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

GB/T 41503-2022

**Monolithic (unshaped) refractory products - Gunning refractory
panels by the pneumatic-nozzle mixing type guns**

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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 modified using ISO.20182.2008 "Refractory Sample Preparation Using Pneumatic Nozzle Hybrid Spray Gun to Prepare Refractory Gunning Sample".

Compared with ISO.20182.2008, this document has many adjustments in structure, and the comparison list of structure number changes between the two documents

See Appendix A.

Compared with ISO.20182.2008, this document has many technical differences. In the outer margins of the clauses involved, use vertical

A single line (|) is marked, and a list of these technical differences and their reasons is given in Appendix B.

The following editorial changes have been made to this document.

--- In order to harmonize with existing standards, the standard name is changed to "Pneumatic Nozzle Hybrid Spray Gun for Unshaped Refractory Materials for Preparation of Refractory Jets"

Test Block".

Introduction

The issuing authority of this document draws attention to the fact that the declaration of compliance with this document may involve the use of patents related to 5.5.

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can be obtained through the following contact details.

Name of patent holder. Wuhan University of Science and Technology.

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Please note that in addition to the patents mentioned above, some content of this document may still involve patents. The issuing agency of this document does not undertake to identify the patent

responsibility.

Unshaped refractory

Preparation of refractory spray material test block by pneumatic nozzle hybrid spray gun

Safety Tips. This document may involve the use of hazardous materials, operations or equipment. This document does not attempt to address the issues involved in its use

safe question. It is the responsibility of the user of this document to establish appropriate safety and health practices and to ensure compliance with regulatory limits prior to use.

1 Scope

This document specifies the principles, equipment, sampling, and test steps for preparing refractory spray test blocks using a pneumatic nozzle hybrid spray gun at room temperature steps, test report.

This document does not apply to refractory shotcrete containing easily hydratable aggregate, nor to plastic refractory shotcrete and wet refractory shotcrete.

Note. The measured data of the sample cut from the spray material test block prepared by this method may be the same as that of the same material obtained after being taken out from the spray construction position.

The sample values do not match.

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 4513.1 Unshaped Refractories Part 1.Introduction and Classification (GB/T 4513.1-2015, ISO 1927-1.2012,

MOD)

GB/T 4513.2 Unshaped Refractories Part 2.Sampling (GB/T 4513.2-2017, ISO 1927-2.2012, IDT)

GB/T 18930 Refractory Terms (GB/T 18930-2020, ISO 836.2001, MOD)

3 Terms and Definitions

The terms and definitions defined in GB/T 4513.1 and GB/T 18930 and the following terms and definitions apply to this document.

3.1

Unshaped refractory materials that are sprayed by pneumatic or mechanical means.

Note. Also known as refractory spray coating (see GB/T 4513.1).

3.2

Supplied in pre-mixed ready-to-use state, with cohesiveness and plasticity, and sprayed with equipment with higher air pressure.

Unshaped refractory material.

3.3

Supplied in dry state, add water (binding agent) to mix before spraying, and then transport it with a spray gun or pump and pour it for spraying.

injection.