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

GB/T 8498-2025

Replacing GB/T 8498-2017

**Earth-moving machinery - Basic types - Identification and
vocabulary**

土方机械 基本类型 识别与术语

(English Translation)

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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.

This document replaces GB/T 8498-2017 "Identification, terms and definitions of basic types of earth-moving machinery" and is consistent with GB/T 8498-2017 in addition to editorial changes, the main technical changes are as follows.

--- Changed the definitions of "earth-moving machinery", "machine family", "compactor" and "small machine" (see 3.1.1, 3.1.7, 3.2.9, 3.2.12, 2017 Version 3.1, 3.4, 4.9, 4.13);

--- Added "Autonomous mode", "Autonomous machine", "Semi-autonomous machine", "Driver protection structure", "Driver shed", "Driver cab", "Telescopic arm loading the terms and definitions of "short-tail excavator", "small dump truck" and "vacuum excavator" (see 3.1.4, 3.1.5, 3.1.6, 3.1.14, 3.1.15, 3.1.16, 3.2.2.4, 3.2.4.2, 3.2.6.5, 3.2.13);

--- The term and definition of "horizontal directional drilling rig" have been deleted (see 4.12 of the 2017 edition).

This document is equivalent to ISO 6165:2022 "Identification and terminology of basic types of earth-moving machinery".

1 Scope

This document defines the terminology and identification structure for the classification of earth-moving machinery according to the following operational uses.

---Excavation;

---load;

---transportation;

--- Drilling, spreading, compacting or trenching of soil, rock or other materials, such as in roads, dams, quarries, mines and construction sites Work on the ground.

The purpose of this document is to provide a definitive method of identifying earth-moving machinery by its function and construction. This may include identifying the machine by its Other classifications based on operating quality and driver control style.

Appendix A provides information on the identification structure used in this document and the use of this structure to classify earth-moving machinery and to derive the following classification rules.

A detailed identification method is provided.

Appendix B provides block diagrams of each earth-moving machine operator's operating style.

2 Normative references

This document has no normative references.

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Machine characteristics and manipulation classification

3.1.1

Earth-moving machinery Self-propelled or towed main machine (3.1.11) using wheels (rollers or tires), tracks or steps, and may have a working device (3.1.12) or Attachments (3.1.13), or both, primarily used for digging, loading, transporting, drilling, spreading, compacting or Trenching work.

Note 1 to entry. Earth-moving machinery may be directly operated, remotely controlled, autonomously or semi-autonomously operated.

Note 2: For types of driver control, see Appendix B.

3.1.1.1

Small machinecompactmachine Except for small excavators (3.2.4.5) and small loaders (3.2.2.3), earthmoving machines with an operating mass (3.1.10) less than or equal to 4500 kg Square machinery (3.1.1).

3.1.2

Direct-control machinedirect-controlmachine Self-propelled earth-moving machinery (3.1.1) controlled by a driver who is in direct physical contact with the machine.