Chinastandards.org

ICS 47.040
CCS U 60

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 4447-2025

Replacing GB/T 4447-2008

Ships and marine technology - Sea-going vessels - Windlasses and anchor capstans

船舶与海洋技术 海船 起锚机和起锚绞盘

(English Translation)

Issued on: April 25, 2025 **Implemented on: November 1, 2025**

Issued by: State Administration for Market Regulation, China National Standardization Administration

Preview: page 1 of 4 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-4447-2025

Chinastandards.org

Table of Contents

Foreword

1 Scope

2 Normative references

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 4447-2008 "Anchor winches and anchor capstans for seagoing vessels".

In addition to the integration and editorial changes, the main technical changes are as follows.

--- Changed the terms "working load", "nominal specification" and "overload tension" (see 3.1, 3.2 and 3.3, 3.1, 3.2 and 3.3 of the 2008 edition);

--- Deleted the term "nominal anchor speed" (see 3.5 of the 2008 edition);

--- Added the terms "anchor windlass", "double chain wheel coupled windlass (type 6)", "brake control device" (see 3.5, 3.10 and 3.11);

--- Added requirements for mooring reels (see 4.4);

--- Changed the strength requirements (see 4.5, 4.4 of the 2008 edition);

--- Added requirements for anchor chain wheels (see 4.6.2.2);

--- Added requirements for motors (see 4.11.2 and 4.11.3);

--- Added requirements for mooring load of cable drum or mooring winch (see 5.4);

--- Added test methods (see 6.3 to 6.8).

This document is modified to adopt ISO 4568:2021 "Ships and marine technology - Anchor windlasses and anchor capstans for seagoing vessels".

The technical differences between this document and ISO 4568:2021 and their reasons are as follows.

--- Changed the design requirements for anchor winch drum (see 4.3.1, 4.3.1 of ISO 4568:2021), corresponding to Figure 5 in 3.9;

Preview: page 2 of 4 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-4447-2025

--- Change "mooring winch" to "mooring drum" (see 4.4, 4.4 of ISO 4568:2021). The original "mooring winch" here only refers to The actuator does not include the power drive device. To distinguish it from the "mooring winch" in GB/T 4446, it is changed here to "Mooring reel";

--- Changed the specifications for drive equipment requiring classification society certification (see 4.11.2, 4.11.2 of ISO 4568:2021), and The requirements of the testing agency are consistent;

--- Added requirements for motor cables (see 4.11.3), consistent with the requirements of third-party inspection agencies in the industry;

--- Increased the requirements for the nominal speed of the windlass (see 6.3);

--- Changed the requirements for the lifting and lowering time of the weight in the acceptance test (see 6.4, 6.4 of ISO 4568:2021) to adapt to my country's technical requirements parts, increasing operability;

--- The clause that some tests can be carried out on board by consensus (see 6.9 of ISO 4568:2021) has been deleted to adapt to the technical requirements of my country. Technical conditions and increase operability. The following editorial changes were made to this document.

---Removed references.

1 Scope

This document specifies the design and construction, requirements, acceptance tests, marking and marking requirements for anchor windlasses and anchor capstans for seagoing vessels.

This document applies to electric, hydraulic, pneumatic or externally driven windlasses and anchor winches for seagoing vessels. The main types are as follows.

---Symmetrical double anchor chain windlass (type 1);

--- Single chain wheel windlass (type 2);

--- Single chain wheel anchoring device (type 3 and type 4);

---Anchor winch (type 5);

---Double chain wheel coupled windlass (type 6).

In addition to this document, ISO 3730 is also applicable to anchor and mooring combined machines.

Note: Please pay attention to the requirements of the relevant classification society or flag state government.

Preview: page 3 of 4 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-4447-2025

Chinastandards.org

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document. ches)

Note: GB/T 4446-2025 Shipbuilding and offshore structure mooring winches (ISO 3730:2012, IDT)

Note: GB/T 3893-2008 Terminology and symbols for deck machinery in shipbuilding and offshore structures (ISO /FDIS3828.2007, IDT)

Note: GB/T 3766-2015 General rules and safety requirements for hydraulic transmission systems and their components (ISO 4413:2010, MOD)

ISO 6482 Shipbuilding-Deckmachinery-Warpingendpro-files)

Note: GB/T 42690-2023 Shipbuilding deck machinery cable drum shape (ISO 6482:2017, IDT)

ISO 7825 Shipbuilding-Deck machinery-General requirements

Note: GB/T 42050-2022 General requirements for shipbuilding deck machinery (ISO 7825:2017, IDT)

Note: GB/T 6994-2006 Definitions and general provisions for marine electrical equipment (IEC 60092-101:2002, IDT)

GB/T 7357-2010 System design protection for marine electrical equipment (IEC 60092-202:1994, MOD)

GB/T 9331-2008 Single-core and multi-core power cables with extruded insulation and non-radial electric field for rated voltage 1kV and 3kV for ship electrical installations (IEC 60092-353:1995,IDT)

GB/T 9332-2008 150/250V (300V) cables for control and instrument circuits of marine electrical installations (IEC 60092-376:2003, IDT)

Preview: page 4 of 4 shown, 24 in the full document. Complete English PDF, instant download:
https://chinastandards.org/standards/gb-t-4447-2025