

ICS 43.080.10



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

GB/T 13880-2024

Road vehicles - Fifth wheels - Interchangeability

道路车辆 牵引座 互换性

(English Translation)

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020 Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents.

This document replaces GB/T 13880-2007 Road vehicles - Fifth wheels - Interchangeability. Compared with GB/T 13880-2007, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

- a) The classes of fifth wheel height are changed (see 5.4; see 3.4 of the 2007 edition);
- b) The requirements for the minimum force-bearing area are added (see 5.6);
- c) The requirements for direct-mounted fifth wheels are added (see Chapter 6).

This document is identical to ISO 3842.2006 Road vehicles - Fifth wheels - Interchangeability.

The chapter "Terms and definitions" is added to this document.

1 Scope

This document specifies the mounting dimensions and interchangeability of fifth wheels on mounting plates or on the upper surface of the frame.

This document applies to standard fifth wheels and direct-mounted fifth wheels

matching the 50 coupling pin specified in ISO 337, or standard fifth wheels matching the 90 coupling pin specified in ISO 4086.

Dimensions not specified in this document are left to the discretion of the manufacturer.

The test conditions and strength requirements for the 50 and 90 fifth wheels shall comply with the provisions of ISO 8717.

2 Normative references

The provisions of the following documents constitute the essential clauses of this document through normative references in this text. Among them, for referenced documents with dates, only the versions corresponding to the dates are applicable to this document; for referenced documents without dates, the latest versions (including all amendments) are applicable to this document.

ISO 337 Road vehicles - 50 semi-trailer fifth wheel coupling pin - Basic and mounting/interchangeability dimensions

NOTE: GB/T 4606-2006 Road vehicles - 50 semi-trailer fifth wheel coupling pin - Basic and mounting/interchangeability dimensions (ISO 337.1981, IDT)

ISO 1726 Road vehicles - Mechanical coupling between tractors and semi-trailers - Interchangeability

NOTE: GB/T 20070-2006 Road vehicles - Mechanical coupling between tractors and semi-trailers - Interchangeability (ISO 1726.2000, MOD)

ISO 4086 Road vehicles - 90 semi-trailer fifth wheel kingpin - Interchangeability

NOTE: GB/T 4607-2006 Road vehicles - 90 semi-trailer fifth wheel coupling pin - Basic and mounting/interchangeability dimensions (ISO 4086.2001, IDT)

ISO 8717 Commercial road vehicles - Fifth wheel couplings - Strength tests)

NOTE: GB/T 20069-2006 Road vehicles - Fifth wheel couplings strength tests (ISO 8717.2000, MOD)

3 Terms and definitions

There are no terms or definitions that require definition in this document.

4 Marking

Fifth wheels complying with the requirements of this document shall be marked in the following order.

- a) The standard number of this document;
- b) The code for the 50 standard fifth wheel that complies with the provisions of Chapter 5 is FW50, and the code for the 90 standard fifth wheel is FW90;
- c) The code for the 50 direct-mounted fifth wheel that complies with the provisions of Chapter 6 is DFW50;
- d) Mark the code of the fifth wheel height (H) class according to the requirements of Table 1 or Table 3;
- e) Mark the transversal width class (A or B) of the direct-mounted fifth wheel that complies with the requirements of Chapter 6, in accordance with the requirements of Table 2.

EXAMPLE 1.50 standard fifth wheel with a height within the range of class 1.

GB/T 13880 FW50-1

EXAMPLE 2.90 standard fifth wheel with a height within the range of class 4.

GB/T 13880 FW90-4

EXAMPLE 3.50 direct-mounted fifth wheel with a width of class A and a height within the range of class 1.

GB/T 13880 DFW50-1-A

5.1 Mounting holes

The dimensions and position of the mounting holes on the mounting plate shall comply with the provisions of Figure 1, and the dimensions and position of the mounting holes on the fifth wheel shall comply with the provisions of Figure 2.

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