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Responsible committee: GSE/33 Gas supply

Interested committees:

Title: Draft BS EN 1594 BS :2024/A1 Gas infrastructure - Pipelines for maximum operating pressure over 16 bar - Functional requirements.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
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- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

Gas infrastructure - Pipelines for maximum operating pressure over 16 bar - Functional requirements

Infrastructures gazières - Canalisations pour pression maximale de service supérieure à 16 bar - Prescriptions fonctionnelles

Gasinfrastruktur - Rohrleitungen für einen maximal zulässigen Betriebsdruck über 16 bar - Funktionale Anforderungen

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 234.

This draft amendment A1, if approved, will modify the European Standard EN 1594:2024. 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.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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

Contents	Page
European foreword	3
1 Addition to the foreword	4
2 Addition to Clause 3	4
3 Addition to 6.1.....	4
4 Addition to 6.2.....	4
5 Modification to 7.1.1	5
6 Addition to 7.1.2.2	5
7 Addition to 7.2.1	5
8 Addition to 7.4.2.2	5
9 Addition to 7.5.....	5
10 Addition to 7.9.2	5
11 Addition to 7.12	5
12 Addition to 7.14	5
13 Addition to 8.1.5.1	6
14 Addition to 8.1.5.4	6
15 Addition to 8.4.....	6
16 Addition to 8.6.....	6
17 Replacement of 10.10.....	6
18 Replacement of Annex B.....	8

European foreword

This document (EN 1594:2024/prA1:2025) has been prepared by Technical Committee CEN/TC 234 “Gas Infrastructure”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

1 Addition to the foreword

In the foreword replace the 5th paragraph or add at the end of the 5th paragraph:

“The main changes between this document and the previous edition EN 1594:2024 are as follows:

- the full standard has been adapted to include hydrogen as a gas in this standard to replace the informative annex of the previous edition,
- addition of provisions to be considered when using an existing line to transport gaseous hydrogen,
- addition of provisions on fracture mechanical verifications for gaseous hydrogen service,
- replacement of Annex B (informative) “Hydrogen gas pipelines” by Annex B (normative) “Fatigue crack growth calculations and monitoring concepts for hydrogen service”.

2 Addition to Clause 3

In 3.11, replace title and definition by:

gas/gases

gaseous energy carrier which is in the gaseous state at a temperature of 15 °C and under an absolute pressure of 0,1 MPa

Note 1 to entry: This includes hydrogen rich and methane rich gases, dimethyl ether (DME) and propane and butanes and admixtures.

Add the following new definitions:

3.48

blended hydrogen operation

transmission of a gas mixture where the hydrogen partial pressure is over 2 bar

3.49

conversion

conversion of a gas pipeline as defined by this document refers to switching from the transportation of methane-rich gases to the transportation of hydrogen gas pursuant to the scope of application

3.50

hydrogen service

operating a gas transmission system with a hydrogen pressure over 2 bar

3 Addition to 6.1

In 6.1, add as last sentence:

“For hydrogen or blended hydrogen operations, adequate monitoring for pressure cycling shall be incorporated.”

4 Addition to 6.2

In 6.2, add as last sentence:

“For hydrogen or blended hydrogen operations, it shall be ensured that the pressure cycling shall be within the design case.”