

Cold-rolled low-carbon steel flat products for cold forming — Technical delivery conditions

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British Standard

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee ISE/10, Flat rolled steel products, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 13 and a back cover.

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 February 1999

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Amendments issued since publication

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English version

Cold-rolled low-carbon steel flat products for cold forming — Technical delivery conditions (includes amendment A1:1998)

Produits plats laminés à froid, en acier doux pour
emboutissage au pliage à froid — Conditions
techniques de livraison
(inclut l'amendement A1:1998)

Kaltgewalzte Flacherzeugnisse aus weichen Stählen
zum Kaltumformen — Technische
Lieferbedingungen
(enthält Änderung A1:1998)

This amendment A1 modifies the European Standard EN 10130:1991; it was approved by CEN on 1 May 1998.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant 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 amendment 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, Czech Republic, 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

Foreword

This EN 10130:1991 + Amendment 1:1998 has been prepared by Technical Committee ECISS/TC 13, Flat products for cold working — Qualities, dimensions, tolerances and specific tests, the Secretariat of which is held by IBN.

This Amendment to the European Standard EN 10130:1991 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 1998, and conflicting national standards shall be withdrawn at the latest by November 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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1 Scope

This European Standard applies to cold-rolled non-coated low-carbon steel flat products in rolled widths equal to or over 600 mm for cold forming, with a minimum thickness of 0,35 mm, and unless otherwise agreed at the time of the order, equal to or less than 3 mm, delivered in sheet, coil, slit coil, or cut lengths obtained from slit coil or sheet.

It does not apply to cold-rolled narrow strip (rolling width < 600 mm) nor 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 (EN 10106);
- semi-processed steel strip for the construction of magnetic circuits (EN 10126 and EN 10165);
- blackplate in coils (EN 10205);
- steel sheet and strip for welded gas cylinders (EN 10120);
- hot-rolled flat products in high yield strength steels for cold forming (EN 10149-2-3);
- cold-rolled flat products in high yield strength steels for cold forming (prEN 10268);
- cold-rolled uncoated non-alloy mild steel narrow strip for cold forming (EN 10139);
- cold-rolled low-carbon steel flat products for vitreous enamelling (EN 10209);
- cold-rolled structural steels for general purposes.

2 Normative references

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

EN 10002-1, *Metallic materials — Tensile testing — Part 1: Method of test (at ambient temperature)*.

EN 10002-2, *Metallic materials — Tensile testing — Part 2: Verification of the force measuring system of the tensile testing machines*.

EN 10002-4, *Metallic materials — Tensile testing — Part 4: Verification of extensometers used in uniaxial testing*.

EN 10020, *Definition and classification of grades of steel*.

EN 10021, *General technical delivery requirements for steel and iron products*.

EN 10027-1, *Designation systems for steels — Part 1: Steel names, principal symbols*.

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

EN 10079, *Definition of steel products*.

EN 10131, *Cold-rolled uncoated low-carbon and high yield strength steel flat products for cold forming — Tolerances on dimensions and shape*.

EN 10204, *Metallic products — Types of inspection documents*.

CR 10260, *Designation systems for steel — Additional symbols for steel names*.

EURONORM 18¹⁾, *Selection and preparation of samples and test pieces for steel and iron and steel products*.

EURONORM 49¹⁾, *Roughness measurement of cold-rolled uncoated steel sheet and strip*.

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 European Standard EN 10079.

4 Designation

The symbolic designation of the steel grades in this European Standard is in conformity with EN 10027-1 and CR 10260; the numerical designation is allocated in conformity with EN 10027-2.

The designation consists of the word: “sheet”, “coil”, “slit coil” or “cut length”, followed in order by:

- the reference of this European Standard EN 10130+A1;
- the grade designation, consisting of:
 - the symbol DC and the designation (01, 03, 04, 05 or 06) according to EN 10027-1 and CR 10260 (see Table 2); or
 - the numerical designation according to EN 10027-2 (see Table 2).
- the symbol concerning the surface quality (A for surface quality A, or B for surface quality B: see 5.7.2 and Table 2);
- if applicable, the symbol relating to the surface finish (see Table 1).

Examples of designations:

- designation of sheet made of steel grade DC01 (1.0330), surface quality A (A), surface finish normal (m):
 - sheet EN 10130+A1 – DC01 – A – m; or
 - sheet EN 10130+A1 – 1.0330 – A – m.
- designation of coil made of steel grade DC06 (1.0873), surface quality B (B), surface finish semi-bright (g):
 - coil EN 10130+A1 – DC06 – B – g; or
 - coil EN 10130+A1 – 1.0873 – B – g.

¹⁾ Until these EURONORMS are transformed into European Standards, they can either be implemented or reference made to the corresponding national standards which are listed in annex C to this European Standard.