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

**GB/T 24952-2010**

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**Ship and marine technology -- Heading control systems for  
high-speed craft**

船舶和海上技术 高速船舶向控制装置

**(English Translation)**

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## Foreword

This standard is equivalent to international standard ISO 16329:2003 "Ships and marine technology high speed bow to the control device" (in English).

This standard is equivalent to translate ISO 16329:2003.

The relative standard ISO 16329:2003 made the following editorial changes.

--- Delete foreword international standards;

--- "This International Standard" be replaced by "this standard";

--- Reference standard in accordance with national standards for the corresponding adjustment;

--- With a decimal point instead of a comma as the decimal point, "";

--- Of expression in accordance with the provisions of GB/T 1.1-2000 made editorial changes.

This standard Annex A, Annex B is normative appendix, Appendix C, Appendix D is an informative annex.

The standard proposed by China State Shipbuilding Corporation.

This standard by the National Standardization Technical Committee boat ocean nautical instruments Technical Committee (SAC/TC12/SC5) centralized.

This standard was drafted. Technical and Economic Research Institute of China Shipbuilding Industry.

## 1 Scope

This standard specifies a high speed craft operating under the following conditions heading structure, performance, testing and test control apparatus requirements.

- a) not more than speed is greater than 30kn 70kn;
- b) The maximum rotational speed of 20 °/s;
- c) Press the "international HSC Code" (HSC Code) Chapter 13 requirements, within the normal operating range of 70 ° N ~ 70 ° S shall comply with this standard specifies the minimum performance requirements.

This standard applies to the information, in the relevant ship maneuverability with minimum limits of servo operation based on pre-holding bow obtained Let's bow to bow to the control device.

This standard assumes a conventional scheme. Other programs, such as the use of the standard applicable requirements still valid; when you must modify the requirements, shall be filled Points reasons.

When the speed is lower than 30kn, heading control device shall comply IMO.342 (IX) requires the resolution, when the speed at 30kn ~ 70kn , It shall meet IMO.822 (19) resolution requirements.

**Note 1:** Where in this standard references to IMO Resolution [IMO.822 (19) resolution, IMO.694 (17) resolution and IMO.342 (IX) resolution] contents are Printed in italics.

**Note 2:** The control device before heading called "autopilot (autopilot)."

**Note 3:** IMO.342 (IX) resolution means a IMOMSC.64 (67) to modify the annex to resolution 3 IMO.342 (IX) resolution.

## 2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

CB/T 3973-2005 Ships and marine technology - Positioning of magnetic compass on board

(ISO 694:2000, IDT) IEC 60945 Maritime navigation and radiocommunication equipment and systems - General requirements for the test results of the test methods and requirements IEC 61162 (all parts) Maritime navigation and radiocommunication equipment and systems - Digital interfaces IMO A.694 (17) resolution as the Global Maritime Distress and Safety System (GMDSS) composed of marine radio equipment and electrical parts General requirements for sub navigation aids IMO A.822 (19) resolution high-speed boat autopilot (autopilot) performance standards Recommendation IMOMSC.64 (67), annex 3 heading control device performance standards

### 3 Terms and Definitions

The following terms and definitions apply to this standard.

#### Heading

High-speed boat bow at some point in the horizontal plane in real-time orientation. The reference orientation azimuth deflection angle of said reference generally square Bit is 0 °. The reference azimuth 000 ° clockwise rotation of 360 ° is represented, 360 ° and 000 ° coincide.

Default heading preset heading High-speed sailing ship will set sail to the horizontal plane orientation. Default heading for the north (true north or magnetic north) azimuth, with