

Bicykle. Bezpečnostné požiadavky na bicykle. Časť 2: Požiadavky na mestské a trekingové bicykle, bicykle pre mladých ľudí, horské a pretekárske bicykle (ISO 4210-2: 2014).

STN EN ISO 4210-2

30 9042

Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles (ISO 4210-2:2014)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/14

Obsahuje: EN ISO 4210-2:2014, ISO 4210-2:2014

Spolu s STN EN ISO 4210-1, STN EN ISO 4210-3, STN EN ISO 4210-4, STN EN ISO 4210-5, STN EN ISO 4210-6, STN EN ISO 4210-7, STN EN ISO 4210-8 a STN EN ISO 4210-9 od 01.08.2015 ruší STN ISO 4210 (30 9042) z apríla 2001

STN EN 14764 (30 9054) z júla 2006

STN EN 14766 (30 9056) z júla 2006

STN EN 14781 (30 9071) z júla 2006

119497

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 4210-2

July 2014

ICS 43.150

Supersedes EN 14764:2005, EN 14766:2005, EN 14781:2005

English Version

Cycles - Safety requirements for bicycles - Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles (ISO 4210-2:2014)

Cycles - Exigences de sécurité des bicyclettes - Partie 2: Exigences pour bicyclettes de ville et de randonnée, de jeune adulte, de montagne et de course (ISO 4210-2:2014) Fahrräder - Sicherheitstechnische Anforderungen an Fahrräder - Teil 2: Anforderungen für City- und Trekkingfahrräder, Jugendfahrräder, Geländefahrräder (Mountainbikes) und Rennräder (ISO 4210-2:2014)

This European Standard was approved by CEN on 21 June 2014.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 4210-2:2014 (E)

Contents	Page
Foreword	3

Foreword

This document (EN ISO 4210-2:2014) has been prepared by Technical Committee ISO/TC 149 "Cycles" in collaboration with Technical Committee CEN/TC 333 "Cycles" the secretariat of which is held by UNI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2015, and conflicting national standards shall be withdrawn at the latest by July 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14764:2005, EN 14766:2005, EN 14781:2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 4210-2:2014 has been approved by CEN as EN ISO 4210-2:2014 without any modification.

INTERNATIONAL STANDARD

ISO 4210-2

First edition 2014-07-01

Cycles — Safety requirements for bicycles —

Part 2:

Requirements for city and trekking, young adult, mountain and racing bicycles

Cycles — Exigences de sécurité des bicyclettes —

Partie 2: Exigences pour bicyclettes de ville et de randonnée, de jeune adulte, de montagne et de course



ISO 4210-2:2014(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, 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
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Co	Page		
Fore	eword		iv
Intr	oductio	v	
1		e	
_	•		
2		native references	
3	Terms and definitions		3
4	Requirements		3
	4.1	Toxicity	
	4.2	Sharp edges	
	4.3	Security and strength of safety-related fasteners	3
	4.4	Crack detection methods	4
	4.5	Protrusions	4
	4.6	Brakes	4
	4.7	Steering	9
	4.8	Frames	
	4.9	Front fork	
	4.10	Wheels and wheel/tyre assembly	
	4.11	Rims, tyres, and tubes	
	4.12	Front mudguard	
	4.13	Pedals and pedal/crank drive system	
	4.14	Drive-chain and drive belt	
	4.15	Chain-wheel and belt-drive protective device	
	4.16	Saddles and seat-posts	
	4.17	Spoke protector	
	4.18	Luggage carriers	
	4.19	Road test of a fully assembled bicycle	
	4.20	Lighting systems and reflectors	
	4.21	Warning device	29
5	Manı	ufacturer's instructions	29
6	Marking		31
	6.1	Requirement	
	6.2	Durability test	
Ann	ex A (inf	formative) Steering geometry	33
Bibl	liograph	ıy	34

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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 149, *Cycles*, Subcommittee SC 1, *Cycles and major sub-assemblies*.

This first edition of ISO 4210-2, together with ISO 4210-3, ISO 4210-4, ISO 4210-5, ISO 4210-6, ISO 4210-7, ISO 4210-8, and ISO 4210-9, cancels and replaces ISO 4210:1996, which has been technically revised.

