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**Earth-mover tyres and rims —**  
**Part 2:**  
**Loads and inflation pressures**

*Pneumatiques et jantes pour engins de terrassement —*  
*Partie 2: Charges et pressions de gonflage*



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ISO copyright office  
CP 401 • Ch. de Blandonnet 8  
CH-1214 Vernier, Geneva  
Phone: +41 22 749 01 11  
Email: [copyright@iso.org](mailto:copyright@iso.org)  
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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 6, *Off-the-road tyres and rims*.

This seventh edition cancels and replaces the sixth edition (ISO 4250-2:2017), which has been technically revised.

The main changes are as follows:

- Deletion and addition of certain tyre size designations to harmonize with ISO 4250-1 and ISO 4250-3.

A list of all parts in the ISO 4250 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Earth-mover tyres and rims —

## Part 2: Loads and inflation pressures

### 1 Scope

This document gives working definitions of masses and load cycles and specifies tyre loads and reference inflation pressures for tyres primarily intended for earth-mover machines.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 4223-1, *Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4223-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

NOTE For a list of equivalent terms for tyres, valves and tubes, see ISO 3877-1.

#### 3.1 Masses

##### 3.1.1

##### **maximum load**

load of individual tyres determined by the manufacturer's rated gross machine mass (GMM) distribution assigned to each axle, divided by the number of tyres for that axle

Note 1 to entry: The maximum GMM includes operating, optional equipment, special modifications and field modification masses and payload defined in 3.1.1.1 to 3.1.1.5 inclusive.

Note 2 to entry: If tyre ballast is used, this is also included in the determination of GMM.

##### 3.1.1.1

##### **operating mass**

actual mass of the base machine with equipment specified by the manufacturer, operator (75 kg), full fuel tank and full lubricating, hydraulic and cooling systems

Note 1 to entry: Net weight is an alternate term for operating mass.