

Magnetic materials —

Part 13: Methods of measurement of density, resistivity and stacking factor of electrical steel sheet and strip

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee ISE/NFE/5, Magnetic alloys and steel, upon which the following bodies were represented:

- Association of Manufacturers Allied to the Electrical and Electronic Industry (BEAMA Ltd.)
- British Steel Industry
- Department of Trade and Industry (National Physical Laboratory)
- Electricity Supply Industry in England and Wales
- Electronic Components Industry Federation
- GAMBICA (BEAMA Ltd.)
- Institute of Physics
- Rotating Electrical Machines Association (BEAMA Ltd.)
- Sunderland Polytechnic (Magnet Centre)
- Transmission and Distribution Association (BEAMA Ltd.)
- Wolfson Centre for Magnetics Technology
- Co-opted members

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National foreword

This British Standard has been prepared by Technical Committee ISE/NFE/5. It is identical with IEC 404-13:1996 *Magnetic materials — Part 13: Methods of measurement of density, resistivity and stacking factor of electrical steel sheet and strip*. It is based on the physical properties chapters of BS 6404-2:1985 which has been superseded by BS 6404-2:1996.

This Part of BS 6404 is the thirteenth in a series of British Standards based on the IEC 404 series, Magnetic materials. The Part numbers of the British Standards follow those of the IEC Publication. The following Parts of the British Standard have been published or will shortly be published.

- *Part 1: Classification;*
- *Part 2: Methods of measurement of magnetic, electrical and physical properties of magnetic sheet and strip;*
- *Part 3: Methods of measurement of the magnetic properties of magnetic sheet and strip by means of a single sheet tester;*
- *Part 4: Methods of measurement of the d.c magnetic properties of solid steels;*
- *Part 5: Permanent magnetic (magnetically hard) materials. Method of measurement of magnetic properties;*
- *Part 6: Methods of measurement of the magnetic properties of isotropic nickel-iron magnetic alloys, types E1, E3 and E4;*
- *Part 7: Method of measurement of the coercivity of the magnetic materials in an open magnetic circuit;*
- *Part 8: Individual materials;*
- *Section 8.1: Specification for magnetically hard materials;*
- *Section 8.2: Specification for cold-rolled, magnetic, non-oriented, alloyed steel strip delivered in the semi-processed state;*
- *Section 8.3: Specification for cold-rolled, magnetic, non-oriented, non-alloyed steel strip delivered in the semi-processed state;*
- *Section 8.4: Specification for cold-rolled, non-oriented, magnetic, steel sheet and strip delivered in the finally annealed state;*
- *Section 8.5: Specification for steel sheet and strip with specified mechanical properties and magnetic permeability;*
- *Section 8.6: Specification for soft magnetic metallic materials;*
- *Section 8.7: Specification for grain-oriented magnetic steel sheet and strip;*
- *Section 8.8: Specification for thin magnetic steel strip for use at medium frequencies;*
- *Section 8.9: Standard specification for sintered soft magnetic materials;*
- *Section 8.10: Specification for magnetic materials (iron and steel) for use in relays;*
- *Part 9: Methods for determination of the geometric characteristics of magnetic steel sheet and strip;*
- *Part 10: Methods of measurement of magnetic properties of magnetic steel and strip at medium frequencies;*
- *Part 11: Method of test for the determination of surface insulation resistance of magnetic sheet and strip;*
- *Part 12: Guide to the methods of assessment of temperature capability of interlaminar insulation coatings;*
- *Part 20: Resistance and temperature classification of insulation coatings.*

Additional Parts and Sections of IEC 404 will be published and are expected to provide a basis for additional Parts of BS 6404.

Cross-references

International Standard	Corresponding British Standard
IEC 404-2:1978	BS 6404 <i>Magnetic materials</i> Part 2:1985 <i>Methods of measurement of magnetic, electrical and physical properties of magnetic sheet and strip</i> (Technically equivalent)
IEC 404-3:1992	Part 3:1992 <i>Methods of measurement of magnetic properties of magnetic sheet and strip by means of a single sheet tester</i> (Identical)
IEC 404-10:1988	Part 10:1989 <i>Methods of measurement of magnetic properties of magnetic sheet and strip at medium frequencies</i> (Identical)
ISO 1183:1987	BS 2782 <i>Methods of testing plastics</i> Part 6: <i>Dimensional properties</i> Methods 620A to 620D <i>Determination of density and relative density of non-cellular plastics</i> (Identical) BS 5600 <i>Powder metallurgical materials and products</i> Part 3: <i>Methods of testing sintered metal materials and products, excluding hardmetals</i>
ISO 2738:1987	Section 3.2:1988 <i>Determination of density, oil content and open porosity</i> (Identical)

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

