigue Test	ASTM A1034
406	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Axial Force Fatigue Test	IS 5074
407	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Axial Force Fatigue Test	ISO 15630 (Part 1)
408	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	API 1104





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

36 of 94

Validity

27/02/2020 to 26/02/2022

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
409	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASME SEction IX
410	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM A370
411	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM A370
412	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E190
413	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E290
414	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E290
415	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ASTM E290
416	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	AWS D 1.1
417	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	BS EN 910
418	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IS 1599





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

37 of 94

Validity

27/02/2020 to 26/02/2022

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
419	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IS 1599
420	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IS 1599
421	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	IS 3589
422	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ISO 5173
423	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ISO 7438
424	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Bend Test	ISO 7438
425	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM A370
426	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM A370
427	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM A370
428	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

38 of 94

Validity

27/02/2020 to 26/02/2022

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
429	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
430	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ASTM E10
431	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
432	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
433	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
434	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
435	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 (Part 1)
436	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	IS 1500 -1
437	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
438	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

39 of 94

Validity

27/02/2020 to 26/02/2022

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
439	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
440	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
441	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Brinell Hardness Test	ISO 6506 (Part 1)
442	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test ((Temperature : 25° C to - 101° C &-196° C)	BS EN 10045 (Part 1)
443	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature : 25° C to - 101° C &-196° C)	ASTM E23
444	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy impact test (Temperature :25° C to -101° C & -196° C)	ISO 9016
445	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature : 25° C to -101° C & -196° C)	ASTM E23
446	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature : 25° C to -101° C & -196° C)	BS EN 10045
447	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature : 25° C to -101° C & -196° C)	IS 1757 (Part 1)
448	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature : 25° C to -101° C & -196° C)	ISO 148 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

40 of 94

Validity

27/02/2020 to 26/02/2022

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
449	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature :25° C to -101° C & -196° C)	BS EN 875
450	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature :25° C to -101° C & -196° C)	ASTM A370
451	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature :25° C to -101° C & -196° C)	ASTM E23
452	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature :25° C to -101° C & -196° C)	IS 1757 (Part 1)
453	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test (Temperature :25° C to -101° C & -196° C)	ISO 148 (Part 1)
454	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test((Temperature : 25° C to - 101° C &-196° C)	IS 1757 (Part 1)
455	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test((Temperature : 25° C to - 101° C &-196° C)	ISO 148 (Part 1)
456	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Charpy Impact Test((Temperature :25° C to -101° C & -196° C)	BS EN 10045 (Part 1)
457	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep Test	IS 3407 (Part 1)
458	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep Test	IS 3407 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

41 of 94

Certificate Numbe

Validity

27/02/2020 to 26/02/2022

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
459	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep/Creep Rupture/Stress Rupture Test	ASTM E139
460	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep/Creep Rupture/Stress Rupture Test	ASTM E292
461	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep/Creep Rupture/Stress Rupture Test	ISO 204
462	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Creep/Stress Rupture Test	IS 3407 (Part 2)
463	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensitle Strength	ASTM E21
464	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%mEUL	ASTM E21
465	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 6892 (Part 2)
466	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	BS EN 10002 (Part 5)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

42 of 94

Validity

27/02/2020 to 26/02/2022

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
467	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM E21
468	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	BS EN 10002 (Part 5)
469	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensile Strength	BS EN 10002 (Part 5)
470	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM E21
471	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 6892 (Part 2)
472	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction	ASTM E21





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

43 of 94

Validity

27/02/2020 to 26/02/2022

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
473	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate tensile strength	ASTM E21
474	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	ASTM E21
475	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	BS EN 10002 (Part 5)
476	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	ISO 6892 (Part 2)
477	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction	ASTM E21
478	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction	BS EN 10002 (Part 5)
479	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction	BS EN 10002 (Part 5)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

