

ICS 59.140.35

QB

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

QB/T 2922-2018

**Case and bag - Test method for shaking impact
(English Translation)**

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Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard is a revision to QB/T 2922-2007 "Case and bag - Test method for fall down".

Compared with QB/T 2922-2007, in addition to editorial modifications, the main technical changes are as follows.

- modified the requirements for "impact device";
- added the requirements for "fixture";
- added the requirements for "suction cup noise reducer";
- modified the requirements for "control device";
- deleted the requirements for "specified load";
- added "normative Annex A".

This Standard was proposed by China Light Industry Federation.

This Standard shall be under the jurisdiction of National Technical Committee on Leather Industry of Standardization Administration of China (SAC/TC 252).

Main drafting organizations of this Standard. Dongguan Hengyu Instrument Co., Ltd., National Leather Products Quality Supervision and Inspection Center (Guangzhou), Yangyi Testing Technology Co., Ltd., New Belle Shoes

(Shenzhen) Co., Ltd., Fujian Baolande Luggage Leather Co., Ltd., Guangdong Xiangchen Boxing Technology Co., Ltd., China Leather and Footwear Industry Research Institute, Guangzhou Quality Supervision and Inspection Institute, Guangzhou Shangyi Clothing Co., Ltd., Nike Sporting Goods Co., Ltd.

Main drafters of this Standard. Chen Zongliang, Zan Zhiyi, Sun Shizhen, Zhao Liguo, Liu Long, Huang Yongqin, Deng Chengliang, Chen Lijian, Wang Yong.

Since the implementation of this Standard, it shall replace the former light industry standard QB/T 2922-2007 "Case and bag - Test method for fall down", QB/T 2922-2007 is repealed simultaneously.

Version of standard substituted by this Standard is.

- QB/T 2922-2007.

Case and bag - Test method for shaking impact

1 Scope

This Standard specifies the principle, devices and test methods for shaking impact test of case and bag.

This Standard is applicable to various daily cases and bags.

2 Principle

Apply the specified load in the case and bag. Lift the case and bag to the specified stroke by lifting the strap, strap (or fully open lever). Perform free fall application under gravity (the rod test uses uniform motion). Through the impact and absorption of the impact force by the spring, make the case and bag be shaken and impacted. Thereby check the anti-shaking impact performance of the handle, the strap, the tie rod and the case (bag) body.

3.1 Shock impact tester

The case and bag shaking impact tester shall include the components specified in 3.1.1 to 3.1.7. See Annex A for the structure of the main components.

3.1.1 Impact device

See Figure A.1 in Annex A for a schematic diagram. The impact device includes a lower suction cup, an upper damping rubber block, a shock absorbing spring, a lower shock absorbing rubber block, an impact rod, and a common clamp (shoulder strap clamp).

3.1.3 Damping spring

See Figure A.3 in Annex A for a schematic diagram. The spring constant is (17.54 ± 0.88) N/mm. The spring section is rectangular (8.5mm x 4.2mm), length of (165 ± 5) mm, outer diameter of (44.5 ± 0.5) mm, inner diameter of (28.0 ± 0.5) mm, total number of turns of (17 ± 0.5) .

3.1.4 Impact rod

See Figure A.4 in Annex A for a schematic diagram. Dimensions shall comply with the requirements of Figure A.4 of Annex A.

3.1.5 Damping block

A cylindrical damping rubber block is mounted at each end of the damping spring. See Figure A.5 in Annex A for a schematic diagram.

3.1.6 Fixture

Including common fixtures and shoulder strap clamps, see Figure A.6, Figure A.7 in Annex A. Double shoulder strap clamps can be installed in common fixtures. The inside of common clamps shall be lined with soft film to avoid wear samples.

3.1.7 Control device

It can adjust the shacking impact rate, can set and record the number of impact tests, and has the function of automatic drop stop when the sample falls.

4 Sample preparation

The sample is placed at a temperature of 16°C ~ 30°C for not less than 2h. The sample shall be tested at this ambient temperature. The sample shall not be pressurized during parking.

5.1 Apply the specified load into the sample case, the inside of the bag.

Distribute the load evenly.

5.4 The test frequency is preferentially set to (20±2) times/min, or tested according to the specified test frequency.

300 times, 500 times, 1,000 times, etc., or test according to the specified

number of times.

5.6 After the test, check the handle (side handle), whether the tie rod is detached or damaged, whether the metal fitting is damaged, whether the thread is broken or not, whether the thread is broken or not, whether the case (including body) is deformed or damaged, or other defects affecting appearance and function.

6 Results representation

The results are expressed in terms of the number of shaking and the apparent quality of the product after the test.

7 Test report

The test report shall include the following information.

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