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BS EN 10149-1:2013



BSI Standards Publication

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

Part 1: General technical delivery conditions

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This British Standard is the UK implementation of EN 10149-1:2013. It supersedes BS EN 10149-1:1996 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/103, Structural Steels Other Than Reinforcements.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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ISBN 978 0 580 73971 2

ICS 77.140.50

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 September 2013.

Amendments issued since publication

Date	Text affected
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EUROPÄISCHE NORM

September 2013

ICS 77.140.50

Supersedes EN 10149-1:1995

English Version

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

Produits plats laminés à chaud en aciers à haute limite d'élasticité pour formage à froid - Partie 1: Conditions générales techniques de livraison

Warmgewalzte Flacherzeugnisse aus Stählen mit hoher Streckgrenze zum Kaltumformen - Teil 1: Allgemeine technische Lieferbedingungen

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

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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Contents		Page
Foreword.....		3
1	Scope.....	4
2	Normative references.....	4
3	Terms and definitions	5
4	Information to be supplied by the purchaser.....	6
4.1	Mandatory information.....	6
4.2	Options	6
5	Dimensions, mass and tolerances	6
5.1	Dimensions and tolerances	6
5.2	Mass of steel	6
6	Classification and designation	6
6.1	Classification and grades	6
6.2	Designation	6
7	Technical requirements	7
7.1	Steel manufacturing process.....	7
7.2	Delivery condition	7
7.3	Chemical composition	8
7.4	Mechanical properties.....	9
7.5	Technological properties.....	9
7.6	Surface finish	10
7.7	Internal soundness	10
8	Inspection and testing	11
8.1	General	11
8.2	Sampling.....	11
8.3	Test units.....	11
8.4	Verification of chemical composition.....	11
8.5	Preparation of samples and test pieces.....	11
8.6	Test methods.....	12
8.7	Retests and resubmission for testing	13
8.8	Inspection documents	13
9	Marking.....	14
10	Disputes.....	14
11	Options	14
Bibliography.....		16

This is a preview of "BS EN 10149-1:2013". [Click here to purchase the full version from the ANSI store.](#)

Foreword

This document (EN 10149-1:2013) 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 10149-1:1995.

In comparison with EN 10149-1:1995, the following significant technical changes were made:

- definition 3.2, Note 1 modified;
- subclause 7.4.1.1, Note modified and changed to standard text;
- subclause 7.5.1, Note 2 for welding suitability of grades S900MC and S960MC added;
- Table 1, values for Mn, Ti and Mo modified.

The specific requirements for hot rolled products made of high yield strength steels for cold forming are given in the EN 10149-2 and EN 10149-3. The titles of the other Parts of this European Standard are:

- *Part 2: Technical delivery conditions for thermomechanical rolled steels;*
- *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.

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1 Scope

1.1 This European Standard specifies requirements for flat products made of weldable, hot-rolled, high yield strength alloy quality and special steels for cold forming.

EN 10149-1 specifies the general delivery conditions.

EN 10149-2 specifies the delivery conditions for thermomechanically rolled steels in the grades given in Table 1 (chemical composition) and Table 2 (mechanical properties) of Part 2.

EN 10149-3 specifies the delivery conditions for normalised or normalised rolled steels in the grades given in Table 1 (chemical composition) and Table 2 (mechanical properties) of Part 3.

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

- Hot-rolled products of structural steels (see EN 10025 parts 1 to 6);
- Hot finished structural hollow sections of non-alloy and fine grain steels (see EN 10210-1).

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 10020, *Definition and classification of grades of steel*

EN 10021, *General technical delivery conditions for steel products*

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

EN 10048, *Hot-rolled narrow steel strip – 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 10052:1993, *Vocabulary of heat treatment terms for ferrous products*

EN 10079:2007, *Definition of steel products*

EN 10149-2:2013, *Hot rolled flat products made of high yield strength steels for cold forming – Part 2: Technical delivery conditions for thermomechanically rolled steels*

EN 10149-3:2013, *Hot rolled flat products made of high yield strength steels for cold forming – Part 3: Technical delivery conditions for normalized or normalized rolled steels*

EN 10160, *Ultrasonic testing of steel flat product of thickness equal to or greater than 6 mm (reflection method)*

EN 10162, *Cold-rolled steel sections – Technical delivery conditions – Dimensional and cross-sectional tolerances*