44 of 94

Validity

27/02/2020 to 26/02/2022

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
480	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction	ISO 6892 (Part 2)
481	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensile Strength	ASTM E21
482	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Ultimate Tensile Strength	BS EN 10002(Part 5)
483	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)
484	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)
485	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Elongation	ISO 6892 (Part 2)
486	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) % Reduction	ISO 6892 (Part 2)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

45 of 94

Validity

27/02/2020 to 26/02/2022

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
487	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elevated Temperature Tensile Test. (80 deg. C to 1100 deg. C) Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 6892 (Part 2)
488	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Elongation	ASTM E8
489	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	BS EN 10002 (Part 1)
490	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	IS 1608 (Part 1)
491	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Elongation	ISO 6892 (Part 1)
492	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Erichsen Cupping Test	IS 10175
493	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Erichsen Cupping Test	IS 10175 (Part 1)
494	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Erichsen Cupping Test	IS 17175
495	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flaring Test	IS 2335





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

46 of 94

Validity

27/02/2020 to 26/02/2022

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
496	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flattening Test	IS 2328
497	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Flattening Test	IS 2501
498	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Force Controlled Constant Amplitude Axial Fatigue Tests	ASTM E466
499	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Test	ASME Section IX
500	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Test	ASME Section VIII
501	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Test	AWS D 1.1
502	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	ASTM E1290
503	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	ASTM E399
504	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness test a) CTOD	ASTM E399
505	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	BS 7448 (Part -2)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

47 of 94

Validity

27/02/2020 to 26/02/2022

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
506	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	BS 7448 (Part -4)
507	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	BS 7448 (Part 1)
508	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	BS 7448 (Part 2)
509	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	ISO 12135
510	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	ISO 15653
511	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ASTM B645
512	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ASTM E399
513	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ASTM E399
514	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part -2)
515	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part -3)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

48 of 94

Validity

27/02/2020 to 26/02/2022

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
516	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part -4)
517	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part 1)
518	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part 2)
519	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part 2)
520	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part 3)
521	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part 4)
522	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part-4)
523	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ISO 12135
524	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ISO 12135
525	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ISO 15653





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

49 of 94

Validity

27/02/2020 to 26/02/2022

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
526	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	ASTM E1820
527	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	BS 7448 (Part -3)
528	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	BS 7448 (Part -4)
529	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	BS 7448 (Part-2)
530	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	ISO 12135
531	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	ISO 15653
532	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test d) FCGR	ASTM E647
533	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test d) FCGR	ASTM E647
534	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test d) FCGR	ASTM E647
535	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test d) FCGR	ASTM E647





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

50 of 94

Validity

27/02/2020 to 26/02/2022

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
536	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test d) FCGR	ISO 12108
537	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test d) FCGR	ISO 12108
538	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	BS 7448 (Part 1)
539	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test a) CTOD	BS 7448 (Part 2)
540	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part -3)
541	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	BS 7448 (Part 1)
542	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test b) K1C	ISO 12135
543	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Fracture Toughness Test c) J1C	ASTM E1820
544	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrogen Embrittlement Susceptibility Test	ASTM B577
545	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrogen Embrittlement Susceptibility Test	IS 6243





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

51 of 94

Validity

27/02/2020 to 26/02/2022

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
546	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrogen Embrittlement Test	ASTM F519
547	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM A450
548	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM A530
549	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM A999
550	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM B111
551	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM B75
552	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM E1003
553	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	ASTM E1003
554	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Hydrostatic Pressure Test (6 mm to 168.3 mm OD)	is 2501
555	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	ASTM E23





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

52 of 94

Validity

27/02/2020 to 26/02/2022

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
556	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Izod Impact Test	IS 1598-1977
557	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Macro etch Test	ASME Section IX
558	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ASTM A604
559	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ASTM A604
560	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ASTM E340
561	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ASTM E340
562	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	BS EN 1321
563	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro etch Test	ISO 17639
564	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro Examination Test a) Metal expansion	ASME Section VIII
565	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro Examination Test a)Metal Expansion	ASME Section IX





