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

GB/T 35150.5-2024

**Technical requirements of dry process cement production
complete equipment - Part 5: Dedusting system**

新型干法水泥生产成套装备技术要求 第5部分：除尘系统

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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 for standardization documents" Drafting is required. This document is part 5 of GB/T 35150 "Technical requirements for complete sets of equipment for the production of new dry process cement". GB/T 35150 has been issued The following parts were published. Part

1 Scope

GB/T 35150.5-2024 is the dedusting part of the Chinese standard for complete dry process cement production equipment. Cement is the largest single source of industrial particulate in China, and the dedusting system is what stands between the kiln, mill and cooler and the emission limit; it is also a system that has to work continuously in high temperature, high dust-load gas with acid dewpoint and abrasive material, and that fails in ways, bag rupture, poor pulse cleaning, hopper bridging, that show up first as an emission excursion. The standard sets the classification and composition of the dedusting systems used across the plant, then the technical requirements: the performance in outlet dust concentration, collection efficiency and pressure drop, the design and construction of the filter, its media, cages, cleaning system and hoppers, the gas conditioning and temperature protection, the fans and ductwork, the ash handling, the instrumentation and control including the leak detection, and the safety, energy consumption and reliability requirements. It then gives the test methods and inspection rules. It takes effect on 1 June 2025.

This document specifies the classification, composition, technical requirements, safety and environmental protection, installation and maintenance of the dust removal system in the new dry process cement production equipment. Acceptance and commissioning, performance testing and delivery documents. This document applies to the design, manufacture and acceptance of organized emission dust removal systems in new dry process cement production equipment.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies. in this document.

GB 2894 Safety signs and their use guidelines

GB/T 3797 Electrical control equipment

GB 4053.1 Safety requirements for fixed steel ladders and platforms Part

3 Industrial guardrails and steel platforms

GB 4915 Emission standard of air pollutants for cement industry

GB/T 5226.1 Electrical safety of machinery Electrical equipment of machinery Part

6 Desulfurization system; - Part

7.Denitrification Systems. - Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the

responsibility for identifying patents. This document was proposed by China Building Materials Federation. This document is under the jurisdiction of the National Technical Committee for Standardization of Building Materials and Equipment (SAC/TC 465). This document was drafted by: Tianjin Cement Industry Design and Research Institute Co., Ltd., Tangshan Jidong Equipment Engineering Co., Ltd., Chengdu Lijun Industrial Co., Ltd., Yancheng Institute of Technology, China Building Materials Machinery Industry Association, Yancheng Lanfeng Environmental Engineering Technology Co., Ltd., Huaji Environmental Bao (Wuhan) Co., Ltd., Shanghai Bag Dust Collection Accessories Co., Ltd., Xi'an Longjing Environmental Protection Technology Co., Ltd., Jiehua Holdings Co., Ltd. Co., Ltd., Jiangsu Anda Environmental Protection Technology Co., Ltd. The main drafters of this document are: Peng Mingde, Fan Daorong, Li Zhijun, Liu Baoliang, Yu Haobo, Wang Yumin, Zuo Hongchuan, Zhou Lei, Yang Xiaohong, Wang Jiadong, Wang Daolong, Zhang Baolin, Liu Pingcheng, Jiang Mengjie, Qu Heye, Gu Liding, Zhu Jian, Li Hongbo, Qu Xiaoyan, and Zhang Hong.

The new dry process cement production technology is based on the suspension preheating and pre-decomposition technology, which uses the existing technologies in thermal engineering, powder engineering, fluid mechanics, etc. The comprehensive technology of cement production adopts modern scientific theories and technologies, and uses computers and network information technology. The complete set of equipment consists of relatively independent The independent process system equipment mainly includes raw material crushing and homogenization, raw material preparation, fuel preparation, cement kiln co-processing, clinker burning, Cement preparation, dust removal, desulfurization, denitrification, process control, packaging and shipping system equipment. At present, my country's cement equipment and technology have reached the international advanced level, but the complete set of equipment based on system solutions is facing With the expansion of domestic cement equipment exports and engineering general contracting, the systematic support of complete sets of equipment is urgently needed. The demand for standards is also gradually increasing. The purpose of formulating the standards for new dry process cement complete sets of equipment is to improve the user-oriented cement complete sets of equipment standards. The system provides technical support for the high-quality development of the cement industry, better guides the industry to develop in the direction of green, low-carbon, and intelligent manufacturing, and supports Support the export of complete sets of cement equipment in my country. This document is used to remove solid particles from dusty gases during cement production to ensure that the emission standards for atmospheric pollutants are met. The formulation provides technical support for the green, low-carbon and high-quality development of the cement industry, and coordinates with other series of standards. GB/T 35150 is planned to consist of seven parts. Part

1.Raw meal preparation system. The purpose is to standardize the equipment structure of the raw meal preparation system in the new dry process cement production complete equipment. completion, technical requirements, safety and environmental protection

requirements, installation acceptance, commissioning and performance testing and delivery documents. Part

2.Firing system. The purpose is to standardize the equipment composition, technology and Requirements, safety and environmental protection requirements, installation acceptance, commissioning and performance testing and delivery documents. Part

3.Cement preparation system. The purpose is to standardize the equipment structure of the cement preparation system in the new dry process cement production complete equipment. completion, technical requirements, safety and environmental protection, installation acceptance and commissioning, performance testing and delivery documents. Part

4.Cement kiln co-processing system. The purpose is to standardize the cement kiln co-processing system in the new dry process cement production equipment. System equipment composition and performance indicators, technical requirements, safety and environmental protection, installation acceptance, commissioning and performance testing and delivery document. Part

5.Dust removal system. The purpose is to standardize the equipment classification, structure and function of the dust removal system in the new dry process cement production equipment. completion, technical requirements, safety and environmental protection, installation acceptance and commissioning, performance testing and delivery documents. Part

6.Desulfurization system. The purpose is to standardize the equipment classification, structure and function of the desulfurization system in the new dry process cement production equipment. completion, technical requirements, safety and environmental protection, installation acceptance and commissioning, performance testing and delivery documents. Part

7.Denitration system. The purpose is to standardize the equipment classification, structure and function of the denitration system in the new dry process cement production equipment. completion, technical requirements, safety and environmental protection, installation acceptance and commissioning, performance testing and delivery documents. Technical requirements for complete equipment for new dry process cement production Part