2 IANDARD

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

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



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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75% of the member bodies casting a vote.

International Standard ISO 7936 was prepared by Technical Committee ISO/TC 27, Solid mineral fuels, Sub-Committee SC 1, Coal preparation. Terminology and performance.

Annexes A and B form an integral part of this International Standard. Annex C is for information only.

Introduction

The results of float and sink testing, presented in tabular and graphical form, are the basis for the provision of washability data. These results are useful when designing and redesigning a plant, and in predicting, controlling and assessing the performance of a plant.

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.

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

1 Scope

This International Standard describes general directions for the apparatus and procedures, using relative density separation methods, for determining the float and sink characteristics of raw coal and of products from coal preparation plants.

A general procedure for a centrifugal float and sink test is given in annex A. A typical procedure for treating and testing a sample of raw coal is described in annex B. Some practical hints on float and sink testing are given in annex C.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 923:1975, Coal cleaning tests — Expression and presentation of results.

ISO 1213-1:1982, Solid mineral fuels — Vocabulary Part 1: Terms relating to coal preparation.

ISO 1213-2:1971, Vocabulary of terms relating to solid mineral fuels — Part 2: Terms relating to coal sampling and analysis.

ISO 1988:1975, Hard coal — Sampling.

ISO 9411-1:—1), Solid mineral fuels — Mechanical sampling from moving streams — Part 1: Coal.

ISO 1953:1972, Hard coals — Size analysis.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 1213-1 and ISO 1213-2 apply.

4 Sampling

4.1 General

Sampling shall be carried out in accordance with ISO 1988.

NOTE 1 A method for the mechanical sampling of coal from moving streams will be covered in ISO 9411-1.

The quantity of sample, and consequently the degree of accuracy obtained in a float and sink test, may be varied according to the purpose for which the test is being carried out. The three main categories are

- a) investigation of the characteristics of raw coal;
- b) comprehensive plant efficiency tests;
- c) plant control tests.

4.2 Raw coal

The mass of the bulk sample should be sufficient to contain the minimum quantities in each fraction as listed in table 1, which is for guidance only for use with an unknown sample. These masses may not be practicable in the case of some plant products or bore core samples.

¹⁾ To be published.