

ICS 65.160
CCS X 85

YC

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

YC/T 169.1-2002

Replacing YC/T 169.1-2002

**Determination of physical and chemical characteristics of tow
for cigarette. Part 1: Total line density
(English Translation)**

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Foreword

YC/T 169 "cigarette tow physical and chemical properties of determination" is divided into 12 parts.

- Part 1. tow linear density;
- Part 2. Single yarn density;
- Part 3. number of crimps;
- Part 4. tow crimp index and the crimp tow elastic recovery;
- Part 5. breaking strength;
- Part 6. cross-sectional shape and radial shaped degree;
- Part 7. Regain;
- Part 8. moisture content;
- Part 9. oil content;
- Part 10. residual acetone content;
- Part 11. Titanium dioxide content;
- Part 12. Packaging and appearance.

This section YC/T 169 - Part 1.

This Part replaces YC/T 169.1-2002 "tow for cigarette was measured series of standards - Part 1. tow linear density." this section compared with YC/T 169.1-2002 main changes are as follows.

--- By the name of this section. Change "series of standard measurement of tow for cigarette tow linear density Part 1," "cigarette tow physicochemical properties

Determination Part 1. tow linear density ";

--- "Normative references" to remove the GB/T 6529 "textiles conditioning and testing using standard atmosphere," adds GB/T 16447 "Tobacco and tobacco products, regulating and testing atmosphere";

--- Modified atmospheric conditions adjustment and testing requirements;

--- Modify the sense of balance in the amount of instruments, equipment chapter;

--- Instrument, apparatus adds timing device;

--- Measurement report adds two things. "Differences between the provisions of this section measuring step" and "observed anomalies in the test." this part by the State Tobacco Monopoly Bureau.

This part of the National Standardization Technical Committee of tobacco smokable material Technical Committee (SAC/TC144/SC8) centralized.

This section drafted by. China National Tobacco Quality Supervision and Inspection Center, Nantong Cellulose Fibers Co., Ltd. Ya Technology Co., Ltd., Zhuhai Sea Acetate Co., Ltd. Kunming acetate fiber.

1 Scope

YC/T in this part 169 specifies the method for the determination of smoke density of the tow line.

This section applies to tobacco smoke and cellulose diacetate tow polypropylene fiber tow.

2 Normative references

The following documents contain provisions which, through reference YC/T 169 of this text, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 16447 Tobacco and tobacco products for conditioning and testing atmospheres (GB/T 16447-2004, ISO 3402:1999, IDT) Principle 3 Within a certain time, for a certain load is applied to eliminate the tow crimp of the tow, and the tow was weighed interception of a certain length, and by scoring Operators drawn tow linear density, special kilo (ktex).

4 Instruments and equipment

Determination of linear density of tow equipment should meet the following requirements.

- a) Load. tow for eliminating curl, where tobacco cellulose diacetate tow load should meet $22.2\text{N} \pm 0.2\text{N}$, tobacco poly Acrylic fiber tow load should meet $39.2\text{N} \pm 0.2\text{N}$;
- b) Fixture. for holding the sample, should be able to clamp the specimen without slippage;
- c) the knife. for cutting specimens should be kept sharp knife from the knife between the two meet $1000\text{mm} \pm 1\text{mm}$;
- d) balance. a sense of the amount of 0.001g ;
- e) Timing. means for applying a load recording time with an accuracy of $\pm 1\text{s}$;
- f) Other tools. gloves, scissors and so on.

5 Sampling

From laboratory samples randomly intercepted 1.2m long curly undamaged tow. 10.

6 Measuring step

6.1

Before the test, according to GB/T 16447 samples were adjusted to regulate the more than 12h, and tested under the appropriate environmental conditions.

6.2

Select the load based on a sample.

6.3

The sample was fixed at one end, the other end of the load is applied and kept 2min after the closing fixture, jig with a cutter along the cut sample, laid in the balances on weighing, accurate to 0.001g .

NOTE: throughout the tow should not be affected by the stretching process in addition to the impact load.

6.4

Repeat step 6.3, a total of 10 test specimens.