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Test method for high pressure grinding rolls selection in mining

矿用高压辊磨机选型试验方法

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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. 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 the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee for Standardization of Mining Machinery (SAC/TC88). This document was drafted by: Luoyang Mining Machinery Engineering Design and Research Institute Co., Ltd., Zhejiang Mining Machinery Co., Ltd., CITIC Heavy Industries Machinery Co., Ltd., Chengdu Lijun Industrial Co., Ltd., Shenyang Jianzhu University, Shenyang Shengshi Wuhuan Technology Co., Ltd., Xingan County Xin Heng Mining Co., Ltd. and Luoyang Zhengfangyuan Heavy Mining Machinery Inspection Technology Co., Ltd. The main drafters of this document are. Yang Jichang, Pan Weining, Xu Ting, Chen Xueting, Tong Lijuan, Deng Fengquan, Ren Yunpeng, Feng Quan, Xiang Qiuping, Wang Yazhen, Dai Sujiang, Li Feier, Liu Chuanwen, Sun Jian, Li Xiangjun, He Xin. Selection test method of high pressure grinding roller for mining

1 Scope

China's national test method for selecting high pressure grinding rolls in mining. High pressure grinding rolls crush ore between two counter-rotating rolls pressed together at very high force, comminuting the material in a compressed bed rather than by impact, and they use substantially less energy than the mills they displace - which in an industry where comminution consumes a few per cent of the world's electricity is a large claim. It is also

ore-specific: the energy saving and the throughput depend on how a particular ore responds to bed compression, and there is no way to predict it from ordinary hardness indices. So the machine is selected by test, on the actual ore, and the test's conditions determine the answer the vendor and the client will both be held to. The standard specifies the test conditions, the equipment and instruments, the test content and procedure, the methods, the data processing and the report, for closed-circuit screening applications.

This document specifies the test conditions, test equipment and instruments, test content and procedures, test methods and procedures for the selection test of high pressure roller grinding mill for mining. Data processing and test report. This document is applicable to the selection test of high pressure roller mill in the closed circuit screening process of high pressure roller mill in the mining grinding process.

2 Normative references

The contents of the following documents constitute 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 to This document. DZ/T 0118-1994 Technical requirements for laboratory standard sieve oscillators

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Extrusion roller extrudedroler The main components of testing machines or industrial machines.

3.2 The linear speed of the outer circle of the extrusion roller.

Note. The unit is meter per second (m/s).

3.3 The thrust per unit cross-sectional area applied by the hydraulic cylinder of the hydraulic station to the squeeze roller of the testing machine or industrial machine when it is running.

Note. The unit is Newton per square millimeter (N/mm2).

3.4 The mass of ore passing through per hour when the test machine or industrial machine is running.

Note. The unit is tons per hour (t/h).

3.5 When the ore material is running on the test machine or industrial machine, the unit extrusion roller diameter, unit extrusion roller width and unit extrusion roller linear speed are calculated.