

**Kuumvaltsitud tasapinnalised tooted,
mis on tehtud kõrge voolavuspiiriga
terastest ning on ette nähtud
külmsurvevormimiseks. Osa 2:
Termomehaaniliselt valtsitud teraste
tarnetingimused**

Hot-rolled flat products made of high yield strength
steels for cold forming - Part 2: Delivery conditions
for thermomechanically rolled steels

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10149-2:1999 sisaldab Euroopa standardi EN 10149-2:1995 ingliskeelset teksti. Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 10149-2:1999 consists of the English text of the European standard EN 10149-2:1995. This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
--	---

Käsitlusala: Lisaks osale 1 määrab selle Euroopa standardi osa 2 kindlaks nõuded nende tasapinnaliste toodete kohta, mis on tehtud keevitatavatest kuumvaltsitud kõrge voolavuspiiriga terastest ning on ette nähtud külmsurvevormimiseks. Neid teraseid tarnitakse termomehaaniliselt valtsitud kujul.	Scope:
--	----------------------

ICS 77.140.50

Võtmesõnad: katsed, keemiline koostis, kontroll, kuumvaltstooted, kvaliteet, kõrge voolavuspiiriga terased, külmtöötlemine, liigitus, margid, mehaanilised omadused, metalli valtsimine, raud- ja terastooted, tarnetingimus, tähistus

Hinnagrupp F

ICS 77.140.10; 77.140.50

Descriptors: Steel, plate, flats, high-strength steel.

English version

**Hot-rolled flat products made of high yield strength
steels for cold forming**

Part 2: Delivery conditions for thermomechanically rolled steels

Produits plats laminés à chaud en aciers à haute limite d'élasticité pour formage à froid. Partie 2: Conditions de livraison des aciers obtenus par laminage thermo-mécanique

Warmgewalzte Flacherzeugnisse aus Stählen mit hoher Streckgrenze zum Kaltumformen. Teil 2: Lieferbedingungen für thermomechanisch gewalzte Stähle

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.

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

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

Contents

	Page
Foreword	2
1 Scope	3
2 Normative references	3
3 Definitions	3
4 Information to be supplied by the purchaser	3
4.1 General	3
4.2 Options	3
5 Dimensions, mass and tolerances	3
5.1 Dimensions and tolerances	3
5.2 Mass of steel	3
6 Classification and designation	4
6.1 Classification	4
6.2 Designation	4
7 Technical requirements	4
7.1 Steel manufacturing process	4
7.2 Delivery condition	4
7.3 Chemical composition	4
7.4 Mechanical properties	4
7.5 Technological properties	5
7.6 Surface finish	5
7.7 Internal soundness	5
8 Inspection and testing	5
8.1 General	5
8.2 Sampling	6
8.3 Test units	6
8.4 Verification of chemical composition	6
8.5 Preparation of samples and test pieces	6
8.6 Test methods	6
8.7 Retests and resubmission for testing	6
8.8 Inspection documents	6
9 Marking	6
10 Disputes	7
11 Options	7
Annex A (normative) Location of test pieces	9
Annex B (informative) List of corresponding former designations	10
Annex C (informative) Minimum inside bend radii for cold forming	10

Foreword

This European Standard has been prepared by ECISS/TC 10 'Structural steels; qualities', the Secretariat of which is held by NNI.

This European Standard is composed of three Parts:

Part 1: General delivery conditions

Part 2: Delivery conditions for thermomechanically rolled steels

Part 3: Delivery conditions for normalized or normalized rolled steels

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 March 1996 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

Part 2 of this European Standard, in addition to part 1, specifies requirements for flat products made of weldable, hot-rolled, high yield strength steels for cold forming.

The grades are given in table 1 (chemical composition) and table 2 (mechanical properties) and are supplied in the thermomechanically rolled delivery condition as given in 7.2.

The steels specified in this European Standard are applicable to hot-rolled flat products in the thickness range of 1,5 mm to 20 mm for the steels which have a specified minimum yield strength of 315 N/mm² up to and including 460 N/mm² and 1,5 mm to 16 mm for the steels which have a specified minimum yield strength of 500 N/mm² up to and including 700 N/mm².

2 Normative references

The normative references as given in EN 10149-1 shall apply.

3 Definitions

The definitions given in EN 10149-1 shall apply.

4 Information to be supplied by the purchaser

4.1 General

The information to be supplied by the purchaser shall be in accordance with EN 10149-1.

4.2 Options

The options given in EN 10149-1 and clause 11 shall apply.

5 Dimensions, mass and tolerances

5.1 Dimensions and tolerances

The dimensions and tolerances shall be in accordance with EN 10149-1.

5.2 Mass of steel

The calculated mass of steel shall be determined in accordance with EN 10149-1.