

Irish Standard I.S. EN 13480-1:2017&&LC:2019&A1:2019

Metallic industrial piping - Part 1: General

 $\ensuremath{\mathbb C}$ CEN 2019 $\hfill No copying without NSAI permission except as permitted by copyright law.$

I.S. EN 13480-1:2017&&LC:2019&A1:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

EN 13480-1:2017/A1:2019

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:			Published:
This document was published			ICS number:
under the authority of the NSAI and comes into effect on:			23.040.03
2019-07-10			
		NOTE: If	blank see CEN/CENELEC cover page
NSAI	T +353 1 80 F +353 1 80		Sales: T +353 1 857 6730
1 Swift Square,	E standards		F +353 1 857 6729
Northwood, Santry Dublin 9	W NSAI.ie	erisai.le	W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

National Foreword

I.S. EN 13480-1:2017&&LC:2019&A1:2019 is the adopted Irish version of the European Document EN 13480-1:2017, Metallic industrial piping - Part 1: General

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This is a free page sample. Access the full version online.

This page is intentionally left blank

EUROPEAN STANDARD

EN 13480-1:2017/A1

EUROPÄISCHE NORM

NORME EUROPÉENNE

April 2019

ICS 23.040.01

English Version

Metallic industrial piping - Part 1: General

Tuyauteries industrielles métalliques - Partie 1 : Généralités Metallische industrielle Rohrleitungen - Teil 1: Allgemeines

This amendment A1 modifies the European Standard EN 13480-1:2017; it was approved by CEN on 17 December 2018.

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, 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 United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

© 2019 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 13480-1:2017/A1:2019 E

Contents

Europ	ean foreword	. 3
1	Modifications to Clause 2, "Normative references"	.4
2	Modification to 3.1, "Terms and definitions"	.4
3	Addition of a new Clause 7, "Accessories"	.4

European foreword

This document (EN 13480-1:2017/A1:2019) has been prepared by Technical Committee CEN/TC 267 "Industrial piping 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 2019 and conflicting national standards shall be withdrawn at the latest by October 2019.

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(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of EN 13480-1:2017.

This document includes the text of the amendment itself. The amended/corrected pages of EN 13480-1:2017 will be published as Issue 2 of the European Standard.

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



Correction Notice

Reference: EN 13480-1

Title:

Metallic industrial piping - Part 1: General

Brussels, 2019-06-26

with reference to the above, please include the following minor editorial correction(s) in the document related to:

for the following procedure PQ/UQ Enquiry 2nd Enquiry Parallel Enquiry Parallel Enquiry Formal Vote 2nd Formal Vote Parallel Formal Vot 2nd Parallel Formal Vot 2nd Parallel Formal UAP TC Approval 2nd TC Approval Publication	/ Vote
	1

In line with resolution **CEN/BT C47/2012** and in co-operation with the **Migration Help Desk**, please note that corrections have been brought to some pages of the documents as listed below.

The following pages have been corrected:

EN 13480-1:2017 – WI 00267080 – Part 1: General		
English (Issue 2 - 2019-06)	French (Issue 2 - 2019-06)	German (Issue 2 - 2019-06)
4 - 6 - 12 - 16	4 - 6 - 12 - 16	4 - 6 - 12 - 16

EN 13480-2:2017 – WI 00267077 – Part 2: Materials			
English (Issue 2 - 2019-06)	French (Issue 2 - 2019-06)	German (Issue 2 - 2019-06)	
3 - 5 - 6 - 7 - 8 - 8a - 17 - 18 - 21 -	3 - 5 - 6 - 7 - 8 - 8a - 17 - 18 - 21 -	3 - 5 - 6 - 7 - 8 - 8a - 17 - 18 - 21 -	
26 - 27 - 28 - 67 - 80 - 80a - 80b -	26 - 27 - 28 - 67 - 80 - 80a - 80b -	26 - 27 - 28 - 67 - 80 - 80a - 80b -	
81 - 83	81 - 83	81 - 83	
	David Q. Daviers and calculation		

EN 13480-3:2017 - WI 00267083 - I	Part 3: Design and calculation	
English (Issue 1 - 2017-06)	French (Issue 1 - 2017-06)	German (Issue 1 - 2017-06)
-	-	-

EN 13480-4:2017 - WI 00267078 - I	Part 4: Fabrication and installation	
English (Issue 1 - 2017-06)	French (Issue 1 - 2017-06)	German (Issue 1 - 2017-06)
-	-	-

