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

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NATIONAL FOREWORD

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Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 23.020.35

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1440:2016+A2

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English Version

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

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

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

This European Standard was approved by CEN on 19 April 2018 and includes Amendment 2 approved by CEN on 6 March 2020.

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European foreword

This document (EN 1440:2016+A2:2020) 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of an identical text or by endorsement, at the latest by October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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

This document includes Amendment 1 approved by CEN on 19 April 2018.

This document includes Amendment 2 approved by CEN on 6 March 2020.

[A2⟩ This document supersedes EN 1440:2016+A1:2018. ⟨A2]

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1⟩ ⟨A1].

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A2⟩ ⟨A2].

[A1⟩ This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association. ⟨A1]

This European Standard has been submitted for reference into the RID [1] and the technical annexes of the ADR [2].

NOTE These regulations take precedence over any clause of this standard. It is emphasized that RID/ADR are being revised regularly at intervals of two years which may lead to temporary non- compliances with the clauses of this standard.

This European Standard deals with the periodic inspection requirements for transportable refillable welded and brazed steel LPG cylinders.

For all other cylinder designs, EN 16728:2016[1] applies.

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, 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.

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1 To be published in 2016.

Introduction

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

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

This European Standard has been prepared to reflect the current methodology for periodic inspection of LPG cylinders and is based on extensive operating experience.

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.

Protection of the environment is a key political issue in Europe and elsewhere, for CEN/TC 286 this is covered in CEN/TS 16765 [3], and this Technical Specification should be read in conjunction with this standard.

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

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

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1 Scope

This European Standard specifies procedures for the periodic inspection and testing, of transportable refillable LPG cylinders with a water capacity from 0,5 l up to and including 150 l.

This European Standard is applicable to welded and brazed steel LPG cylinders with a specified minimum wall thickness designed according to EN 1442, EN 12807, EN 13322-1, or equivalent standard (e.g. national codes).

This European Standard is intended to be applied to cylinders complying with RID/ADR (including pi marked cylinders) and also to existing non RID/ADR cylinder populations.

NOTE The requirements of RID/ADR take precedence over those of this standard in the case of cylinders complying with that regulation, including pi marked cylinders.

This European Standard does not apply to cylinders permanently installed in vehicles.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 837-1:1996, *Pressure gauges – Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing*

EN 837-3:1996, *Pressure gauges – Part 3: Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing*

EN 1442, *LPG equipment and accessories - Transportable refillable welded steel cylinders for LPG - Design and construction*

EN 12807, *LPG equipment and accessories - Transportable refillable brazed steel cylinders for liquefied petroleum gas (LPG) - Design and construction*

EN 12816, *LPG equipment and accessories - Transportable refillable LPG cylinders - Disposal*

EN 13322-1, *Transportable gas cylinders - Refillable welded steel gas cylinders - Design and construction – Part 1: Carbon steel*

EN 14894, *LPG equipment and accessories - Cylinder and drum marking*

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

EN ISO 14245, *Gas cylinders - Specifications and testing of LPG cylinder valves - Self-closing (ISO 14245)*

EN ISO 15995, *Gas cylinders - Specifications and testing of LPG cylinder valves - Manually operated (ISO 15995)*

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