

Methods for

Analysis and testing of coal and coke —

Part 105: Determination of gross
calorific value

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Solid Mineral Fuels Standards Policy Committee (SFC/-) to Technical Committee SFC/3, upon which the following bodies were represented:

- British Cement Association
- British Coal Corporation
- British Gas plc
- British Steel Industry
- Electricity Industry in United Kingdom
- GAMBICA (BEAMA Ltd.)
- Institute of Petroleum
- Power Generation Contractors' Association (BEAMA Ltd.)

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Foreword

This Part of BS 1016 has been prepared under the direction of the Solid Mineral Fuels Standards Policy Committee. Part 105 is a revision of the 1977 edition of BS 1016-5, which is withdrawn. The principal change is that stainless steel or nickel-chromium crucibles are now specified for all purposes (see 6.6), instead of silica, nickel-chromium or platinum crucibles; lining of the crucible is now recommended whenever complete combustion cannot otherwise be achieved.

Part 105 is a further Part numbered under a scheme for rationalizing and restructuring BS 1016. The new series, when complete, will begin with Part 100, which will include a general introduction. The earlier series of Parts is as follows, with the new Part numbers (which will be given to revisions when they are published) in parentheses.

- *Part 1: Total moisture of coal (Part 101);*
- *Part 2: Total moisture of coke (Part 102);*
- *Part 6: Ultimate analysis of coal (Part 106);*
- *Part 7: Ultimate analysis of coke (Part 106);*
- *Part 8: Chlorine in coal and coke (Part 106);*
- *Part 9: Phosphorus in coal and coke (Part 106);*
- *Part 10: Arsenic in coal and coke (Part 106);*
- *Part 11: Forms of sulphur in coal (Part 106);*
- *Part 14: Analysis of coal ash and coke ash (Part 114);*
- *Part 15: Fusibility of coal ash and coke ash (Part 113);*
- *Part 16: Methods for reporting results (Part 100);*
- *Part 17: Size analysis of coal (Part 109);*
- *Part 18: Size analysis of coke (Part 110);*
- *Part 20: Determination of Hardgrove grindability index of hard coal (Part 112);*
- *Part 21: Determination of moisture-holding capacity of hard coal (Part 103).*

The following Parts in the new series have been published.

- *Part 104: Proximate analysis;*
- *Part 105: Determination of gross calorific value;*
- *Part 107: Caking and swelling properties of coal;*
- *Part 108: Tests special to coke;*
- *Part 111: Determination of abrasion index of coal.*

This Part is related to ISO 1928:1976, published by the International Organization for Standardization (ISO). The principal differences are as follows.

- a) ISO 1928 specifies the use of silica, nickel-chromium or platinum crucibles, depending on the nature of the test portion.
- b) ISO 1928 describes the calculation of other calorific values: in this Part of BS 1016 reference is made to BS 1016-16 instead.

WARNING NOTE. This British Standard does not necessarily detail all the precautions necessary to comply with the requirements of the Health and Safety at Work etc. Act 1974 [1] or the Control of Substances Hazardous to Health Regulations 1988 [2]. Attention should be paid to any appropriate precautions and the method should be operated only by trained personnel.

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.

