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[SIST EN 13445-5:2002/A4:2007](https://standards.iteh.ai/catalog/standards/sist/22555c86-70a7-40a2-b92b-86f94d35b9b3/sist-en-13445-5-2002-a4-2007)

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ICS 23.020.30

English Version

Unfired pressure vessels - Part 5: Inspection and testing

Réceptifs sous pression non soumis à la flamme - Partie
5: Inspection et contrôles

Unbefeuerte Druckbehälter - Teil 5: Inspektion und Prüfung

This amendment A4 modifies the European Standard EN 13445-5:2002; it was approved by CEN on 21 October 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

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Foreword

This document (EN 13445-5:2002/A4:2006) has been prepared by Technical Committee CEN/TC 54 “Unfired pressure vessels”, the secretariat of which is held by BSI.

This Amendment to the European Standard EN 13445-5:2002 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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(s).

For relationship with EU Directive(s), see informative Annex ZA, B, C or D, which is an integral part of this document.

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

The amendment is based on EN 13445-5 up to issue 16 (October 2005)

The document includes the text of the amendment itself. The corrected pages of EN 13445-5 will be delivered as issue 24 of the standard.

1 Scope

Delete the third paragraph:

This Part does not give inspection and testing provisions for vessels designed using Design by Analysis – Direct Route (DBA) of EN 13445-3:2002 Annex B.

5.2 Information to be contained in the technical documentation

5.2.1 General description of the pressure vessel

Add the following items 6) and 7) to c):

6) if the vessel is designed for fatigue according to Clause 17 or Clause 18 of EN 13445-3:2002:

- the cyclic loads considered;
- the allowed numbers of cycles;
- the relevant fatigue locations;

7) the design method used e.g. if the vessel is totally or in part designed by Design by Analysis – Direct Route of Annex B of EN 13445-3:2002 or designed according to 6.3 of EN 13445-3:2002.

6.6 Non-destructive testing of welded joints

6.6.1 Extent of non-destructive testing

Delete the NOTE and include:

For serially produced pressure vessels an alternative route is given in Annex A. This annex is not applicable to vessels or vessel parts designed according to Design by Analysis – Direct Route of Annex B of EN 13445-3:2002 or designed according to 6.3 of EN 13445-3:2002.

6.6.1.1 Use of testing groups

6.6.1.1.1 General

Add after the NOTE:

For vessels (or vessel parts) designed according to Design by Analysis – Direct Route of Annex B of EN 13445-3:2002 or designed according to 6.3 of EN 13445-3:2002, only testing group 1 is permissible.

Annex A (normative)

Inspection and testing of serially produced pressure vessels – Model acceptance

A.1 Introduction

Add the following sentence:

See 6.6.1 in case of Design by Analysis.

Replace the text of Annex ZA with the following:

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Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of the EU Pressure Equipment Directive (97/23/EC)

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Pressure Equipment Directive (97/23/EC).

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Pressure Equipment Directive (97/23/EC)

Clause(s)/subclause(s) of this EN	Essential Requirements (ERs) of Pressure Equipment Directive (97/23/EC)	Qualifying remarks/Notes
4	3.1	Manufacturing procedures
5	3.3 b)	Technical documentation
6.2	3.1	Manufacturing procedures and construction drawings
6.3	3.1.5	Material traceability
6.4	3.1.1	Preparation of the component parts
6.5	3.1.2	Permanent joining
6.6 and Annex G	3.1.3	Internal and surface defect
6.7	3.1	Destructive testing
6.8	3.1.4	Heat treatment
7	3.1	Manufacturing procedures
10	3.2	Final assessment
10.2.1 and Annex G	3.2.1	Final inspection
10.2.2	3.2.1	Review of documentation
10.2.3	3.2.2	Proof test
11	3.3	Marking and labelling
12	3.3 b)	Documentation
Annex C	2.5	Draining and venting
C.2, C.3 and C.4	2.4 and 2.5	Means of examination