

ICS 17.140.30

CCS Z 32



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

GB/T 4595-2020

Measurement of noise on board vessels

Issued on: March 6, 2020

Implemented on: October 1, 2020

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

Table of Contents

Foreword

2000 version 8.1);

1 Scope

2 Normative references

3 terms and definitions

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard replaces GB/T 4595-2000 "Measurement of noise on ships". Compared with GB/T 4595-2000, the main technical changes are as follows.

--- Modified the standard referenced in the definition of A-weighted sound pressure level L_{pA} (see 3.6, 3.6 of the.2000 version);

--- Modify the content of the annotation, and add the expression and explanation of equivalent continuous A-weighted sound pressure level and equivalent continuous C-weighted sound pressure level (see

3.7, 3.7 of the.2000 version);

--- Increase the terms and definitions of C-weighted peak sound pressure levels (see 3.8);

--- The relevant requirements for instrument specifications, instrument calibration and instrument calibration have been modified and described in sections (see Chapter 4,.2000 edition

Chapter 4);

--- Modified the requirements for the measurement environment (see 5.1, 5.1 of the.2000 version);

--- Added other environmental conditions that affect measurement (see 5.3);

--- Modified the measurement parameters (see Chapter 6, Chapter 6 of the.2000 edition);

--- Added ship status for noise measurement during operation of high-noise equipment (see 7.3);

--- Revised the measurement time and measurement interval, and increased the relative positional relationship between the microphone and the reflective surface, air flow and related equipment (see 8.1,

2000 version 8.1);

--- Added the basic information of the ship, the equivalent continuous C-weighted sound pressure level and the general layout in the measurement report [see a) in Chapter 9, j), r)].

This standard uses the redrafting method to modify and adopt ISO 2923..1996 "Noise measurement on acoustic vessels".

This standard has more adjustments in structure than ISO 2923..1996. Appendix A lists this standard and ISO 2923..1996.

List of chapter number comparisons.

There are technical differences between this standard and ISO 2923..1996, and the terms related to these differences have passed the margins on their outer margins.

The installed vertical single line (?) is marked, and a list of corresponding technical differences and their causes is given in Appendix B.

This standard also makes the following editorial changes.

- Modified the standard name;
- Deleted the informative Appendix A "References" of ISO 2923..1996;
- Added informational Appendix C "Noise Measurement Report Format";
- Added "References".

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

This standard is under the jurisdiction of the National Inland Waterway Standardization Technical Committee (SAC/TC130).

This standard was drafted. Shanghai Institute of Shipping Research.

1 Scope

This standard specifies the instruments, measurement environment, measurement parameters, measurement status, measurement procedures and measurement reports for noise measurement on board ships.

This standard applies to noise measurement on board. The measurement results are mainly used for.

- comparison of various ships;
- In the delivery and pick-up test, as a comparison with domestic or international regulations, the shipowner's contract technical specification specifies the indicators;

- As a basis for further research and noise reduction measures;
- as a basis for assessing noise exposure and the effects of noise on the crew;
- assess the intelligibility of language;
- Evaluate the audibility of the acoustic alarm.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

ISO 17025 General Requirements for the Competence of Testing and Calibration Laboratories

and calibration laboratories)

IEC 60942 Electroacoustics-Sound calibrators

IEC 61260 Electroacoustic Octave and Fractional Octave Filters Part 1. Specifications (Electroacoustics-Octave-

band and fractional-octave-band filters-Part 1. Specifications)

IEC 61672-1 Electroacoustic Sound Level Meters Part 1. Specifications (Electroacoustics-Sound level meters-Part 1.

Specifications)

3 terms and definitions

The following terms and definitions apply to this document.

3.1

Accommodation space

Bedrooms, offices (operating on ships), infirmaries, dining rooms and recreation rooms.

3.2

Duty station

Cabin equipped with main navigation equipment, ship's radio equipment or emergency power supply or centralized fire alarm equipment or fire fighting equipment, also

Including kitchen, main pantry, laundry room, storage room (except independent pantry and small cabin outdoor), mail room, valuables storage room, centralized control

Rooms, workshops other than mechanical spare parts rooms, and similar cabins.

3.3

Machinespace

Equipped with thrusters, boilers, fuel oil installations, electric motors and engines, generators and main electrical installations, loading and unloading machinery, oil injection, purification and pumps

Spaces for station equipment, refrigeration, anti-rolling, ventilation and air-conditioning installations, windlasses, winches and similar equipment, and access to these spaces.