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Metallic industrial piping - Part 3: Design and calculation

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Metallic industrial piping - Part 3: Design and calculation

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Konstruktion und Berechnung

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

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Contents

	Page
European foreword.....	10
1 Scope	12
2 Normative references	12
3 Terms, definitions, symbols and units	13
3.1 Terms and definitions	13
3.2 Symbols and units	13
4 Basic design criteria	15
4.1 General	15
4.2 Loadings	15
4.2.1 General	15
4.2.2 Combination of loads	16
4.2.3 Loads for dimensioning	16
4.2.4 Other loads to be taken into account	18
4.2.5 Design conditions	19
4.3 Thickness	22
4.4 Tolerances	25
4.5 Joint coefficient	25
4.6 Dimensioning of piping components subject to pressure	26
5 Design stresses	26
5.1 General	26
5.2 Time-independent nominal design stress	27
5.2.1 Steels other than austenitic steels	27
5.2.2 Austenitic steels	27
5.2.3 Nickel and / or chromium alloy steels	28
5.2.4 Steels castings	28
5.2.5 Additional requirements for steels with no specific control	28
5.3 Time-dependent nominal design stress	29
5.3.1 General	29
5.3.2 Steels	29
5.3.3 Nickel and/or chromium alloy steels	30
6 Design of piping components under internal pressure	30
6.1 Straight pipes	30
6.2 Pipe bends and elbows	30
6.2.1 General	30
6.2.2 Symbols	31
6.2.3 Required wall thicknesses	31
6.3 Mitre bends	32
6.3.1 General	32
6.3.2 Symbols	32
6.3.3 Effective radius of mitre bend	33
6.3.4 Multiple mitre bends	33
6.3.5 Single mitre bends	34

6.3.6	Adjacent straight pipe sections of mitre bends	34
6.4	Reducers	34
6.4.1	Conditions of applicability	34
6.4.2	Specific definitions	35
6.4.3	Specific symbols and abbreviations.....	35
6.4.4	Conical shells.....	36
6.4.5	Junctions - general.....	37
6.4.6	Junction between the large end of a cone and a cylinder without a knuckle.....	37
6.4.7	Junction between the large end of a cone and a cylinder with a knuckle	40
6.4.8	Junction between the small end of a cone and a cylinder	41
6.4.9	Offset reducers	43
6.4.10	Special forged reducers.....	43
6.5	Flexible piping components.....	44
6.5.1	General	44
6.5.2	Expansion joints.....	44
6.5.3	Corrugated metal hose assemblies	46
6.6	Bolted flange connections	47
6.6.1	General	47
6.6.2	Symbols	47
6.6.3	Standard flange	47
6.6.4	Non-standard flange	48
7	Design of ends under internal pressure.....	48
7.1	Dished ends.....	48
7.1.1	Symbols	48
7.1.2	Hemispherical ends	49
7.1.3	Torispherical ends	50
7.1.4	Ellipsoidal ends	51
7.1.5	Calculation of β	52
7.2	Circular flat ends.....	56
7.2.1	General	56
7.2.2	Symbols	56
7.2.3	Unstayed flat circular ends welded to cylindrical shells/pipes.....	58
7.2.4	Unstayed flat circular bolted ends.....	65
7.2.5	Reinforcements of openings in unstayed flat ends	71
8	Openings and branch connections	74
8.1	General	74
8.2	Symbols	74
8.3	Limitations	75
8.3.1	Thickness ratio	75
8.3.2	Openings in the vicinity of discontinuities	77
8.3.3	Types of reinforcement	79
8.3.4	Calculation method.....	80
8.3.5	Elliptical openings and oblique branch connections.....	80
8.3.6	Reinforcing pads	82
8.3.7	Dissimilar material of shell and reinforcements	82
8.3.8	Extruded outlets.....	82
8.3.9	Forged tee.....	82
8.3.10	Branches in bends or elbows.....	83
8.3.11	Screwed-in branches	83
8.4	Isolated openings.....	84
8.4.1	General	84
8.4.2	Unreinforced openings.....	87

