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

GB/T 34572-2017

**Railway applications -- Current collection system --
Pantographs, testing methods for carbon contact strips**

轨道交通 受流系统 受电弓碳滑板试验方法

(English Translation)

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Table of Contents

Preface
1 Scope
2 Normative references
3 Terms and definitions
4 Symbol
5 Test
5.1 Test classification
5.2 Test Procedure
Appendix A (informative) This standard and IEC 62499:2008 subsection number contrast list
Appendix B (Normative) Test Project Summary Table
Appendix C (Informative) User-specified parameters
References

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses redrafted law revision adopted IEC 62499:2008 "rail transit flow system pantograph carbon skateboard test side law".

This standard compared with IEC 62499:2008 in the structure of more adjustment, the specific chapter number control see Appendix A.

This standard compared with IEC 62499:2008 there are technical differences, the provisions of these differences have been passed in the outer margin of the page margin Set the vertical single line (-) were marked, the technical differences and the reasons are as follows.

- Increasing the normative references, due to the text changes cited (see 5.2.2);
- Modify and add the relevant symbols (see Chapter 4, Chapter 4 of IEC 62499:2008);
- Increased the size of the inspection, with reference to TB/T 1842.3-2008 improve the pilot project (see 5.2.1);
- Increase the carbon performance test, with reference to TB/T 1842.3-2008 improve the pilot project (see 5.2.2);

- Increased carbon skateboard at the maximum operating temperature of the current-carrying capacity test to improve the stability of carbon skateboard requirements (see 5.2.3.3);
- Modify the original air tightness test and temperature test, the two combined test revised to check the air pressure through the inspection of a Test, because the original leak of gas leak detection inconvenience, learn from GB/T 21561.1-2008 application experience and pantograph gas-tight Sexual testing methods to change the test protocol (see 5.2.7.2.1, 5.2.5.2.1, 5.2.5.2.2 of IEC 62499-2008);
- Increase the wear test, with reference to TB/T 1842.3-2008 improve the pilot project (see 5.2.10);
- Remove the acceptance criteria of the test methods, the relevant content is the product standard range (see IEC 62499:2008 5.2.1.2, 5.2.2.2.2, 5.2.4.2.1, 5.2.4.2.3, 5.2.5.2.1, 5.2.5.2.2, 5.2.5.2.3, 5.2.5.2.4.2, 5.2.6.2, 5.2.7.2) .

This standard also made the following editorial changes.

- Modify 5.2.3, 5.2.3.2 title and 5.2.3.1 Overview;
- Modify some references in the literature.

This standard proposed by the National Railway Administration.

This standard by the National Traction Electrical Equipment and Systems Standardization Technical Committee (SAC/TC278) centralized.

1 Scope

This standard specifies the method of carbon skateboard test.

This standard applies to the performance and structure of carbon skateboard (excluding installation bolts) inspection.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

JB/T 8133.1 Charcoal products physical and chemical properties of test methods - Part 1. Specimen processing technology requirements JB/T 8133.2 Charcoal products physical and chemical properties of test methods - Part 2. Resistivity JB/T 8133.3 Charcoal products physical and chemical properties of test methods - Part 3 Rockwell hardness JB/T 8133.7 Charcoal products physical and chemical properties of test methods - Part 7. Bending strength JB/T 8133.8 Charcoal products physical and chemical properties test methods

Part 8. Compressive strength JB/T 8133.14 Charcoal products physical and chemical properties of test methods - Part 14. Bulk density

3 Terms and definitions

The following terms and definitions apply to this document.

Carbon skateboard carboncontactstrip the strip of carbon material permanently bonded to the support structure (bracket) formed by the whole, excluding the mounting bolts.

Shearstrength

The stress that causes failure of the bond between the carbon and the support structure.

Automatic bow down sensing device autodropdetectionsensor Mechanics that signal the pantograph automatic bow down (ADD) in a carbon skateboard.

Flow Continuity

Uninterrupted flow of air or other fluids.

Rated current load ratedcurrentloading Under specified operating conditions, carbon skateboards designed by the supplier can sustain the current without degrading the performance.