Second edition 2006-08-15

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



PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2006

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Cont	ents Pag	је
Forewo	ord	iv
Introduction		v
1	Scope	1
2	Normative references	1
3 3.1 3.2	VariablesReference systemVariables to be determined	2
4 4.1 4.2 4.3	Measuring equipment Description Transducer installations Data processing	2 3
5 5.1 5.2 5.3 5.4	Test conditions General Test track Wind velocity Test vehicle	6 6 6
6 6.1 6.2	Test methodWarm-upInitial driving condition	7
Annex	A (normative) Test report — General data	10
Annex	B (normative) Test report — Test conditions	13
Annex	C (informative) Transducers and their installations	14
Annex	D (informative) Analogue filtering: Butterworth filter	18

Contents

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.