

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

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 15541:2003 sisaldab Euroopa standardi EN ISO 15541:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.03.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 15541:2003 consists of the English text of the European standard EN ISO 15541:2001.

This document is endorsed on 19.03.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

Käsitlusala:

This standard specifies requirements on a test bench to determine the fire resistance of hose assemblies, in particular by tests according to ISO 15540, up to at least 100 mm nominal diameter. During the exposure to flames, there are possible working pressure up to 10 bar.

Scope:

This standard specifies requirements on a test bench to determine the fire resistance of hose assemblies, in particular by tests according to ISO 15540, up to at least 100 mm nominal diameter. During the exposure to flames, there are possible working pressure up to 10 bar.

ICS 47.020.30, 83.140.40

Võtmesõnad: fire resistance, fire tests, hoses, piping, shipbuilding, specifications, test benches, test equipment

English version

Ships and marine technology

Fire resistance of hose assemblies – Requirements for the test bench
(ISO 15541 : 1999)

Navires et technologie maritime –
Résistance au feu des tuyauteries –
Exigences du banc d'essai
(ISO 15541 : 1999)

Schiffe und Meerestechnik – Feuer-
widerstand von Schlauchleitungen –
Anforderungen an den Prüfstand
(ISO 15541 : 1999)

This European Standard was approved by CEN on 2001-06-09.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

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

which was prepared by ISO/TC 8 'Ships and marine technology' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 300 'Ships and marine technology', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by January 2002 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 15541 : 1999 was approved by CEN as a European Standard without any modification.

Introduction

The main objective of the test using the test bench 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.

Tests carried out using the test bench specified in this International Standard are intended to lead to results capable of being reproduced.

1 Scope

This International Standard specifies requirements for a test bench to determine the fire resistance of hose assemblies, in particular by tests according to ISO 15540, up to at least 100 mm nominal diameter. During the exposure to flames, there are possible working pressures up to 10 bar.

The flame spread ability of the hose cannot be tested with the test bench specified in this International Standard.

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(s)

The following normative documents contain provisions that, 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 editions of the normative documents 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 15540:1999, *Ships and marine technology — Fire resistance of hose assemblies — Test methods*.

IEC 60051-1:1984, *Direct acting indicating, analogue electrical-measuring instruments and their accessories — Part 1: Definitions and general requirements common to all parts*.

IEC 60051-1, *Amendment No. 1:1994*.

IEC 60051-1, *Amendment No. 2:1995*.

3 Term and definition

For the purposes of this International Standard, the following term and definition applies.

3.1

fire resistance

ability of an element of building construction, component or structure, to fulfil for a stated period of time the required stability, integrity, thermal insulation and/or other expected duty specified, in a standard fire resistance test

4 Requirements

4.1 Components of test bench

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