



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

**GB/T 26949.13-2017**

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**Industrial trucks -- Verification of stability -- Part 13:  
Rough-terrain trucks with mast**

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### Preface

GB/T 26949 "Industrial Vehicle Stability Verification" has been or is intended to be issued in the following sections.

- Part 1. General;
- Part 2. Balance forklift;
- Part 3. Front and rear forklift;
- Part 4. pallet truck, double stacker and operator picking height of not more than 1200mm picking;
- Part 5. Side forklift (unilateral);
- Part 7. Two-way and multi-directional operation of forklifts;
- Part 8. Additional stability tests for stacking operations under mast forward and load hoisting conditions;
- Part 9. Balance truck with 6m and above length of cargo container;
- Part 10. Additional stability tests for stacking operations under lateral loading of power units;

- Part 11. Telescopic arm forklift;
- Part 12. Telescopic forklift for handling cargo containers of length 6m and above;
- Part 13. Cross-country forklifts with gantry;
- Part 14. Off - road telescopic forklift;
- Part 15. Balance heavy forklift with articulated steering;
- Part 16. Walking vehicles;
- Part 17. Cargo and Personnel Carrier;
- Part 20. Additional stability tests for operating under load biasing conditions;
- Part 21. Selection of the operator with a height of greater than 1200 mm;
- Part 22. Three-way stacker forklift with or without an operator's position;
- Part 23. Industrial and RTT Trucks Carrying Forklifts;
- Part 24. Off - road rotary telescopic forklift trucks.

This part is part 13 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 22915-13..2012 "Industrial vehicle stability verification Part 13.

Wild type forklift ".

In this part of the normative reference to the international documents have a consistent correspondence between the following documents.

Terminology for mobile industrial vehicles (ISO 5053. 1987, IDT);

Industrial vehicle stability verification - Part 1. General (ISO 22915-1..2008, IDT) GB/T 26949.1-2012.

This part incorporates the amendments to ISO 22915-13..2012/Cor.1..2013, the terms of which are covered by

The vertical two-line ( ) of the blank position on the outside margin is marked.

This part is made by the China Machinery Industry Federation.

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

This part is responsible for the drafting unit. Hang fork Group Co., Ltd., Beijing Lifting Transport Machinery Design and Research Institute, the national lifting transport machinery

Quality Supervision and Inspection Center.

This part participates in the drafting unit. Anhui Heli Co., Ltd.

## 1 Scope

This part of GB/T 26949 specifies that the rated lifting capacity of a gantry with a fork or load carrying is not more than 10,000 kg

Test method for stability of off - road counterbalanced forklift truck.

This section does not apply to vehicles that carry freight containers.

## 2 normative reference documents

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

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

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

ISO 22915-1 Industrial vehicle stability verification Part 1. General  
(Industrial trucks-Verification of stability-  
Part 1. General)

## 3 terms and definitions

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

### 4.1 General

See ISO 22915-1.

#### 4.2.1 Load bridge and drive axle/steering axle

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

Description.

AA --- vehicle longitudinal center plane;

BB --- steering bridge (in the 4-wheel drive vehicle can also be the drive axle);

CC --- load bridge (in the 4-wheel steering vehicles can also be steering bridge).

Figure 1 Load bridge and drive axle/steering axle

#### 4.2.2 Stabilizer/axle locking device

If a stabilizer or axle lock is installed, it should only be used for test 1 and test 3.

#### 4.2.3 Test 1 and Test 2

The vehicle should be placed on an inclined platform with the load bridge CC parallel to the tilt axis XY of the inclined platform, see Table 1.

#### 4.2.4 Test 3, Test 4 and Test 5

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

As shown in Table 1, the steering wheel closest to the tilt axis should be parallel to the tilt axis XY. M points are defined as follows.

a) For vehicles with articulated steering bridges. point M is the intersection of the vehicle longitudinal center plane AA and the steering axle axis at the inclined platform

On the projection (see Table 1);

b) For vehicles with articulated frames. the two parts of the frame to the limit position, M point is the rear frame longitudinal center JJ and after

The intersection of the bridge axis on the inclined platform (see Table 1);

c) For a vehicle with a axle lock device. M is the center of the reclining platform with the rear wheel contact surface closest to the tilt axis XY

Point (see Table 1).

As shown in Table 1, point N is defined as the relationship between the tilting platform surface and the load wheel (or the stabilized leg) that is closest to the tilt axis XY

The center of the contact surface.

#### 4.3 Position of load reference point

When the test 1 is carried out, the horizontal position of the load reference point E should not be changed when the fork is lifted from the lower position, as shown in Fig.

So that the mast is vertical, the specified test load up to about 500mm above the tilt platform. The vertical section of the fork is perpendicular to the front surface

If the fork or fork is fixed in relation to the centroid of the test load, E can be set on the fork or fork, as shown in Figure 2a). E points

Should be used as a reference for the tilting platform F point. When the gantry rises, a new