Lihtsad leekkuumutuseta õhu või lämmastiku surveanumad. Osa 2: Surveanumad õhkpiduritele või mootorveokite ja nende haagiste abisüsteemidele

Simple unfired pressure vessels designed to contain air or nitrogen - Part 2: Pressure vessels for air braking and auxiliary systems for motor vehicles and their trailers

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 286-2:1999 sisaldab Euroopa standardi EN 286-2:1992 ingliskeelset teksti.	This Estonian standard EVS-EN 286-2:1999 consists of the English text of the European standard EN 286-2:1992.
Standard on kinnitatud Eesti Standardikeskuse 23.11.1999 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 23.11.1999 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 286-2:1992

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Descriptors: Road vehicles, trailers, braking systems, pressure vessels, compressed air, tanks: containers, steels, aluminium, comput ation, welded construction, manufacturing, tests, inspection, welded defects, marking

English version

Simple unfired pressure vessels designed to contain air or nitrogen - Part 2: Pressure vessels for air braking and auxiliary systems for motor vehicles and their trailers

Récipients à pression simples, non soumis à la flamme, destinés à contenir de l'air ou de l'azote - Partie 2: Récipients à pression pour circuits de freinage et circuits auxiliaires des véhicules routiers et leurs remorques

Einfache, unbefeuerte Druckbehälter für Luft oder Stickstoff - Teil 2: Druckbehälter für Druckluftbremsanlagen und Hilfseinrichtungen in Kraftfahrzeugen und deren Anhängefahrzeugen

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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.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart,36 B-1050 Brussels

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Foreword

This Part of this European Standard was drawn up by CEN/TC 54 'Simple unfired pressure vessels', of which the secretariat is held by the United Kingdom.

This Part is one of a series of four. The other Parts are:

Part 1: Design, manufacture and testing

Part 3: Steel pressure vessels designed for air braking equipment and auxillary pneumatic equipment for railway rolling stock

Part 4: Aluminium alloy pressure vessels designed for air braking equipment and auxillary pneumatic equipment for railway rolling stock

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 1993, and conflicting national standards shall be withdrawn at the latest by March 1993.

In accordance with the Common CEN/CENELEC Rules the following countries are bound to implement this European Standard : Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

1.1 This Part of this European Standard applies to the design and manufacture of simple unfired serially made pressure vessels, herein after referred to as vessels, designed for air breaking equipment and auxiliary systems for motor vehicles and their trailers, and which:

a) include fabrication by welding;

b) have a simple geometry enabling simple-to-use production procedures. This is achieved by either:

1) a cylindrical shell of circular cross section closed by outwardly dished and/or flat ends having the same axis of revolution as the shell; or:

2) two dished ends having the same axis of revolution;

c) have branches not larger in diameter than 0,5 of the diameter of the cylinder to which they are welded.

1.2 It applies to vessels intended to contain only compressed air, and which operate within the following constraints:

a) subjected to an internal pressure greater than 0,5 bar;

b) the parts and assemblies contributing to the strength of the vessel under pressure to be made either of non-alloy quality steel or of non-alloy aluminium or non-age hardening aluminium alloys;

c) maximum working pressure 30 bar, the product of that pressure and the capacity of the vessel (PS.V) is greater than 50 bar litres and not exceeding 1500 bar litres;

d) capacity not exceeding 150 litres;

e) minimum working temperature not lower than -50 °C and maximum working temperature not higher than 100 °C.

It does not apply to vessels specifically designed for nuclear use, to vessels specifically intended for installation in or the propulsion of ships and aircraft, or to fire extinguishers.

1.3 The essential safety requirements are given in annex G.

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.

EN 287-1	Approval testing of welders - fusion welding - Part 1: Steels
EN 287-2	Approval testing of welders - fusion welding - Part 2: Aluminium and aluminium alloys
EN 288-1	Specification and approval of welding procedures for metallic materials - Part 1: General rules for fusion welding
EN 288-3	Specification and approval of welding procedures for metallic materials - Part 3: Welding procedure tests for arc welding of steels
EN 288-4	Specification and approval of welding procedures for metallic materials - Part 4: Welding procedure tests for arc welding of aluminium and its alloys
EN 10002-1	Metallic materials - tensile testing - Part 1: Method of testing (at ambient temperature)
EN 10025	Hot rolled products of non-alloy structural steel - Technical delivery conditions (annex F only)
EN 10028-1	Flat products made of steels for pressure purposes - Part 1: General requirements
EN 10028-2	Flat products made of steels for pressure purposes - Part 2: Non-alloy and alloy steels with specified elevated temperature properties
EN 10207	Steels for simple pressure vessels - Technical delivery requirements for plates, strips and bars
EN 26520	Classification of imperfections in metallic fusion welds, with explanations
ISO 148	Steel-Charpy impact test (V-notch)
ISO 209-1	Wrought aluminium and aluminium alloys - Chemical composition and forms of products - Part 1: Chemical composition
ISO 209-2	Wrought aluminium and aluminium alloys - Chemical composition and forms of products - Part 2: Forms of products
ISO 1106-1	Recommended practice for radiographic examination of fusion welded joints - Part 1: Fusion welded butt joints in steel plates up to 50 mm thick

ISO 1106-3	Recommended practice for radiographic examination of fusion welded joints - Part 3: Fusion welded circumferential joints in steel pipes of up to 50 mm wall thickness
ISO 2107	Aluminium, magnesium and their alloys - Temper designation
ISO 2409	Paints and varnishes - Cross cut test
ISO 2604-1	Steel products for pressure purposes - Quality requirements - Part 1: Forgings
ISO 2604-2	Steel products for pressure purposes - Quality requirements - Part 2: Wrought seamless tubes
ISO 2604-3	Steel products for pressure purposes - Quality requirements - Part 3: Electric resistance and induction-welded tubes
ISO 4136	Fusion-welded butt joints in steel - Transverse tensile test
ISO 5173	Fusion welded butt joints in steel - Transverse root and face bend test
ISO 5817	Arc-welded joints in steel - Guidance on quality levels for imperfections[1)]
ISO 6361-2	Wrought aluminium and aluminium alloys sheets, strip and plates - Part 2: Mechanical properties
ISO 6362-2	Wrought aluminium and aluminium alloys extruded rods/bars, tubes and profiles - Part 2: Mechanical properties
ISO 7253	Paints and varnishes - Determination of resistance to neutral salt spray
ISO 10042	Arc-welded joints in aluminium and its weldable alloys - Guidance on quality levels for imperfections[1)]

3 Definitions and symbols

3.1 Definitions

For the purposes of this standard the following definitions apply.

3.1.1 type examination: The procedure by which an approved inspection body ascertains and certifies that a specimen of a vessel satisfies the provisions of this European Standard (see annex D).

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1) This ISO Standard is registered in the programme of work of CEN/TC 121 'Welding' and should be implemented as an EN Standard.