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Foreword

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 8, *Ship design*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Ships and marine technology — Design and test requirements for small steel hatches using electrical trace heating

1 Scope

This document specifies the design, materials, quality of manufacture, test and designation of electrical trace heating for small steel hatches onboard vessels sailing in low temperature environments (below –10 °C).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8501-1, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*

IACS UR S26, *Strength and Securing of Small Hatches on the Exposed Fore Deck*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
heated small steel hatch
hatch made of steel installed onboard vessels, sailing in *low temperature environments* (3.4), enabling people to open normally by adding heat through the *trace heater cable* (3.3)

3.2
trace heater
device designed for the purpose of producing heat on the principle of electrical resistance and typically composed of one or more metallic conductors or an electrically conductive material, suitably electrically insulated and protected

Note 1 to entry: This can be in the form of a *trace heater cable* (3.3), heater panel or heated pad.

[SOURCE: IEC 60519-10:2013, 3.115]

3.3
trace heater cable
circular to flattened cable shaped construction with one or more discrete or continuous electrically insulated heating elements

Note 1 to entry: This cable is able to self-regulate its heating output power due to ambient temperature.

[SOURCE: IEC 60519-10:2013, 3.116]