

ICS 83.160.10

CCS G 41



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

GB/T 2977-2024

Replacing GB/T 2977-2016

**Size designation, dimensions, inflation pressure and load
capacity for truck tyres**

载重汽车轮胎规格、尺寸、气压与负荷

Issued on: September 29, 2024

Implemented on: April 1, 2025

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

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1 Scope

This document specifies the way truck tyre sizes are designated, the tyre sizes and the corresponding dimensions, inflation pressures and loads, and other related requirements.

This document applies to new pneumatic tyres for trucks.

3 Terms and definitions

The terms and definitions given in GB/T 6326 apply to this document.

4 Designation of tyre sizes

4.1 Tyres for mini trucks and light trucks. The designation of tyre sizes for mini and light trucks is shown by two worked examples.

4.2 Truck tyres. The designation of truck tyre sizes is shown by two worked examples.

5 Tyre sizes, dimensions, inflation pressure and load capacity

5.1 The tyre size designation, ply rating, load index, measuring rim, new tyre dimensions, load capacity and inflation pressure shall conform to Tables 1 to 33; the maximum in-service dimensions, the static loaded radius, the minimum dual spacing, the permitted rims and the valve type should conform to Tables 1 to 33. Data for other sizes are given in Annex A.

5.2 The relationship between running speed and change of load shall conform to Table 34.

Where the load is increased, the inflation pressure shall be increased accordingly, the proportion of the increase being settled with the manufacturer.

5.3 The relationship between load index and load capacity shall conform to Annex B.

5.4 The relationship between speed symbol and maximum speed shall conform to Annex C.

B Annex B (normative) Relationship between load index and load capacity

The relationship between load index and load capacity shall conform to Table B.1. The table pairs each load index from 60 to 199 with a load capacity in kilograms, running from 250 kg at index 60 to 13 600 kg at index 199.

C Annex C (normative) Relationship between speed symbol and maximum speed

The relationship between the speed symbol and the maximum running speed shall conform to Table C.1. The pairings are B 50 km/h, C 60 km/h, D 65 km/h, E 70 km/h, F 80 km/h, G 90 km/h, J 100 km/h, K 110 km/h, L 120 km/h, M 130 km/h, N 140 km/h, P 150 km/h, Q 160 km/h, R 170 km/h, S 180 km/h, T 190 km/h, U 200 km/h and H 210 km/h.

D Annex D (normative) Calculation and rounding of the maximum and minimum overall dimensions of a new tyre

D.1 Maximum and minimum overall width of a new tyre. The maximum and minimum overall widths of a truck tyre are calculated by the formulas given in Tables 1, 3, 17 to 19, 21, 22, 28 and 32, and the result of the calculation is rounded to the nearest whole millimetre.

D.2 Maximum and minimum outside diameter of a new tyre. For the maximum and minimum outside diameters of a truck tyre, the calculated design section height of the new tyre is first rounded to the nearest whole millimetre; the result of the design section height multiplied by the coefficient is then rounded to the nearest whole millimetre; and the calculation follows the formulas given in Tables 1, 3, 17 to 19, 21, 22, 28 and 32. For snow tyres, mud and snow tyres and special-purpose tyres the maximum outside diameter of the new tyre and the maximum in-service outside diameter of the tyre may be increased by 1 %, the result being rounded to the nearest whole millimetre. The design section height of the new tyre is calculated from formula (D.1) as half the difference between the design outside diameter and the nominal rim diameter. In the formula, H is the design section height of the new tyre in millimetres, D is the design outside diameter of the new tyre in millimetres and Dr is the nominal rim diameter in millimetres. The value taken for the nominal rim diameter shall comply with the relevant provisions of GB/T 6326.