INTERNATIONAL STANDARD

ISO 10263-1

Second edition
2009-02-01

Earth-moving machinery — Operator enclosure environment —

Part 1: Terms and definitions

Engins de terrassement — Environnement de l'enceinte de l'opérateur —

Partie 1: Termes et définitions

Reference number
ISO 10263-1:2009(E)

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

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 10263-1 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 10263-1:1994), 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*

Earth-moving machinery — Operator enclosure environment —

Part 1: Terms and definitions

1 Scope

ISO 10263 provides test methods and criteria for the evaluation of the operator enclosure environment in earth-moving machinery as defined in ISO 6165. This part of ISO 10263 gives the terms and definitions which are used in other parts of ISO 10263.

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 6165, *Earth-moving machinery — Basic types — Identification and terms and definitions*

ISO 5353:1995, *Earth-moving machinery, and tractors and machinery for agriculture and forestry — Seat index point*

3 Terms, definitions and abbreviations

For the purposes of this document, the following terms, definitions and abbreviations apply.

3.1
air conditioning system
system which lowers the effective temperature of the air within the operator enclosure

3.2
air filtration
removal of dust particles from the air forced or drawn into the operator enclosure by mechanical means

3.3
cooling
decrease of the temperature of the air inside the operator enclosure

3.4
daylight opening
DLO
maximum unobstructed opening through any glazed aperture, with trim mouldings and mounting seals adjoining the glazed surface

3.5
defrosting
removal and maintenance of an ice/frost-free window area for visibility

3.6
defrosted area
area of the windscreen consisting of dry cleared surface and melted or partially melted (wet) test coating, and excluding that area of the windscreen covered with dry test coating of ice

3.7
effective temperature
combination of relative humidity and temperature which can indicate the level of comfort perceived by the human body

3.8
filter efficiency
measure of the ability of the air filter element to remove particulate matter

3.9
full air conditioning
control of the effective temperature and pressure of the air inside the operator enclosure

3.10
heating
increase of the temperature of the air inside the operator enclosure

3.11
heating system
system which raises the effective temperature of the air within the operator enclosure

3.12
heat transfer medium
HTM
means through which defroster system heating is achieved

3.13
operator enclosure temperature chart
diagram of the range of effective temperatures in which the operator environment within the operator enclosure is perceived as desirable

3.14
operator enclosure
part of the machine which completely surrounds the operator, preventing the free passage of external air, dust or other substances into the area around the operator

3.15
operator enclosure air filter element
medium in which particulate matter is removed from the incoming air supply

3.16
operator environment
space surrounding the operator defined by temperature and wind speed measurement points

3.17
pressurization
pressure differential between the static pressure inside and outside of the operator enclosure

3.18
pressurization system
means used to pressurize the operator enclosure, including any components which influence the performance of the system

3.19
seat index point
SIP
point in the central, vertical and longitudinal plane of the SIP measuring device

NOTE Adapted from ISO 5353:1995, definition 3.1.

3.20
solar heating
heating factor from the sun to be considered in determining air circulation and cooling requirements necessary to maintain comfortable temperature inside the operator enclosure

3.21
solar radiant energy
process by which solar heating is generated

3.22
test dust
particulate matter used to evaluate the filter element

3.23
ventilating
air change for comfort in the area around the operator in an operator enclosure

3.24
ventilating system
system which provides fresh air to, and maintains air circulation within, the operator enclosure

3.25
windscreen defrosting system
means intended to defrost the windscreen

4 Abbreviations

DLO daylight opening

HTM heat transfer medium

HVAC heating, ventilating and air conditioning system (also referred to as climate control system)

SIP seat index point

Bibliography

[1] SAE J1163, *Determining seat index point*

ICS 01.040.53; 53.100

Price based on 4 pages