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Cold rolled uncoated low carbon steel narrow strip for cold forming - Technical delivery conditions

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/16

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 10139

February 2016

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Supersedes EN 10139:1997

## **English Version**

# Cold rolled uncoated low carbon steel narrow strip for cold forming - Technical delivery conditions

Feuillards non revêtus laminés à froid en aciers à bas carbone pour formage à froid - Conditions techniques de livraison

Kaltband ohne Überzug aus weichen Stählen zum Kaltumformen - Technische Lieferbedingungen

This European Standard was approved by CEN on 13 December 2015.

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

Contents		Page
European foreword		
1	Scope	4
2	Normative references	4
3	Terms and definitions	5
4	Classification and designation	5
5	Designation	5
6 6.1	Properties Steel making process and chemical composition	6
6.2 6.3	Choice of properties  Mechanical and technological properties	
6.4	Surface characteristics	
6.4.1	General	
6.4.2	Surface appearance	
6.4.3 6.5	Surface finishStretcher strain marks	
6.6	Suitability for the application of surface coating	
6.7	Weldability	
6.8	Dimensions, mass, permissible tolerances	
7	Testing	8
7.1	Agreement on acceptance testing	
7.2	Acceptance units and number of tests	
7.3	Sampling and preparation of test pieces	
7.4 7.5	Test methods to be followed  Re-tests	
7.J 8	Marking	
9	Oiling	
	-	
10	Packing	
11	Information to be supplied by the purchaser	10
<b>12</b>	Disputes	10

# **European foreword**

This document (EN 10139:2016) has been prepared by Technical Committee ECISS/TC 109 "Coated and uncoated flat products to be used for cold forming", the secretariat of which is held by AFNOR.

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 2016, and conflicting national standards shall be withdrawn at the latest by August 2016.

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 10139:1997.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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

**1.1** This European Standard applies to cold rolled narrow strip in coils and cut lengths in thicknesses up to 10 mm and of widths less than 600 mm, made from low carbon, unalloyed and alloyed steels in accordance with Table 1.

These products are suitable for cold forming. They are also suitable for surface coating. On the other hand, they are not suitable for hardening treatment followed by tempering.

- **1.2** This European Standard does not cover cold rolled flat products for which a separate standard already exists, particularly the following products:
- cold rolled non-oriented electrical steel sheet and strip delivered in the fully processed state (EN 10106);
- grain-oriented electrical steel sheet and strip delivered in the fully processed state (EN 10107);
- cold rolled electrical non-alloy and alloy steel sheet and strip delivered in the semi-processed state (EN 10341);
- cold rolled narrow steel strip for heat treatment (EN 10132-1 to −4);
- cold rolled steel flat products with higher yield strength for cold forming (EN 10268);
- cold rolled low carbon steel flat products for cold forming (EN 10130);
- cold reduced blackplate in coil form for the production of tinplate or electrolytic chromium/chromium oxide coated steel (EN 10205);
- cold rolled low carbon steel flat products for vitreous enamelling (EN 10209).

#### 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 10027-1, Designation systems for steels - Part 1: Steel names

EN 10027-2, Designation systems for steels - Part 2: Numerical system

EN 10049, Measurement of roughness average Ra and peak count RPc on metallic flat products

EN 10079, Definition of steel products

EN 10140:2006, Cold rolled narrow steel strip - Tolerances on dimensions and shape

EN 10204, Metallic products - Types of inspection documents

EN ISO 377, Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:2013, Corrected version 2015-06-01)

EN ISO 6507 (all parts), Metallic materials — Vickers hardness test (ISO 6507)

EN ISO 6892-1:2009, Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1:2009)

ISO 10113, Metallic materials — Sheet and strip — Determination of plastic strain ratio

ISO 10275, Metallic materials — Sheet and strip — Determination of tensile strain hardening exponent

koniec náhľadu – text ďalej pokračuje v platenej verzii STN