# Terastoodete määratlus

Definition of steel products



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 10079:2008 sisaldab Euroopa standardi EN 10079:2007 ingliskeelset teksti.

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# EUROPEAN STANDARD NORME EUROPÉENNE

# **EN 10079**

EUROPÄISCHE NORM

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ICS 01.040.77; 77.140.01

Supersedes EN 10079:1992

# **English Version**

# Definition of steel products

Définition des produits en acier

Begriffsbestimmungen für Stahlerzeugnisse

This European Standard was approved by CEN on 13 January 2007.

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 CEN Management Centre or to any CEN member.

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

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# **Foreword**

This document (EN 10079:2007) has been prepared by Technical Committee ECISS/TC 6 "Definition and classification", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by September 2007, and conflicting national standards shall be withdrawn at the latest by September 2007.

This document supersedes EN 10079:1992.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, ac ym. Sweden, Switzerland and United Kingdom.

# Introduction

There are various classification systems existing in Europe but this European Standard only deals with definitions for steel products manufactured by or used in the steel industry or by its customers. For example, Annex B provides guidance on the definition systems used in the former European Coal and Steel Community (ECSC) Treaty as well as the Statistical office of the European Communities and of the Harmonised Commodity Description and Coding System.

The entries that are presented in this European Standard have been ordered systematically, and have been grouped by steel products according to:

- shape and dimensions e.g. flat products, long products, heavy sections;
- appearance and surface condition e.g. coated flat products, bright products.

That, and the state of the stat This European Standard also contains an alphabetical index, which has been included at the end of this document.

# 1 Scope

This European Standard defines terms for steel products according to:

- a) shape and dimensions; and
- b) appearance and surface condition.

NOTE 1 Although the products are generally defined independently of their end uses or manufacturing processes, it has sometimes been necessary to make reference to these criteria.

NOTE 2 All dimensions given in this European Standard are nominal.

## 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 39, Loose steel tubes for tube and coupler scaffolds — Technical delivery conditions

EN 10017, Steel rod for drawing and/or cold rolling — Dimensions and tolerances

EN 10024, Hot rolled taper flange I sections — Tolerances on shape and dimensions

EN 10029, Hot rolled steel plates 3 mm thick or above — Tolerances on dimensions, shape and mass

EN 10034, Structural steel I and H sections — Tolerances on shape and dimensions

EN 10048, Hot rolled narrow steel strip — Tolerances on dimensions and shape

EN 10051:1991 + A1:1997, Continuously hot-rolled uncoated plate, sheet and strip of non-alloy and alloy steels - Tolerances on dimensions and shape (includes amendment A1:1997)

EN 10055, Hot rolled steel equal flange tees with radiused root and toes — Dimensions and tolerances on shape and dimension

EN 10056-1, Structural steel equal and unequal leg angles — Part 1: Dimensions

EN 10058, Hot rolled flat steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10059, Hot rolled square steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10060, Hot rolled round steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10061, Hot rolled hexagon steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10067, Hot rolled bulb flats — Dimensions and tolerances on shape, dimensions and mass

EN 10080, Steel for the reinforcement of concrete — Weldable reinforcing steel — General

EN 10092-1, Hot rolled spring steel flat bars — Part 1: Flat bars — Dimensions and tolerances on shape and dimensions

EN 10092-2, Hot rolled spring steel flat bars — Part 2: Ribbed and grooved spring leaves — Dimensions and tolerances on shape and dimensions

EN 10106, Cold rolled non-oriented electrical steel sheet and strip delivered in the fully processed state

EN 10107, Grain-oriented electrical steel sheet and strip delivered in the fully processed state

EN 10108, Round steel rod for cold heading and cold extrusion — Dimensions and tolerances

EN 10131: 2006, Cold rolled uncoated and zinc or zinc-nickel electrolytically coated low carbon and high yield strength steel flat products for cold forming - Tolerances on dimensions and shape

prEN 10138-2, Prestressing steels — Part 2: Wire

prEN 10138-4, Prestressing steels — Part 4: Bar

EN 10140, Cold rolled narrow steel strip — Tolerances on dimensions and shape

EN 10143, Continuously hot-dip coated steel sheet and strip — Tolerances on dimensions and shape

EN 10162, Cold rolled steel sections — Technical delivery conditions — Dimensional and cross-sectional tolerances

EN 10169-1, Continuously organic coated (coil coated) steel flat products — Part 1: General information (definitions, materials, tolerances, test methods)

EN 10202, Cold reduced tinmill products — Electrolytic tinplate and electrolytic chromium/chromium oxide coated steel

EN 10205, Cold reduced blackplate in coil form for the production of tinplate or electrolytic chromium/chromium oxide coated steel

EN 10208-1, Steel pipes for pipelines for combustible fluids — Technical delivery conditions — Part 1: Pipes of requirement class A

EN 10208-2, Steel pipes for pipelines for combustible fluids — Technical delivery conditions — Part 2: Pipes of requirement class B

EN 10210-2, Hot finished structural hollow sections of non-alloy and fine grain steels — Part 2: Tolerances, dimensions and sectional properties

EN 10216-1, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties

EN 10216-2, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties

EN 10216-3, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 3: Alloy fine grain steel tubes

