SVENSK STANDARD
SS-EN 13110:2012+A1:2017

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Gasflaskor – Utrustning och tillbehör för gasol (LPG) – Svetsade aluminiumflaskor för gasol – Konstruktion och tillverkning

LPG equipment and accessories – Transportable refillable welded aluminium cylinders for liquefied petroleum gas (LPG) – Design and construction

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Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.

Standards make the world go round

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Europastandarden EN 13110:2012+A1:2017 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 13110:2012+A1:2017.

Denna standard ersätter SS-EN 13110:2012, utgåva 2.

The European Standard EN 13110:2012+A1:2017 has the status of a Swedish Standard. This document contains the official English version of EN 13110:2012+A1:2017.

This standard supersedes the Swedish Standard SS-EN 13110:2012, edition 2.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Gasflaskor, SIS/TK 296.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13110:2012+A1

January 2017

ICS 23.020.30

English Version

LPG equipment and accessories - Transportable refillable welded aluminium cylinders for liquefied petroleum gas (LPG) - Design and construction

Equipements pour gaz de pétrole liquéfiés et leurs accessoires - Bouteilles soudées transportables et rechargeables en aluminium pour gaz de pétrole liquéfié (GPL) - Conception et construction

Flüssiggas-Geräte und Ausrüstungsteile - Ortsbewegliche wiederbefüllbare geschweißte Flaschen aus Aluminium für Flüssiggas (LPG) - Auslegung und Bau

This European Standard was approved by CEN on 13 April 2012 and includes Amendment 1 approved by CEN on 3 January 2017.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 13110:2012+A1:2017) 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 July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

This document includes Amendment 1 approved by CEN on 03 January 2017.

This document supersedes A1 EN 13110:2012 A1.

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

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 supersedes EN 13110:2002.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

This standard has been submitted for reference into the RID and/or in the technical annexes of ADR (see [9] and [8]).

The main technical changes to this revision include the addition of:

— reference to the latest welding standards;

— the introduction of radioscopy as a permitted alternative to radiographic examination of welds;

— simplification of the marking requirements by reference to EN 14894; and

— environmental considerations recorded in Annex B.

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.

Introduction

This European Standard calls for the use of substances and procedures that may be injurious to health and/or the environment if adequate precautions are not taken. It refers only to technical suitability: it does not absolve the user from their legal obligations at any stage.

[A1] Protection of the environment is a key political issue in Europe and elsewhere. For CEN/TC 286, this is covered in CEN/TS 16765. This Technical Specification should be read in conjunction with this European Standard. [A1]

It is recommended that manufacturers develop an environmental management policy. For guidance see ISO 14000- series.

Provisions need to be restricted to a general guidance. Limit values are specified in national laws.

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.

All pressures are gauged unless otherwise stated.

NOTE This European Standard requires measurement of material properties, dimensions and pressures. All such measurements are subject to a degree of uncertainty due to tolerances in measuring equipment etc. It may be beneficial to refer to the leaflet “measurement uncertainty leaflet” SP INFO 2000 27 [11].

1 Scope

This European Standard specifies minimum requirements for material, design, construction and workmanship, testing and examination during the manufacture of transportable refillable welded aluminium liquefied petroleum gas (LPG) cylinders, having a water capacity from 0,5 l up to and including 150 l, exposed to ambient temperature.

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 10204:2004, *Metallic products - Types of inspection documents*

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

EN 14717, *Welding and allied processes - Environmental check list*

EN 14784-1, *Non-destructive testing - Industrial computed radiography with storage phosphor imaging plates - Part 1: Classification of systems*

EN 14784-2, *Non-destructive testing - Industrial computed radiography with storage phosphor imaging plates - Part 2: General principles for testing of metallic materials using X-rays and gamma rays*

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

EN ISO 4136, *Destructive tests on welds in metallic materials - Transverse tensile test (ISO 4136)*

EN ISO 5173, *Destructive tests on welds in metallic materials - Bend tests (ISO 5173)*

EN ISO 5178, *Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints (ISO 5178)*

EN ISO 6892-1, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1)*

EN ISO 9606-2, *Qualification test of welders - Fusion welding - Part 2: Aluminium and aluminium alloys (ISO 9606-2)*

〚A1〛 EN ISO 9712:2012, *Non-destructive testing - Qualification and certification of NDT personnel (ISO 9712:2012)* 〚A1〛

EN ISO 10042:2005, *Welding - Arc-welded joints in aluminium and its alloys - Quality levels for imperfections (ISO 10042:2005)*

EN ISO 11114-1, 〚A1〛 *Gas cylinders - Compatibility of cylinder and valve materials with gas contents - Part 1: Metallic materials (ISO 11114-1)* 〚A1〛

EN ISO 11117:2008, *Gas cylinders - Valve protection caps and valve guards - Design, construction and tests (ISO 11117:2008)*