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

53 of 94

Validity

27/02/2020 to 26/02/2022

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
566	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leak Path	ASME Section IX
567	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leak Path	ASME Section VIII
568	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	API 1104
569	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	ASME Section IX
570	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	ASME Section VIII
571	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Leg Lengths	AWS D1.1
572	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Metal Expansion	ASME Section IX
573	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Metal Expansion	ASME Section VIII
574	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Throat Length	ASME Section IX
575	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Throat Length	ASME Section VIII





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

54 of 94

Validity

27/02/2020 to 26/02/2022

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
576	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Macro-Examination a) Throat Length	AWS D 1.1
577	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Mercurous Nitrate Test	ASTM B154
578	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Mercurous Nitrate Test	IS 2305
579	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Nick Break Test	API 1104
580	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Peel Test	ASME Section IX
581	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Peel Test	ASME Section VIII
582	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Pneumatic Pressure Test (3.18 mm to 60.33 mm OD)	ASTM B111
583	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Pneumatic Pressure Test (3.18 mm to 60.33 mm OD)	ASTM B75
584	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Pneumatic Pressure Test (3.18 mm to 60.33 mm OD)	IS 2501
585	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Re-Bend Test	IS 1786-2008





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

55 of 94

Validity

27/02/2020 to 26/02/2022

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
586	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM A370
587	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM A370
588	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
589	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
590	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ASTM E18
591	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 1)
592	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 1)
593	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 1)
594	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	IS 1586 (Part 2)
595	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

56 of 94

Validity

27/02/2020 to 26/02/2022

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
596	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 1)
597	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 2)
598	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Rockwell Hardness Test	ISO 6508 (Part 2)
599	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Load (Pull-out) Test	ASME Section IX
600	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Load (Pull-out) Test	ASME Section VIII
601	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Test	ASME Section IX
602	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Shear Test	ASME Section VIII
603	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Strain Controlled Fatigue Test	ASTM E606
604	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Strain Controlled Fatigue Test	ASTM E606
605	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Strain Controlled Fatigue Test	ASTM E606





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

57 of 94

Validity

27/02/2020 to 26/02/2022

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
606	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test - Ultimate Tensile Strength	BS EN 10002 (Part 1)
607	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	API 1104
608	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ASME Section IX
609	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	AWS D 1.1
610	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	BS EN 10002 (Part 1)
611	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	BS EN 895
612	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test	BS EN ISO 4136
613	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	IS 1367 (Part 14)
614	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test	ISO 898 (Part 1)
615	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test Reduction Area	ASTM E8





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

58 of 94

Validity

27/02/2020 to 26/02/2022

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
616	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test Reduction Area	BS EN 10002 (Part 1)
617	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	ASTM A370
618	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	ASTM E8
619	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	BS EN 10002 (Part 1)
620	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	IS 1367 (Part 1)
621	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	IS 1608 (Part 1)
622	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	ISO 6892 (Part 1)
623	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - % Elongation	ISO 898 (Part 1)
624	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	ASTM A370
625	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	ASTM E8





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

59 of 94

Validity

27/02/2020 to 26/02/2022

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
626	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	BS EN 10002 (Part 1)
627	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	IS 1367 (Part 14)
628	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	IS 1608 (Part 1)
629	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test - Ultimate Tensile Strength	ISO 6892 (Part 1)
630	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	ISO 6892 (Part 1)
631	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Ultimate Tensile Strength	ISO 898 (Part 1)
632	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	ASTM A370
633	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test - Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM E8
634	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test - Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	IS 1608 (Part 1)
635	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test - Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	IS 1608 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

60 of 94

Validity

27/02/2020 to 26/02/2022

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
636	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test - Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 6892 (Part 1)
637	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test - Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 898 (Part 1)
638	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test , % Reduction Area	ASTM A370
639	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test , % Reduction Area	ASTM E8
640	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test , % Reduction Area	BS EN 10002 (Part 1)
641	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile test- Ultimate Tensile Strength	IS 1608 (Part 1)
642	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Tensile Test -Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	ASTM E8
643	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test -Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	BS EN 10002 (Part 1)
644	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test -Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	IS 1367 (Part 1)
645	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test -Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	ISO 6892 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

