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

GB/T 14625.1-2008

Replacing GB/T 14625.1-1993

**Test methods for basketball, football, volleyball and handball -
Part 1: The measurement of roundness**

篮球、足球、排球、手球试验方法 第1部分：圆度测定方法

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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 first 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 14625.1-1993 "Basketball, Football, Volleyball, Handball Roundness Measurement Method". The main changes in this section compared with GB/T 14625.1-1993 are as follows:

a) adjust the scope of application of the standard;

b) add "normative references";

c) adjusted the "device" requirements;

d) Added "representation of results". 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 released in September.1993 and this is the first revision. GB/T 14625.1-2008 Basketball, football, volleyball, handball test methods Part 1. Roundness measurement method

1 Scope

GB/T 14625.1-2008 is the Chinese national standard on test methods for basketball, football, volleyball and handball - part 1: the measurement of roundness, 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 roundness of basketball, football, volleyball and handball. This section applies to basketball, football, volleyball, and handball for competitions and daily activities. This section does not apply to rubber balls.

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

The ball is stereoscopically detected in a three-dimensional space using a roundness meter, using 32 points of basketball, 40 points of volleyball, handball, and 30 points of

football. Adopted The data is processed by the computer, and the average radius, average circumferential length and maximum radius difference of the ball are calculated, and the maximum radius difference of the sample is expressed. Show roundness.

4 Device

4.1 Roundness meter Its main components should meet the following requirements.

- The tolerance of the three coordinate axes of the instrument will be 0.02mm;
- Probe repeatability, 0.002mm;
- Indicative accuracy, 0.001mm;
- Pinch ball clamping force, $5\text{N} \pm 2\text{N}$;
- Range, the diameter of the sample to be tested is 160mm ~ 260mm;
- Automatic calculation and recording device.

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.

6 Test methods

6.1 Turn on the main power switch, fan switch, and the axial fan.

6.2 Press the start button and the microcomputer control power is turned on.

6.3 Press the output switch, place the sample on the lower clamp plate, lower the upper clamp plate, and clamp the sample tightly. Adjust the position of the ball. GB/T 14625.1-2008

---Basketball (8-piece ball). Place the ball on the ball-clip plate, align the ball plate with the upper and lower crosshairs of the ball, clamp, and align the head with the skin. center.

---Volleyball, handball (18-piece ball). The ball is aligned with the upper ball plate, clamped, and the detection head is aligned with the center of the middle piece.

---Football (32-piece ball). Align the ball plate with any two pentagonal pieces (the ball mouth is up), clamp, and the detection head is at the center of the skin.

6.4 Adjust the axis of the sample so that it is coaxial with the return axis of the instrument, that is, adjust the radial runout of the ball with the correction mechanism dial indicator. Within 1mm.

6.5 Enter the type of sample (basketball, football, volleyball, handball).

6.6 Press the execute button to automatically detect.

6.7 After the test is completed, the test result is automatically output and printed.

6.8 Raise the upper grip plate and remove the sample.

7 Handling precautions

7.1 The instrument is often calibrated and adjusted to ensure the accuracy of the instrument and the accuracy of the test data.

7.2 If an abnormal situation occurs during the test, first turn off the output switch, then press the reset button to re-test.

8 Representation of the result

The instrument automatically prints out the average radius, average circumferential length, and maximum radius difference of the sample, and the result is expressed by the maximum radius difference.

9 Test report

The test report should contain the following.

- a) the number of this part;
- b) sample name, number, type, manufacturer (or trademark), date of manufacture;
- c) test results (average radius, average circumference length, maximum radius difference);
- d) anomalies that occur during the test;
- e) the difference between the measured method and this part;
- f) Tester and date. GB/T 14625.1-2008