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

YC/T 599.4-2026

**Technical specification for measurement of on-line measuring
instrument ind cigarette processing - Part 4: flow-measurement
instruments**

(English Translation)

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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 is Part 4 of YC/T 599, "Technical Specification for Online Measuring Instruments in Cigarette Processing". YC/T 599 has already been issued.

The following parts were laid out.

---Part 1: General Provisions;

---Part 2: Belt Scale;

---Part 3: Temperature Measuring Instruments;

---Part 4: Flow Measuring Instruments Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the State Tobacco Monopoly Administration.

Introduction

Modern cigarette manufacturing processes utilize numerous online metering instruments to monitor and control process parameters such as flow rate, temperature, moisture content, and pressure.

Inspection data is fundamental for designing and adjusting production process parameters, implementing automated production control, and monitoring process quality. YC/T 599 was developed.

The "Technical Specification for Online Measuring Instruments in Cigarette Processing" is designed to guide enterprises in comprehensively and systematically conducting

metrological technical work on online measuring instruments.

Technical work. YC/T 599 is proposed to consist of five parts.

---Part 1: General Principles. The purpose is to propose general procedures and requirements for online measuring instrument operations, and to provide key online...

Recommended list of measuring instruments.

---Part 2: Belt Scales. The purpose is to provide technical guidelines and methods for conducting metrological work using belt scales specifically designed for tobacco products.

---Part 3: Temperature Measuring Instruments. The purpose is to provide a basis for conducting metrological work using temperature measuring instruments that are used online.

According to the technical guidelines and methods.

---Part 4: Flow Metering Instruments. The purpose is to provide a basis for conducting metering work on flow metering instruments used online.

According to the technical guidelines and methods.

---Part 5: Online Moisture Analyzers. The purpose is to provide technical guidelines for conducting metrological work using online moisture analyzers.

The proposed components of YC/T 599 are mainly designed to address prominent issues in current metrology work, and with the development of online metrology technology...

With the development of the industry and the deepening research on cigarette processing, YC/T 599 will expand its scope and add more sections.

Technical Specifications for Online Measuring Instruments in Cigarette Processing Part 4: Flow Measuring Instruments

1 Scope

This document specifies the general technical standards for conducting metering work on flow-type measuring instruments used online during cigarette processing.

Guidelines.

This document applies to the measurement work of flow-type metering instruments used online during cigarette processing, mainly including mass flow meters and electromagnetic flow meters.

Flow meters and vortex flow meters.

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 20728-2021 Measurement of Fluid Flow in Closed Pipes. Guidelines for the Selection, Installation and Use of Coriolis Flow Meters JJF1708-2018 Standard Specification for Online Calibration of Coriolis Mass Flow Meters JJG1029-2007 Vortex Flow Meter JJG1033-2007 Electromagnetic Flowmeter JJG1038-2008 Coriolis Mass Flow Meter JJG1132-2017 Thermal Gas Mass Flow Meter

3 Terms and Definitions

The terms and definitions defined in YC/T 599.1 and the following terms and definitions apply to this document.

flowrate

The amount of fluid flowing through a certain cross section.

Note: Flow rate is a general term encompassing both instantaneous flow rate and cumulative flow rate. The amount of fluid flowing through a certain cross-section over a period of time is called cumulative flow rate, also known as total flow. When time...

The amount of fluid flowing through a certain cross-section in a very short time is called instantaneous flow rate. Under normal circumstances, instantaneous flow rate can also be simply referred to as flow rate. Flow rate is measured in volumes.

When expressed as a product, it is called volumetric flow rate; when expressed as a mass, it is called mass flow rate.

[Source. JJF1004-2004, 1.1] 3.2 flowmeter Flow measurement devices typically consist of a primary device and a secondary device.

Note: A flow meter with high accuracy and good stability, which can be used as a comparison standard for other flow meters, is called a standard flow meter.

[Source. JJF1004-2004, 1.4] 3.3 maximum flow rate the maximum flow rate that meets the metering performance requirements.