
Agricultural tyres for construction machines

*Pneumatiques pour machines agricoles destinés à des engins de
construction*



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Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Tyre designation and marking	2
4.1 General	2
4.2 Tyre size and construction code	2
4.2.1 General	2
4.2.2 Nominal section width	2
4.2.3 Nominal aspect ratio	2
4.2.4 Tyre construction code	2
4.2.5 Nominal rim diameter code	2
4.2.6 Tyre size suffix IND	3
4.2.7 Tyre classification code	3
4.3 Index of strength	3
4.4 Service description	3
4.4.1 General	3
4.4.2 Supplementary service description	3
4.4.3 Load index	3
4.4.4 Speed symbol	4
4.5 Other service characteristics	4
4.5.1 Tubeless	4
4.5.2 Preferred direction of rotation	4
4.6 Examples for designation and marking of agricultural tyres for construction machines	4
4.7 Tyre dimensions and approved rim contours	4
4.8 Tyre load carrying capacities (TLCC)	5
4.9 Tyre applications at service speeds others than the reference speed	5
5 Maximum pressure for tyre bead seating	6
6 Tyre parameters for vehicle speed reference	6
Annex A (normative) Tyre dimensions and approved rim contours	7
Annex B (normative) Tyre load carrying capacities (TLCC) and reference inflation pressures	12
Annex C (informative) Speed radius index (SRI)	19
Bibliography	21

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).

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).

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.

This document was prepared by Technical Committee ISO/TC 31, *Tyres, rims and valves*, Subcommittee SC 5, *Agricultural tyres and rims*.

This first edition of ISO 18808 cancels and replaces ISO 13442:2004, which has been technically revised.

The main changes to ISO 13442:2004 are as follows:

- dimensions for sizes with metric designation and suffix IND added;
- list of approved rims for sizes with metric designation and suffix IND added;
- load capacities for metric sizes with speed symbol A8 added;
- load capacities for metric sizes with speed symbol D added;
- load variations as a function of speed and type of service added;
- service description for code designated sizes added;
- pictogram for maximum bead seating pressure added;
- SRI values added;
- Bibliography added;
- duplications with other ISO documents deleted;
- “miscellaneous” sizes already included in the ISO 4251 series or ISO 5383¹⁾ deleted;
- non-agricultural sizes derived from earth-mover tyres deleted.

1) Under preparation. Stage at the time of publication: ISO/DIS 5383:2021.

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.

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Agricultural tyres for construction machines

1 Scope

This document specifies the designation, dimensions, approved rim contours, load ratings and reference speeds for agricultural tyres fitted to construction machines (e.g. backhoe loaders, small dumpers, loaders, excavators) operating on building sites under loading and transport conditions.

Tyres conforming to this document are identified by the suffix IND in the tyre size designation; code designated tyres can alternatively, in place of the suffix IND, be identified by the classification code R-4.

NOTE Agricultural tyres without the suffix IND in the tyre size designation or with a classification code differing from “R-4” are not part of this document. Code designated diagonal tyres (ply rating marked series) for agricultural tractors, trailers and machines are part of ISO 4251-1 and ISO 4251-2. Code designated radial tyres for agricultural tractors, trailers and machines are part of ISO 8664. Metric designated tyres for agricultural tractors, trailers and machines are part of ISO 7867-2. Tyres for forestry machines, identified by suffix LS, or classification code LS-x are part of ISO 18807.

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 4223-1:2017, *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 terminological databases for use in standardization at the following addresses:

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

3.1

cyclic haulage service

cycle where a machine self-loads or receives a load from loading equipment, transports it elsewhere and returns unloaded

Note 1 to entry: Transportation speeds remain low (on unimproved surfaces) or medium, and distances are short to medium, usually less than 1 km one way, and out of public roads.

3.2

loading cycle

cycle where a machine picks up material, moves it to deposit it into a haulage vehicle or other equipment (e.g. bin, conveyor) then returns empty

Note 1 to entry: Transportation speeds are low (up to 10 km/h) and distances are short, usually less than 76 m one way.