



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

GB/T 26949.15-2017

**Industrial trucks -- Verification of stability -- Part 15:
Counterbalanced trucks with articulated steering**

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Foreword

GB/T 26949 "Industrial Vehicle Stability Verification" has or plans to release the following parts.

--- Part 1. General;

---Part 2. Counterbalanced forklift;

--- Part 3. Forward and legged forklifts;

--- Part 4. Pallet stacker, double stacker and picker with a height of not more than 1200mm from the operator;

--- Part 5. Side forklifts (one side);

--- Part 7. Two-way and multi-directional operation of the forklift;

--- Part 8. Additional stability tests for stacking operations under gantry forward and load lift conditions;

---Part 9. Counterbalanced forklifts carrying freight containers of 6m and longer lengths;

--- Part 10. Additional stability tests for stacking operations under lateral load conditions of power units;

--- Part 11. Telescopic forklift;

--- Part 12. Telescopic forklifts carrying freight containers of 6 m or longer in length;

--- Part 13. Off-road forklifts with gantry;

- Part 14. Off-road telescopic forklift;
- Part 15. Counterbalanced forklifts with articulated steering;
- Part 16. Walker vehicles;
- Part 17. Cargo and personnel carriers;
- Part 20. Additional stability tests for operation under load bias conditions;
- Part 21. Picking vehicles with an operator position elevation greater than 1200 mm;
- Part 22. Three-way stacker forklifts where the operator position can be lifted;
- Part 23. Industrial and RTT truck-mounted forklifts;
- Part 24. Off-road rotary telescopic forklift.

This part is the 15th part of GB/T 26949.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the translation method equivalent to ISO 22915-15.2013 "Industrial Vehicle Stability Verification Part 15. With Articulated Steering

Balanced heavy forklift.

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

- GB/T 6104-2005 Mobile Industrial Vehicle Terminology (ISO 5053.1987, IDT);
- GB/T 26949.1-2012 Industrial vehicle stability verification Part 1. General (ISO 22915-1.2008, IDT).

Compared with ISO 22915-15.2013, the editorial changes are as follows.

- Original Table 1 "The position of the vehicle on the inclined platform (Test 2)" is incorrect and corrected.

This part was proposed by the China Machinery Industry Federation.

This part is under the jurisdiction of the National Industrial Vehicle Standardization Technical Committee (SAC/TC332).

This section is responsible for drafting units. Zhejiang Nuoli Machinery Co., Ltd., Beijing Crane Transportation Machinery Design and Research Institute, national lifting transportation

Machinery Quality Supervision and Inspection Center.

Participated in the drafting of this section. Anhui Heli Co., Ltd.

1 Scope

This part of GB/T 26949 provides for the verification of counterweight forks with articulated steering with gantry, forks or load handling attachments

Test method for vehicle stability.

This section does not apply to vehicles with a forward-moving (retractable gantry or fork).

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 5053 Mobile Industrial Vehicle Terminology (Powered industrial trucks-Terminology)

ISO 22915-1 - Determination of stability of industrial vehicles - Part 1. General
(Industrial trucks-Verification of stability-Part 1. General)

3 Terms and definitions

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

4.1 General

See ISO 22915-1.

4.2.1 Load bridge and steering axle

Figure 1 defines the load bridge and steering axle of the vehicle.

Description.

AA---the longitudinal center plane of the vehicle;

BB --- steering axle;

CC --- load bridge.

Figure 1 Load bridge and steering bridge

4.2.2 Test 1

The vehicle should be placed on the inclined platform in a steering full lock state with its load bridge parallel to the tilt axis XY of the inclined platform, see Table 1.

4.2.3 Test 2

The vehicle should be placed on a tilting platform with its load-bearing bridge and steering axle parallel to the tilting axis XY of the tilting platform, see Table 1.

4.2.4 Test 3, Test 4 and Test 5

The lateral stability test of the vehicle in Table 1 should be carried out on the side with the least stability.

The vehicle should be placed on the inclined platform in a turned state such that the MN line is parallel to the tilt axis XY of the tilting platform, see Table 1.

The M point is defined as the center point of the contact face on the inclined platform with the rear wheel closest to the tilt axis XY.

The N point is defined as the center point of the contact surface of the load wheel closest to the tilt axis XY on the inclined platform.

4.3 Load reference point position

When the test 1 is carried out, the position of the horizontal projection of the load reference point E should not change when the fork is lifted from the low position, as shown in Fig. 2.

The gantry is vertical and the specified test load is raised to approximately 300 mm above the inclined platform. Make the front surface of the vertical section of the fork vertical,

E point is established on the fork or fork frame in a fixed relationship with the center of mass of the test load, as shown in a) of Figure 2. Point E should be used as a tilting platform

Reference point for point F. When the gantry is lifted, a new F1 point may be created on the tilting platform, as shown in b) of Figure 2. Should be available at

The design value allows the gantry tilt angle to be adjusted so that the new F1 point is returned to the initial position F, as shown in c) of Figure 2.

a)

b)

Figure 2 Location of the load reference point

c)

Figure 2 (continued)

4.4 Lifting height of simulated running test