

ICS 45.060.20
CCS S 52



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

GB/T 5600-2018

General technical specification for railway freight cars

铁道货车通用技术条件

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 General requirements	2
4 Material Requirements	2
5 Manufacturing requirements	3
5.1 Process Requirements	3
5.2 Car body	3
5.3 bogie	3
5.4 Brake device	3
5.5 coupler buffer device	3
5.6 Vehicle completion	3
6 Painting and signing	4
14 Appendix E (Normative Appendix) Technical Requirements for Other Vehicle Types..	16

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 5600-2006 "General Technical Conditions for Railway Freight Cars". Compared with GB/T 5600-2006, except for editorial repair The main technical changes changed are as follows:

- Revised the scope of application of the standard (see Chapter 1, Chapter 1 of the.2006 edition);
- Increased the requirements for trucks that need to enter the defrosting warehouse (see 3.2, 3.2 of.2006 edition);
- Increased the work pressure requirements of train supervisors (see 3.3);
- Modify the scope of application through vehicle reducers and mechanized hump vehicles (see 3.13, 3.12 of the.2006 edition);
- Increased the vehicle should have an electrostatic discharge function (see 3.14);
- Increased interface size requirements (see 3.15);

- Clarified the specific requirements of aluminum alloy and stainless steel (see 4.4, 4.3 edition of.2006);
- Increased requirements for rubber elastic components (see 4.6);
- Increased the basic requirements for welding and riveting of truck manufacturing (see 5.1.1, 5.1.2);
- Revised the standard for the implementation of general technical requirements for bogies (see 5.3, 5.2.2.,2006 edition);

1 Scope

China's national general technical specification for railway freight cars. China's freight railway is the largest in the world by tonne-kilometres, and it is built around a fleet that is deliberately uniform: standard gauge wagons up to 120 km/h and 30 tonnes axle load, interchangeable across the entire network, maintained in depots that must be able to work on any of them. That interchangeability is the point of a general specification, and it reaches further than dimensions. A wagon runs in trains of many hundred metres made up of vehicles from different builders and different decades, and its structure, its coupling, its brake and its running gear must all behave predictably in that company, because the forces in a long heavy train are shared between vehicles. The standard specifies the general requirements, material requirements, manufacturing requirements, painting and marking for such wagons, and may be referenced for wagons above 120 km/h, above 30 tonnes axle load, or with special structural or operating requirements.

This standard specifies the general requirements, material requirements, manufacturing requirements, painting and marking of standard gauge railway trucks. This standard applies to standard gauge new railroads with a maximum operating speed of less than or equal to 120km/h and an axle weight of less than or equal to 30t. car. For newly-built railway wagons with a maximum running speed of more than 120km/h and a major shaft of 30t or special requirements for structure and operation, please refer to carried out.

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 146.1 standard gauge railway locomotive vehicle limit

GB/T 699 high quality carbon structural steel

GB/T 700 carbon structural steel

GB/T 702 hot rolled steel bar size, shape, weight and tolerance

GB/T 1591 low alloy high strength structural steel

GB 4806.10 National food safety standards for food contact coatings and coatings

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

GB/T 25024 railway truck two-axle bogie general technical conditions

GB/T 25343 (all parts) Welding of railway applications rail vehicles and their components

GB/T 28791 railway vehicle sign GBZ 230 Occupational exposure to toxicant hazard classification NB/T 47013 (all parts) Non-destructive testing of pressure equipment NB/T 47014 Pressure welding equipment welding process evaluation Brake hose connector for TB/T 60 rolling stock 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 1558 (all parts) Non-destructive testing of welds on rolling stock TB/T 1808 railway mechanical refrigerated truck electrical device and refrigeration heating device TB/T 1900 railway vehicle storage cylinder TB/T 1961 railway vehicle bumper TB/T 1979 weather-resistant steel for railway vehicles TB/T 2206 Type 103/104 air distribution valve rubber parts for vehicles TB/T 2231.2 Railway vehicle braking systems - Part 2. Trucks General technical requirements for rubber elastic components for TB/T 2843 rolling stock TB/T 2911 Technical conditions for the riveting of railway vehicles TB/T 2942 General technical requirements for steel castings for rolling stock