

**Kõrgtemperatuursete struktuuride säilitamisega
karastatud ja noolutatud või dispersioonkarastatud
kõrge voolavuspiiriga konstruktsiooniterastest tehtud
plaadid ja laiad tasapinnalised tooted. Osa 1: Üldised
tarnetingimused**

Plates and wide flats made of high yield strength structural steels in the quenched and tempered or precipitation hardened conditions - Part 1: General delivery conditions

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10137-1:1999 sisaldb Euroopa standardi EN 10137-1:1995 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 23.11.1999 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This Estonian standard EVS-EN 10137-1:1999 consists of the English text of the European standard EN 10137-1:1995. This standard is ratified with the order of Estonian Centre for Standardisation dated 23.11.1999 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kätesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 77.140.50

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EUROPEAN STANDARD

EN 10137-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 1995

ICS 77.140.10; 77.140.50

Descriptors: iron and steel products, metal plates, wide flats, steels, structural steels, high yield strength steels, delivery conditions, chemical composition, grades, quality, classifications, designation, mechanical characteristics, inspection, tests, marking

English version

**Plates and wide flats made of high yield strength
structural steels in the quenched and tempered or
precipitation hardened conditions - Part 1: General
delivery conditions**

Tôles et larges plats en aciers de construction
à haute limite d'élasticité à l'état trempé et
revenu ou durci par précipitation - Partie 1:
Conditions générales de livraison

Blech und Breitflachstahl aus Baustählen mit
höherer Streckgrenze im Vergüteten oder im
ausscheidungsgehärteten Zustand - Teil 1:
Allgemeine Lieferbedingungen

This European Standard was approved by CEN on 1995-08-06. 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, 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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Contents

	page
Foreword	3
1 Scope	4
2 Normative references	4
2.1 General standards	4
2.2 Standards on dimensions and tolerances	5
2.3 Standards on testing	5
3 Definitions	6
4 Information to be supplied by the purchaser	6
4.1 General	6
4.2 Options	6
5 Dimensions, mass and tolerances	7
5.1 Dimensions and tolerances	7
5.2 Mass of steel	7
6 Classification and designation	7
6.1 Classification	7
6.2 Designation	7
7 Technical requirements	8
7.1 Steel manufacturing process	8
7.2 Delivery condition	8
7.3 Chemical composition	8
7.4 Mechanical properties	9
7.5 Technological properties	10
7.6 Surface finish	11
7.7 Internal soundness	11
8 Inspection and testing	11
8.1 General	11
8.2 Sampling	11
8.3 Test units	11
8.4 Verification of chemical composition	12
8.5 Preparation of samples and test pieces	12
8.6 Test methods	13
8.7 Retests and resubmission for testing	14
8.8 Inspection documents	14
9 Marking	14
10 Disputes	15
11 Options	15
Annex A (normative) Location of test pieces	18
Annex B (informative) List of national standards which correspond with EURONORMS referenced	19

Foreword

This European Standard has been prepared by the Technical Committee ECISS/TC 10 "Structural steel - Qualities", 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, at the latest by Mars 1996, and conflicting national standards shall be withdrawn at the latest by Mars 1996.

According to 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, United Kingdom.

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1 Scope

1.1 This European Standard specifies requirements for plates and wide flats of high yield strength alloy special steels.

Part 1 of this European Standard specifies the general delivery conditions.

Part 2 of this European Standard specifies the delivery conditions for quenched and tempered steels in the grades and qualities given in table 1 (chemical composition) and tables 2 and 3 (mechanical properties) of Part 2.

Part 3 of this European Standard specifies the delivery conditions for precipitation hardened steels in the grades and qualities given in table 1 (chemical composition) and tables 2 and 3 (mechanical properties) of Part 3.

The steels specified in this European Standard are especially intended for use in heavily loaded parts of welded structures such as bridges, flood gates, storage tanks, water supply tanks, buildings, crane structures, etc. for service at ambient and low temperatures.

1.2 This European Standard does not apply to products for pressure vessels and products for which other EURONORMS exist or European Standards dealing with steels for general structural applications exist or are being prepared:

- Hot-rolled products of non-alloy structural steels - (see EN 10025).
- Semi-finished products for forging in general purpose structural steels - (see EURONORM 30).
- Weldable fine grain structural steels (see EN 10113 Parts 1 - 3).
- Structural steels with improved atmospheric corrosion resistance - (see EN 10155).
- Flat products in high yield strength steels for cold forming - wide flats, sheet/plate, wide and narrow strip - (see EN 10149 Parts 1 - 3).
- Steels for shipbuilding - normal and high strength qualities - (see EURONORM 156).
- Hot finished structural hollow sections (see EN 10210-1).

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.

2.1 General standards

EN 10020	Definition and classification of grades of steels
EN 10021	General technical delivery requirements for steel and iron products

EN 10027-1	Designation systems for steel - Part 1: Steel names principal symbols
EN 10027-2	Designation systems for steel - Part 2: Numerical system
EN 10052	Vocabulary of heat treatment terms for ferrous products
EN 10079	Definitions of steel products
EN 10163	Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections - Part 1: General requirements Part 2: Plates and wide flats
EN 10164	Steel products with improved deformation properties perpendicular to the surface of the product - Technical delivery conditions
EN 10204	Metallic products - Types of inspection documents
EURONORM 168 (1986) ¹⁾	Iron and steel products - Inspection documents - Contents
ECSC IC 2 (1983) ¹⁾	Weldable fine-grained structural steels - Recommendations for processing, in particular for welding
ECIIS IC 10	Designation systems for steel - Additional symbols for steel names

2.2 Standards on dimensions and tolerances

EN 10029	Hot-rolled plates 3 mm thick or above - Tolerances on dimensions, shape and mass
EN 10048	Hot rolled narrow steel strip - Tolerances on dimensions and shape
EN 10051	Continuously hot-rolled non-coated sheet and strip of non-alloy and alloy steels - Tolerances on dimensions and shape
EURONORM 91 (1981) ¹⁾	Hot-rolled wide flats - Tolerances on dimensions, shape and mass

2.3 Standards on 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 18 (1979) ¹⁾	Selection and preparation of samples and test pieces for steel and iron and steel products
EURONORM 103 (1971) ¹⁾	Microscopic determination of the ferritic and austenitic grain size of steel
EURONORM 160 (1985) ¹⁾	Manual ultrasonic testing of plate in thickness ≥ 6 mm (reflection method)
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 B to this European Standard.