

**Kuumalt lõppvaltsitud konstruktsiooni-
õõnesprofiilid mittelegeer- ja peenetera-
konstruktsiooniterastest. Osa 1:
Tehnilised tarnenõuded**

Hot finished structural hollow sections of non-alloy
and fine grain structural steels - Part 1: Technical
delivery requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10210-1:1999 sisaldab Euroopa standardi EN 10210-1:1994 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 10210-1:1999 consists of the English text of the European standard EN 10210-1:1994.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>See EN 10210 standardi osa määrab kindlaks tehnilised tarnenõuded kuumalt lõppvaltsitud ümmarguse, ruudu- või ristkülikukujulise ristlõikega konstruktsiooni-õõnesprofiilide kohta, mis on vormitud kuumalt kas pärastise termotöötlusega või ilma selleta või on vormitud külmalts ning pärast termiliselt töödeldud. Hilisem termiline töötlemine on tehtud selleks, et saada kuumalt vormitud toodetega võrdväärsed metallurgilised omadused. Peeneterataseid tarnitakse tavaliselt normaliseeritult.</p>	<p>Scope:</p>
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ICS 77.140.75

Võtmesõnad: keemiline koostis, konstruktsiooniterased, kuumvaltstooted, liigitus, markeerimine, mehaanilised omadused, mehaanilised teimid, mittelegeerterased, profiilmetall, tarnetingimused, tähistamine, õõnesprofiilid

UDC 669.14.018.29-122.4-46:620.1

Descriptors: Hollow section, structural steel, structural steelwork, fine grain steel, technical delivery conditions.

English version

**Hot finished structural hollow sections of non-alloy
and fine grain structural steels**

Part 1: Technical delivery requirements

Profils creux pour la construction finis à
chaud en aciers de construction non alliés
et à grains fins. Partie 1: Conditions tech-
niques de livraison

Warmgefertigte Hohlprofile für den Stahl-
bau aus unlegierten Baustählen und aus
Feinkornbaustählen. Teil 1: Technische
Lieferbedingungen

This European Standard was approved by CEN on 1994-03-03.

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, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee ECISS/TC 10 'Structural steel; quality', the Secretariat of which is held by NNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by September 1994 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This part of this European Standard specifies the technical delivery requirements for hot finished hollow sections of circular, square or rectangular form and applies to hollow sections formed hot with or without subsequent heat treatment or formed cold with subsequent heat treatment to obtain equivalent metallurgical conditions to those obtained in the hot formed product. Fine grain steels are generally delivered in the normalized condition.

The specified requirements apply to non-alloy base steel, non-alloy quality steel, fine grain non-alloy quality steel and fine grain alloy special steels as defined in European Standard EN 10020.

The grades, chemical composition and mechanical properties for the non-alloy base and quality steels are given in annex A.

The grades, chemical composition and mechanical properties for the fine grain non-alloy quality and alloy special steels are given in annex B.

The products specified in this part of this European Standard are intended for use in construction.

Requirements for tolerances, dimensions and sectional properties are contained in Part 2 of this standard (prEN 10210-2).

NOTE: A range of material grades is specified in this standard and the user should select the grade appropriate to the intended use and service conditions. The grades and mechanical properties are compatible with those in EN 10025 and EN 10113.

This European standard does not apply to products covered by the following European Standards:

EN 10025 Hot rolled products of non-alloy structural steels . Technical delivery conditions

EN 10113 Hot rolled products in weldable fine grain structural steels

EN 10155 Structural steels with improved atmospheric corrosion resistance

prEN 10219 Cold formed welded structural hollow sections of non-alloy and fine grain steels

prEN 10225 Weldable structural steels for fixed offshore structures

2 Normative references

This part of this European Standard incorporates by dated 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 dated references, subsequent amendments to or revisions of any of these publications apply to this part of this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

2.1 General standards

EN 10020 Definition and classification of grades of steel

EN 10021 General technical delivery requirements for steel and iron products

EN 10027 Designation systems for steel
Part 1 : Steel names, principal symbols
Part 2 : Steel numbers

EN 10079 Definition of steel products

EN 10204 Metallic products - Types of inspection documents

EN 10052 Vocabulary of heat treatment terms for ferrous products

EURONORM 168¹⁾ Iron and steel products - Inspection documents - Contents

Information Circular No. 2 Weldable fine-grained structural steels - Recommendations for processing, in particular for welding

Information Circular No. 10 Designation system for steel : Additional symbols for steel names

EN 287-1 Approval testing of welders - Fusion welding - Part 1 : Steels

EN 288 Specification and approval of welding procedures for metallic materials

Part 1 : General rules for fusion welding
Part 2 : Welding procedure specification for arc welding
Part 3 : Welding procedure tests for arc welding of steels

EN 29002 Quality systems : Model for quality assurance in production and installation

1) Until these EURONORMS are transformed into European Standards, they can either be implemented or reference made to the corresponding national standards, the list of which is given in annex D to this part of this European Standard.

2.2 Standards for tolerances and dimensions

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

2.3 Standards for testing

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

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

EURONORM 18¹⁾ Selection and preparation of samples and test pieces for steel and iron and steel products

EURONORM 103¹⁾ Micrographic determination of ferritic or austenitic grain size of steel

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

EN 10246-5 Non-destructive testing of steel tubes
Part 5 : Seamless and welded (except submerged arc-welded) ferromagnetic steel tubes - Automatic full peripheral magnetic transducer/flux leakage testing for the detection of longitudinal imperfections

EN 10246-8 Non-destructive testing of steel tubes
Part 8 : Electric resistance and induction welded steel tubes - Automatic ultrasonic testing of the weld seam for the detection of longitudinal imperfections

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

ISO 2566-1:1984 Steel - Conversion of elongation values - Part 1 : Carbon and low alloy steels

1) Until these EURONORMS are transformed into European Standards, they can either be implemented or reference made to the corresponding national standards, the list of which is given in annex D to this part of this European Standard.