INTERNATIONAL STANDARD

ISO 10263-1

First edition 1994-12-15

Earth-moving machinery — Operator enclosure environment —

Part 1: General and definitions

Engins de terrassement — Ambiance dans l'enceinte de l'opérateur — Partie 1: Généralités et définitions



Reference number ISO 10263-1:1994(E)

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.

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.

International Standard ISO 10263-1 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety requirements and human factors*.

ISO 10263 consists of the following parts, under the general title Earthmoving machinery — Operator enclosure environment:

- Part 1: General and definitions
- Part 2: Air filter test
- Part 3: Operator enclosure pressurization test method
- Part 4: Operator enclosure ventilation, heating and/or air-conditioning test method
- Part 5: Windscreen defrosting system test method
- Part 6: Determination of effect of solar heating on operator enclosure

© ISO 1994

International Organization for Standardization

Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

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 the publisher.

Earth-moving machinery — Operator enclosure environment —

Part 1:

General and definitions

1 Scope

ISO 10263 specifies test methods and criteria for the evaluation of the operator enclosure environment in earth-moving machinery as defined in ISO 6165.

It applies as indicated in each of the parts of this International Standard.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this part of ISO 10263. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this part of ISO 10263 are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 6165:1987, Earth-moving machinery — Basic types — Vocabulary.

3 Definitions

For the purposes of ISO 10263, the following definitions apply.

3.1 effective temperature: Combination of relative humidity and temperature which determines the level of comfort perceived by the human body.

3.2 comfort chart: Diagram to indicate the effective temperature range in which an operator environment is perceived to be comfortable.

3.3 operator environment: Space surrounding the operator defined by temperature measurement points.

3.4 air-conditioning: Lowering the effective air temperature inside the enclosure.

3.5 full air-conditioning: Control of the effective temperature and air pressure inside the enclosure.

3.6 heating: Increase of air temperature inside the enclosure.

3.7 cooling: Decrease of air temperature inside the enclosure.

3.8 ventilation: Air change for comfort in the area around the operator in an operator enclosure system.

3.9 pressurization: Mechanically increased pressure level inside the enclosure for the purpose of reducing entry of air or dust at undesired locations.

3.10 air filtration: Removal of dust particles from the air forced or drawn into the operator enclosure by mechanical means.

3.11 defrosting: Removal and maintenance of an ice/frost-free window area for visibility.

3.12 solar heating: Heating factor from the sun to be considered in determining air circulation and cool-