8.4.3	Reinforced openings with $d_i/D_i < 0,8$	87
8.4.4	Reinforced single openings with $0,8 < d/D \leq 1,0$	93
8.5	Adjacent openings.....	93
8.5.1	Unreinforced openings.....	93
8.5.2	Reinforced openings with $d/D \leq 0,8$	93
8.6	Design of special piping components.....	94
8.6.1	Cylindrical Y-pieces	94
8.6.2	Spherical Y-pieces	95
8.6.3	Triform reinforced branches.....	96
9	Design of piping components under external pressure.....	97
9.1	General.....	97
9.2	Symbols and elastic stress limits.....	99
9.2.1	Symbols.....	99
9.2.2	Elastic stress limits.....	101
9.3	Cylindrical pipes, elbows and mitre bends.....	101
9.3.1	Determination of lengths	101
9.3.2	Interstiffener collapse	103
9.3.3	Overall collapse of stiffened pipes	105
9.3.4	Stiffener stability.....	106
9.3.5	Heating/cooling channels	109
9.4	Reducers (conical shells)	110
9.5	Dished ends	112
9.5.1	Hemispherical ends.....	112
9.5.2	Torispherical ends.....	113
9.5.3	Ellipsoidal ends.....	113
10	Design for cyclic loading.....	113
10.1	General.....	113
10.2	Exemption from detailed fatigue analysis	113
10.3	Fatigue design for cyclic pressure.....	114
10.3.1	Equivalent full load cycles.....	114
10.3.2	Simplified fatigue analysis.....	114
10.4	Fatigue design for thermal gradients	129
10.4.1	General.....	129
10.4.2	Design guidance.....	129
10.5	Fatigue design for combined loads	130
11	Integral attachments.....	130
11.1	General.....	130
11.2	Allowable stresses	130
11.3	Symbols.....	131
11.4	Hollow circular attachments.....	133
11.4.1	Limitations.....	133
11.4.2	Preliminary calculations	133
11.4.3	Analysis of attachments welded to pipe with a full penetration weld.....	135
11.4.4	Analysis of attachments welded to pipe with fillet or partial penetration weld	136
11.5	Rectangular attachments	136
11.5.1	Limitations.....	136
11.5.2	Preliminary calculations	136
11.5.3	Analysis of attachments welded to pipe with a full penetration weld.....	138
11.5.4	Analysis of attachments welded to pipe with fillet or partial penetration weld	139
11.6	Stress analysis of the run pipe.....	139
11.7	Shear stress analysis in attachment.....	141

11.7.1	Hollow circular attachments	141
11.7.2	Rectangular attachments	141
11.8	Alternative calculation methods	141
12	Flexibility analysis and acceptance criteria	141
12.1	Basic conditions	141
12.1.1	General	141
12.1.2	Loading conditions	142
12.1.3	Allowable stresses	142
12.2	Piping flexibility	144
12.2.1	General	144
12.2.2	Basic conditions	144
12.2.3	Displacement strains	144
12.2.4	Displacement stresses	145
12.2.5	Stress range	146
12.2.6	Cold pull	146
12.2.7	Properties for flexibility analysis	147
12.2.8	Supporting conditions	147
12.2.9	Expansion joints	149
12.2.10	Flexibility analysis	149
12.3	Flexibility analysis	151
12.3.1	General	151
12.3.2	Stress due to sustained loads	152
12.3.3	Stress due to sustained and occasional or exceptional loads	152
12.3.4	Stress range due to thermal expansion and alternating loads	153
12.3.5	Additional conditions for the creep range	154
12.3.6	Stresses due to a single non-repeated support movement	154
12.3.7	Determination of resultant moments	155
12.3.8	Alternative method for stress calculation	157
12.3.9	Reactions	157
12.4	Fatigue analysis	157
12.5	Vibration	157
13	Pipe Supports	158
13.1	General requirements	158
13.1.1	General	158
13.1.2	Classification of supports	158
13.1.3	Additional definitions	159
13.1.4	Boundaries	161
13.1.5	Pipe supports welded to the pipe	163
13.2	Selection of pipe supports	164
13.2.1	General	164
13.2.2	Detail design of pipe supports	165
13.2.3	Support location	166
13.3	Constant hangers/base mounted (pedestal) constant supports	166
13.3.1	General	166
13.3.2	Load deviation from calibrated load	166
13.3.3	Site adjustment of the calibrated load	166
13.3.4	Travel reserve (Overtravel)	166
13.3.5	Blocking	167
13.3.6	Identification Marking/Name plate	167
13.4	Variable load spring hangers and base mounted (pedestal) variable load spring supports	167
13.4.1	General	167

