

**Surveotstarbelised keevitatud
terastorud. Tehnilised tannetingimused.
Osa 7: Roostevabast terasest torud**

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

EESTI STANDARDI EESSÖNA**NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 10217-7:2005 sisaldb Euroopa standardi EN 10217-7:2005 ingliskeelset teksti.	This Estonian standard EVS-EN 10217-7:2005 consists of the English text of the European standard EN 10217-7:2005.
Käesolev dokument on jõustatud 28.04.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 28.04.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This Part of this European Standard 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 applied for pressure and corrosion resisting purposes at room temperature, at low temperatures or at elevated temperatures	Scope: This Part of this European Standard 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 applied for pressure and corrosion resisting purposes at room temperature, at low temperatures or at elevated temperatures
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ICS 23.040.10, 77.140.75**Võtmesõnad:** acceptance testing, circular form, measurement, orders : sales documents, pipes : tubes, specifications, temperature, testing, thermal stress, tightness, tolerances, tolerances (measurement), weight : mass, weights, weldability, welded, welded tubes, verification**Hinnagrupp R**

EUROPEAN STANDARD

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English version

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

Tubes soudés en acier pour service sous pression -
Conditions techniques de livraison - Partie 7: Tubes en
acières inoxydables

Geschweißte Stahlrohre für Druckbeanspruchungen
Technische Lieferbedingungen - Teil 7: Rohre aus
nichtrostenden Stählen

This European Standard was approved by CEN on 14 October 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

Foreword	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Symbols	6
5 Classification and designation	7
5.1 Classification	7
5.2 Designation	7
6 Information to be supplied by the purchaser	7
6.1 Mandatory information	7
6.2 Options	7
6.3 Examples of an order	8
6.3.1 Example 1	8
6.3.2 Example 2	8
7 Manufacturing process	9
7.1 Steelmaking process	9
7.2 Tube manufacture and delivery conditions	9
8 Requirements	11
8.1 General	11
8.2 Chemical composition	12
8.2.1 Cast analysis	12
8.2.2 Product analysis	12
8.3 Mechanical properties	17
8.3.1 At room temperature	17
8.3.2 At elevated temperature	17
8.3.3 At low temperature	17
8.4 Corrosion resistance	22
8.5 Appearance and internal soundness	22
8.5.1 Appearance	22
8.5.2 Internal soundness	23
8.6 Straightness	23
8.7 Preparation of ends	23
8.8 Dimensions, masses and tolerances	24
8.8.1 Outside diameter and wall thickness	24
8.8.2 Mass	24
8.8.3 Lengths	24
8.8.4 Tolerances	24
9 Inspection	27
9.1 Type of inspection	27
9.2 Inspection documents	27
9.2.1 Types of inspection documents	27
9.2.2 Content of inspection documents	27
9.3 Summary of inspection and testing	28
10 Sampling	28
10.1 Test unit	28
10.2 Preparation of samples and test pieces	30
10.2.1 Selection and preparation of samples for product analysis	30
10.2.2 Location, orientation and preparation of samples and test pieces for mechanical tests	30
11 Test methods	31
11.1 Chemical analysis	31
11.2 Tensile test on the base material	31
11.2.1 At room temperature	31
11.2.2 At elevated temperature	32
11.3 Transverse tensile test on the weld	32
11.4 Technological tests	32
11.4.1 General	32
11.4.2 Flattening test	32
11.4.3 Ring tensile test	33

11.4.4	Drift expanding test	33
11.4.5	Ring expanding test	33
11.5	Weld bend test	33
11.6	Impact test	33
11.7	Intergranular corrosion test	34
11.8	Leak tightness test	34
11.8.1	Hydrostatic test	34
11.8.2	Eddy current test	35
11.9	Dimensional inspection	35
11.10	Visual examination	35
11.11	Non-destructive testing	35
11.12	Material identification	35
11.13	Retests, sorting and reprocessing	36
12	Marking	36
12.1	Marking to be applied	36
12.2	Additional marking	36
13	Handling and packaging	36
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC		37

Foreword

This document (EN 10217-7:2005) has been prepared by Technical Committee ECISS /TC 29, "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 August 2005, and conflicting national standards shall be withdrawn at the latest by August 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 97/23/EC, see informative Annex ZA, which is an integral part of this document.

