LPG equipment and accessories - Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders



EESTI STANDARDI EESSÕNA

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English Version

LPG equipment and accessories - Inspection and maintenance of LPG cylinder valves at time of periodic inspection of cylinders

Équipements pour GPL et leurs accessoires - Contrôle et entretien des robinets de bouteilles de GPL lors du contrôle périodique des bouteilles

Flüssiggas-Geräte und Ausrüstungsteile - Inspektion und Wartung von Ventilen für Flaschen für Flüssiggas (LPG) zum Zeitpunkt der wiederkehrenden Inspektion der Flaschen

This European Standard was approved by CEN on 26 December 2014.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 14912:2015) has been prepared by Technical Committee CEN/TC 286 "LPG 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of an identical text or by endorsement, at the latest by September 2015, and conflicting national standards shall be withdrawn at the latest by September 2015.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document supersedes EN 14912:2005.

The main changes between this version of this standard and the previous version are:

- alignment with the requirement of paragraph 12 of Packing Instruction P200 of ADR;
- introduction of inspection and refurbishment requirements for pressure relief valves.

It is recommended that users develop an environmental management policy. For guidance, see EN ISO 14000 series, see [1], [2] and [3]. Users of this standard should consult FprCEN/TS 16765 [4] while implementing its requirements.

This European Standard has been submitted for reference into the technical annexes of the ADR [5].

NOTE These regulations take precedence over any clause of this European Standard. It is emphasized that ADR is regularly revised at intervals of two years, which may lead to temporary non-compliances with the clauses of this European 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, 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard has been prepared to reflect the current methods for periodically inspecting LPG cylinder valves, and is based upon the operating experience of millions of cylinder years of service over a period of more than 50 years.

The primary objective of the periodic inspection of transportable refillable LPG cylinder valves is that, at the completion of the tests, the cylinder valve can be re-introduced into service for a further period of time.

The valve inspection is an integral part of the periodic inspection of an LPG cylinder.

Periodic inspections/tests shall be carried out by a competent person under the authorization of an inspection body based on a written scheme of examination.

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

amed to 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 the requirements for inspection and maintenance of LPG cylinder valves, either manually operated or self-closing, for reuse. It applies when the valve is either inspected or refurbished at the time of periodic inspection of the cylinder.

This European Standard may also be applied at any other time, for example, when maintenance of the valve is necessary.

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 13953, LPG equipment and accessories — Pressure relief valves for transportable refillable cylinders for Liquefied Petroleum Gas (LPG)

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)

ISO 2859-1, Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

3 Terms and definitions

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

3.1

liquefied petroleum gas

LPG

low pressure liquefied gas composed of one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene with traces of other hydrocarbon gases

3.2

periodic inspection

activities carried out at defined intervals, such as examining, measuring, testing or gauging the characteristics of a pressure vessel and comparing these with specified requirements

3.3

dismantling

separation into component parts

3.4

minor repair

operations that include cleaning and replacement of components accessible without any dismantling of the valve (e.g. outlet seal, excess flow device)

3.5

refurbishment

operation that includes complete dismantling of the valve, evaluation and replacement of internal components, and reassembly