

INTERNATIONAL STANDARD

ISO
10263-3

First edition
1994-12-15

Earth-moving machinery — Operator enclosure environment —

Part 3:

Operator enclosure pressurization test method

Engins de terrassement — Ambiance dans l'enceinte de l'opérateur —

Partie 3: Méthode d'essai du système de pressurisation de l'enceinte de l'opérateur



Reference number
ISO 10263-3:1994(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 10263-3 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 *Earth-moving 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*

Annex A of this part of ISO 10263 is for information only.

© ISO 1994

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.

International Organization for Standardization
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Earth-moving machinery — Operator enclosure environment —

Part 3:

Operator enclosure pressurization test method

1 Scope

This part of ISO 10263 specifies a test method which provides uniform measurement of the pressurization inside an operator enclosure of an earth-moving machine fitted with a device to pressurize the enclosure.

2 Definition

For the purposes of this part of ISO 10263, the following definition applies.

2.1 pressurization system: Means used to pressurize the operator enclosure, including any components which influence the performance of the system. [ISO 10263-1:1994, definition 3.17]

3 Test equipment

3.1 Manometer, the maximum error of which shall not exceed $\pm 10\%$, to measure pressurization.

3.2 Voltmeter, the maximum error of which shall not exceed $\pm 2\%$, to monitor voltage in the system during the test.

4 Test conditions

4.1 The pressurizer system shall be completely powered by the standard equipment on the test machine with the engine operating at rated speed. The voltage at blower motor terminals shall be no more than 20 % above the nominal rating of the system (for example 14,4 V for a 12 V system).

4.2 All machine accessories pertinent to the operation of the enclosure, enclosure components and blowers shall be standard production parts or the equivalent, adjusted within the machine manufacturer's specification limits.

The operator enclosure shall be equipped with all applicable equipment, i.e. blowers, filters, duct work, heat exchangers, etc., if the pressurizer is used to provide flow through these units.

NOTE 1 Clean air filters are recommended since the amount of particulate matter in the filters may affect the pressurization.

4.3 An operator may be present in the enclosure throughout the duration of the test.

5 Test procedure

5.1 Before recording data, operate the pressurization system for 15 min using maximum outside air, on the maximum blower speed setting. Ensure that no automatic pressurization controls are locked out, and that neither the air-conditioning nor the heating systems are in operation, to obtain uniform results.

5.2 Record for information purposes only:

- a) blower voltage;
- b) ambient temperature;
- c) barometric pressure;

- d) wind velocity and direction in relation to the machine centreline.

5.3 Record enclosure pressure, in pascals.

NOTE 2 It is recommended to avoid velocity head on the manometer by keeping its outlets away from air streams.

STANDARDSISO.COM : Click to view the full PDF of ISO 10263-3:1994

Annex A

(informative)

Bibliography

- [1] ISO 3737:1976, *Agricultural tractors and self-propelled machines — Test method for enclosure pressurization systems*.

STANDARDSISO.COM : Click to view the full PDF of ISO 10263-3:1994

This page intentionally left blank

STANDARDSISO.COM : Click to view the full PDF of ISO 10263-3:1994