

Transportable gas cylinders - Battery vehicles - Design, manufacture, identification and testing

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13807:2004 sisaldab Euroopa standardi EN 13807:2003+AC:2003 + AC:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 28.01.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13807:2004 consists of the English text of the European standard EN 13807:2003+AC:2003 + AC:2005.</p> <p>This document is endorsed on 28.01.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the requirements for the design, manufacture, identification and testing of a battery vehicle. It is applicable to battery vehicles containing compressed gas, liquefied gas and mixtures thereof. It is also applicable to battery vehicles for dissolved acetylene. The specific requirements for dissolved acetylene are included in annex B. For toxic gases, this standard is only applicable where the LC50 of the gas is above 200 ml/m³</p>	<p>Scope:</p> <p>This European Standard specifies the requirements for the design, manufacture, identification and testing of a battery vehicle. It is applicable to battery vehicles containing compressed gas, liquefied gas and mixtures thereof. It is also applicable to battery vehicles for dissolved acetylene. The specific requirements for dissolved acetylene are included in annex B. For toxic gases, this standard is only applicable where the LC50 of the gas is above 200 ml/m³</p>
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ICS 23.020.30

Võtmesõnad: labe, liquefied petroleum gas, liquefied petroleum gas installations, liquefied petroleum gases, liquid gas cylinder, liquid gas tank, marking, markings, mobile, production, safety, specification (approval), specifications, storage, symbols, testing, transport, valves

ICS 23.020.30

English version

Transportable gas cylinders - Battery vehicles - Design, manufacture, identification and testing

Bouteilles à gaz transportables - Véhicules-batteries -
Conception, fabrication, identification et essai

Ortsbewegliche Gasflaschen - Batterie-Fahrzeuge -
Konstruktion, Herstellung, Kennzeichnung und Prüfung

This European Standard was approved by CEN on 1 September 2003.

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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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 13807:2003) 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 March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

Annexes A and B are normative.

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 in 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 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: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

For some applications a transport unit, known as a battery vehicle, may be used to supply larger volumes of gas in a single unit. A battery vehicle is a vehicle containing elements which are linked to each other by a manifold and permanently fixed to a transport unit.

The following are considered to be elements of a battery vehicle; cylinders, large cylinders known as tubes, and bundles.

Types of battery vehicles also exist which use manifolded cylinder bundles, which are designed to be disassembled from the battery vehicle to enable the bundles to be filled individually. These contradict the basic definition of a battery vehicle but are commonly referred to as battery vehicles. Their special requirements are included in annex A.

Unless otherwise stated individual cylinders within the battery vehicle should conform to applicable standards for individual cylinders.

1 Scope

This European Standard specifies the requirements for the design, manufacture, identification and testing of a battery vehicle. It is applicable to battery vehicles containing compressed gas, liquefied gas and mixtures thereof. It is also applicable to battery vehicles for dissolved acetylene. The specific requirements for dissolved acetylene are included in annex B. For toxic gases, this standard is only applicable where the LC_{50} of the gas is above 200 ml/m^3 .

This European Standard does not apply to the vehicle chassis or motive unit or to multi-element gas containers (MEGC's), pressure drums and tanks.

This standard is primarily for industrial gases other than Liquefied Petroleum Gases (LPG) but may also be used for LPG. However for dedicated LPG cylinders, see standards 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 places 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 287-1, *Approval testing of welders — Fusion welding — Part 1: Steels*.

EN 288-1, *Specification and qualification of welding procedures for metallic materials — Part 1: General rules for fusion welding*.

EN 1089-2, *Transportable gas cylinders — Gas cylinder identification (excluding LPG) — Part 2: Precautionary labels*.

EN 1089-3, *Transportable gas cylinders — Cylinder identification (excluding LPG) — Part 3: Colour coding*.

EN 1800, *Transportable gas cylinders — Acetylene cylinders — Basic requirements and definitions*.

EN 12755, *Transportable gas cylinders — Filling conditions for acetylene bundles*.

EN 13133, *Brazing — Brazer approval*.

EN 13134, *Brazing — Procedure approval*.

prEN 13769, *Transportable gas cylinders — Cylinder bundles — Design, manufacture, identification and testing*.

EN ISO 14113, *Gas welding equipment — Rubber and plastic hoses assembled for compressed or liquefied gases up to a maximum design pressure of 450 bar (ISO 14113:1997)*.

ISO 13769, *Gas cylinders -- Stamp marking*

3 Terms & definitions

For the purposes of this European Standard, the following terms and definitions apply. Definitions specific to acetylene are included in annex B.