Advanced in vitro exposure systems

Soap Bubble Volume Tester

VITROCELL® SYSTEMS

Soap Bubble Volume Tester

For quality assurance, measuring and verifying the volume of puffs

The VITROCELL® Puff Volume Tester, based on the principle of a soap bubble flow meter, is an essential tool for quality assurance, measuring and verifying the volume of puffs taken by a cigarette smoking machine or robot. Its simplicity provides an electronic-free, easy-to-use, and still highly accurate method to ensure compliance with smoking standards such as ISO 3308, ISO 20778, ISO 20768, and various CORESTA recommended methods.

How the accurate puff volume measurement works: The operator tracks the movement of a soap bubble through a calibrated tube to measure the precise volume of air drawn during each puff in millilitres (mL).

Applications for the VITROCELL Puff Volume Tester

Initial Smoking Machine Calibration

- Essential for calibrating the puffing mechanism of cigarette smoking machines.
- Verifies that machines deliver exact puff volumes as specified by industry or ISO guidelines.

Detection of Deviations

- Identifies irregularities in the puffing process caused by external factors like temperature changes, mechanical wear, blockages, or user related influences

Available ranges:

- 34 – 36 mL
- 40 – 80 mL
- 150 – 700 mL (for waterpipe testing)

Features:

- Calibrated with certificate
- Durable design
- Easy-to-use

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About VITROCELL®

VITROCELL® exclusively concentrates on the developing, producing, installing, training and servicing of advanced *in vitro* exposure systems.

The VITROCELL® Systems' team is driven by their vision for new in-vitro standards through state-of-the-art technology, highly qualified workmanship and absolute client dedication. VITROCELL® has successfully collaborated with clients from leading research institutes, contract research organizations, regulatory authorities or industrial laboratories across the world. Working with our team experts, all modules have been tailored to create durable and complete turnkey-systems for *in vitro* inhalation toxicology. Gases, environmental atmospheres, nano particles and complex mixtures are analyzed on lung cells at the air/liquid interface using these systems. VITROCELL® technologies are also applicable to solutions for skin research.

Over a decade of devotion to research in this specific field has given our team of design & precision manufacturing specialists the opportunity to mentor highly diversified and complex projects from conception to completion. We strive to become a constructive member of each research team, providing support when it is needed, advice when it is required and modules of the highest quality, which are even polished by hand before leaving here to be integrated into your workspace. Every piece of our German engineered equipment is manufactured to the highest of standards – yours.

For more information please scan the QR-Code:

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