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

EESTI STANDARDI EESSÕNA

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English Version

**Hot rolled flat products made of high yield strength steels for
cold forming - Part 2: Technical 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
techniques de livraison des aciers obtenus par laminage
thermomécanique

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

This European Standard was approved by CEN on 17 August 2013.

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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 10149-2:2013) has been prepared by Technical Committee ECISS/TC 103 "Structural steel other than reinforcements", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by March 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10149-2:1995.

In comparison with EN 10149-2:1995, the following significant technical changes were made:

- Scope was modified;
- subclause 6.1 was revised;
- subclause 7.4.1 was modified;
- subclause 7.5.3 was completely revised;
- Option 13) was added in Clause 11;
- steel grades S900MC and S960MC were added in Tables 1, 2 and B.1;
- footnotes f and g were added in Table 2.

The titles of the other Parts of this European Standard are:

- *Part 1: General technical delivery conditions;*
- *Part 3: Technical delivery conditions for normalized or normalized rolled steels.*

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard, in addition to EN 10149-1, 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 MPa¹⁾ up to and including 460 MPa¹⁾;
- 1,5 mm to 16 mm for the steels which have a specified minimum yield strength of 500 MPa¹⁾ up to and including 700 MPa¹⁾; and
- from 2 mm up to 10 mm for the steels with a minimum yield stress in the range from 900 MPa¹⁾ to 960 MPa¹⁾.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 10029, *Hot-rolled plates 3 mm thick or above - Tolerances on dimensions and shape*

EN 10051, *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels - Tolerances on dimensions and shape*

EN 10149-1:2013, *Hot rolled flat products made of high yield strength steels for cold forming - Part 1: General technical delivery conditions*

EN ISO 14713-2:2009, *Zinc coatings - Guidelines and recommendations for the protection against corrosion of iron and steel in structures - Part 2: Hot dip galvanizing (ISO 14713-2:2009)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10149-1:2013 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.

1) 1 MPa = 1 N/mm².