



BRITISH STANDARD

**BS EN ISO
2178 : 1995**

**Non-magnetic coatings
on magnetic
substrates —
Measurement of coating
thickness —
Magnetic method**

The European Standard EN ISO 2178 : 1995 has the status of a
British Standard

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National foreword

This revised Part of BS 5411 has been prepared under the direction of the Surface Coatings (other than Paints) Standards Committee. It is identical with the 1982 edition of ISO 2178 'Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method', which was prepared, with the active participation and approval of the United Kingdom, by Subcommittee 2, Methods of inspection and co-ordination of test methods, of Technical Committee 107, Metallic and other non-organic coatings, of the International Organization for Standardization (ISO). This Part of BS 5411 supersedes BS 5411 : Part 11 : 1977 which is now withdrawn.

In 1994 the European Committee for Standardization (CEN) accepted ISO 2178 : 1982 as European Standard EN ISO 2178 : 1995. As a consequence of implementing the European Standard this British Standard is renumbered as BS EN ISO 2178 and any reference to BS 5411 : Part 11 should be read as a reference to BS EN ISO 2178.

This edition of BS 5411 : Part 11 differs from the previous edition in the following principal respects.

- (a) Additional advice is given regarding calibration of the instrument.
- (b) The procedure to be adopted when making measurements on a rough surface has been amended by now requiring at least five measurements within the same reference area if the range of a series of measurements on a rough surface substantially exceeds the inherent repeatability of the instrument.
- (c) Attention is now drawn to the importance of cleanliness of the instrument probe.
- (d) The use of a measuring stand is now strongly recommended, in appropriate cases when a constant pressure probe is not being used. In addition, the advice regarding the effect of probe pressure has been expanded.
- (e) The procedure to be followed when residual magnetism is present in the basis metal is now made more general with less emphasis on specific types of instruments.

(f) The accuracy of the method is now given in terms of absolute measure of coating thickness as well as in terms of a percentage of the coating thickness.

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.

The comma has been used as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Where the words 'International Standard' appear, referring to this standard, they should be read as 'Part of this British Standard'.

Cross-references

International standard	Corresponding British Standard
ISO 2064-1980	BS 5411 Methods of test for metallic and related coatings Part 1 : 1980 Definitions and conventions concerning the measurement of thickness (Identical)
ISO 2361-1982	Part 9 : 1984 Measurement of coating thickness of electro-deposited nickel coatings on magnetic and non-magnetic substrates : magnetic method (Identical)

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



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Descriptors: Metal coatings, non-metal coatings, vitreous enamels, porcelain enamels, dimensional measurements, magnetic tests, base metal

English version

Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method

(ISO 2178 : 1982)

Revêtements métalliques non magnétiques sur métal de base magnétique — Mesurage de l'épaisseur du revêtement — Méthode magnétique (ISO 2178 : 1982)

Nichtmagnetische Überzüge auf magnetischen Grundmetallen — Messen der Schichtdicke Magnetverfahren (ISO 2178 : 1982)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

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