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Replacing GB/T 6326-2014

Tyre - Vocabulary

轮胎 术语

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Foreword

This document was drafted in accordance with the provisions of GB/T 1.1-2020 "Directives for standardization - Part 1: Rules for the structure and drafting of standardizing documents".

This document replaces GB/T 6326-2014 "Tyre terms and definitions". Compared with GB/T 6326-2014, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) CHANGE the definitions of the terms "special use tyre", "motorcycle tyre", "moped tyre", "sidewall" (see 4.1.2, 4.3.9, 4.3.10, 5.3; 3.1.2, 3.3.9, 3.3.10, 4.3 of 2014 edition);
- b) ADD the terms "traction tyre", "professional off-road tyre", "ice tyre", "rail transit tyre", "straddle monorail tyre", "self-sealing tyre", "rim protector" (see 4.1.3, 4.1.4, 4.1.9, 4.3.13, 4.3.14, 4.4.33, 5.4);
- c) DELETE the terms "slush pattern", "snow pattern", "new tyre size", "traction resistance", "separation method measurement value", "machine method measurement value", "separation method", "moment of inertia", "measurement result correlation", "laboratory control tyre", "repeatability of measurement results", "corrected tyre deviation", "correction value", "rated takeoff speed", "rated landing speed", "rated takeoff load", "rated landing load", "incline test" (see 5.10, 5.11, 7.2, 8.12.3, 8.12.7, 8.12.8, 8.12.11 ~ 8.12.13, 8.12.19 ~ 8.12.22, 8.18.11, 8.18.13, 8.18.15, 8.18. 17, 8.18.21 of the 2014 edition);
- d) ADD the terms "vertical load", "ice grip index", "tractive force first harmonic", "laser shearography testing", "robustness factor" and "impact bulge energy" (see 9.2.1, 9.8.31, 9.11.11, 9.16.4, 9.19.1, 9.19.2);
- e) CHANGE the term "high-speed test" to "high speed performance test", "wet grip coefficient" to "wet grip index", "snow grip coefficient" to "snow grip index", "radial force" to "vertical force", "transverse force" to "lateral force", "lateral displacement" to "lateral deflection", "lateral rigidity" to "lateral stiffness"; meanwhile CHANGE the definitions (see 9.7.1, 9.8.29, 9.8.30, 9.17.1, 9.17.5 ~ 9.17.7; 8.6.1, 8.7.29, 8.7.30, 8.16.1, 8.16.5 ~ 8.16.7 of the 2014 edition);
- f) CHANGE the definitions of the terms "takeoff speed", "landing speed", "takeoff load", "landing load" (see $9.20.10 \sim 9.20.13$; 8.18.10, 8.18.12, 8.18.14, 8.18.16 of the 2014 edition);
- g) ADD the terms "bead ledge taper" and "load symbol" (see 9.20.22, 12.1.4);
- h) CHANGE the definitions of the sign terms "F" and "POR" (see 10.3.5, 10.3.16; 9.3.17, 9.3.21 of the 2014 edition);

Tyre - Vocabulary

1 Scope

This document defines terminology used in the tyre industry, including general terms and tyre classifications, tyre parts and components, tyre tread patterns, rims, tyre sizes, tyre performance and testing, tyre marking, tyre appearance defects, tyre use, tyre retreading and repair terms and their definitions.

This document applies to passenger car tyre, light truck tyre, truck and bus tyre, earthmover tyre, agricultural tyre, industrial tyre, motorcycle tyre, electric bicycle tyre, cycle tyre, aircraft tyre.

2 Normative references

This document has no normative references.

3 General terms

3.1

Tyre

A circular elastic product mounted on a wheel or machine wheel.

3.2

New tyre

Tyre that are neither used nor retreaded.

3.3

Grown tyre

Tyre whose rim size has expanded due to use.

3.4

Pneumatic tyre

The tyre, whose inner cavity of the tyre needs to be filled with compressed gas or liquid and can maintain the pressure.

Note: Divided into tube tyre and tubeless tyre.

3.5

Solid tyre

Cavity-less tyre that use materials with different properties to fill the tyre carcass.

3.6

Tubeless tyre

Pneumatic tyre that do not require an inner tube.

3.7

Tube tyre

A pneumatic tyre that requires an inner tube inside the tyre casing.

Note: Usually includes cover, inner tube, flap.

3.8

Cover

A tyre casing that can withstand various forces.

3.9

Inner tube

A circular elastic tube, which has a valve used to maintain the internal pressure of the tyre.

3.10

Flap

An annular band that protects the inner tube contact patch from rim wear.

3.11

Rim

The part of the wheel that mounts and supports the tyre.

4 Tyre classification

4.1 Classification by use

4.1.1

Normal tyre

Tyre designed for general use.

4.1.2

Special use tyre

Tyre designed mainly for use under off-road conditions, which can be used on mixed ordinary roads and off-roads, OR used under other special conditions.

Note: This type of tyre marking includes MPT (multi-purpose truck), ML (mining and logging), ET (extra tread), POR (professional off-road), MT (mud-terrain), RT (rugged-terrain), AT (all-terrain), etc.

4.1.3

Traction tyre

Tyre designed mainly for vehicle drive wheels, to maximize the transmission of vehicle power.

4.1.4

Professional off-road tyre

Tyre designed primarily for use in harsh off-road conditions.

