

ICS 83.160.99

CCS G41



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

**GB/T 16623-2022**

Replacing GB/T 16623-2008

**Technical specification of pressed-on solid tyres**

压配式实心轮胎技术规范

**Issued on: October 14, 2022**

**Implemented on: May 1, 2023**

**Issued by: State Administration for Market Regulation;  
Standardization Administration of China**

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### 1 Scope

GB/T 16623-2022 is the Chinese national standard on technical specification of pressed-on solid tyres, in the field of rubber and plastic industries. 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 14 October 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2023. Classification: ICS 83.160.99, CCS G41. 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 Document specifies the technical requirements, test methods and markings for pressed-on solid tyres. This Document applies to new pressed-on solid tyres used on counterbalanced forklift trucks and other industrial vehicles.

### 2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates indicated are applicable to this Document; for the undated documents, only the latest version (including all the amendments) is applicable to this Document.

GB/T 528 Rubber, Vulcanized or Thermoplastic - Determination of Tensile Stress-Strain Properties

GB/T 531.1 Rubber, Vulcanized or Thermoplastic - Determination of Indentation hardness -

## Part 1: Durometer Method (Shore Hardness)

GB/T 1031 Geometrical Product Specifications (GPS) - Surface Texture: Profile Method - Surface Roughness parameters and their Values

GB/T 1689 Rubber Vulcanized - Determination of Abrasion Resistance (Akron Machine)

GB/T 2941 Rubber - General Procedures for Preparing and Conditioning Test Pieces for Physical Test Methods

GB/T 3512 Rubber, Vulcanized or Thermoplastic - Accelerated Ageing and Heat Resistance Tests

GB/T 6326 Tyre Terms and Definitions

GB/T 7760 Rubber, Vulcanized or Thermoplastic - Determination of Adhesion to a Rigid Substrate -

90 Degrees Peel Method

GB/T 8170 Rules of Rounding off for Numerical Values & Expression and Judgement of Limiting Values the rubber is broken.

## 5 Test Methods

5.1 The dimensions of the outer edge of the tyre shall be measured according to the provisions of Appendix B.

5.2 Tensile strength, elongation at break, hardness and abrasion quantity shall be tested according to the provisions of Appendix C.

5.3 The adhesion strength between metal and rubber shall be tested according to the provisions of GB/T 7760.

5.4 The tyre durability shall be tested according to the provisions of GB/T 22391.

## 6 Marking

6.1 The sidewall of each tyre shall have the following markings:

- a) specifications;
  - b) trademark, manufacturer's name or place of origin;
  - c) production number;
  - d) inspection mark.
- 6.2

### 6.1 a) ~

c) on the tyre sidewall shall be permanent marks; and

## Appendix B

(Normative) Measurement Method for the Outer Edge Dimension of the Tyre B.1

Measurement items Outer perimeter and section width of tyre. B.2 Measurement conditions

B.2.1 The tyre shall be parked at room temperature for more than 48h after vulcanization; and the tire and rim assembly shall be parked at a temperature of 18°C ~ 36°C for at least 24h before testing. B.2.2 Measurement tools and their accuracy requirements are as follows:

a) steel ruler and metal tape (without curvature): 1mm;

b) vernier caliper: 0.1mm;

c) calipers. B.3 Measurement method B.3.1 The outer perimeter of the tyre Use metal tape to wrap around the tyre along the centerline of the crown or near the highest point of the centerline to measure the outer perimeter. The unit of measurement is millimeter; round-off to an integer; and obtain the outer diameter according to Formula (B.1). B.3.2 Section width of tyre Select the widest part of the sidewall without a mark; and use a vernier caliper or a caliper and a steel ruler to measure the section width at four points at approximately quarters of the tyre circumference. Take the arithmetic mean value; the measurement unit is mm; rounded-off to an integer. B.4 Calculation method The outer diameter of tyre shall be calculated according to Formula (B.1).