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

GB/T 17737.310-2018

**Coaxial communication cables -- Part 1-310: Mechanical test
methods -- Test for torsion characteristics of copper-clad
metals**

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Foreword

GB/T 17737 "Coaxial Communication Cable" has or plans to issue the following parts.

--- Part 1. General rules, definitions and requirements;

--- Section 1-31 . Mechanical test methods ; Ellipticity test ;

-- Part 1-302 . Mechanical test methods ; eccentricity test ;

-- Part 1-304 . Mechanical test methods ; Impact test ;

Part 1-108 . Mechanical test methods -- Tensile strength and elongation test of copper clad metal ;

--- Part 1-310. Mechanical test methods Torsional characteristics of copper clad metal;

--- Part 1-313. Mechanical test methods Adhesion of media and sheath;

--- Part 1-314. Mechanical test methods Bending test of cables;

--- Part 1-316. Mechanical test methods Maximum tensile strength test of cables;

--- Part 1-317. Mechanical test methods Cable compression test;

--- Sections 1-318. Mechanical test methods Thermal performance test;

--- Part 1-324 . Mechanical test methods Cable abrasion resistance test ;

--- Part 1-325 . Mechanical test methods Wind - induced vibration test ;

This part is part 1-310 of GB/T 17737.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the translation method equivalent to the use of IEC 61196-1-310.2005 "coaxial communication cable part 1-310. mechanical test methods

Copper Clad Metal Torsional Characteristics Test."

1 Scope

This part of GB/T 17737 applies to coaxial communication cables. It specifies the test for determining the torsional characteristics of the copper-clad metal of a coaxial cable.

method.

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 version (including all amendments) applies to this document.

GB/T 17737.1-2013 Coaxial telecommunication cable Part 1. General specifications General, definitions and requirements (IEC 61196-1.2005, IDT)

3 Terms and definitions

The terms and definitions defined in GB/T 17737.1-2013 apply to this document.

4.1 Principle

This test is used to test the integrity of the surface of the wire, the inner metal, and the bond between the copper layer and its inner metal.

4.2 Test Equipment

There are two cartridges on the track, one of which is non-rotatable and the other can be twisted in some way to create a wire sample.

Torque. Non-rotating chucks should be able to adjust along the track so that the length of the specimen between the fixtures is 100 times the diameter of the specimen. Unrotatable

A slight tension is applied to the collet to keep the twisted wire flat and the twisting speed is approximately 15 revolutions per minute.

4.3 sample preparation

The specimen length between the fixtures is 100 times the specimen diameter and should be straight.

4.4 Procedures

After 20 twist tests, the integrity of the surface and inner metal was examined.

Continue turning the wire until it breaks, then check the separation of the copper section of the section and the end of the inner metal.

4.5 Expression of results

After 20 twist tests on the length of the sample with a length of 100 times the diameter of the sample, it is indicated whether there is any seam on the surface of the sample.