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

GB/T 21477-2024

Replacing GB/T 21477-2008

**Ships and marine technology - Fire resistance of non-metallic
hose assemblies and non-metallic compensators - Test
methods**

船舶与海上技术 非金属软管组件和非金属补偿器的耐火性能 试验方法
(English Translation)

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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 21477-2008 "Test method for fire resistance of hose assemblies for ships and offshore technology" and Compared with GB/T 21477-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Changed the scope of application (see Chapter 1, Chapter 1 of the 2008 edition);
- Increased the requirements for testing in standard devices (see Chapter 5);
- Deleted the test duration requirements (see 7.5 of the 2008 edition);
- Changed the pressure during the application of flame (see 8.6, 7.6 of the 2008 edition);
- Added test duration requirements for non-metallic compensators (see 8.7);
- Changed the pressure requirement after the flame is applied (see 8.8, 7.8 of the 2008 edition).

This document is equivalent to ISO 15540:2016 "Ships and offshore technology - Fire resistance of non-metallic hose assemblies and non-metallic expansion joints" Energy Test Methods.

1 Scope

This document specifies the test methods for determining the fire resistance of non-metallic hose assemblies and non-metallic compensators with a nominal diameter not exceeding 150 mm.

When the test bench meets the conditions, this document is also applicable to the

determination of the fire resistance of non-metallic hose assemblies and non-metallic compensators with larger nominal diameters.

performance.

This test is used to prove that after a flame is applied for a period of time on the test bench specified in GB/T 21476-2024, the when the non-metallic hose assembly and non-metallic compensator can continue to remain leak-free.

The test medium is only water. To ensure that the operator can for the safety of the test bench, flammable test media are not allowed to be used.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

GB/T 21476-2024 Shipbuilding and offshore technology - Fire resistance test bench for non-metallic hose assemblies and non-metallic compensators (ISO 15541:2016, IDT)

3 Terms and Definitions

There are no terms or definitions that require definition in this document.

4 Mark

The test mark used to indicate fire resistance performance consists of the following elements.

test

mark

Standard number

Test duration, in minutes (min) 0.5-Working pressure during application of flame, in MPa
40-the pressure after the flame is applied is in MPa.

Test piece with fireproof sleeve F