

ICS 65.160  
CCS X87



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

**GB/T 22838.13-2009**

---

**Determination of physical characteristics for cigarettes and  
filter rods - Part 13: Filter rods roundness**

卷烟和滤棒物理性能的测定 第13部分：滤棒圆度

**Issued on: April 3, 2009**

**Implemented on: May 1, 2009**

---

**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine of the People's Republic of China;  
Standardization Administration of China**

## Table of Contents

- 1 Scope
- 2 Normative references
- 4 Equipment
- 5 Sampling and Sample Preparation
- 6 Measuring step
- 6.5 Repeat steps

### Foreword

GB/T 22838 "cigarettes and filter rods - Determination of physical properties" is divided into 18 sections;

- Part 1. cigarette packaging and labeling;
- Part 2. Photoelectric length method;
- Part 3. circumferential laser method;
- Part 4. quality of cigarettes;
- Part 5. Draw resistance of cigarettes and filter rods pressure drop;
- Part 6. hardness;
- Part 7. Cigarettes dust rate;
- Part 8. moisture content;
- Part 9. Cigarettes short;
- Part 10. population explosion;
- Part 11. Cigarettes extinguish;
- Part 12. Cigarettes appearance;
- Part 13. Filter Rod roundness;

### 1 Scope

GB/T 22838.13-2009 is the Chinese national standard on determination of physical characteristics for cigarettes and filter rods - part 13: filter rods roundness, in the field of agriculture. 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 3 April 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 May 2009. Classification: ICS 65.160, CCS X87. 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 section GB/T 22838 specifies the method for determination of the plug of roundness. This section applies to filter rods.

## 2 Normative references

The following documents contain provisions which, through reference

GB/T 22838 in this section 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 5605-2002 Tobacco and tobacco products, acetate fiber filter rods

GB/T 15270-2001 Tobacco and tobacco products, polypropylene tow filter rod

GB/T 16447 regulate tobacco and tobacco products and testing atmosphere ( GB/T 16447-2004,

ISO 3402.1999, IDT) Principle

3 By the projection or photoelectric methods were used to measure the maximum diameter of the filter rod and minimum diameter difference between the two is the diameter of the roundness.

## 4 Equipment

4.1 Determination of the required roundness instrument shall meet the following requirements.

- To produce a parallel light (laser or ordinary light) of the optical system;
- Sample can be rotated projection or scanning measuring at least 100 times;
- Probe. Determination of the course, the continuous rotation of the sample of at least 180°;

--- Photoreceiving device and the data processing system;

--- Instrument measurement results (diameter) Accuracy. 0.01mm.

4.2 Standard bar. Accuracy (diameter) 0.005mm.

## 5 Sampling and Sample Preparation

Acetate filter rod extraction laboratory samples according to GB/T 5605-2002 of 6.1, according to the sample preparation 5.6. Polypropylene tow filter rod extraction laboratory samples according to GB/T 15270-2001 6.2, according to the prepared sample 6.3.2.

## 6 Measuring step

According to GB/T 16447 samples were adjusted, and tested under the appropriate environmental conditions.

6.1 with a standard stick calibration of the instrument.

6.2 The sample was placed in the probe, so that the parallel light beam to the effective measurement site in the middle of the sample.

6.3 Sample rotation, the sample is scanned or projector. Max

6.4 photoreceiving device and the data processing system of the sample is given diameter, minimum, or given directly to the maximum diameter and minimum diameter Difference.

### 6.5 Repeat steps

6.2 to 6.4, a total of 30 test specimens.