
Kolesa - Varnostne zahteve za kolesa - 1. del: Izrazi in definicije (ISO/DIS 4210-1:2021)

Cycles - Safety requirements for bicycles - Part 1: Terms and definitions (ISO/DIS 4210-1:2021)

Fahrräder - Sicherheitstechnische Anforderungen an Fahrräder - Teil 1: Begriffe (ISO/DIS 4210-1:2021)

Cycles - Exigences de sécurité des bicyclettes - Partie 1: Termes et définitions (ISO/DIS 4210-1:2021)

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Part 1: Terms and definitions

*Cycles — Exigences de sécurité des bicyclettes —**Partie 1: Termes et définitions*

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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.

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

— **xxx xxxxxxxx xxx xxxxx**

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 International Standard has been developed in response to demand throughout the world, and the aim has been to ensure that bicycles manufactured in compliance with this International Standard 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 is to be used on public roads, national regulations apply.

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Cycles — Safety requirements for bicycles — Part 1: Terms and definitions

1 Scope

This part of ISO 4210 specifies terms and definitions related to safety and performance requirements for the design, assembly, and testing of bicycles and sub-assemblies having saddle height as given in Table 1.

This part of ISO 4210 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 ISO 8124-1, and with a maximum saddle height of more than 435 mm and less than 635 mm, see ISO 8098.

Table 1 — Maximum saddle height

Dimensions in millimetres

Bicycle type	City and trekking bicycles	Young adult bicycles	Mountain bicycles	Racing bicycles
Maximum saddle height	635 or more	635 or more and less than 750	635 or more	635 or more

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 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 designed for use on public roads primarily for means of transportation or leisure

3.1.3

delivery bicycle

bicycle designed for the primary purpose of carrying goods

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3.1.4

folding bicycle

bicycle designed to fold into a compact form, facilitating transport and storage

3.1.5

mountain bicycle

bicycle designed for use off-road on rough terrain, on public roads, and on public pathways, equipped with a suitably strengthened frame and other components, and, typically, with wide-section tyres with coarse tread patterns and a wide range of transmission gears

3.1.6

racing bicycle

bicycle intended for high-speed amateur use on public roads and having a steering assembly with multiple grip positions (allowing for an aerodynamic posture, such as drop bars or aerodynamic bars), a multi-speed transmission system, and a maximum mass of 12 kg for the fully assembled bicycle

3.1.7

recumbent bicycle

bicycle that places the rider in a laid-back reclining position

3.1.8

tandem

bicycle with saddles for two or more riders, one behind the other

3.1.9

young adult bicycle

bicycle designed for use on public roads by a young adult whose weight is less than 40 kg, with maximum saddle height of 635 mm or more and less than 750 mm

3.2 General terms

3.2.1

bolted joint

components joined together with threaded fasteners

3.2.2

composite material

component that is entirely or partially made of a non-metallic matrix materials which is reinforced by metallic or non-metallic materials such as short or long fibres, fabric, or particles

3.2.3

exposed protrusion

protrusion which, through its location and rigidity, could present a hazard to the rider either through heavy contact with it in normal use or should the rider fall onto it in an accident

3.2.4

fracture

unintentional separation into two or more parts

3.2.5

fully assembled bicycle

bicycle fitted with all components necessary for its intended use

3.2.6

maximum saddle height

vertical distance from the ground to the point where the top of the seat surface is intersected by the seat-post axis, measured with the seat in a horizontal position and with the seat-post set to the minimum insertion-depth mark

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