

**Surveotstarbelised õmblusteta  
terastorud. Tehnilised taretingimused.  
Osa 1: Kindlaksmääratud  
toatemperatuuriliste omadustega  
süsikterasest torud**

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

**EESTI STANDARDI EESSÖNA****NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 10216-1:2002 sisaldb Euroopa standardi EN 10216-1:2002 ingliskeelset teksti.	This Estonian standard EVS-EN 10216-1:2002 consists of the English text of the European standard EN 10216-1:2002.
Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kätesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

**Käsitlusala:**

This Part of EN 10216 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.

**Scope:**

This Part of EN 10216 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.

**ICS** 77.120.01, 77.140.01, 77.150.01

**Võtmesõnad:** chemical composition, cobalt alloys, definition, definitions, designations, high temperature, marking, mechanical properties, nickel alloys, production, specification (approval), specifications, steels, testing

**EUROPEAN STANDARD**

**EN 10216-1**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

May 2002

ICS 23.040.10; 77.140.75

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 25 April 2002.

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 Management Centre 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 Management Centre has the same status as the official versions.

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



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

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## Foreword

This document (EN 10216-1:2002) 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 November 2002, and conflicting national standards shall be withdrawn at the latest by November 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(s).

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

Other Parts of EN 10216 are:

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This Part of EN 10216 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.

## 2 Normative references

This European Standard incorporates by date or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For date references, subsequent amendments to or revisions of, any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

The requirements of this European Standard rule when they differ from those in the standards and documents referred to below:

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

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

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

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

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

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

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

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

ENV 10220, *Seamless and welded steel tubes - Dimensions and masses per unit length*.

EN 10246-1, *Non-Destructive Testing of steel tubes Part 1 : Automatic electromagnetic testing of seamless and welded (except submerged arc welded) ferromagnetic 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 10246-5, *Non-Destructive Testing of steel tubes – Part 5: Automatic full peripheral magnetic transducer/flux leakage testing of seamless and welded (except submerged arc-welded) ferromagnetic steel tubes for the detection of longitudinal 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 10256, *Non-Destructive Testing of steel tubes - Qualification and competence of level 1 and level 2 NDT personnel*.

prEN 10168<sup>1)</sup>, *Iron and steel products - Inspection documents - List of information and description*

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1) In preparation, until this document is published as European Standard, the corresponding National standard should be agreed at the time of enquiry and order.

prEN 10266<sup>1)</sup>, *Steel tubes, fittings and structural hollow sections - Symbols and definition of terms for use in product standards*

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

EN ISO 2566-1, *Steel - Conversion of elongation values – Part 1: Carbon and low-alloy steels (ISO 2566-1:1984)*

ISO 14284, *Steel and iron - Sampling and preparation of samples for the determination of chemical composition*

CR 10260, *Designation systems for steel - Additional symbols*

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

### **3 Terms and definitions**

For the purposes of this Part of EN 10216, the terms and definitions given in EN 10020, EN 10021, EN 10052, prEN 10266 and the following apply:

#### **3.1**

##### **employer**

organization for which a person works on a regular basis.

NOTE 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 prEN 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 and CR 10260;

or:

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