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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 12434-2008

Regulations of dust control for refractory enterprises

耐火材料企业防尘规程

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Foreword

This standard 4.4,4.5,4.6,5.2,5.10,6.1.3,6.1.4,6.3.2,6.3.7,6.6. 4,7.1.3,7.1.4,

7.1.6 are recommended The rest is mandatory. This standard replaces GB 12434-1990 "Regulations of dust refractory enterprises." This standard compared with GB 12434-1990, made the following major changes.

--- Added "Terms and Definitions" chapter;

--- The comprehensive technical measures are divided into. "plant construction", "production technology and equipment", "major step in the dust," "dust removal system design Gauge and Maintenance "chapters be discussed;

--- Part of the mandatory provisions recommended adjustment provisions; This standard was proposed by the State Administration of Work Safety. This standard produced by the National Technical Committee of Standardization Technical Committee of dust and poison safety. This standard is drafted by: China Steel Group, Wuhan Research Institute of safety and environmental protection. Participated in the drafting of this standard. ACRE Coking & Refractory Engineering Technology Co., Ltd., Sinosteel Luoyang Institute of Refractories Research, Sinosteel Refractory Material Co., Ltd. The main drafters of this standard. Li Xiaofei, high Shihlin, Zhao Dan force, Di Guohua, Wang Rui, Shen-considered, Hudong Tao, long known Hong, Wang Man, Chen Qiang. This standard was first published in 1990 and 2008, the first revision. Regulations of dust refractory enterprises

1 Scope

China's mandatory regulations for dust control in refractory enterprises. Refractory manufacture is dust from beginning to end - crushing, screening, milling, mixing and pressing of fired clays, magnesia, alumina and silica - and the dust is the reason the industry is regulated: crystalline silica causes silicosis, an incurable and progressive lung disease, and magnesia and chrome-bearing dusts carry their own hazards. The disease appears decades after the exposure, which is precisely why the control has to be engineered rather than left to the worker. The regulations therefore specify enclosure and extraction at each dust-generating operation, the ventilation rates and capture velocities required, the filtration of the extracted air, wet methods where they can replace dry ones, the workplace concentration limits, and the monitoring that proves them. Respiratory protection appears where it belongs, as the last resort after the engineering has been done.

This standard specifies the basic requirements related to dust and refractory enterprises comprehensive dust control measures. This standard applies to the design and management of dust and refractory enterprises.

2 Terms and definitions

The following terms and definitions apply to this standard.

2.1 It refers to the physical and chemical properties of metallic materials suitable for use in high temperature environments, but do not rule out some products may contain a certain amount of gold Metallic material.

2.2 So shaped refractory products produced sintering heat treatment.

2.3 In the construction of monolithic refractories or sample preparation, the use of vibration to make dense manner.

3 Basic provisions

3.1 Production process and equipment should take effective dust control measures. Can choose wet production process, should be preferred.

3.2 Where the new construction, expansion, reconstruction and technical transformation projects, the project should dust control measures with the main project designed, constructed and put into operation use.

3.3 Maintenance of the dust-proof equipment, maintenance should be included in the production and operation plans; dust removal system failure stop, should also stop production equipment car. Production equipment overhaul, maintenance dustproof device should at the same time and put into use.

3.4 dedusting facility, does not allow any removal or other purposes.

3.5 should configure the dust removal system according to the production process, in order to capture dust.

3.6 dust pass rate, dust removal equipment in good condition and operation rate, should be included in the assessment of economic and technical indicators of the enterprise.

4 Plant construction

4.1 Installation precipitator floor height, it should ensure that there is an upper filter maintenance operations space.

4.2 around the inside walls and ground plant buildings should be smooth. When the plant should water washing facilities (production Yasumizu variety of cases outer).

4.3 devices, interlayer floor and walls holes on the chute, through the pipeline, and should try to open small holes in the floor to be provided with four weeks of high 50mm Waterproof boss.

4.4 raw material crushing, grinding operations, and forming operations should be separated to prevent cross-contamination of dust.

4.5 molding, drying, firing and oil operations, such as the top of the plant, should be established shelter skylight.

4.6 Library materials should form a closed structure.

5 Production Technology and Equipment

5.1 should be mechanized, tightly closed, continuous production process, minimizing material transit links, reduce material gap, shorten material handling distance.

5.2 of the same nature of the production process equipment, should be centralized arrangement, and to meet the vertical or horizontal lines operating requirements.

5.3 arranged production equipment, should provide the necessary conditions for the rational arrangement of dust removal system, and allow enough space for the maintenance of dust removal equipment.

5.4 production equipment with matching dust removal equipment, electrical interlocking should delay opening stop device.

5.5 belt conveyor shall be provided sweeper.

5.6 firing process should be used in the tunnel kiln, shuttle kiln, down draft kiln is generally no longer used.

5.7 semi-finished drying should be suitable for the production of clean dry kiln, such as a tunnel kiln drying, chamber drying kiln.

5.8 Oil bitumen products operations, should be vacuum sealed immersion process, and should be equipped with ventilation purification facilities.

5.9 Oil asphalt surface treatment products should be used in mechanization and automation of the production process, and should be equipped with ventilation purification facilities.

5.10 grinding and cutting machining firebrick, we should adopt a wet process and effective dust removal measures. Dust 6 primary steps

6.1 Library materials and crushing section

6.1.1 Library materials should ensure the normal flow of material to prevent the collapse of the material and dust to escape. Raw material storage

6.1.2 closed structure, its bridge grab crane cab, install safety regulation and purification devices.

6.1.3 Non-freezing season, the desirability of non-hydraulic stockpile raw materials within the library spray water spray.

6.1.4 grab by the trough should be established exposure suction hood. Each tank should be established independent removal system.

6.1.5 jaw crusher inlet and outlet opening should be located closed hood and ventilation and dust removal, spray watering facilities provided when necessary (when production of varieties Yasumizu exception).

6.2 Pulverized and mixed section

6.2.1 Production system should be set up crushing operations dedusting system.

6.2.2 various dust production equipment should be tightly closed from the process. Undersize conveyor belt conveyor powder, should be fully enclosed.

6.2.3 crushed section of high-rise buildings, dust removal equipment should be arranged at the top, and to recover the dust directly back to the corresponding production systems Powder to the finished product tank.

6.2.4 In order to facilitate the mixing section of filter material back, dust removal equipment should be arranged in the top section of the ground.

6.2.5 Cage crusher discharge port when connected conveyor belt, which suction hood should be located in the lower part of the mill by a tank; when the spout chute then lift When the helicopter or screw conveyor and chute and closed more rigorous body can only screw conveyor or on a hoist body suction.

6.2.6 surrounding the discharge ball mill hood should be located in the mill housing, feed