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

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Continuous surface miners - Safety requirements

露天连续采矿机 安全要求

(English Translation)

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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 is equivalent to ISO 19224:2017 "Safety requirements for continuous mining machines (CSM)".

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

---To align with existing standards, the standard's name has been changed to "Safety Requirements for Open-Pit Continuous Mining Machines";

---ISO 6405-1:2017 has been replaced by GB/T 8593.1-2021 (see 4.3.2.2, 4.3.2.3), which is cited in the informational reference.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.

This document is particularly relevant to the following stakeholder groups representing market players regarding machinery safety.

---Machine manufacturers (small, medium, and large enterprises);

---Health and safety agencies (regulatory agencies, accident prevention organizations, market supervision, etc.).

Other parties may be affected by the level of mechanical safety, which is achieved by the aforementioned stakeholder groups through documentation.

---Machine users/employers (small, medium and large enterprises);

---Machine users/employees (such as unions, organizations with special needs);

---Service providers, such as repair services (small, medium, and large enterprises);

---Consumer (if the machine is intended for consumer use).

The aforementioned stakeholder groups were given the opportunity to participate in the drafting process of this document.

This document specifies the relevant machinery and the extent of the hazards, dangerous situations, or dangerous events it covers.

When the requirements of this Class C standard differ from those specified in Class A or Class B standards, for designs and manufactures made in accordance with the requirements of this Class C standard...

For machines, the Class C standard requirements take precedence over the requirements of other standards.

Safety requirements for open-pit continuous mining machines

1 Scope

This document addresses the safety requirements for continuous open-pit mining machines (hereinafter referred to as "mining machines"), and specifies the general requirements for the design and manufacture of mining machines.

The aim is to protect workers from accidents and health hazards that may occur during operation, loading, transportation, and maintenance.

This document addresses known major hazards, hazardous situations, or dangerous events related to mining machines, covering situations where the equipment is used for its intended purpose.

The risks that may arise in cases of misuse that the manufacturer could reasonably foresee (as per Appendix A).

This document also specifies appropriate technical measures to eliminate or reduce the risks arising from the major hazards identified in Appendix A.

This document does not apply to mining machines manufactured before its publication date.

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 15706-2012 General principles for safety design of machinery. risk assessment and risk reduction (ISO 12100:2010, IDT) GB/T 17922-2014 Laboratory tests and performance requirements for earthmoving machinery rollover protection structures (ISO 3471:2008, IDT) Note. GB/T 17299-1998 Minimum inlet dimensions for earthmoving machinery (ISO 2860:1992, IDT) ISO 2867 Earth-moving machinery access systems Note. GB/T 17300-2017 Earthmoving Machinery Access Devices (ISO 2867:2011, IDT) ISO 3411 Body dimensions of earthmoving machinery operators and minimum operating space for operators (Earth-moving machinery-Note. GB/T 8420-2011 Body dimensions and minimum operating space of earthmoving machinery operators (ISO 3411:2007, IDT) ISO 3449 Laboratory testing and performance requirements for earthmoving machinery - Falling object protection structures Note. GB/T 17771-2010 Laboratory testing and performance requirements for earthmoving machinery falling object protection structures (ISO 3449:2005, IDT) ISO 3457 Definitions and requirements for protective devices for earthmoving machinery Note. GB/T 25607-2010 Definition and requirements for protective devices for earthmoving machinery (ISO 3457:2003, IDT) ISO 3471 Earthmoving machinery - Rollover protection structures - Laboratory testing and performance requirements Note. GB/T 17922-2014 Laboratory tests and performance requirements for earthmoving machinery rollover protection structures (ISO 3471:2008, IDT) ISO 3795 Determination of fire resistance of interior materials for road vehicles, tractors and machinery for agricultural and forestry use.

or materials)

Note: GB/T 20953-2007 Determination of flammability of interior trim materials for agricultural and forestry tractors and machinery (ISO 3795:1989, MOD) Note. GB/T 3766-2015 General rules and safety requirements for hydraulic transmission systems and their components (ISO 4413:2010, MOD)