DIN EN 13480-3

ICS 23.040.01

Supersedes
DIN EN 13480-3:2014-12,
DIN EN 13480-3 Corrigendum 1:2015-12,
DIN EN 13480-3 Corrigendum 2:2016-10 and
DIN EN 13480-3/A1:2017-11

Metallic industrial piping – Part 3: Design and calculation; English version EN 13480-3:2017, English translation of DIN EN 13480-3:2017-12

Metallische industrielle Rohrleitungen –
Teil 3: Konstruktion und Berechnung;
Englische Fassung EN 13480-3:2017,
Englische Übersetzung von DIN EN 13480-3:2017-12

Tuyauteries industrielles métalliques –
Partie 3: Conception et calcul;
Version anglaise EN 13480-3:2017,
Traduction anglaise de DIN EN 13480-3:2017-12

Document comprises 367 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

11.17 2795007

A comma is used as the decimal marker.

National foreword

This document (EN 13480-3:2017) has been prepared by Technical Committee CEN/TC 267 “Industrial piping and pipelines” (Secretariat: AFNOR, France). The responsible German body involved in its preparation was *DIN-Normenausschuss Rohrleitungen und Dampfkesselanlagen* (DIN Standards Committee Piping and Boiler Plant), Working Committee NA 082-00-17 AA “Industrial piping and pipeline; Mirror Committee to CEN/TC 267”.

This part of DIN EN 13480 specifies the design and calculation of industrial piping systems.

Amendments

This standard differs from DIN EN 13480-3:2014-12, DIN EN 13480-3 Corrigendum1:2015-12, DIN EN 13480-3 Corrigendum 2:2016-10 and DIN EN 13480-3/A1:2017-11 as follows:

a) normative references have been updated;

b) Clause 2 “Normative references” has been updated concerning the types of inspection documents for metallic materials and the qualification of welding procedures for metallic materials;

c) subclause 4.2.3.4 “Other loads to be taken into account” has been revised;

d) subclause 4.3 “Thickness” has been revised;

e) subclause 4.6 “Dimensioning of piping components subject to pressure” has been revised;

f) subclause 5.2 “Time-independent nominal design stress” has been revised;

g) subclause 5.3 “Time-dependent nominal design stress” has been revised;

h) subclause 6.2.3 “Required wall thickness” has been revised;

i) subclause 6.3 “Mitre bends” has been revised;

j) subclause 6.4.4 “Conical shells” has been revised;

k) subclause 6.6 “Bolted flange connections” has been revised;

l) Table 7.2.4-1 “Bolted circular flat ends with gasket entirely within the bolt circle” has been revised;

m) Clause 8 “Openings and branch connections” has been revised;

n) subclause 8.3.9 “Forged tee” has been included;

o) subclause 10.3.2.3 “Determination of allowable number of load cycles” has been revised;

p) Clause 11 “Integral attachments” has been revised;

q) subclause 12.1.3 “Allowable stresses” has been revised;

r) subclause 12.2 “Piping flexibility” has been revised;

s) subclause 12.3 “Flexibility analysis” has been revised;

t) subclause 12.3.8 “Alternative method for stress calculation” has been included;

u) Clause 13 “Pipe Supports” has been revised;

v) Annex B “More accurate calculation of bends and elbows” has been revised;

w) Annex C “Expansion joints” has been revised;

x) Annex D “Flanges” has been revised;

y) Annex E “Design of branch connections in piping accessories” has been revised;

z) Annex H “Flexibility characteristics, flexibility and stress intensification factors and section moduli of piping components and geometrical discontinuities” has been revised;

aa) Annex I “Production testing of spring supports and shock arrestors (shock absorbers)” has been revised;

bb) Annex K “Attachment of supports to structures” has been revised;

cc) Annex L “Buckling of linear type supports” has been revised;

dd) Annex N “Documentation of supports” has been revised;

ee) Annex O “Alternative method for checking branch connections” has been included;

ff) Annex P “Recommended gaskets for industrial piping” has been revised;

gg) Annex Q “Simplified pipe stress analysis” has been revised;

hh) Annex ZA “Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU aimed to be covered” has been revised;

ii) the Bibliography has been updated;

jj) the standard has been editorially revised.

Previous editions

DIN 2413: 1927-01, 1936-09, 1954-05, 1966-06, 1972-06
DIN 2413-1: 1993-10
DIN 2413-2: 1993-10
DIN EN 13480-3: 2002-08, 2012-11, 2013-11, 2014-12
DIN EN 13480-3/A1: 2005-11, 2017-11
DIN EN 13480-3 Corrigendum 1: 2005-12, 2015-12
DIN EN 13480-3 Corrigendum 2: 2006-06, 2016-10
DIN EN 13480-3/A2: 2007-02
DIN EN 13480-3 Corrigendum 3: 2007-05
DIN EN 13480-3/A3: 2009-11
DIN EN 13480-3/A4: 2010-10

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 13480-3

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English Version

Metallic industrial piping - Part 3: Design and calculation

Tuyauteries industrielles métalliques - Partie 3: Conception et calcul

Industrielle metallische Rohrleitungen - Teil 3: Konstruktion und Berechnung

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

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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