61 of 94

Validity

27/02/2020 to 26/02/2022

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
646	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	IS 1608 (Part 1)
647	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Reduction Area	ASTM B557M
648	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Reduction Area	ASTM E8
649	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Reduction Area	BS EN 10002 (Part 1)
650	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Reduction Area	IS 1608 (Part 1)
651	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	API 1104
652	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	ASME Section IX
653	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	ASTM E8
654	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	ASTM E8
655	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	AWS D 1.1





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

62 of 94

Validity

27/02/2020 to 26/02/2022

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
656	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	BS EN 10002 (Part 1)
657	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	BS EN 10002 (Part 1)
658	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	BS EN 895
659	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	BS EN ISO 4136
660	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	IS 1608 (Part 1)
661	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	ISO 6892 (Part 1)
662	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	ISO 898 (Part 1)
663	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, % Elongation	IS 1608 (Part 1)
664	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	API 1104
665	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	ASME Section IX





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

63 of 94

Validity

27/02/2020 to 26/02/2022

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
666	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	ASTM E8
667	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	AWS D 1.1
668	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	BS EN 10002 (Part 1)
669	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	BS EN 895
670	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	BS EN ISO 4136
671	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	IS 1608 (Part 1)
672	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Ultimate Tensile Strength	ISO 6892 (Part 1)
673	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield Stress	API 1104
674	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield Stress	ASME Section IX
675	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield Stress	AWS D 1.1





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

64 of 94

Validity

27/02/2020 to 26/02/2022

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
676	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield Stress	BS EN 895
677	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield Stress	ISO 4136
678	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM E8
679	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	BS EN 10002 (Part 1)
680	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Tensile Test, Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ISO 6892 (Part 1)
681	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Through Thickness Tensile Test - % Reduction Area	ASTM A770
682	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic materials	Through Thickness Tensile Test - % Reduction Area	ISO 7778
683	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Ultimate Tensile Strength	ISO 6892 (Part 2)
684	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test	BS EN 1043 (Part 2)
685	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test	ISO 6507 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

65 of 94

Validity

27/02/2020 to 26/02/2022

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
686	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
687	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
688	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ASTM E92
689	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	BS EN 1043 (Part 1)
690	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	BS EN 1043 (Part 1)
691	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
692	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
693	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	IS 1501 (Part 1)
694	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
695	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

66 of 94

Validity

27/02/2020 to 26/02/2022

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
696	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 6507 (Part 1)
697	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 9015 (Part 1)
698	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Macro Indentation)	ISO 9015 (Part 1)
699	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro In dentation)	BS EN 1043 (Part 2)
700	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
701	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
702	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
703	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
704	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ASTM E384
705	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

67 of 94

Validity

27/02/2020 to 26/02/2022

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
706	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
707	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	BS EN 1043 (Part 2)
708	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
709	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
710	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
711	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
712	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
713	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)-2013
714	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)-2013
715	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)-2013





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

68 of 94

Validity

27/02/2020 to 26/02/2022

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
716	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)-2013
717	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)-2013
718	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
719	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
720	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
721	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
722	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
723	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 6507 (Part 1)
724	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
725	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

69 of 94

Validity

27/02/2020 to 26/02/2022

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
726	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
727	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
728	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Vickers Hardness Test (Micro Indentation)	ISO 9015 (Part 2)
729	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	ASTM E8
730	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	BS EN 10002 (Part 1))
731	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	IS 1608 (Part 1)
732	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	ISO 6892 (Part 1)
733	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materials	Yield Stress, 0.2% & 1.0% Proof Stress, 0.5%EUL	ISO 898 (Part 1)
734	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Metallic Materiasl	Vickers Hardness Test (Micro Indentation)	IS 1501 (Part 1)
735	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Cyclic Tensile Test	ASTM A1034





