



BSI Standards Publication

Metallic industrial piping

Part 2: Materials

National foreword

This British Standard is the UK implementation of EN 13480-2:2017+A7:2020. It supersedes BS EN 13480-2:2017+A3:2018, which is withdrawn.

The text of CEN amendment A7:2020 has been provided in its entirety at the beginning of this document. BSI's policy of providing consolidated content remains unchanged; however, in the interest of expediency, in this instance BSI have chosen to collate the relevant content at the beginning of this document.

The UK participation in its preparation was entrusted to Technical Committee PVE/10, Piping systems.

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

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Amendments/corrigenda issued since publication

Date	Text affected
31 December 2019	Implementation of CEN amendment A1:2018: see European foreword for details
31 December 2019	Implementation of CEN amendment A2:2018: see European foreword for details
31 December 2019	Implementation of CEN amendment A3:2018: see European foreword for details
31 July 2021	Implementation of CEN amendment A7:2020

EUROPEAN STANDARD

EN 13480-2:2017/A7

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2020

ICS 23.040.01

English Version

Metallic industrial piping - Part 2: Materials

Tuyauteries industrielles métalliques - Partie 2 :
MatériauxMetallische industrielle Rohrleitungen - Teil 2:
Werkstoffe

This amendment A7 modifies the European Standard EN 13480-2:2017; it was approved by CEN on 10 February 2020.

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.

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

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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European foreword

This document (EN 13480-2:2017/A7:2020) has been prepared by Technical Committee CEN/TC 267 “Industrial pipings and pipelines”, the secretariat of which is held by AFNOR.

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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 2020.

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 includes the text of the amendment itself. The amended/corrected pages of EN 13480-2:2017 will be published as Issue 3 of the European Standard.

Amendments EN 13480-2:2017/prA4 to EN 13480-2:2017/prA6 are withdrawn from the work program of Technical Committee CEN/TC 267 “Industrial piping and pipelines” following CEN Rules related to the time limit for activating Preliminary Work Items.

This document has been prepared under a standardization request 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, see informative Annex ZA, which is an integral part of EN 13480-2:2017.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Modification to Clause 2, Normative references

Delete the following normative reference:

EN 10164:2004, *Steel products with improved deformation properties perpendicular to the surface of the product - Technical delivery conditions*

2 Modification to 4.2.1.1, General

Delete the heading "4.2.1.1 General".

Therefore, the paragraphs of 4.2.1.1 fall under 4.2.1 "Special properties".

The second indent shall read as follows:

" — operating conditions: e.g. hydrogen embrittlement, corrosion, scaling, wear, ageing behaviour after cold forming."

3 Modification to 4.2.1.2, Lamellar tearing

Delete the whole sub-clause 4.2.1.2.

4 Modification to Annex ZA, Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU aimed to be covered

In Table ZA.1, reference to 4.2.1.1 shall be deleted and replaced by 4.2.1.

5 Modification to Bibliography

Delete the following reference:

[13] EN 1011-2:2001, *Welding - Recommendations for welding of metallic materials - Part 2: Arc welding of ferritic steels*

After this deletion, the sequence of numberings of references in the Bibliography shall be updated accordingly.

EUROPEAN STANDARD

EN 13480-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2017

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Supersedes EN 13480-2:2012

English Version

Metallic industrial piping - Part 2: MaterialsTuyauteries industrielles métalliques - Partie 2 :
MatériauxMetallische industrielle Rohrleitungen - Teil 2:
Werkstoffe

This European Standard was approved by CEN on 21 June 2017.

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 26 June 2019.

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European foreword

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

This European Standard EN 13480 for metallic industrial piping consists of eight interdependent and not dissociable Parts which are:

- *Part 1: General;*
- *Part 2: Materials;*
- *Part 3: Design and calculation;*
- *Part 4: Fabrication and installation;*
- *Part 5: Inspection and testing;*
- *Part 6: Additional requirements for buried piping;*
- *CEN/TR 13480-7, Guidance on the use of conformity assessment procedures;*
- *Part 8: Additional requirements for aluminium and aluminium alloy piping.*

Although these Parts may be obtained separately, it should be recognised that the Parts are inter-dependant. As such the manufacture of metallic industrial piping requires the application of all the relevant Parts in order for the requirements of the Standard to be satisfactorily fulfilled.

This European Standard will be maintained by a Maintenance MHD working group whose scope of working is limited to corrections and interpretations related to EN 13480.

EN 13480-2:2017 (E)
Issue 2 (2019-06)

The contact to submit queries can be found at <http://www.unm.fr> (en13480@unm.fr). A form for submitting questions can be downloaded from the link to the MHD website. After subject experts have agreed an answer, the answer will be communicated to the questioner. Corrected pages will be given specific issue number and issued by CEN according to CEN Rules. Interpretation sheets will be posted on the website of the MHD.

This document supersedes EN 13480-2:2012. This new edition incorporates the Amendments which have been approved previously by CEN members, and the corrected pages up to Issue 5 without any further technical change. Annex Y provides details of significant technical changes between this European Standard and the previous edition.

Amendments to this new edition may be issued from time to time and then used immediately as alternatives to rules contained herein. It is intended to deliver a new Issue of EN 13480:2017 each year, consolidating these Amendments and including other identified corrections. Issue 2 (2019-06) consolidates Amendments EN 13480-2:2017/A1:2018, EN 13480-2:2017/A2:2018 and EN 13480-2:2017/A3:2018; it includes the corrected pages listed in Annex Y.

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1 Scope

This document specifies the requirements for steel products used for industrial piping and supports.

For some metallic materials other than steel, such as spheroidal graphite cast iron, aluminium, nickel, copper, titanium, requirements are or will be formulated in separate parts of this document.

For metallic materials which are not covered by a harmonized material standard and are not likely to be in near future, specific rules are given in this part or the above cited parts of this document.

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 764-3:2002, *Pressure equipment — Terminology Part 3: Definition of parties involved*

EN 1092-1:2007, *Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1: Steel flanges*

EN 1515-4:2009, *Flanges and their joints — Bolting — Part 4: Selection of bolting for equipment subject to the Pressure Equipment Directive 97/23/EC*

EN 1591-1:2013, *Flanges and their joints — Design rules for gasketed circular flange connections — Part 1: Calculation*

EN 1591-2:2008, *Flanges and their joints — Design rules for gasketed circular flange connections — Part 2: Gasket parameters*

CEN/TS 1591-3:2007, *Flanges and their joints — Design rules for gasketed circular flange connections — Part 3: Calculation method for metal to metal contact type flanged joint*

EN 1591-4:2013, *Flanges and their joints — Part 4: Qualification of personnel competency in the assembly of the bolted connections of critical service pressurized systems*

CEN/TR 1591-5:2012, *Flanges and their joints — Design rules for gasketed circular flange connections — Part 5: Calculation method for full face gasketed joints*

EN 10028-1:2007+A1:2009+AC:2009, *Flat products made of steels for pressure purposes — Part 1: General requirements*

EN 10028-2:2009, *Flat products made of steels for pressure purposes — Part 2: Non-alloy and alloy steels with specified elevated temperature properties*

EN 10028-3:2009, *Flat products made of steels for pressure purposes — Part 3: Weldable fine grain steels, normalized*

EN 10028-4:2009, *Flat products made of steels for pressure purposes — Part 4: Nickel alloyed steels with specified low temperature properties*