

Third edition  
2023-11

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# Road vehicles — Test method for the quantification of on-centre handling —

## Part 1: Weave test

*Véhicules routiers — Méthode d'essai pour la quantification du  
centrage —*

*Partie 1: Essai en petite sinusoïde au volant*



Reference number  
ISO 13674-1:2023(E)

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CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
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Published in Switzerland

This is a preview of ISO 13674-1:2023. [Click here to purchase the full version from the ANSI store.](#)

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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 33, *Vehicle dynamics, chassis components and driving automation systems testing*.

This third edition cancels and replaces the second edition (ISO 13674:2010), which has been technically revised.

The main changes are as follows:

- references have been updated to ISO 15037-1:2019 and deleted reference to ISO/TS 20119:2002;
- corrected the key for the abscissa and ordinate dead band in [Figure 1](#);
- removed calculated lateral acceleration to calculate lateral acceleration metrics;
- corrected incomplete steering hysteresis calculation.

A list of all parts in the ISO 13674 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

The main purpose of this document is to provide repeatable and discriminatory test results.

The dynamic behaviour of a road vehicle is a very important aspect of active vehicle safety. Any given vehicle, together with its driver and the prevailing environment, constitutes a closed-loop system that is unique. The task of evaluating the dynamic behaviour is therefore, very difficult since the significant interaction of these driver-vehicle-environment elements are each complex in themselves. A complete and accurate description of the behaviour of the road vehicle necessarily involves information obtained from a number of different tests.

Since this test method quantifies only one small part of the complete vehicle handling characteristics, the results of these tests can only be considered significant for a correspondingly small part of the overall dynamic behaviour.

Moreover, insufficient knowledge is available concerning the relationship between overall vehicle dynamic properties and accident avoidance. A substantial amount of work is necessary to acquire sufficient and reliable data on the correlation between accident avoidance and vehicle dynamic properties in general and the results of these tests in particular. Consequently, for any application of this test method for regulation purposes, proven correlation between test results and accident statistics is important.