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

70 of 94

Validity

27/02/2020 to 26/02/2022

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
736	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Cyclic Tensile Test	IS 16172
737	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical splices	High Cycle Fatigue Test	ASTM A1034
738	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical splices	High Cycle Fatigue Test	IS 16172
739	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical splices	Slip Test	ASTM A1034
740	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical splices	Slip Test	IS 16172
741	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test a) UTS	ASTM A 1034
742	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test a) UTS	ASTM A1034
743	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test a)UTS	IS 16172
744	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test b) %EL at Max. Force	ASTM A1034
745	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Reinforcement bar/Mechanical Splices	Static Tensile Test b) %EL at Max. Force	IS 16172





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

71 of 94

Validity

27/02/2020 to 26/02/2022

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
746	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Steel bars, billets, blooms and forgings	Macro etch Test	ASTM E381
747	MECHANICAL- MECHANICAL PROPERTIES OF METALS	tubes/pipes	Flaring Test	ASTM A370
748	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Tubes/Pipes	Flaring Test	ASTM B153
749	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Tubes/Pipes	Flaring Test	IS 2335
750	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Tubes/Pipes	Flaring Test	IS 2501
751	MECHANICAL- MECHANICAL PROPERTIES OF METALS	tubes/pipes	Flattening Test	ASTM A370
752	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Tubes/Pipes	Flattening Test	ASTM B111
753	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Tubes/Pipes	Flattening Test	IS 2328
754	MECHANICAL- MECHANICAL PROPERTIES OF METALS	tubes/pipes	Flattening Test	IS 2501





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

72 of 94

Validity

27/02/2020 to 26/02/2022

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
755	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Wrought and cast Aluminium and magnesium alloy product	Tensile Test, Ultimate Tensile Strength	ASTM B557M
756	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Wrought and cast Aluminium and magnesium alloy product	Tensile Test, Yield stress, 0.2% & 1.0% proof stress, 0.5%EUL	ASTM B557M
757	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Wrought and cast Aluminium and Magnesium alloy products	Tensile Test, % Elongation	ASTM B557M
758	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Wrought and cast Aluminium and magnesium alloy products	Tensile Test, % Reduction Area	ASTM B557M
759	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Zinc Coated Iron & Steel	Mass Of Coating (Stripping Method)	ASTM A90
760	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Zinc Coated Iron & Steel	Mass Of Coating (Stripping Method)	IS 6745
761	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Practice A	ASTM A262
762	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Practice B	ASTM A262
763	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Practice C	ASTM A262
764	MECHANICAL- METALLOGRAPHY TEST	Austenitic Stainless Steel	IGC Practice E	ASTM A262





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

73 of 94

Validity

27/02/2020 to 26/02/2022

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
765	MECHANICAL- METALLOGRAPHY TEST	Austentic stainless Steel	IGC Method A	DIN EN ISO 3651 (Part 2)
766	MECHANICAL- METALLOGRAPHY TEST	Austentic stainless Steel	IGC Method B	DIN EN ISO 3651 (Part 2)
767	MECHANICAL- METALLOGRAPHY TEST	Austentic Stainless Steel	IGC Method C	DIN EN ISO 3651 (Part 2)
768	MECHANICAL- METALLOGRAPHY TEST	Cast Iron	Determination of Graphite in Cast Iron (Type, Shape, Size, %)	ASTM A247
769	MECHANICAL- METALLOGRAPHY TEST	Cast Iron	Determination of Graphite in Cast Iron (Type, Shape, Size, %)	IS 7754
770	MECHANICAL- METALLOGRAPHY TEST	Cast iron	Type Size, & Distribution	ASTM A247
771	MECHANICAL- METALLOGRAPHY TEST	Duplex Austenitic / Stainless Steel	Determination of Detrimental Intermetallic Phases (Method C)	ASTM A923
772	MECHANICAL- METALLOGRAPHY TEST	Duplex Austentic / Stainless Steel	Detection of detrimental Intremetallic Phases (Method A)	ASTM A923
773	MECHANICAL- METALLOGRAPHY TEST	Duplex Austentic/Stainless Steel	Determination of Detrimental Intermetallic Phases (Method B)	ASTM A923
774	MECHANICAL- METALLOGRAPHY TEST	Ferritic Stainless Steel	IGC Practice W	ASTM A763
775	MECHANICAL- METALLOGRAPHY TEST	Ferritic Stainless Steel	IGC Practice X	ASTM A763
776	MECHANICAL- METALLOGRAPHY TEST	Ferritic Stainless Steel	IGC Practice Y	ASTM A763





