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

GB/T 14625.2-2008

Replacing GB/T 14625.2-1993

**Test methods for basketball, football, volleyball and handball -
Part 2: The measurement of bouncing altitude**

篮球、足球、排球、手球试验方法 第2部分：反弹高度测定方法

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Foreword

GB/T 14625 "Basketball, Football, Volleyball, Handball Test Method" is divided into five parts.

---Part 1. Determination of roundness;

--- Part 2. Determination of the rebound height;

---Part 3. Dynamic impact test method;

--- Part 4. Test conditions and sample preparation;

--- Part 5. Measurement of circumference length and circumference difference. This part is the second part of GB/T 14625. This section refers to the FIBA "Basketball Competition Rules", FIFA "Football Competition Rules", and the International Volleyball "Volleyball Competition Rules" Formulated. This part replaces GB/T 14625.2-1993 "Basketball, Football, Volleyball, Handball Bounce Height Determination Method". The main changes in this section compared with GB/T 14625.2-1993 are as follows:

a) the addition of "normative references";

b) increase the requirements of "rebound board" and "test photocell" in "device";

c) expanded the scope of testing;

d) Replace Chapter 4 "Test Conditions" and Chapter 5 "Samples" in Chapter 5, "Test Conditions and Preparation of Samples". This part was proposed by the China Light Industry Federation. This part is under the jurisdiction of the National Leather Industry

Standardization Technical Committee (SAC/TC252). This section drafted by: High-speed rail testing equipment (Dongguan) Co., Ltd., National Sports General Administration Equipment and Equipment Center, China Leather and Shoemaker Industry Research Institute, Guangzhou Hailesi Ball Manufacturing Co., Ltd., Yuxi (Kunshan) Sporting Goods Co., Ltd. The main drafters of this section. Chen Jingchang, South Korea Chun, Zhong Yaoqiang. This section was first published in 1993 and this is the first revision. GB/T 14625.2-2008 Basketball, football, volleyball, handball test methods Part 2. Determination of bounce height

1 Scope

GB/T 14625.2-2008 is the Chinese national standard on test methods for basketball, football, volleyball and handball - part 2: the measurement of bouncing altitude, in the field of domestic and commercial equipment, entertainment, sport. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 December 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 September 2009. Classification: ICS 97.220.01, CCS Y56. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This part of GB/T 14625 specifies the method for determining the rebound height of basketball, football, volleyball and handball. This section applies to basketball, football, volleyball, and handball for competitions and daily activities.

2 Normative references

The provisions in the following documents become the provisions of this part by reference in this part of

GB/T 14625. Quotations with dated And all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouragement is achieved in accordance with this section. The parties to the agreement study whether the latest versions of these documents can be used. For undated references, the latest edition applies to this section.

GB/T 14625.4 Basketball, football, volleyball, handball test methods - Part 4. Test conditions and sample preparation

3 Principle

Using a ball rebound height gauge, the specimen is free-falling at a height of 1800 mm (based on the lower point of the ball), and the contact is reversed. The sample rebounds after the elastic plate, after 1000mm, 1100mm, 1200mm, 1300mm, 1400mm, 1500mm, 1600mm height. The photoelectric sensor measures, the initial velocity of the rebound is calculated by the computer, and the actual rebound height of the sample is calculated according to the law of conservation of energy.

4 Device

4.1 Ball rebound height gauge Its main components should meet the following requirements.

- Positioning the arm to ensure that the distance between the undercut point and the rebound plate of the sample is (1800 ± 2) mm;
- Fixture, after the sample is positioned, the clamps on the left and right sides are simultaneously extended, the sample is clamped, the positioning arm is removed, and the clamp switch is released. Free fall. The fixture can adjust the distance up and down according to the specifications of the sample, so as to clamp the sample at the axial center, and left Right symmetry
- Rebound plate, phenolic resin board, hardness is HS80~HS90, thickness is 25mm, or it is made of hardwood to ensure rebound Height error ± 2 mm;
- Test the photocell, at a height of 1000mm, 1100mm, 1200mm, 1300mm, 1400mm from the rebound plate, Between 1500mm and 1600mm, there are respectively symmetrical photoelectric transmitting tubes and receiving tubes;
- Measure the photocell, the rebound test area is 370mm x 370mm area, and the polarization photoelectric tube is installed at the edge of the test area. During the rebound process, the test area is popped up, and the measured photodiode is measured and displayed;
- Display, recording device, can automatically display and record the number of bounces and bounce height.

4.2 Barometer The accuracy is 1.5, the range is 0~0.16MPa, and the minimum scale is 0.0025MPa.

5 Test conditions and sample preparation

Should comply with the provisions of GB/T 14625.4. GB/T 14625.2-2008

6 Test methods

6.1 Turn on the power switch and turn on the microcomputer switch.

6.2 According to the type of sample, press the corresponding button on the test selector (the test selector is divided into basketball, football, volleyball, handball "male", Handball "female" five files).

6.3 Press the reset button, the sample positioning arm extends, in the middle waiting position, the clamp is retracted into the instrument, and the preparation is completed.

6.4 Place the sample on the positioning arm (the ball is up), the clamp automatically extends to clamp the sample, and the sample positioning arm is retracted into the instrument. The sample is free to fall, rebounded by the rebound plate and photocell test, and the number of tests and the rebound height are displayed on the display.

6.5 Press the save button and the instrument will automatically record the test results.

6.6 Press the Continue button and repeat

6.5 to test again.

6.7 Repeat the test 10 times.

6.8 At the end of the test, press the average button to automatically output and print out the test results.

7 Handling precautions

7.1 Adjust the horizontal screw of the base of the main unit before the test so that the level of the base is level and the body is in the vertical position.

7.2 The rebound trajectory of the sample caused by the production process is skewed. The instrument display data is for reference only. It is empirically determined whether the test is performed. effective.

7.3 The rebound height is lower than 1000mm or higher than 1600mm. It is considered that the test is invalid. If the cumulative 3 times is invalid, the sample will be rebounded high. The degree test failed.

7.4 If the test is invalid, press the retest button, the test result will not be recorded, and the test can be re-tested.

8 Representation of the result

The bounce height is expressed as the arithmetic mean of the number of valid tests, calculated according to equation (1). (1) In the formula. Shape

--- the number of valid tests. The calculation results retain four significant figures.

9 Test report