

**Continuously hot-dip coated steel flat products -
Technical delivery conditions**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10346:2009 sisaldab Euroopa standardi EN 10346:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 11.03.2009.

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Võtmesõnad:

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English Version

Continuously hot-dip coated steel flat products - Technical delivery conditions

Produits plats en acier à bas carbone revêtus en continu
par immersion à chaud - Conditions technique de livraison

Kontinuierlich schmelztauchveredelte Flacherzeugnisse
aus Stahl - Technische Lieferbedingungen

This European Standard was approved by CEN on 31 January 2009.

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 Management Centre or to any CEN member.

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Foreword

This document (EN 10346:2009) has been prepared by Technical Committee ECISS/TC 27 “Surface coated flat products - Qualities, dimensions, tolerances and specific tests”, 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of an identical text or by endorsement, at the latest by September 2009, and conflicting national standards shall be withdrawn at the latest by September 2009.

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 10292:2007, EN 10326:2004, EN 10327:2004, and – together with EN 10152:2009 – EN 10336:2007.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies requirements for continuously hot-dip coated products made of low carbon steels for cold forming, of steels for construction, of steels with high proof strength for cold forming and coated with zinc (Z), zinc-iron alloy (ZF), zinc-aluminium alloy (ZA), aluminium-zinc alloy (AZ) or aluminium-silicon alloy (AS), and for continuously hot-dip coated products made of multiphase steels for cold forming coated with zinc (Z) zinc-iron alloy (ZF) or zinc-aluminium alloy (ZA) with thicknesses of 0,35 mm to 3 mm unless otherwise agreed.

The thickness is the final thickness of the delivered product after coating.

This document applies to strip of all widths and to sheets cut from it (≥ 600 mm width) and cut lengths (< 600 mm width).

NOTE 1 Products coated with (pure) aluminium can also be available, but are not covered by this European standard.

NOTE 2 By agreement at the time of enquiry and order, this European Standard is applicable to continuously hot-dip coated flat products in thicknesses $< 0,35$ mm or > 3 mm with agreed mechanical properties, adhesion of coating and surface condition requirements.

NOTE 3 The products covered by this European Standard are used where cold formability, high strength, a defined minimum yield strength and corrosion resistance are the most important factors. Corrosion resistance of the product is proportional to the coating thickness, hence to its mass (see also 7.3.2). The products covered by this European Standard can be used as substrates for organic coated flat products specified in EN 10169-1 and EN 10169-2 or EN 10169-3 for building and general engineering applications.

NOTE 4 By agreement at the time of enquiry and order, this European standard is applicable to other continuously hot-dip coated hot rolled steel flat products (e.g. in accordance with EN 10149-2).

2 Normative references

The following referenced documents are indispensable for the application 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 10002-1:2001, *Metallic materials – Tensile testing – Part 1: Method of test at ambient temperature*

EN 10020:2000, *Definition and classification of grades of steel*

EN 10021:2006, *General technical delivery conditions for steel products*

EN 10049, *Measurement of roughness average R_a and peak count RP_c on metallic flat products*

EN 10079:2007, *Definition of steel products*

EN 10143, *Continuously hot-dip coated steel sheet and strip – Tolerances on dimensions and shape*

EN 10204:2004, *Metallic products – Types of inspection documents*

EN 10325, *Steel – Determination of yield strength increase by the effect of heat treatment (Bake-Hardening-Index)*

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*