



**NSAI**  
Standards

Irish Standard  
I.S. EN 12817:2019

# LPG Equipment and accessories - Inspection and requalification of LPG pressure vessels up to and including 13 m<sup>3</sup>

**I.S. EN 12817:2019**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 12817:2019 is the adopted Irish version of the European Document EN 12817:2019, LPG Equipment and accessories - Inspection and requalification of LPG pressure vessels up to and including 13 m<sup>3</sup>

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**EUROPEAN STANDARD**

**EN 12817**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

March 2019

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Supersedes EN 12817:2010

English Version

**LPG Equipment and accessories - Inspection and  
requalification of LPG pressure vessels up to and including  
13 m<sup>3</sup>**

Équipements et accessoires GPL - Inspection et  
requalification des réservoirs de capacité inférieure ou  
égale à 13 m<sup>3</sup> pour gaz de pétrole liquéfiés (GPL)

Flüssiggas-Geräte und Ausrüstungsteile - Inspektion  
und wiederkehrende Prüfung von Druckbehältern für  
Flüssiggas (LPG) mit einem Fassungsraum bis  
einschließlich 13 m<sup>3</sup>

This European Standard was approved by CEN on 9 December 2018.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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## **European foreword**

This document (EN 12817:2019) has been prepared by Technical Committee CEN/TC 286 “Liquefied petroleum gas equipment and accessories”, the secretariat of which is held by NSAI.

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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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 supersedes EN 12817:2010.

EN 12817:2010 was thereby technically revised.

In using this document, prepared in the field of application of Article 153 of the treaty on the functioning of the European Union, users are aware that standards have no formal legal relationship with Directives that may have been made under Article 153 of the treaty on the functioning of the European Union. In addition, national legislation in the Member states may contain more stringent requirements than the minimum requirements of a Directive based on Article 153. Information on the relationship between the national legislation implementing Directives based on Article 153 and this EN may be given in a national foreword of the national standard implementing this EN.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**EN 12817:2019 (E)****Introduction**

Inspection and requalification regimes for pressure vessels up to and including 13 m<sup>3</sup> have developed in various countries in different ways that range from defined to variable inspection periods with requalification regimes achieved by various methods. This document for inspection and requalification is based on European countries' legislation and codes of practice and industry codes of practice. In addition, use of LPG in different applications has encouraged the industry to approach the requirements for inspection and requalification in different ways for each application.

This document calls for the use of substances and procedures that can be injurious to health if adequate precautions are not taken. It refers to technical suitability and does not absolve the user from legal obligations relating to health and safety at any stage.

Protection of the environment is a key political issue in Europe and elsewhere; for CEN/TC 286 this is covered in CEN/TS 16765 [1], and this Technical Specification should be read in conjunction with this standard.

It has been assumed in the drafting of this document that execution of its provisions is entrusted to appropriately qualified and experienced people.

## 1 Scope

This document specifies requirements for:

- a) routine inspection, periodic inspection and requalification of fixed LPG pressure vessels of sizes from 150 l up to and including 13 m<sup>3</sup>, and associated fittings;
- b) marking pressure vessels and/or keeping records, as appropriate, as a result of routine inspection, periodic inspection and requalification.

This document excludes refrigerated storage.

## 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 1330-9, *Non-destructive testing – Terminology – Part 9: Terms used in acoustic emission testing*

EN 13477-1, *Non-destructive testing - Acoustic emission - Equipment characterisation – Part 1: Equipment description*

EN 13477-2, *Non-destructive testing - Acoustic emission - Equipment characterisation – Part 2: Verification of operating characteristic*

EN 13554, *Non-destructive testing - Acoustic emission testing - General principles*

EN 14129, *LPG Equipment and accessories - Pressure relief valves for LPG pressure vessels*

EN 14584, *Non-destructive testing - Acoustic emission testing - Examination of metallic pressure equipment during proof testing - Planar location of AE sources*

EN 16631, *LPG equipment and accessories - Pressure relief valves for LPG pressure vessels - Reconditioning requirements*

## 3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

### 3.1

#### **periodic inspection**

external inspection of the visible parts of a pressure vessel and its fittings at defined intervals

### 3.2

#### **routine inspection**

external inspection of the visible parts of a pressure vessel and its fittings, carried out more frequently than periodic inspections

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