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## Mechanical vibration — Road surface profiles — Reporting of measured data

*Vibrations mécaniques — Profils de routes — Méthode de  
présentation des résultats de mesures*



Reference number  
ISO 8608:2016(E)



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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.

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 documents 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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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

The committee responsible for this document is ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, Subcommittee SC 2, *Measurement and evaluation of mechanical vibration and shock as applied to machines, vehicles and structures*.

This second edition cancels and replaces the first edition (ISO 8608:1995), of which it constitutes a minor revision. The following changes have been made:

- normative references have been updated;
- subclause numbering has been adjusted;
- figures have been made language independent;
- bibliography has been updated;
- editorially revised.

## Introduction

The purpose of this document is to facilitate the compilation and comparison of measured vertical road profile data from various sources. It therefore specifies a uniform method of reporting data from one-track and multiple-track measurements.

It specifies how measurements are to be reported, but not how the measurements are to be made. The measuring equipment can influence the results of the measurement; therefore certain characteristics of the measuring system have also to be reported.

[Annex A](#) is an example of a report which meets the minimum requirements of this document.

[Annex B](#) gives means of approximately characterizing specific road profiles in order to facilitate the division of road profiles into general classifications. A general classification is also given. A curve fitting method is presented for characterizing spectral data.

[Annex C](#) provides general guidance for the use of road profile statistical data for simulation studies and for related studies such as evaluation of comfort, suspensions and road profiles.

[Annex D](#) discusses the processing of the power spectral density (PSD) with the fast Fourier transform (FFT) technique. A discussion on the statistical precision is also given.