

ICS 45.060.20

CCS S 52



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

GB/T 5601-2018

Rules for inspecting and testing of railway freight cars

铁道货车检查与试验规则

Issued on: June 7, 2018

Implemented on: January 1, 2019

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Inspection and test rules	2
4.1 Routine inspection	2
4.2 Type test	2
5 Inspection and test method	4
5.1 Visual inspection	4
5.2 Structural inspection	4
14 Reference	23

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 5601-2006 "Rules for Inspection and Testing of Railway Freight Cars". Compared with GB/T 5601-2006, except for editorial The main technical changes outside the revision are as follows:

- Revised the scope of application of the standard (see Chapter 1, Chapter 1 of the.2006 edition);
- Revised some terms and definitions (see 3.1, 3.2, 3.3, 3.4, 3.5,.2006 edition 3.1, 3.2, 3.3, 3.4, 3.5);
- Removed the use of assessment test terms and definitions (see.2006 edition of 3.6);
- Revised the conditions of the type test (see 4.2, 4.2 of the.2006 edition);
- Increase the rotation test of the rotating coupler (see 5.3.2.2.3);
- Modified the test of the brake device (see 5.3.2.3, 5.3.2.3 of the.2006 edition);
- Modified the state of the vehicle in the performance test of tipping and hydraulic system (see 5.3.2.8, 5.3.2.9, 5.3.2.9 of.2006 edition, 5.3.2.10);

- Revised the impact test requirements (see 5.3.4.3, 5.3.3.2.3 of the.2006 edition);
- Removed the emergency braking distance test (see 5.3.3.2.4 of the.2006 edition);
- Increased braking performance test (see 5.3.4.4);

1 Scope

China's national rules for inspecting and testing railway freight cars. This is the companion to the general specification and covers what happens after a wagon is built: the inspection and testing of its main technical performance before it is allowed into service. That gate matters because a freight wagon, once accepted, disappears into a fleet of hundreds of thousands and may not be examined in detail again for years, running the whole time in trains whose safety depends on every vehicle in them. The checks are correspondingly specific - the brake's performance and its behaviour in a long train, the running gear's geometry and the wheelset dimensions on which derailment safety turns, the coupler height, the body's structural integrity - and each is a measurement rather than an opinion. The standard specifies the terminology, the inspection and test rules and the test methods, applies to new wagons up to 120 km/h and 30 tonnes axle load, and may be referenced for faster, heavier or special wagons such as long freight cars and liquefied gas tank wagons.

This standard stipulates the terminology and test for the inspection and test of the main technical performance of newly-built railway wagons before they are put into use. Sense, inspection and test rules, inspection and test methods. This standard is applicable to the inspection and inspection of new railway wagons with a maximum running speed less than or equal to 120km/h and an axle weight less than or equal to 30t. test. Newly built railway wagons with a maximum operating speed of more than 120km/h, a shaft size of 30t or special requirements for construction and operation (eg. growing up) Cargo trucks, liquefied gas railway tankers, etc.) can be referred to.

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.

GB/T 1226 general pressure gauge

GB/T 5599 Railway Vehicle Dynamics Performance Evaluation and Test Identification Specification

GB/T 5600 railway truck general technical conditions

GB/T 10479 aluminum railway tank car GB T12816 Railway passenger car internal noise limit and measurement method

GB/T 13639 analog input digital indicator for industrial process measurement and control systems

GB/T 16904.1 Standard gauge railroad rolling stock -- Limiting inspection - Part 1 .
Examination method

HG/T 2468 stainless steel rail tanker TB/T 456 Rail vehicle with hook and hook frame TB/T 493 railway vehicle coupler cushioning device assembly technical conditions TB/T 1335 Railway Vehicle Strength Design and Test Identification Specification TB/T 1492 railway vehicle brake bicycle test TB/T 1740 railway locomotive vehicle weight measuring method TB/T 1802 railway vehicle watertightness test method TB/T 1808 railway mechanical refrigerated truck electrical device and refrigeration heating device Evaluation method for static performance test of TB/T 1885 mechanical refrigerated truck TB/T 2231.2 Railway vehicle braking systems - Part 2. Trucks JJG140 railway tanker volume verification procedures JJG184 Liquefied Gas Railway Tanker Volume Verification Procedure

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Type test typetest Test verification of whether the basic parameters, structure, performance, etc. of the vehicle meet the design requirements.

Note. Rewrite GB/T 4549.1-2004, definition 7.1.