

**Pidevkuumvaltsimisel toodetud
madalsüsinikterastest lehed ja ribad
külmsurvetöötluks. Tehnilised
tarnetingimused**

Continuously hot-rolled low carbon steel sheet and strip for cold forming - Technical delivery conditions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10111:1999 sisaldab Euroopa standardi EN 10111:1998 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 10111:1999 consists of the English text of the European standard EN 10111:1998.</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>
--	---

<p>Käsitlusala: See Euroopa standard määrab kindlaks pidevkuumvaltsemise teel toodetud madalsüsinikterasest lehtede ja ribade (rullides) margid külmsurvetötluseks.</p>	<p>Scope:</p>
--	----------------------

ICS 77.140.50

Võtmesõnad: katsed, keemiline koostis, kuumvaltstoode, liigitus, markeerimine, mehaanilised omadused, metallplaadid, raud- ja terastooted, rebendite tekkimine, servade ääristamine, tarnetingimus, terased, terasribad, tähistamine

ICS 77.140.50

Descriptors: Steel, strip.

English version

**Continuously hot-rolled low carbon steel sheet
and strip for cold forming**

Technical delivery conditions

Bandes et tôles laminées à chaud en continu, en acier doux pour emboutissage ou pliage à froid – Conditions techniques de livraison

Kontinuierlich warmgewalztes Band und Blech aus weichen Stählen zum Kaltumformen – Technische Lieferbedingungen

This European Standard was approved by CEN on 1996-06-30.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

Central Secretariat: rue de Stassart 36, B-1050 Brussels

CONTENTS LIST

	Page
Foreword	3
1 Scope	4
2 Normative references	4
3 Classification of grades	4
4 Designation	5
5 Requirements	5
5.1 Steelmaking and manufacturing process	5
5.2 Method of deoxidation	5
5.3 Chemical composition	5
5.4 Delivery condition	5
5.5 Choice of properties	6
5.6 Mechanical properties	6
5.7 Surface appearance	6
5.8 Weldability	6
5.9 Tolerances on dimensions and shape	6
5.10 Suitability for surface coating	8
6 Tests	8
6.1 General	8
6.2 Inspection unit	8
6.3 Number of tests	8
6.4 Sampling	8
6.5 Test method	9
6.6 Interpretation of results	9
6.7 Inspection documents	9
7 Marking	9
8 Packaging	10
9 Disputes after delivery	10
Annex A (informative) - Corresponding former steel designations	11
Annex B (informative) - Bibliography	11

Foreword

This European Standard has been prepared by Technical Committee ECISS/TC 13 "Flat products for cold working - Qualities, dimensions, tolerances and specific tests", the secretariat of which is held by IBN/BIN.

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 1998, and conflicting national standards shall be withdrawn at the latest by August 1998.

The European Committee for Iron and Steel Standardization (ECISS) charged ECISS/TC 13 (Secretariat : IBN) with preparing a European Standard EN 10111 to replace EURONORM 111-1977.

ECISS/TC 13 met on 1994-09-16 in Brussels and agreed on the text for publication as a European Standard. The following countries were represented in that meeting : France, Germany, Netherlands, Sweden and United Kingdom.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

a preview generated by EVS

1 SCOPE

This European standard specifies the grades of continuously hot rolled low carbon steel sheet and strip (in coils) for cold forming.

Depending on its actual width, strip is classified as :

- hot rolled wide strip if its width is greater than or equal to 600 mm;
- hot rolled slit wide strip, if its width is less than 600 mm.

For each grade, it specifies the chemical composition and the mechanical properties.

This European Standard is applicable to products of thickness not less than 1,5 mm and not exceeding 8 mm.

This European Standard is not applicable to products covered by other standards, such as :

- hot rolled products of non-alloy structural steels for general use (EN 10025);
- steel sheet for pressure purposes (EN 10028);
- steel sheet for welded gas cylinders (EN 10120);
- quenched and tempered steels (EN 10083-1 and EN 10083-2).

2 NORMATIVE REFERENCES

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 European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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

EN 10021 - Steel and iron products - General technical delivery requirements

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 10051 - Continuously hot-rolled uncoated plate, sheet and strip of non-alloy and alloy steels - Tolerances on dimensions and shape

EN 10079 - Definition of steel products

EN 10204 - Metallic products - Types of inspection documents

CR 10260 - Designation systems for steel - Additional symbols for steel names

EURONORM 6 - Bend test for steel

EURONORM 12 - Bend test on steel sheet and strip less than 3 mm thick

3 CLASSIFICATION OF GRADES

The choice of the steel grade and product type is left to the purchaser. For this choice, he may be advised by the manufacturer, but without any liability on the part of the latter, unless agreed at the time of ordering.