BRITISH STANDARD

BS EN 12820:2002

Inspection and requalification of LPG tanks greater than 13 m^3 underground

The European Standard EN 12820:2002 has the status of a British Standard

ICS 23.020.30

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National foreword

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

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English version

Inspection and requalification of LPG tanks greater than 13 m³ underground

Inspection et requalification de réservoirs enterrés de capacité supérieure à 13 m³ pour gaz de pétrole liquéfiés (GPL)

Instandhaltung und wiederkehrende Prüfung von Behältern für Flüssiggas (LPG) mit einem Fassungsraum über 13 m³ in unterirdischer Aufstellung

This European Standard was approved by CEN on 25 October 2001.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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Foreword

This document EN 12818:2002 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of an identical text or by endorsement, at the latest by November 2002, and conflicting national standards shall be withdrawn at the latest by November 2002.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 EN, 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 EN.

In this standard annexes A, B, C, D, E, F, G and ZA are informative.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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Introduction

Periodic inspection and requalification regimes for underground LPG tanks greater than 13 m^3 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 industries' 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 only 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 underground and mounded LPG storage tanks of sizes greater than 13 m^3, 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

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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, recognised or appointed by a member state, which oversees safe operation of LPG pressure equipment

2.7
written scheme
document, prepared by a competent body, containing inspection information

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, for action to be 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 the tank or its fittings safe shall be taken by a competent person.

NOTE Methods for detecting leaks include:

- ¾ visual inspection;
- ¾ smell;
- ¾ listening;
- ¾ 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:

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