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

GB/T 26171-2025

Replacing GB/T 26171-2010

**Inspection methods for special equipment of electric wire and
cable**

电线电缆专用设备检测方法

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 26171-2010 "Test Methods for Special Equipment for Wires and Cables". Compared with GB/T 26171-2010, except for the structure... Aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The "Terminology and Definitions" section has been changed (see Chapter 3, Chapter 3 of the.2010 edition);
- b) Added requirements for "testing environment and conditions" (see Chapter 4);
- c) The requirement to "inspect the paint film quality using a coating thickness gauge" has been added (see 5.4.4);
- d) The requirements for "Noise Detection Methods" have been changed (see 5.6, 4.6 of the.2010 edition);
- e) The requirements for "Reliability Testing" have been changed (see 6.2.2.3, 5.2.2.2 in the.2010 version);
- f) The requirements for "Outgoing Line Speed Detection" have been changed (see 6.2.2.4, 5.2.2.3 in the.2010 version);
- g) The requirement for "unit energy consumption value testing" has been added (see 6.2.2.6);
- h) The requirements for "assembly accuracy inspection of the support roller" and "contact surface inspection between the cylinder support roller ring and the support roller" have been removed (see the.2010 version). 5.3.4.2, 5.3.4.4);
- i) The requirements for "Cylinder Precision Inspection", "Wire Coil Frame Precision

Inspection", and "Cylinder Assembly Precision Inspection" have been changed (see 6.3.3.1, 6.3.3.2,...). 6.3.4.1 (5.3.3.1, 5.3.3.2, and

1 Scope

GB/T 26171-2025 is the Chinese national standard on inspection methods for special equipment of electric wire and cable, in the field of electrical engineering. 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 5 October 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2026. Classification: ICS 29.100.01, CCS K97. 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 defines the relevant terms and definitions for testing equipment for wires and cables, and describes general testing methods and special testing methods. This document applies to continuous casting and rolling equipment, wire drawing equipment, tubular stranding equipment, frame stranding equipment, and cradle-type forming equipment used in the production of wires and cables. Testing of cable equipment, reel cabling equipment, winding wire enameling equipment, concentric stranding equipment, bundle stranding equipment, and single screw extrusion equipment.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 2900.40 Electrical Terminology - Special Equipment for Wires and Cables

GB/T 11354 Determination of nitrided layer depth and metallographic examination of steel parts

GB/T 13924 Precision Inspection Guidelines for Involute Cylindrical Gears

GB/T 17421.5 General Rules for Machine Tool Inspection - Part

5.Determination of Noise Emission GB /Z 18620.4 Inspection Implementation Standard for Cylindrical Gears - Part

3 Terms and Definitions

The terms and definitions defined in GB/T 2900.40 and JB/T 5817.1, as well as the following terms and definitions, apply to this document.

3.1 Equipment for continuously smelting, casting, rolling and winding electrolytic copper, aluminum blocks or ingots into coils to produce rods. [Source: GB/T 2900.40-1985, 1.2]

3.2 rod (pole material) Large-length circular cross-section materials that conform to wire and cable standards or other industry standards.

3.3 Crystallization wheel In continuous casting and rolling equipment, liquid copper or aluminum is converted into solid wheels.

3.4 Roller Rollers are used to extrude ingots into rods with cross-sectional shapes that meet technical requirements.

4 Inspection of Surface Texture and Tooth Contact Pattern

GB/T 23644 General Technical Requirements for Electrical Equipment

GB/T 33580 Energy Consumption Test Method for Rubber and Plastic Extruders

JB/T 5817.1 Types and Dimensions of Stranding Equipment for Wires and Cables - Part