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

GB/T 21476-2024

Replacing GB/T 21476-2008

**Ships and marine technology - Fire resistance of non-metallic
hose assemblies and non-metallic compensators -
Requirements for the test bench**

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 试验台要求
(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 21476-2008 "Requirements for fire resistance test bench for ships and offshore technology hose assemblies" and Compared with GB/T 21476-2008, 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);
- Changed the specimen connection arrangement operating height (see 4.2.1, 4.2.1 of the 2008 edition);
- Deleted Figure 2 (see Figure 2 of the 2008 edition);
- Changed the adjusted working pressure (see 4.3, 4.3 of the 2008 edition);
- Changed the working pressure of the water circuit [see 4.4.3.1d), 4.4.3.1d of the 2008 edition] this document is equivalent to ISO 15541:2016 "Fire resistance of non-metallic hose assemblies and non-metallic compensators for ships and offshore technology" Test bench requirements.

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 requirements, this document is also applicable to the determination of the resistance of non-metallic hose assemblies and non-metallic

compensators with larger nominal diameters.

Fire performance. When exposed to flames, the test bench can withstand a working pressure not exceeding 1.6 MPa.

The flame propagation capability of non-metallic hose assemblies and non-metallic compensators cannot be tested using the test bench specified in this document.

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 21477-2024 Shipbuilding and offshore technology - Test method for fire resistance of non-metallic hose assemblies and non-metallic compensators (ISO 15540:2016, IDT) IEC 60051-1:2016 DC acting indicating and simulating electrical measuring devices and their accessories Part 1: Definitions and general requirements for all components

1) There is no technical difference between the referenced content of IEC 60051-1:2016 and the referenced content of IEC 60051-1:1997.

3 Terms and Definitions

The following terms and definitions apply to this document.

fireresistance

In standard fire resistance tests, components, parts or structural elements meet the required stability, integrity and resistance, thermal insulation and/or other desired specific performance capabilities.

4.1 Test bench components

The test bench shall consist of the following parts (see Figure 1).

--- Combustion chamber with test piece connection equipment, burner and exhaust manifold (see 4.2);