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

**GB/T 32219-2026**

Replacing GB/T 32219-2015

**Cylinder mills - Cast grinding cylpebs**

筒式磨机 铸造磨段

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### Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 32219-2015 "Casting Grinding Section for Cylindrical Mills". Compared with GB/T 32219-2015, the only changes are structural adjustments. Aside from editorial changes, the main technical changes are as follows:

- a) The terminology and definition of "casting grinding section" have been changed (see 3.1,.2015 edition of 3.1);
- b) The method of representing the alloy element content in the casting grinding section has been changed (see 4.1,.2015 edition of 4.1);
- c) Added casting grinding section specifications of  $\phi 50 \times 55$ ,  $\phi 55 \times 60$ ,  $\phi 60 \times 65$  and  $\phi 65 \times 70$  (see Table 1);
- d) Requirements for the main chemical composition and surface hardness of ZDCr35 cast grinding sections have been added (see Tables 2 and 3);
- e) The requirements for phosphorus content in the main chemical components of the casting grinding section have been changed (see Table 2,.2015 edition);
- f) The requirement has been added that cast grinding sections of grades ZDCr12~ZDCr35 should not be subjected to as-cast or as-cast stress-relief treatment (see Table 3);
- g) Increased requirements for wear on the casting grinding section (see 5.4.5);
- h) The requirements for casting defects have been changed (see 5.5,.2015 edition of 5.5);

i) The inspection rules for the chemical composition of casting grinding sections have been changed (see 7.2, 2015 version of 7.2);

j) Rounding of test results has been removed (see 7.4 in the 2015 edition);

k) The requirements for marking, certificates of conformity, packaging, transportation and storage of casting grinding sections have been changed (see Chapter 8, Chapter 8 of the 2015 edition). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee on Standardization of Mining Machinery (SAC/TC88). This document was drafted by: Jinan University, Ningguo Huafeng Wear-Resistant Materials Co., Ltd., Ningguo Dongfang Grinding Materials Co., Ltd., and Suichang. Dexin Cast Steel Co., Ltd., Luoyang Mining Machinery Engineering Design and Research Institute Co., Ltd., Anhui Fengxing New Material Technology Co., Ltd. Guangdong Torch Testing Co., Ltd., Ma'anshan Yifeng Wear-Resistant New Material Technology Co., Ltd., Meililin Technology Co., Ltd., Shaoguan Xinrui Intelligent Equipment Co., Ltd., Anshan Mining Wear-Resistant Materials Co., Ltd., and Jinan Heavy Industry Co., Ltd. The main drafters of this document are: Li Wei, Yang Junjie, Chen Quanxin, Zhao Jinbin, Zhu Jingzhi, Hao Bing, Shen Maolin, Bin Yuanhong, Zhang Xuewu, and Lin Peiyuan. Xue Wenfeng, Qiao Xinru, Wang Yongzhe, Song Liang, Zeng Dahai, and Du Jiyong. This document was first published in 2015, and this is its first revision. Casting grinding section of cylindrical mill

## 1 Scope

GB/T 32219-2026 is the Chinese national standard covering the cast cylpeb - the short cylindrical grinding body used instead of balls in the fine grinding chamber of a cement or ore mill, specified on composition, hardness, impact resistance and wear rate. Grinding media wear is one of the largest consumable costs in cement making, so the wear rate in this standard is money. It replaces GB/T 32219-2015. It was issued on 28 January 2026 and has been in force since 1 August 2026, replacing GB/T 32219-2015. The document is under the responsibility of the China Machinery Industry Federation. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the grades and codes, technical requirements, inspection rules and markings, certificates of conformity, packaging, and transportation of the casting grinding section for cylindrical mills. Storage, and the corresponding experimental methods are described. This document applies to the design, production, and manufacturing of chromium alloy cast iron grinding sections (hereinafter referred to as "cast grinding sections") for use as grinding media in cylindrical mills. test.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 223.11 Determination of Chromium Content in Iron and Steel and Alloys by Titration and Spectrophotometry

GB/T 223.18 Chemical Analysis Methods for Iron and Steel Alloys - Determination of Copper by Sodium Thiosulfate Separation-Iodometric Method

GB/T 223.23 Determination of Nickel Content in Iron and Steel and Alloys - Dimethylglyoxime Spectrophotometric Method

GB/T 223.26 Determination of molybdenum content in iron and steel and their alloys - Thiocyanate spectrophotometric method

GB/T 223.59 Determination of phosphorus content in iron and steel and their alloys - Bismuth-phosphomolybdenum blue spectrophotometric method and antimony-phosphomolybdenum blue spectrophotometric method

GB/T 223.60 Determination of silicon content in iron and steel and alloys by gravimetric method

GB/T 223.64 Determination of Manganese Content in Iron and Steel and Alloys by Flame Atomic Absorption Spectrometry

GB/T 223.71 Chemical Analysis Methods for Iron and Steel Alloys - Determination of Carbon Content by Gravimetric Method After Combustion in Tubular Furnace

GB/T 223.72 Determination of sulfur content in iron and steel and their alloys by gravimetric method

GB/T 230.1 Metallic materials - Rockwell hardness test - Part

## 3 Terms and Definitions

The terms and definitions defined in GB/T 5611 and the following terms and definitions apply to this document.

**3.1 Casting Grinding Cylindricals** The grinding media used in the cylindrical mill are approximately cylindrical in shape with a length-to-diameter ratio of less than 2.0.

**3.2 Diameter tolerance** The difference between the maximum or minimum diameter required on the same casting grinding section and the nominal diameter.