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

JT/T 1279-2019

Axle(wheel)weighing instrument for motor vehicle detection

机动车检测用轴（轮）重仪 清晰版

(English Translation)

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Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and definitions
4 Classification and model
5 Technical requirements
6 Test method
7 Inspection rules
8 Marking, packaging, transportation and storage
References

Foreword

This standard is in accordance with GB/T Draft the rules given in 1-2009.

This standard was proposed and managed by the National Technical Committee for Automobile Maintenance Standardization (SAC/TC 247).

This standard was drafted. Highway Research Institute of the Ministry of Transport, Zhejiang Jiangxing Automobile Testing Equipment Co., Ltd., China Testing Technology Research Institute Research Institute, Gansu Provincial Institute of Metrology, Shenzhen Anche Testing Co., Ltd., Shandong New Lexus Testing Technology Co., Ltd., Chengdu Chengbao Co., Ltd.

Development Co., Ltd., Shijiazhuang Huayan Transportation Technology Co., Ltd., Xiamen Metrology and Testing Institute, Nantong Automobile Comprehensive Performance Testing Center, Shandong University of Science and Technology Microcomputer Application Research Institute Co., Ltd.

1 Scope

This standard specifies the classification and model, technical requirements, test methods, inspection rules, and marks, Packaging, transportation and storage requirements.

This standard applies to single-axis and multi-axis motor vehicle axle (wheel) weight testers with weighing platform, and counter-force braking with rollers.

Production, inspection and use of axle (wheel) weight gauges for composite installation of

inspection stands.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 191 Packing, storage and transportation icon GB/T 13306 plate GB/T 13384 General technical requirements for packaging of mechanical and electrical products

3 Terms and definitions

The following terms and definitions apply to this document.

Axle (wheel) weight gauge for vehicle inspection axle (wheel) weighing inform for vehicle detective Equipment for testing the static axle (wheel) load quality of motor vehicles.

Axle (wheel) weight (weel) weigh the static axle load or wheel load mass of a motor vehicle.

Rated bearing mass capacity loose capacity the maximum allowable axle mass of the axle (wheel) weight gauge.

The difference between the indicated values is differentiator between values Under the same load, the absolute value of the difference between the indication errors of the left and right weighing platforms of the wheel scale.

3. Five

No-load variability

No-load return performance of the axle (wheel) weight gauge.

Weighing plate

Shaft (wheel) weight gauges are used to carry the load under load.

JT/T 1279-2019

4 Classification and model

4.1

Classification

According to the rated load quality, the axle (wheel) weight meter for motor vehicle testing [hereinafter referred to as the axle (wheel) weight meter] is divided into 3t or less, 3t to 13t, and 13t or less.

Up three levels.

4.2

Model

Refer to Figure 1 for the model nomenclature.

Figure 1 Model designation

Example.

x x x x -ZLLZ-03B, which represents a shaft (wheel) weight gauge with a rated load of 3t and a second improved design.

5 Technical requirements

5.1

Basic requirements

5.1.1

Working conditions Under the following environmental conditions, the axle (wheel) weight gauge should be able to work normally.

- a) Ambient temperature. -10 ° C to 40 ° C;
- b) Relative humidity. not more than 85%;
- c) Working voltage. AC 198V ~ 242V, 49Hz ~ 51Hz.

5.1.2

Functional requirements

5.1.2.1

The axle (wheel) weight gauge should have a display function.

5.1.2.2

The axle (wheel) weight gauge should have a communication interface and provide interface definitions and related communication protocols.

5.1.3

Units of measurement the unit of physical quantity displayed and output by the axle (wheel) scale is kilogram (kg).

5.1.4

Resolution

The resolution of the display device of the axle (wheel) weight gauge should meet the requirements in Table 1.

JT/T 1279-2019

Table 1 The resolution of the display device of the axle (wheel) weight gauge is in kilograms

Maximum weighing m Display device resolution d $m \leq 3\,000$ $d \leq 1$ $3\,000 < m \leq 13\,000$
 $d \leq 2$ $m > 13\,000$ $d \leq 5$

5.2

Performance requirements

5.2.1

Indication error the indication error should meet the following requirements.

- a) When the formula value is $\leq 10\%$ FS, the maximum allowable error of the axle (wheel) weight gauge is $\pm 0.2\%$ FS;
- b) When the formula value is $> 10\%$ FS, the maximum allowable error of the axle (wheel) weight gauge is $\pm 2\%$.

Note: FS stands for full scale.

5.2.2

Repeatability

Weighing multiple times under the same load, the repeatability between the weighing results of the axle (wheel) weighing machine should meet the following requirements.

- a) When the value of the formula is $\leq 10\%$ FS, it should not be greater than $1/2$ of the absolute value of the maximum allowable error of the weighing point;
- b) When the formula value is $> 10\%$ FS, it should not be greater than $1/2$ of the absolute value of the maximum allowable error of the weighing point and the actual loading value of the weighing point.

product.

5.2.3

Difference between indications Under the same load, the difference between the indications of the left and right weighing platforms of the wheel loader should not be greater than the absolute value of the maximum allowable error of the weighing point.

5.2.4

Eccentric load error when the same load is at different positions on the weighing platform, the error of the displayed value should conform to 5.2. The requirements of 1 shall not be greater than the difference between the indicated values.

The absolute maximum allowable point error is $1/4$.