



NSAI
Standards

Irish Standard
I.S. EN 10303:2015

Thin magnetic steel strip and sheet for use at medium frequencies

I.S. EN 10303:2015

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 10303:2015 is the adopted Irish version of the European Document EN 10303:2015, Thin magnetic steel strip and sheet for use at medium frequencies

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EUROPEAN STANDARD

EN 10303

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

ICS 77.140.40; 77.140.50

Supersedes EN 10303:2001

English Version

Thin magnetic steel strip and sheet for use at medium frequencies

Bandes et tôles extra-minces en acier électrique pour utilisation à moyennes fréquences

Dünnes Elektrobund und -blech aus Stahl zur Verwendung bei mittleren Frequenzen

This European Standard was approved by CEN on 29 August 2015.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

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EN 10303:2015 (E)

European foreword

This document (EN 10303:2015) has been prepared by Technical Committee ECISS/TC 108 “Steel sheet and strip for electrical applications”, 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of an identical text or by endorsement, at the latest by April 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.

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 10303:2001.

Regarding the changes that were made in this new edition of EN 10303, see Annex E.

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

1 Scope

This European Standard defines the grades of thin non-oriented magnetic steel strip and sheet in nominal thicknesses of 0,05 mm, 0,10 mm, 0,15 mm, 0,20 mm, 0,25 mm, 0,27 mm, 0,30 mm and 0,35 mm, and of thin grain-oriented magnetic steel strip and sheet in nominal thicknesses of 0,05 mm, 0,10 mm, 0,15 mm and 0,18 mm. In particular, it gives general requirements, magnetic properties, geometric characteristics and tolerances and technological characteristics, as well as inspection procedure.

This European Standard applies to magnetic steel strip and sheet supplied in the finally annealed condition in coils and intended for the construction of magnetic circuits used at frequencies equal to or higher than 100 Hz.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 10204, *Metallic products — Types of inspection documents*

EN 10251, *Magnetic materials — Methods of determination of the geometrical characteristics of electrical steel sheet and strip*

EN 60404-2, *Magnetic materials — Part 2: Methods of measurement of the magnetic properties of electrical steel strip and sheet by means of an Epstein frame (IEC 60404-2)*

EN 60404-13, *Magnetic materials — Part 13: Methods of measurement of density, resistivity and stacking factor of electrical steel sheet and strip (IEC 60404-13)*

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)*

EN ISO 7799, *Metallic materials — Sheet and strip 3 mm thick or less — Reverse bend test (ISO 7799)*

IEC 60050-121, *International Electrotechnical Vocabulary — Chapter 121: Electromagnetism*

IEC 60050-221, *International Electrotechnical Vocabulary — Chapter 221: Magnetic materials and components*

IEC 60404-10, *Magnetic materials — Part 10: Methods of measurement of magnetic properties of magnetic sheet and strip at medium frequencies*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-121, IEC 60050-221 and the following apply.

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