

Surveotstarbelised õmblusteta terastorud. Tehnilised tarnetingimused. Osa 1: Süsinikterasest torud, millel on kindlaksmääratud omadused toatemperatuuril

Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 1: Non-alloy steel tubes with specified room temperature properties

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 10216-1:2013 sisaldab Euroopa standardi EN 10216-1:2013 inglisekeelset teksti.	This Estonian standard EVS-EN 10216-1:2013 consists of the English text of the European standard EN 10216-1:2013.
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English Version

Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 1: Non-alloy steel tubes with specified room temperature properties

Tubes sans soudure en acier pour service sous pression -
Conditions techniques de livraison - Partie 1 : Tubes en
acier non allié avec caractéristiques spécifiées à
température ambiante

Nahtlose Stahlrohre für Druckbeanspruchungen -
Technische Lieferbedingungen - Teil 1: Rohre aus
unlegierten Stählen mit festgelegten Eigenschaften bei
Raumtemperatur

This European Standard was approved by CEN on 17 August 2013.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Symbols	6
5 Classification and designation.....	6
5.1 Classification.....	6
5.2 Designation	6
6 Information to be supplied by the purchaser	7
6.1 Mandatory information.....	7
6.2 Options	7
6.3 Example of an order	8
7 Manufacturing process	8
7.1 Steelmaking process.....	8
7.2 Tube manufacture and delivery conditions	8
8 Requirements	9
8.1 General.....	9
8.2 Chemical composition	9
8.2.1 Cast analysis	9
8.2.2 Product analysis	11
8.3 Mechanical properties.....	12
8.3.1 Mechanical properties for quality TR2.....	12
8.3.2 Mechanical properties for quality TR1.....	12
8.4 Appearance and internal soundness.....	13
8.4.1 Appearance	13
8.4.2 Internal soundness	13
8.5 Straightness	14
8.6 Preparation of ends	14
8.7 Dimensions, masses and tolerances.....	14
8.7.1 Diameter and wall thickness.....	14
8.7.2 Mass	14
8.7.3 Lengths.....	14
8.7.4 Tolerances	17
9 Inspection	17
9.1 Types of inspection	17
9.2 Inspection documents.....	18
9.2.1 Types of inspection documents.....	18
9.2.2 Content of inspection documents.....	18
9.3 Summary of inspection and verification testing	19
10 Sampling	20
10.1 Frequency of tests	20
10.1.1 Test unit.....	20
10.1.2 Number of sample tubes per test unit.....	20
10.2 Preparation of samples and test pieces.....	20
10.2.1 Selection and preparation of samples for product analysis	20
10.2.2 Location, orientation and preparation of samples and test pieces for mechanical tests.....	20
11 Verification test methods.....	21

11.1	Chemical analysis	21
11.2	Tensile test	22
11.3	Impact test	22
11.4	Leak tightness test	23
11.4.1	Hydrostatic test	23
11.4.2	Electromagnetic test	23
11.5	Dimensional inspection	23
11.6	Visual examination	23
11.7	Non-Destructive Testing	23
11.8	Retest, sorting and reprocessing	24
12	Marking	24
12.1	Marking to be applied	24
12.2	Additional marking	24
13	Protection	24
Annex A	(informative) Technical changes from the previous edition	25
A.1	Introduction	25
A.2	Technical changes	25
Annex ZA	(informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC	26
Bibliography	27

Foreword

This document (EN 10216-1:2013) 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 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 June 2014, and conflicting national standards shall be withdrawn at the latest by June 2014.

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 10216-1:2002.

For the list of the most significant technical changes that have been made in this new edition, see Annex A.

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(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard 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 steels tubes with specified elevated temperature properties;*
- *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, *Welded steel tubes for pressure purposes — Technical delivery conditions.*

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, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the technical delivery conditions for two qualities TR1 and TR2 of seamless tubes of circular cross section with specified room temperature properties made of non-alloy quality steel.

NOTE Once this standard is published in the Official Journal of the European Union (OJEU) under Directive 97/23/EC, 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 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*

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

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

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

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

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

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

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 leaktightness (ISO 10893-1)*

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 (ISO 10893-2)*

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 (ISO 10893-3)*

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 (ISO 10893-10)*

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

ISO 11484, *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

employer

organization for which a person works on a regular basis

Note 1 to entry: The employer may be either the tube manufacturer or a third party organization providing non-destructive testing (NDT) services.

4 Symbols

For the purpose of this Part of EN 10216, the symbols given in EN 10266 apply.

5 Classification and designation

5.1 Classification

According to the classification system in EN 10020, the steels are classified as non-alloy quality steels.

5.2 Designation

5.2.1 For the tubes covered by this Part of EN 10216 the steel designation consists of:

— the number of this Part of EN 10216;

plus either:

— the steel name in accordance with EN 10027-1;

or:

— the steel number allocated in accordance with EN 10027-2.