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

GB/T 4513.5-2017

**Monolithic (unshaped) refractory products -- Part 5: Preparation
and treatment of test pieces**

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Table of Contents

Foreword

2012 chapter number control list.

1 Scope

2 Normative references

3 sample size

Foreword

GB/T 4513 "amorphous refractory" is divided into the following eight sections.

- Part 1. Introduction and classification;
- Part 2. Sampling;
- Part 3. Basic characteristics;
- Part 4. Determination of fluidity of castables;
- Part 5. Sample preparation and pretreatment;
- Part 6. Determination of physical properties;
- Part 7. Determination of preforms;
- Part 8. Determination of additional performance.

This section GB/T 4513 Part 5.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the redrafted law Amendment uses ISO 1927-5.2012 "amorphous refractory materials Part 5. Preparation and pre-sample

Reason. "

This part of the structure compared with ISO 1927-5.2012 more adjustments, listed in Appendix A of this section and ISO 1927-5.

2012 chapter number control list.

This section there are technical differences compared with ISO 1927-5.2012, the provisions of these differences have been passed in the outer margin of the page margin

The vertical line (|) is marked. Appendix B lists the technical differences between this part

and ISO 1927-5.2012 and the reason one

Table.

Please note that some of this document may be patentable. The issuing agencies of this document do not bear the responsibility of identifying these patents.

This part of the National Refractories Standardization Technical Committee (SAC/TC193) and focal point.

This section is responsible for the drafting unit. Sinosteel Luoyang Refractory Research Institute Co., Ltd., Henan Ruitai Refractory Technology Co., Ltd.,

MCC Wuhan Metallurgical Construction Research Institute Co., Ltd.

1 Scope

This section GB/T 4513 specifies the size of amorphous refractory sample, describes the preparation and pretreatment of the sample (curing, drying

And heat treatment) method.

This section applies to dense castable, insulation castable, refractory ramming material, refractory plastic and dry material.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 4513.1 amorphous refractory materials - Part 1 Introduction and classification (GB/T 4513.1-2015, ISO 1927-1.2012, MOD)

GB/T 4513.4 amorphous refractory - Part 4. Determination of fluidity of castables (GB/T 4513.4-2017,

ISO 1927-4.2012, MOD)

GB 5749 drinking water health standards

GB/T 6682 analytical laboratory water specifications and test methods (GB/T 6682-2008, ISO 3696.1987, MOD)

GB/T 17732 dense shaped carbon-containing refractory products test method (GB/T 17732-2008, ISO 10060.1993, MOD)

3 sample size

The sample size has the following types .A-shaped .230mm x 114mm x 64mm; B-shaped .230mm x 64mm x 54mm;

C-shaped 230mm x 64mm x 64mm; D-shaped. 160mm x 40mm x 40mm.

The width of the sample preparation as the test height, deviations should be recorded, C, D-shaped specimen molding surface should be marked. In addition to ramming

Materials and dry materials, the sand can be used to prepare hammer hammer 50mm diameter and height of 50mm +/- 1mm of the sample, a variety of materials, sample size

Select Table 1. C-shaped laboratory arbitration sample size. The size of the sample chosen by the parties concerned to determine.

Table 1 sample size type

Castables

Maximum particle size

< 15mm

Maximum particle size

> 15mm

B or C or DA

Direct test b sqrt

Other tests sqrt

Direct test b sqrta

Other tests sqrt

Ramming material sqrt

Plastic sqrt

aB, C or D-shaped specimen can be A-shaped specimen cut.

b There are no size restrictions. The test items that can be directly used for the results include the flexural strength, compressive strength at room temperature, the change of permanent heating lines and the geometric bulk density.