# Seadmed paiksete vedelkütusemahutite ülevoolu vältimiseks

Overfill prevention devices for static tanks for liquid petroleum fuels



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 13616:2004 sisaldab Euroopa standardi EN 13616:2004 + AC:2006 ingliskeelset teksti.

Käesolev dokument on jõustatud 26.10.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13616:2004 consists of the English text of the European standard EN 13616:2004 + AC:2006.

This document is endorsed on 26.10.2004 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 the minimum performance and construction requirements for various types of overfill prevention devices which are limited to static tanks of shop fabricated manufacture both metallic and non metallic. It covers devices for underground tanks and also above ground tanks with a maximum height of 5 m

### Scope:

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ICS 23.020.10, 75.200

Võtmesõnad:

### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 13616

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### English version

## Overfill prevention devices for static tanks for liquid petroleum fuels

Dispositifs limiteurs de remplissage pour réservoirs statiques pour carburants pétroliers liquides

Überfüllsicherungen für ortsfeste Tanks für flüssige Brennund Kraftstoffe

This European Standard was approved by CEN on 8 April 2004.

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 Central Secretariat or to any CEN member.

This European Standard exists 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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### **Foreword**

This document (EN 13616:2004) has been prepared by Technical Committee CEN/TC 221 "Shop fabricated metallic tanks and equipment for storage tanks and for service stations", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2005, and conflicting national standards shall be withdrawn at the latest by April 2006.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of the Equipment and protective systems intended for use in potentially explosive atmospheres Directive (ATEX)<sup>1)</sup>, Electromagnetic Compatibility Directive (EMC)<sup>2)</sup> and Construction Products Directive (CPD)<sup>3)</sup>.

For the relationship with the Directives 94/9/EC, 89/336/EEC and 89/106/EEC, respectively see informative annexes ZA, ZB and ZC which are an integral part of this document.

By application of this European Standard presumption is given, that the Essential Safety Requirements of the ATEX, EMC and CPD Directives are met.

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

<sup>1)</sup> Directive 94/9/EC of the European Parliament and of the Council of 23 March 1994 on the approximation of the laws of the Member States concerning Equipment and protective systems intended for use in potentially explosive atmospheres (OJEC L 100).

<sup>2)</sup> Directive 89/336/EEC of the European Parliament and of the Council of 03 May 1989 on the approximation of the laws of the Member States concerning Electromagnetic compatibility (OJEC L 139).

<sup>3)</sup> Directive 89/106/EEC of the European Parliament and the Council of 21 December 1988 on the approximation of the laws of the Member States concerning Construction products (OJEC L 40).

### Introduction

This document has been written to limit environmental damage and the risk of pollution to water and any fire or explosion risk during the filling of storage tanks with liquid petroleum fuels.

writ, ge of liqu This document has been written by CEN/TC 221 covering the whole range of static shop fabricated tanks and their equipment for the storage of liquid petroleum fuels.

### 1 Scope

This standard specifies the minimum performance and construction requirements for various types of overfill prevention devices which are limited to static tanks of shop fabricated manufacture both metallic and non metallic. It covers devices for underground tanks and also above ground tanks with a maximum height of 5 m.

To cover the different types of overfill prevention devices, two types have been developed:

- Type A: An overfill prevention device where the operation does not depend on the road tank vehicle or supply system;
- Type B: An overfill prevention device where the operation depends on the road tank vehicle or the supply system.

This standard applies to overfill prevention devices for liquid petroleum fuels, having a flash point up to but not exceeding 100  $^{\circ}$ C. The requirements apply to overfill prevention devices suitable for use at ambient temperatures in the range from –25  $^{\circ}$ C to +60  $^{\circ}$ C, and subject to normal operational pressure variations.

Additional measures may be required for use at temperatures outside this range and are the subject of negotiation between the manufacturer and its client.

#### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 590, Automotive fuels — Diesel – Requirements and test methods

EN 954–1, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design

EN 50014, Electrical apparatus for potentially explosive atmospheres — General requirements

EN 50020, Electrical apparatus for potentially explosive atmospheres — Intrinsic safety « i »

EN 60204-1, Safety of machinery – Electrical equipment of machines – Part 1: General requirements (IEC 60204-1:1997)

EN 60529, Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)

EN 61000-6-1, Electromagnetic compatibility (EMC) - Part 6-1: Generic standards; Immunity for residential, commercial and light-industrial environments (IEC 61000-6-1:1997, modified)

EN 61000-6-2, Electromagnetic compatibility (EMC) - Part 6-2: Generic standards; Immunity for industrial environments (IEC 61000-6-2:1999, modified)

EN 61000-6-3, Electromagnetic compatibility (EMC) - Part 6-3: Generic standards; Emission standard for residential, commercial and light-industrial environments (IEC 61000-6-3:1996, modified)

EN 61000-6-4, Electromagnetic compatibility (EMC) - Part 6-4: Generic standards; Emission standard for industrial environments (IEC 61000-6-4:1997, modified)

### 3 Terms, definitions and abbreviated terms

For the purposes of this document the following terms, definitions and abbreviated terms apply.