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Petrol filling stations - Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units CONSOLIDATED **TFXT**



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13617-1:2004+A1:2009 sisaldab Euroopa standardi EN 13617-1:2004+A1:2009 ingliskeelset teksti. This Estonian standard EVS-EN 13617-1:2004+A1:2009 consists of the English text of the European standard EN 13617-1:2004+A1:2009.

Standard on kinnitatud Eesti Standardikeskuse 30.10.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 17.06.2009.

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The standard is available from Estonian standardisation organisation.

ICS 75.200

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English Version

Petrol filling stations - Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units

Stations-service - Partie 1: Exigences relatives à la construction et aux performances de sécurité des distributeurs de carburants et unités de pompage à distance

Tankstellen - Teil 1: Sicherheitstechnische Anforderungen an Bau- und Arbeitsweise von Zapfsäulen, druckversorgten Zapfsäulen und Fernpumpen

This European Standard was approved by CEN on 5 May 2004 and includes Corrigendum 1 issued by CEN on 25 Janvier 2006 and Amendment 1 approved by CEN on 21 May 2009.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 13617-1:2004+A1:2009) has been prepared by Technical Committee CEN/TC 393 "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 December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-05-21 and Corrigendum 1, issued by CEN on 25 January 2006.

This document supersedes EN 13617-1:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A1).

The modifications of the related CEN Corrigendum have been implemented at the appropriate places in the text and are indicated by the tags (AC).

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directives, see informative Annexes ZA, ZB and ZC, which are integral parts of this document. (A)

This European Standard "Petrol filling stations" consists of 4 parts:

Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units

Part 2 🖹 deleted text 🖾 : Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers

Part 3 (A) deleted text (A): Safety requirements for construction and performance of shear valves

Part 4 [A] deleted text (A]: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers

Annex A is normative. Annex B is informative.

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.

Introduction

This document is a type C standard as stated in EN ISO 12100-1 and EN 12100-2 (4).

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of the type C standard.

It has been assumed that the use of the equipment for dispensing of fuels will be by untrained persons (user / Per Constant dispenser), while other aspects of the operation, maintenance, etc, will be by designated and trained personnel (station personnel or operator).

1 Scope

This European Standard applies to metering pumps, dispensers and remote pumping units to be installed at petrol filling stations, designed to dispense liquid fuels into the tanks of motor vehicles, boats and light aircraft and into portable containers at flow rates up to 200 l·min⁻¹, and intended for use and storage at ambient temperatures between -20 °C and +40 °C. Measures in addition to those required by this standard may be required for use and storage at temperature outside this range. The need for and nature of additional requirements should be determined by the manufacturer, if necessary after consulting the client.

This European Standard deals with all significant hazards, hazardous situations and events relevant to metering pumps, dispensers and remote pumping units, when they are used as intended and under the conditions foreseeable (A) by the manufacturer (see clause 4).

This European Standard gives health and safety related requirements for the selection, construction and performance of the equipment. (A)

This European Standard does not deal with noise and with hazards related to transportation and installation.

This European Standard does not include any requirements for metering performance.

Vapour recovery efficiency rates are not considered within this European Standard.

This European Standard is not applicable to metering pumps, dispensers and remote pumping units which are manufactured before the date of publication of this document by CEN.

NOTE Liquefied petroleum gas (LPG) is not a liquid fuel in the sense of this European Standard.

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. [A]

EN 228, Automotive fuels — Unleaded petrol — Requirements and test methods

A₁) deleted text (A₁)

EN 1360, Rubber hoses and hose assemblies for measured fuel dispensing — Specification

EN 12874, Flame arresters — Performance requirements, test methods and limits for use

EN 13012, Petrol filling stations — Construction and performance of automatic nozzles for use on fuel dispensers

EN 13463-1:2001, Non-electrical equipment for potentially explosive atmospheres — Part 1: Basic method and requirements

[A] EN 13483 (A], [A] Rubber and plastic hoses (A] and hose assemblies with internal vapour recovery for measured fuel dispensing systems — Specification

A₁ deleted text (A₁

(IEC 60079-0:2006, Electrical apparatus for explosive gas atmospheres — Part 0: General requirements (IEC 60079-0:2004, modified)

EN 60079-1:2007, Explosive atmospheres — Part 1: Equipment protection by flameproof enclosures "d" (IEC 60079-1:2007)

EN 60079-7:2007, Explosive atmospheres — Part 7: Equipment protection by increased safety "e' (IEC 60079-7:2006) [A]

EN 60079-10, Electrical apparatus for explosive gas atmospheres — Part 10: Classification of hazardous areas (IEC 60079-10:2002) (A)

EN 60079-14, Electrical apparatus for explosive gas atmospheres — Part 14: Electrical installations in hazardous areas (other than mines) (IEC 60079-14:2002) (A)

EN 60079-15, Electrical apparatus for explosive gas atmospheres — Part 15: Construction, test and marking of type of protection "n" electrical apparatus (IEC 60079-15:2005) (A)

(IEC 60204-1:2006, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified) (A)

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

EN 60730-2-10, Automatic electrical controls for household and similar use — Part 2: Particular requirements for motor starting relays (IEC 60730-2-10:2006)

EN 60947-3, Low-voltage switchgear and controlgear — Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units (IEC 60947-3:1999)

EN 60950-1, Information technology equipment — Safety — Part 1: General requirements (IEC 60950-1:2005, modified) (A)

EN ISO 1182, Reaction to fire tests for building products — Non-combustibility test (ISO 1182:2002)

EN ISO 12100-1:2003, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)

EN ISO 12100-2:2003, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)

♠ EN ISO 13849-1, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)

EN ISO 14121-1, Safety of machinery — Risk assessment — Part 1: Principles (ISO 14121-1:2007) (A)

ISO 11925-3, Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 3: Multi-source test

HD21.13 S1, Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V — Part 13: Oil resistant PVC sheathed cables with two or more conductors

HD22.4 S3, Rubber insulated cables of rated voltages up to and including 450/750 V — Part 4: Cords and flexible cables

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 12100-1 and the following apply.

3.1

air and/or vapour separator

device used for continuously separating and removing air or gases contained in the liquid

3.2

delivery hose assembly

flexible delivery system to which the nozzle is connected