INTERNATIONAL STANDARD

ISO 15540

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Ships and marine technology — Fire resistance of hose assemblies — Test methods

Navires et technologie marine — Résistance au feu des tuyauteries — Méthodes d'essais

Reference number
ISO 15540:1999(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 15540 was prepared by Technical Committee ISO/TC 8, *Ships and marine technology*, Subcommittee SC 3, *Piping and machinery*.

Annex A forms a normative part of this International Standard.

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Introduction

The main objective of the test described in this International Standard is to determine whether and for how long a hose assembly can be exposed to fire, without becoming inoperable, e.g. without becoming untight when subjected to the envisaged working pressure. Despite the fact that the attacking fire is simulated so as to correspond to a fire occurring in practice, it cannot be assumed that the duration of resistance to fire as recorded during the test will also occur in the event of an actual fire, as the conditions of installation, which essentially affect the duration of resistance to fire, may vary from case to case.

When carried out using the test bench specified in ISO 15541, the test procedure according to this International Standard is intended to lead to results capable of being reproduced.

A specimen test certificate is specified in normative annex A.

Ships and marine technology — Fire resistance of hose assemblies — Test methods

1 Scope

This International Standard specifies a test procedure for determining the fire resistance of hose assemblies with nominal diameters of at least 100 mm.

It serves for proving whether, after the period of fire effect on the test bench specified in ISO 15541, hose assemblies continue to be tight, even when subjected to proof pressure.

Only water is permitted as a test medium. With a view to ensuring maximum safety for both the operating personnel and the test bed in the event of damage to the hose during the test, the use of combustible test media is excluded.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 15541:1999, *Ships and marine technology — Fire resistance of hose assemblies — Requirements for the test bench*.

3 Designation

The designation of the test for determining the fire resistance is composed of the elements quoted in the example below: