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

GB/T 203-2008

Replacing GB/T 203-1994

Granulated blast furnace slag used for cement production

用于水泥中的粒化高炉矿渣

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Quarantine;
Standardization Administration of the PRC**

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Foreword

This standard replaces GB/T 203-1994 "for cement granulated blast furnace slag." This standard compared with GB/T 203-1994 main changes are as follows:

- Increasing the terms and definitions (Excerpts of 3.2, 3.3);
- The maximum size of the index was revised (1994 Version 5.3);
- Increased vitreous content requirements (edition 4.1);
- Canceled classes and grading (1994 Edition Chapter 4 5.1,5.3). Appendix A of this standard is a normative appendix. The standard proposed by China Building Materials Federation. This standard by the National Standardization Committee cement (SAC/TC184) centralized. The standard is drafted by: China Building Materials Academy. Participated in the drafting of this standard. Tianjin Iron & Steel Co., Handan Iron and Steel Co., Ltd., Wenxi County, Shanxi Province Cement Co., the second Secretary, Chongqing Iron & Steel Group Co., Ltd. Fung Yuen Industrial Company. The main drafters of this standard. Yueyun De, Wang Xianbin, Zhangshu Liang, Wen Yugang, Gujin Lin, Wei Jinhua. This standard replaces the standards previously issued as follows:
- GB 203-1963, GB 203-1978, GB/T 203-1994. For cement granulated blast furnace slag

1 Scope

China's national standard for the granulated blast furnace slag used as an active mineral addition in cement. It specifies the terms and definitions, the technical requirements, the test methods, the inspection rules, and the storage and transport, and it applies to granulated blast furnace slag used as an active blending material in cement. Blast furnace slag is what floats off the iron in an ironworks, and if it is allowed to cool slowly it crystallises into an inert rock fit only for aggregate. If instead it is quenched in water as it leaves the furnace, it solidifies as a glass - and that glass is latently hydraulic: ground finely and activated by the alkali and calcium hydroxide released when Portland cement hydrates, it

sets and hardens on its own. That is what makes it the most important supplementary cementitious material there is. Slag cement gains strength more slowly at early ages and more at later ones, generates far less heat of hydration, which matters in mass concrete, and gives markedly better resistance to sulfate attack and to chloride ingress. All of that depends on one property: how much of the slag is glass rather than crystal. Hence the change that defines this edition - the 2008 revision added a requirement for glass content, revised the maximum particle size, added terms and definitions, and abolished the grades and classification of the 1994 edition. The remaining requirements cover the chemical composition and the quality coefficient computed from it, the moisture, and the impurities, with the test methods and the sampling and acceptance rules. Issued on 30 June 2008 and in force since 1 April 2009, it replaces GB/T 203-1994.

This standard specifies the terms and definitions used in cement granulated blast furnace slag, technical requirements, test methods, inspection rules, storage and transport Transport and so on. This standard applies to granulated blast furnace slag cement is used as the active material is mixed.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 176 chemical analysis of cement

GB/T 6003.2 Test sieves of perforated metal plate

GB 6566 building materials radionuclide limits

GB/T 18046-2008 for cement and concrete granulated blast furnace slag powder JC/T 740-2006 phosphorous slag Portland cement

3 Terms and Definitions

This standard uses the following terms and definitions.

3.1 When pig iron blast furnace, resulting in aluminosilicate melt a main component, after quenching granulation, having latent hydraulic materials, namely, As granulated blast furnace slag (the slag).

3.2 Slag calcium oxide, magnesium oxide, aluminum oxide and a mass fraction of silica, titanium dioxide, nitrous oxide and manganese content of Ratio.

3.3 Granulated blast furnace slag amorphous solid. 4. Technical Requirements

4.1 Performance Slag properties shall comply with the requirements in Table 1. Table

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