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Passenger cars — Power-off reaction of a vehicle in a turn — Open-loop test method

Voitures particulières — Réponse d'un véhicule à un lever de pied en virage — Méthode d'essai en boucle ouverte



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Foreword

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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.

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ISO 9816 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 9816:1993), which has been technically revised.

Introduction

The dynamic behaviour of a road vehicle is a most important part of the 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 is therefore very difficult, since there is a significant interaction between these driver-vehicle-road elements, each of which is complex in itself. A complete and accurate description of the behaviour of the road vehicle must inevitably involve information obtained from a number of tests of different types.

Since the power-off test procedure quantifies only one small part of the complete handling characteristics, the results of this test can only be considered significant for a correspondingly small part of the overall dynamic behaviour.

Moreover, insufficient knowledge is available concerning the relationship between accident avoidance and the dynamic characteristics evaluated in this test. A substantial amount of effort is necessary to acquire sufficient and reliable data on the correlation between accident avoidance and vehicle dynamic properties in general and the results of this test in particular.

Therefore, it is not possible to use these test methods and test results for regulation purposes *at present*. The best that can be expected is that the power-off test is used as one among other tests, whose results together describe an important part of vehicle dynamic behaviour.

Test conditions and tyres have a strong influence on test results. Therefore, only vehicle dynamic properties obtained under identical test and tyre conditions are comparable to one another.