



Physical Test Methods (PTM) Sub-Group Report

2021 CORESTA SSPT Virtual Conference

October 2021



- ❖ **The PTM Sub-Group**
- ❖ **Objectives**
- ❖ **Collaborative Study on Physical Parameters**
- ❖ **Round Robin Tests on Calibration Standards**
- ❖ **Other Work Items**
- ❖ **Systematic Document Review**
- ❖ **Future Work Items**
- ❖ **Next Meeting**



The PTM Sub-Group

❖ Sub-Group established in 2007

- 15-20 active members (43 on the distribution list)

❖ Executives

- **Coordinator** **Bernhard EITZINGER**
- **Secretary** **Patricia MÜLLER**
- **SC Liaison** **Bernhard EITZINGER**

❖ Meetings

- **32nd Meeting** **Web Meeting** **April 20-21, 2021**
- **33rd Meeting** **Web Meeting** **September 28-29, 2021**



Objectives

- 1. To propose and maintain CORESTA Recommended Methods (CRMs) and related documents for the physical testing of tobacco, tobacco products and their components.**
- 2. To organise interlaboratory testing related to Objective 1.**

❖ **No change since June 2018.**



Published Documents

Project No.	Type	Project name	Publication Month
PTM-260	TR	4 th Proficiency Test on Diffusion Capacity of Cigarette Papers	November 2020
PTM-152	TR	5 th Round Robin Test on Air Permeability Calibration Standards	January 2021
PTM-240	TR	13 th Collaborative Study on Physical Parameters	February 2021
PTM-209	TR	15 th Round Robin Test on Pressure Drop Calibration Standards	February 2021



Annual Collaborative Study

- ❖ **PTM-303 14th Collaborative Study on Physical Parameters**
- ❖ **Measurement of Filters and Cigarettes**
 - **Filters** **weight, diameter, pressure drop**
 - **Cigarettes** **weight, diameter, open draw resistance**
closed draw resistance, filter ventilation
 - **5 Filters, 5 Cigarettes, 5 replicate measurements on different days**
- ❖ **Monitoring CRMs 6, 41 and respective ISO standards**



Annual Collaborative Study

- ❖ **PTM-303 14th Collaborative Study on Physical Parameters**
- ❖ **31 Participants (38 sample sets)**
- ❖ **Samples and protocol distributed in June**
- ❖ **Measurements to be completed (deadline September 30th)**
- ❖ **Statistical evaluation and report under preparation**



Round Robin Tests

❖ Pressure Drop Calibration Standards

- PTM-271 16th RR Test – Circulation of standards ongoing

❖ Filter Ventilation Calibration Standards

- PTM-212 8th RR Test – Circulation of standards to be completed
 - including slim calibration standards

❖ Air Permeability Calibration Standards

- PTM-211 6th RR Test – Circulation of standards ongoing



Collaborative Study on Air Permeability

- ❖ **PTM-302 2nd Collaborative Study on Air Permeability (ISO 2965)**
- ❖ **Protocol**
 - **cigarette papers, perforated tipping papers and plug wrap papers**
 - **3 replicates of 20 measurements**
 - **measurements with 10×20 mm² and 2×15 mm² head**
- ❖ **21 participants, 37 sample sets**
- ❖ **Measurement, data analysis and reporting until end of 2021**



Systematic Document Review

❖ CRM 06 – Ventilation (1983)	ISO 9512	reviewed	09/2021
❖ CRM 16 – Lamina Particle Size (1991)	ISO 12194	confirmed	10/2018
❖ CRM 17 – Stem Content (1991)	ISO 12195	confirmed	10/2018
❖ CRM 41 – Draw Resistance (2007)	ISO 6565	confirmed	10/2018
❖ CRM 53 – Wrapper Burn Speed (2002)		revised	01/2019
❖ CRM 77 – Diffusion Capacity (2014)		revised	06/2019
❖ CRM 90 – Pouch Sealing Strength (2019)		published	03/2019
❖ CRM 94 – Flavor Capsule Crush Strength (2020)		published	08/2020



Systematic Document Review

❖ Guide No. 04 – Pressure Drop	revised	01/2019
❖ Guide No. 06 – Use of Balances	revised	01/2020
❖ Guide No. 10 – Diameter	revised	03/2020
❖ Guide No. 14 – Diffusion Capacity	revised	06/2019



Future Work Items

❖ **15th Collaborative Study on Physical Parameters**

- **5 filters, 5 cigarettes**
- **Weight, diameter, pressure drop, ventilation**
- **Scheduled as routine work item in 2022**

❖ **5th Proficiency Test on Diffusion Capacity**

- **Based on CRM 77**
- **Scheduled as routine work item in 2022**



Future Work Items

- ❖ **Measurement of low pressure drops**
 - **Various calibration standards have been tested**
 - **Further discussions to take place**



Next Meeting

34th Meeting of the PTM Sub-Group

April or May, 2022

Location to be defined



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April or May, 2022

Location to be defined

THANK YOU!