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

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**Road vehicles -- Heavy commercial vehicle combinations and
articulated buses -- Lateral stability test methods**

道路车辆 重型商用汽车列车和铰接客车 横向稳定性试验方法

(English Translation)

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Foreword

This standard is identical with ISO 14791:2000 "Road vehicles - Heavy commercial vehicles passenger trains and articulated lateral stability test side Law "(in English).

This standard is equivalent to translate ISO 14791:2000.

For ease of use, this standard made the following editorial changes.

- a) "this International Standard" be replaced by "this standard";
- b) with a decimal point instead of the international standard as a decimal comma " , " . " , " ;
- c) Remove the preface to the international standards;
- d) Remove the directory Chapter 5, Chapter 6, Chapter 7, Chapter 8 of the next level directory;
- e) a standard part of the normative references. ISO 3833. 1977, ECCouncilDirectiveNo.92/53/EEC.AnnexII, Definitionofvehiclecategoriesandvehicletypes. Modify the national standard GB/T 3730.1-2001, GB/T 15089-2001, references with international standards no difference;
- f) the format of this standard formula was adjusted.

The Standard Appendix A, Appendix B is normative appendix, Appendix C, Appendix D is an informative annex.

This standard was proposed by the National Development and Reform Commission, People's Republic of China.

This standard by the National Automotive Standardization Technical Committee (SAC/TC114) centralized.

This standard drafting units. China road vehicles Machinery Co., Ltd., the Ministry of Communications Highway Research Institute, Beijing University of Aeronautics and Astronautics, Kyrgyzstan Jiaotong University College of Forestry, Automobile Co., Ltd. Changshu, East China.

Introduction

Trains and heavy commercial vehicles articulated bus driving stability automotive active safety is a very important part. Any heavy commercial Closed-loop system train car, the driver and the main component of environmental factors are unique. Because drivers, vehicles, trailers and Road Conditions Complex interplay between various factors and their complexity, and therefore the evaluation of heavy commercial vehicle train driving stability is very difficult. Correct Train with heavy-duty vehicles feature a complete and accurate description must contain the number of different types of test information obtained.

Since this standard only on car handling in the field of small parts were quantified, and therefore the test results specified in this standard only counterweight Commercial Vehicle type articulated bus and train handling a small portion of sense.

Further, the test results apply only to one type of vehicle train units, and not to describe the characteristics of each vehicle driving unit.

Finally, due to the variation of the number of heavy goods trains a lot, either truck train is unique, so the test results only test vehicle or train effectively, it can not be transferred to a similar train car, especially heavy goods trains.

Road vehicles

Heavy commercial vehicles trains and articulated buses Lateral Stability Test Method

1 Scope

This standard specifies the lateral stability test train heavy commercial vehicles, trucks and center axle trailers consisting of trains and articulated buses method. This standard applies to the total mass of over 3.5t truck and trailer, and the total mass of over 5t articulated bus, which according to GB/T 15089 divided N2, N3, O3, O4 and M3 category vehicles.

Test method specified in the driving operation is not fully representative of real driving

conditions, but would help assess lateral stability of heavy vehicles of the train.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 3730.1-2001 car and trailer types of terms and definitions (ISO/WD3833.1999, MOD)
 GB/T 3730.2-1996 road vehicle mass Vocabulary and codes (idt ISO 1176:1990) GB/T
 15089-2001 Classification of motor vehicles and trailers ISO 8855:1991 road vehicle
 dynamics and driving stability vocabulary vehicle ISO 9815:1992 Passenger Train lateral
 stability test

3 Terms and Definitions

ISO 8855, the GB/T 3730.1 and established the following terms and definitions apply to this standard.

Vehicle unit A combination of a rigid (non-hinged) vehicle element running alone, or rigid (non-hinged) vehicle or a vehicle with a rigid element elements articulated.

For example tractor, trailer, semi-trailer coupled racks.

Rear amplification factor rearward amplification During driving operational requirements, the peak with the peak of the first vehicle motion variable ratio unit cell vehicle movement variables move.

Track offset offtracking Vehicle front axle centerline point trajectory of the vehicle other laterally offset part of the middle point between the tracks.

Note 1: See 8.3 Determination on track offset.

Note 2: In the process of converting a single lane driving operation, the offset track vehicle part of the structure is greater than a predetermined trajectory of the original front axle track and the original predetermined trajectory Offset amount, called "At this point, part of the structure of the trajectory of the vehicle 'overshoot' front axle track"; on the contrary, claimed that "at this point, part of the structure of the trajectory of the vehicle 'Undershoot' front axle track. " 3.4 Zero damping speed Semitrailer free yaw damping velocity is zero.