

### SLOVENSKI STANDARD SIST EN 13480-6:2018/A1:2019

01-september-2019

#### Kovinski industrijski cevovodi - 6. del: Dodatne zahteve za vkopane cevovode -Dopolnilo A1

Metallic industrial piping - Part 6: Additional requirements for buried piping

Metallische industrielle Rohrleitungen - Teil 6: Zusätzliche Anforderungen an erdgedeckte Rohrleitungen

### iTeh STANDARD PREVIEW

Tuyauteries industrielles métalliques - Partie 6: Exigences complémentaires relatives aux tuyauteries enterrées

#### SIST EN 13480-6:2018/A1:2019

Ta slovenski standard /je istoveten zalog/starEN 13480-6:2017/A1:2019 e50050d280d1/sist-en-13480-6-2018-a1-2019

#### ICS:

Železne in jeklene cevi
Jeklene cevi in cevni profili za posebne namene
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Iron and steel pipes Steel pipes and tubes for specific use

SIST EN 13480-6:2018/A1:2019

en,fr,de

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## **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

## EN 13480-6:2017/A1

April 2019

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**English Version** 

### Metallic industrial piping - Part 6: Additional requirements for buried piping

Tuyauteries industrielles métalliques - Partie 6 : Exigences complémentaires pour les tuyauteries enterrées

Metallische industrielle Rohrleitungen - Teil 6: Zusätzliche Anforderungen an erdgedeckte Rohrleitungen

This amendment A1 modifies the European Standard EN 13480-6:2017; it was approved by CEN on 1 March 2019.

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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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#### EN 13480-6:2017/A1:2019 (E)

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#### EN 13480-6:2017/A1:2019 (E)

#### **European foreword**

This document (EN 13480-6:2017/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 13480-6:2017.

This document includes the text of the amendment itself. The amended/corrected pages of EN 13480-6:2017 will be published as Issue 2 of the European Standard.

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, itch.ai/catalog/standards/sist/ffb78c3f-650f-4183-8835-

e50050d280d1/sist-en-13480-6-2018-a1-2019

#### EN 13480-6:2017/A1:2019 (E)

#### 1 Modification to 5.2, Design

*In Entry 5.2.4, replace the 2<sup>nd</sup> paragraph with the following one:* 

"The axial stress due to combined pressure and temperature change effects shall be calculated as follows:

$$S_L = v \ S_p - E\alpha \ (\Delta T) \tag{1}$$

where

- $S_{\rm L}$  is the axial stress  $\leq$  0,90 × yield strength at design temperature;
- $S_{\rm p}$  is the circumferential stress due to pressure alone;
- $\Delta T$  is the maximum temperature range;
- *v* is Poisson's ratio;
- $\alpha$  is the thermal expansion factor;
- *E* is the Young modulus".

#### 2 Modification to A.3.2.2, Notations

# Replace the 1<sup>st</sup> notation in the list with the following one:

*C*<sub>tass</sub> = Settlement ratio (see A.3.2.5.1, paragraph b));".

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#### **3 Modification to A.3t2:3;tSoil** properties and ards/sist/fb78c3f-650f-4183-8835e50050d280d1/sist-en-13480-6-2018-a1-2019

Between the 1<sup>st</sup> paragraph and Table A.3.2-3, add the following paragraph:

"The value of the ultimate deformation factor of the soil  $R_{\text{ultime}}$  is generally between 0,015 and 0,030 (m<sup>-1</sup>). If there is no data, the value giving the safest results shall be taken.".

#### 4 Modifications to A.3.2.5.1, Definition

*Under indent b), replace both dashes of the NOTE with the following ones:* 

u

- The backfill above the piping settles less than the rest of the backfill. In this case, which corresponds to a «rigid» piping, (see NOTE 2 of Table A.3.2.5.1-2), the shearing forces at the boundaries will tend to increase the load on the piping and the settlement ratio will be positive.
- The backfill above the piping settles more than the rest of the backfill. In this case, which corresponds to a «semi-rigid» or «flexible» piping (see NOTE 2 of Table A.3.2.5.1-2), the shearing forces at the boundaries will tend to lower the load on the piping and the settlement ratio will be negative.".

Replace the sentence above Table A.3.2.5.1-2 with the following one:

"Table A.3.2.5.1-2 gives a set of values recommended for this settlement ratio for the most current cases:".

Replace the heading of Table A.3.2.5.1-2 with the following one:

"Table A.3.2.5.1-2 — Settlement ratio C<sub>tass</sub>".

#### 5 Modifications to A.3.3.2, Distributed live load

On Figure A.3.3.1-1, replace three times the word "ou" with "or".

On Figure A.3.3.1-2, replace three times the word "ou" with "or".

# 6 Modification to A.3.5.6.2, Longitudinal compressive stress in the restrained part

Below Formula (A.3.5.6.2-1), add the following element into the key:

 $\sigma_{\rm C}$  is the circumferential stress due to pressure.".

#### 7 Modification to Annex ZA (informative), Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU aimed to be covered

*Replace the* 1<sup>st</sup> *row in Table ZA.1 with the following one:* 

"

# Table ZA.1 — Correspondence between this European Standard and Directive 2014/68/EU on Pressure Equipment

Essential Safety Requirements (ERs) of Directive 2014/68/EU on Pressure Equipment, Annex Ittps://standard	Clause(s)/sub-clause(s) of (standahisen itch.ai) SIST EN 13480-6:2018/A1:2019 s.iteh.ai/catalog/standards/sist/ffb78c3f-6	Qualifying remarks/Notes
6 (a) and 6 (g)	3.1 b)	Piping as referred to in Article 3, Section 1.3