EN 10216-4, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 4: Non-alloy and alloy steel tubes with specified low temperature properties

EN 10216-5, Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 5: Stainless steel tubes

- EN 10217-1, Welded steel tubes for pressure purposes Technical delivery conditions Part 1: Non-alloy steel tubes with specified room temperature properties
- EN 10217-2, Welded steel tubes for pressure purposes Technical delivery conditions Part 2: Electric welded non-alloy and alloy steel tubes with specified elevated temperature properties
- EN 10217-3, Welded steel tubes for pressure purposes Technical delivery conditions Part 3: Alloy fine grain steel tubes
- EN 10217-4, Welded steel tubes for pressure purposes Technical delivery conditions Part 4: Electric welded non-alloy steel tubes with specified low temperature properties
- EN 10217-5, Welded steel tubes for pressure purposes Technical delivery conditions Part 5: Submerged arc welded non-alloy and alloy steel tubes with specified elevated temperature properties
- EN 10217-6, Welded steel tubes for pressure purposes Technical delivery conditions Part 6: Submerged arc welded non-alloy steel tubes with specified low temperature properties
- EN 10217-7, Welded steel tubes for pressure purposes Technical delivery conditions Part 7: Stainless steel tubes
- EN 10218-2, Steel wire and wire products General Part 2: Wire dimensions and tolerances
- EN 10219-2, Cold formed welded structural hollow sections of non-alloy and fine grain steels Part 2: Tolerances, dimensions and sectional properties
- EN 10220, Seamless and welded steel tubes Dimensions and masses per unit length
- EN 10222-1, Steel forgings for pressure purposes Part 1: General requirements for open die forgings.
- EN 10224, Non-alloy steel tubes and fittings for the conveyance of aqueous liquids including water for human consumption Technical delivery conditions
- EN 10248-2, Hot rolled sheet piling of non alloy steels Part 2: Tolerances on shape and dimensions
- EN 10249-2, Cold formed sheet piling of non alloy steels Part 2: Tolerances on shape and dimensions
- EN 10250-1, Open die steel forgings for general engineering purposes Part 1: General requirements
- EN 10255, Non-alloy steel tubes suitable for welding and threading Technical delivery conditions
- EN 10265, Magnetic materials Specification for steel sheet and strip with specified mechanical properties and magnetic permeability
- EN 10278, Dimensions and tolerances of bright steel products
- EN 10279, Hot rolled steel channels Tolerances on shape, dimension and mass
- EN 10294-1, Hollow bars for machining Technical delivery conditions Part 1: Non alloy and alloy steels
- EN 10296-1, Welded circular steel tubes for mechanical and general engineering purposes Technical delivery conditions Part 1: Non-alloy and alloy steel tubes
- EN 10296-2, Welded circular steel tubes for mechanical and general engineering purposes Technical delivery conditions Part 2: Stainless steel
- EN 10297-1, Seamless circular steel tubes for mechanical and general engineering purposes Technical delivery conditions Part 1: Non-alloy and alloy steel tubes

EN 10297-2, Seamless circular steel tubes for mechanical and general engineering purposes — Technical delivery conditions — Part 2: Stainless steel tubes

EN 10303, Thin magnetic steel sheet and strip for use at medium frequencies

EN 10305-1, Steel tubes for precision applications — Technical delivery conditions — Part 1: Seamless cold drawn tubes

EN 10305-2, Steel tubes for precision applications — Technical delivery conditions — Part 2: Welded cold drawn tubes

EN 10305-3, Steel tubes for precision applications — Technical delivery conditions — Part 3: Welded cold sized tubes

EN 10305-4, Steel tubes for precision applications — Technical delivery conditions — Part 4: Seamless cold drawn tubes for hydraulic and pneumatic power systems

EN 10305-5, Steel tubes for precision applications — Technical delivery conditions — Part 5: Welded and cold sized square and rectangular tubes

EN 10305-6, Steel tubes for precision applications — Technical delivery conditions — Part 6: Welded cold drawn tubes for hydraulic and pneumatic power systems

EN 10312, Welded stainless steel tubes for the conveyance of aqueous liquids including water for human consumption - Technical delivery conditions

EN 10341, Cold rolled electrical non-alloy and alloy steel sheet and strip delivered in the semi-processed state

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

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

## 3.1

#### liquid steel 1)

steel in the liquid state ready for pouring and obtained from the melting of raw materials

#### 3.2

ingots and semi finished products 2)

#### 3.2.1

# ingots

products obtained by pouring liquid steel into moulds of a shape appropriate to the subsequent processing <sup>3)</sup> into semi finished products, or flat or long products, generally by hot rolling or forging

NOTE 1 The shape generally resembles a truncated pyramid or truncated cone; the side surfaces may be corrugated and the corners more or less rounded. Depending on subsequent conversion requirements, ingots may be dressed and/or hot scarfed or cropped without altering their status as "ingots".

2) See **B.1.3** and **B.1.4**.

<sup>1)</sup> See **B.1.2**.

<sup>3)</sup> In the case of ingots remelted by the vacuum arc of electroslag process, the products are obtained by melting, in a mould of appropriate shape, steel electrodes that have been previously cast, forged or rolled.