

ICS 45.060.20
CCS S 50



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

GB/T 12817-2004

**General technical specification of railway passenger car
(English Translation)**

Issued on: June 11, 2004

Implemented on: December 1, 2004

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

Table of Contents

Foreword...	3
1 Scope...	4
2 Normative references...	4
3 Basic requirements...	7
4 Material requirements...	9
5 Parts' structure and properties...	9
6 Coating and marking...	17
7 Test methods and inspection rules...	17
Annex A...	19

Foreword

This Standard replaces GB/T 12817-1991 "General technical specification for railway passenger car".

Compared with GB/T 12817-1991, the main changes of this Standard are as follows.

- In basic requirements, the clauses such as construction speed, running stability indicators, and noise in guest rooms are specified accordingly. ADD requirements for the anti-fire protection structure design of cars, grounding protection of cars' metal parts, axle temperature alarm devices, etc. MERGE the clauses of heating and ventilation portions in the original standard INTO the heating, ventilation, and air conditioning devices in Chapter 5 "Structure and properties of each part".
- In material requirements, ADD the content of coating requirements, flame retardant requirements for non-metallic materials used for passenger cars, and requirements for indoor decorating materials, etc.
- In structure and properties of each part, ADD new technical features of 10 parts correspondingly, such as car body, bogie, and braking device; and MODIFY some contents.
- ADD coating and marking requirements, etc.

- ADD the content of environmental protection in the corresponding provisions.

Annex A of this Standard is normative.

The Standard was proposed by the Ministry of Railways of the People's Republic of China.

This Standard shall be under the jurisdiction of the Institute of Standards and Metrology of the Ministry of Railways.

Drafting organizations of this Standard. Institute of Standards and Metrology of the Ministry of Railways, Changchun Railway Vehicles Co., Ltd., Tangshan Locomotive & Rolling Stock Works, Sifang Rolling Stock Research Institute, and Puzhen Rolling Stock Works.

Main drafters of this Standard. Sun Yan, Qi Bing, Pei Yanbin, Song Yinchuan, Sun Lingjun, Du Mingzhong, Yuan Shuqing, Shi Guirong, Wu Ronghua, and Pan Yining.

This Standard was first-time issued in April 1991, this is the first revision.

General technical specification for
railway passenger car

1 Scope

This Standard specifies the basic requirements, material requirements, parts' structure and properties, coating, marking, test methods, and inspection rules of standard gauge railway passenger cars.

This Standard applies to all-metal-body seating cars, sleeping cars, baggage cars, postal cars, dining cars, electricity generating cars, and combination cars that are newly manufactured for standard gauge railway, for general purposes, and with a construction speed not greater than 200km/h. Cars for special purposes such as official cars, sanitation cars, maintenance cars, and test cars with special requirements may also use this Standard for reference.

2 Normative references

The provisions in 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 versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB 146.1 Rolling stock gauge for standard gauge railways

GB/T 699-1999 Quality carbon structural steels

GB/T 700-1988 Carbon structural steels (neq DIN 630.1987)

GB/T 1591-1994 High strength low alloy structural steels (neq ISO 4950.1980)

GB/T 3280-1992 Cold rolled stainless steel sheets and plates

GB/T 3880-1997 Aluminium and aluminium alloy rolled sheet (neq ASTM B209)

GB/T 4171-2000 Superior atmospheric corrosion resisting structural steel

GB/T 4172-2000 Atmospheric corrosion resisting steel for welded structure

GB/T 4952-1985 Coupler connection contour for locomotives and cars

GB/T 5599-1985 Railway vehicles - Specification for evaluation the dynamic performance and accreditation test

GB/T 12813-1991 Assembling specification of couplers and draft gears for railway cars

GB/T 12818-2004 Rules for inspecting and testing of railway passenger car after completion of construction

GB 18045 Safety glass for railway rolling stock (GB 18045-2000, eqv JIS R3213.1998)

GB 18580 Indoor decorating and refurbishing materials - Limit of formaldehyde emission of wood based panels and finishing products (GB 18580-2001, neq EN 312-1.1997)

GB 18581 Indoor decorating and refurbishing materials - Limit of harmful substances of solvent based coatings for woodenware (GB 18581-2001, neq EC Directive 1999/10/EC)

GB 18583 Indoor decorating and refurbishing materials - Limit of harmful

substances of adhesives

GB 18584 Indoor decorating and refurbishing materials - Limit of harmful

substances of wood based furniture

GB 18585 Indoor decorating and refurbishing materials - Limit of harmful

substances of wallpapers (GB 18585-2001, neq EN 12149.1997)

GB 18586 Indoor decorating and refurbishing materials - Limit of harmful

substances of polyvinyl chloride floor coverings

GB 18587 Indoor decorating and refurbishing materials - Limit of harmful

substances emitted from carpets, carpet cushions and adhesives (GB 18587-2001,
idt CRI standards)

TB/T 1.1-1995 Lettering and marking of railway cars - General regulations

TB/T 1333.1-2002 Railway applications - Electric equipment for rolling stock - Part

1 General service conditions and general rules (idt IEC 60077-1.1999)

TB/T 1333.2-2002 Railway applications - Electric equipment for rolling stock - Part

2 Electrotechnical components - General rules (idt IEC 60077-2.1999)

TB/T 1335-1996 Specifications for strength design and test identification of railway
vehicles

TB/T 1490-2004 General technical specification for the bogies of railway
passenger coach

TB/T 1719-1998 General technical specification for the heating devices of railway
passenger car (eqv UIC 553.1990)

TB/T 1720-1998 General technical specification for the water supply devices of
railway passenger car (eqv UIC 563.1990)

TB/T 1759-2003 Rules for installation of cabling for railway passenger car

TB/T 1765-1986 Design parameters of supply voltage of passenger car

TB/T 1802-1996 Rain leakage test method of railway vehicles

TB/T 1901-1999 Assembly technical conditions of vehicle braking system