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BSI Standards Publication

Seamless steel tubes for pressure purposes — Technical delivery conditions

Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties

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National foreword

This British Standard is the UK implementation of EN 10216-2:2024. It supersedes BS EN 10216-2:2013+A1:2019, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/110, Steel Tubes, and Iron and Steel Fittings.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2024.

Amendments/corrigenda issued since publication

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EUROPEAN STANDARD **EN 10216-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2024

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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 approved by CEN on 13 October 2024.

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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 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).

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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)*