

ICS 19.060
CCS N70



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

GB/T 2611-2022

Replacing GB/T 2611-2007

Testing machines - General requirements

试验机 通用技术要求

Issued on: December 30, 2022

Implemented on: July 1, 2023

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

1	Scope
2	Normative references
3	Terms and Definitions
4	Basic requirements
5	Parts Requirements
5.2	Castings
6	Safety of assembly and machinery
7	Electrical system
8	Hydraulic system
9	Pneumatic system
10	Appearance quality
11	Identification and inspection
12	Accessories, Tools and Technical Documents Supplied

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1. Structure and Drafting Rules for Standardization Documents" drafting. This document replaces GB/T 2611-2007 "General Technical Requirements for Testing Machines". Compared with GB/T 2611-2007, except for structural adjustment In addition to editorial changes, the main technical changes are as follows:

- Delete the requirement for the unit of measurement (see 3.1.2 of the.2007 edition);
- Deleted the requirements for the organization that submitted the type inspection (see 3.2.3 of the.2007 edition);
- Changed the content of the basic requirements (see Chapter 4, Chapter 3 of the.2007 edition);
- Added general requirements for parts (see 5.1);
- Changed the inspection requirements before assembly of parts (see 6.1.2, 4.1.2 of the.2007 edition);

- Added requirements for protective devices (see 6.2.5);
- Change "electrical equipment" to "electrical system" (see Chapter 7, Chapter 7 of the 2007 edition);
- Increased the requirements for the electrical system of the portable testing machine (see 7.1.1);
- Changed the requirements for the height of the electrical system from the ground (see 7.1.6,

1 Scope

GB/T 2611-2022 is the Chinese national standard on testing machines - general requirements, in the field of testing. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 December 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2023.

Classification: ICS 19.060, CCS N70. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the basic requirements of the testing machine, parts requirements, assembly and mechanical safety, electrical system, hydraulic system, pneumatic system, external Requirements for visual quality, identification, inspection, accompanying accessories, tools and technical documents. This document is applicable to testing machines for metallic materials, testing machines for non-metallic materials, balancing machines, vibrating tables, Shape testing instruments, process testing machines, packaging testing machines and non-destructive testing instruments (hereinafter referred to as "testing machines").

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 5226.1-2019 Electrical Safety of Machinery and Electrical Equipment Part

3 Terms and Definitions

This document does not have terms and definitions that need to be defined.

4 Basic requirements

4.1 The terms used in the testing machine shall comply with the provisions of GB/T 6444 and GB/T 36416 (all parts).

4.2 The design of the testing machine should meet the requirements of low energy consumption, high efficiency, safety and environmental protection.

4.3 The testing machine should have reasonable structure, stable and reliable performance, easy operation and ergonomics, and should be easy to assemble and maintain. Operation should be guaranteed Personnel can use convenient and conventional methods for operation, inspection or maintenance.

4.4 The electrical system of the testing machine should ensure that the testing machine is in normal working condition, and the test data should be accurate, timely and stable.

4.5 The place where the testing machine is used should have appropriate space to ensure the normal and stable operation of the testing machine and meet the needs of workpiece transportation.

4.6 The auxiliary devices of the testing machine (including those added later) should not affect the operation and performance of the testing machine.

4.7 The testing machine should work normally under the working environment conditions specified in its product standards or technical requirements.

5 Parts Requirements

5.1 General requirements The specifications, materials, quantity, size, shape or position of the parts of the testing machine shall comply with the drawings, technical requirements and relevant standards.

5.2 Castings

5.2.1 The material and mechanical properties of castings should meet the requirements of the corresponding material standards.