

ICS 53.060
CCS J 83



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

GB/T 26949.2-2022

Replacing GB/T 26949.2-2013

**Industrial trucks - Verification of stability - Part 2:
Counterbalanced trucks with mast**

Issued on: December 30, 2022

Implemented on: April 1, 2023

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Preface	
Introduction	
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Test conditions	1
4.1 General	1
4.2 Position of the vehicle on the inclined platform	1
4.3 Location of load reference point	5
4.4 The lifting height of the simulated operation test	5
5 Stability Verification	5
5.1 General requirements	5

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 is the second part of GB/T 26949 "Industrial Vehicle Stability Verification". GB/T 26949 has issued the following parts.

- Part 1. General;
- Part 2. Counterbalanced forklifts;
- Part 3. Reach and forklift trucks;
- Part 4. Pallet stacker, double-deck stacker and picking vehicle with lifting height of operator position not greater than 1200mm;
- Part 5. Side forklifts (one side);
- Part 7. Two-way and multi-way running forklifts 1);
- Part 8. Additional stability tests for stacking operations under the conditions of mast tilting forward and load lifting;
- Part 9. Counterbalanced forklifts for handling freight containers with a length of 6 m or

more;

- Part 10. Additional stability tests for stacking operations under sideways loads from the power unit;
- Part 11. Telescopic forklifts;
- Part 12. Telescopic forklifts for handling freight containers with a length of 6 m and above;
- Part 13. Off-road forklift with mast;
- Part 14. Off-road telehandlers;
- Part 15. Counterbalanced forklifts with articulated steering;
- Part 16. Pedestrian vehicles;
- Part 20. Additional stability tests for operations under load bias conditions;
- Part 21. Picking vehicles with a lifting height greater than 1200mm at the operator's position;
- Part 22. Three-way stacker forklift with or without lifting operator position.

This document replaces GB/T 26949.2-2013 "Industrial Vehicle Stability Verification Part 2. Counterbalanced Forklifts", and

Compared with GB/T 26949.2-2013, except for structural adjustment and editorial changes, the main technical changes are as follows.

- a) Changed the description of "operation type" in the test requirements (see Table 1, Table 1 of the.2013 edition);
- b) Changed the explanation of velocity "v" in the table (see Table 1, Table 1 of the.2013 edition).

This document is equivalent to ISO 22915-2:2018 "Industrial Vehicle Stability Verification Part 2. Counterbalanced Forklift".

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

Stability is one of the important indicators for assessing the safety of industrial vehicles. The counterbalanced forklift is a product with a large volume and a wide range of industrial vehicles.

Over the past few years, the demand for counterbalanced forklifts at home and abroad has continued to increase. In order to ensure the safety of counterbalanced forklifts, it is necessary to stabilize such products.

The performance verification requires standardization and unification, and realizes that my country's counterbalanced forklift products are in line with international standards.

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

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

- Part 1.General;
- Part 2.Counterbalanced forklifts;
- Part 3.Reach and forklift trucks;
- Part 4.Pallet stacker, double-deck stacker and picking vehicle with lifting height of operator position not greater than 1200mm;
- Part 5.Side forklifts (one side);
- Part 7.Two-way and multi-way running forklifts;
- Part 8.Additional stability tests for stacking operations under the conditions of mast tilting forward and load lifting;
- Part 9.Counterbalanced forklifts for handling freight containers with a length of 6 m or more;
- Part 10.Additional stability tests for stacking operations under sideways loads from the power unit;
- Part 11.Telescopic forklifts;
- Part 12.Telescopic forklifts for handling freight containers with a length of 6 m and above;
- Part 13.Off-road forklift with mast;
- Part 14.Off-road telehandlers;
- Part 15.Counterbalanced forklifts with articulated steering;
- Part 16.Pedestrian vehicles;
- Part 17.Cargo and personnel vehicles;
- Part 20.Additional stability tests for operations under load bias conditions;
- Part 21.Picking vehicles with a lifting height greater than 1200mm at the operator's position;
- Part 22.Three-way stacking forklift with or without lifting operator position;
- Part 23.Truck-mounted forklifts;
- Part 24.Off-road type rotary telescopic forklift.

Industrial Vehicle Stability Verification

Part 2. Counterbalanced forklifts

1 Scope

This document specifies test methods for verifying the stability of counterbalanced forklift trucks with masts, fitted with forks or load-handling attachments. This article

Parts do not apply to vehicles specified in ISO 22915-9 for handling cargo containers.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

ISO 5053-1 Terminology and classification of industrial vehicles Part 1. Types of industrial vehicles (Industrial trucks-Terminology

Note. GB/T 6104.1-2018 Terminology and Classification of Industrial Vehicles Part 1. Types of Industrial Vehicles (ISO 5053-1.2015, IDT)

ty-Part 1. General)

Note. GB/T 26949.1-2020 Industrial Vehicle Stability Verification Part 1. General Principles (ISO 22915-1.2016, IDT)

3 Terms and Definitions

The terms and definitions defined in ISO 5053-1 and ISO 22915-1 apply to this document.

4.1 General

See ISO 22915-1.

4.2.1 Load and steering axles

Figure 1 defines the load and steering axles.