NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 6770-2020

Special safety regulations for driver's cabs of locomotives

Issued on: June 2, 2020 **Implemented on: December 1, 2020**

Issued by: SAMR; SAC

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1 Scope

This Standard specifies the terms and definitions for driver's cabs of locomotives, the protective measures against destructive external forces, the protective measures against inertial forces in the car, the protective measures against other hazards and the emergency exit requirements for the driver's cabs.

This Standard applies to the design of driver's cabs of electric locomotives and diesel locomotives. The driver's cabs of shunting locomotives can be implemented by reference.

2 Normative references

The following documents are indispensable for the application of this document.

For dated references, only the dated version applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 5914.1, Driver's cab for locomotives - Part 1: Visibility conditions

GB/T 5914.2, Position of front and side windows and other windows

GB/T 6769, Regulations governing the layout of driver's cabs of locomotives

GB/T 21563, Railway applications - Rolling stock equipment - Shock and vibration tests

GB/T 25334.1-2010, Technical specification for railway locomotive car body - Part 1: Diesel locomotive car body

3 Terms and definitions

Terms and definitions which are defined in GB/T 25334.1-2010 are applicable to this document.

5.2 The type of window glass that is used in the driver's cab shall meet the requirements of GB/T 5914.2.

5.3 The equipment in the driver's cab shall be installed firmly and meet the shock and vibration requirements of GB/T 21563.

6 Protective measures against other hazards

6.1 There shall be no parts, equipment and unprotected high-voltage electrical equipment that may endanger the safety of the crew (such as electric shock, burns, explosion, poisoning) in the driver's cab.

6.2 The non-current-carrying metal parts that are installed on the vehicle roof shall be electrically connected to the vehicle body and reliably grounded, so as to ensure the safety of people and vehicles in the accident where the live wire from the overhead line system or pantograph falls on the vehicle roof.

7 Emergency exit of the driver's cab

7.1 The driver's cab at the end shall be provided with at least one door or one passageway as an emergency exit, so that when an emergency occurs, the crew can enter the adjacent compartment or the other end of the driver's cab through the longitudinal corridor. The emergency exit shall meet the following requirements:

a) The emergency exit shall meet the requirements of GB/T 6769, and shall be easy for crew members to pass. The driver's seat shall not become an obstacle to the emergency exit. Crew members shall be able to evacuate from the driver's cab safely and without difficulty.

b) The emergency exit door shall be able to close tightly and open outward from the driver's cab. The door shall be easy to push open, or any other simple and quick way of opening the door can be used. If the driver's cab door is in danger of obstruction (such as luggage, passengers), the door should be designed as a sliding plug door or a door that can rotate both inward and outward.

c) The crew members shall be able to evacuate from the emergency exit safely and without difficulty; the distance between the emergency exit and the driver's seat shall not exceed 2 m. The height of the emergency exit passage is not less than 1 800 mm; the width is not less than 500 mm; the minimum clearance size of the door is 1 724 mm x 452 mm.