SLOVENSKI STANDARD
kSIST FprEN 15888:2011

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Premične plinske jeklenke - Sveženj jeklenk - Periodični pregledi in preskušanje

Transportable gas cylinders - Cylinder bundles - Periodic inspection and testing

Ortsbewegliche Gasflaschen - Flaschenbündel - Wiederkehrende Inspektion und Prüfung

Bouteilles à gaz transportables - Cadres de bouteilles - Contrôles et essais périodiques

Ta slovenski standard je istoveten z: **FprEN 15888**

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23.020.30	Tlačne posode, plinske jeklenke	Pressure vessels, gas cylinders

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English Version

Transportable gas cylinders - Cylinder bundles - Periodic inspection and testing

Bouteilles à gaz transportables - Cadres de bouteilles - Contrôles et essais périodiques

Ortsbewegliche Gasflaschen - Flaschenbündel - Wiederkehrende Inspektion und Prüfung

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

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Foreword

This document (FprEN 15888:2011) has been prepared by Technical Committee CEN/TC 23 “Transportable gas cylinders”, the secretariat of which is held by BSI.

This document is currently submitted to the Unique Acceptance Procedure.

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

This European Standard has been submitted for reference into the RID and/or the technical annexes of the ADR.

Introduction

The principal aim of a periodic inspection and testing procedure is that at the completion of the test the bundles may be reintroduced into service for a further period of time.

Experience of the inspection and testing of cylinder bundles which is specified in this European Standard is an important factor when determining whether a cylinder bundle should be returned into service.

Periodic inspection of the bundle is carried out inline with the retest period of the cylinder and is a legal requirement in order to comply with Use of Work Directive 89/655 as amended by Directive 95/63 as implemented into National Legislation within the European Union.

In European Standards, weight is equivalent to a force, expressed in newtons. However, in common parlance (as used in terms defined in this European Standard), the word “weight” continues to be used to mean “mass”, but this practice is deprecated (see ISO 80000-4).

1 Scope

This European Standard specifies the requirements for the periodic inspection and testing of cylinder bundles containing compressed gas, liquefied gas and mixtures thereof. It is also applicable to cylinder bundles containing acetylene.

This European Standard includes information regarding the maintenance of cylinder bundles.

This European Standard does not cover the requirements for cylinder bundles when they are a part of a battery vehicle.

2 Normative references

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

EN 1089-3*, Transportable gas cylinders — Gas cylinder identification (excluding LPG) — Part 3: Colour Coding*

EN 12863, *Transportable gas cylinders — Periodic inspection and maintenance of dissolved acetylene cylinders*

EN 13769:2003, *Transportable gas cylinders — Cylinder bundles — Design, manufacture, identification and testing*

EN 14189, *Transportable gas cylinders — Inspection and maintenance of cylinder valves at time of periodic inspection of gas cylinders*

ISO 7225, *Gas cylinders — Precautionary labels*

3 Terms and definitions

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

3.1
compressed gas
gas which when packaged under pressure for transport is entirely gaseous at – 50 °C, this category includes all gases with a critical temperature less than or equal to – 50 °C

3.2
main valve
valve which is fitted to a bundle's manifold isolating it from the main connection(s)

3.3
cylinder bundle (bundle)
portable assembly which consists of a frame and two or more cylinders each of capacity up to 150 l and with a combined capacity of not more than 3 000 l, or 1 000 l in the case of toxic gases, connected to a manifold by cylinder valves or fittings such that the cylinders are filled, transported and emptied without disassembly

3.4
frame
structural and non-structural members of a bundle which combine all other components together, whilst providing protection for the bundle's cylinders, valves and manifold and which enable the bundle to be transported

3.5
cylinder valve
valve which is fitted into a cylinder and to which a manifold is connected in a bundle

3.6
cylinder fitting
device with no gas shut-off capability which serves as a method for connecting a bundle's manifold to its individual cylinders when cylinder valves are not fitted to the cylinders

3.7
manifold
system for connecting a bundle's cylinder valves or cylinder fittings to the main valve(s) or main connection(s)

3.8
main connection
means of making a gas connection to a bundle

3.9
tare weight
weight of the bundle including all permanent fittings, when empty of gas

3.10
maximum gross weight
tare weight of the bundle plus the maximum weight of the gas product contained within the bundle

3.11
liquefied gas
gas which when packaged under pressure for transport is partially liquid at temperatures above –50 °C

NOTE A distinction is made between:

a) high pressure liquefied gas; a gas with a critical temperature between –50 °C and +65 °C; and

b) low pressure liquefied gas; a gas with a critical temperature above +65 °C.

3.12
proof test pressure
hydraulic or pneumatically applied pressure which demonstrates the structural integrity of the manifold

3.13
working pressure
settled pressure at a uniform temperature of 288 K (15 °C) for a full bundle

3.14
design pressure
value of pressure which is used to perform stress calculations of gas retaining components, other than cylinders, within the bundle

3.15
competent person
someone who has the necessary technical knowledge, experience and authority to assess and approve processes and to define any special conditions of use that are necessary. Such a person will also normally be formally qualified in an appropriate technical discipline

3.16
helium test gas
leak testing gas mixture containing not less than 2 % helium