

This is a preview of "ISO 6395:2008". [Click here to purchase the full version from the ANSI store.](#)

Second edition
2008-03-15

Earth-moving machinery — Determination of sound power level — Dynamic test conditions

*Engins de terrassement — Détermination du niveau de puissance
acoustique — Conditions d'essai dynamique*



Reference number
ISO 6395:2008(E)

© ISO 2008

This is a preview of "ISO 6395:2008". [Click here to purchase the full version from the ANSI store.](#)

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.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2008

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.org
Web www.iso.org

Published in Switzerland

This is a preview of "ISO 6395:2008". Click here to purchase the full version from the ANSI store.

Contents

Page

| | |
|--|-----------|
| Foreword..... | v |
| Introduction | vi |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions..... | 1 |
| 4 Instrumentation..... | 2 |
| 5 Test environment..... | 2 |
| 5.1 General..... | 2 |
| 5.2 Test site and environmental correction, K_{2A}..... | 2 |
| 5.3 Test site | 3 |
| 5.4 Background noise correction, K_{1A}..... | 4 |
| 5.5 Climatic conditions..... | 4 |
| 6 Measurement of time-averaged A-weighted sound pressure levels | 4 |
| 6.1 Size of measurement surface | 4 |
| 6.2 Microphone positions on the hemispherical measurement surface..... | 4 |
| 6.3 Positioning the machine | 5 |
| 7 Set-up and operation of machine..... | 6 |
| 7.1 General..... | 6 |
| 7.2 Engine speed..... | 7 |
| 7.3 Fan speed | 7 |
| 7.4 Travel mode operation of machine | 7 |
| 8 Determination of A-weighted sound power level | 8 |
| 8.1 Measurement procedure | 8 |
| 8.2 Calculation of A-weighted sound power level | 8 |
| 8.3 Determination of measurement result..... | 9 |
| 9 Information to be recorded | 9 |
| 10 Information to be reported..... | 10 |
| 10.1 Information | 10 |
| 10.2 Declaration of sound emission data and uncertainty..... | 10 |
| Annex A (normative) Basic length, l, and additional machine specifications | 11 |
| Annex B (normative) Excavators (hydraulic or cable-operated)..... | 23 |
| Annex C (normative) Dozers | 25 |
| Annex D (normative) Loaders | 26 |
| Annex E (normative) Backhoe loaders | 28 |
| Annex F (normative) Dumpers..... | 30 |
| Annex G (normative) Graders | 32 |
| Annex H (normative) Landfill compactors..... | 33 |
| Annex I (normative) Trenchers | 34 |
| Annex J (normative) Scrapers | 35 |
| Annex K (normative) Pipelayers | 37 |

This is a preview of "ISO 6395:2008". [Click here to purchase the full version from the ANSI store.](#)

| | |
|--|-----------|
| Annex L (normative) Ride-on operated rollers | 39 |
| Annex M (informative) Additional guidelines for measurement of A-weighted sound power level of earth-moving machinery — Dynamic test conditions | 41 |
| Annex N (normative) Declaration of sound emission data and uncertainty | 42 |
| Bibliography | 43 |

This is a preview of "ISO 6395:2008". [Click here to purchase the full version from the ANSI store.](#)

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 2.

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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6395 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety requirements and human factors* in collaboration with Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

This second edition cancels and replaces the first edition (ISO 6395:1988), which has been technically revised. It also incorporates the Amendment ISO 6395:1988/Amd. 1:1996.

This is a preview of "ISO 6395:2008". [Click here to purchase the full version from the ANSI store.](#)

Introduction

This International Standard is a specific test code for earth-moving machinery as defined in ISO 6165.

A simulated dynamic test condition, rather than an actual work cycle, is used. Simulated dynamic test conditions provide noise emission data which are repeatable and representative. Actual work cycle tests are complex and repeatability can be a problem.

Specific procedures are described in this International Standard to enable the sound power emission in dynamic test conditions to be determined in a manner which is repeatable. Attachments (bucket, dozer, etc.) for the manufacturer's production version are intended to be fitted since this is the configuration most likely to exist when the machine is in actual use.

This International Standard enables compliance with noise limits to be determined, if applicable. It can also be used for evaluation purposes in noise reduction investigations.

A complementary test code is given in ISO 6396. This other specific test code is intended to be used to determine the noise emitted by earth-moving machinery, measured at the operator's position in terms of the A-weighted sound pressure level with the machine under dynamic test conditions.

Corresponding measurements of noise emitted to the environment and noise at the operator's position under stationary test conditions are described in ISO 6393 and ISO 6394, respectively.