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

GB/T 47116-2026

**Underground mining machines - Mobile extracting machines at
the face - Safety requirements for shearer loaders and plough
systems**

地下采矿机械 工作面移动式采掘机械 采煤机和犁式系统的安全要求

(English Translation)

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References

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 is equivalent to ISO 19225:2017 "Underground mining machinery - Mobile mining machinery for working faces - Coal mining machines and plow systems".

Safety requirements.

The following minimal editorial changes have been made to this document.

---Incorporating the content of the ISO 19225:2017/Amd.1.2019 amendment;

---ISO 12508 has been replaced by GB/T 17301-1998 (see 5.2.1), which is cited in the informational reference.

---ISO 6805 has been replaced by GB/T 18947-2003 (see 5.10.1), which is cited in the informational reference.

---ISO 19353 has been replaced by GB/T 23819-2023 (see 5.11), which is cited in the informational reference.

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).

Introduction

This document is a Class C standard as specified in ISO 12100.

The scope section of this document defines the scope of the machinery involved and the hazards, dangerous situations, or dangerous events covered therein.

When there are differences between Class C standards and Class A or Class B standards, for machinery designed and manufactured according to Class C standards, the Class C standard shall apply.

The requirements shall prevail.

The relevant machinery uses tools for cutting minerals (such as coal, ore, salt, and surrounding rock), can operate at fixed or variable heights, and conveys materials via scrapers.

Guide the machine or its accessories. The coal mining machine has a built-in traction system and can be directly operated by one or more drivers, or remotely/programmed controlled.

The plow-type system is remotely controlled. The wireless remote control system of the coal mining machine is suitable for the surrounding environment of the equipment.

Mobile mining machinery for underground mining faces Safety requirements for coal mining machines and plow systems

1 Scope

This document specifies safety requirements to minimize risks in underground mining when coal mining machines and plow systems are used as intended and by the manufacturer.

Under reasonably foreseeable conditions of misuse, the equipment may be subject to the provisions of Chapter 4 during assembly, use, maintenance, repair, shutdown, dismantling, and disposal.

The danger of the column.

This document does not cover any hazards caused by explosive atmospheres. Requirements for explosive atmospheres are found in ISO/IEC 80079-38.

This document does not apply to machinery manufactured prior to its release.

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 1251.1-2008 Ergonomics - Hazard Signals in Public Places and Work Areas - Auditory Hazard Signals (ISO 7731.

2003, IDT)

GB/T 15706-2012 General principles for safety design of machinery. risk assessment and risk reduction (ISO 12100:2010, IDT) GB/T 17248.2-2018 Noise emitted by acoustic

machines and equipment with negligible environmental correction above a reflecting surface
Emitted sound pressure level at the working position and other specified locations in a pseudo-free field (ISO 11201:2010, IDT) GB/T 17248.3-2018 Noise emitted by acoustic machines and equipment - Determination of noise using approximate environmental corrections for working position and other factors.

Emitted sound pressure level at a specified location (ISO 11202:2010, IDT) GB/T 17248.5-2018 Noise emitted by acoustic machines and equipment-Measurement of noise from working position and other factors with accurate environmental correction.

Emitted sound pressure level at a specified location (ISO 11204:2010, IDT) GB/T 25607-2010 Definition and requirements for protective devices for earthmoving machinery (ISO 3457:2003, IDT) ISO 3864-3 Graphical symbols for safety colors and safety signs - Part 3: Principles for the design of graphic symbols for safety signs) Note. GB/T 2893.3-2010 Graphical symbols for safety colors and safety signs - Part 3: Design principles for graphic symbols for safety signs (ISO 3864-3.

2006, MOD)

Note: GB/T 3766-2015 General rules and safety requirements for hydraulic transmission systems and their components (ISO 4413:2010, MOD) Note. GB/T 14574-2000 Designation and verification of noise emission values for acoustic machines and equipment (ISO 4871:1996, EQV) ISO 6405-1 Symbols for operator control devices and other display devices for earthmoving machinery - Part 1: General symbols (Earth-mov-Note. GB/T 8593.1-2021 Symbols for operator control devices and other display devices of earthmoving machinery - Part 1: General symbols (ISO 6405-1.

2017, IDT)

ISO 9244 General Rules for Safety Labelling of Earthmoving Machinery