



# SLOVENSKI STANDARD SIST EN 10131:1997

01-december-1997

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hY`Yb`U`n`U`df`Yc`V]\_cj Ub`Y`j \ `UXbYa`!`AY`b]`cXg]cd`\_]a`Yf`]b`hc`Yf`Ub`W`c`V]\_

Cold rolled uncoated low carbon and high yield strength steel flat products for cold forming - Tolerances on dimensions and shape

Kaltgewalzte Flacherzeugnisse ohne Überzug aus weichen Stählen sowie aus Stählen mit höherer Streckgrenze zum Kaltumformen - Grenzabmaße und Formtoleranzen

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Produits plats laminés a froid, non revetus, en acier doux et en acier a haute limite d'élasticité pour emboutissage et pliage a froid - Tolérances sur les dimensions et sur la forme

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Ta slovenski standard je istoveten z: **EN 10131:1991**

### ICS:

77.140.50 Ú[| z aab \ | ^ } aã á ^ | aã Flat steel products and semi-products  
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EUROPEAN STANDARD

RECHENUNGSVEREINIGUNG TECHNISCHE

EN 10131:1991

NORME EUROPEENNE

COMITÉ EUROPÉEN DE NORMALISATION

EUROPAISCHE NORM

VEREINIGUNG TECHNISCHE

November 1991

UDC 669.14-122.2-41:621.753.1

Descriptors : Iron and steel products, cold rolled products, metal plates, wide, strips, low carbon steels, high yield strength steels, dimensional tolerances, form tolerances

## English version

Cold rolled uncoated low carbon and high yield strength steel flat products for cold forming - Tolerances on dimensions and shape

Produits plats laminés à froid, non revêtus, en acier doux et en acier à haute limite d'élasticité pour emboutissage et pliage à froid - Tolérances sur les dimensions et sur la forme

Kaltgewalzte Flacherzeugnisse ohne Überzug aus weichen Stählen sowie aus Stählen mit höherer Streckgrenze zum Kaltumformen - Grenzabmasse und Formtoleranzen

## iTeh STANDARD PREVIEW

This European Standard was approved by CEN on 1991-11-30. 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.

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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

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Ref. No. EN 10131:1991 E

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## Foreword

The European Committee for Iron and Steel Standardization (ECISS) asked Technical Committee 13 (Secretariat: Belgium) to transform EU 131 : 1977 'Cold-rolled non-coated mild unalloyed steel flat products for cold forming. Tolerances on dimensions and shape' into a European Standard and to enlarge its field of application to incorporate steels with high yield strength.

Publication of European standard EN 10131 was agreed at a meeting of ECISS/TC13 in October 1991, and accepted by COCOR on 1991-05-27 for submission to CEN formal vote.

This European Standard replaces the EURONORM 131-1977.

According to the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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## 1 Scope

This European standard applies to cold-rolled uncoated low carbon and high yield strength steel flat products for cold forming with a minimum thickness of 0.35 mm and unless otherwise agreed at the time of ordering less than or equal to 3 mm thick, delivered in sheet, wide strip, slit wide strip, or cut lengths obtained from slit wide strip or sheet.

It does not apply to cold-rolled strip (rolled width  $\leq$  600 mm), or to flat cold-rolled products for which there is a specific standard, in particular the following:

- cold-rolled non-grain oriented magnetic steel sheet and strip (EURONORM 106);
- semi-processed steel strip for the construction of magnetic circuits (EURONORM 126 and 165);
- blackplate in sheet form (EURONORM 145);
- blackplate in coils prEN 10205;
- cold-rolled uncoated non-alloy mild steel narrow strip for cold forming (EURONORM 139).

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## 2 Normative reference [standards.iteh.ai/catalog/standards/sist/282371e9-d4f6-4cbc-933a-3d8a108abf17/sist-en-10131-1997](#)

This EN 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 EN only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 100 79 Definition of steel products

## 3 Definitions

For the purposes of this European Standard, the definitions of the cold-rolled flat products listed in clause 1 are those given in EN 10 079.