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

74 of 94

Validity

27/02/2020 to 26/02/2022

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
777	MECHANICAL- METALLOGRAPHY TEST	Ferritic Stainless Steel	IGC Practice Z	ASTM A763
778	MECHANICAL- METALLOGRAPHY TEST	Metallic Material	Nodularity in SG Iron	IS 1865-1991
779	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Case Depth (By Microscopic Method)	IS 6416
780	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Case Depth (Hardness Method)	IS 6416
781	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	CSCC (CaCl2) Test	ASTM G36
782	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	CSCC (MgCl2) Test	ASTM G36
783	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Decarburization Test (By Microscopic Method)	ASTM E1077
784	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Decarburization Test (By Microscopic Method)	IS 6396
785	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Ferrite Content Test (By Ferrite-scope)	ASTM A799
786	MECHANICAL- METALLOGRAPHY TEST	metallic Materials	Ferrite Content Test (By Ferrite-scope)	ASTM A800
787	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Ferrite Content Test (By Ferrite-scope)	ASTM A800
788	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Ferrite Content Test (By Microscopic Method)	ASTM E562
789	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	HIC Test	NACE TM0284
790	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	IGC (NAMLT) Test	ASTM G67





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

75 of 94

Validity

27/02/2020 to 26/02/2022

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
791	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Inclusion Rating Method A, D	ASTM E45
792	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Inclusion Rating Method M & K	DIN 50602
793	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination	BS EN 1321
794	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination	ISO 17639
795	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (General Structure)	ASM Volume 9
796	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (General Structure)	ASM Volume 9
797	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112
798	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112
799	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112
800	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ASTM E112
801	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	IS 4748





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

76 of 94

Validity

27/02/2020 to 26/02/2022

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
802	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	IS 4748
803	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	IS 4748
804	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Micro Examination (Grain Size by Comparison Method)	ISO 643
805	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SCC Test	ASTM B858
806	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SCC Test	ASTM G44
807	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SCC Test	ASTM G47
808	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	NACE TM0177
809	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	ASTM G39
810	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	EFC 16 (Third Edition)
811	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	EFC 17 (Second Edition)
812	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	EFC 17 (Third Edition)
813	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	IS 15490
814	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	ISO 11439





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

77 of 94

Validity

27/02/2020 to 26/02/2022

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
815	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	ISO11439
816	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	NACE TM0177
817	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	SSCC Test	NACE TM0316
818	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Thickness of Coating (Microscopic Method)	ASTM B487
819	MECHANICAL- METALLOGRAPHY TEST	Metallic Materials	Visual Assessment of Exfoliation Corrosion (ASSET) Test	ASTM G66
820	MECHANICAL- METALLOGRAPHY TEST	Metallic Matrials	Ferrite Content Test (By Ferrite-scope)	ASTM A799
821	MECHANICAL- METALLOGRAPHY TEST	Nickel Based Alloys	IGC Method A	ASTM G28
822	MECHANICAL- METALLOGRAPHY TEST	Nickel Based Alloys	IGC Method B	ASTM G28
823	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	Crevice Corrosion Test (Method B)	ASTM G48
824	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	Crevice Corrosion Test (Method D)	ASTM G48
825	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	Crevice Corrosion Test (Method F)	ASTM G48
826	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	IGC Practice F	ASTM A262
827	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	Pitting Corrosion Test (Method C)	ASTM G48





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

78 of 94

Validity

27/02/2020 to 26/02/2022

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
828	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	Pitting Corrosion Test (Method A)	ASTM G48
829	MECHANICAL- METALLOGRAPHY TEST	Stainless Steel	Pitting Corrosion Test (Method E)	ASTM G48
830	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASME Sec. V Article 7
831	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescen	ASME SE709
832	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASTM E709
833	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	LPT by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME SE165
834	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	LPT by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME Sec. V Article 6
835	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	LPT by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASMT E165





