Second edition 2022-08

Coal — Determination and presentation of float and sink characteristics — General directions for apparatus and procedures

Charbon — Détermination et présentation des caractéristiques de flottation et d'enfoncement — Principes directeurs relatifs à l'appareillage et aux modes opératoires



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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).

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).

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

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 27, *Coal and coke*, Subcommittee SC 1, *Coal preparation: Terminology and performance*.

This second edition cancels and replaces the first edition (ISO 7936:1992), which has been technically revised.

The main changes are as follows:

— addition of new procedures for the use of inorganic solutions, such as caesium and potassium formates, and for aqueous suspensions, such as zirconium dioxide for float and sink analysis.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The results of float and sink testing, presented in tabular and graphical form, are the basis for the provision of washability data.

The results of float and sink data from coal seam samples provide an estimation of the future quality and yield of washed coal from the area of the coal lease where the samples were taken.

The results of float and sink data from coal seams and preparation plants are also used when designing a new plant and /or redesigning an existing plant, and also in predicting, controlling and assessing the performance of an existing plant in total or in part.

Where tests other than those for routine control purposes are carried out, it is essential that there is precise instruction regarding size ranges and relative density fractions to establish the scope of information and accuracy required.

The following annexes provide new additional information in this revision as follows:

- Annex A Drop shatter A pre-treatment of samples for float and sink testing;
- Annex B Wet tumbling A pre-treatment of samples for float and sink and testing;
- <u>Annex C</u> Sample masses for float and sink testing;
- Annex D Validation of data from float and sink analysis;
- Annex E Interpretation of data from float and sink analysis;
- Annex F Guide to the safe use of organic solutions.