Hard coal and coke — Mechanical sampling

Part 1: General introduction
This British Standard is the UK implementation of ISO 13909-1:2016. It supersedes BS ISO 13909-1:2001 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PTI/16, Solid mineral fuels.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO’s adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword - Supplementary information](https://www.iso.org/foreword-supplementary-information.html).

The committee responsible for this document is ISO/TC 27, Solid mineral fuels, Subcommittee SC 4, Sampling.

This second edition cancels and replaces the first edition (ISO 13909-1:2001), which has been technically revised.

ISO 13909 consists of the following parts, under the general title *Hard coal and coke — Mechanical sampling*:

— *Part 1: General introduction*

— *Part 2: Coal — Sampling from moving streams*

— *Part 3: Coal — Sampling from stationary lots*

— *Part 4: Coal — Preparation of test samples*

— *Part 5: Coke — Sampling from moving streams*

— *Part 6: Coke — Preparation of test samples*

— *Part 7: Methods for determining the precision of sampling, sample preparation and testing*

— *Part 8: Methods of testing for bias*
Hard coal and coke — Mechanical sampling —

Part 1: General introduction

1 Scope

This part of ISO 13909 defines the basic terms used in the sampling of solid mineral fuels, describes the general principles of sampling and details the information to be provided in the documentation and the sampling report. It also lists the other parts and gives guidance on the selection of the appropriate part.

ISO 13909 does not include sampling of brown coals and lignites, or sampling from coal seams, for which guidance is given in ISO 14180. Manual sampling of coal and coke is covered in ISO 18283.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 565, Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings

ISO 3310-1, Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth

ISO 5725-1:1994, Accuracy (trueness and precision) of measurement methods and results — Part 1: General principles and definitions

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 air-drying

process of bringing the moisture content of the sample (3.31) near to equilibrium with the atmosphere in the area in which further reduction and division of the sample are to take place

Note 1 to entry: Air-drying to equilibrium with the atmosphere applies to coal. Drying of coke is generally to facilitate sample preparation (3.34).

3.2 bias

systematic error (3.10) which leads to the average value of a series of results being persistently higher or persistently lower than those which are obtained using a reference sampling method

3.3 coefficient of variation

standard deviation (3.37) expressed as a percentage of the absolute value of the arithmetic mean

3.4 common sample

sample (3.31) collected for more than one intended use