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

79 of 94

Validity

27/02/2020 to 26/02/2022

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
836	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME Sec. V Article 4 ,5 & 23
837	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE213
838	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASME SA609
839	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASTM A609
840	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE273
841	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASTM E213
842	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA435
843	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA578





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

80 of 94

Validity

27/02/2020 to 26/02/2022

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
844	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASTM A578
845	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASME SA388
846	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASTM A388
847	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME SE164
848	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASTM E164
849	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 155
850	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 94





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

81 of 94

Validity

27/02/2020 to 26/02/2022

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
851	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE192
852	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
853	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 155
854	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 94
855	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 446
856	NON-DESTRUCTIVE- METALS & ALLOYS	Steel Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 446
857	NON-DESTRUCTIVE- METALS & ALLOYS	Steel Castings by Investment method.	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E192
858	NON-DESTRUCTIVE- METALS & ALLOYS	Steel plates	Ultrasonic Testing	ASME SA577
859	NON-DESTRUCTIVE- METALS & ALLOYS	Steel plates	Ultrasonic Testing	ASTM A435
860	NON-DESTRUCTIVE- METALS & ALLOYS	Steel plates	Ultrasonic Testing	ASTM A577





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

82 of 94

Validity

27/02/2020 to 26/02/2022

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			
	Site Facility						
1	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IEC 62321-3-1			
2	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA			
3	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IEC 62321-3-1			
4	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA			
5	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IEC 62321-3-1			
6	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Lead	IS 16197 (Part 3, Sec 1): 2014, RA			
7	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IEC 62321-3-1			
8	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS test for Electronics	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA			
9	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Cadmium	IEC 62321-3-1			





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

83 of 94

Validity

27/02/2020 to 26/02/2022

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
10	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA
11	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Chromium	IEC 62321-3-1
12	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
13	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Lead	IEC 62321-3-1
14	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
15	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Mercury	IEC 62321-3-1
16	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Fabrics, Paper products	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
17	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Cadmium	IEC 62321-3-1
18	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

84 of 94

Validity

27/02/2020 to 26/02/2022

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
19	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Chromium	IEC 62321-3-1
20	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
21	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Lead	IEC 62321-3-1
22	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
23	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Mercury	IEC 62321-3-1
24	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Lighting,Lamps,lighti ng fixtures,light bulb,electrical wrings	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

85 of 94

Validity

27/02/2020 to 26/02/2022

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
25	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IEC 62321-3-1; 2013, IEC 62321-5
26	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 5): 2014, RA
27	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IEC 62321 -3-1
28	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 5): 2014, RA
29	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium(VI)	IEC 62321-7-1
30	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Chromium(VI)	IS 16197 (Part 7, Sec 1)
31	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IEC 62321-3-1; 2013, IEC 62321-5
32	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Lead	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 5): 2014, RA
33	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IEC 62321-3-1; 2013, IEC 62321-4
34	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Metallic Materials	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA 2019/ IS 16197 (Part 4): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

86 of 94

Validity

27/02/2020 to 26/02/2022

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
35	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IEC 62321-3-1
36	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IEC 62321-3-1
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	Mercury	IEC 62321-3-1
39	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA
40	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
41	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
42	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Paints & Inks products	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
43	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Cadmium	IS 16197 (Part 3, Sec 1): 2014, RA





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

87 of 94

Validity

27/02/2020 to 26/02/2022

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
44	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
45	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Lead	IS 16197 (Part 3, Sec 1): 2014, RA
46	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s	Mercury	IS 16197 (Part 3, Sec 1): 2014, RA
47	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Cadmium	IEC 62321-3-1
48	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Chromium	IEC 62321-3-1
49	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Lead	IEC 62321-3-1
50	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for Products of plastics, Resins,Rubbers,Glue s,	Mercury	IEC 62321-3-1
51	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IEC 62321 -3-1





