

INTERNATIONAL STANDARD

AMENDMENT 1

**Magnetic materials –
Part 1-1: Classification – Surface insulations of electrical steel strip, sheet and laminations**

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MAGNETIC MATERIALS –

Part 1-1: Classification – Surface insulations of electrical steel strip, sheet and laminations

AMENDMENT 1

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Amendment 1 to IEC IEC 60404-1-1:2004 has been prepared by IEC technical committee 68: Magnetic alloys and steels.

The text of this Amendment is based on the following documents:

Draft	Report on voting
68/756/CDV	68/763/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications/.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

Throughout the document, including the title of Part 1-1, replace "sheet, strip and laminations" with "strip, sheet and laminations".

2 Normative references

Delete the existing reference to IEC 60404-8-2.

Replace the existing dated references to IEC 60404-8-3, IEC 60404-8-4, IEC 60404-8-5, IEC 60404-8-7, IEC 60404-8-8 and IEC 60404-11 with the following new undated references:

IEC 60404-8-3, Magnetic materials – Part 8-3: Specifications for individual materials – Cold-rolled non-oriented electrical steel strip and sheet delivered in the semi-processed state

IEC 60404-8-4, Magnetic materials – Part 8-4: Specifications for individual materials – Cold-rolled non-oriented electrical steel strip and sheet delivered in the fully-processed state

IEC 60404-8-5, Magnetic materials – Part 8-5: Specifications for individual materials – Electrical steel strip and sheet with specified mechanical properties and magnetic polarization

IEC 60404-8-7, Magnetic materials – Part 8-7: Specifications for individual materials – Cold-rolled grain-oriented electrical steel strip and sheet delivered in the fully-processed state

IEC 60404-8-8, Magnetic materials – Part 8-8: Specifications for individual materials – Thin electrical steel strip and sheet for use at medium frequencies

IEC 60404-11, Magnetic materials – Part 11: Methods of measurement of the surface insulation resistance of electrical steel strip and sheet

3 Terms and definitions

Replace the existing text by the following:

For the purposes of this document, the terms and definitions given in IEC 60050-221, IEC 60404-8-3, IEC 60404-8-4, IEC 60404-8-5, IEC 60404-8-7, IEC 60404-8-8 and IEC 60404-11 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

Table 1

Replace, in the title of Table 1, "sheet, strip and laminations" with "strip, sheet and laminations".

Replace, throughout Table 1, "this coating" with "this type of coating".

Add, between the existing rows "EC-3" and "EC-4" a new row "EC-3-B" as follows:

Table 1 – Classification of surface insulations of electrical steel strip, sheet and laminations

Insulation designation	Insulation description – Characteristics – Typical application, limits of use
...	...
EC-3-B	<p>An EC-3 coating, usually applied by the steel manufacturer, having a self-bonding function used for bonding of stacks of stamped laminations.</p> <p>This type of coating, applied on the steel strip or sheet surface, is in a reactive state in the as-delivered condition of the steel. It turns into a fully cured state, bonding adjacent laminations in a stack and no longer reactive, after applying a pressure to the stack at an elevated temperature for a certain time^c.</p> <p>This type of coating can be applied on top of other types of coating, e.g. EC-5 or EC-6.</p>

Add, after the existing footnotes "a" and "b" a new footnote "c" as follows:

^c Methods for assessing the properties and quality of the coating in the as-delivered, active, state and the fully cured, bonded state, can be agreed between the manufacturer and the purchaser. This includes the proper bonding process.

