

ICS 19.060; 77.040.10
CCS N 71



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

GB/T 16825.2-2018

**Verification of static uniaxial testing machines -- Part 2: Tension
creep testing machines -- Verification of the applied force**

Issued on: June 7, 2018

Implemented on: January 1, 2019

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 symbols and their meaning
- 4 General inspection of the test machine

Foreword

GB/T 16825 "Test of static single-axis testing machine" is divided into the following two parts.

--- Part 1. Inspection and calibration of the force measurement system of tension and/or pressure testing machine;

--- Part 2. Test of the applied force of the tensile creep tester.

This part is the second part of GB/T 16825.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part replaces GB/T 16825.2-2005 "Test of static single-axis testing machine - Part 2. Tensile creep test machine

The main technical changes are as follows. Compared with GB/T 16825.2-2005.

--- Added the relevant content of the spring type creep test machine (see Chapter 1, Chapter 3, 5.5.7, 6.4, Table 1, Table 4 and Figure A.9);

--- Revised the footnotes in Chapter 1 (see footnotes in Chapter 1, footnotes in Chapter 1 of the.2005 edition);

---Modified the guiding language of the normative reference documents in Chapter 2; and replaced it with the international standard ISO 204

National standard GB/T 2039-1997 converted from ISO 204 (see Chapter 2, Chapter 2 of the.2005 edition);

--- Added a footnote to the symbol "m" in Table 1 (see Table 1);

--- Revised the footnote of the symbol "gn" in Table 1 (see Table 1, Table 1 of the.2005 edition);

--- Revised the details in Figure A.1 ~ Figure A.8 according to the rules of mechanical

drawing in China and moved the figure from the text to Appendix A (see Figure A.1~ Figure A.8, Figure 1 to Figure 8 of the 2005 edition;

--- Revised the inspection cycle of the weight [see 5.2a), 2005 edition of 5.2a)];

--- Change the term "dynamometer" used in some articles to "sensor" (see 5.5.2, 2005 version 5.5.2).

This part uses the translation method equivalent to ISO 7500-2:2006 "Metal material static single-axis testing machine inspection part 2. pull

Test of the force applied by the force creep tester.

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

---GB/T 13634-2008 Calibration of standard dynamometer for inspection of single-axis testing machine (ISO 376:2004, IDT)

---GB/T 2039-2012 Test method for uniaxial tensile creep of metallic materials (ISO 204:2009, MOD)

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

--- In accordance with the name of the first part of GB/T 16825, the name of this part was changed to "Second inspection of static single-axis testing machine"

Part. Inspection of the force applied by the tensile creep tester.

1 Scope

This part of GB/T 16825 specifies the test of tensile creep tester for static uniaxial tensile creep test according to ISO 204.

method.

The inspection includes.

---General inspection of the test machine;

--- Test the force applied by the test machine.

This section applies to static, lever and spring type creep testers.

The test machine with the force measuring system 1) should be tested according to GB/T 16825.1.

1) The force measurement system referred to here includes force sensors, signal processing and indicating devices.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

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

ISO 204 metal material uniaxial tensile creep test test method
(Metalicmaterials-Uniaxialcreep testing

intension-Methodoftest)

Calibration of standard dynamometers for ISO 376 single-axis testing machines
(Metalicmaterials-Calibrationofforce-proving

Instrumentsusedfortheverificationofuniaxialtestingmachines)

3 symbols and their meaning

The symbols in Table 1 apply to this section.

The following types of creep testers should be distinguished when using symbols.

--- Static or heavy test machine with or without guide (see Figure A.1 and Figure A.2);

---Upper lever or lower lever type testing machine (see Figure A.3, Figure A.4 and Figure A.5);

--- Upper lever type or lower lever type test machine with moving weight (see Figure A.6 and Figure A.7);

---The test machine of the above type combination (see Figure A.8);

--- Tester using spring force (see Figure A.9).

4 General inspection of the test machine

The test machine can only be inspected if it is in good working condition. To this end, before testing the force exerted by the testing machine, the test should be

Check the machine for general inspection (see Appendix A).