



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 10336:2007

ICS 77.140.50

**CONTINUOUSLY HOT-DIP COATED AND
ELECTROLYTICALLY COATED STRIP AND
SHEET OF MULTIPHASE STEELS FOR COLD
FORMING - TECHNICAL DELIVERY
CONDITIONS**

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EUROPEAN STANDARD

EN 10336

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2007

ICS 77.140.50

English Version

Continuously hot-dip coated and electrolytically coated strip and sheet of multiphase steels for cold forming - Technical delivery conditions

Bandes et tôles en aciers multiphasés revêtus en continu par immersion à chaud et revêtus par voie électrolytique pour formage à froid - Conditions techniques de livraison

Kontinuierlich schmelztauchveredeltes und elektrolytisch veredeltes Band und Blech aus Mehrphasenstählen zum Kaltumformen - Technische Lieferbedingungen

This European Standard was approved by CEN on 15 March 2007.

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.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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Contents

	page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Classification and designation.....	6
4.1 Classification.....	6
4.2 Designation	6
5 Information to be supplied by the purchaser	6
5.1 Mandatory information	6
5.2 Options	7
6 Manufacturing process	8
7 Requirements	8
7.1 Chemical composition	8
7.2 Mechanical properties	11
7.3 Requirements for coatings	12
7.4 Tolerances on dimensions and shape	18
7.5 Suitability for further processing.....	18
8 Testing	18
8.1 General.....	18
8.2 Test units	19
8.3 Number of tests.....	19
8.4 Sampling.....	19
8.5 Test methods.....	20
8.6 Retests	20
8.7 Inspection documents.....	20
9 Marking	20
10 Packing	21
11 Storage and transportation.....	21
12 Disputes	21
Annex A (normative) Reference method for determination of the zinc coating mass.....	22
Annex B (normative) Reference method for determination of the zinc-nickel coating mass and the zinc-nickel coating composition for electrolytically coated products	23
Bibliography	25

Foreword

This document (EN 10336:2007) 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 October 2007, and conflicting national standards shall be withdrawn at the latest by October 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 United Kingdom.

EN 10336:2007 (E)

1 Scope

1.1 This European Standard specifies requirements for continuously hot-dip coated and electrolytically coated flat products made of multiphase steels for cold forming (see Table 1, Table 3 and Table 4) coated with zinc (Z and ZE), zinc-iron alloy (ZF) or zinc-nickel alloy (ZN) with thicknesses of 0,35 mm to 3,0 mm, unless otherwise agreed (see 1.2).

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

This European Standard applies to strip of a width ≥ 600 mm and sheets cut from it.

1.2 If agreed at the time of enquiry and order, this European Standard may also be applied to continuously hot-dip coated flat products of thicknesses $> 3,0$ mm. In this case the mechanical property, adhesion of the coating and surface condition requirements should also be agreed at the time of enquiry and order.

1.3 The products covered by this European Standard are mainly used where cold formability, high strength and corrosion resistance are the most important factors. Corrosion resistance of the coating is proportional to the coating mass (see also 7.3.5)

1.4 This European Standard is not applicable to:

- continuously hot dip coated steel flat products made of low carbon steels (see EN 10327);
- continuously hot-dip coated structural steel flat products (see EN 10326);
- electrolytically zinc coated cold rolled steel flat products (see EN 10152);
- continuously organic coated (coil coated) steel flat products (see EN 10169-1, EN 10169-2 and EN 10169-3);
- electrolytically zinc-nickel coated cold rolled steel flat products (see EN 10271); and
- continuously hot-dip coated strip and sheet of steels with high yield strength for cold forming (see EN 10292).

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

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

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 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 10275, *Metallic materials – Sheet and strip – Determination of tensile strain hardening exponent*

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