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

GB/T 26949.10-2026

Replacing GB/T 26949.10-2011

**Industrial trucks - Verification of stability - Part 10: Additional
stability test for trucks operating in the special condition of
stacking with load laterally displaced by powered devices**

工业车辆 稳定性验证 第10部分：在由动力装置侧移载荷条件下堆垛作业的附加
稳定性试验

(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 Part 10 of GB/T 26949 "Stability Verification of Industrial Vehicles". GB/T 26949 has published the following...

---Part 1: General Provisions;

- Part 2: Counterbalance Forklifts;
- Part 3: Reach Trucks and Extender Trucks;
- Part 4: Pallet stackers, double-decker stackers, and picking carts with an operator position lifting height not exceeding 1200mm;
- Part 5: Side-mounted forklifts (single-sided);
- Part 7: Two-way and Multi-way Forklifts;
- Part 8: Additional stability tests for stacking operations under gantry tilting and load lifting conditions;
- Part 9: Counterbalance forklifts for handling freight containers 6m and longer;
- Part 10: Additional stability tests for stacking operations under lateral loads from a powered unit;
- Part 11: Telescopic Boom Forklifts;
- Part 12: Telescopic boom forklifts for handling freight containers 6m and longer;
- Part 13: Off-road forklifts with masts;
- Part 14: Off-road Telescopic Boom Forklifts;
- Part 15: Counterbalance forklifts with articulated steering;
- Part 16: Pedestrian Vehicles;
- Part 17: Tractors, Cargo and Personnel Carriers;
- Part 20: Additional stability tests under load bias conditions;
- Part 21: Picking carts with an operator position lifting height greater than 1200mm;
- Part 22: Three-way stacker forklifts with or without operator position lifting;

This document replaces GB/T 26949.10-2011 "Industrial Vehicle Stability Verification - Part 10: Under Lateral Loads from Power Units".

The "Additional Stability Tests for Stacking Operations under Certain Conditions" standard, compared to GB/T 26949.10-2011, has undergone structural adjustments and editorial changes, with the main differences being...

The technological changes are as follows.

- The scope of the document has been changed (see Chapter 1, Chapter 1 of the 2011 edition);
- The regulations regarding the vehicle's position on the inclined platform have been changed (see 4.2, 2011 version 4.2);

---The load location specifications have been changed (see 4.3, 2011 version 4.3);

---The stability verification method has been changed (see Chapter 5, Chapter 5 of the 2011 edition).

This document is equivalent to ISO 22915-10:2023 "Industrial vehicles - Stability verification - Part 10: Stability testing under lateral loads from a power unit".

Additional stability tests for stacking operations under certain conditions.

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

---ISO 22915-1:2016 (see 3.1) has been replaced with GB/T 26949.1-2020 (reference required), and references have been added.

literature.

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 Industrial Vehicles (SAC/TC332).

Introduction

Stability is one of the important indicators for assessing the safety of industrial vehicles. With the continuous growth of demand for industrial vehicles in my country, various types of forklifts...

Stacking operations are particularly common for forklifts under lateral load conditions caused by the power unit. To ensure the forklift operates under these conditions...

The safety of stacking operations requires the adoption of international standards to regulate the stability verification of such products, thereby achieving compliance with international standards for industrial vehicle products in my country.

Align with international standards.

GB/T 26949 "Stability Verification of Industrial Vehicles" aims to establish the stability of industrial vehicles as defined in ISO 5053-1 and its verification.

Methods. GB/T 26949 is proposed to consist of the following parts.

---Part 1: General Provisions;

---Part 2: Counterbalance Forklifts;

---Part 3: Reach Trucks and Extender Trucks;

- Part 4: Pallet stackers, double-decker stackers, and picking carts with an operator position lifting height not exceeding 1200mm;
- Part 5: Side-mounted forklifts (single-sided);
- Part 7: Two-way and Multi-way Forklifts;
- Part 8: Additional stability tests for stacking operations under gantry tilting and load lifting conditions;
- Part 9: Counterbalance forklifts for handling freight containers 6m and longer;
- Part 10: Additional stability tests for stacking operations under lateral loads from a powered unit;
- Part 11: Telescopic Boom Forklifts;
- Part 12: Telescopic boom forklifts for handling freight containers 6m and longer;
- Part 14: Off-road Telescopic Boom Forklifts;
- Part 15: Counterbalance forklifts with articulated steering;
- Part 16: Pedestrian Vehicles;
- Part 17: Tractors, Cargo and Personnel Carriers;
- Part 20: Additional stability tests under load bias conditions;
- Part 21: Picking carts with an operator position lifting height greater than 1200mm;
- Part 22: Three-way stacker forklifts with or without operator position lifting;
- Part 23: Truck-Mounted Forklifts;
- Part 24: Off-road Swing Telescopic Boom Forklifts;
- Part 25: Off-road telescopic forklifts operating under specific conditions of lifting freely swinging loads.

Industrial vehicle stability verification Part 10: Loads lateralized by a power unit Additional stability test of stacking operation under the condition

1 Scope

This document specifies additional tests to verify the stability of fully loaded vehicles equipped with dynamic load-carrying devices (e.g., side shifters), which can...

The load center of gravity is laterally offset by a significant predetermined lateral displacement from the vehicle's longitudinal center plane or center position. Such devices are used in this mode.