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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 3565.7-2022

**Safety requirements for bicycles - Part 7: Wheel and rim test
methods**

自行车安全要求 第7部分：车轮与轮辋试验方法

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Foreword

This document was issued on 30 December 2022 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 October 2023.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 43.150, Chinese classification Y14.

Introduction

GB (/T) 3565 "Safety Requirements for Bicycles" was drafted according to the safety requirements of bicycle products.

To produce bicycles that are as safe as possible. GB (/T) 3565 "Bicycle Safety Requirements" consists of 9 parts.

--- Part 1.Terms and definitions. The purpose is to unify the terminology used in each part of the standard.

--- Part 2.Requirements for city and touring bicycles, youth bicycles, mountain bikes and racing bicycles. purpose is

Classify the safety requirements of Category 4 bicycles into mandatory national standards for easy enforcement.

--- Part 3.General test methods. The purpose is to centralize and unify the general test

methods for bicycle safety requirements and facilitate operation.

--- Part 4.Brake test method. The purpose is to carry out professional tests on the brake requirements in the bicycle safety requirements, and provide a basis for the brake test

Opportunities for method improvement.

--- Part 5.Test methods for handlebars. The purpose is to carry out professional tests on the handlebar requirements in the bicycle safety requirements, and to provide a basis for the handlebar test

Opportunities for method improvement.

--- Part 6.Test methods for frame and fork. The purpose is to conduct a professional review of the requirements for frame and front fork in bicycle safety requirements.

Test and provide opportunities for improved test methods for frames and forks.

--- Part 7.Test methods for wheels and rims. The purpose is to conduct a professional review of the requirements for wheels and rims in bicycle safety requirements

Test and provide opportunities for improvement of test methods for wheels and rims.

--- Part 8.Test methods for pedals and drive systems. The purpose is to meet the requirements for pedals and drive systems in bicycle safety requirements

Conduct specialized tests and provide opportunities for improved test methods for pedal and drive systems.

--- Part 9.Test methods for saddles and saddle tubes. The purpose is to conduct a professional review of the requirements for saddles and saddle tubes in bicycle safety requirements

Test, and provide opportunities for the improvement of test methods for saddles and saddle tubes.

GB 3565.2 is a mandatory national standard, and 7 test method standards (GB/T 3565.3~GB/T 3565.9) are recommended national standards

Standard, used in conjunction with GB 3565.2.These test method standards are designed to ensure the strength and reliability of individual components as well as the complete bicycle

It meets the requirements and requires consideration of safety issues from the design stage.

The scope of GB (/T) 3565 is limited to product safety considerations. If bicycles are used on public roads, national road traffic regulations must be followed.

Communication safety laws and related management regulations.

To improve repeatability and reproducibility, and to take into account suitability, size and operator effects for all types of bicycles, the test

The machine test method reflects the current advanced level and is more popular than the road test method.

The safety and quality of bicycles is related to the traffic life safety of consumers. Since 1983, my country has released three versions of

GB 3565. It has been 17 years since GB 3565-2005 was issued and implemented.

Provided technical support. GB 3565-2005 "Safety Requirements for Bicycles" is equivalent to ISO 4210.1996 "Safety Requirements for Two-wheeled Bicycles"

Require". In 2014, ISO 4210 was revised and released again, from the original 1 standard to 9 standards. For this reason, GB 3565 also changed from the original

1 standard was revised into 9 standards, the standard level is synchronized with the international standard, and continues to provide technical support for the safety of bicycle products in our country.

Bicycle Safety Requirements

Part 7. Test methods for wheels and rims

1 Scope

GB/T 3565.7-2022 covers the bench tests for bicycle wheels and rims - rotational accuracy, taken as the run-out of the wheel once it is fully built and adjusted; the static load test on the wheel and tyre assembly; the reliability of the front and rear wheel clamping devices; the heat resistance of wheels made of composite materials; and the fit between non-pneumatic tyres and rims. An informative annex adds a fatigue test on the wheel and pneumatic tyre assembly for urban and touring bicycles. Each of these answers a way a wheel can put a rider on the ground. A wheel out of true fouls the brake and the frame; a clamping device that works loose lets the wheel leave the fork, which is the failure that removes any chance of recovery; a composite rim heats under prolonged rim braking until the material that holds it together softens; and a non-pneumatic tyre that does not seat properly can come off the rim under load. The methods here are the ones called up by the requirements part of the series for the bicycle types it covers. Part 7 of the GB/T 3565 series, for wheel makers, bicycle assemblers and the laboratories that test them.

This document describes the rotational accuracy of bicycle wheels and rims, static load tests of wheel/tyre assemblies, reliability of clamping devices, compound

Material wheel temperature resistance test and test method for non-pneumatic tire and rim fit.

This document is applicable to the test of the wheel and rim components of the bicycle types involved in GB 3565.2.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

GB/T 3565.1 Bicycle Safety Requirements Part 1.Terms and Definitions (GB/T 3565.1-2022, ISO 4210-1.

2014, MOD)

GB 3565.2-2022 Bicycle Safety Requirements Part 2.City and Touring Bicycles, Youth Bicycles, Mountain Bicycles

Requirements for racing bicycles (ISO 4210-2.2015, MOD)

Note. There is no technical difference between the referenced content of GB 3565.2-2022 and the referenced content of ISO 4210-2.2015.

GB/T 3565.3-2022 Bicycle Safety Requirements Part 3.General Test Methods (ISO 4210-3.2014, IDT)

3 Terms and Definitions

The terms and definitions defined in GB/T 3565.1 apply to this document.

4 Test method

4.1 Rotational accuracy

Rotational accuracy means that after the wheel is fully assembled and adjusted, it can rotate one circle without axial play, and a suitable wheel along the rim

Point, the maximum change range of the rim position measured in the direction perpendicular to the wheel axis (see Figure 1 and Figure 2) (ie the reading difference of the dial indicator). both sides of the rim

should be measured and the result should be taken as its maximum value.

For city and touring bicycles, mountain bikes and youth bicycles, the axial runout (face) and radial runout (concentric) of the wheels