

SURVEOTSTARBELISED ÕMBLUSTETA TERASTORUD.
TEHNILISED TARNETINGIMUSED. OSA 2: SÜSINIK- JA
LEGEERTERASEST TORUD, MILLEL ON
KINDLAKSMÄÄRATUD OMADUSED KÕRGENDATUD
TEMPERATUURIL

Seamless steel tubes for pressure purposes - Technical
delivery conditions - Part 2: Non-alloy and alloy steel
tubes with specified elevated temperature properties

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 10216-2:2025 sisaldab Euroopa standardi EN 10216-2:2024 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 13.11.2024.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 10216-2:2025 consists of the English text of the European standard EN 10216-2:2024.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 13.11.2024.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 23.040.10, 77.140.75

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EUROPEAN STANDARD

EN 10216-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes EN 10216-2:2013+A1:2019

English Version

Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties

Tubes sans soudure en acier pour service sous pression - Conditions techniques de livraison - Partie 2: Tubes en acier non allié et allié avec caractéristiques spécifiées à température élevée

Nahtlose Stahlrohre für Druckbeanspruchungen - Technische Lieferbedingungen - Teil 2: Rohre aus unlegierten und legierten Stählen mit festgelegten Eigenschaften bei erhöhten Temperaturen

This European Standard was corrected and reissued by the CEN-CENELEC Management Centre on 26 February 2025.

This European Standard was approved by CEN on 13 October 2024.

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.

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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 10216-2:2024) has been prepared by Technical Committee CEN/TC 459 “ECISS – European Committee for Iron and Steel Standardization”¹, 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 May 2025 and conflicting national standards shall be withdrawn at the latest by May 2025.

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 10216-2:2013+A1:2019.

For the list of the most significant technical changes that were made in EN 10216-2:2024, see Annex B.

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.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

EN 10216 consists of the following parts, under the general title “*Seamless steel tubes for pressure purposes – Technical delivery conditions*”:

- *Part 1: Non-alloy steel tubes with specified room temperature properties*
- *Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties* (the present document)
- *Part 3: Alloy fine grain steel tubes*
- *Part 4: Non-alloy and alloy steel tubes with specified low temperature properties*
- *Part 5: Stainless steel tubes*

Another European Standard series covering tubes for pressure purposes is:

EN 10217 series, *Welded steel tubes for pressure purposes – Technical delivery conditions*

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 organizations 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.

¹ Through its sub-committee SC 10 “Steel tubes, and iron and steel fittings” (secretariat: UNI).

1 Scope

This document specifies the technical delivery conditions in two test categories for seamless tubes of circular cross section, with specified elevated temperature properties, made of non-alloy and alloy steel.

This Part of EN 10216 is also applicable to tubes of non-circular cross section; necessary modification will be agreed at the time of enquiry and order.

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 10020:2000, *Definition and classification of grades of steel*

EN 10021:2006, *General technical delivery conditions for steel products*

EN 10027-1:2016, *Designation systems for steels - Part 1: Steel names*

EN 10027-2:2015, *Designation systems for steels - Part 2: Numerical system*

EN 10168:2004, *Steel products - Inspection documents - List of information and description*

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

EN 10220:2002, *Seamless and welded steel tubes - Dimensions and masses per unit length*

EN 10266:2003, *Steel tubes, fittings and structural hollow sections - Symbols and definitions of terms for use in product standards*

EN ISO 148-1:2016, *Metallic materials - Charpy pendulum impact test - Part 1: Test method (ISO 148-1:2016)*

EN ISO 377:2017, *Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:2017)*

EN ISO 2566-1:2021, *Steel - Conversion of elongation values - Part 1: Carbon and low-alloy steels (ISO 2566-1:2021, Corrected version 2022-06)*

EN ISO 4885:2018, *Ferrous materials - Heat treatments - Vocabulary (ISO 4885:2018)*

EN ISO 6892-1:2019, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1:2019)*

EN ISO 6892-2:2018, *Metallic materials - Tensile testing - Part 2: Method of test at elevated temperature (ISO 6892-2:2018)*

EN ISO 8492:2013, *Metallic materials - Tube - Flattening test (ISO 8492:2013)*

EN ISO 8493:2004, *Metallic materials - Tube - Drift expanding test (ISO 8493:1998)*

EN ISO 8495:2013, *Metallic materials - Tube - Ring expanding test (ISO 8495:2013)*

EN ISO 8496:2013, *Metallic materials - Tube - Ring tensile test (ISO 8496:2013)*

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

EN ISO 10893-1:2011,² *Non-destructive testing of steel tubes - Part 1: Automated electromagnetic testing of seamless and welded (except submerged arc-welded) steel tubes for the verification of hydraulic leak-tightness (ISO 10893-1)*

EN ISO 10893-3:2011,³ *Non-destructive testing of steel tubes - Part 3: Automated full peripheral flux leakage testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for the detection of longitudinal and/or transverse imperfections (ISO 10893-3)*

EN ISO 10893-8:2011,⁴ *Non-destructive testing of steel tubes - Part 8: Automated ultrasonic testing of seamless and welded steel tubes for the detection of laminar imperfections (ISO 10893-8)*

EN ISO 10893-10:2011,⁵ *Non-destructive testing of steel tubes - Part 10: Automated full peripheral ultrasonic testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of longitudinal and/or transverse imperfections (ISO 10893-10)*

EN ISO 14284:2022, *Steel and iron - Sampling and preparation of samples for the determination of chemical composition (ISO 14284:2022)*

ISO 11484:2019, *Steel products - Employer's qualification system for non-destructive testing (NDT) personnel*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10020:2000, EN 10021:2006, EN ISO 4885:2018 and EN 10266:2003 and the following apply.

3.1 test category

classification that indicates the extent and level of inspection and testing

3.2 employer

organization for which a person works on a regular basis

Note 1 to entry: The employer may be either the tube manufacturer or supplier or a third party organization providing Non-Destructive Testing (NDT) services.

² As impacted by EN ISO 10893-1:2011/A1:2020.

³ As impacted by EN ISO 10893-3:2011/A1:2019 and EN ISO 10893-3:2011/A2:2020.

⁴ As impacted by EN ISO 10893-8:2011/A1:2020.

⁵ As impacted by EN ISO 10893-10:2011/A1:2020.