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Cold rolled low carbon steel flat products for vitreous enamelling - Technical delivery conditions

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

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English Version

Cold rolled low carbon steel flat products for vitreous enamelling - Technical delivery conditions

Produits plats laminés à froid, en acier doux pour émaillage par vitrification - Conditions techniques de livraison

Kaltgewalzte Flacherzeugnisse aus weichen Stählen zum Emaillieren - Technische Lieferbedingungen

This European Standard was approved by CEN on 28 May 2023.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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EN 10209:2023 (E)**European foreword**

This document (EN 10209:2023) has been prepared by Technical Committee CEN/TC 459 “ECISS - European Committee for Iron and Steel Standardization”¹, 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of an identical text or by endorsement, at the latest by January 2024 and conflicting national standards shall be withdrawn at the latest by January 2024.

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

This document supersedes EN 10209:2013.

In comparison with the previous edition, the following technical modifications have been made:

- DC07EK steel grade added;
- r value in Mechanical Properties (Table 2) changed;
- Table 2: definition of Tensile test direction more precise;
- Annex A: conditions of the fish scaling test, devices to be used (removal of Strohlein apparatus) redefined.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

¹ Through its sub-committee SC 9 “Coated and uncoated flat products to be used for cold forming” (secretariat: AFNOR).

1 Scope

This document applies to cold rolled non-coated low carbon steel flat products in rolled widths equal to or over 600 mm and in thicknesses equal to or less than 3 mm, 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 narrow strip (rolling width < 600 mm) or to cold rolled flat products for which there is a specific standard, in particular the following:

- cold-rolled low carbon steel flat products for cold forming (EN 10130);
- cold-rolled non-oriented electrical steel sheet and strip delivered in fully processed state (EN 10106);
- cold rolled electrical non-alloy and alloy steel sheet and strip delivered in the semi-processed state (EN 10341);
- cold reduced blackplate (EN 10205);
- steel sheet and strip for welded gas cylinders (EN 10120);
- cold-rolled uncoated non-alloy mild steel narrow strip for cold forming (EN 10139);
- cold-rolled structural steels for general purposes;
- cold-rolled flat products made of high yield strength for cold forming (EN 10268).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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 R_{Pc} on metallic flat products*

EN 10079:2007, *Definition of steel products*

EN 10131, *Cold rolled uncoated and zinc or zinc-nickel electrolytically coated 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*

EN ISO 377, *Steel and steel products — Location and preparation of samples and test pieces for mechanical testing (ISO 377)*

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

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

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