

Tyres and rims (metric series) for agricultural tractors and machines —

Part 1: Tyre designation, dimensions and marking, and tyre/rim coordination

ICS 83.160.30

National foreword

This British Standard reproduces verbatim ISO 7867-1:2005 and implements it as the UK national standard. It supersedes BS AU 50-1.4.5a:1996 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee AUE/4, Tyres and wheels for motor vehicles, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

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Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to iv, pages 1 to 18, an inside back cover and a back cover.

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INTERNATIONAL STANDARD

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Tyres and rims (metric series) for agricultural tractors and machines —

Part 1:

Tyre designation, dimensions and marking, and tyre/rim coordination

*Pneumatiques et jantes (série millimétrique) pour tracteurs et machines
agricoles —*

*Partie 1: Désignation, cotes et marquage des pneumatiques,
coordination pneumatiques/jantes*



Reference number
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Documents

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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 7867-1 was prepared by Technical Committee ISO/TC 31, *Tyre, rims and valves*, Subcommittee SC 5, *Agricultural tyres and rims*.

This fourth edition cancels and replaces the third edition (ISO 7867-1:1996), which has been technically revised.

ISO 7867 consists of the following parts, under the general title *Tyres and rims (metric series) for agricultural tractors and machines*:

- *Part 1: Tyre designation, dimensions and marking, and tyre/rim coordination*
- *Part 2: Service description and load ratings*

Tyres and rims (metric series) for agricultural tractors and machines —

Part 1: Tyre designation, dimensions and marking, and tyre/rim coordination

1 Scope

This part of ISO 7867 establishes the size designation, the dimensional calculation and the markings of the metric series of tyres primarily intended for use on agricultural tractors and machines. Tyre and rim coordination is also given.

It applies to bias-belted, diagonal and radial tyres mounted on 5° tapered rims, as specified in ISO 4251-3. Only established rim diameters and widths within the ranges in Tables 1 and 2 are recommended.

This part of ISO 7867 also applies to different concepts and types of tyres and rims; in this case, however, appropriate rim/section ratios K_1 and coefficients K_2 , a and b will be established and added.

Dimensions of existing rims are specified in ISO 4251-3.

NOTE Tyres (ply rating marked series) and rims for agricultural tractors and machines are specified in ISO 4251-1 to ISO 4251-5. Service description (load index — speed symbol) marking of the existing series of agricultural tractor-drive-wheel tyres is given in ISO 8664.

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 4223-1:2002, *Definitions of some terms used in the tyre industry — Part 1: Pneumatic tyres*

ISO 4251-3:1994, *Tyres (ply rating marked series) and rims for agricultural tractors and machines — Part 3: Rims*

ISO 7867-2, *Tyres and rims (metric series) for agricultural tractors and machines — Part 2: Service description and load ratings*

3 Terms and definitions

For the purposes of this part of ISO 7867, the terms and definitions given in ISO 4223-1 and the following apply.

3.1 agricultural tyre for special cultivation work
tyre for use on wheels (usually tractor drive wheels) on agricultural machines engaged in surface work or linear cultivation and the transport on roads and tracks of the tools required for such work

4 Tyre designation

4.1 General

The designation of the tyre shall be shown on its sidewall and shall include the following markings close to each other:

- size and construction characteristics (see 4.2);
- service description (see 4.3).

4.2 Size and construction characteristics

4.2.1 General

The size and construction characteristics shall be indicated as follows:

Nominal section width	/	Nominal aspect ratio	Tyre construction code	Nominal rim diameter code
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4.2.2 Nominal section width

The nominal section width shall be expressed in millimetres and shall end in 0.

4.2.3 Nominal aspect ratio

The nominal aspect ratio shall be expressed as a percentage and shall be a multiple of 5.

4.2.4 Tyre construction code

The tyre construction code shall be as follows:

- “B” for bias-belted construction;
- “D” for diagonal/bias construction;
- “R” for radial construction.

NOTE Other codes will be established for new concepts (constructions) of tyres.

4.2.5 Nominal rim diameter code

For tyres mounted on 5° tapered rims, the rim diameter shall be expressed by a code comprising 1 or 2 digits. The code shall be as given in Table 1.

For tyres requiring new-concept rims, for safety reasons – especially concerning mounting – the code number shall be equal to the nominal rim diameter expressed in an integral number of millimetres, i.e. comprising 3 or 4 digits.