

BUREAU OF INDIAN STANDARDS

Program of Work

MED 4 : Renewable Energy Sources

Scope: Formulation of standards in the field of Renewable energy sources such as solar energy, bio-gas energy, bio-mass energy etc.

Liaison: **TC-180 (P): Solar energy TC-180 SC-1 (P): Climate - Measurement and data TC-180 SC-4 (P): Systems - Thermal performance, reliability and durability TC-285 (P): Clean cookstoves and clean cooking solutions**

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS/ISO/TR 10217 : 1989 ISO/TR 10217 : 1989 <i>Reviewed In : 2022</i>	Solar energy - Water heating systems - Guide to material selection with regard to internal corrosion	October, 2022	-	Indigenous
2	IS 12933 (Part 1) : 2003 <i>Reviewed In : 2019</i> ISO 9806 (Parts 1 and 2)	Solar flat plate collector - Specification: Part 1 requirements (Second Revision)	January, 2019	2	Not Equivalent
3	IS 12933 (Part 2) : 2003 <i>Reviewed In : 2019</i>	Solar flat plate collector - Specification: Part 2 components (Second Revision)	January, 2019	3	Indigenous
4	IS 12933 (Part 3) : 2003 <i>Reviewed In : 2024</i>	Solar flat plate collector - Specification: Part 3 measuring instruments (First Revision)	March, 2024	1	Indigenous
5	IS 12933 (Part 5) : 2003 <i>Reviewed In : 2019</i>	Solar flat plate collector - Specification: Part 5 test methods (Second Revision)	January, 2019	2	Indigenous
6	IS 12976 : 2023	SOLAR WATER HEATING SYSTEMS - CODE OF PRACTICE (First Revision)		-	Indigenous
7	IS 12986 (Part 1) : 1990 <i>Reviewed In : 2020</i>	Biogas plants - Glass fibre reinforced polyester resin gas holders - Specification: Part 1 with steel frame	October, 2020	1	Indigenous
8	IS 13129 (Part 1) : 2023	SOLAR HEATING DOMESTIC WATER HEATING SYSTEMS PART 1 PERFORMANCE RATING PROCEDURE USING INDOOR TEST METHODS		-	Indigenous
9	IS 13129 (Part 2) : 2023	SOLAR HEATING DOMESTIC WATER HEATING SYSTEMS PART 2 PROCEDURE FOR SYSTEM PERFORMANCE		-	Indigenous

		CHARACTERIZATION AND YEARLY PERFORMANCE PREDICATION			
10	IS 13129 (Part 3) : 1991 Reviewed In : 2019	Solar heating - Domestic water heating systems: Part 3 procedures for system component characterization and - Predication for yearly performance using component performance data	December, 2019	-	Indigenous
11	IS 13129 (Part 3) : 2024	Solar Heating - Domestic Water Heating Systems Part 3 Procedures for System Component Characterization and Predication for Yearly Performance Using Component Performance Data (First Revision)		-	Indigenous
12	IS 13129 (Part 4) : 2023	SOLAR HEATING DOMESTIC WATER HEATING SYSTEMS PART 4 DETERMINATION OF DURABILITY AND RELIABILITY		-	Indigenous
13	IS 13152 (Part 1) : 2013 Reviewed In : 2024	Portable solid bio - Mass cookstove (Chulha) - Specification (First Revision)	March, 2024	-	Indigenous
14	IS 13429 (Part 1) : 2020	Solar Cooker - Box Type - Specification Part 1 Requirements (Second Revision)	-	-	Indigenous
15	IS 13429 (Part 2) : 2018 Reviewed In : 2024	Solar cooker - Box type - Specification: Part 2 components (Second Revision)	March, 2024	-	Indigenous
16	IS 13429 (Part 3) : 2018 Reviewed In : 2024	Solar cooker - Box type - Specification: Part 3 test method (Second Revision)	March, 2024	-	Indigenous
17	IS 16368 : 2015 Reviewed In : 2020	Test procedure for thermosyphon type domestic solar hot water heating systems	October, 2020	-	Indigenous
18	IS 16542 : 2016 Reviewed In : 2021	Direct insertion type storage water tank for all glass evacuated tubes solar collector - Specification	September, 2021	1	Indigenous
19	IS 16543 : 2016 Reviewed In : 2021	All glass evacuated solar collector tubes - Specification	September, 2021	-	Indigenous
20	IS 16543 : 2024	All-glass evacuated solar collector tubes - Specification (First revision)		-	Indigenous
21	IS 16544 : 2016 Reviewed In : 2021	All glass evacuated tubes solar water heating system	September, 2021	1	Indigenous
22	IS 16648 (Part 1) : 2017 Reviewed In : 2022	Concentrated solar thermal - Specification: Part 1 paraboloid dish concentrator	October, 2022	-	Indigenous
23	IS 16648 (Part 2) : 2017 Reviewed In : 2022	Concentrated solar thermal - Specification: Part 2 scheffler concentrator	October, 2022	-	Indigenous

