

Road vehicles — Heavy commercial vehicles and buses — Steady-state circular tests

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee AUE/15, Safety related to vehicles, which has the responsibility to:

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- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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Summary of pages

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Foreword

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ISO 14792 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 9, *Vehicle dynamics and road-holding ability*.

Introduction

The road-holding ability of heavy vehicles is a most important part of the active vehicle safety. Any given heavy vehicle, together with its driver and the prevailing environment, forms a unique closed-loop system. The task of evaluating road-holding ability is therefore very difficult since there is a significant interaction between these driver—motor-vehicle—trailer—road elements, each of which is complex in itself. A complete and accurate description of the behaviour of the heavy vehicle must necessarily involve information obtained from a number of tests of different types. Since they quantify only a small part of the whole handling field, the results of these tests can only be considered significant for a correspondingly small part of the overall handling behaviour.

Moreover, insufficient knowledge is available concerning the relationship between overall vehicle dynamic properties and accident avoidance. Since the number of variants of heavy vehicles is tremendously large, each vehicle is unique. Accordingly, results obtained using these test procedures apply only to the individual test vehicle or combination and not to other vehicles or combinations, regardless of how similar they may appear to be. Therefore, it is not appropriate to use these procedures and test results for regulation purposes — especially not for heavy trucks.

There are several established test methods for determining the circular driving behaviour of vehicles at steady-state conditions. These are the

- constant radius test,
- constant steer angle test,
- constant speed, variable-steer angle test, and
- constant speed, variable radius test.

The procedure given in this International Standard is based on the *constant radius* and *constant speed, variable-steer angle* test methods.