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Human response to vibration — Measuring instrumentation —

Part 2: Personal vibration exposure meters

Réponse des individus aux vibrations — Appareillage de mesure —

Partie 2: Instruments de mesure de l'exposition des personnes aux vibrations

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Contents

Page

Foreword

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This document was prepared by Technical Committee ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 231, *Mechanical vibration and shock,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 8041 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.

Introduction

ISO 8041-1 specifies instruments for measuring human exposure to vibration. These instruments are used for temporary, short time measurements or controlled measurements.

This document specifies personal vibration exposure meters (abbreviated to PVEM) for measuring human exposure to vibration over long time periods, e.g. a whole working shift.

It is not necessary for PVEM to fulfil all of the specifications given in ISO 8041-1. On the other hand, it is necessary for them to fulfil other requirements which allow non-controlled measurements or stand-alone measurements over longer time periods. In combination with alarm functions, PVEM can make it possible to alert the user before vibration exposure reaches certain values (action value, limit value). For this reason, it is necessary to distinguish PVEM from the instrumentation specified in ISO 8041-1.

Whilst some potential applications and artefacts are covered in the informative annexes, this standard is an instrument standard and does not cover all potential applications of the PVEM. The reader should refer to measurement standards and guidance for further information.

Annex A describes the treatment of transient acceleration artefacts, Annexes B and C describe possible extension features with additional information for the measurement procedure.