

Systémy zisťovania netesností. Časť 7: Požiadavky a skúšobné metódy/metódy hodnotenia medzipriestorov, ochranných povlakov a ochranných plášťov.

STN EN 13160-7

69 8979

Leak detection systems - Part 7: Requirements and test/assessment methods for interstitial spaces, leak detection linings and leak detection jackets

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/16

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 13160-7

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#### **English Version**

# Leak detection systems - Part 7: Requirements and test/assessment methods for interstitial spaces, leak detection linings and leak detection jackets

Systèmes de détection de fuites - Partie 7: Exigences et méthodes d'essai/d'évaluation pour les espaces interstitiels, les détecteurs de fuite des revêtements et les détecteurs de fuite d'enveloppes Leckanzeigesysteme - Teil 7: Anforderungen und Prüf/Bewertungsverfahren für Überwachungsräume,
Leckschutzauskleidungen und
Leckschutzummantelungen

This European Standard was approved by CEN on 8 April 2016.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

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## **European foreword**

This document (EN 13160-7:2016) has been prepared by Technical Committee CEN/TC 393 "Equipment for storage tanks and for filling 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 2016, and conflicting national standards shall be withdrawn at the latest by March 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13160-7:2003.

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 Directive(s), see informative Annex ZA, which is an integral part of this document.

According to edition 2003 the following fundamental changes are given:

- requirements and tests for permeation added;
- material properties revised;
- requirements from EN 13160-1:2003 included, which are no longer contained in EN 13160-1:2016.

This European Standard *Leak detection systems* consists of 7 parts:

- Part 1: General principles
- Part 2: Requirements and test/assessment methods for pressure and vacuum systems
- Part 3: Requirements and test/assessment methods for liquid systems for tanks
- Part 4: Requirements and test/assessment methods for sensor based leak detection systems
- Part 5: Requirements and test/assessment methods for in-tank gauge systems and pressurized pipework systems
- Part 6: Sensors in monitoring wells
- Part 7: Requirements and test/assessment methods for interstitial spaces, leak detection linings and leak detection 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, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta,

Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### 1 Scope

This European Standard gives requirements and the corresponding test/assessment methods applicable to leak detection lining kits and leak detection jacket kits. Leak detection lining kits and leak detection jackets kits intended to be used to create an interstitial space or leakage containment in single skin underground or above ground, non-pressurized, tanks designed for water polluting liquids. The kit has to be used only in conjunction with leak detection kits covered by EN 13160-2 to EN 13160-4.

#### 2 Normative references

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

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

EN 495-5, Flexible sheets for waterproofing — Determination of foldability at low temperature — Part 5: Plastic and rubber sheets for roof waterproofing

EN 1107-2, Flexible sheets for waterproofing — Determination of dimensional stability — Part 2: Plastic and rubber sheets for roof waterproofing

EN 1849-2, Flexible sheets for waterproofing — Determination of thickness and mass per unit area — Part 2: Plastic and rubber sheets

EN 10300:2005, Steel tubes and fittings for onshore and offshore pipelines — Bituminous hot applied materials for external coating

EN 13121-1, GRP tanks and vessels for use above ground — Part 1: Raw materials — Specification conditions and acceptance conditions

EN 13121-2:2003, GRP tanks and vessels for use above ground — Part 2: Composite materials — Chemical resistance

EN 13160-1:2016, Leak detection systems — Part 1: General principles

EN 13160-2:2016, Leak detection systems — Part 2: Requirements and test/assessment methods for pressure and vacuum systems

EN 13160-3:2016, Leak detection systems — Part 3: Requirements and test/assessment methods for liquid systems for tanks

EN 13160-4:2016, Leak detection systems — Part 4: Requirements and test/assessment methods for sensor based leak detection systems

EN 14879-4:2007, Organic coating systems and linings for protection of industrial apparatus and plants against corrosion caused by aggressive media — Part 4: Linings on metallic components

EN ISO 62, Plastics — Determination of water absorption (ISO 62)

EN ISO 75-1, Plastics — Determination of temperature of deflection under load — Part 1: General test method (ISO 75-1)

EN ISO 75-2, Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite (ISO 75-2)

EN ISO 75-3, Plastics — Determination of temperature of deflection under load — Part 3: High-strength thermosetting laminates and long-fibre-reinforced plastics (ISO 75-3)

EN ISO 175, Plastics — Methods of test for the determination of the effects of immersion in liquid chemicals (ISO 175)

EN ISO 178, Plastics — Determination of flexural properties (ISO 178)

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

EN ISO 179-2, Plastics — Determination of Charpy impact properties — Part 2: Instrumented impact test (ISO 179-2)

EN ISO 527-1, Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1)

EN ISO 527-3, Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3)

EN ISO 604, Plastics — Determination of compressive properties (ISO 604)

EN ISO 1183-1, Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pyknometer method and titration method (ISO 1183-1)

EN ISO 24345, Resilient floor coverings — Determination of peel resistance (ISO 24345)

ISO 2528, Sheet materials — Determination of water vapour transmission rate — Gravimetric (dish) method

ISO 6133, Rubber and plastics — Analysis of multi-peak traces obtained in determinations of tear strength and adhesion strength

koniec náhľadu – text ďalej pokračuje v platenej verzii STN