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KATSEMEETODID JUHITAVUSELE**

**Cycles - Safety requirements for bicycles - Part 5:  
Steering test methods (ISO 4210-5:2014)**

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English Version

**Cycles - Safety requirements for bicycles - Part 5: Steering test  
methods (ISO 4210-5:2014, Corrected version 2015-02-01)**

Cycles - Exigences de sécurité des bicyclettes - Partie 5:  
Méthodes d'essai de guidage (ISO 4210-5:2014, Version  
corrigée 2015-02-01)

Fahrräder - Sicherheitstechnische Anforderungen an  
Fahrräder - Teil 5: Prüfverfahren für die Lenkung (ISO  
4210-5:2014)

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## Foreword

This document (EN ISO 4210-5:2014) 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of an identical text or by endorsement, at the latest by January 2015, and conflicting national standards shall be withdrawn at the latest by July 2015.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.

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### Endorsement notice

The text of ISO 4210-5:2014, Corrected version 2015-02-01 has been approved by CEN as EN ISO 4210-5:2014 without any modification.

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## 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.

# Cycles — Safety requirements for bicycles —

## Part 5: Steering test methods

### 1 Scope

This part of ISO 4210 specifies the steering test methods for ISO 4210-2.

### 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 4210-2:2014, *Cycles – Safety requirements for bicycles – Part 2: Requirements for city and trekking, young adult, mountain and racing bicycles*

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

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4210-1 apply.

### 4 Test methods

#### 4.1 Handlebar grips and plugs

##### 4.1.1 Freezing test

Immerse the handlebar, with handlebar grips or plugs fitted, in water at room temperature for 1 h and then place the handlebar in a freezer until the handlebar is at a temperature lower than  $-5\text{ }^{\circ}\text{C}$ . Remove the handlebar from the freezer and allow the temperature of the handlebar to reach  $-5\text{ }^{\circ}\text{C}$ , and then apply a force of 70 N to the grip or plug in the loosening direction as shown in [Figure 1](#). Maintain the force until the temperature of the handlebar has reached  $+5\text{ }^{\circ}\text{C}$ . It shall be permitted to create a hole in the plug to allow for the testing fixture to be fitted so long as the hole does not affect the seat of the plug in the handlebar and the fixture does not contact the handlebar during the test.