



BS 6404 : Section 8.6 : 1988
IEC 404-8-6 : 1986

(Incorporating Corrigendum 1987)

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British Standard
Magnetic materials

Part 8. Individual materials

Section 8.6 Specification for soft magnetic metallic materials

Matériaux magnétiques

Partie 8. Matériaux particuliers

Section 8.6 Matériaux métalliques magnétiquement doux – Spécifications

Magnetische Werkstoffe

Teil 8. Einzelne Werkstoffe

Abschnitt 8.6 Weichmagnetische Werkstoffe

National foreword

This Section of BS 6404 : Part 8 has been prepared under the direction of the Iron and Steel and Non-ferrous Metals Standards Committees. It is identical with IEC 404-8-6 : 1986 'Magnetic materials, Part 8 : Specifications for individual materials. Section Six – Soft magnetic metallic materials' incorporating Corrigendum : 1987, published by the International Electrotechnical Commission (IEC). Incorporation of the Corrigendum is indicated by vertical lines in the margin.

The following Parts of BS 6404 have been 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 specific total losses 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. 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 8.7 Specification for grain-oriented magnetic steel sheet and strip
- Part 9. Methods for determination of the geometrical characteristics of magnetic steel sheet and strip

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

Terminology and conventions. The text of the international standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

Wherever page numbers are quoted, they are IEC page numbers.

Cross-references

International standard	Corresponding British Standard
IEC 50 (121) : 1978	BS 4727 Glossary of electrotechnical, power, telecommunication, electronics, lighting and colour terms
IEC 50 (131) : 1978	
	Part 1 Terms common to power telecommunications and electronics Group 01 : 1983 Fundamental terminology (Technically equivalent)
IEC 404-1 : 1979	BS 6404 Magnetic materials Part 1 : 1984 Classification (Technically equivalent)
IEC 404-2 : 1978	Part 2 : 1985 Methods of measurement of magnetic, electrical and physical properties of magnetic sheet and strip (Technically equivalent)
IEC 404-6 : 1986	Part 6 : 1988 Methods of measurement of the magnetic properties of isotropic nickel-iron soft magnetic alloys, types E1, E3 and E4 (Identical)
IEC 404-8-4 : 1986	Section 8.4 : 1986 Specification for cold-rolled, non-oriented magnetic steel sheet and strip delivered in the finally annealed state (Technically equivalent)
IEC 635 : 1978	BS 5935 : 1980 Specification for toroidal strip-wound cores made of magnetically soft material (Identical)

The Technical Committee has reviewed the provisions of IEC 50 (901), IEC 404-8-2 and IEC 404-8-5*, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

A related British Standard to IEC 50(901) is BS 4727 : Part 1 : Group 07 : 1973 'Magnetism terminology'.

IEC 404-8-2 is related to BS 6404 : Section 8.2 and IEC 404-8-5* is related to BS 6404 : Section 8.7.

*IEC 404-8-5 has become IEC 404-8-7. See paragraph regarding textual error.

Textual error. When adopting the text of the international standard the textual error given below was discovered. It has been marked in the text and has been reported to IEC in a proposal to amend the text of the international standard.

In clause 1, paragraph 2, lines 6 and 7, 'IEC Publication 404-8-5 : Part 8 : Specifications for individual materials. Section 5 – Specification for Grain Oriented Magnetic Steel Sheet and Strip (in preparation)' should be read as 'IEC Publication 404-8-7 : Part 8 : Specification for individual materials. Section 7 – Specification for Grain Oriented Magnetic Steel Sheet and Strip'.

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

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