

ISO 9875:2023-05 (E)

Ships and marine technology - Marine echo-sounding equipment

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Abbreviated terms	3
5	Performance requirements	4
5.1	General	4
5.2	Functionality	4
5.2.1	Range performance	4
5.2.2	Range scales	4
5.2.3	Main display	4
5.2.4	Other displays	4
5.2.5	Pulse repetition rate	4
5.2.6	Roll and pitch	4
5.3	Multiple installation	5
5.4	Data storage	5
5.5	Accuracy	5
5.5.1	Accuracy of measurement	5
5.5.2	Discrimination	5
5.6	Malfunctions and alert and indications	5
5.6.1	General	5
5.6.2	Depth alarm	6
5.6.3	Failure or reduction in power supply ("power fail" alert)	6
5.6.4	System failure	6
5.7	Ergonomic criteria	6
5.7.1	Operational controls	6
5.7.2	Presentation of information	7
5.8	Design and installation	7
5.9	Interfacing	7
6	Methods of testing and required test results	7
6.1	General	7
6.2	General conditions of measurement	7
6.3	General underwater test conditions	8
6.4	Functionality	8
6.4.1	Range performance	8
6.4.2	Receiver sensitivity	11
6.4.3	Performance checks	11
6.4.4	Range scales	12
6.4.5	Main display	12
6.4.6	Other display	13
6.4.7	Pulse repetition rate	13
6.4.8	Roll and pitch	13
6.5	Multiple installation	13
6.6	Data storage	13

6.6.1	Method of test	13
6.6.2	Required result	13
6.7	Accuracy	13
6.7.1	Method of test	13
6.7.2	Required result	14
6.7.3	Discrimination	14
6.8	Malfunctions, alert and indications	14
6.8.1	General	14
6.8.2	Depth alarm	14
6.8.3	Failure or reduction in power supply	15
6.8.4	System failure	16
6.9	Ergonomic criteria	16
6.9.1	Operational controls	16
6.9.2	Presentation of information	16
6.10	Design and installation (test of environment and interference)	16
6.11	Interfacing	17
Annex A (informative) Sound absorption coefficient		18
Annex B (normative) Alerts definition for echo-sounding equipment		25
Annex C (normative) IEC 61162 interfaces		26
Bibliography		28