

Road vehicles — Vehicle dynamics test methods —

Part 1: General conditions for passenger cars

ICS 43.100

National foreword

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A list of organizations represented on AUE/15 can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Road vehicles — Vehicle dynamics test methods —

Part 1: General conditions for passenger cars

*Véhicules routiers — Méthodes d'essai de la dynamique des
véhicules —*

Partie 1: Conditions générales pour voitures particulières



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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 2.

The main task of technical committees is to prepare International Standards. 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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 15037-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 9, *Vehicle dynamics and road-holding ability*.

This second edition cancels and replaces the first edition (ISO 15037-1:1998), which has been technically revised. It also incorporates the Technical Corrigendum ISO 15037-1:1998/Cor. 1:2001.

ISO 15037 consists of the following parts, under the general title *Road vehicles — Vehicle dynamics test methods*:

- *Part 1: General conditions for passenger cars*
- *Part 2: General conditions for heavy vehicles and buses*

Introduction

The dynamic behaviour of a road vehicle is a most important part of active vehicle safety. Any given vehicle, together with its driver and the prevailing environment, constitutes a unique closed-loop system. The task of evaluating the dynamic behaviour of the vehicle is therefore very difficult since there is significant interaction between these driver-vehicle-environment elements, and each of these elements is individually complex in itself.

The test conditions exert large influence on the test results. Only test results obtained at identical test conditions are comparable.

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Road vehicles — Vehicle dynamics test methods —

Part 1: General conditions for passenger cars

1 Scope

This part of ISO 15037 specifies the general conditions that apply when vehicle dynamics properties are determined according to ISO test methods.

In particular, it specifies general conditions for

- variables,
- measuring equipment and data processing,
- environment (test track and wind velocity),
- test vehicle preparation (tuning and loading),
- initial driving, and
- test reports (general data and test conditions).

These items are of general significance, independent of the specific vehicle dynamics test method. They apply when vehicle dynamics properties are determined, unless other conditions are required by the standard which is actually used for the test method.

This part of ISO 15037 is applicable to passenger cars as defined in ISO 3833 and light trucks.

NOTE The general conditions defined in existing vehicle dynamics standards are valid until a reference to this part of ISO 15037 is included.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1176, *Road vehicles — Masses — Vocabulary and codes*

ISO 2416, *Passenger cars — Mass distribution*

ISO 3833, *Road vehicles — Types — Terms and definitions*

ISO 8855, *Road vehicles — Vehicle dynamics and road-holding ability — Vocabulary*