



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

GB/T 26949.22-2019

**Industrial trucks -- Verification of stability -- Part 22: Lateral-and
front-stacking trucks with and without elevating operator
position**

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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 with or without operator position;
- Part 23. Industrial and RTT truck-mounted forklifts;
- Part 24. Off-road rotary telescopic forklift.

This part is the 22nd part of GB/T 26949.

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

This section uses the translation method equivalent to ISO 22915-22.2014 "Industrial Vehicle Stability Verification Part 22. Operator Location

A three-way stacker forklift that can or cannot be lifted.

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

--- GB/T 6104.1-2018 Industrial vehicle terminology and classification - Part 1. Industrial vehicle type (ISO 5053-1.2015,

IDT)

--- GB/T 26949.1-2012 Industrial vehicle stability verification Part 1. General (ISO 22915-1.2008, IDT)

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 was drafted. Hangcha Group Co., Ltd., Beijing Crane Transportation Machinery Design and Research Institute Co., Ltd., Anhui Heli

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1 Scope

This part of GB/T 26949 specifies a three-way stacker forklift that verifies that the operator's

position may or may not rise (eg ISO 5053-1)

Test method for the stability of the definition).

This section applies to vehicles with forks, shuttle forks and/or integral attachments under normal operating conditions.

This section also applies to vehicles in which the load handling device can be moved sideways or rotated and offset from the longitudinal center plane of the vehicle.

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 5053-1 Industrial Vehicle Terms and Classifications Part 1. Industrial Vehicle Types (Industrialtrucks-Terminology

andclassification-Part 1.Typesofindustrialtrucks)

ISO 22915-1 - Determination of stability of industrial vehicles - Part 1. General (Industrialtrucks-Verificationofstabili-

ty-Part 1.General)

3 Terms and definitions

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

3.1

Normal operating conditions normaloperatingconditions

The working condition of the vehicle running on the ground level, level and hard enough (such as concrete).

3.2

Guided steering guidedsteering

Mechanical (such as rails) or non-mechanical (such as electromagnetic guidance, laser sensors or infrared guidance systems) that are not directly controlled by the operator.

Steering for guiding the steering of the vehicle along a predetermined straight path.

3.3

Restricted steering restrictedsteering

The steering of the vehicle is controlled by the operator, and the angle between the steering angle and the forward and backward running directions is not more than $\pm 10^\circ$.

3.4

Unrestricted steering unrestricted steering

The steering of the vehicle is controlled by the operator and the steering angle is not limited.

4.1 General

See ISO 22915-1.

4.2.1 Load bridge and steering axle

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

Description.

AA --- longitudinal center plane of the vehicle;

BB --- drive/steering axle;

CC --- load bridge.

Figure 1 Load bridge and drive/steering axle

4.2.2 Test 1, Test 2 and Test 3

The vehicle should be placed on a tilting platform whose drive/steering bridge BB and load bridge CC should be parallel to the tilt axis XY of the tilting platform.

See Table 1.

4.2.3 Test 4

The vehicle should be placed on a tilting platform with its longitudinal center plane AA parallel to the tilting axis XY of the tilting platform, see Table 1.

4.2.4 Test 5, Test 6 and Test 7

The vehicle should be placed on a tilting platform such that the MN line is parallel to the tilt axis XY of the tilting platform.

The definition of point M is as follows.

a) For vehicles with dual drive (steering) wheels, point M is the intersection of the transaxle centerline and the vehicle center plane AA

Vertical projection on the stage;