Note: It is a kind of special purpose tyre.

4.1.5

Mud and snow tyre

The tyre, whose tyre pattern, tread compound, tyre structure are specially designed to provide better driving performance than ordinary tyre when driving in snowy, muddy or sandy areas.

4.1.6

Temporary-use spare tyre

The tyres, other than those installed on vehicles and used under specified driving conditions, are only used temporarily under limited driving conditions.

4.1.7

T-type temporary use spare tyre

The tyre, whose inflation pressure is higher than that of standard and reinforced tyre, is for temporary use only.

4.1.8

Snow tyre

Tyre which has specially designed tyre patterns, tread compounds or tyre structures that perform better than ordinary tyre, in terms of vehicle starting, handling and braking performance on icy and snowy roads or in cold conditions.

4.1.9

Ice tyre

Tyre which has specially designed tyre patterns, tread compounds or tyre structures that perform better than ordinary tyre, in terms of vehicle starting, handling and braking performance on icy road conditions.

Note: It is a kind of snow tyre.

4.1.10

Run flat tyre

Pneumatic tyres that are designed to travel under normal inflation conditions and can still travel a certain distance at a certain speed, under a lack of pressure condition.

4.1.11

Self-supporting run flat tyre

It is a pneumatic tyre, which is designed to be driven in a normal inflated state and can still travel a certain distance at a certain speed without any other accessories in a deflated state.

4.1.12

Internal support tyre

A tyre with supports in the inner cavity of the tyre.

4.2 Classification by structure

4.2.1

Structure type

Technical characteristics of tyre carcass.

Note: Including diagonal structure, bias-belted structure, radial structure, etc.

4.2.2

Diagonal tyre; bias-ply tyre

A pneumatic tyre in which the adjacent cords of the carcass ply and breaker intersect and are aligned at less than 90° with the tread centerline.

4.2.3

Bias-belted tyre; bias tyre

A pneumatic tyre in which the belt is composed of two or more layers of cord material that is basically inextensible, tightening the carcass ply in a bias structure.

4.2.4

Radial tyre

A pneumatic tyre in which the carcass ply cords are arranged at or close to 90° to the tread centerline and the belt is used to tighten the carcass.

4.3 Classification by matching vehicles or machinery or equipment

4.3.1

Passenger car tyre

Tyre designed primarily for use on passenger cars.

4.3.2

Truck and bus tyre

Tyre designed primarily for use on commercial vehicles and their trailers.

4.3.3

Light truck tyre

Tyre designed primarily for use on microcars or light commercial vehicles.

Note: It is a type of truck and bus tyre.

4.3.4

Earth-mover tyre

Tyre designed for use on wheeled construction machinery and construction vehicles.

Note: Construction machinery and vehicles are usually used for short-distance, low-speed, engineering operations on non-paved roads.

4.3.5

Industrial tyre

Tyre designed for use on industrial vehicles.

Note: Mainly divided into solid tyre and pneumatic tyre. Industrial vehicles are usually short-distance, low-speed, intermittent or periodic operation vehicles.

4.3.6

Agricultural tyre

Tyre designed for use on tractors, agricultural machinery, agricultural vehicles.

Note: Agricultural machinery and vehicles are usually used for low-speed operation machinery in various fields, such as farmland and sugarcane fields or for short-distance low-speed transportation operations in agricultural operating areas.

4.3.7

Logging tyre

Tyre designed for use on forestry machinery and forestry vehicles.

Note: Forestry machinery and vehicles are usually used for low-speed operations in various mountainous areas, such as forest areas and forest farms. It is a type of agricultural tyre.

4.3.8

Aircraft tyre

Pneumatic tyre designed for use on aircraft.

4.3.9

Motorcycle tyre

Tyre designed for use on motorcycles.

4.3.10

Moped tyre

Tyre designed for use on mopeds.

4.3.11

Cycle tyre

Tyre designed for non-motor vehicles such as trolleys, bicycles, tricycles.

4.3.12

Electric bicycle tyre

Tyre designed for use on e-bikes.

4.3.13

Rail transit tyre

Tyre designed for use on rail transit.

4.3.14

Straddle monorail tyre

Tyres designed for straddle-type monorail vehicles, which are a rail transit tyre.

4.4 Other tyres

4.4.1

Cast tyre

Tyre manufactured using a casting process.

4.4.2

Foam filled tyre

A tyre in which elastic foam material is used instead of compressed gas in the inner cavity of the tyre.

4.4.3

Removable tread tyre

Pneumatic tyre with replaceable tread.

4.4.4

Press-on solid tyre

A solid tyre with a steel ring that is press-fitted to the rim using an interference fit.

4.4.5

Cured-on solid tyre

Solid tyre without steel rims vulcanized directly on the rim.

4.4.6

Solid tyre for pneumatic tyre rim

A solid tyre mounted on a pneumatic tyre rim.

4.4.7

Cylindrical base solid tyre

A solid tyre with a cylindrical base and fastened to the rim.

4.4.8

Conical base solid tyre

A solid tyre with a conical base and mounted on a split rim.

4.4.9

Anti-static solid tyre

A solid tyre with conductive properties, that prevents the accumulation of static charges.

4.4.10

Conductive solid tyre

Solid tyre with resistance no greater than 2.5 \times $10^4~\Omega$ and capable of conducting electricity.

4.4.11

Oil-resistance solid tyre

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