# Transportable gas cylinders - Periodic inspection and testing of welded carbon steel gas cylinders

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### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
1803:2002 sisaldab Euroopa standardi EN
1803:2002 ingliskeelset teksti.

Käesolev dokument on jõustatud 12.07.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1803:2002 consists of the English text of the European standard EN 1803:2002.

This document is endorsed on 12.07.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

This European Standard specifies the requirements for periodic inspection and testing of welded, carbon steel transportable gas cylinders for compressed and liquefied gases under pressure, of water capacity from 0,5 I to 150 I.

### Scope:

This European Standard specifies the requirements for periodic inspection and testing of welded, carbon steel transportable gas cylinders for compressed and liquefied gases under pressure, of water capacity from 0,5 I to 150 I.

**ICS** 23.020.30

**Võtmesõnad:** examination, examination (qual, gas cylinders, hydraulic, liquefied petroleum gas, liquefied petroleum gases, macroscopic analysis, mobile, pressure tests, recurrent, repairs, repeat tests, steel cylinders, steels, suitability, testing, visual inspection (testing)

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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#### **English version**

## Transportable gas cylinders - Periodic inspection and testing of welded carbon steel gas cylinders

Bouteilles à gaz transportables - Contrôles et essais périodiques des bouteilles à gaz soudées en acier au carbone Ortsbewegliche Gasflaschen - Wiederkehrende Prüfung von geschweißten Gasflaschen aus Kohlenstoffstahl

This European Standard was approved by CEN on 8 November 2001.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

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### **Foreword**

This document EN 1803:2002 has been prepared by Technical Committee CEN/TC 23 "Transportable gas cylinders", the secretariat of which is held by BSI.

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 August 2002, and conflicting national standards shall be withdrawn at the latest by August 2002.

In this standard the annexes B, C, D and E are normative and the annexes A, F and G informative.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports the objectives of the framework Directives on Transport of Dangerous Goods.

This European Standard has been submitted for reference into the RID and/or the technical annexes of the ADR. Therefore in this context 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 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

### Introduction

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

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

### 1 Scope

This European Standard specifies the requirements for periodic inspection and testing of welded, carbon steel transportable gas cylinders intended for compressed and liquefied gases under pressure, of water capacity from 0,5 l up to 150 l.

NOTE As far as practicable, this standard may also be applied to cylinders of less than 0,5 I water capacity.

This Standard specifies the requirements for periodic inspection and testing to verify the integrity of such gas cylinders to be reintroduced into service for a further period of time. It also defines a procedure to qualify existing gas cylinders for free movement between member states of the European Union (see annex A).

This standard does not apply to periodic inspection and testing of acetylene cylinders or composite (fully wrapped or hoop-wrapped) steel cylinders.

This standard is primarily for industrial gases other than LPG but may also be applied for LPG. However for dedicated LPG cylinders, see EN 1440, *Transportable refillable welded steel cylinders for liquefied petroleum gas (LPG) – Periodic requalification* prepared by CEN/TC 286 – *Liquefied petroleum gas equipment and accessories.* 

#### 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate place in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 629-2, Transportable gas cylinders — 25E taper thread for connection of valves to gas cylinders — Part 2: Gauge inspection.

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 — Dimension, metrology, requirements and testing.

EN 1089-1, Transportable gas cylinders — Gas cylinder identification (excluding LPG) — Part 1: Stampmarking.

EN 1795. Transportable gas cylinders (excluding LPG) — Procedures for change of gas service.

EN ISO 11114-1, Transportable gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 1: Metallic materials (ISO 11114-1:1997).

EN ISO 11114-2, Transportable gas cylinders — Compatibility of cylinder and valve materials with gas contents — Part 2: Non-metallic materials (ISO 11114-2:2000).

prEN 13322-1, Transportable gas cylinders — Refillable welded steel gas cylinders — Design and construction — Part 1: Welded steel.

prEN 13322-2, Transportable gas cylinders — Refillable welded steel gas cylinders — Design and construction— Part 2: Welded stainless steel.

EN ISO 13341, Transportable gas cylinders — Fitting of valves to gas cylinders (ISO 13341:1997).