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

GB 48002-2026

Earth-moving machinery - Safety technical specification

土方机械 安全技术规范

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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. 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 and is under the jurisdiction of the Ministry of Industry and Information Technology of the People's Republic of China.

This document is a Class C standard as defined in GB/T 15706. Appendix A of GB/T 25684.1-2021 specifies the application of earthmoving machinery under producer-specified purposes and foreseeable misoperation conditions. At that time, all major hazards, dangerous conditions, and dangerous events associated with it. This document outlines methods for eliminating or mitigating risks arising from major hazards, hazardous conditions, or dangerous events during the use, operation, and maintenance of earthmoving machinery. Technical measures to prevent hazards. When the main power

source of the machine is electricity, this document does not cover electrical hazards related to the machine's main circuitry and drives. Since the machine is designed and manufactured in accordance with Class C standards, when the requirements of Class C standards differ from those of Class A or Class B standards... At the same time, the requirements of Category C standards take precedence over Category A or Category B standards. Chapter 4 of this document contains general requirements, while Chapters 5 through 17 contain specific requirements for particular machine families. These specific requirements take precedence over the general requirements. Requirements. The requirements for using multi-functional machines are covered in the relevant sections concerning their functions. Safety Technical Specifications for Earthmoving Machinery

1 Scope

GB 48002-2026 is the Chinese national standard on earth-moving machinery - safety technical specification, in the field of materials handling equipment. 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 28 January 2026 by the State Administration for Market Regulation; Standardization Administration of China, and takes effect on 1 February 2027.

Classification: ICS 53.100, CCS P97. 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 document specifies the safety requirements for earthmoving machinery. This document applies to bulldozers, loaders, backhoe loaders, hydraulic excavators, dump trucks, scrapers, graders, pipe-laying machines, and trenchers. Design, production, and inspection of compactors, mechanical excavators, road rollers, and horizontal directional drilling rigs. This document does not apply to machines manufactured prior to the implementation of this document.

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 3766 General rules and safety requirements for hydraulic transmission systems and their components

GB/T 4208-2017 Degrees of protection provided by enclosures (IP code)

GB/T 5182 Technical requirements and test methods for forklift forks

GB/T 6572 Earthmoving Machinery - Hydraulic Excavators. Terminology and Commercial Specifications

GB/T 7920.5 Earthmoving Machinery - Road Rollers and Backfill Compactors. Terminology and Commercial Specifications

GB/T 7920.8 Earthmoving Machinery - Scrapers - Terminology and Commercial Specifications

GB/T 7920.9 Earthmoving Machinery - Graders. Terminology and Commercial Specifications

GB/T 7932 General rules and safety requirements for pneumatic systems and their components

GB/T 8419 Laboratory evaluation of vibration of driver's seat for earthmoving machinery

GB/T 8420-2011 Body Dimensions of Earthmoving Machinery Operators and Minimum Operating Space for Operators

GB/T 8498-2025 Basic Type Identification and Terminology of Earthmoving Machinery

GB/T 8590 Earthmoving Machinery - Bulldozers. Terminology and Commercial Specifications

GB/T 8591 Calibration points for driver's seats of earthmoving machinery