

ICS 67.260
CCS X91



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

GB/T 45037-2024

Grain and oil machinery - Grain scraper

粮油机械 扒谷机

Issued on: November 28, 2024

Implemented on: June 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions

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. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by the State Administration of Grain and Material Reserves. This document is under the jurisdiction of the National Technical Committee on Cereals and Oils Standardization (SAC/TC270). This document was drafted by: Anhui Yunlong Grain Machinery Co., Ltd., Anhui Kaijie Machinery Manufacturing Co., Ltd., Anhui Quality and Standardization Research Institute Institute of Technology, Jieshou Grain Machinery Co., Ltd., Anhui University of Science and Technology, Central Grain Reserve Shenqiu Direct Depot Co., Ltd., Anhui Yongcheng Electronic Machinery Machinery Technology Co., Ltd., Sichuan Guanghan Jingli Storage Equipment Manufacturing Co., Ltd., and Zhoukou Direct Depot of the Central Reserve Grain. The main drafters of this document are. Cao Pengfei, Guan Wenwu, Cao Kaijie, Zhang Qiang, Zhang Wenqiu, Cheng Ning, Xu Xu, Yang Xinyu, Zhang Chunyu, Zhang Chunyan, Wang Fuyou, Dai Zishang, Zhang Xinquan, Wang Yong, and Wang Mingju. Grain and oil machinery

1 Scope

GB/T 45037-2024 is the Chinese standard for grain scrapers, the machines that drag grain out of a flat store or a wagon toward a conveyor or elevator. They are the least glamorous machine in a grain depot and the one whose failure stops everything, and they work in the worst conditions in the plant: heavy abrasive product, dense dust that is itself an explosion hazard, and continuous duty during the intake season. The standard sets the classification, the model designation and the basic parameters, then the technical requirements: the throughput and the power consumption, the scraper chain or paddle and its wear resistance, the drive and the transmission, the frame and its stability, the travelling and slewing arrangements, the dust control and the sealing, the safety devices and guarding, the electrical equipment and the noise. It then gives the test methods, the inspection rules

and the marking, packaging, transport and storage. It takes effect on 1 June 2025.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 191 Pictorial markings for packaging, storage and transportation GB 1350 Rice GB 1351-2023 Wheat

GB/T 3768 Acoustics Sound Pressure Method for Determination of Sound Power Level and Sound Energy Level of Noise Source Using a Simple Measurement Surface Enveloped Above the Reflecting Surface Easy Method

GB/T 4208-2017 Enclosure protection degree (IP code)

GB/T 5226.1 Electrical safety of machinery Electrical equipment of machinery Part

GB/T 5491 Sampling and subsampling methods for grain and oilseed inspection

GB/T 5494 Inspection of grains and oils Inspection of impurities and imperfect grains in grains and oils

GB/T 9286-2021 Paint and varnish cross-cut test

GB 10396 General rules for safety signs and hazard pictograms for agricultural and forestry tractors and machinery, lawn and gardening power machinery GB/T 10595 Belt conveyor

GB/T 10596 Scraper conveyor GB/T 13306 Labels

GB 17440-2008 Safety regulations for dust explosion prevention in grain processing, storage and transportation systems

GB/T 23821 Mechanical safety Safety distance to prevent upper and lower limbs from touching dangerous areas

GB/T 24854 General technical requirements for packaging of grain and oil machinery products

GB/T 24856 General technical requirements for grain and oil machinery castings

GB/T 24857 General technical requirements for plate parts and plate-shaped steel components of grain and oil machinery

GB/T 25218 General technical requirements for coating of grain and oil machinery products
LS/T 3530 Horizontal Screw Conveyor

3 Terms and definitions

The following terms and definitions apply to this document.

chinastandards.org - PREVIEW