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

GB/T 4513.1-2015

Replacing GB/T 4513-2000

**Monolithic (unshaped) refractory products -- Part 1:
Introduction and classification**

不定形耐火材料 第1部分：介绍和分类

(English Translation)

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Foreword

GB/T 4513 "monolithic refractories" includes the following eight sections.

- Part 1. Introduction and classification;
- Part 2. Sampling;
- Part 3. basic characteristics;
- Part 4. Determination of flow castable;
- Part 5. Sample preparation and pretreatment;
- Part 6. Determination of physical properties;
- Part 7. Determination of the preform;
- Part 8. Determination of specific properties.

This section GB/T 4513 Part 1.

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

This Part replaces GB/T 4513-2000 "monolithic refractories classification." this section uses redrafted Law Amendment uses ISO 1927-1:2012 "monolithic refractories - Part 1. Introduction and classification." this part of ISO 1927-1:2012, compared with more adjustment in the structure, listed in Appendix A of this standard and ISO 1927-1:2012 Chapter numbers control list.

Technical differences exist compared to 2012, listed in Appendix B of this standard and ISO 26845.. This part of ISO 1927-1 2008 skills List surgery differences and their causes.

--- On normative references, this standard has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Focus is reflected in the status of Chapter 2, "Normative references", the specific adjustments are as follows.

- increase the reference GB/T 2998;
- increase the reference GB/T 5988;

- Modify with international standards of GB/T 6005-2008 instead of ISO 565:1990.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

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

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1 Scope

This section provides monolithic refractories classification of product variety and various unshaped refractory products.

This section does not apply to particulate refractory materials and no binding agent.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 2998 Shaped insulating refractory products bulk density and true porosity test method (GB/T 2998-2001, eqv ISO 5016.

1997)

GB/T 5988 Refractories on heating test method (GB/T 5988-2007, ISO 2477:2005, ISO 2478. 1987, MOD) Basic dimensions GB/T 6005 Test sieves - Metal wire cloth, perforated plate and electroformed sheet mesh (GB/T 6005-2008, ISO 565:1990, MOD)

3 Terms and Definitions

The following terms and definitions apply to this document.

Unshaped refractory monolithic (unshaped) refractory products by the aggregate and one or more binding materials may be added directly to one or more suitable liquid is applied to the construction site after a Species mix.

Note 1: The monolithic refractories may include metals, organic or ceramic fiber material.

Note 2: The mixture may be either a dense material may be a heat-insulating material, insulation material means after the samples are fired using ISO 5016 is not true porosity measured Less than

45% of the material.

Preform pre-formed shapes to facilitate the production plant will directly and masonry monolithic refractories cast or molded into shaped articles.

Note: You can preform pre-heat treatment.

Bound form nature of the bond Binding form depends on the material without hardening process.

Note 1: The form can be combined.

--- Hydration combination. curing and curing at room temperature;

--- Ceramic bond. formed cured by sintering;

--- Chemical bonding (inorganic or inorganic - organic composite). forming a hardened by a chemical reaction, but not the hydration reaction is carried out at room temperature or below sintered ceramics Temperature to complete;

--- The combination of. forming a binding or harden at room temperature or higher temperatures.