

Lekkedetektorsüsteemid. Osa 1: Üldpõhimõtted

Leak detection systems - Part 1: General principles

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13160-1:2003 sisaldab Euroopa standardi EN 13160-1:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.08.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13160-1:2003 consists of the English text of the European standard EN 13160-1:2003.</p> <p>This document is endorsed on 14.08.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the general principles for leak detection systems for use with double-skin tanks, single-skin tanks and pipework designed for water polluting fluids</p>	<p>Scope:</p> <p>This European Standard specifies the general principles for leak detection systems for use with double-skin tanks, single-skin tanks and pipework designed for water polluting fluids</p>
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English version

Leak detection systems - Part 1: General principles

Systèmes de détection de fuites - Partie 1: Principes
généraux

Leckanzeigesysteme - Teil 1: Allgemeine Grundsätze

This European Standard was approved by CEN on 10 March 2003.

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.

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 Management Centre has the same status as the official versions.

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Foreword

This document (EN 13160-1:2003) 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 November 2003, and conflicting national standards shall be withdrawn at the latest by February 2005.

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 the Construction Products Directive (89/106/EEC) see informative Annex ZA, which is an integral part of this document. For relationship with other EU Directives see informative Annex ZB.

Annexes A, B, and D are informative. Annex C is normative.

This document includes a Bibliography.

This European Standard consists of 7 parts:

Leak detection systems;

Part 1: General principles

Part 2: Pressure and vacuum systems

Part 3: Liquid systems for tanks

Part 4: Liquid and/or vapour sensor systems for use in leakage containments or interstitial spaces

Part 5: Tank gauge leak detection systems

Part 6: Sensors in monitoring wells

Part 7: General requirements and test methods for interstitial spaces, leak protecting linings and leak protecting jackets

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

1 Scope

This European Standard specifies the general principles for leak detection systems for use with double-skin tanks, single-skin tanks and pipework designed for water polluting fluids.

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 13160-2:2003, *Leak detection systems — Part 2: Pressure and vacuum systems.*

EN 13160-3:2003, *Leak detection systems — Part 3: Liquid systems for tanks.*

EN 13160-4:2003, *Leak detection systems — Part 4: Liquid and/or vapour sensor systems for use in leakage containments or interstitial spaces.*

prEN 13160-5:1998, *Leak detection systems — Part 5 : Tank gauge leak detection systems.*

EN 13160-6:2003, *Leak detection systems — Part 6 : Sensors in monitoring wells.*

EN 13160-7:2003, *Leak detection systems — Part 7: General requirements and test methods for interstitial spaces, leak protecting linings and leak protecting jackets.*

EN 13352, *Specification for the performance of automatic tank contents gauges.*

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

EN 50014, *Electrical apparatus for potentially explosive atmospheres – General requirements.*

EN 50015, *Electrical apparatus for potentially explosive atmospheres – Oil immersion "o".*

EN 50016, *Electrical apparatus for potentially explosive atmospheres – Pressurized apparatus "p".*

EN 50017, *Electrical apparatus for potentially explosive atmospheres – Powder filling "q".*

EN 50018, *Electrical apparatus for potentially explosive atmospheres – Flameproof enclosures "d".*

EN 50019, *Electrical apparatus for potentially explosive atmospheres – Increased safety "e".*

EN 50020, *Electrical apparatus for potentially explosive atmospheres – Intrinsic safety "i".*

EN 50028, *Electrical apparatus for potentially explosive atmospheres – Encapsulation m.*

EN 50039, *Electrical apparatus for potentially explosive atmospheres – Intrinsic safety "i" systems.*

EN 60073, *Basic and safety principles for man-machine interface, marking and identification - Coding principles for indicators and actuators (IEC 60073:1996).*

EN 60335-1, *Household and similar electrical appliances – Safety - — Part 1 : General requirements (IEC 60335-1:2001, modified).*

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

EN 60730-1, *Automatic electrical controls for household and similar use — Part 1 : General requirements (IEC 60730-1:1999, modified).*

EN 61010-1, *Safety requirements for electrical equipment for measurement, control and laboratory use — Part 1: General requirements (IEC 61010-1:2001).*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1 : Sampling schemes indexed by acceptance quality limit (AQL) for lot-by lot inspection.*

3 Classes of leak detection systems

For the purpose of this standard the following classes apply in order of protection for the level of safety or environmental protection required: