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BS EN 13445-10:2015



BSI Standards Publication

Unfired pressure vessels

Part 10: Additional requirements for
pressure vessels of nickel and nickel alloys

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The UK participation in its preparation was entrusted to Technical Committee PVE/1, Pressure Vessels.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Unfired pressure vessels - Part 10: Additional requirements for pressure vessels of nickel and nickel alloys

Réipients sous pression non soumis à la flamme -
Partie 10 : Exigences complémentaires pour les
réipients sous pression en nickel et alliages de nickel

Unbefeuerte Druckbehälter - Teil 10: Zusätzliche
Anforderungen an Druckbehälter aus Nickel und
Nickellegierungen

This European Standard was approved by CEN on 10 October 2015.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Contents	Page
European foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms, definitions, symbols and units	5
4 General requirements	5
5 Materials.....	6
5.1 General.....	6
5.2 Material grouping system	6
5.3 Material documentation	6
5.4 Prevention of brittle fracture	6
5.5 Lamellar tearing.....	6
6 Design.....	6
6.1 General.....	6
6.2 Time-independent nominal design stress	6
6.3 Creep design.....	7
6.4 Shells under external pressure	7
6.5 Fatigue design.....	7
7 Manufacture	8
7.1 General.....	8
7.2 Qualification of welding procedure specifications (WPQR).....	8
7.3 Qualification of welders and welding operators	8
7.4 Joint preparation.....	8
7.5 Preheat.....	9
7.6 Production test, reference criteria	9
7.7 Extent of testing.....	9
7.8 Performance of test and acceptance criteria	9
7.9 Forming procedures.....	9
7.9.1 Cold forming.....	9
7.9.2 Hot forming	9
7.10 Heat treatment after forming	10
7.10.1 General.....	10
7.10.2 Heat treatment of flat products after cold forming	10
7.10.3 Heat treatment of tubular products after cold forming.....	10
7.10.4 Heat treatment after hot forming.....	11
7.11 Sampling of formed products	11
7.11.1 Cold formed products without heat treatment	11
7.11.2 Hot formed or cold formed products with heat treatment.....	11
7.12 Tests.....	12
7.12.1 Base material.....	12
7.12.2 Butt welds	12
7.13 Post weld heat treatment (PWHT).....	12
7.14 Repairs.....	12
8 Inspection and testing.....	12
8.1 General.....	12

This is a preview of "BS EN 13445-10:2015". [Click here to purchase the full version from the ANSI store.](#)

8.2	Non-destructive testing of welded joints	12
8.2.1	General	12
8.2.2	Demonstration of satisfactory experience for testing group 2	13
8.3	Determination of extent of non-destructive testing	13
8.4	Selection of non destructive testing methods for surface imperfections	18
8.5	Standard hydrostatic test	18
	Annex A (normative)	19
	Annex B (informative) Designations of some nickel alloys	21
	Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC	25
	Bibliography	26

This is a preview of "BS EN 13445-10:2015". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN 13445-10:2015) 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 June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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, 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, 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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1 Scope

This Part 10 of this European Standard specifies requirements for unfired pressure vessels and their parts made of nickel and nickel alloys (see 3.1) in addition to the general requirements for unfired pressure vessels under EN 13445-1:2014, EN 13445-2:2014, EN 13445-3:2014, EN 13445-4:2014 and EN 13445-5:2014.

NOTE Cast materials are not included in this version. Details regarding cast materials will be subject to an amendment to or a revision of this European Standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 764-5:2014, *Pressure equipment — Part 5: Inspection documentation of metallic materials and compliance with the material specification*

EN 10204:2004, *Metallic products — Types of inspection documents*

EN 13445-1:2014, *Unfired pressure vessels — Part 1: General*

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 ISO 9606-4:1999, *Approval testing of welders — Fusion welding — Part 4: Nickel and nickel alloys (ISO 9606-4:1999)*

EN ISO 14732, *Welding personnel — Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials (ISO 14732:2013)*

CEN ISO/TR 15608:2013, *Welding — Guidelines for a metallic materials grouping system (ISO/TR 15608:2013)*

3 Terms, definitions, symbols and units

For the purposes of this document, the terms, definitions, symbols and units given in EN 13445-1:2014, EN 13445-2:2014, EN 13445-3:2014, EN 13445-4:2014 and EN 13445-5:2014 and the following apply.

3.1

nickel alloys

those alloys which contain a minimum of 30 % nickel and contain more nickel than iron

4 General requirements

The general requirements of EN 13445-1:2014 shall apply.