National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : DEE DEVELOPMENT ENGINEERS LIMITED (QUALITY CONTROL LAB), VILLAGE TATARPUR, PRITHLA-TATARPUR ROAD, PALWAL, HARYANA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-8399 **Page No** 1 of 5

Validity 14/10/2022 to 13/10/2024 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- METALS & ALLOYS	Ferrous materials	Corrosion Test- Test Method C	ASTM A923
2	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Aluminum (Al)	ASTM E 415
3	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Manganese (Mn)	ASTM E 415
4	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Niobium (Nb)	ASTM E 415
5	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Sulfur (S)	ASTM E 415
6	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Carbon (C)	ASTM E 415
7	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Chromium (Cr)	ASTM E 415
8	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Copper (Cu)	ASTM E 415
9	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Molybdenum (Mo)	ASTM E 415
10	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Nickel (Ni)	ASTM E 415
11	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Phosphorus (P)	ASTM E 415
12	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Silicon (Si)	ASTM E 415
13	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Titanium (Ti)	ASTM E 415
14	CHEMICAL- METALS & ALLOYS	Low Alloy Steel	Vanadium (V)	ASTM E415
15	CHEMICAL- METALS & ALLOYS	Stainless Steel	Carbon (C)	ASTM E 1086
16	CHEMICAL- METALS & ALLOYS	Stainless Steel	Aluminum (Al)	SOP Document no. DQC/WI/01, dated 1 April
17	CHEMICAL- METALS & ALLOYS	Stainless Steel	Chromium (Cr)	ASTM E 1086
18	CHEMICAL- METALS & ALLOYS	Stainless Steel	Copper (Cu)	ASTM E 1086

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19	CHEMICAL- METALS & ALLOYS	Stainless Steel	Manganese (Mn)	ASTM E 1086
20	CHEMICAL- METALS & ALLOYS	Stainless Steel	Molybdenum (Mo)	ASTM E 1086
21	CHEMICAL- METALS & ALLOYS	Stainless Steel	Nickel (Ni)	ASTM E 1086
22	CHEMICAL- METALS & ALLOYS	Stainless Steel	Niobium (Nb)	SOP Document no. DQC/WI/01, dated 1 April
23	CHEMICAL- METALS & ALLOYS	Stainless Steel	Phosphorus (P)	ASTM E 1086
24	CHEMICAL- METALS & ALLOYS	Stainless Steel	Silicon (Si)	ASTM E 1086
25	CHEMICAL- METALS & ALLOYS	Stainless Steel	Sulfur (S)	ASTM E 1086
26	CHEMICAL- METALS & ALLOYS	Stainless Steel	Titanium (Ti)	SOP Document no. DQC/WI/01, dated 1 April
27	CHEMICAL- METALS & ALLOYS	Stainless Steel	Vanadium (V)	SOP Document no. DQC/WI/01, dated 1 April
28	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Duplex Austenitic/Ferritic Stainless Steel	Charpy V notch Impact in Joule (Temperature range = +20 degree Celsius to -80 degree Celsius and -196degree Celsius)	ASTM A923
29	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials	% Reduction in Area	IS 1608 (Part 1)
30	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials	%Elongation	ASTM A370
31	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials	%Elongation	IS 1608 (Part 1)
32	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous materials	%Reduction in Area	ASTM A370
33	MECHANICAL- MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Bend Test	ASME SECTION-IX

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34	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Bend Test	ASTM A370
35	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Bend Test	IS 1599
36	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Charpy V notch Impact in Joule (Temperature range = +20 degree Celsius to -80 degree Celsius and -196 degree Celsius)	ASTM A370
37	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Charpy V notch Impact in Joule (Temperature range = +20 degree Celsius to -80 degree Celsius and -196 degree Celsius)	IS 1757 (Part 1)
38	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Charpy V notch Impact in Joule (Temperature range = +20 degree Celsius to -80 degree Celsius and -196 degree Celsius)	ISO 148-1
39	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Charpy V notch Impact in weld butt joint in Joule (TTemperature range = +20 degree Celsius to -80 degree Celsius and -196 degree Celsius)	ISO 9016
40	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Flattening Test	ASTM A370
41	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Flattening Test	IS 2328
42	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Macro Examination	ASME SECTION-IX
43	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Proof Stress (0.2%)	ASTM A 370
44	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Proof Stress (0.2%)	IS 1608 (Part 1)

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45	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Rockwell Hardness HRB	ASTM E18
46	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Rockwell Hardness HRB	IS 1586 (Part 1)
47	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Rockwell Hardness HRC	IS 1586 (Part 1)
48	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Tensile Strength	ASME Section-IX
49	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Tensile Strength	ASTM A370
50	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Tensile Strength	IS 1608 (Part-1)
51	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Vicker Hardness (HV)	IS 1501 (Part 1,4)
52	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous Materials	Vicker Hardness (HV)	ISO 6507-1
53	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Yield Stress	ASTM A370
54	MECHANICAL-MECHANICAL PROPERTIES OF METALS	Ferrous materials	Yield Stress	IS 1608 (Part 1)
55	MECHANICAL-METALLOGRAPHY TEST	Austenitic Steels	Inter Granular Corrosion (IGC) (Practice B)	ASTM A 262(15)
56	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials	IGC Test- Method A	ASTM G48
57	MECHANICAL-METALLOGRAPHY TEST	Ferrous materials	Inter Granular Corrosion (IGC Practice E)	ASTM A262(15)
58	MECHANICAL-METALLOGRAPHY TEST	Ferrous Materials	Volume Fraction by Systematic Manual Point Count	ASTM E562
59	MECHANICAL-METALLOGRAPHY TEST	Ferrous Steel & Stainless Steels	Grain size Analysis	ASTM E112

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60	MECHANICAL-METALLOGRAPHY TEST	Ferrous Steel & Stainless Steels	Macro Examination	ASM Handbook Vol-9
61	MECHANICAL-METALLOGRAPHY TEST	Ferrous Steel & Stainless Steels	Macro Examination	ASTM E340
62	MECHANICAL-METALLOGRAPHY TEST	Ferrous Steel & Stainless Steels	Macro Examination	IS 11371
63	MECHANICAL-METALLOGRAPHY TEST	Ferrous Steel & Stainless Steels	Micro Structure Analysis	ASM Handbook Vol-9