EN 13480-5:2017 – WI 00267079 – Part 5: Inspection and testing		
English (Issue 2 - 2019-06)	French (Issue 2 - 2019-06)	German (Issue 2 - 2019-06)
5 - 6 - 15 - 24 - 25 - 26 - 27 - 30a -	5 - 6 - 15 - 24 - 25 - 26 - 27 - 30a -	5 - 6 - 15 - 24 - 25 - 26 - 27 - 30a -
32 - 34	32 - 34	32 - 34

EN 13480-6:2017 – WI 00267081 – Part 6: Additional requirements for buried piping		
English (Issue 2 - 2019-06)	French (Issue 2 - 2019-06)	German (Issue 2 - 2019-06)
4 - 8 - 13 - 14 - 19 - 20 - 26 - 27 -	4 - 8 - 13 - 14 - 19 - 20 - 26 - 27 -	4 - 8 - 13 - 14 - 19 - 20 - 26 - 27 -
32 - 35 - 36	32 - 35 - 36	32 - 35 - 36

EN 13480-8:2017 – WI 00267082 – Part 8: Additional requirements for aluminium and aluminium alloy piping		
English (Issue 2 - 2019-06)	French (Issue 2 - 2019-06)	German (Issue 2 - 2019-06)
5 - 32 - 42 - 43	5 - 32 - 43	5 - 32 - 43

This page is intentionally left BLANK.

EUROPEAN STANDARD

EN 13480-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2017

ICS 23.040.03

Supersedes EN 13480-1:2012

English Version

Metallic industrial piping - Part 1: General

Tuyauteries industrielles métalliques - Partie 1 : Généralité Metallische industrielle Rohrleitungen - Teil 1: Allgemeines

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.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a 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 European Standard 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, 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 13480-1:2017 (E) Issue 2 (2019-06)

Contents

Page

Europe	ean foreword	3
1	Scope	5
2	Normative references	5
3	Terms, definitions, symbols and units Terms and definitions	6
3.1	Terms and definitions	6
5.2	Piping of category 0	12
5.3	Piping operating ≤ 0.5 bar	12
5.4	Piping operating ≤ 0,5 bar Special cases	12
6	Requirements for Piping systems	
7	Accessories Industrial valves	12
7.1	Industrial valves	12
7.2	Safety systems	12
Annex	Y (informative) History of EN 13480-1	16
Y.1	Differences between EN 13480-1:2012 and EN 13480-1:2017	
Y.2	List of corrected pages of Issue 2 (2019-06)	16

European foreword

This document (EN 13480-1:2017) has been prepared by Technical Committee CEN/TC 267 "Industrial piping 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 December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

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.

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.

The contact to submit queries can be found at <u>http://www.unm.fr (en13480@unm.fr</u>). 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 13480-1:2012. This new edition incorporates the Amendments which have been approved previously by CEN members, and the corrected pages up to Issue 4 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 Amendment EN 13480-1:2017/A1:2019; it includes the corrected pages listed in Annex Y.

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

1 Scope

This European Standard specifies the requirements for industrial piping systems and supports, including safety systems, made of metallic materials with a view to ensure safe operation.

This European Standard is applicable to metallic piping above ground, ducted or buried, irrespective of pressure.

This European Standard is not applicable to:

- Pipelines and their accessories;
- Stream waterways such as penstocks, pressure tunnels, pressure shaft for hydro-electric-installations and their related specific accessories;
- Piping for vehicles covered by the EEC type approval procedures as laid down in Directives 70/156/EEC [1], 74/150/EEC [2] and 92/61/EEC [3];
- Items specifically designed for nuclear use, failure of which may cause an emission of radioactivity;
- Well-control equipment used in the petroleum, gas or geothermal exploration and extraction industry and in underground storage which is intended to contain and/or control well pressure, including the piping;
- Piping of blast furnaces including the furnace cooling, hot blast recuperators, dust extractors and blast furnace exhaust gas scrubbers and direct reducing cupolas including the furnace cooling, gas converters and vacuum furnaces and pans for melting, re-melting de-gassing and casting of steel and non ferrous metals;
- Enclosures for high voltage electrical equipment such as switchgear, control gear and transformers;
- Pressurized pipes for the containment of transmission systems such as for electrical power and telephone cables;
- Permanently fixed piping for ships, rockets, aircraft and mobile offshore units;
- Internal piping in medical devices as defined in the Directive 93/142/EEC [4] concerning medical devices;
- Internal piping of boilers and piping integral to pressure vessels.

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.



This is a free preview. Purchase the entire publication at the link below:

Product Page

S Looking for additional Standards? Visit Intertek Inform Infostore

> Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation