BUREAU OF INDIAN STANDARDS

Program of Work

ETD 54 : Marine Energy Conversion Systems

Scope: To prepare standards for marine energy conversion systems. The primary focus will be on the conversion of wave, tidal and other water current energy into electrical energy, although other conversion methods, systems and products are included. a) terminology; b) management plans for technology and project development; c) performance measurements of marine energy converters; d) resource assessments; e) design and safety including reliability and survivability; f) deployment, commissioning, operation, maintenance, retrieval and decommissioning; g) electrical interface, including array integration and / or grid integration; h) testing laboratory, manufacturing and factory acceptance; i) additional measurement methodologies and processes.

Liaison: **IEC TC-114 (P):** *Marine energy - Wave, tidal and other water current converters* **IEC TC-114 (P):** *Marine energy - Wave, tidal and other water current converters*

Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 18972 (Part 10):2025 IEC TS 62600-10-2021 IEC TS 62600-10-2021	Marine Energy wave tidal and other water current converters Part 10 : Assessment of mooring system for marine energy converters MECS		-	Identical under dual numbering
2	IS 18972 (Part 101):2026	Marine energy – Wave, tidal and other water current converters – Part 101: Wave energy resource assessment and characterization		-	
3	IS 18972 (Part 200):2026	Marine energy – Wave, tidal and other water current converters – Part 200: Electricity producing tidal energy converters – Power performance assessment		-	
4	IS 18972 (Part 201):2026	Marine energy – Wave, tidal and other water current converters – Part 201: Tidal energy resource assessment and characterization		-	
5	IS 18972 (Part 202):2026	Marine energy – Wave, tidal and other water current converters – Part 202: Early stage development of tidal energy converters – Best practices and recommended procedures for the testing of pre-prototy		-	
6	IS 18972 (Part 1):2025	Marine energy Wave tidal and other water current converters Part		-	Identical under dual numbering

	IEC TS 62600-1-2020 IEC TS 62600-1-2020	1: Vocabulary			
7	IS 18972 (Part 20):2025 IEC TS 62600-20:2019 IEC TS 62600-20:2019	Marine Energy wave tidal and other water current converters Part 20 : Design and Analysis of an Ocean Thermal Energy Conversion OTEC plant General Guidance		-	Identical under dual numbering
8	IS 18972 (Part 100):2025 IEC TS 62600-100-2012 IEC TS 62600-100-2012	Marine Energy Wave Tidal and Other Water Current Converters Part 100 : Electricity producing wave energy converters - Power performance assessment		-	Identical under dual numbering
9	IS 18972 (Part 2):2025 IEC TS 62600-2 2019 IEC TS 62600-2 2019	Marine energy Wave tidal and other water current converters Part 2: Marine energy systems Design requirements		-	Identical under dual numbering

Standards under Development

Projects Approved

SI. No.	Doc No.	Title
No Records Found		

Preliminary Draft Standards

SI. No.	Doc No.	Title
No Records Found		

Drafts Standards in WC Stage

SI. No.	Doc No.	Title
No Records Found		

Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standard

SI. No.	Doc No.	Title
No Records Found		

Finalized Draft Indian Standards under Print

SI. No.	Doc No.	Title
1	ETD 54 (24541)	Marine energy Wave tidal and other water current converters Part 1 Vocabulary
2	ETD 54 (24542)	Marine energy Wave tidal and other water current converters Part 2 Marine energy systems Design requirements
3	ETD 54 (24543)	Marine Energy wave tidal and other water current converters Part 10 Assessment of mooring

		system for marine energy converters MECS
4	ETD 54 (24544)	Marine Energy wave tidal and other water current converters Part 20 Design and Analysis of an Ocean Thermal Energy Conversion OTEC plant General Guidance
5	ETD 54 (24545)	Marine Energy Wave Tidal and Other Water Current Converters Part 100 Electricity producing wave energy converters - Power performance assessment
6	ETD 54 (32809)	Marine energy Wave tidal and other water current converters Part 101 Wave energy resource assessment and characterization
7	ETD 54 (32852)	Marine energy Wave tidal and other water current converters Part 200 Electricity producing tidal energy converters Power performance assessment
8	ETD 54 (32853)	Marine energy Wave tidal and other water current converters Part 201 Tidal energy resource assessment and characterization
9	ETD 54 (32856)	Marine energy Wave tidal and other water current converters Part 202 Early stage development of tidal energy converters Best practices and recommended procedures for the testing of pre-prototy
10	ETD 54 (35202)	Marine energy - Wave tidal and other water current converters - Part 300 Electricity producing river energy converters - Power performance assessment
11	ETD 54 (35222)	Marine energy - Wave tidal and other water current converters - Part 301 River energy resource assessment
12	ETD 54 (35292)	Marine Energy Wave Tidal and Other Water Current Converters Part 100 Electricity producing wave energy converters - Power performance assessment

Total Published Standards:9 Total Standards Under development:12

Aspect Wise Report

Product : 0
Code of Practices : 1
Methods of Test : 1
Terminology : 1
Dimensions : 2
System Standard : 0
Safety Standard : 0
Others : 0
Service Specification : 0
Process Specification : 0
Unclassified : 4

Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
No Records Found		

Annexure-II :List of Indian Product Standards

SI. No.	IS No. & Year	Title
No Records Found		