13.4.2	Tolerance on spring rate	168
13.4.3	Travel reserve (Overtravel)	168
13.4.4	Blocking	168
13.4.5	Name plate	168
13.5	Rigid struts	169
13.6	Shock arrestors (shock absorber, snubber).....	169
13.7	Sliding supports	170
13.8	Anchors	170
13.9	Documentation of supports.....	170
13.10	Marking of supports	170
13.11	Manufacturing of pipe supports	170
13.11.1	Material requirements	170
13.11.2	Design temperatures for support components	171
13.11.3	Design details.....	172
13.11.4	Determination of component sizes	173
13.11.5	Welded connections	174
13.11.6	Threaded connections	176
13.11.7	Additional requirements on springs	177
13.11.8	Design details for rigid struts	177
13.11.9	Design details for shock arrestors (shock absorbers, snubbers)	178
13.11.10	Design details for shock arrestors (shock absorbers, snubbers).....	179
Annex A	(informative) Dynamic analysis	180
A.1	General.....	180
A.2	Analysis by calculation.....	180
A.2.1	Seismic events	180
A.2.2	Rapid valve closure	184
A.2.3	Flow induced vibration	187
A.2.4	Safety valve discharge	189
A.2.5	Allowable stresses	192
A.3	Alternative means of design verification.....	192
A.3.1	Comparative studies	192
A.3.2	Full scale testing.....	192
A.3.3	Reduced scale testing	192
Annex B	(normative) More accurate calculation of bends and elbows	193
B.1	General.....	193
B.2	Symbols and units	193
B.3	Required wall thickness	194
B.4	Calculation	195
B.4.1	Calculation of wall thickness.....	195
B.4.2	Stress calculation	197
Annex C	(informative) Expansion joints	201
C.1	Incorporation of expansion joints into piping systems.....	201
C.1.1	General.....	201
C.1.2	Types of expansion joints.....	202
C.1.3	Design of expansion joints	202
C.1.4	Designing with expansion joints.....	203
C.1.5	Analyses and calculation	205
C.1.6	Cold pull.....	206
C.2	Maximum spacing for unrestrained axially compensated straight runs.....	206
C.2.1	General.....	206
C.2.2	Calculation rules.....	206

C.2.3	Maximum spacing for defined conditions	207
C.3	Indication for the design of expansion joints	209
C.3.1	General	209
C.3.2	Information for the system analyst.....	209
Annex D	(normative) Flanges.....	210
D.1	Purpose	210
D.2	Specific terms and definitions.....	210
D.3	Specific symbols and abbreviations.....	211
D.4	General	212
D.4.1	Introduction	212
D.4.2	Use of standard flanges without calculation.....	212
D.4.3	Bolting.....	213
D.4.4	Flange construction	215
D.4.5	Machining	215
D.4.6	Gaskets	215
D.5	Narrow face gasketed flanges	216
D.5.1	General	216
D.5.2	Bolt loads and areas.....	219
D.5.3	Flange moments	220
D.5.4	Flange stresses and stress limits.....	220
D.5.5	Narrow face flanges subject to external pressure	226
D.5.6	Lap joints	226
D.5.7	Split ring flanges	229
D.6	Full face flanges with soft ring type gaskets	230
D.6.1	Specific symbols and abbreviations.....	231
D.6.2	Bolt loads and areas.....	231
D.6.3	Flange design.....	232
D.6.4	Full face flanges subject to external pressure	233
D.7	Seal welded flanges.....	233
D.8	Reverse narrow face flanges.....	234
D.8.1	Internal pressure.....	234
D.8.2	External pressure	236
D.9	Reverse full face flanges.....	236
D.9.1	General	236
D.9.2	Design following method of D.5.....	236
D.9.3	Design following method of D.6.....	238
D.10	Full face flanges with metal to metal contact	240
D.10.1	General	240
D.10.2	Specific symbols and abbreviations.....	240
D.10.3	Design	241
Annex E	(normative) Design of branch connections in piping accessories	243
E.1	Scope	243
E.1.1	General	243
E.2	Reinforcement	245
E.2.1	Angles and areas	245
E.2.2	The following condition shall be satisfied:.....	245
E.3	Flexibility analysis	246
Annex F	(informative) Testing during operation in the case of cyclic loading.....	248
F.1	Testing during operation.....	248
F.2	Measures to be taken when the calculated fatigue life has been reached	248
Annex G	(informative) Physical properties of steels	250

