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

GB/T 22459.6-2022

**Refractory mortars - Part 6: Determination of moisture content
of ready-mixed mortars**

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5.1 Balance. the minimum division value is not more than 0.01g.

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foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 6 of GB/T 22459 "Refractory Slurry". GB/T 22459 has released the following parts.

- Part 1. Consistency test method (cone penetration method);
- Part 2. Consistency test method (jumping table method);
- Part 3. Test method for bonding time;
- Part 4. Test method for flexural bond strength at room temperature;
- Part 5. Test method for particle size distribution (sieve analysis);
- Part 6. Test method for water content of pre-mixed mud;
- Part 7. Other performance test methods;
- Part 8. Bleeding test method.

This document replaces GB/T 22459.6-2008 "Refractory Mud Part 6. Test Method for

Moisture Content of Pre-mixed Mud". and

Compared with GB/T 22459.6-2008, in addition to structural adjustment and editorial changes, the main technical changes are as follows.

- a) Modified normative references (see Chapter 2, Chapter 2 of the.2008 edition);
- b) The definition of water content is deleted (see 3.1 of the.2008 edition);
- c) Added the definition of pre-mixed mud (see 3.1);
- d) Changed the equipment (see Chapter 5, Chapter 5 of the.2008 edition);
- e) The sampling regulations for refractory mud have been changed (see Chapter 6, Chapter 6 of the.2008 edition);
- f) Changed the test procedure (see Chapter 7, Chapter 7 of the.2008 edition);
- g) Changed the calculation formula and added the requirements for revision (see Chapter 8, Chapter 8 of the.2008 edition);
- h) Changed the test report requirements (see Chapter 9, Chapter 9 of the.2008 edition).

This document is revised and adopted ISO 13765-6.2004 "Refractory Mud Part 6.Test Method for Moisture Content of Pre-mixed Mud".

Compared with ISO 13765-6.2004, this document has many adjustments in structure, and the comparison list of structure number changes between the two documents

See Appendix A for the table.

Compared with ISO 13765-6.2004, this document has many technical differences. In the outer margins of the clauses involved, vertical

The straight single line () is marked. See Appendix B for a list of these technical differences and their reasons.

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Refractory mud is generally used as the joint material of refractory masonry, so that the masonry forms a tight whole to resist the damage of external force and prevent gas,

Intrusion of molten liquid. Masonry joints are usually the weak link of the masonry, and in most cases are damaged before the masonry, so the quality of the refractory mortar is

It is closely related to the overall life of the masonry.

The water content of refractory mud is an important indicator to characterize its

construction performance, which directly affects the construction quality of refractory masonry, and will eventually affect the refractory masonry.

The service life and safety of the body are affected. The first 6 parts of GB/T 22459 are modified and adopted ISO 13765, Part 7 of GB/T 22459

Part 8 and ISO 13765 have no correspondence.

GB/T 22459 "Refractory Mud" consists of 8 parts.

--- Part 1.Consistency test method (cone penetration method), the purpose is to determine the consistency of refractory mud;

--- Part 2.Consistency test method (jumping table method), the purpose is to determine the consistency of refractory mud;

--- Part 3.Test method for bonding time, the purpose is to determine the time required for the stability of the bonding of refractory mortar joints when building refractory masonry take time;

--- Part 4.Test method for flexural bonding strength at room temperature, the purpose is to determine the resistance of refractory mortar joints after refractory masonry is built.

folded bond strength;

--- Part 5.Test method for particle size distribution (sieve analysis), the purpose of which is to determine the particle size distribution of refractory mud;

--- Part 6.Test method for water content of pre-mixed mud, the purpose of which is to determine the moisture content of pre-mixed mud;

--- Part 7.Other performance test methods, the purpose is to determine the refractoriness of refractory mud, high temperature flexural bonding strength, room temperature flexural strength

degree, thermal expansion, thermal conductivity, etc.;

--- Part 8.Bleeding test method, the purpose is to determine the bleeding performance of refractory mud at rest or under a certain load.

This document is part 6, and the other 7 parts belong to the test method for refractory mud, which together constitute the test method for refractory mud

system.

Refractory Slurry Part 6.

Test method for water content of pre-mixed mud

1 Scope

This document specifies the principle, equipment, sampling, test procedure, result calculation and test of the test method for water content of pre-stirred refractory slurry Report.

This document applies to the determination of the moisture content of pre-stirred refractory slurries.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 4513.2 Unshaped Refractories Part 2.Sampling (GB/T 4513.2-2017, ISO 1927-2:2012, IDT)

GB/T 8170 Numerical Rounding Rules and Representation and Judgment of Limit Values

GB/T 18930 Refractory Terms (GB/T 18930-2020, ISO 836:2001, MOD)

3 Terms and Definitions

GB/T 18930 and the following terms and definitions apply to this document.

3.1

The refractory slurry that has been pre-mixed with water or liquid binder and can be used directly when supplied.

4 Principles

In a drying oven at 110 °C $\pm$ 5 °C, dry samples of known mass to constant weight.

5.4 Watch glass. ceramic or glass, diameter 70mm~100mm.

Note. The watch dish can be replaced by suitable containers such as petri dishes and evaporating dishes that do not react with refractory mud.

6 Sampling

Sampling according to the provisions of GB/T 4513.2 or negotiated by relevant parties.