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

GB/T 47710-2026

**Ships and marine technology - Design and test requirements
for steel doors using electrical trace heating**

船舶和海上技术 船舶电伴热钢质门设计及试验要求

(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".

This document adopts ISO 24316:2022 "Design and testing requirements for electrically heated steel doors for ships and marine technical vessels".

1 Scope

This document specifies the design, materials, manufacturing quality, testing, and marking of marine electrically heated steel doors for use in low-temperature environments (below -10°C). Require.

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 to this document.

ISO 8501-1 Surface preparation of steel before coating - Visual assessment of surface cleanliness - Part 1: Uncoated steel surfaces (of previous coatings)

Note: GB/T 8923.1-2011 Visual assessment of surface cleanliness of steel surfaces before coating - Part 1: Uncoated steel surfaces and Rust level and treatment level of steel surface after complete removal of original coating (ISO 8501-1:2007, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Heated steel door

A steel door installed on a ship navigating in a low-temperature environment (3.4) that can be opened normally by heating an electric heating cable (3.3).

3.2 Traceheater

Devices designed to generate heat based on the principle of resistance typically consist of one or more metal conductors or conductive materials, and are then... Provide appropriate electrical insulation and protection.

Note: Electric heating tape (3.3), heating plate or heating pad can be used. [Source: IEC 60519-10:2013, 3.115]

3.3 Electric heat tracing cable

A cable in a circular or flat shape consisting of one or more independent or continuous electrically insulated heating elements.

Note: This cable can automatically adjust its heating output power according to the ambient temperature. [Source: IEC 60519-10:2013, 3.116]