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

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Determination of bulk density of coke in a large container

焦炭堆积密度大容器测定方法

(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 is modified to adopt ISO 1013:2020 "Determination of bulk density of coke in large containers".

The technical differences between this document and ISO 1013:2020, and the reasons therefor, are as follows.

---The maximum weighing capacity requirement for weighing equipment has been increased (see 5.2) to adapt to my country's technical conditions;

---The normative reference GB/T 2001 (see 6.6) has been added to adapt to my country's technical conditions;

---The normative reference GB/T 8170 has been added, replacing ISO 579 (see Chapter 7) to adapt to my country's technical conditions;

---Added the section "Abnormalities found during the measurement process" to the test report to adapt to my country's technical conditions.

The following editorial changes have been made to this document.

---The standard's name has been changed;

---Change the symbol for the total moisture content of coke to Mt.

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 Iron and Steel Association.

This document is under the jurisdiction of the National Technical Committee on Standardization of Coal Chemical Industry (SAC/TC469).

1 Scope

This document describes a method for determining the bulk density of coke in large containers such as trucks or dump trucks.

This document is applicable to the determination of the bulk density of coke in large containers.

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 2001 Analytical Determination Methods for Coke Industry GB/T 8170 Rules for rounding off numerical values and the representation and determination of limiting values

3 Terms and Definitions

The following terms and definitions apply to this document.

Bulk density of coke Under specified conditions, the ratio of the mass of coke in a container to the volume of the container.

4 Principles

A container with known mass and volume is filled with coke. Calculate the bulk density of the coke based on the mass of the coke in the container and the volume of the container.

5 Instruments and Equipment

5.1

Container. capable of holding at least 3 tons of coke, such as a truck or dump truck.

5.2

Weighing equipment. capable of weighing containers and their loads, with a maximum weighing capacity of 10t and a weighing accuracy of 0.2%.

6 Experimental Procedure

6.1

Place the container (5.1) on the weighing device (5.2) and record its mass (m_1).

6.2

Measure the internal dimensions of the container to an accuracy of 1 cm and calculate its volume (V).

6.3

If the container is already full of coke, it is advisable to weigh the container and the coke first, and then weigh and measure the empty container.

6.4

Place the container on a level surface and slowly pour in the coke until the amount of coke poured in is higher than the entire top surface of the container.

6.5

Slide a rigid ruler across the top of the container and remove any coke fragments that obstruct its passage. Weigh the container filled with coke.

Mass (m_2).

6.6

The total moisture content of coke shall be determined in accordance with GB/T 2001 and denoted as M_t .