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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18711-2025

Replacing GB/T 18711-2002

Test method of magnetite for use in coal preparation

选煤用磁铁矿粉试验方法

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 18711-2002 "Test Methods for Magnetite Powder for Coal Preparation". Compared with GB/T 18711-2002, except for the structure...

Aside from adjustments and editorial changes, the main technical changes are as follows.

- a) The scope of application has been changed (see Chapter 1, Chapter 1 of the 2002 edition);
- b) Added terms and definitions (see Chapter 3);
- c) Sampling and sample preparation have been changed (see Chapter 4, Chapter 3 of the 2002 edition);
- d) The determination of moisture content was changed (see Chapter 5, Chapter 4 in the 2002 edition);
- e) Sample preparation prior to laboratory analysis has been removed (see Chapter 5 of the 2002 edition);
- f) The determination of particle size composition has been modified (see Chapter 6, Chapter 6 of the 2002 edition);
- g) The key points, main test equipment, magnetic field strength, units, and expression of test results for determining the content of magnetic materials have been changed (see 7.1, 7.2).
7.3.2, 7.3.8, 7.4 (and 7.1, 7.2, 7.3.2, 7.3.8, 7.4 in the 2002 edition);
- h) The determination of true density has been modified (see Chapter 8, Chapter 8 of the 2002 edition);
- i) The description of the instrument, the amount of sample, and the expression of the test results in the true density determination have been changed (see 8.3, 8.4, 8.9, 2002 edition).
(8.3, 8.4, 8.9)
- j) The requirements for the temperature and number of measurements for true density determination have been removed (see sections 8.5 and 8.6 of the 2002 edition);
- k) The determination of ferrous oxide content has been changed (see Chapter 10, Chapter 10 of the 2002 edition);
- l) Sulfur content determination has been added (see Chapter 11);
- m) increased the density of distilled water at different temperatures (see Appendix A).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Coal Association.

This document is under the jurisdiction of the National Coal Standardization Technical Committee (SAC/TC42).

1 Scope

This document describes the sampling and preparation of magnetite powder for coal preparation, including moisture determination, particle size distribution determination, magnetic content determination, and true density.

Methods for determining total iron content, ferrous oxide content, and sulfur content.

This document applies to magnetite powder used in coal preparation.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 6730.2 Determination of moisture content in iron ore by gravimetric method GB/T 6730.5 Determination of total iron content in iron ore by titration after reduction with titanium trichloride GB/T 6730.8 Determination of ferrous content in iron ore by potassium dichromate titration method GB/T 6730.16 Determination of Sulfur Content in Iron Ore by Barium Sulfate Gravimetric Method GB/T 10322.1 Sampling and Sample Preparation Methods for Iron Ore GB/T 10322.7 Determination of particle size distribution of iron ore and direct reduced iron by sieve analysis

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4 Sampling and Sample Preparation

Sampling and sample preparation shall be carried out in accordance with GB/T 10322.1.

5 Moisture content determination

Moisture content determination shall be performed in accordance with GB/T 6730.2.

6 Particle size composition determination

Particle size distribution was determined according to GB/T 10322.7.

7.1 Key Points

The sample particle size is