Gas infrastructure - Quality of gas - Group H

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16726:2025 sisaldab Euroopa standardi EN 16726:2025 ingliskeelset teksti.	This Estonian standard EVS-EN 16726:2025 consists of the English text of the European standard EN 16726:2025.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.09.2025.	Date of Availability of the European standard is 10.09.2025.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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English Version

Gas infrastructure - Quality of gas - Group H

Infrastructures gazières - Qualité du gaz - Groupe H

Gasinfrastruktur - Beschaffenheit von Gas - Gruppe H

This European Standard was approved by CEN on 20 July 2025.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard 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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

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

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European foreword

This document (EN 16726:2025) has been prepared by Technical Committee CEN/TC 234 “Gas infrastructure”, the secretariat of which is held by DIN.

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 March 2026, and conflicting national standards shall be withdrawn at the latest by March 2026.

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 supersedes EN 16726:2015+A1:2018.

EN 16726:2024 includes the following significant technical changes with respect to EN 16726:2015+A1:2018:

— Inclusion of Wobbe index requirements in 5.1, Table 1, Wobbe index exit classification requirement (5.3), a Wobbe index entry recommendation (5.2) and related informative Annexes:

— Annex B – Limitations of the end-use gas applications to cope with the broad Wobbe index entry range;

— Annex C – Possible mitigation measures for Wobbe index changes;

— Annex D – General considerations on on-site adjustment of combustion processes and applications;

— Annex E – Current national Wobbe index requirements;

— Annex F – Rate of change of Wobbe index;

— Inclusion of the Calorific value in relationship to the Wobbe index (5.1, Table 1) and related informative Annex G

— Revision of the minimum relative density (5.1, Table 1);

— Addition of an admissible hydrogen concentration (5.1, Table 1) and related informative Annex K;

— Revision of the admissible sulfur content (5.1, Table 1) and addition of related informative Annex H;

— Revision of the admissible oxygen content (5.1, Table 1) and addition of related informative Annex I;

— Revision of the admissible methane number in this standard (5.1, Table 1) in relation to the general design of engines and addition of related informative Annex L.

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.

The need for a European Standard concerning the specification of the quality of gases of group H is derived from the standardization request M/400 issued to CEN by the European Commission.

According to this standardization request (dated back to 2007) and the more recent EU climate policies, the goal is to define specifications that are as wide as possible within reasonable costs. This means that the specifications enhance the free flow of gas within the internal EU market, in order to promote competition and security of supply minimizing the negative effects on gas infrastructure and gas networks, efficiency and the environment and allow appliances to be used without compromising safety.

Some requirements specified in this European Standard, Clause 5, cannot be implemented by

- Denmark
- Estonia
- Hungary
- Ireland
- Italy
- Romania
- The Netherlands

due to existing conflicting national legislation. The related A-Deviations are listed in Annex.

NOTE BSI announced the notification of A-Deviations for the requirements on Wobbe index Class specified (5.3.2), Oxygen (5.1, Table 1) and Hydrogen (5.1, Table 1) referring to Gas Safety Management Regulations, GSMR, for the UK gas supply being enforced in UK Law.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

Introduction

This document sets requirements for gas quality with the aim to allow the free flow of gas between the CEN member states and to enable the security of supply taking into account the impact on the whole value chain from gas production and supply to end users.

The Wobbe index and oxygen requirements in this document are based on the proposal of the CEN Sector Forum Gas Joint Working Group Pre-normative studies of H-gas quality parameters (short: CEN SFGas Gas Quality Study, GQS).

NOTE Responsibility issues in the context of this document are subject to European or national regulations.

This document includes requirements on Wobbe index aspects which need an appropriate national/European framework as pre-condition for the implementation of the standard. This is expressed in Clause 5.3.6 Implementation of Wobbe index Classification.

Furthermore, this document does not define an acceptable rate of change (RoC) of Wobbe index as pre-normative work is needed; an informative Annex F is part of this document. A separate CEN process on RoC is intended to start in CEN/TC 234.

1 Scope

This document specifies gas quality characteristics, parameters and their limits, for gases classified as group H that are to be transmitted, injected into and withdrawn from storages, distributed and utilized.

NOTE For information on gas families and gas groups, see EN 437.

This document specifies a Wobbe index classification system which is applicable, if the corresponding national/European framework is available to support it.

This document does not give any threshold for the rate of change of Wobbe index or other gas quality parameters. Nevertheless, acknowledging the serious influence of the rate of change of Wobbe index and/or GCV on the proper functioning of a number of end-use applications, such as gas engines and gas turbines, the risks of the rate of change within the Wobbe index exit range is described in Annex F.

This document does not cover gases conveyed on isolated networks.

For specific requirements on the quality of biomethane and other renewable and low-carbon gases injected into the grid, reference is made to EN 16723-1.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 13443, *Natural gas - Standard reference conditions (ISO 13443)*

EN ISO 14532, *Natural gas - Vocabulary (ISO 14532)*

ISO 14912, *Gas analysis — Conversion of gas mixture composition data*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 14532 and the following apply.

NOTE Some legal definitions which are considered useful for the topic of this document are given in Annex M for information. Due to the normative character of this clause, they cannot be integrated here.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp/

— IEC Electropedia: available at https://www.electropedia.org/

3.1
isolated network
network where transmission, distribution and utilization of gas are combined and which is physically unconnected to other networks

3.2
application
installation or process that utilizes the transported and distributed gas

Note 1 to entry: Some examples of gas applications are: gas appliances (domestic or commercial), processes (chemical or industrial), turbines, engines, burners, etc.