

LPG equipment and accessories — Inspection and re-qualification of LPG tanks up to and including 13 m³ overground

The European Standard EN 12817:2002, with the incorporation of amendment A1:2006, has the status of a British Standard

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National foreword

This British Standard is the official English language version of EN 12817:2002, including amendment A1:2006.

The start and finish of text introduced or altered by CEN amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted to Technical Committee PVE/19, LPG containers and their associated fittings, which has the responsibility to:

- aid enquirers to understand the text;
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- monitor related international and European developments and promulgate them in the UK.

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English version

LPG equipment and accessories — Inspection and re-qualification of LPG tanks up to and including 13 m³ overground

Inspection et requalification de réservoirs aériens de
capacité inférieure ou égale à 13 m³ pour gaz de pétrole
liquéfiés (GPL)

Instandhaltung und wiederkehrende Prüfung von Behältern
für Flüssiggas (LPG) mit einem Fassungsraum bis
einschließlich 13 m³ in oberirdischer Aufstellung

This European Standard was approved by CEN on 25 October 2001. Amendment A1 was approved by CEN on 20 January 2006.

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.

CEN members are the national standards bodies of Austria, Belgium, 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.



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Foreword

This European Standard EN 12817:2002 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 November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.

Users of this standard, prepared in the field of application of Article 118A of the EC Treaty, should be aware that standards have no formal legal relationship with Directives that may have been made under Article 118A of the Treaty. In addition, national legislation in the Member states may contain more stringent requirements than the minimum requirements of a Directive based on Article 118A. Information on the relationship between the national legislation implementing Directives based on Article 118A and this EN may be given in a national foreword of the national standard implementing this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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 the United Kingdom.

Foreword to amendment A1

This European Standard (EN 12817:2002/A1:2006) has been prepared by Technical Committee CEN/TC 286 "Liquefied petroleum gas equipment and accessories", the secretariat of which is held by NSAI.

This Amendment to the European Standard EN 12817:2002 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2006, and conflicting national standards shall be withdrawn at the latest by September 2006.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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

Periodic inspection and requalification regimes for overground LPG tanks up to and including 13 m³ have developed in various countries in different ways, that range from defined to variable inspection periods with requalification regimes achieved by various methods. This standard for periodic 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 routine periodic inspection and requalification in different ways for each application.

This European Standard 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.

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

1 Scope

This European Standard specifies requirements for:

- a) routine inspection, periodic inspection and requalification of fixed above ground LPG storage tanks of sizes from 150 l up to and including 13 m³, and associated fittings;
- b) marking tanks and/or keeping records, as appropriate, as a result of routine inspection, periodic inspection and requalification.

This European Standard excludes refrigerated storage.

2 Terms and definitions

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

2.1

periodic inspection

external inspection of the visible parts of a tank and its fittings

2.2

routine inspection

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

2.3

requalification

inspection/test carried out at intervals, typically at the time of a periodic inspection, in order to confirm that a tank is fit for a further period of service

2.4

competent body

person or corporate body, defined by a national competent authority, that, by appropriate qualification, training, experience, and resources, is able to make objective judgements related to inspection and testing of pressure equipment in LPG service

2.5

competent person

person who, by qualification, training, experience, and resources, is able to make objective judgements related to inspection and testing of pressure equipment in LPG service

2.6

national competent authority

organization, recognized or appointed by a member state, that oversees safe operation of LPG pressure equipment

2.7

written scheme

document, prepared by a competent body, containing inspection information

[A1] NOTE In some countries, the written scheme (in whole or in part) may have to be approved by a national competent authority. **[A1]**

2.8

commissioning

preparation for safe service

2.9

decommissioning

removing from service and safe preparation for inspection/test

3 Safety

3.1 Safety precautions

Appropriate safety precautions shall be taken during decommissioning, commissioning and inspection/requalification of a tank and its fittings.

3.2 Unsafe conditions

Any unsafe condition observed by a competent person on the site of an LPG storage tank shall be reported to the person responsible for safe operation of the tank/site, as appropriate, and action taken.

3.3 Leaks

Any leak discovered from the tank or its fittings shall be reported immediately to the person responsible for safe operation of the tank.

Action to make a tank or its fittings safe shall be taken by a competent person.

NOTE Methods for detecting leaks include:

- visual inspection;
- smell;
- listening;
- use of gas detectors.

4 Written scheme

4.1 Each tank and its fittings shall be included in a written scheme taking into account Clauses 5 to 7.

4.2 If duties are shared between different parties, the written scheme shall clearly identify the respective areas of responsibility.

4.3 Intervals between inspections shall be determined by consideration of the following:

- $\frac{3}{4}$ the design specification of the tank and its equipment;