# INTERNATIONAL STANDARD 

# Wheels and rims for pneumatic tyres - Vocabulary, designation and marking 

Roues et jantes pour pneumatiques — Vocabulaire, désignation et marquage

COPYRIGHT PROTECTED DOCUMENT
(C) ISO 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 •Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 227490111
Email: copyright@iso.org
Website: www.iso.org
Published in Switzerland

## Contents

Foreword ..... iv
1 Scope ..... 1
2 Normative references. ..... 1
3 Terms and definitions ..... 1
4 Wheel/rim size designation ..... 15
4.1 Designation ..... 15
4.2 Rim size/Contour types ..... 16
5 Marking specifications ..... 17
5.1 Marking of disc wheels and demountable rims ..... 17
5.2 Marking of rings ..... 17
5.3 Divided wheels ..... 17
5.4 Height/legibility ..... 17
5.5 Location/visibility ..... 17
5.6 Additional markings ..... 17
5.7 Offset, inset and outset marking ..... 17
Bibliography ..... 19

## 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 22, Road vehicles, Subcommittee SC 33, Vehicle dynamics and chassis components.

This fourth edition cancels and replaces the third edition (ISO 3911:2004), which has been technically revised.

The main changes compared to the previous edition are as follows:

- 3.8.1, optional bead seat profiles has been added;
- contre-pente (CP) hump in Figure 10 has been omitted;
- definition for five-piece rims have been amended to include 6-, 7-, 8- and 9-piece rims;
- 4,0 and 5,0 wheel designation and marking have been added, and annexes have been deleted;
- manually adjustable wheel graphic in Figure 8 has been made common with power adjustable graphic.

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.

## Wheels and rims for pneumatic tyres - Vocabulary, designation and marking

## 1 Scope

This document presents a vocabulary of terms related to, and systems for the designation and marking of, wheels and rims intended for use with pneumatic tyres. The intention is to define fundamental wheel and rim terms rather than provide a comprehensive tabulation of all wheel design features. Also specified are the content, location and minimum size of the wheel and rim marking, with the purpose of establishing, on a worldwide basis, a uniform identification system for wheels and rims.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions 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

## wheel

rotating load-carrying member between the tyre and the axle, usually consisting of two major parts, the rim and the wheel disc, which may be integral, permanently attached or detachable
Note 1 to entry: See Figures 1 to 8 .

## 3.2 wheel components

3.2.1
rim
part of the wheel (3.1) on which the tyre is mounted and supported

### 3.2.2

disc
wheel disc
part of the wheel (3.1) which is the supporting member between the axle and the rim

### 3.2.3

## single wheel

wheel (3.1) which supports one tyre on one end of an axle

### 3.2.4

## inset wheel

wheel (3.1) so constructed that the rim centreplane is located inboard of the attachment face of the disc
Note 1 to entry: See Figure 1 a).
Note 2 to entry: Inset is the distance from the attachment face of the disc to the rim centreplane.

