

Tyres and wheels —

Part 1: Tyres —

Section 3: Off-the-road tyres —

Subsection 3.1a Specification for narrow and wide base tyre designations and dimensions

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Automobile Standards Policy Committee (AUE/-) to Technical Committee AUE/4, 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
- Bus and Coach Council
- Department of Transport
- Freight Transport Association
- Institute of Road Transport Engineers (Inc)
- Motor Cycle Industry's Association of Great Britain Ltd.
- Motor Industry Research Association
- National Tyre Distributors' Association
- Retread Manufacturers' Association
- Road Haulage Association Ltd.
- Royal Automobile Club
- Society of Motor Manufacturers and Traders Ltd.

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Contents

	Page
Committees responsible	Inside front cover
National foreword	ii
0 Introduction	1
1 Scope	1
2 Field of application	1
3 References	1
4 Definitions	1
5 Tyre designation	1
6 Tyre dimensions	2
7 Dual spacing	2
8 Recommended rims	2
9 Method of measurement of tyre dimensions	2
Table 1 — Type of service	1
Table 2 — Tread design	1
Table 3 — Tyre dimensions for narrow base tyres	3
Table 3a) — Tyre dimensions for narrow base tyres on SDC rims	4
Table 4 — Tyre dimensions for wide base tyres	5
Table 5 — Dimensions for narrow base tyres mounted on 15° rim contours	6
Table 5a) — Tyre dimensions for 65 series tyres	7
Table 6 — Recommended rims for diagonal and radial narrow base tyres for earth-moving service, mobile cranes, shovels, mining cars, loaders and dozers	8
Table 6a) — Recommended rims for diagonal and radial tyres for road graders	8
Table 7 — Recommended rims for diagonal and radial wide base tyres for earth-moving, mining and logging service, mobile cranes, shovels, mining cars, loaders and dozers	8
Table 8 — Recommended rims for diagonal and radial narrow base tyres mounted on 15° contours	9
Table 9 — Recommended rims for diagonal and radial 65 series tyres	9
Publication(s) referred to	Inside back cover

National foreword

This Subsection of this Part of BS AU 50, prepared under the direction of the Automobile Standards Policy Committee, is identical with ISO 4250-1:1988 “*Narrow and wide base off-road tyres and rims — Part 1: Tyre designation and dimensions*” as amended by ISO 4250-1:1988/Amd 1:1990 and published by the International Organization for Standardization (ISO). Subsection 3.2 of the Part deals with tyre loads and inflation pressures. Other Parts of the standard are:

- *Part 2: Wheels and rims;*
- *Part 3: Valves.*

This edition supersedes BS AU 50-1.3.1:1989, which is withdrawn.

Cross-references

The Technical Committee has reviewed the provisions of ISO 4223-1 and ISO 4250-3, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

NOTE The full provisions of ISO 4250-3:1987 will be included in a future revision of BS AU 50-2.1:1980.

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 10, 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.

0 Introduction

ISO 4250 provides technical details on the designation and dimensions of off-road tyres and rims, as well as load ratings for these types of tyres.

This International Standard consists of three parts:

- *Part 1: Tyre designations and dimensions;*
- *Part 2: Loads and inflation pressures;*
- *Part 3: Rims.*

1 Scope

This part of ISO 4250 sets out designations and dimensions for narrow and wide base off-road tyres and recommended rims.

2 Field of application

This part of ISO 4250 applies to tyres primarily intended for off-road machines.

3 References

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

ISO 4250-3, *Narrow and wide base off-road tyres and rims — Part 3: Rims.*

4 Definitions

For definitions of terms relating to tyres, see ISO 4223-1.

5 Tyre designation

The designation of tyres shall include the details in 5.1 and 5.2; it may include those in 5.3.

5.1 Tyre size and construction code

Tyres shall be designated by a two-part size marking (nominal section width — nominal rim diameter code) except as noted in the tables. Diagonal ply construction shall not be specially marked. Radial ply construction shall be identified by the letter “R” instead of the dash, before the rim diameter in the size designation. In addition, the word “radial” may also appear on the tyre.

5.2 Index of tyre strength

The term is used to identify a given tyre with its maximum recommended load when used in a specific type of service.

5.3 Other markings

Other markings may be added, for example as in 5.3.1 to 5.3.4.

5.3.1 Preferred direction of rotation

The marking to indicate the preferred direction of rotation shall be an arrow.

5.3.2 Tubeless tyres

Tyres shall be marked “TUBELESS”, if applicable.

5.3.3 Code system for tyre usage

Tyres may be identified by their type of service and tread design as indicated in Table 1 and Table 2 respectively.

Table 1 — Type of service

Service code	Type of service
C	Compactor
E	Earth-moving (dumper and tractor-scraper)
G	Grader
L	Loader
NOTE The use of these identification codes is at the discretion of the individual tyre manufacturer.	

Table 2 — Tread design

Code	Tread type
C-1	Smooth
C-2	Grooved
E-1	Rib
E-2	Traction
E-3	Rock
E-4	Rock (deep tread)
E-7	Flotation
G-1	Rib
G-2	Traction
G-3	Rock
L-2	Traction
L-3	Rock
L-4	Rock (deep tread)
L-5	Rock (extra deep tread)
NOTE 1 The use of these identification codes is at the discretion of the individual tyre manufacturer.	
NOTE 2 Where smooth treads are used in the “L” series, this should be denoted by the suffix “S” (for example, L-5S).	
NOTE 3 Code types 1, 2 and 3 are designated as normal tread depth.	