

INTERNATIONAL STANDARD

ISO
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Earth-moving machinery — Operator enclosure environment —

Part 2: Air filter test

*Engins de terrassement — Ambiance dans l'enceinte de l'opérateur —
Partie 2: Essai de l'élément du filtre à air*



Reference number
ISO 10263-2:1994(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 10263-2 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.

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Earth-moving machinery — Operator enclosure environment —

Part 2: Air filter test

1 Scope

This part of ISO 10263 specifies a uniform test method to determine performance levels of operator enclosure panel-type air filters used to filter the air entering an earth-moving machine operator enclosure with a powered fresh air system.

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 5011:1988, *Inlet air cleaning equipment for internal combustion engines and compressors — Performance testing*.

3 Definitions

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

3.1 operator enclosure air filter element: Medium in which particulate matter is removed from the in-

coming air supply. [ISO 10263-1:1994, definition 3.19]

3.2 filter efficiency: Measure of the ability of the air filter to remove particulate matter. [ISO 10263-1:1994, definition 3.20]

3.3 test dust: Particulate matter used to evaluate the filter element. [ISO 10263-1:1994, definition 3.21]

4 Test equipment and instruments

4.1 Test equipment in accordance with figure 1, used to determine the resistance to airflow, particle holding capacity, particulate removal efficiency and sealing characteristics. For the dust capacity and efficiency tests, the restrictor plates specified in figure 1 shall be used to promote adequate mixing of dust upstream of the filter being tested (see 5.7). For components other than panel filters, see ISO 5011.

4.2 Dust metering device in accordance with figure 2 which, when used with the dust injector specified in figure 3, is capable of ensuring the necessary flow. The average delivery rate shall be within 5 % of the desired rate, and the deviation in the instantaneous delivery rate from the average shall be no more than 5 %. This feed system shall not change the primary particle size distribution of the particulate.