ISO 4210 consists of the following parts, under the general title *Cycles* — *Safety requirements for bicycles*:

- Part 1: Terms and definitions
- Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles
- Part 3: Common test methods
- Part 4: Braking test methods
- Part 5: Steering test methods
- Part 6: Frame and fork test methods
- Part 7: Wheels and rim test methods
- Part 8: Pedals and drive system test methods
- Part 9: Saddles and seat-post test methods

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.

For the purposes of improving repeatability and reproducibility, and considering the applicability to all types of bicycle and the size and influence of the operator, the machine test method reflects today's state of the art and is preferred to the track test method.

Unless there is evidence of improvement of the test track method in the future, this method will be made informative for the next revision. Users of the International Standard are invited to provide their feedback to ISO/TC 149/SC 1.

Cycles — Safety requirements for bicycles —

Part 2:

Requirements for city and trekking, young adult, mountain and racing bicycles

1 Scope

This part of ISO 4210 specifies safety and performance requirements for the design, assembly, and testing of bicycles and sub-assemblies having saddle height as given in Table 1, and lays down guidelines for manufacturer's instructions on the use and care of such bicycles.

This part of ISO 4210 applies to young adult bicycles with maximum saddle height of 635 mm or more and less than 750 mm, city and trekking bicycles, mountain bicycles, and racing bicycles that have a maximum saddle height of 635 mm or more including folding bicycles (see <u>Table 1</u> and <u>Figure 1</u>).

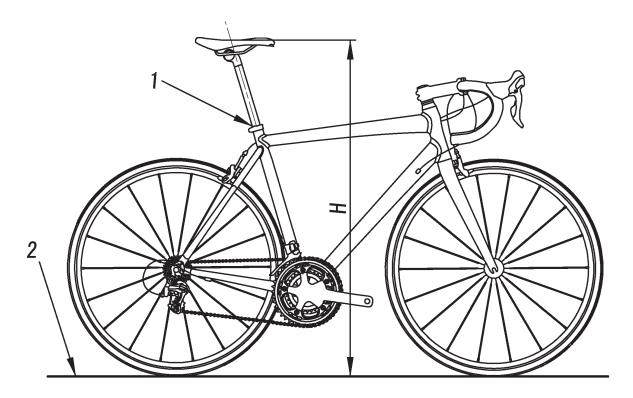
This part of ISO 4210 does not apply to specialized types of bicycle, such as delivery bicycles, recumbent bicycles, tandems, BMX bicycles, and bicycles designed and equipped for use in severe applications such as sanctioned competition events, stunting, or aerobatic manoeuvres.

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 trek- king bicycles	Young adult bicycles	Mountain bicycles	Racing bicycles
Maximum sad- dle height	635 or more	635 or more and less than 750	635 or more	635 or more



Key

- *H* maximum saddle height
- 1 minimum insertion-depth mark
- 2 ground plane

Figure 1 — Maximum saddle height

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4210-1, Cycles — Safety requirements for bicycles — Part 1: Terms and definitions

ISO 4210-3:2014, Cycles — Safety requirements for bicycles — Part 3: Common test methods

ISO 4210-4:2014, Cycles — Safety requirements for bicycles — Part 4: Braking test methods

ISO 4210-5:2014, Cycles — Safety requirements for bicycles — Part 5: Steering test methods

ISO 4210-6:2014, Cycles — Safety requirements for bicycles — Part 6: Frame and fork test methods

ISO 4210-7:2014, Cycles — Safety requirements for bicycles — Part 7: Wheel and rim test methods

ISO 4210-8:2014, Cycles — Safety requirements for bicycles — Part 8: Pedal and drive system test methods

ISO 4210-9:2014, Cycles — Safety requirements for bicycles — Part 9: Saddle and seat-post test methods

ISO 5775-1, Bicycle tyres and rims — Part 1: Tyre designations and dimensions

ISO 5775-2, Bicycle tyres and rims — Part 2: Rims

ISO 6742-1, Cycles — Lighting and retro-reflective devices — Part 1: Lighting and light signalling devices
ISO 6742-2, Cycles — Lighting and retro-reflective devices — Part 2: Retro-reflective devices
ISO 9633, Cycle chains — Characteristics and test methods
ISO 11243, Cycles — Luggage carriers for bicycles — Concepts, classification and testing

koniec náhľadu – text ďalej pokračuje v platenej verzii STN