#### 4 Designation

4.1 Products conforming to this European standard shall be designated in the following order (see also clause 5):

- a) type of product (wide strip, sheet or cut length);
- b) the number of this standard (EN 10 131);
- c) nominal thickness in millimetres;
- d) the letter S for products ordered with special tolerances on thickness;
- e) nominal width in millimetres;
- f) the letter S for products ordered with special tolerances on width;
- g) nominal length in millimetres;
- h) the letter S for products ordered with special tolerances on length (sheets and cut lengths only);
- i) the letter FS for sheets or cut lengths ordered with special tolerances on flatness;
- j) the letters CS for slit strip ordered with special tolerances on camber.

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4.2 The product designation in accordance with 4.1 shall be followed by the complete designation of the steel ordered (according to EN 10 130 for example).

#### 4.3 Examples of designation

- a) Wide strip according to this European standard of nominal thickness 1,20 mm, nominal width of 1500 mm in steel FePO4Am as specified in EN 10 130:

Wide strip EN 10 131 - 1,20 x 1500

Steel EN 10 130 - FePO4Am

- b) Sheet according to this European standard of nominal thickness 0,80 mm ordered with special thickness tolerance (S), nominal width of 1200 mm with special tolerances on width (S), nominal length of 2500 mm and with special tolerances on flatness in steel FePO6Bg as specified in EN 10 130:

Sheet EN 10 131 - 0,80 S x 1200 S x 2500 FS

Steel EN 10 130 - FePO6Bg

## 5 Condition of delivery

5.1 Flat products according to this European standard may be delivered as follows:

- a) with normal or special thickness tolerances (see table 1);
- b) with normal or special width tolerances (see tables 3 and 4);
- c) with normal or special length tolerances for sheet or cut lengths (see table 5);
- d) with normal or special flatness tolerances for sheet or cut lengths (see tables 6 and 7);
- e) with normal or special tolerances on camber for slit strip of width less than 600 mm (see clause 11).

5.2 In the absence of information on the order in respect of the condition of delivery given in 5.1 the flat products shall be delivered with normal tolerances on thickness, width, length, flatness and camber.

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## 6 Tolerances on thickness

The tolerances on thickness are given in 6.1 for low carbon steel flat products and in 6.2 for high yield strength steel flat products.

## 6.1 Low carbon steel flat products

The tolerances on thickness shall be as given in table 1 and apply over the whole length.

Tolerances more severe than special tolerances may be agreed at the time of the order.

Table 1: Tolerances on thickness

Dimensions in millimetres

Nominal thickness	Normal tolerances for <sup>(1)</sup> a nominal width of			Special tolerances (S) for <sup>(1)</sup> a nominal width of		
	≤ 1200	> 1200 to ≤ 1500	> 1500	≤ 1200	> 1200 to ≤ 1500	> 1500
≥ 0,35 to 0,40	± 0,04	± 0,05	± 0,05	± 0,025	± 0,035	-
> 0,40 to 0,60	± 0,05	± 0,06	± 0,07	± 0,035	± 0,045	± 0,05
> 0,60 to 0,80	± 0,06	± 0,07	± 0,08	± 0,04	± 0,05	± 0,05
> 0,80 to 1,00	± 0,07	± 0,08	± 0,09	± 0,045	± 0,06	± 0,06
> 1,00 to 1,20	± 0,08	± 0,09	± 0,10	± 0,055	± 0,07	± 0,07
> 1,20 to 1,60	± 0,10	± 0,11	± 0,11	± 0,07	± 0,08	± 0,08
> 1,60 to 2,00	± 0,12	± 0,13	± 0,13	± 0,08	± 0,09	± 0,09
> 2,00 to 2,50	± 0,14	± 0,15	± 0,15	± 0,10	± 0,11	± 0,11
> 2,50 to 3,00	± 0,16	± 0,17	± 0,17	± 0,11	± 0,12	± 0,12

(1) For wide strip and slit wide strip the thickness tolerances in the region of cold-rolled welds may be increased by a maximum of 60 % over a length of 15 metres.

This increase is applicable to all thicknesses and unless otherwise agreed at the time of order, to normal and special tolerances over or under.