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

88 of 94

Validity

27/02/2020 to 26/02/2022

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
52	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Cadmium	IS 16197 (Part 3: Sec 1) 2014, RA
53	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IEC 62321 (Part 3-1)
54	CHEMICAL- HAZARDOUS & RESTRICTED CHEMICALS	RoHS Test for various computer parts	Chromium	IS 16197 (Part 3, Sec 1): 2014, RA
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): 2014, RA
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): 2014, RA
59	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Chromium	ASTM E1476 (2004)
60	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Cobalt	ASTM E1476 (2004)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

89 of 94

Validity

27/02/2020 to 26/02/2022

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
61	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Iron	ASTM E1476
62	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tin AND	ASTM E1476 (2004)
63	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Titanium	ASTM E1476 (2004)
64	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Tungsten	ASTM E1476 (2004)
65	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Vanadium	ASTM E1476 (2004)
66	CHEMICAL- METALS & ALLOYS	identification Metallic material by portable XRF analyzer	Zinc	ASTM E1476 (2004)
67	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Copper	ASTM E1476 (2004)





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

90 of 94

Validity

27/02/2020 to 26/02/2022

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
68	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Lead	ASTM E1476 (2004)
69	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Manganese	ASTM E1476 (2004)
70	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Molybdenum	ASTM E1476 (2004)
71	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Nickel	ASTM E1476 (2004)
72	CHEMICAL- METALS & ALLOYS	identification of Metallic material by portable XRF analyzer	Niobium	ASTM E1476 (2004)
73	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASME Sec. V Article 7
74	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescen	ASME SE709
75	NON-DESTRUCTIVE- METALS & ALLOYS	Ferromagnetic Materials	Magnetic Particle Testing (Yoke & Prod) Visible & Fluorescent	ASTM E709





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

91 of 94

Validity

27/02/2020 to 26/02/2022

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
76	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	LPT by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME SE165
77	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	LPT by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASME Sec. V Article 6
78	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Non Ferrous Metals & its alloys	LPT by Visible & Florescent Technique using solvent removal technique - for Detection of flaws open to surface	ASMT E165
79	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME Sec. V Article 4 ,5 & 23
80	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE213
81	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASME SA609
82	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Castings	Ultrasonic Testing	ASTM A609





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

92 of 94

Validity

27/02/2020 to 26/02/2022

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
83	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASME SE273
84	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Pipes & Tubing	Ultrasonic Testing	ASTM E213
85	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA435
86	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASME SA578
87	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys plates	Ultrasonic Testing	ASTM A578
88	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASME SA388
89	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging	Ultrasonic Testing	ASTM A388
90	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASME SE164





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

93 of 94

Validity

27/02/2020 to 26/02/2022

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
91	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous & Nonferrous metals & alloys Welds, Forging , Plates , Castings, Pipes & Tubing	Ultrasonic Testing	ASTM E164
92	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 155
93	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 94
94	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE192
95	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
96	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 155
97	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous &Nonferrous metals & alloys, Welds,Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 94
98	NON-DESTRUCTIVE- METALS & ALLOYS	Ferrous Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E 446
99	NON-DESTRUCTIVE- METALS & ALLOYS	Steel Castings	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASME SE 446





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, THANE, MAHARASHTRA,

INDIA

Accreditation Standard

ISO/IEC 17025:2017

Certificate Number

TC-6905

Page No

94 of 94

Validity

27/02/2020 to 26/02/2022

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
100	NON-DESTRUCTIVE- METALS & ALLOYS	Steel Castings by Investment method.	Radiography Testing X- Rays(Kv-250), Gamma Rays (Ir-192)	ASTM E192
101	NON-DESTRUCTIVE- METALS & ALLOYS	Steel plates	Ultrasonic Testing	ASME SA577
102	NON-DESTRUCTIVE- METALS & ALLOYS	Steel plates	Ultrasonic Testing	ASTM A435
103	NON-DESTRUCTIVE- METALS & ALLOYS	Steel plates	Ultrasonic Testing	ASTM A577