National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : REGIONAL TEST CENTRE -CUM- TECHNOLOGY BACK UP UNIT FOR SOLAR THERMAL DEVICES, CENTRE FOR ENERGY STUDIES, SAVITRIBAI PHULE PUNE UNIVERSITY, PUNE, MAHARASHTRA, INDIA

Accreditation Standard ISO/IEC 17025:2017

Certificate Number TC-6422 **Page No** 1 of 3

Validity 16/11/2022 to 25/06/2024 **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	MECHANICAL- THERMAL TESTS	Thermosyphon Type Domestic Solar Hot Water Heating System	Static Pressure Leakage Test	IS 16368 (Clause 6.2)
2	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Absorptivity and Emissivity Test Of The Selective Coating (Absorptivity)	IS 16543 (Claue 7.10, Annex. H)
3	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar Collector Tubes	Absorptivity and Emissivity Test Of The Selective Coating (Emissivity)	IS 16543 (Clause 7.10, Annex. H.3)
4	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Average Heat Loss Coefficient Test	IS 16543 (Clause 7.5, Annex. C)
5	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Resistance to Impact Test	IS 16543 (Clause 7.8, Annex. F)
6	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar Collector Tubes	Resistance to Internal Pressure Test	IS 16543 (Clause 7.9, Annex. G)
7	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Resistance to Thermal Shock Test	IS 16543 (Clause 7.7, Annex. E)
8	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Stagnation Performance Parameter Test	IS 16543 (Clause 7.3, Annex. A)
9	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Stagnation Solar Irradiance Test	IS 16543 (Clause 7.4, Annex. B)
10	MECHANICAL- THERMAL TESTS	All Glass Evacuated Solar collector tubes	Vacuum Performance Test	IS 16543 (Clause 7.6, Annex. D)
11	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Internal Thermal Shock Test	IS 16544 (Clause 6.2.5, Annex. F)
12	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Leakage Test	IS 16544 (Clause 6.2.2, Annex. C)
13	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Stagnation Test	IS 16544 (Clause 6.2.3, Annex. D)
14	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Exterior Test	IS 16544 (Clause 6.2.1, Annex. B)
15	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	External Thermal Shock Test	IS 16544 (Clause 6.2.4, Annex. E)
16	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Pre-conditioning Test	IS 16544 (Clause 6.1)
17	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Resistance to Impact Test	IS 16544 (Clause 6.2.7)

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18	MECHANICAL- THERMAL TESTS	All Glass Evacuated Tubes Solar Water Heating System	Thermal Performance Test	IS 16544 (Clause 6.2.6)
19	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Idle Heating Test	IS 16542 (Clause 7.3)
20	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Integral Test	IS 16542 (Clause 7.4)
21	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Leakage Test	IS 16542 (Clause 7.2)
22	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Measurement of Storage Water Tank Capacity	IS 16542 (Clause 7.1)
23	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Performance Test	IS 16542 (Clause 7.5)
24	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Thermal Shock Test for Inner Sealing	IS 16542 (Clause 7.6)
25	MECHANICAL- THERMAL TESTS	Direct Insertion Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector	Thermal Shock Test for Outer Sealing	IS 16542 (Clause 7.7)
26	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Mirror Reflectivity Test	IS 13429 (Part 3, Clause 4.3)
27	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Rain Penetration Test	IS 13429 (Part 3, Clause 4.1.4)
28	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Rubber Gasket Leakage Test	IS 13429 (Part 3, Clause 4.1.2)
29	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Thermal Performance Test	IS 13429 (Part 3, Clause 4.5)
30	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Thermal Shock test for Gasket, Grommet & Sealant	IS 13429 (Part 2, Clause 5.2)
31	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Cooking Tray Test	IS 13429 (Part 3, Clause 4.1.1)
32	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Exposure Test	IS 13429 (Part 3, Clause 4.4)
33	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Leakage Test for Lower Side of Cover Plate	IS 13429 (Part 3, Clause 4.1.3(b))
34	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Leakage Test for Upper Side of Cover Plate	IS 13429 (Part 3, Clause 4.1.3 (a))
35	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Load Test for FRP body Cooker Only	IS 13429 (Part 1, Clause 7.2.2)
36	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Load Test: Sensible Heating of Water	IS 13429 (Part 3, Clause 4.5.2)

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37	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Slam Test	IS 13429 (Part 3, Clause 4.2)
38	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Stagnation Temperature Test	IS 13429 (Part 3, Clause 4.5.1)
39	MECHANICAL- THERMAL TESTS	Solar Box Type Cooker	Transmittance Test for Cover Plate	IS 13429 (Part 2, Clause 5.1)
40	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Thermal Performance Test	IS 12933 (Part 5, Clause 6.4)
41	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Thermal Shock Test for Gaskets & Grommets	IS 12933 (Part 2, Clause 12.1)
42	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	External Thermal Shock Test	IS 12933 (Part 5, Clause 5.4)
43	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Impact Resistance Test	IS 12933 (Part 5, Clause 5.7)
44	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Incident Angle Modifier Test	IS 12933 (Part 5, Clause 6.6)
45	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Internal Thermal Shock Test	IS 12933 (Part 5, Clause 5.5)
46	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Outdoor No Flow Exposure Test	IS 12933 (Part 1, Clause 7.2.1)
47	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Rain Penetration Test	IS 12933 (Part 5, Clause 5.6)
48	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Static Pressure Leakage Test	IS 12933 (Part 5, Clause 5.3)
49	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Temperature Test on absorber	IS 12933 (Part 2, Clause 9.1.4)
50	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Time Constant Test	IS 12933 (Part 5, Clause 6.5)
51	MECHANICAL- THERMAL TESTS	Solar Flat Plate Collector	Transmittance Test on Cover Plate	IS 12933 (Part 5, Clause 5.1)
52	MECHANICAL- THERMAL TESTS	Thermosyphon Type Domestic Solar Hot Water Heating System	Preconditioning Test	IS 16368 (Clause 6.1)
53	MECHANICAL- THERMAL TESTS	Thermosyphon Type Domestic Solar Hot Water Heating System	Thermal Performance Test	IS 16368 (Clause 7)