24	IS 16648 (Part 3) : 2017 Reviewed In : 2022	Concentrated solar thermal - Specification: Part 3 parabolic trough concentrator	October, 2022	-	Indigenous
25	IS 16648 (Part 4) : 2018 Reviewed In : 2022	Concentrated solar thermal? - Specification: Part 4 non - Imaging concentrator	October, 2022	-	Indigenous
26	IS 16648 (Part 5) : 2017 Reviewed In : 2022	Concentrated solar thermal - Specification: Part 5 test methods	October, 2022	1	Indigenous
27	IS 18727 : 2024	Manifold Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector Systems - Specification		-	Indigenous
28	IS 9478 : 2023	Design, Construction, Installation and Operation of Biogas (Biomethane) Plant i _c ½ Code of Practice		-	Indigenous
29	IS/ISO 9488 : 2022 ISO 9488: 2022 ISO 9488: 2022	SOLAR ENERGY VOCABULARY		-	Identical under single numbering
30	IS/ISO 9847 : 1992 ISO 9847 Reviewed In : 2022 ISO 9847 : 1992	Solar energy - Calibration of field pyranometers by comparison to a reference pyranometer	October, 2022	-	Identical under single numbering

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
1	MED 4 (25025)	Concentrated solar thermal - Specification Part 5 Test methods Amendment - 2

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	MED 4 (21413)	All glass evacuated tubes solar water heating system Amendment No - 2

Total Published Standards:26 Total Standards Under development:2

Aspect Wise Report

Product : 13
Code of Practices : 8
Methods of Test : 4
Terminology : 1
Dimensions : 0
System Standard : 0
Safety Standard : 0
Others : 0
Service Specification : 0
Process Specification : 0
Unclassified : 0

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 12933 (Part 4) : 1990	Solar flat plate collector Part 4 Performance requirements and accepted criteria
2	IS 12934 : 1990 9488 Reviewed In : 2010	Solar energy - Thermal applications - Vocabulary
3	IS 13429 (Part 1) : 2000 Reviewed In : 2010 IEC TS 62351-100-3:2020	Solar Cooker - Box Type - Part 1 Requirements

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
1	IS 12933 (Part 1) : 2003 Reviewed In : 2019 ISO 9806 (Parts 1 and 2)	Solar flat plate collector - Specification Part 1 requirements Second Revision
2	IS 12933 (Part 2) : 2003 Reviewed In : 2019	Solar flat plate collector - Specification Part 2 components Second Revision
3	IS 12933 (Part 3) : 2003 Reviewed In : 2024	Solar flat plate collector - Specification Part 3 measuring instruments First Revision
4	IS 12986 (Part 1) : 1990 Reviewed In : 2020	Biogas plants - Glass fibre reinforced polyester resin gas holders - Specification Part 1 with steel frame
5	IS 13152 (Part 1) : 2013 Reviewed In : 2024	Portable solid bio - Mass cookstove Chulha - Specification First Revision
6	IS 16542 : 2016 Reviewed In : 2021	Direct insertion type storage water tank for all glass evacuated tubes solar collector - Specification
7	IS 16543 : 2024	All-glass evacuated solar collector tubes - Specification First revision
8	IS 16544 : 2016 Reviewed In : 2021	All glass evacuated tubes solar water heating system
9	IS 16648 (Part 1) : 2017 Reviewed In : 2022	Concentrated solar thermal - Specification Part 1 paraboloid dish concentrator
10	IS 16648 (Part 2) : 2017	Concentrated solar thermal - Specification Part 2 scheffler concentrator

	<u>Reviewed In : 2022</u>	
11	IS 16648 (Part 3) : 2017	Concentrated solar thermal - Specification Part 3 parabolic trough concentrator
	<u>Reviewed In : 2022</u>	
12	IS 16648 (Part 4) : 2018	Concentrated solar thermal - Specification Part 4 non - Imaging concentrator
	<u>Reviewed In : 2022</u>	
13	IS 18727 : 2024	Manifold Type Storage Water Tank for All Glass Evacuated Tubes Solar Collector Systems - Specification