

Recipientes a presión no sometidos a llama. Parte 1:
Generalidades. (Ratificada por la Asociación Española
de Normalización en septiembre de 2019.)

UNE-EN 13445-1:2014/A2:2018

Recipientes a presión no sometidos a llama. Parte 1: Generalidades. (Ratificada por la Asociación Española de Normalización en septiembre de 2019.)

Unfired pressure vessels - Part 1: General (Endorsed by Asociación Española de Normalización in September of 2019.)

Réipients sous pression non soumis à la flamme - Partie 1 : généralités (Entérinée par l'Asociación Española de Normalización en septembre 2019.)

En cumplimiento del punto 11.2.5.4 de las Reglas Internas de CEN/CENELEC Parte 2, se ha otorgado el rango de documento normativo español UNE al documento normativo europeo EN 13445-1:2014/A2:2018 (Fecha de disponibilidad 2018-03-28)

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Las observaciones a este documento han de dirigirse a:

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English Version

Unfired pressure vessels - Part 1: General

Réceptacles sous pression non soumis à la flamme -
Partie 1 : Généralités

Unbefeuerte Druckbehälter - Teil 1: Allgemeines

This amendment A2 modifies the European Standard EN 13445-1:2014; it was approved by CEN on 25 November 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This amendment 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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European foreword

This document (EN 13445-1:2014/A2:2018) has been prepared by Technical Committee CEN/TC 54 “Unfired pressure vessels”, 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 September 2018, and conflicting national standards shall be withdrawn at the latest by September 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2014/68/EU.

For relationship with EU Directive 2014/68/EU, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Modification to Clauses 1 to 3 (Scope, Normative references and Terms and definitions)

Replace Clauses 1 to 3 with the following text [the former NOTE after the 2nd paragraph was inserted into Clause 6]:

“

1 Scope

This European Standard defines the terms, definitions, quantities, symbols and units that are used throughout the EN 13445 series and gives general information on the design and manufacturing of vessels under this standard.

It also contains instructions on how to use the standard (Annex A) as well as an index which covers the whole standard (Annex B). This information is aimed to aid users of the EN 13445 series.

This European Standard applies to unfired pressure vessels with a maximum allowable pressure greater than 0,5 bar gauge but may be used for vessels operating at lower pressures, including vacuum.

This European Standard is not applicable to pressure vessels of the following types:

- vessels of riveted construction;
- vessels of lamellar cast iron or any other materials not included in Parts 2, 6, or 8 of the standard;
- multilayered, autofrettaged or pre-stressed vessels.

This European standard can be applied to the following pressure vessels, provided that account is taken of additional and/or alternative requirements resulting from the hazard analysis and from rules or instructions specific for:

- transportable vessels;
- items specifically designed for nuclear use;
- pressure vessels with a risk of overheating.

NOTE EN 14222 covers electrically fired boilers made from stainless steel and can be used as an example of additional requirements for such vessels.

Other European standards apply to industrial piping (EN 13480 series) and to water tube and shell boilers (EN 12952 series and EN 12953 series).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 764-1:2015+A1:2016, *Pressure equipment — Part 1: Vocabulary*

EN 764-2:2012, *Pressure equipment — Part 2: Quantities, symbols and units*

EN 13445-2:2014, *Unfired pressure vessels — Part 2: Materials*

EN 13445-3:2014, *Unfired pressure vessels — Part 3: Design*

EN 13445-4:2014, *Unfired pressure vessels — Part 4: Fabrication*

EN 13445-5:2014, *Unfired pressure vessels — Part 5: Inspection and testing*

EN 13445-6:2014, *Unfired pressure vessels — Part 6: Requirements for the design and fabrication of pressure vessels and pressure parts constructed from spheroidal graphite cast iron*

EN 13445-8:2014, *Unfired pressure vessels — Part 8: Additional requirements for pressure vessels of aluminium and aluminium alloys*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 764-1:2015+A1:2016, EN 764-2:2012 and the following apply.

NOTE To aid the user, some of the most important terms and definitions from EN 764-1 have been repeated here.

3.1

assembly

several pieces of pressure equipment assembled by a manufacturer to constitute an integrated and functional whole

3.2

fluid

gas, liquid and vapour in their pure phase as well as mixtures thereof

Note 1 to entry: A fluid may contain a suspension of solids.

3.3

hazard

potential source of harm

3.4

hazard category

category of the pressure vessel taking into account the potential hazards

3.5

joint coefficient

reduction coefficient, which is applied to the nominal design stress

Note 1 to entry: E.g. used for a welded joint and related to the testing group.

3.6

main pressure bearing parts

parts which constitute the envelope under pressure, essential for the integrity of the equipment

3.7

manufacturer

individual or organization responsible for the design, fabrication, testing, installation where relevant, and compliance with the requirements of the relevant product standard, whether executed by him or a subcontractor

Note 1 to entry: The manufacturer can subcontract one or more of the above mentioned tasks under its responsibility.