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Cycles — Safety requirements for bicycles —

Part 1: **Vocabulary**

Cycles — Exigences de sécurité pour les bicyclettes —

Partie 1: Vocabulaire

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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.

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 149, *Cycles*, Subcommittee SC 1, *Cycles and major sub-assemblies*.

This second edition cancels and replaces the first edition (ISO 4210-1:2014), which has been technically revised, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 333, *Cycles*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

The main changes are as follows:

— the configuration of Clause 3 was systematically changed;

— some corrections according to ISO/IEC Directives Part 2 were done;

— the definitions of "racing bicycle" and "crank assembly" were modified;

— the following terms and definitions: “handlebar grips portion”, “rigid, non-welded fork”, “sag”, “wheel and tyre assembly”, “crank assembly”, “dropper seat-post”, “seat mast cap” and “suspension dropper seat-post” were added.

A list of all parts in the ISO 4210 series can be found on the ISO website.

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.

Introduction

This document has been developed in response to demand throughout the world, and the aim has been to ensure that bicycles manufactured in conformity with this document will be as safe as is practically possible. The tests have been designed to ensure the strength and durability of individual parts as well as of the bicycle as a whole, demanding high quality throughout and consideration of safety aspects from the design stage onwards.

The scope has been limited to safety considerations and has specifically avoided standardization of components.

If the bicycle should be used on public roads, national regulations apply.

Cycles — Safety requirements for bicycles —

Part 1: Vocabulary

1 Scope

This document specifies terms and definitions related to safety and performance requirements for the design, assembly, and testing of bicycles and sub-assemblies having maximum saddle height 635 mm or more.

This document does not apply to specialized types of bicycle such as delivery bicycles, recumbent bicycles, tandems, BMX bicycles, and bicycles designed and equipped for use in severe applications such as sanctioned competition events, stunting, or aerobatic manoeuvres.

NOTE For bicycles with a maximum saddle height of 435 mm or less, see national regulations for ride-on toys, and with a maximum saddle height of more than 435 mm and less than 635 mm, see ISO 8098[1].

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 https://www.electropedia.org/

3.1 Bicycle type

3.1.1
bicycle
two-wheeled vehicle that is propelled solely or mainly by the muscular energy of the person on that vehicle, in particular by means of pedals

3.1.2
city and trekking bicycle
bicycle (3.1.1) designed for use on *public roads* (3.3.3) primarily for means of transportation or leisure

3.1.3
delivery bicycle
bicycle (3.1.1) designed for the primary purpose of carrying goods

3.1.4
folding bicycle
bicycle (3.1.1) designed to fold into a compact form, facilitating transport and storage