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Motorcycle tyres

摩托车轮胎

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Motorcycle tyres

1 Scope

This document specifies the requirements, test methods and marking for motorcycle tyres.

This document applies to new pneumatic motorcycle tyres.

2 Normative references

The contents of the following documents, through normative references in this text, constitute indispensable provisions of this document. Among them, for dated references, only the edition corresponding to that date applies to this document. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 521 Test method of measuring peripheral dimensions for tyres

GB/T 2983 Series of motorcycle tyres

GB/T 6326 Tyre terms and definitions

GB/T 7036.2 Inner tube of pneumatic tyres - Part 2: Inner tube of motorcycle tyres

GB/T 8170 Rules of rounding off for numerical values and expression and judgement of limiting values

GB/T 13203 Test methods for verifying capabilities of motorcycle tyres

HG/T 2177 Appearance quality of tyres

3 Terms and definitions

The terms and definitions defined in GB/T 6326 and the following one apply to this document.

3.1

Motorcycle radial tyre

The pneumatic motorcycle tyre in which the carcass ply cords are arranged at

Tyres shall be tested for durability. After the durability test, the tyre shall not have defects such as delamination, chunking, crack, joint cracking, cord splitting or breaking. The test tyre pressure shall not be lower than the initial pressure.

4.5.3 High-speed performance

Tyres with speed symbol J and above shall be subjected to high-speed performance test. After the high-speed performance test, the tyre shall not have defects such as delamination, chunking, crack, joint cracking, cord splitting or break. The test tyre pressure shall not be lower than the initial pressure.

4.6 Tread wear mark

- **4.6.1** Each tyre shall, at equal distances along the circumferential direction, be provided with no less than 3 clearly-observable tread wear marks. And make the tread wear marks fall in the groove that is not more than 1/2 the tread width by the center of the tyre crown. The height of the tread wear mark shall not be less than 0.8 mm.
- **4.6.2** The shoulders on both sides of the tyre shall be moulded with marks indicating the position of the tread wear mark.

4.7 Appearance quality

- **4.7.1** The tyre shall not have appearance defects that seriously affect the service life; such as delamination between components, spongy, drawing-up and breaking of the traveler, multiple cord breaks, folds of the cord in the tyre, and rubber edge cords on the tyre crown, etc. The shape of the cushion belt shall not be broken; or the belt body shall be cracked.
- **4.7.2** Other appearance quality of tyres and cushion belts shall comply with the regulations of HG/T 2177.

4.8 Inner tube

If an inner tube is used, the inner tube shall meet the requirements of GB/T 7036.2.

5 Test methods

5.1 Refer to GB/T 2983 or relevant industry technical documents for test parameters such as tyre size, load index, load capacity, measuring rim, allowable rim and inflation pressure involved in the test methods. See Appendix B for the correspondence between tyre speed symbol and maximum driving speed. See Appendix C for the correspondence between tyre load index and

Appendix A

(Normative)

Requirements for peripheral dimensions of new tyres

A.1 Requirements for section width dimensions of new tyres

- **A.1.1** For tyres whose design section width is less than 100 mm, the new tyre's section width tolerance is ±4 mm.
- **A.1.2** For tyres whose design section width is 100 mm and above, the new tyre's section width tolerance is ±4%.
- **A.1.3** For tyres with a tread wider than their section width, the total width of the tread is designated as the section width; shall not be less than the minimum section width value of the new tyre.

A.2 Requirements for outer diameter dimensions of new tyres

A.2.1 The outer diameter dimensions of the new tyre shall not exceed the values of D_{min} and D_{max} obtained from formulas (A.1) and (A.2):

$$D_{\min} = d + 2H \times \text{Fh}_{\min}$$
 (A.1)

Where:

D_{min} - The minimum outer diameter of a new tyre, in millimeters (mm);

- d The nominal diameter of the rim, in millimeters (mm);
- H Design section height, in millimeters (mm);

Fh_{min} - Minimum tolerance factor.

$$D_{\text{max}} = d + 2H \times \text{Fh}_{\text{max}}$$
 (A.2)

Where:

D_{max} - The maximum outer diameter of a new tyre, in millimeters (mm);

- d The nominal diameter of the rim, in millimeters (mm);
- H Design section height, in millimeters (mm);

Fh_{max} - Maximum tolerance factor.

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