

ICS 53.020.99

CCS J 80



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

GB/T 46621-2025

Discard qualification for mechanical parking systems

机械式停车设备报废条件

Issued on: October 31, 2025

Implemented on: May 1, 2026

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

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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 by the China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee on Standardization of Lifting Machinery (SAC/TC227). This document was drafted by: Beijing Kezhengping Engineering Technology Testing and Research Institute Co., Ltd., and Beijing Lifting and Transportation Machinery Design and Research Institute Co., Ltd. Company, Hangzhou Xizi Intelligent Parking Co., Ltd., Jiangsu Puteng Intelligent Technology Co., Ltd., Hangzhou Dazhong Boao Technology Co., Ltd., Shenzhen Shenzhen Yifeng Automation Technology Co., Ltd., Nanjing Special Equipment Safety Supervision and Inspection Institute, Jiangsu Runbang Intelligent Parking Garage Co., Ltd. China Construction Science & Industry Group Smart Parking Technology Co., Ltd., Shandong Laiwu Steel Teda Parking Garage Co., Ltd., Shenzhen Jingzhi Machinery Co., Ltd., and Zhejiang Noli Garage Equipment Manufacturing Co., Ltd., Chengdu Special Equipment Inspection and Testing Institute, Shenzhen CIMC Intelligent Parking Co., Ltd., Zhejiang Botong Intelligent Equipment Co., Ltd., Guangdong Cheboshi Intelligent Equipment Co., Ltd., Anhui Hongjiwei Parking Equipment Co., Ltd., Changzhi Changqing

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1 Scope

GB/T 46621-2025 is the Chinese national standard covering when an automated parking structure has to be taken out of service - the wear of the lifting and traversing mechanisms, the corrosion and fatigue of the frame, the obsolescence of the controls and the unavailability of parts, and the assessment that makes the decision. China built these systems by the tens of thousands in the 1990s and 2000s, and the first generation is now old. First edition, in force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026.

This document specifies the conditions for scrapping mechanical parking equipment and its disposal after scrapping. This document applies to lifting and traversing mechanical parking equipment, simple lifting mechanical parking equipment, and vertical lifting mechanical parking equipment as defined in GB/T 26476. Lift-type mechanical parking equipment, planar moving type mechanical parking equipment, vertical circulation type mechanical parking equipment, horizontal circulation type mechanical parking equipment Parking equipment, multi-level circulating mechanical parking equipment, lane stacking mechanical parking equipment, and car lifts.

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 5171.1-2014 Small power electric motors - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 26476 and the following terms and definitions apply to this document.

3.1 main structure Metal structural components that bear the main loads in mechanical parking equipment.

Note. The main structural components include columns, beams, longitudinal beams,

diagonal braces, etc.

3.2 Designed life Based on the pre-set operating conditions of the mechanical parking equipment designer, the expected usage of the mechanical parking equipment according to the given design method is... time.

4 Scrapping conditions for mechanical parts and major components

4.1 Conditions for scrapping mechanical parts If the following conditions occur with the storage and retrieval handover mechanism, transporter, elevator, stacker crane in the aisle, transport trolley, or rotary table, and repair is not possible... The item should be scrapped.

---The wear of the shaft hole and pin has reached 2% of the original size;