

Advanced in vitro exposure systems

VITROCELL® Sidestream Chamber



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For testing and dilution of atmospheric substances

This highly developed system guides airborne substances and particles from a singular aerosol inlet point to the inlets of the exposure modules. The special delivery path using 2 heated chambers ensures optimized aerosol transportation and dilution.

In the standard version, the test atmosphere enters the first chamber at a regulated flow rate of 50 – 150 m³/h. Optional VITROCELL® Particle

Photometers can be used to monitor the particle concentrations. An isokinetic probe guides the sample flow to the second chamber. The atmosphere can then be diluted with up to 6.7 l/min of clean air resulting in a total maximum flow rate of 12.5 l/min.

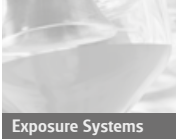
The samples progress to the exposure module at 5 ml/min by means of isokinetic probes, the surplus is expelled.

The entire system is heated in order to avoid condensation and to ensure that the chemical properties of specific test substances are maintained. It can be combined with VITROCELL® 6 and VITROCELL® 12 modules.

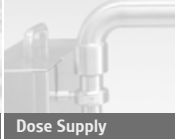


Features

- Reduction of high flows of test atmosphere by means of isokinetic sampling
- Integrated dilution system
- Heating capability
- Optimized distribution to module positions
- Combinable with VITROCELL® 6 and VITROCELL® 12 series
- Optional monitoring of test atmosphere using VITROCELL® Particle Photometers



Exposure Systems



Dose Supply



Dilution



Racks & Carts



Dose Monitoring



Skin Exposure



Auxiliary Equipment



1 Exhaust 1

2 Dilution System

3 Heated aerosol chambers

4 Exhaust 2

5 Aerosol sampling

6 Aerosol inlet

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.

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