

JB

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

JB/T 3300-2010

Replacing JB/T 3300-1992

**Counterbalanced fork-lift trucks - Test methods for complete
trucks**

平衡重式叉车 整机试验方法

(English Translation)

Issued on: February 11, 2010

Implemented on: July 1, 2010

**Issued by: Ministry of Industry and Information Technology of the
People's Republic of China**

Table of Contents

Foreword	4
1 Scope	6
2 Normative references	6
3 Test load and status	7
4 Preparations before test	8
5 General test conditions	10
parameters	11
7 Stability test	19
8 Loading and unloading performance test	19
9 Steering performance test	21
10 Operating performance test	28
11 Dynamic performance test	30
12 Energy consumption test	34
13 Braking performance test	37
14 Vibration test	39
15 Noise test	39
16 Security performance test for overhead guards	39
17 Thermal balance test	39
18 Operating force determination	41
19 Strengthening test	41
lift trucks	48
counterbalanced fork-lift trucks	58
References	66
Notification on the amendment of	67
machinery industry standard	67

1 Scope

This Standard specifies the test method for whole machines of the counterbalanced fork-lift trucks' preparations before test, test conditions, parameter determination and stability, loading and unloading performance, steering performance, operating performance, dynamic performance, energy consumption, braking performance, vibration, noise, etc.

This Standard is applicable to the internal combustion counterbalanced fork-lift trucks with the rated lifting capacity of 500kg ~ 10,000kg (referred to as "internal combustion fork-lift trucks" in particular to the internal combustion counterbalanced fork-lift trucks) and the battery-powered counterbalanced fork-lift trucks with the rated lifting capacity of 500kg ~ 5,000kg (referred to as

"battery-powered fork-lift trucks" in particular to the battery-powered counterbalanced fork-lift trucks), which are hereinafter referred to as "fork-lift trucks". Other types of fork-lift trucks can use this Standard for reference.

2 Normative references

The provisions in the following documents become the provisions of this

Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrections) or revisions do not apply to this Standard. However, parties who reach an agreement based on this

Standard are encouraged to study if the latest editions of these documents are applicable. For undated references, the latest editions apply to this Standard.

GB/T 3785 Electric, sonic properties and measuring methods for sound level meters

GB/T 5141 Counterbalanced fork-lift trucks - Stability test (GB/T 5141-2005,

ISO 1074.1991, IDT)

GB/T 5143 Industrial trucks - Overhead guards - Specification and testing (GB/T 5143-2008, ISO 6055.2004, IDT)

JB/T 2390 Counter balanced fork lift trucks - Basic parameter

ISO 5767 Industrial trucks operating in special condition of stacking with mast tilted forward - Additional stability test b) Standard no-load operating status. OPERATE under standard no-load status and the condition of mast tilting backward to the greatest extent.

c) Standard load status. The fork-lift trucks shall be equipped with test loads.

The masts shall be vertical. The upper surfaces of the forks shall be 300mm away from the ground.

d) Standard load operating status. OPERATE under standard load status and the condition of mast tilting backward to the greatest extent.

4.1 Purpose of the preparations

Before the test, the fork-lift trucks shall have normal technical status, so as to ensure the correctness of the test results. In the meanwhile, ELIMINATE various hidden dangers to ensure the security and the smooth conduct of the test, and to avoid accidents.

4.2.1.1

REGISTER the product certificate, manufacturing plant's name, product model, product serial number or manufacturing date, and the original dimensions of the parts that need to be dismantled and inspected.

4.2.1.2

CHECK the integrity of the fork-lift trucks' assemblies, components, accessories, accessory devices and attached tools, tightening degree of the fasteners in key positions, lubrication and sealing conditions of the assemblies' lubricating oil and points, sealing conditions of the hydraulic systems and oil pipe connectors, insulation resistance between batteries and bodies of the battery-powered fork-lift trucks, and firmness of the battery cells in the containers, battery containers in the frames and battery system wiring.

4.2.1.3

CHECK the assembly condition of the fork-lift trucks. For the fork-lift trucks in standard no-load operating status, CHECK whether the steering system, transmission system, braking system, operating system, electrical system and battery container sets are normal and reliable. For the fork-lift trucks in standard no-load status, CHECK whether the mast lifting system and hydraulic system are normal and reliable. There shall be no oil leakage.

4.2.1.4

CHECK whether the nameplates and load curve plates of the fork-lift trucks are correct, and whether their security identifications are integral.

4.2.2

Forklift running-in 5.5 Before the performance test, fully PREHEAT the fork-lift trucks.

5.6

During the test, CONFORM to the following conditions.

a) The ambient temperature shall be with...

GB 10827.1-2014 | GB/T 5143-2008 | JB/T 3299-2025 |