

SLOVENSKI STANDARD SIST EN 14795:2006 01-marec-2006

CdfYa U']b'df]Vcf'nUi hY_c]b'Yb]'bUZb]'d']b'fl BDL'!'DfYa] bYzdcbcj bc'dc'b'']j Y Ui a]b]'Yj Y'Y_`Yb_Y'nUI BD'!'DYf]cX] b]'dfY[`YX]

LPG equipment and accessories - Transportable refillable aluminium cylinders for Liquefied Petroleum Gas (LPG) - Periodic inspection

Flüssiggas-Geräte und Ausrüstungsteile - Ortsbewegliche, wiederbefüllbare Flaschen aus Aluminium für Flüssiggas (LPG) - Wiederkehrende Prüfung

iTeh STANDARD PREVIEW

Équipements pour gaz de pétrole liquéfie et leurs accessoires - Bouteilles transportables et rechargeables en aluminium pour gaz de pétrole liquéfié (GPL) - Inspection périodique

https://standards.iteh.ai/catalog/standards/sist/92ef508f-a98

ICS:

23.020.30

SIST EN 14795:2006

en

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 14795:2006

https://standards.iteh.ai/catalog/standards/sist/92ef508f-a986-4547-94dd-9da91a895004/sist-en-14795-2006

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14795

November 2005

ICS 23.020.30

English Version

LPG equipment and accessories - Transportable refillable aluminium cylinders for Liquefied Petroleum Gas (LPG) - Periodic inspection

Équipements pour gaz de pétrole liquéfié et leurs accessoires - Bouteilles transportables et rechargeables en aluminium pour gaz de pétrole liquéfié (GPL) - Inspection périodique Flüssiggas-Geräte und Ausrüstungsteile - Ortsbewegliche, wiederbefüllbare Flaschen aus Aluminium für Flüssiggas (LPG) - Wiederkehrende Prüfung

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

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Iraly, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents		page	
Forew	vord	3	
	luction		
1	Scope		
-	Normative references		
2			
3	Terms and definitions	_	
4	Intervals between periodic inspection	6	
5	Procedures for periodic inspection		
5.1	General		
5.2	External visual inspection		
5.2.1 5.2.2	Preparation for external visual inspection		
5.2.2 5.2.3	Inspection procedureVisible defects		
5.2.3 5.3	Internal visual inspection		
5.3.1	General		
5.3.2	Preparation of cylinders	9	
5.3.3	Preparation of cylinders Procedure TEN STANDARD PREVIEW	9	
5.4	Additional test procedures	10	
5.4.1	Preparation of cylinders	10	
5.4.2	Hydraulic proof pressure test		
5.4.3	Pneumatic proof test and leak testSIST EN 14793 2006	11	
6	Inspection of cylinder/threads, iteh ai/catalog/standards/sist/92et508f-a986-4547-94dd-	12	
6.1	General	12	
6.2	Internal threads		
6.3	External threads		
6.4	Damaged threads	12	
7	Final operations	12	
7.1	Drying	12	
7.2	Valving		
7.3	Tare weight		
7.4	Marking		
7.5	Purging	12	
8	Records	13	
Biblio	graphy	14	
	2. *k.·l		

Foreword

This European Standard (EN 14795:2005) 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 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.

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 14795:2006</u> https://standards.iteh.ai/catalog/standards/sist/92ef508f-a986-4547-94dd-9da91a895004/sist-en-14795-2006

Introduction

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

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.

The specification 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 millions of cylinder years of service over a period of more than 50 years.

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.

<u>SIST EN 14795:2006</u> https://standards.iteh.ai/catalog/standards/sist/92ef508f-a986-4547-94dd-9da91a895004/sist-en-14795-2006

1 Scope

This European Standard specifies inspection intervals, procedures for periodic inspection and testing, for transportable refillable welded aluminium LPG cylinders of water capacity from 0,5 l up to and including 150 l. (see EN 13110).

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 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 9da91a895004/sist-en-14795-2006

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

3.2

competent person

person who by a combination of training, experience and supervision is able to make objective judgements on the subject

3.3

periodic inspection

activities carried out at defined intervals, such as examining, measuring, testing or gauging the characteristics of a cylinder and comparing these with specified requirements and marking to attest conformity

3.4

LPG (liquefied petroleum gas)

mixture of predominantly butane or propane with traces of other hydrocarbon gases classified in accordance with UN number 1965, hydrocarbon gases mixture, liquefied, NOS or UN number 1075, petroleum gases, liquefied

NOTE In some countries, UN number 1011, 1978 may also be designated LPG.

3.5

tare weight

sum of the mass of the empty cylinder, the mass of the valve including a dip tube where fitted, and the mass of all other parts that are permanently attached to the cylinder when it is being filled, e.g. fixed valve guard

4 Intervals between periodic inspection

A 10-year interval shall apply between periodic inspections.

5 Procedures for periodic inspection

5.1 General

In all cases, periodic inspection procedures shall consist of an external and internal visual inspection as given in 5.2 and 5.3 and additionally, at least one of the following test procedures:

- hydraulic test (see 5.4.2),(standards.iteh.ai)
- pneumatic proof and leak test (see 5.4.3)
 SIST EN 14795:2006

Periodic inspections/tests shall be carried out under the responsibility of a body approved by a competent authority.

Cylinders rejected shall be segregated to be reconditioned, re-tested or rendered unserviceable.

The decision to render a cylinder unserviceable may be taken at any stage during the periodic inspection procedure. With the agreement of the owner, a cylinder shall be rendered unserviceable in accordance with EN 12816, so that it cannot be re-issued into service as a pressure vessel.

NOTE In some countries, render unserviceable means scrapping.

5.2 External visual inspection

5.2.1 Preparation for external visual inspection

- a) If required, the cylinder shall be cleaned and have all tar, oil, labels or other foreign matter removed from its external surface e.g. by water jet abrasive cleaning, chemical cleaning or other suitable methods.
- b) Care shall be taken to avoid damaging the cylinder.
- c) When cylinders are treated by a process that might remove cylinder material, the competent body shall decide whether a thickness test is required, e.g. ultrasonic thickness check.

5.2.2 Inspection procedure

The entire surface of the cylinder shall be inspected for:

- a) dents, cuts, gouges, bulges, cracks, laminations or punctures, applying the criteria for rejection in Table 1;
- b) corrosion, giving special attention to areas where water can be trapped, at the base of the cylinder, the junction between the cylindrical shell and the foot-ring, the cylindrical shell and the valve guard or shroud, and in particular hidden corrosion (e.g. data plate) applying the criteria for rejection given in Table 2;
- c) other defects (e.g. depressed bung or fire damage) applying the criteria for rejection given in Table 3;
- d) the integrity of all permanent attachments;
- e) the integrity of all mandatory permanent markings.

5.2.3 Visible defects

Rejection criteria for physical and material defects or heat damage on the cylinder shell are contained in Table 1, Table 2 and Table 3.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN 14795:2006</u> https://standards.iteh.ai/catalog/standards/sist/92ef508f-a986-4547-94dd-9da91a895004/sist-en-14795-2006