

INTERNATIONAL STANDARD

**ISO
5008**

Second edition
2002-07-01

Agricultural wheeled tractors and field machinery — Measurement of whole-body vibration of the operator

*Tracteurs et matériels agricoles à roues — Mesurage des vibrations
globales du corps du conducteur*



Reference number
ISO 5008:2002(E)

© ISO 2002

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

This document is a preview generated by EVS

© ISO 2002

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

Page

Foreword.....	iv
Introduction.....	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Symbols	2
5 Vibration measurements.....	2
6 Instrumentation.....	3
7 Safety recommendations	4
8 Operator	5
9 Operator seat	5
10 Condition of tractor	5
11 Measurement sites and operating conditions	6
12 Test report	6
Annex A (informative) Field measurements	14
Annex B (informative) Specimen report of measurement of whole body vibration of the operator of an agricultural tractor or field machine	16

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5008 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 2, *Common tests*.

This second edition cancels and replaces the first edition (ISO 5008:1979), which has been technically revised.

Annexes A and B of this International Standard are for information only.

Introduction

The purpose of this International Standard is to define the specification of instruments, measurement procedures, measurement site characteristics and frequency weighting that will allow the whole body vibration of agricultural wheeled tractors and field machinery to be made and reported with acceptable precision.

The vibration is evaluated in accordance with currently accepted standards including means of weighting the vibration levels at different frequencies to take account of the frequency sensitivity of the human operator to whole body vibration.

This document is a preview generated by EVS

This document is a preview generated by EVS

Agricultural wheeled tractors and field machinery — Measurement of whole-body vibration of the operator

1 Scope

- 1.1 This International Standard specifies methods for measuring and reporting the whole body vibration to which the operator of an agricultural wheeled tractor or other field machine is exposed when operating on a standard test track.
- 1.2 The operating conditions of the machine and the ordinates of the artificial test tracks are also included.
- 1.3. This International Standard applies when measurements are made on the artificial test tracks defined herein.
- 1.4. Measurements made under field conditions are covered in annex A.
- 1.5. This International Standard does not include assessment of vibration reaching the operator other than through his/her seat or foot platform (e.g., vibration that is sensed by the feet through the controls or by the hands through the steering wheel is not considered).

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 2041:1990, *Vibration and shock — Vocabulary*

ISO 2631-1:1997, *Mechanical vibration and shock — Evaluation of human exposure to whole-body vibration — Part 1: General requirements*

ISO 5007:¹⁾, *Agricultural wheeled tractors — Operator's seat — Laboratory measurement of transmitted vibration*

ISO 5348:1998, *Mechanical vibration and shock — Mechanical mounting of accelerometers*

ISO 8041:1990, *Human response to vibration — Measuring instrumentation*

ISO 10326-1:1992, *Mechanical vibration — Laboratory method for evaluating vehicle seat vibration — Part 1: Basic requirements*

ISO 13090-1:1998, *Mechanical vibration and shock — Guidance on safety aspects of tests and experiments with people — Part 1: Exposure to whole-body mechanical vibration and repeated shock*

1) To be published. (Revision of ISO 5007:1990)