



SLOVENSKI STANDARD
SIST EN 334:2019/oprA1:2023
01-januar-2023

Regulatorji tlaka plina za vstopne tlake do 10 MPa (100 bar) - Dopnilo A1

Gas pressure regulators for inlet pressure up to 10 MPa (100 bar)

Gas-Druckregelgeräte für Eingangsdrücke bis 10 MPa (100 bar)

Régulateurs de pression de gaz pour des pressions amont jusqu'à 100 bar

Ta slovenski standard je istoveten z: EN 334:2019/prA1

<https://standards.iteh.ai/catalog/standards/sist/ecb7901e-ffda-4d5b-acd6-2aef7547d3bc/sist-en-334-2019-opra1-2023>

ICS:

23.060.40 Tlačni regulatorji Pressure regulators

SIST EN 334:2019/oprA1:2023 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 334:2019
prA1

December 2022

ICS

English Version

Gas pressure regulators for inlet pressure up to 10 MPa (100 bar)

Régulateurs de pression de gaz pour des pressions
amont jusqu'à 100 bar

Gas-Druckregelgeräte für Eingangsdrücke bis 10 MPa
(100 bar)

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 235.

This draft amendment A1, if approved, will modify the European Standard EN 334:2019. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 334:2019/prA1:2022) has been prepared by Technical Committee CEN/TC 235 “Gas pressure regulators and associated safety devices for use in gas transmission and distribution”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

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EN 334:2019/prA1:2022 (E)**1 Modification to Clause 2 “Normative references”**

Replace the following references:

EN ISO 9712:2012, *Non-destructive testing - Qualification and certification of NDT personnel (ISO 9712:2012)*

EN ISO 15607:2003, *Specification and qualification of welding procedures for metallic materials - General rules (ISO 15607:2003)*

EN ISO 15609-1:2004, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 1: Arc welding (ISO 15609-1:2004)*

by the new editions:

EN ISO 9712:2022, *Non-destructive testing - Qualification and certification of NDT personnel (ISO 9712:2021)*

EN ISO 15607:2019, *Specification and qualification of welding procedures for metallic materials - General rules (ISO 15607:2019)*

EN ISO 15609-1:2019, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 1: Arc welding (ISO 15609-1:2019)*

Delete the following normative references:

— MSS SP 55:2011, *Quality standard for steel castings for valves, flanges and fittings and other piping components (Visual method)*;

— Recommended Practice N. SNT-TC-1A:2016, *Personnel Qualification and Certification in Nondestructive Testing*.

2 Modification to 4.2.1.6.1 “Welding requirements”

Modify the first paragraph as follow:

Fabrication welds in all pressure bearing parts shall be made:

— using qualified welding procedures in accordance with applicable EN ISO 15607:2019, EN ISO 15609-1:2019, EN ISO 15610:2003, EN ISO 15611:2003, EN ISO 15612:2018, EN ISO 15613:2004, EN ISO 15614-1:2017 and EN ISO 15614-2:2005/AC:2009 and

— by qualified welders/welding operators.

The qualification of welders/welding operators shall be approved in accordance with applicable EN ISO 9606-2:2004, EN ISO 9606-3:1999, EN ISO 9606-4:1999, EN ISO 9606-1:2017 and EN ISO 14732:2013 for the intended processes, material groups and range of sizes.

3 Modification to 4.2.1.7.3 “Qualification of personnel for non-destructive testing”

Modify the paragraph as follow:

The NDTs shall be carried out by qualified personnel.

The qualification of personnel for non-destructive testing shall be approved in accordance with EN ISO 9712:2022.

