

Irish Standard I.S. EN 10217-7:2014

Welded steel tubes for pressure purposes -Technical delivery conditions - Part 7: Stainless steel tubes

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I.S. EN 10217-7:2014

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English Version

Welded steel tubes for pressure purposes - Technical delivery conditions - Part 7: Stainless steel tubes

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Foreword

This document (EN 10217-7:2014) has been prepared by Technical Committee ECISS/TC 110 "Steel tubes, and iron and steel fittings", the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by April 2015 and conflicting national standards shall be withdrawn at the latest by April 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10217-7:2005.

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, 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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This Part of EN 10217 specifies the technical delivery conditions in two test categories for welded tubes of circular cross-section made of austenitic and austenitic-ferritic stainless steel which are intended for pressure and corrosion resisting purposes at room temperature, at low temperatures or at elevated temperatures.

NOTE Once this standard is published in the Official Journal of the European Union (OJEU) under Directive 97/23/EC, pressure equipment directive, presumption of conformity to the Essential Safety Requirements (ESR) of Directive 97/23/EC is limited to technical data of materials in this standard and does not presume adequacy of the material to a specific item of 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.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10020, Definition 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 system

EN 10028-7:2007, Flat products made of steels for pressure purposes - Part 7: Stainless steels

EN 10052, Vocabulary of heat treatment terms for ferrous products

EN 10088-1, Stainless steels - Part 1: List of stainless steels

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

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

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

CEN/TR 10261, Iron and steel - European standards for the determination of chemical composition

EN ISO 148-1:2010, Metallic materials - Charpy pendulum impact test - Part 1: Test method (ISO 148-1:2009)

EN ISO 377:2013, Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:2013)

EN ISO 1127, Stainless steel tubes - Dimensions, tolerances and conventional masses per unit length (ISO 1127)

EN ISO 2566-2, Steel - Conversion of elongation values - Part 2: Austenitic steels (ISO 2566-2)

EN ISO 3651-2:1998, Determination of resistance to intergranular corrosion of stainless steels - Part 2: Ferritic, austenitic and ferritic-austenitic (duplex) stainless steels - Corrosion test in media containing sulfuric acid (ISO 3651-2:1998)

EN ISO 5173:2010, Destructive tests on welds in metallic materials - Bend tests (ISO 5173:2009)

EN ISO 6892-1:2009, Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1:2009)



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