

LPG equipment and accessories — Transportable refillable welded and brazed steel Liquefied Petroleum Gas (LPG) cylinders — Periodic inspection

The European Standard EN 1440:2005 has the status of a British Standard

ICS 23.020.30

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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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 21 and a back cover.

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Amendments issued since publication

Amd. No.	Date	Comments

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 21 December 2005

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English Version

LPG equipment and accessories - Transportable refillable
welded and brazed steel Liquefied Petroleum Gas (LPG)
cylinders - Periodic inspection

Equipements pour GPL et leurs accessoires - Bouteilles en
acier soudé et brasé transportables et rechargeables pour
gaz de pétrole liquéfié (GPL) - Contrôle périodique

Flüssiggas-Geräte und Ausrüstungsteile - Ortsbewegliche
wiederbefüllbare geschweißte Flaschen aus Stahl für
Flüssiggas (LPG) - Wiederkehrende Prüfung

This European Standard was approved by CEN on 7 October 2005.

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Foreword

This European Standard (EN 1440:2005) has been prepared by Technical Committee CEN/TC 286 “Liquified 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of an identical text or by endorsement, at the latest by May 2006, and conflicting national standards shall be withdrawn at the latest by May 2006.

This European Standard has been submitted for reference into the RID and/or in the technical annexes of the ADR. Therefore the standards listed in the normative references and covering basic requirements of the RID/ADR not addressed within the present standard are normative only when the standards themselves are referred to in the RID and/or in the technical annexes of the ADR.

This European Standard supersedes EN 1440:1996.

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

Introduction

The primary objective of the periodic inspection of transportable refillable welded and brazed steel liquefied petroleum gas (LPG) cylinders is that, at the completion of the tests, the cylinders can be re-introduced into service for a further period of time.

With experience and confidence gained over more than 60 years and improved cylinder manufacturing quality, it has been possible to allow the extension of intervals between periodic inspections to 15 years in several circumstances.

The very large populations of LPG cylinders in use have led to the development of alternative methods of inspection.

Periodic inspection is normally carried out at a test station operated under the responsibility of a competent gas organisation, or of a third party.

This European Standard has now been prepared to reflect the current state of the art for periodically inspecting LPG cylinders, and is based upon the operating experience of many hundreds of millions of cylinder years of service.

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 the execution of its provisions is entrusted to appropriately qualified and experienced people.

Where judgements are called for, it has been assumed that they are made by competent persons who have been trained specifically for the tasks.

1 Scope

This European Standard specifies inspection intervals, procedures for periodic inspection and testing, for transportable refillable welded and brazed steel LPG cylinders of water capacity from 0,5 l up to and including 150 l with a minimum wall thickness of 1,5 mm (see EN 1442 and EN 12807).

This standard does not apply to cylinders permanently installed in vehicles, or to plant and filling equipment.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 837-1, *Pressure gauges - Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing*

EN 837-3, *Pressure gauges - Part 3: Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing*

EN 1439, *LPG equipment and accessories - Transportable refillable welded and brazed steel Liquefied Petroleum Gas (LPG) cylinders - Procedure for checking before, during and after filling*

EN 1442, *Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) - Design and construction*

EN 12816, *Transportable refillable steel and aluminium LPG cylinders – Disposal*

EN 13152, *Specification and testing of LPG cylinder valves - Self closing*

EN 13153, *Specification and testing of LPG cylinder valves - Manually operated*

prEN 14894, *LPG Equipment and accessories - Cylinder and drum marking*

prEN 14912, *LPG equipment and accessories – Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders*

EN ISO 4628-3, *Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 3: Assessment of degree of rusting (ISO 4628-3:2003)*

ISO 9162, *Petroleum products - Fuels (class F) - Liquefied petroleum gases - Specifications*

3 Terms and definitions

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

3.1

competent body

person or corporate body defined by the national authority, which by combination of appropriate qualification, training, experience, and resources, is able to make objective judgements on the subject