

ICS 71.120; 81.040.30
CCS G 94



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

GB/T 21409-2008

**Glass plant, pipeline and fittings -- General rules for testing,
handling and use**

玻璃设备、管道和管件 检验、安装和使用的一般规则

(English Translation)

Issued on: February 1, 2008

Implemented on: July 1, 2008

Issued by: Standardization Administration of China

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Foreword

This standard is identical with ISO 3586. 1976 (2005) "Glass equipment, pipes and fittings --- testing, installation and use of the general rule." (In English).

This standard is equivalent translation ISO 3586. 1976 (2005).

For ease of use, this standard made the following editorial changes.

--- "This International Standard" by "this standard";

--- Delete foreword international standards;

--- Some of the statements apply to international standards to apply to our standard formulation;

--- Remove the "Normative references" in the ISO 4704 "glass equipment, pipes and fittings --- glass assembly" and ISO 3587 "Glass Glass equipment, pipes and fittings --- 15mm ~ 150mm diameter pipe and fittings versatility and interchangeability, "two documents, because these two files in a standard text virtually no reference.

The standard proposed by China Petroleum and Chemical Industry Association.

This standard by the National Non-metallic chemical equipment Standardization Technical Committee centralized (SAC/TC162).

This standard was drafted. Beijing Glass Instrument Factory, Tianhua Institute of Chemical Machinery and Automation.

1 Scope

This standard specifies the general rules for glass equipment, pipes and fittings test installation and use.

This standard does not involve the design of the glass pieces.

When installing piping or equipment shall comply with the relevant safety procedures for pressure equipment must also comply with the rules relating to the pressure vessel.

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.

ISO 3585 borosilicate glass 3.3 performance

3 Materials

Physical and chemical properties of the structural material of glass equipment shall comply with the requirements of ISO 3585.

The working fluid in contact with the material of the gasket, the manufacturer's instructions should be used.

4.1 Factory inspection

As all parts of the pressure vessel equipment, the manufacturer shall conduct regular stress testing.

Hydraulic test pressure test should be used.

All pressure tests should be recorded in detail, in order to review past tests and to provide users with inspection certificate.

4.2 Inspected by the user

Glass equipment and the assembled system, and its maximum operating temperature must not exceed the maximum working pressure recommended by the manufacturer data.

4.2.1

no manufacturer or supplier sectors agreed by both parties participate, the user shall not carry out on-site inspection of pressure.

When assembly 4.2.2 pipe pressure test site, should also be used hydraulic test. When the device is connected, it should pay attention to drain the system empty Gas, in order to ensure that the various stresses of the device is not connected by the assembly or by pressure testing equipment caused. Added to the total on the entire assembly Pressure must not exceed its maximum operating pressure. Equipment should have the proper

screen protection layer to protect the operator.

Note: measuring overall system pressure at a certain point, indicating the pressure value with the pressure of the system deviation, with the difference of the static liquid Head values. Therefore, if the pressure is not measured at the lowest point of assembly were, it is estimated that there will be a pressure higher than the indicated values.

4.2.3

above the standpipe assembly of hydrostatic head as the hydraulic pressure source. If this is not possible in practice, in order to reliably, can be Hydraulic pump.

4.2.4

In fact, if the hydraulic test method can not be used, you can use the device with a water seal air pressure to test its air pressure 10kPa (Figure 1), and check whether the junction leakage. If you find leaks, before the device begins working pressure should be reduced force. When used under vacuum conditions, equipment to be evacuated by the pressure with respect to the known internal volume increase can be detected any leaks.

4.2.5

Test Method should be a detailed written report, its purpose is to carry out the inspection and subsequent security operations, and user-friendly system Factory inspection process can be made to make this record. After the inspection, any equipment necessary changes or adjustments must be recorded in the report.

GB/T 21409-2008/ISO 3586. 1976 (2005)