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

GB/T 5743-2025

Replacing GB/T 5743-2010

Marine pilot

船用操舵仪

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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 5743-2010 "Marine automatic steering instrument" and GB/T 10846-1989 "Marine magnetic compass automatic steering instrument".

GB/T 11876-2007 "General Technical Requirements for Marine Follow-up Pilots" and GB/T 11877-2010 "Gyrocompass for Marine Use" Combined Steering Instrument" and other four steering instrument related standards.

Compared with GB/T 11876-2007, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed and integrated terms and definitions (see Chapter 3, GB/T 5743-2010, GB/T 10846-1989, GB/T 11877- 2010, Chapter 3 of GB/T 11876-2007);
- Changed and integrated technical requirements (see Chapter 4, GB/T 5743-2010, GB/T 10846-1989, GB/T 11877- 2010, Chapter 4 of GB/T 11876-2007);

- Added "track control" and other requirements and test methods [see 4.3.1.2b) and 5.2.2.2b)];
- Added "override" and other functions (see 4.3.1.3);
- Changed and integrated the test methods (see Chapter 5, GB/T 5743-2010, GB/T 10846-1989, GB/T 11877- 2010, Chapter 5 of GB/T 11876-2007);
- Integrate and modify the inspection rules (see Chapter 6, GB/T 5743-2010, GB/T 10846-1989, GB/T 11877- 2010, Chapter 6 of GB/T 11876-2007);
- Added the test method for automatic control of ship heading (see Appendix A);
- Added the ship track/track direction automatic control test method (see Appendix B);
- Added automatic control stability accuracy and deviation calculation method (see Appendix C);
- Added track control scenario definition (see Appendix D).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the National Technical Committee for Standardization of Marine Electrical and Electronic Equipment (SAC/TC531).

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The previous versions of this document and the documents it replaces are as follows.

- First issued as GB/T 5743-1985 in 1985, first revised in 1994, second revised in 2010;
- First published in 1989 as GB/T 10846-1989;
- First published as GB/T 11876-1989 in 1989, first revised in 2007;
- First published as GB/T 11877-1989 in 1989, first revised in 1999, second revised in 2010;
- This is the third revision of GB/T 5743, which incorporates GB/T 10846-1989 "General Technical Specifications for Marine Magnetic Compass Automatic Steering Instruments" GB/T 11876-2007 "General Technical Requirements for Marine Follow-up Steering Instruments" and GB/T 11877-2010 "General Technical Requirements for Marine Follow-up Steering Instruments" The contents of "Gyrocompass combined steering instrument".
Marine steering gear

1 Scope

This document specifies the technical requirements, inspection rules, marking and labeling, packaging, transportation and storage of marine steering instruments (hereinafter referred to as "steering instruments").

The corresponding test methods are described.

This document applies to the design, manufacture and acceptance of steering gear for steering gear, azimuth thrusters and jet thrusters.

2 Normative references

GB/T 2423.101-2008

GB/T 4208-2017

GB/T 13384

GB/T 31843

GB/T 32065.2

GB/T 32065.4

GB/T 32065.6

GB/T 32065.10

GB/T 32065.14

GB/T 36911

GB/T 37417

IEC 60945

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Track error

The distance between the vessel's position and the current planned leg of the voyage.

Note. Track deviation is expressed as a negative value when the ship's position is to the left of the current planned course (also known as the planned leg course), and as a positive value when it is to the right (i.e. "left negative"). Right").