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Edition: 2014-10-01

Welded steel tubes for pressure purposes — Technical delivery conditions

Part 3: Electric welded and submerged arc welded alloy fine grain steel tubes with specified room, elevated and low temperature properties

Note:

Because of possible comments, the final version of this ÖNORM can differ from the present Draft.

Please send your comments (in writing) by **2014-11-15** to Austrian Standards Institute.

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responsible Committee 063

Steel pipes

Explanations concerning Draft

The present Draft European Standard **EN 10217-3** has been submitted to CEN members for voting. In case of a positive result of the voting as required by CEN/CENELEC regulations, this Draft will be published as EN.

Like all member organizations of CEN, Austrian Standards Institute is basically obliged to implement European Standards in Austria and to withdraw conflicting standards.

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Comments on this Draft

Please find below some practical instructions intended to offer you and the responsible committee assistance for the processing of comments and proposals for modification:

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Structure Please use a new line for each comment. This facilitates the attribution

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Aspects concerning patent law
The recipients of this Draft ÖNORM are requested to add information on

any patent rights known to their comments and to provide supporting

documentation, if available.

EN 10217-3 rev

August 2014

ICS 23.040.10; 77.140.75

Will supersede EN 10217-3:2002

English Version

Welded steel tubes for pressure purposes - Technical delivery conditions - Part 3: Electric welded and submerged arc welded alloy fine grain steel tubes with specified room, elevated and low temperature properties

Tubes soudés en acier pour service sous pression -Conditions techniques de livraison - Partie 3 : Tubes en acier allié à grain fin xxxxxxxxxx Geschweißte Stahlrohre für Druckbeanspruchungen Technische Lieferbedingungen - Teil 3: Elektrisch
geschweißte und unterpulvergeschweißte Rohre aus
legierten Feinkornbaustählen mit festgelegten
Eigenschaften bei Raum-, erhöhter und erniedrigter
Temperatur

This draft European Standard is submitted to CEN members for second enquiry. It has been drawn up by the Technical Committee ECISS/TC 110.

If this draft becomes a European Standard, 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.

This draft European Standard 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 EUR OPÉEN DE NORMALISATION EUR OPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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AS+ Shop 18.11.201

Foreword

This document (prEN 10217-3:2014) has been prepared by Technical Committee ECISS/TC 110 "Steel tubes and fittings for steel tubes", the secretariat of which is held by UNI.

This document is currently submitted to the 2nd Enquiry.

This document will supersede EN 10217-3:2002.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 97/23/EC.

For relationship with EU Directive 97/23/EC, see informative Annex ZA, which is an integral part of this document.

This European Standard consists of the following parts, under the general title *Welded steel tubes for pressure purposes – Technical delivery conditions*:

- Part 1: Electric welded and submerged arc welded non-alloy steel tubes with specified room temperature properties
- Part 2: Electric welded non-alloy and alloy steel tubes with specified elevated temperature properties
- Part 3: Electric welded and submerged arc welded alloy fine grain steel tubes with specified room, elevated and low temperature properties
- Part 4: Electric welded non-alloy and alloy steel tubes with specified low temperature properties
- Part 5: Submerged arc welded non-alloy and alloy steel tubes with specified elevated temperature properties
- Part 6: Submerged arc welded non-alloy steel tubes with specified low temperature properties
- Part 7: Stainless steel tubes

Another European Standard series covering tubes for pressure purposes is:

EN 10216, Seamless steel tubes for pressure purposes

1 Scope

This Part of EN 10217 specifies the technical delivery conditions for two test categories of electric welded and submerged arc longitudinally (SAWL) or helically (SAWH) welded tubes of circular cross section, made from weldable fine grain steel.

These tube grades are intended to support the essential requirements of EU Directive 97/23/EC in respect of pressure equipment covered under all relevant Categories as set out in Article 9 of that Directive.

NOTE Once this standard is published in the Official Journal of the European Union (OJEU), presumption of conformity to the Essential Safety Requirements (ESR) of Directive 97/23/EC is limited to the technical data for the materials in this standard and does not presume adequacy of the material for a specific item of pressure equipment. Consequently, the assessment of the technical data stated in this material standard against the design requirements of this specific item of equipment to verify that the ESRs of the Pressure Equipment Directive are satisfied, needs to be done by the designer or manufacturer of the pressure equipment, taking also into account the subsequent manufacturing processes which may affect properties of the base materials.

NOTE For further information see the guideline of European Commission and the Member State for the Interpretation of Directive 97/23/EC, Annex I.

2 Normative references

The following referenced documents are indispensable for the application 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, Definitions and classification of grades of steel

EN 10021, General technical delivery conditions for steel products

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

EN 10027-2, Designation systems for steels — Part 2: Numerical systems

EN 10052, Vocabulary of heat treatment terms for ferrous products

EN 10168, Steel products — Inspection documents — List of information and description

EN 10204, Metallic products — Types of inspection documents

EN 10220, Seamless and welded steel tubes — Dimensions and masses per unit length

EN 10266, Steel tubes, fittings and structural hollow sections — Symbols and definition of terms for use in product standards

CEN/TR 10261, Iron and steel — Review of available methods of chemical analysis

EN ISO 148-1, Metallic materials — Charpy pendulum impact test — Part 1: Test method

EN ISO 377, Steel and steel products — Location and preparation of samples and test pieces for mechanical testing

EN ISO 643, Steels — Micrographic determination of the apparent grain size

EN ISO 2566-1, Steel — Conversion of elongation values — Part 1: Carbon and low-alloy steels

EN ISO 5173, Destructive tests on welds in metallic materials - Bend tests

EN ISO 6892-1, Metallic materials — Tensile testing — Part 1: Method of test at room temperature

EN ISO 6892-2, Metallic materials — Tensile testing — Part 1: Method of test at elevated temperature

EN ISO 8492, Metallic materials — Tubes — Flattening test

EN ISO 8493, Metallic materials — Tubes — Drift expanding test

EN ISO 8495, Metallic materials — Tubes — Ring expanding test

EN ISO 8496, Metallic materials — Tubes — Ring tensile test

EN ISO 10893-1, 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.

EN ISO 10893-2, Non-destructive testing of steel tubes — Part 2: Automated eddy current testing of seamless and welded (except submerged arc-welded) steel tubes for the detection of imperfections.

EN ISO 10893-3, 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.

EN ISO 10893-6, Non-destructive testing of steel tubes — Part 6: Radiographic testing of the weld seam of welded steel tubes for the detection of imperfections.

EN ISO 10893-7, Non-destructive testing of steel tubes — Part 7: Digital radiographic testing of the weld seam of welded steel tubes for the detection of imperfections

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

EN ISO 10893-9, Non-destructive testing of steel tubes — Part 9: Automated ultrasonic testing for the detection of laminar imperfections in strip/plate used for the manufacture of welded steel tubes.

EN ISO 10893-10, 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.

EN ISO 10893-11, Non-destructive testing of steel tubes — Part 11: Automated ultrasonic testing of weld seam of welded steel tubes for the detection of longitudinal and transverse imperfections

EN ISO 14174, Welding consumables - Fluxes for submerged arc welding and electroslag welding - Classification

EN ISO 14284, Steel and iron — Sampling and preparation of samples for the determination of chemical composition

EN ISO 17639, Destructive tests on welds in metallic materials — Macroscopic and microscopic examination of welds

ISO 11484:2009, 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, EN 10021, EN 10052, EN 10266 and the following apply:

3.1

test category

classification that indicates the extent and level of inspection and testing