

Tyres and wheels —

Part 1: Tyres —

Section 4. Agricultural tractor and machine tyres —

Subsection 4.5a Specification for designations, dimensions, marking and tyre/rim coordination for metric series tyres

ICS 43.040.50;83.160.30

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee AUE/4, Tyres and wheels for motor vehicles, upon which the following bodies were represented:

- Agricultural Engineers' Association
- Automobile Association
- British Industrial Truck Association
- British Pressure Gauge Manufacturers' Association
- British Rubber Manufacturers' Association
- Confederation of Passenger Transport UK
- Department of Transport
- Freight Transport Association
- Institute of Road Transport Engineers (Inc)
- Motor Cycle Industry's Association of Great Britain Ltd.
- British Industry Research Association
- National Tyre Distributors' Association
- Retread Manufacturers' Association
- Road Haulage Association Ltd.
- Society of Motor Manufacturers and Traders Ltd.

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National foreword

This Subsection of BS AU 50 has been prepared by Technical Committee AUE/4 and supersedes BS AU 50-1-4.5:1992, which is withdrawn. It is identical with ISO 7867-1:1996 *Tyres and rims (metric series) for agricultural tractors and machines — Part 1: Tyre designation, dimensions, marking and tyre/rim coordination*, published by the International Organization for Standardization (ISO).

BS AU 50 is published in four Parts:

- *Part 1: Tyres;*
- *Part 2: Wheels and rims;*
- *Part 3: Valves;*
- *Part 4: Rim profiles and dimensions.*

ISO 7867 specifies requirements for metric series tyres and rims for agricultural tractors and machines and ISO 8664 specifies requirements for agricultural tractor drive-wheel tyres.

Cross-references

Publication referred to	Corresponding British Standard
	BS AU 50 <i>Tyres and wheels</i> Part 1 <i>Tyres</i> Section 4 <i>Agricultural tractor and machine tyres</i>
ISO 7867-2:1996	Subsection 4.6:1996 <i>Specification for service description and load ratings for metric series tyres</i> (Identical) Part 4 <i>Rim profiles and dimensions</i> Section 4 <i>Agricultural tractor and machine rims</i>
ISO 4251-3:1994	Subsection 4.1a:1995 <i>Specification for ply-rating marked series rims</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 4223-1, to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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 Table 1 and Table 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 1 Code (ply rating) marked series of tyres and rims for agricultural tractors and machines are specified in ISO 4251-1, ISO 4251-2 and 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 standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 7867. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 7867 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4223-1:1989, *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 7867-2:1996, *Tyres and rims (metric series) for agricultural tractors and machines — Part 2: Service description and load ratings.*

3 Definitions

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

3.1

agricultural tyre for special cultivation work

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

4 Tyre designation

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

- size and construction (see 4.1);
- service description (see 4.2).

4.1 Size and construction

The characteristics shall be indicated as follows:

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

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

4.1.2 Nominal aspect ratio

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

4.1.3 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 2 Other codes will be established for new concepts (constructions) of tyres.

4.1.4 Nominal rim diameter code

For tyres mounted on 5° tapered rims, the rim diameter shall be expressed by a code formed with 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. formed by 3 or 4 digits.

4.1.5 Rim width code

For tyres mounted on 5° tapered rims, the rim width shall be expressed by a code, as given in Table 2.

For tyres requiring new concept rims, other code numbers will be established.

4.2 Service description

The service description shall be indicated as follows:

Load index	Speed symbol
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The characteristics are specified and explained in ISO 7867-2.