G.1	General	250
G.2	Physical properties	250
G.2.1	Density	250
G.2.2	Differential coefficient of linear expansion	251
G.2.3	Specific thermal capacity	251
G.2.4	Thermal diffusivity	251
G.2.5	Poisson's ratio	251
G.3	Physical properties of steels	251
Annex H	(normative) Flexibility characteristics, flexibility and stress intensification factors and section moduli of piping components and geometrical discontinuities	257
Annex I	(informative) Production testing of spring supports and shock arrestors (shock absorbers)	267
I.1	Constant load supports	267
I.2	Variable spring supports	267
I.3	Shock arrestors	267
Annex J	(normative) Type testing of support components	272
Annex K	(informative) Attachment of supports to structures	274
K.1	Attachment of supports to concrete structures	274
K.2	Attachment to metallic structures	275
K.2.1	Standard bolts	275
K.2.2	Friction grip bolts	275
K.2.3	Welding	275
Annex L	(informative) Buckling of linear type supports	276
L.1	General	276
L.2	Symbols	276
L.3	Basic formulae	277
L.4	Allowable compressive stress	277
L.5	Buckling length	278
Annex M	(informative) Design guidance for structural components	280
M.1	Linear type components subjected to bending	280
M.1.1	General	280
M.1.2	Supplementary verifications for linear type supports	280
M.2	Stability of plate type supports	282
M.3	Anchorage plates or equivalent anchorage components	282
M.3.1	General	282
M.3.2	Design of simple anchorage plates	282
M.3.3	Fixing plates with stiffening gussets	283
M.3.4	Load calculations for anchorages fixed in concrete	283
Annex N	(normative) Documentation of supports	284
Annex O	(normative) Alternative method for checking branch connections	286
O.1	Scope	286
O.2	Symbols	286
O.3	Design and checking of the branch connection	288
O.3.1	Limit value for the load due to pressure only for straight pipes without opening	288
O.3.2	Determination of the minimum thicknesses under loading due to pressure only	289
O.3.3	Checking of the thicknesses selected for the combination of pressure loading and loadings due to external loads	289
Annex P	(informative) Recommended gaskets for industrial piping	340

Annex Q (informative) Simplified pipe stress analysis	342
Q.1 General	342
Q.2 Simplified procedure	342
Q.2.1 General	342
Q.2.2 Specification of allowable spacing of supports	342
Q.2.3 Check of elasticity	342
Q.3 Explanatory notes for Table Q.1	344
Q.4 Symbols	346
Q.5 Indices f_L	346
Q.6 Explanatory notes to Q.2.2	347
Q.6.1 Specification of allowable spacing of supports	347
Q.7 Conversion of the allowable lengths	348
Q.7.1 Other support conditions	348
Q.7.2 Other parameters	348
Q.8 Additional single loads	349
Q.8.1 General	349
Q.9 Explanatory note on Figure Q.2	352
Q.9.1 General	352
Q.9.2 Required pipe leg length L_1, for f_1 from the nomogram	354
Q.9.3 Required pipe leg length L_2, for f_2 from the nomogram	354
Annex Y (informative) History of EN 13480-3	359
Y.1 Differences between EN 13480-3:2012 and EN 13480-3:2017	359
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2014/68/EU aimed to be covered	361
Bibliography	362

European foreword

This document (EN 13480-3:2017) 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 <http://www.unm.fr> (en13480@unm.fr). 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 13480-3:2012. This new edition incorporates the Amendments which have been approved previously by CEN members, and the corrected pages up to Issue 5 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.

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 Part of this European Standard specifies the design and calculation of industrial metallic piping systems, including supports, covered by EN 13480.

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.

EN 1515-2:2001, *Flanges and their joints — Bolting — Part 2: Combination of flange and bolting materials for steel flanges PN designated*

EN 1515-3:2005, *Flanges and their joints — Bolting — Part 3: Classification of bolt materials for steel flanges, Class designated*

EN 1515-4:2010, *Flanges and their joints — Bolting — Part 4: Selection of bolting for equipment subject to the Pressure Equipment Directive 97/23/EC*

EN 1591-1:2013, *Flanges and their joints — Design rules for gasketed circular flange connections — Part 1: Calculation method*

EN 1591-2:2008, *Flanges and their joints — Design rules for gasketed circular flange connections — Part 2: Gasket parameters*

EN 1993 (all parts), *Eurocode 3: Design of steel structures*

EN 10204:2004, *Metallic products — Types of inspection documents*

EN 10216-2:2013, *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties*

EN 13445-3:2014, *Unfired pressure vessels — Part 3: Design*

EN 13480-1:2017, *Metallic industrial piping — Part 1: General*

EN 13480-2:2017, *Metallic industrial piping — Part 2: Materials*

EN 13480-4:2017, *Metallic industrial piping — Part 4: Fabrication and installation*

EN 13480-5:2017, *Metallic industrial piping — Part 5: Inspection and testing*

EN ISO 5817:2007, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections (ISO 5817:2003, corrected version:2005, including Technical Corrigendum 1:2006)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN