

Magnetic materials —

Part 3: Methods of measurement of the magnetic properties of magnetic sheet and strip by means of a single sheet tester

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Iron and Steel Standards Policy Committee (ISM/-) and the Non-ferrous Metals Standards Policy Committee (NFM/-) to Technical Committee ISM/NFM/5, 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 Magnets Technology
- Coopted members

This British Standard, having been prepared under the direction of the Iron and Steel and Non-ferrous Metals Standards Policy Committees, was published under the authority of the Standards Board and comes into effect on 15 September 1992

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National foreword

This Part of BS 6404 has been prepared under the direction of the Iron and Steel and Non-ferrous Metals Standards Policy Committees. It is identical with IEC 404-3:1992 *Magnetic materials — Part 3: Methods of measurement of the magnetic properties of magnetic sheet and strip by means of a single sheet tester*, published by the International Electrotechnical Commission (IEC). This Part of BS 6404 supersedes BS 6404-3:1985, which is withdrawn.

The scope of the standard has been extended to include measurement of magnetic field strength, excitation current and specific apparent power. The apparatus recommended in BS 6404-3:1985 is specified apparatus in this revision, with an agreed effective magnetic path length.

This Part of BS 6404 is the third in a series of British Standards based on the IEC series *Magnetic materials*. The Part numbers of the British Standards follow the Parts 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 4: Methods of measurement of the d.c. magnetic properties of solid steels;*
- *Part 5: Methods of measurement of the magnetic properties of magnetically hard (permanent magnet) materials;*
- *Part 6: Methods of measurement of the magnetic properties of isotropic nickel-iron soft magnetic alloys, types E1, E3 and E4;*
- *Part 7: Method of measurement of the coercivity of 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;*
- *Part 9: Methods for determination of the geometrical characteristics of magnetic steel sheet and strip;*
- *Part 10: Methods of measurement of magnetic properties of magnetic steel sheet and strip at medium frequencies;*
- *Part 11: Method of test for the determination of surface insulation resistance of magnetic sheet and strip.*

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)

The Technical Committee has reviewed the provisions of IEC 50(901), to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 12, 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.

