

<b>STN</b>	<b>Systémy zisťovania netesností Časť 5: Požiadavky a skúšobné metódy/metódy hodnotenia meracích systémov v nádrži a tlakových potrubných systémov</b>	<b>STN EN 13160-5+A1</b>  69 8979
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Leak detection systems - Part 5: Requirements and test/assessment methods for in-tank gauge systems and pressurised pipework systems

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. 01/25

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EUROPEAN STANDARD

**EN 13160-5:2016+A1**

NORME EUROPÉENNE

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English Version

## Leak detection systems - Part 5: Requirements and test/assessment methods for in-tank gauge systems and pressurised pipework systems

Systèmes de détection de fuites - Partie 5: Exigences et méthodes d'essai/d'évaluation des systèmes de détection de fuites en citernes et des systèmes de tuyauterie sous pression

Leckanzeigesysteme - Teil 5: Anforderungen und Prüf-/Bewertungsmethoden für Tankinhaltmesssysteme und druckbeaufschlagte Rohrleitungen

This European Standard was approved by CEN on 8 April 2016 and includes Amendment 1 approved by CEN on 11 September 2024.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 13160-5:2016+A1:2024) 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of an identical text or by endorsement, at the latest by May 2025, and conflicting national standards shall be withdrawn at the latest by August 2026.

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

This document includes Amendment 1 approved by CEN on 11 September 2024.

This document supersedes A1 EN 13160-5:2016 A1.

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 EN 13160-5:2004 the following fundamental changes are given:

- Requirement for a device for simulating a leak deleted;
- requirements from EN 13160-1:2003 included, which are no longer contained in EN 13160-1:2016;
- Pressure line leak detection kits included.

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 leak detection linings*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

**EN 13160-5:2016+A1:2024 (E)****1 Scope**

This European Standard gives requirements and corresponding test\assessment methods applicable to leak detection kits, based on volumetric loss from within the tank and/or pipework system. The kits usually comprise:

- Measuring Device
- Evaluation Device
- Alarm Device

Intended use:

Leak Detection kits are intended to be used in\with single or double skin underground tanks or single or double skin underground and/or aboveground pipework designed for flammable liquids having a flash point not exceeding 100 °C.

**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 228, *Automotive fuels — Unleaded petrol — Requirements and test methods*

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

EN 976-1, *Underground tanks of glass-reinforced plastics (GRP) — Horizontal cylindrical tanks for the non-pressure storage of liquid petroleum based fuels — Part 1: Requirements and test methods for single wall tanks*

EN 981:1996+A1:2008, *Safety of machinery — System of auditory and visual danger and information signals*

EN 12285-1, *Workshop fabricated steel tanks — Part 1: Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and non-flammable water polluting liquids*

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

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

EN 13352:2012, *Specification for the performance of automatic tank contents gauges*

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 60296, *Fluids for electrotechnical applications — Unused mineral insulating oils for transformers and switchgear (IEC 60296)*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*

EN 61672-1, *Electroacoustics — Sound level meters — Part 1: Specifications (IEC 61672-1)*



ISO 8601, *Data elements and interchange formats — Information interchange — Representation of dates and times*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**