NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 26949.1-2020

Industrial trucks - Verification of stability - Part 1: General

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Foreword

The following parts have been released or are to be released for GB/T 26949, "Industrial trucks - Verification of stability":

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-- Part 4: Pallet stackers, double stackers and order-picking trucks with operator position elevating up to and including 1 200 mm lift height;

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-- Part 22: Lateral-and front-stacking trucks with and without elevating operator position;

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This Part is Part 1 of GB/T 26949.

This Part was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part replaces GB/T 26949.1-2012, "Industrial trucks - Verification of stability - Part 1: General"; compared with GB/T 26949.1-2012, the main technical changes are as follows:

-- Delete "cargo and personnel vehicles" (see Chapter 1 of version 2012);

-- Modify "normative references" (see Chapter 2; Chapter 2 of version 2012);

-- Add "(3.1, 3.2)" (see 3.3);

-- Add notes (see 3.4, 3.5);

-- Modify the expression of maintaining the initial position of the truck on the tilt table (see 4.3.2; 4.3.2 of version 2012).

The translation method that is used in this Part is equivalent to ISO 22915-1:2016 "Industrial trucks - Verification of stability - Part 1: General".

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

-- GB/T 6104.1-2018, Industrial trucks - Terminology and classification - Part

1: Types of industrial trucks (ISO 5053-1:2015, IDT)

-- GB/T 8591-2000, Earth-moving machinery - Seat index point (eqv ISO 5353:1995)

-- GB/T 8420-2011, Earth-moving machinery - Physical dimensions of operators and minimum operator space envelope (ISO 3411:2007, IDT)

This Part was proposed by China Machinery Industry Federation.

This Part shall be under the jurisdiction of National Technical Committee of Industrial Trucks (SAC/TC 332).

The drafting organizations of this Part: Hangcha Group Co., Ltd., Beijing Materials Handling Research Institute, Anhui Heli Co., Ltd., Noblelift Intelligent Equipment Co., Ltd., Ruyi Joint Stock Co. Ltd., Longhe Intelligent Equipment

Industrial trucks - Verification of stability -

Part 1: General

1 Scope

This Part of GB/T 26949 specifies the stability that is related to the safety of industrial trucks which are defined by ISO 5053-1, and the verification methods.

The industrial trucks which are involved in this Part refer to self-propelled or pedestrian-propelled trucks with wheels, except for trucks running on tracks. These trucks can be controlled by the operator, or unmanned, which are used for handling, towing, pushing, lifting, stacking or layer stacking in the shelf.

This Part specifies the basic test specifications and requirements for the verification of stability of industrial trucks (hereinafter referred to as "trucks").

This Part applies to the following truck types and their specific conditions:

a) Counterbalanced trucks with mast which are specified in ISO 22915-2;

b) Reach and straddle trucks which are specified in ISO 22915-3;

c) Pallet stackers, double stackers and order-picking trucks with operator position elevating up to and including 1 200 mm lift height, which are specified in ISO 22915-4;

d) Single-side-loading trucks which are specified in ISO 22915-5;

e) Bidirectional and multidirectional trucks which are specified in ISO 22915-7;

f) Additional stability test for trucks operating in the special condition of stacking with mast tilted forward and load elevated, which are specified in ISO 22915-8;

g) Counterbalanced trucks with mast handling freight containers of 6 m (20 ft) length and longer, which are specified in ISO 22915-9;

h) Additional stability test for trucks operating in the special condition of stacking with load laterally displaced by powered devices, which are specified in ISO 22915-10;

i) Industrial variable-reach trucks, which are specified in ISO 22915-11;

< Trucks other than variable-reach and rough-terrain trucks> meet the following operating conditions:

a) The fork is basically level; the stacking operation is carried out on a solid, smooth, level and paved road;

b) Perform the operation when the load centroid is approximately in the longitudinal median plane of the truck;

c) The mast or fork is tilted backward (if possible); the load is in a low (operating) position; it operates on a solid, smooth, level and paved road; for forward-moving trucks, the mast or fork is completely retracted back;

d) The load/operator is running or operating in the lifting state (the truck is specially designed for this operating condition).

3.2 Normal operating conditions

< Variable-reach and rough-terrain trucks> meet the following operating conditions:

a) Perform the stacking operation on a solid, smooth, level and paved road under the combined state when the cantilever crane lifts/extends and fork