EESTI STANDARD

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Fixed firefighting systems - Foam systems - Part 1: Requirements and test methods for components CONSOLIDATED TEXT

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EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA	NATIONAL FOREWORD
Käesolev Eesti standard EVS-EN 13565-1:2004+A1:2007 sisaldab Euroopa standardi EN 13565-1:2003+A1:2007 ingliskeelset teksti. Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13565-1:2004+A1:2007 consists of the English text of the European standard EN 13565-1:2003+A1:2007. This document is endorsed on 22.11.2007 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 European Standard specifies requirements for materials, construction, and performance of components intended for use in fixed foam fire fighting systems, and using foam concentrates conforming to EN 1568-1 to EN 1568-4. The components covered are: proportioners, sprayers, semi-subsurface hose units, branchpipes, low/medium expansion foam generators, high expansion foam generators, foam chambers, tanks and pressure vessels. Methods of test are given in annexes A to K. Requirements are also given for the provision of the characteristic data needed for correct application of components.NOTE 1 Unless otherwise stated pressures are gauge pressures expressed in bar.The requirements of this specification do not cover, except where stated, the use of combinations of components to form part, or the whole, of a fire fighting system. NOTE 2 It should not be assumed that components conforming to this specification are necessarily compatible one with another. Requirements for pumps, motors and the functioning of mechanical components (i.e. remote control turrets) are outside the scope of this standard.	**Scope:** This European Standard specifies requirements for materials, construction, and performance of components intended for use in fixed foam fire fighting systems, and using foam concentrates conforming to EN 1568-1 to EN 1568-4. The components covered are: proportioners, sprayers, semi-subsurface hose units, branchpipes, low/medium expansion foam generators, high expansion foam generators, foam chambers, tanks and pressure vessels. Methods of test are given in annexes A to K. Requirements are also given for the provision of the characteristic data needed for correct application of components.NOTE 1 Unless otherwise stated pressures are gauge pressures expressed in bar.The requirements of this specification do not cover, except where stated, the use of combinations of components to form part, or the whole, of a fire fighting system. NOTE 2 It should not be assumed that components conforming to this specification are necessarily compatible one with another. Requirements for pumps, motors and the functioning of mechanical components (i.e. remote control turrets) are outside the scope of this standard.

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Ortsfeste Brandbekämpfungsanlagen - Schaumlöschanlagen - Teil 1: Anforderungen und Prüfverfahren für Bauteile

This European Standard was approved by CEN on 21 November 2003 and includes Amendment 1 approved by CEN on 13 September 2007.

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Foreword

This document (EN 13565-1:2003+A1:2007) has been prepared by Technical Committee CEN /TC 191, "Fixed firefighting systems" the secretariat of which is held by BSI.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2007 and conflicting national standards shall be withdrawn at the latest by April 2007.

This document includes Amendment 1, approved by CEN on 2007-09-13.

This document supersedes EN 13565-1:2003.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ▌A1⟩ ⟨A1▌.

▌A1⟩ *deleted text* ⟨A1▌

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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Introduction

This European Standard covers components intended for use in fixed fire fighting foam systems.

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1 Scope

This European Standard specifies requirements for materials, construction, and performance of components intended for use in fixed foam fire fighting systems, and using foam concentrates conforming to EN 1568-1 to EN 1568-4. The components covered are: proportioners, sprayers, semi-subsurface hose units, branchpipes, low/medium expansion foam generators, high expansion foam generators, foam chambers, tanks and pressure vessels. Methods of test are given in annexes A to K.

Requirements are also given for the provision of the characteristic data needed for correct application of components.

NOTE 1 Unless otherwise stated pressures are gauge pressures expressed in bar.

The requirements of this specification do not cover, except where stated, the use of combinations of components to form part, or the whole, of a fire fighting system.

NOTE 2 It should not be assumed that components conforming to this specification are necessarily compatible one with another.

Requirements for pumps, motors and the functioning of mechanical components (i.e. remote control turrets) are outside the scope of this standard.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 671-1:2001, *Fixed firefighting systems - Hose systems - Part 1: Hose reels with semi-rigid hose*

EN 1568-1: 2000, *Fire extinguishing media - Foam concentrates - Part 1: Specification for medium expansion foam concentrates for surface application to water-immiscible liquids*

EN 1568-2:2000, *Fire extinguishing media - Foam concentrates - Part 2: Specification for high expansion foam concentrates for surface application to water-immiscible liquids*

EN 1568-3:2000, *Fire extinguishing media - Foam concentrates - Part 3 Specification for low expansion foam concentrates for surface application to water-immiscible liquids*

EN 1568-4, *Fire extinguishing media - Foam concentrates - Part 4: Specification for low expansion foam concentrates for surface application to water-miscible liquids*

[A1] EN 12259-1:1999+A1:2001 [A1], *Fixed fire fighting systems – Components for sprinkler and water spray systems - Part 1: Sprinklers*

EN 12416-1:2001, *Fixed firefighting systems - Powder systems - Part 1: Requirements and test methods for components*

EN 12542, *Static welded steel cylindrical tanks, serially produced for the storage of Liquified Petroleum Gas (LPG) having a volume not greater than 13 m^3 and for installation above ground - Design and manufacture*

EN 20225, *Fasteners - Bolts, screws, studs and nuts – Symbols, designations and dimensions (ISO 225:1983)*

EN ISO 175, *Plastics - Methods of test for the determination of the effects of immersion in liquid chemicals (ISO 175:1999)*

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EN ISO 179-1, *Plastics - Determination of Charpy impact properties - Part 1: Non-instrumented impact test (ISO 179-1:2000)*

EN ISO 180, *Plastics - Determination of Izod impact strength (ISO 180:2000)*

EN ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*

EN ISO 527-1, *Plastics - Determination of tensile properties - Part 1: General principles (ISO 527-1:1993 including Corr 1:1994)*

EN ISO 898-1, *Mechanical properties of fasteners made of carbon steel and alloy steel - Part 1: Bolts, screws and studs (ISO 898-1:1999)*

EN ISO 4759-1, *Tolerances for fasteners - Part 1: Bolts, screws, studs and nuts - Product grades A, B and C (ISO 4759-1:2000)*

EN ISO 9001:2000 *Quality management systems – Requirements (ISO 9001:2000)*

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads - Part 1: Dimensions, tolerances and designation*

ISO 272, *Fasteners - Hexagon products - Widths across flats*

ISO 885, *General purpose bolts and screws - Metric series - Radii under the head*

ISO 888, *Bolts screws and studs - Nominal lengths and thread length for general purpose bolts*

ISO 1179-1, *Connections for general use and fluid power - Ports and stud ends with EN ISO 228-1 threads with elastomeric or metal-to-metal sealing - Part 1: Threaded ports (Revision of ISO 1179:1981)*

ISO 4633, *Rubber seals - Joint rings for water supply, drainage and sewerage pipelines - Specification for material*

ISO 6447, *Rubber seals - Joint rings used for gas supply pipes and fittings - Specification for material*

ISO 6448, *Rubber seals - Joint rings used for petroleum product supply pipes and fittings - Specification for material*

ISO 7005-1, *Metallic flanges; Part 1: Steel flanges*

ISO 7005-2, *Metallic flanges; Part 2: Cast iron flanges*

ISO 9227, *Corrosion tests in artificial atmospheres; salt spray tests*

Nordtest method NT Fire 042

3 Terms and definitions

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

3.1
aspirating component
component within which air and foam solution are mixed to make foam

3.2
branchpipe
component which projects foam in the form of a jet or spray

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