# SLOVENSKI STANDARD
# SIST EN 13480-5:2018/A1:2019

**01-junij-2019**

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**Kovinski industrijski cevovodi - 5. del: Pregled in preskušanje - Dopolnilo A1**

Metallic industrial piping - Part 5: Inspection and testing

Metallische industrielle Rohrleitungen - Teil 5: Prufüng

Tuyauteries industrielles métalliques - Partie 5: Inspection et contrôle



**Ta slovenski standard je istoveten z:** **EN 13480-5:2017/A1:2019**

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**ICS:**

| | | |
|---|---|---|
| 23.040.10 | Železne in jeklene cevi | Iron and steel pipes |
| 77.140.75 | Jeklene cevi in cevni profili za posebne namene | Steel pipes and tubes for specific use |

**SIST EN 13480-5:2018/A1:2019** **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 13480-5:2017/A1

March 2019

ICS 23.040.01

English Version

# Metallic industrial piping - Part 5: Inspection and testing

Tuyauteries industrielles métalliques - Partie 5 : Inspection et contrôle

Metallische industrielle Rohrleitungen - Teil 5: Prüfung

This amendment A1 modifies the European Standard EN 13480-5:2017; it was approved by CEN on 17 December 2018.

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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
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## European foreword

This document (EN 13480-5:2017/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of an identical text or by endorsement, at the latest by September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.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 13480-5:2017.

This document includes the text of the amendment itself. The amended/corrected pages of EN 13480-5:2017 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.

## 1 Modification to Clause 2, Normative references

*Between EN 13480-6:2017 and EN 14917:2009+A1:2012, add the following new reference:*

"CEN/TR 13480-7:2017, *Metallic industrial piping — Part 7: Guidance on the use of conformity assessment procedures*".

## 2 Modification to 8.2.1, Extent of testing

*Replace List Entry b) 1) with the following one:*

"

1) for piping of pipe category 0 and piping operating at or below 0,5 bar, the amount of NDT shall be suitable to ensure weld quality;

   If volumetric testing is applied, a minimum amount of 2 % is recommended.".

## 3 Modification to 9.3.3, Pneumatic pressure test

*Replace List Entry d) with the following one:*

"

d) Attention is drawn to the fact that if the gas pressure is reduced to the piping system under test from high pressure storage, its temperature will fall. Therefore the equipment shall be such that the temperature of the gas entering the piping systems exceeds the minimum temperature indicated, The metal temperature at which shall be at least 20 °C above the brittle fracture temperature required in EN 13480-2:2017, Annex B;".



## 4 Modification to 9.3.4, Other tests

*Add the following new 3rd paragraph:*

"For piping in Category 0 and piping with PS <= 0,5 bar an initial service leak test in accordance with Annex B may be performed if specified.".

## 5 Modification to 9.4.1, Final documentation package

*Replace the NOTE in Table 9.4-1 with the following text:*

"

NOTE See Annex IV of the PED.

See CEN/TR 13480-7:2017, Table A.2 for the EU-declaration of conformity which shall be available if piping of Categories I, II and III is placed on the market in a country where the PED applies.".

## 6 Modification to Clause 10, Declaration

*Replace the content with the following paragraph:*

"On completion of final assessment and documentation, the manufacturer shall issue a declaration of compliance with EN 13480 (see Annex A). If piping of category I, II and III is placed on the market where the PED applies, the declaration in accordance with A.3 shall be replaced by an EU-declaration of conformity (see CEN/TR 13480-7:2017, Table A.2).".

## 7 Addition of a new Annex B (informative), Initial Leak Test

*Add the following new informative Annex B:*

“

# Annex B
(informative)

# Initial Leak Test

## B.1 Initial Service Leak Test

### B.1.1 General

This test is applicable only to piping of fluid group 2 in Category 0 and piping of fluid group 2 with PS < = 0,5 bar.

The test fluid is the service fluid.

### B.1.2 Examination Procedure for service fluid gas or vapor

During or prior to initial operation, the pressure shall be gradually increased in steps until the operating pressure is reached, holding the pressure at each step long enough to equalize piping strains.

A preliminary check shall be made as described below, if the service fluid is a gas or vapor.

The pressure shall be gradually increased until a gauge pressure that is the lesser of onehalf the test pressure or 0,5 bar is attained, at which time a preliminary check shall be made, including examination of joints for leakage. Thereafter, the pressure shall be gradually increased in steps until the test pressure is reached, holding the pressure at each step long enough to equalize piping strains.



The examination for leaks shall be performed as follows:

The leak test pressure shall be maintained for at least 10 min and then all joints and connections shall be examined for leaks.

### B.1.3 Examination Procedure for service fluid liquid

During or prior to initial operation, the pressure shall be gradually increased in steps until the operating pressure is reached, holding the pressure at each step long enough to equalize piping strains.

The following examination for leaks shall be conducted while the system is at operating pressure.

The leak test pressure shall be maintained for at least 10 min and then all joints and connections shall be examined for leaks.

It is permissible to omit examination for leaks of joints and connections previously tested in accordance with this standard.

## B.2 Initial Leak Test

This test is applicable for piping of fluid group 1 in Category 0 and piping of fluid group 1 with PS < = 0,5 bar, if the test fluid is water or a fluid of group 2. The testing procedure of B.1 applies.

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