SLOVENSKI STANDARD
SIST EN 13480-5:2012/A3:2017

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Kovinski industrijski cevovodi - 5. del: Pregled in preskušanje - Dopolnilo A3

Metallic industrial piping - Part 5: Inspection and testing

Metallische industrielle Rohrleitungen - Teil 5: Prüfung

Tuyauteries industrielles métalliques - Partie 5: Inspection et contrôle

Ta slovenski standard je istoveten z: **EN 13480-5:2012/A3:2017**

ICS:

77.140.75	Jeklene cevi in cevni profili za posebne namene	Steel pipes and tubes for specific use

SIST EN 13480-5:2012/A3:2017 **en,fr,de**

EUROPEAN STANDARD

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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 A3 modifies the European Standard EN 13480-5:2012; it was approved by CEN on 20 February 2017.

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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

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

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European foreword

This document (EN 13480-5:2012/A3:2017) 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of an identical text or by endorsement, at the latest by October 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.

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 13480-5:2012.

This document includes the text of the amendment itself. The amended/corrected pages of EN 13480-5:2012 will be published in the new Edition 2017 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 8.1.3 e)

Replace 8.1.3 e) by the following:

"

e) If any one of the two additional welds required by c) reveal an unacceptable imperfection, all welds in that batch represented by the sample inspection shall be examined and, as necessary, repaired or replaced and re-examined.

When defining the represented sample inspection one may distinguish between:

1) piping installation at construction sites; or

2) piping manufacturing (series or mass production) in workshops.

1) is normally used if 2) is not applicable. For this piping, a group of welds represented by the same sample inspection may be defined per piping system or per line number.

2) is normally used for piping integrated in packaged units such as machinery. For this piping a group of welds represented by the same sample inspection may be defined as per 1) above or per production lot or any other sample inspection system as long as the minimum extent of NDT of this standard is kept.".

2 Modification to 8.2.1

Replace Table 8.2-1 by the following:

Table 8.2-1 — Extent of testing for circumferential, branch, fillet and seal welds

Material group [a]	Category	All welds	Circumferential welds			Branch welds						Socket/fillet welds		Seal welds	
			Surface testing		Volumetric testing [b]	Surface testing			Volumetric testing [b,k]			Surface testing		Surface testing	
		VT %	e_n mm	MT/PT [c] %	RT/UT %	Branch diameter	e_n [h] mm	MT/PT [c] %	Branch diameter [i]	e_n [h] mm	RT/UT %	e_n mm	MT/PT %	e_n mm	MT/PT %
1.1, 1.2, 8.1	I	100	0 (5) [f,g]		5 (10) [g]	All		0 (5) [f,g]	All		0	All	0	All	0
	II														
	III				10			10	> DN 100	> 15	10		10		10
1.3, 1.4, 1.5, 2.1, 2.2, 4.1, 4.2, 5.1, 5.2, 8.2, 8.3, 9.1, 9.2, 9.3, 10.1, 10.2	I	100	≤ 30	5	10	All [e]			All		0	All [e]	10	All [e]	5
			> 30	10	10										
	II		≤ 30	5	10										
			> 30	10	10			10 (25) [g]							
	III		≤ 30	5	10 (25 [d]) [f,g]										
			> 30	10	10 (25 [d]) [f,g]	All			> DN 100	> 15	10	All	25	All	25
3.1, 3.2, 3.3, 5.3, 5.4, 6.1, 6.2, 6.3, 6.4, 7.1, 7.2	I	100	≤ 30	10	25	All		25	All		25	All	25	All	10
			> 30	25	25										
	II		≤ 30	25	25										
			> 30	25	25 (25 [d]) [f,g]				> DN 100	> 15					
	III		≤ 30	100	25 (100) [f,g]			100			100		100		100
			> 30	100	25 (100 [d]) [f,g]										

[a] Material group, see CEN ISO/TR 15608.
[b] For the selection of the appropriate NDT-method for volumetric testing, see 8.4.4.3.
[c] See 8.4.4.2.
[d] Additional testing for transverse defects from weld surface (see EN ISO 17640:2010, testing level C).
[e] Only if PWHT has been carried out.
[f] Value in brackets applies to piping where creep or fatigue is the controlling factor in design.
[g] Value in brackets applies to piping with pneumatic pressure test with 1,1 times the maximum allowable pressure.
[h] e_n is the nominal thickness of the branch pipe at the weld (see W3, W3.1 and W6 in EN 13480-4:2012, Figure 9.14.4-1 and Figure 9.14.4-2).
[i] For parts without DN designation d_i > 120 mm may be used instead of DN > 100.
[k] Volumetric testing is required if both criteria (branch diameter and nominal thickness) are satisfied.

3 Modification to 9.3.3

Replace the three paragraphs after the second indent (above item a)):

"Performance of pneumatic pressure test shall be decided during design stage. Adequate safety precautions shall be taken.

NOTE Special national safety rules about pneumatic pressure tests may apply in the European member states.

The requirements of 9.3.1 shall be fulfilled.

Due to the hazard involved in pressure testing using a compressible medium, a hazard analysis shall be performed by the manufacturer with special consideration to at least the following factors:".