Other parts of EN 10217 are:

- *Part 1: 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: Alloy fine grain steel tubes;*
- *Part 4: Electric welded non-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*

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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 applied for pressure and corrosion resisting purposes at room temperature, at low temperatures or at elevated temperatures.

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 473, *Non destructive testing - Qualification and certification of NDT personnel - General principles*.

EN 910, *Destructive tests on weld in metallic materials - Bend tests*.

EN 10002-1, *Metallic materials - Tensile testing - Part 1: Method of test at ambient temperature*.

EN 10002-5, *Metallic materials - Tensile testing - Part 5: Method of test at elevated temperature*.

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

EN 10021:1993, *General technical delivery requirements for steel and iron products*.

EN 10027-1, *Designation systems for steels - Part 1: Steel names, principal symbols*.

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

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

EN 10045-1, *Metallic materials - Charpy impact test - Part 1: Test method*.

EN 10052:1993, *Vocabulary of heat treatment terms for ferrous products*.

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

EN 10088-2, *Stainless steels – Part 2: Technical delivery conditions for sheet/plate and strip for general purposes*.

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

EN 10204, *Metallic products - Types of inspection documents*.

EN 10233, *Metallic materials - Tube - Flattening test*.

EN 10234, *Metallic materials - Tube - Drift expanding test*.

EN 10236, *Metallic materials - Tube - Ring expanding test*.

EN 10237, *Metallic materials - Tube - Ring tensile test*.

EN 10246-2, *Non destructive testing of steel tubes - Part 2: Automatic eddy current testing of seamless and welded (except submerged arc-welded) austenitic and austenitic-ferritic steel tubes for verification of hydraulic leak-tightness*.

EN 10246-3, *Non-destructive testing of steel tubes - Part 3: Automatic eddy current testing of seamless and welded (except submerged arc welded) steel tubes for the detection of imperfections*.

EN 10246-7, *Non destructive testing of steel tubes - Part 7: Automatic full peripheral ultrasonic testing of seamless and welded (except submerged arc welded) steel tubes for the detection of longitudinal imperfections*.

EN 10246-9, *Non-destructive testing of steel tubes - Part 9: Automatic ultrasonic testing of the weld seam of submerged arc-welded steel tubes for the detection of longitudinal and/or transverse imperfections*.

EN 10246-10, *Non-destructive testing of steel tubes - Part 10: Radiographic testing of weld seam of automatic fusion arc-welded steel tubes for the detection of imperfections*.

EN 10246-16, *Non destructive testing of steel tubes - Part 16: Automatic ultrasonic testing of the area adjacent to the weld seam of welded steel tubes for the detection of laminar imperfections*.

EN 10246-17, *Non destructive testing of steel tubes – Part 17: Ultrasonic testing of tube ends of seamless and welded steel tubes for the detection of laminar imperfections*.

EN 10256, *Non destructive testing of steel tubes – Qualification and competence of level 1 and level 2 non-destructive testing personnel*.

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

EN ISO 377 *Steel and steel products - Location of samples and test pieces for mechanical testing*. (ISO 377:1997).

EN ISO 1127, *Stainless steel tubes - Dimensions, tolerances and conventional masses per unit length* (ISO 1127:1992).

EN ISO 2566-2, *Steel - Conversion of elongation values - Part 2: Austenitic steels* (ISO 2566-2:1984).

EN ISO 3651-2, *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 14284, *Steel and iron - Sampling and preparation of samples for the determination of the chemical composition* (ISO 14284:1996).

CR 10260, *Designation systems for steel: Additional symbols*.

CR 10261, *ECIIS Information Circular 11 - Iron and steel - Review of available methods of chemical analysis*.

3 Terms and definitions

For the purpose of this Part of EN 10217, the terms and definitions given in EN 10020:2000, EN 10021:1993, EN 10052:1993 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 The employer may be either the tube manufacturer or supplier or a third party organization providing Non-Destructive Testing (NDT) services.

4 Symbols

For the purpose of this Part of EN 10217, the symbols given in EN 10266:2003 and the following apply.

- C1 and C2 category conformity indicators (see Clauses 7.2.1 and 7.2.3.);
- TC test category.

NOTE See also Table 2 for symbols of the delivery condition.