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

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**Bulk-cement delivery tanker security quality**

散装水泥车罐体安全质量

**(English Translation)**

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### Foreword

4.2,4.5.2,4.5.3,4.5.4,4.6,4.7 this standard are mandatory, the rest are recommended.

The standard reference QC/T 560-1999 "bulk cement truck technical conditions" and QC/T 561-1999 "bulk cement truck performance test Based approach "of the content of and in accordance with the requirements of the relevant existing regulatory documents developed.

This standard is proposed and managed by the China Federation of Logistics and Purchasing.

This standard was drafted. Anhui star horse Automobile Co., Ltd., Wuhan Special Purpose Vehicle Group, Nanjing Tianyin Special Purpose Vehicle Co., Division, the China Construction Second Board Construction Machinery Factory in Dongguan City Yongqiang Automobile Manufacturing Co., Ltd.

## 1 Scope

This standard specifies the bulk cement tank car safety and quality-related terms and definitions, tank requirements, test methods and inspection rules.

This standard applies to the quality and safety of road transport bulk cement truck tank assessment.

## 2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB 150-1998 Steel Pressure Vessels GB 2894-1996 Safety Signs JG/T 5021-1993 gas unloading bulk cement trucks unloading quick connector

## 3 Terms and Definitions

The following terms and definitions apply to this standard.

Can carry, can tank container for bulk cement and other powder materials pneumatic conveying.

In the pneumatic conveying state, the maximum allowed pressure tank.

Realization of special equipment and means of delivery fastening the tank.

Gas realization tank body powder materials pneumatic conveying pipelines, pipeline materials and all kinds of fittings and pipes connected to the valve, Instrumentation.

Tank loading and unloading in the implementation process, to ensure the safety and security configuration facilities and warning signs.

### 4.1 Maximum operating pressure

Maximum working pressure of the tank should not exceed 0.2MPa.

## **4.2 Strength**

Steady boost to the tank maximum working pressure of 1.15 times, sustained 30min, during the test and no abnormal noise visible deformation.

## **4.3 Tightness**

After the tank pressure reaches 0.2MPa, stop gas supply 30min, weld not leak and pressure drop should be less than 0.015MPa.

## **4.4 Tank connecting means**

Tank connecting device should have sufficient strength to meet the pneumatic conveying powder materials and transport requirements of bulk cement.

## **4.5 Tank delivery device**

### **4.5.1**

tank transport means should guarantee claim pneumatic conveying, not leak.

### **4.5.2**

tank delivery device pipeline and fittings at 1.15 times the maximum working pressure pneumatic test, should be sealed and no reliable See deformation.

### **4.5.3**

tank or transport means shall be provided pressure gauge accuracy rating of not less than 2.5, the installation location easy operator observation.

### **4.5.4**

tank transport means shall be provided a safety valve, safety valve discharge function should be able to meet the security requirements of pneumatic conveying, safety valve should be waterproof, Installation location for easy inspection and maintenance.

### **4.5.5**

unloading quick connectors shall conform to JG/T 5021-1993 requirements and regulations.

## **4.6 Tank safety device**

### **4.6.1**

The tank should be set up near the mouth of the feed table and fence and other safety devices, workstations should be non-slip, easy drainage.

### **4.6.2**

open and close the tank lid material should be light and flexible, reliable sealing; safety

interlock device shall be provided.

#### **4.6.3**

The tank should be set up relief device, relief device should be easy to operate.

#### **4.6.4**

tanks shall be marked with warning signs prominently.

### **4.7 Tank head**

Tank head should be in line with GB 150-1998 and 10.2.3 in Chapter 7 of the regulations and requirements.

### **4.8 Tank and tank welding**

Tanks shall not have cracks, corrosion and other significantly affect the mechanical strength and stiffness of the material defects; weld surface shall not have cracks, lack of fusion, incomplete Penetration, slag and other phenomena, the weld surface of the undercut depth of not more than 0.5mm, the length of continuous biting edges shall not exceed 100mm. Both sides of the weld Undercut total length may not exceed 10% of the weld length.

### **5.1 Working pressure tank**

Tank in pneumatic conveying health standard conditions by observation tank gauges working pressure is less than 0.2MPa (bulk cement truck Nominal compressor discharge pressure to use not more than 0.2MPa, so the tank should not exceed the maximum working pressure 0.2MPa).

### **5.2 Body strength**

After steady boost to the tank under 1.15 times the maximum working pressure continued 30min, check the tank if there is abnormal noise and visible deformation.

### **5.3 Tank tightness**

After the tank pressure reaches 0.2MPa, stop gas supply, 30min after the weld not leak and pressure drop should be less than 0.015MPa.

### **5.4 Tank connecting means**

Let the tank is connected with the vehicle, it does carry the full load test of 20km, connecting means checking whether there is enough to meet the bulk cement Powder and other materials to achieve the strength of pneumatic conveying and transport requirements.