

British Standard

Sampling and analysis of iron, steel and other ferrous metals

Part 3. Methods of analysis

Section 3.7 Determination of calcium

Subsection 3.7.1 Steel: flame atomic absorption spectrometric method

[EU title : Chemical analysis of ferrous materials. Determination of calcium in steels.

Flame atomic absorption spectrometric method]

Echantillonnage et analyse du fer, de l'acier et d'autres métaux ferreux

Partie 3. Méthodes d'analyse

Section 3.7 Dosage du calcium

Sous-section 3.7.1 Acier: méthode par spectrométrie d'absorption atomique

Probenahme und Analyse von Eisen, Stahl und anderen Eisenmetallen

Teil 3. Analysenverfahren

Abschnitt 3.7 Kalziumbestimmung

Unterabschnitt 3.7.1 Stahl: Flammenatomabsorptionsspektrophotometrie

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National foreword

This Subsection of BS 6200 has been prepared under the direction of the Iron and Steel Standards Committee.

It is identical with Euronorm 177-1985 'Chemical analysis of ferrous materials. Determination of calcium in steels. Flame atomic absorption spectrometric method' published by the Commission of the European Communities.

Terminology and conventions. The text of the Euronorm 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 the word 'EURONORM' appears, referring to this standard, it should be read as 'British Standard'.

Cross-references

International standard	Corresponding British Standard
ISO 5725-1981	BS 5497 Precision of test methods Part 1 : 1979 Guide for the determination of repeatability and reproducibility for a standard test method (Technically equivalent)

The Technical Committee has reviewed the provisions of Euronorm 18, to which reference is made in clause 6, and has decided that they are acceptable for use in conjunction with this standard.

At present there is no corresponding British Standard for Euronorm 18. Appropriate procedures from Euronorm 18 will be incorporated in BS 6200 : Part 2 'Methods of sampling and sample preparation', which will be published in due course.

Additional information. The method given embodies an early practice of subtracting the absorbance of the zero calibration solution from the absorbance of the other calibration solutions to obtain the net absorbances which are used in the preparation of the graph. This is a potential source of error in methods where there is a significant amount of analyte in the base metal and the calibration graph is non-linear. Tests have shown, however, that over the concentration range of calcium encountered in steel the graph is linear, so that these potential errors do not arise. Details of the procedures to be adopted in methods where the calibration graphs are non-linear will be included in BS 6200 : Part 6, to be published in due course.

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