National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : MATERIAL TESTING LABORATORY, BHARAT HEAVY ELECTRICALS LTD., JHANSI, UTTAR PRADESH, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-10800 **Page No** 1 of 5

Validity 13/07/2022 to 12/07/2024 **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	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Density	IS 1488 (Part 16)
2	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dielectric Dissipation Factor (Tan Delta)	ASTM D924
3	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dielectric Dissipation Factor (Tan Delta)	IEC 60247
4	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dielectric Dissipation Factor (Tan Delta)	IS 1866
5	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dielectric Dissipation Factor (Tan Delta)	IS 6262
6	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H2	ASTM D3612
7	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H2	IEC 60567
8	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H2	IEC 61181
9	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H2	IS 10593
10	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H4	ASTM D3612
11	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H4	IEC 60567
12	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H4	IEC 61181
13	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H4	IS 10593

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14	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H6	ASTM D3612
15	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H6	IEC 60567
16	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H6	IEC 61181
17	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H6	IS 10593
18	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CH4	ASTM D3612
19	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CH4	IEC 60567
20	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CH4	IEC 61181
21	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CH4	IS 10593
22	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oils	Dissolved Gas Analysis/ Gas Content CH4	IS 9434
23	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oils	Dissolved Gas Analysis/ Gas Content CO	ASTM D3612
24	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO	IEC 60567
25	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO	IEC 61181
26	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO2	ASTM D3612
27	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO2	IEC 60567

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28	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO2	IEC 61181
29	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO2	IS 10593
30	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO2	IS 9434
31	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H2	IS 9434
32	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H4	IS 9434
33	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content C2H6	IS 9434
34	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO	IS 10593
35	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content CO	IS 9434
36	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content H2	ASTM D3612
37	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content H2	IEC 60567
38	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content H2	IEC 61181
39	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content H2	IS 10593
40	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Dissolved Gas Analysis/ Gas Content H2	IS 9434
41	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Electric Strength / Break Down Voltage (BDV)	ASTM D877M

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42	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Electric Strength / Break Down Voltage (BDV)	IEC 60156
43	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Electric Strength / Break Down Voltage (BDV)	IS 1866
44	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Electric Strength / Break Down Voltage (BDV)	IS 6792
45	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Interfacial Tension Test	ASTM D971
46	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Interfacial Tension Test	IS 1866
47	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Interfacial Tension Test	IS 6104
48	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oils	Interfacial Tension Test	ISO 6295
49	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Specific Resistance (Resistivity)	ASTM D1169
50	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Specific Resistance (Resistivity)	IEC 60247
51	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Specific Resistance (Resistivity)	IS 1866
52	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Specific Resistance (Resistivity)	IS 6103
53	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Water Content	ASTM D1533
54	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer oils	Water Content	IEC 60814
55	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Water Content	IS 13567

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56	ELECTRICAL- INSULATING MATERIALS & INSULATORS	Transformer Oils	Water Content	IS 1866