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

GB/T 8452-2025

Replacing GB/T 8452-2008

Glass bottles - Test method for verticality

玻璃瓶罐 垂直轴偏差试验方法

(English Translation)

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Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Instruments and Equipment

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 8452-2008 "Test Method for Vertical Axis Deviation of Glass Bottles and Jars". Compared with GB/T 8452-2008, except for the following.

Aside from structural adjustments and editorial changes, the main technical changes are as follows.

- a) A digital control device has been added to the instrumentation (see 4.2), and the reading microscope has been removed (see 4.2 in the 2008 edition);
- b) Sample requirements have been changed (see Chapter 5, Chapter 5 of the 2008 edition);
- c) The angle of the rotating chassis and the direction of pressure applied to the sample were changed in the test procedure (see 6.1, 2008 edition of 6.1);
- d) The experimental step of "correcting the measured vertical axis deviation according to accuracy" has been removed (see 6.4 in the 2008 edition);
- e) Added calculation and result representation (see Chapter 7);
- f) The contents of the test report have been changed (see Chapter 8, Chapter 7 of the 2008 edition).

This document is modified to adopt ISO 9008:1991 "Test method for vertical axis deviation of glass bottles and jars".

This document has undergone the following structural adjustments compared to ISO 9008:1991.

---4.1, 4.2, and 4.3 correspond to 4.1 in ISO 9008:1991, and 4.4~4.6 correspond to 4.2~4.4

in ISO 9008:1991;

---6.1 corresponds to parts of 6.1, 6.2, and 6.3 in ISO 9008:1991, and 6.2 corresponds to 6.3 in ISO 9008:1991.

Partial content.

The technical differences between this document and ISO 9008:1991, and the reasons therefor, are as follows.

---ISO 7348 (see Chapter 3) has been replaced with the normatively referenced GB/T 9987 to adapt to my country's technical conditions;

---The terms "verticality" and "vertical deviation" (see Chapter 3, 3.1 and 3.2 of ISO 9008:1991) have been removed and are already included in the normative reference.

Use the document GB/T 9987;

---A digital control device has been added to adapt to my country's technological conditions and improve operability (see 4.2);

---The requirements for the automatic centering and clamping device in the instrument have been changed to improve operability (see 4.4, 4.2 of ISO 9008:1991);

---The test procedure has been changed; "apply a downward pressure at a 45° angle to the sample" has been changed to "apply a downward pressure at an angle to the sample".

The phrase "rotate the chassis 360°" has been changed to "rotate the chassis at least 360°" to improve operability (see 6.1, ISO 9008:1991).

(6.1, 6.3)

---The result calculation formula has been added to improve operability (see Chapter 7);

---The content of the test report has been changed (see Chapter 8, Chapter 8 of ISO 9008:1991).

The following editorial changes have been made to this document.

---To maintain consistency with the standards for glass bottles and jars, the standard name has been changed to "Test Method for Vertical Axis Deviation of Glass Bottles and Jars";

---The note in the scope of ISO 9008:1991 has been deleted (see Chapter 1 of ISO 9008:1991);

---A schematic diagram of the experimental apparatus has been added (see Figure 1).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Daily-Use Glass (SAC/TC377).

1 Scope

This document describes the test method for vertical axis deviation of glass bottles and jars.

This document is applicable to testing the vertical axis deviation of glass bottles and jars.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 9987 Terminology for the manufacture of glass bottles and jars (GB/T 9987-2011, ISO 7348:1992, MOD)

3 Terms and Definitions

The terms and definitions defined in GB/T 9987 apply to this document.

4 Instruments and Equipment

4.1

The instrument should be placed with the bottom of the glass bottle or jar horizontally. It can test the deviation between the bottle mouth and the vertical axis. The instrument's testing error should not exceed 0.1 mm.

4.2

Able to select various types of instruments and equipment, such as.

- a) Spirit level;
- b) Percentage scale;
- c) Magnifying projection device on the scale;
- d) Digital control device.

4.3

The tool for testing deviation is placed on the outside of the bottle mouth edge.

4.4

The instrument consists of a rotating base with an automatic centering and clamping device and a vertical stand equipped with a level, dial indicator, or digital control device.

It consists of columns, or a base plate with V-blocks/right-angle blocks and vertical columns equipped with a level, dial indicator or digital control device.

A dial indicator, spirit level, or digital control device should be able to adjust the height and level position. See Figure 1. Non-contact optical scanning can also be used.

Device.

4.5

For non-circular glass bottles and jars, the instrument should be able to clamp them at the center of the rotating base.

4.6

In addition to the instruments and equipment mentioned above, other types of instruments and equipment that meet the requirements may also be used.