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ISO 10263-3:2009

Australian STANDARD®

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Earth-moving machinery — Operator enclosure environment

Part 3: Pressurization test method



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Department of Regional NSW
Engineers Australia
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Preface

This Standard was prepared by the Standards Australia Committee ME-063, Earthmoving Equipment.

The objective of this document is to specify a test method which will provide for uniform measurement of the maximum pressurization inside an operator enclosure of an earth-moving machine when equipped with a pressurization system.

This document is identical with, and has been reproduced from, ISO 10263-3:2009, *Earth-moving machinery — Operator enclosure environment — Part 3: Pressurization test method.*

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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 10263-3 was prepared by Technical Committee ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety, ergonomics and general requirements*.

This second edition cancels and replaces the first edition (ISO 10263-3:1994), which has been technically revised.

ISO 10263 consists of the following parts, under the general title *Earth-moving machinery — Operator enclosure environment*:

— *Part 1: Terms and definitions*

— *Part 2: Air filter element test method*

— *Part 3: Pressurization test method*

— *Part 4: Heating, ventilating and air conditioning (HVAC) test method and performance*

— *Part 5: Windscreen defrosting system test method*

— *Part 6: Determination of effect of solar heating*

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Earth-moving machinery — Operator enclosure environment

Part 3: Pressurization test method

1 Scope

This part of ISO 10263 specifies a test method which will provide for uniform measurement of the maximum pressurization inside an operator enclosure of an earth-moving machine when equipped with a pressurization system.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10263-1, *Earth-moving machinery — Operator enclosure environment — Part 1: Terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10263-1 and the following apply.

3.1
pressurization
pressure differential between the static pressure inside and outside of the operator enclosure

3.2
pressurization system
means used to pressurize the operator enclosure, including any components which influence the performance of the system

4 Test equipment

4.1 **Device to measure pressure** with a measuring accuracy of 5 % of the observed values.

4.2 **Voltmeter** or **other voltage measuring device to measure blower voltage**, with a measuring accuracy of 2 %.

4.3 **Thermometers** or **other temperature measuring devices**, with a measuring accuracy of ± 0,5 °C.

4.4 **Device to measure barometric pressure**, with a measuring accuracy of 2 % of the observed values.

4.5 **Anemometer to measure wind speed**, with a measuring accuracy within 0,5 m/s.

5 Test conditions

5.1 The pressurization system shall be completely powered by the standard equipment on the test machine with the engine operating at rated speed when the engine or other components influence the environment within the operator enclosure. The voltage at blower motor terminals shall be no more than 15 % above the nominal rating of the system (for example 13,8 V for a 12 V system).

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