

Thin magnetic steel sheet and strip for use at medium frequencies

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 10303:2001 sisaldab Euroopa standardi EN 10303:2001 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.11.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 10303:2001 consists of the English text of the European standard EN 10303:2001.</p> <p>This document is endorsed on 16.11.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard defines the grades of thin non-oriented magnetic steel sheet and strip in nominal thicknesses of 0,05 mm, 0,10 mm, 0,15 mm and 0,20 mm, and of thin grain-oriented magnetic steel sheet and strip in nominal thicknesses of 0,05 mm, 0,10 mm and 0,15 mm. In particular, it gives general requirements, magnetic properties, geometric characteristics and tolerances and technological characteristics, as well as inspection procedure.</p>	<p>Scope: This European Standard defines the grades of thin non-oriented magnetic steel sheet and strip in nominal thicknesses of 0,05 mm, 0,10 mm, 0,15 mm and 0,20 mm, and of thin grain-oriented magnetic steel sheet and strip in nominal thicknesses of 0,05 mm, 0,10 mm and 0,15 mm. In particular, it gives general requirements, magnetic properties, geometric characteristics and tolerances and technological characteristics, as well as inspection procedure.</p>
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Hinnagrupp G

ICS 77.140.40; 77.140.50

English version

Thin magnetic steel sheet and strip for use at medium frequencies

Tôles et bandes magnétiques extra-minces en acier pour utilisation à moyennes fréquences

Dünnes Elektroblech und -band aus Stahl zur Verwendung bei mittleren Frequenzen

This European Standard was approved by CEN on 4 February 2001.

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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 Management Centre 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.



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Foreword

This European Standard has been prepared by Technical Committee ECISS/TC 24 "Electrical steel sheet and strip qualities - 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 2001, and conflicting national standards shall be withdrawn at the latest by September 2001.

This document is based on IEC 60404-8-8.

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 the United Kingdom.

1 Scope

This European Standard defines the grades of thin non-oriented magnetic steel sheet and strip in nominal thicknesses of 0,05 mm, 0,10 mm, 0,15 mm and 0,20 mm, and of thin grain-oriented magnetic steel sheet and strip in nominal thicknesses of 0,05 mm, 0,10 mm and 0,15 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 sheet and strip 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

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 (including amendments).

EN 10021, *Steel and steel products - General technical delivery requirements.*

EN 10204, *Metallic products - Types of inspection document.*

EN 10251, *Methods of determination of the geometrical characteristics of magnetic steel sheet and strip.*

EN 10252, *Methods of measurement of magnetic properties of magnetic steel sheet and strip at medium frequencies.*

EN ISO 7799, *Metallic materials - Sheet and strip 3 mm thick or less - Reverse bend test (ISO 7799:1985).*

IEC 60050 (121), *International Electrotechnical Vocabulary (IEV) – Chapitre 121 : Electromagnetism.*

IEC 60050 (221), *International Electrotechnical Vocabulary (IEV) - Chapter 221 : Magnetic materials and components.*

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

3 Terms and definitions

For the purposes of this European standard, the terms and definitions given in IEC 60050(121) and IEC 60050 (221) and the following apply.

3.1

number of bends

number of alternate bends possible before the appearance of the first crack in the base metal visible to the naked eye

NOTE It constitutes an indication of the ductility of the material.

3.2

edge camber

greatest distance between a longitudinal edge of the strip or sheet and the line joining the two extremities of the measured length of this edge