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

Véhicules routiers — Ensembles de véhicules utilitaires lourds et autobus articulés — Méthodes d'essai de stabilité latérale



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 14791 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 9, *Vehicle dynamics and road-holding ability*.

Annexes A and B form a normative part of this International Standard. Annexes C and D are for information only.

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Introduction

The road-holding ability of heavy commercial vehicle combinations and articulated buses is a most important part of active vehicle safety. Any given heavy commercial vehicle combination, together with its driver and the prevailing environment, constitutes a closed-loop system that is unique. The task of evaluating road-holding ability is, therefore, very difficult because of the significant interaction of these driver/motor vehicle/trailer/road elements, each of which is in itself complex. A complete and accurate description of the behaviour of a heavy vehicle combination must necessarily involve information obtained from a number of tests of different types.

Because they quantify only a small part of the whole vehicle handling field, the results of the tests specified in this International Standard can only be considered significant for a correspondingly small part of the overall handling behaviour of heavy commercial vehicle combinations and articulated buses.

In addition, the results obtained from these tests apply only for combinations of identical types of vehicle units. The results will not describe the behaviour of the vehicle units separately.

Moreover, insufficient knowledge is available concerning the relationship between overall vehicle dynamic properties and accident avoidance. Since the number of variants of heavy truck combinations is tremendously large, each truck combination is unique. So the measured result is valid only for the tested vehicle or combination and the transition of the results to obviously similar vehicle combinations is, especially for heavy trucks, not possible. Therefore, it is not possible to use these test methods and the test results for regulation purposes.