

ICS 73.120
CCS D94



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

GB 25520-2010

**Mineral grinding and ultra-micro grinding equipment - Safety
requirements**

矿物粉磨和超微粉碎设备 安全要求

Issued on: December 1, 2010

Implemented on: October 1, 2011

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Danger List
- 4 Safety requirements and/or measures and determination
 - 4.1 General Requirements
 - 4.2 Operating position
 - 4.3 Control System
 - 4.4 Protection of moving parts
 - 4.5 Protection
 - 4.6 Electrical Equipment
 - 4.7 Hydraulic lubrication system
 - 4.8 Installation, operation, maintenance and repair
 - 4.9 Platform and channel
 - 4.10 Lighting
- 5 Use Information
 - 5.2 Description
 - 5.4 User's Guide

Foreword

Chapter 3 of this standard are recommended, the rest are mandatory. The standard proposed by China Machinery Industry Federation. This standard by the National Mining Machinery Standardization Technical Committee (SAC/TC88) centralized. This standard is drafted by: Luoyang Mining Machinery Engineering Design & Research Institute Co., Ltd. Participated in the drafting of this standard. CITIC Heavy Machinery Co., Ltd. The main drafters of this standard. Guo Ming, Zou Yong, Li Yang, now, Zhang Sheng Qi, Huang Jialin, Wang Yadong. This standard is the first release. Mineral grinding and ultrafine grinding equipment safety requirements

1 Scope

GB 25520-2010 is the Chinese national standard on mineral grinding and ultra-micro grinding equipment - safety requirements, in the field of mining and minerals. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a

practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 1 December 2010 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 October 2011. Classification: ICS 73.120, CCS D94. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the list of dangerous mineral grinding and ultrafine grinding equipment, safety requirements and/or measures and determination, usage information. This standard is to limit the use of predetermined physical properties and mineral grinding and ultrafine grinding equipment proposed. Safety requirements specified Applies to GB/T 15706.1-2007 in 5.3a) the risk of the various stages within the specified life of the machine produced. This standard does not relate to the hazard and GB/T 15706.1 and GB/T 15706.2 consistent. About general mechanical, electrical, hydraulic, Pneumatic and other dangerous devices, are not included in this standard. This standard applies to mineral grinding and ultrafine grinding equipment, including a ball mill, rod mill, tube mill, since the mill, ball mill, bis Double into the mill, vertical mill, MPS disc roller mill, bowl mill, Pendulum mill, fan mill, vibration mill, centrifugal mill, Column mill, stirred mill, ultrafine mill, impact mill, jet mill and cyclone mill (hereinafter referred to as grinding equipment).

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 2894 Safety Signs and use guidelines

GB/T 3766 Hydraulic System General technical conditions (GB/T 3766-2001, eqv ISO 4413.1998)

GB 3836.1 Electrical apparatus for explosive gas atmospheres - Part 1. General requirements (GB 3836.1-2000, eqv IEC 60079-0. 1998)

GB 4053.1 fixed ladders and platforms - Safety requirements - Part 1. Steel ladders

GB 4053.2 fixed ladders and platforms - Safety requirements - Part 2. Steel LADDER

GB 4053.3 fixed ladders and platforms - Safety requirements - Part 3. Industrial guardrails and steel platform

GB 4351.1 Portable fire extinguishers - Part 1. Performance and structural requirements

GB 5226.1 mechanical and electrical safety of machinery - Electrical equipment - Part 1. General requirements (GB 5226.1-2008, IEC 60204-1.2005, IDT)

GB/T 8196 mechanical safety devices fixed and movable guards design and manufacture of general requirements (GB/T 8196- 2003, ISO 14120.2002, MOD)

GB/T 8419 moving machinery - Seat vibration laboratory evaluation (GB/T 8419-2007, ISO 7096.2000, IDT)

GB/T 9969 General Instructions industrial products GB/T 13306 signs

GB/T 13325 basic norms noise machinery and equipment operator position radiation noise measurement (engineering grade)

GB/T 15706.1-2007 Safety of machinery - Basic concepts, general principles for design - Part 1. Basic terminology, methodology (ISO 12100- 1.2003, IDT)

3 Danger List

Grinding equipment lifetime risk that may arise in the transportation, installation, use and maintenance of the process are shown in Table 1. Table

4.1 General Requirements

4.1.1 grinding equipment intended use of security measures should be consistent with GB/T 15706.1 of the relevant requirements.

4.1.2 Grinding equipment shall be ergonomically designed to reduce labor intensity, to avoid operator fatigue. The operator work should take Necessary protective measures.

4.1.3 sharp edges, corners and protruding parts shall be designed to comply with the provisions of GB/T 15706.2 of. Dangerous contact with hot surfaces

4.1.4 If so, it should be installed fence or cover.

4.1.5 tubes, hoses and fittings shall withstand. Hoses shall be marked with the maximum operating pressure. When a hose or tube operating position close to the necessary Shield should be installed to prevent the tube or hose burst injury to the user.

4.1.6 into the operation and maintenance of the position of the channel device shall comply with GB/T 17300 of.

4.1.7 around the grinding equipment should allow sufficient space for operation and maintenance.

4.1.8 Working under high temperature, cold environment, the operator shall be protected.

4.2 Operating position

4.2.1 grinding equipment operation should be carried out at ambient no danger to personnel status.

4.2.2 operating position should be able to prevent the risk of falling materials produced for the feed, discharge, transportation and other process should take the necessary protective measures.

4.2.3 operating position should be convenient channel and visibility to ensure that staff do not pose a danger.

4.2.4 operating room door opening direction should enable the operator to quickly leave in the event of danger.

4.2.5 main operating room noise should not exceed 85dB (A), and should be GB/T 13325 for testing.

4.2.6 Weighted main operating room at the seat of the rms acceleration correction value should not exceed 1.25m/s², vibration test reference GB/T 8419 of Method.

4.2.7 operating room illumination should comply with 4.10.2.

4.2.8 There should be close to the operating position inflammable and explosive materials, materials, operating room shall meet the requirements of 4.11.1.

4.3 Control System

4.3.1 grinding equipment control system safety components shall comply with GB/T 16855.1 of.

4.3.2 power supply is interrupted or re-supply interruption, only to restart the manually operated; when power supply failures or hydraulic system When the system pressure drops, shall be protected to avoid danger. Protection devices and protective measures should guarantee effective.

4.3.3 grinding equipment before starting, should sound alarm signal; grinding equipment shall set the alarm system when the risk of an emergency, the alarm signal It should be able to make and receive timely.

4.3.4 Operation of the control device should be safe, fast, reliable, and its design configuration flag shall comply with GB/T 15706.2 of. Key The control device should be arranged in the comfort zone operated auxiliary control device may be disposed within the outer range and can be manipulated or other hazardous area position.

4.3.5 grinding system should have the appropriate safety and emergency stop devices, emergency stop devices shall comply with the provisions of GB 16754.

4.3.6 All emergency stop functions and safety devices which should be checked periodically.