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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 30499-2026

Replacing GB/T 30499-2014

**Inland navigation vessels - Manually and power-operated
coupling devices - Safety requirements and main dimensions**

内河船 紧缆绞车 安全要求和主要尺寸

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document supersedes GB/T 30499-2014 "Safety Requirements and Main Dimensions of Manually Operated Cable Tightening Winches for Inland Waterway Vessels". (The document is consistent with GB/T 30499-...) Compared to 2014, aside from structural adjustments and editorial changes, the main technical changes are as follows.

- a) The scope of application has been changed (see Chapter 1, Chapter 1 of the 2014 edition);
- b) The term "connection load" and its definition have been removed (see 3.2 in the 2014 edition);
- c) The terms "powered cable tensioning winch," "tensioning device," "tensioning force," and "minimum breaking load" and their definitions have been added (see 3.2-3.5);
- d) The general principles have been changed to general requirements, and the specific content has been modified (see 4.1, 2014 version 4.1);
- e) Component drawings for both manual and power-operated cable tensioning winches

have been added (see Figures 1 and 2);

f) Added a power limit to the power tensioning winch drive (see 4.2);

g) The strength requirements have been changed (see 4.3, 4.2 in the 2014 edition);

h) Added operating methods for the cable tensioning winch, and the distinctions between manual and manual cable tensioning winches (see 5.1 and 5.3);

i) The winch classification method has been changed (see Figure 3, Figures 1 and 2 in the 2014 version);

j) The footplate type has been removed (see 5.3 in the 2014 edition);

l) The main dimensions of the manual cable tensioning winch have been modified (see Figure 4, Figure 3 in the 2014 version);

m) Requirements for power equipment and combined operation modes have been added (see 6.3 and 6.4);

(n) The design requirements for the anti-rollover device and foot brake, as well as the material requirements for the protective devices, have been changed (see 6.5~6.7, 6.3 in the 2014 edition).

6.5, 6.6);

o) The requirement for transmission devices has been removed (see 6.7 in the 2014 edition);

p) Increased requirements for power cable tensioning winch brakes, gears, manual cable tensioning winch tensioning devices and transmission gears, bases, and guide devices.

(See 6.8~6.13);

q) The size and performance requirements have been changed (see 7.2, 7.3, and 7.2 in the 2014 version);

r) Changes have been made to the requirements for materials, installation and operation instructions, marking examples, and signage (see Chapters 8-11, 2014 edition).

Chapters 8-11)

s) Load test requirements for manual and power cable tensioning winches have been added (see A.3.2, A.3.3).

This document adopts ISO 6218:2019 "Safety requirements for manual and powered cable-tightening winches on inland waterway pushers" equivalent to ISO 6218:2019.

Size required.

The following minimal editorial changes have been made to this document.

---To align with existing standards, the standard title has been changed to "Safety Requirements and Main Dimensions of Cable Tightening Winches for Inland Waterway Vessels";

---Place the description of the figure title in Figure 4 in the figure caption.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the Ministry of Transport of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Standardization of Inland Waterway Vessels and Waterway Transportation (SAC/TC130).

Machinery manufacturing company.

1 Scope

This document specifies the safety requirements and key dimensions of cable winches mounted on inland waterway pushboats or inland waterway vessels secured by ropes.

The connecting device ensures the stable position of the inland waterway vessel.

This document specifies the protection of operators from accidents during the formation, operation, and separation of the rope connection between the jacking vessel and the connecting vessel.

Safety requirements.

This document applies to the design and testing of cable tensioning winches for inland waterway vessels.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

ISO 2768-1 General tolerances - Part 1: Tolerances for linear and angular dimensions without specified tolerances Note. GB/T 1804-2000 General tolerances. Tolerances for linear and angular dimensions without specified tolerances (eqv ISO 2768-1:1989) Note. GB/T 4446-2025 Shipbuilding and offshore structures mooring winches (ISO 3730:2012, IDT) ISO 4014 Fasteners - Hexagonhead Bolts - Product Classes A and B grades A and B)

3 Terms and Definitions

The following terms and definitions apply to this document.

A device for tightening ropes by turning a handwheel.

A device that uses power to fasten ropes.

tensioning device

ratchet wrench

Tools used to tighten ropes.

tension force

When a specific tangential force is applied to the manual roller, or a specific force generated by the power-operated mechanism is applied to the gear, the rope bears the load.