Modify Table 6 as follow:

Table 6 — Non-destructive testing

		Type of non-destructive testing				
		Volumetric		Surface		
		Radiographic	Ultrasonic	Visual	Magnetic particle	Liquid penetrant
Sections to be examined and/or extent of coverage	Steel castings	EN 12516-1:2014+A1:2018, C.2.1.2		Accessible surfaces	EN 12516-1:2014+A1:2018, C.2.1.3	
	Forgings, bars, plates and tubular products	EN 12516-1:2014+A1:2018, C.2.2 and C.2.3		Not applicable		
	Fabrication welds	According to E and F in Table 7		Accessible surfaces	According to B in Table 7	
NDT procedures and acceptance criteria for castings, forgings and their fusion weld repairs		EN 12516-1:2014+A1:2018, Annex D	EN 12516-1:2014+A1:2018, Annex G	EN ISO 17637:2016 ^a	EN 12516-1:2014+A1:2018, Annex E	EN 12516-1:2014+A1:2018, Annex F
NDT procedures and acceptance criteria for fabrication welds, including their repairs		EN 12516-1:2014+A1:2018, C.2.4 and Annex D	EN 12516-1:2014+A1:2018, C.2.4 and Annex G	EN ISO 17637:2016 ^a		
General requirements	<ul style="list-style-type: none"> Examinations shall be performed on the material after any heat treatment required by the material or welding either before or after the finish machining at the option of the manufacturer. Accessible surfaces in case of surface examination include exterior and interior surfaces but no threads, drilled or threaded holes etc. 					
^a This document is applicable only to fusion weld repairs.						
NOTE For a complete application see MSS SP 55, this document is applicable only for ferrous castings.						

EN 334:2019/prA1:2022 (E)

4 Modification to 4.3.7 “Minimum values of safety factor for pressure bearing parts

Modify the paragraph as follow:

Table 9 lists the safety factors in respect of yield strength of the material. They shall be used to limit the stresses in the walls of pressure bearing parts and inner metallic partition walls at the maximum allowable pressure.

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5 Modification to Table ZA.1 — Correspondence between this European Standard and Directive 2014/68/EU (PED)

Modify Table ZA.1 as follow:

Essential Requirements of Directive 2014/68/EU (PED)	Clause(s)/subclause(s) of this EN	Remarks/Notes
2.2.1	4.3.1, 4.3.2, 4.3.3, 4.3.6, 4.3.7 4.1.8, 4.3.1, 4.3.2, 4.3.3, 4.3.6,	Design loadings
2.2.3	4.3.7, 4.3.8, 7.7.3.1	Calculation method
2.2.4	7.7.3.2	Experimental design method
2.7	4.1.9	Wear – Replacement of parts
2.11.1, indent 1	4.1.2	Design and independence from integrated safety devices and/or monitor
2.11.1, indent 2	4.1.7, 5.5, 5.7, 7.7.6	Fail-safe modes of fail close
2.11.1, indent 3	4.1.2.1, 4.1.2.2, 4.1.2.3	Redundancy
3.1.4	4.2.1.6.1	Heat treatment of fabrication welds
3.1.5	4.2.1.6.2	Traceability
3.2.1	5.4.2	Final inspection
3.2.2	7.7.4, 7.7.5	Proof test
3.3	10.2, 10.4	Marking and labelling
3.4	9.4	Operating instructions
4.1 (a), 4.1 (b), 4.2 (a), 4.2(b)	4.2.1.1, 4.2.1.2	Appropriate characteristics and chemical resistance of materials
4.3	4.2.1.4, 4.2.1.5	Compliance of materials with specifications
7.1.2	4.3.7	Permissible membrane stress (Allowable stresses)
7.2	4.3.8	Joint coefficients
7.3	7.7.9.3, 7.7.9.4.3	Short duration pressure surge
7.4	7.7.4	Hydrostatic pressure test
7.5	4.2.1.1, 4.2.1.2	Material characteristics

EN 334:2019/prA1:2022 (E)

6 Modification to “Bibliography”

Modify as follow:

Add the following two references:

- MSS SP 55:2011, *Quality standard for steel castings for valves, flanges and fittings and other piping components (Visual method)*;
- Recommended Practice N. SNT-TC-1A:2016, *Personnel Qualification and Certification in Nondestructive Testing*.

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