

Options

for e-cigarettes

VITROCELL® Smoking Machine VC 1 2.0

Manual smoking machine with high tech features



The VC 1 smoking machine is used for a controlled aerosol generation of combustion cigarettes as well as of next generation devices such as Heated Tobacco Products (HTP) and electronic nicotine delivery systems (ENDS). Special attention was given to guarantee very flexible programming of the smoking parameters. The properties of the aerosol are maintained due to small dead volumes of the system. The requirements of all relevant ISO standards are met.

Fast and uncomplicated cleaning can be performed after each experiment or in case of a product change. The pump cylinder is easily dismantled, cleaned and remounted within a few minutes. The aerosol does not come into contact with the valve system, resulting in easy cleaning and increased reliability. An open design allows for uncomplicated installation of additional testing equipment, such as particle or gas analysers. All parameters of the smoking regime are freely programmable for puff volume, puff duration, puff frequency and exhaust duration.

Key features:

- Versatile platform concept for all types of test articles
- o Requirements as of all relevant ISO standards are met
- Integrated automatic button actuation for ENDS and HTP's
- o Fast cleaning
- $\circ\,$ Durable and easy to operate

Top: The Smoking Machine VC 1 is delivered turn-key with a laptop and modern HMI interface

Below: The platform enables easy access to all components. Picture shows the integrated heating system.





Versatility for all types of test articles

No matter which type of product: The VC 1 offers a platform for reliable smoking or vaping to all established standards. Easy cleaning and fast interchange of holders and actuators make the machine a versatile solution.



Combustion cigarettes



Button actuated e-cigarettes

VITROCELL® Holder System for e-cigarettes

New designs of ENDS (Electronic Nicotine Delivery Systems) lead to a large variety of different shapes making the insertion into conventional holders with labyrinth seals impossible.

VITROCELL® has developed holder systems which are flexible to adjust to different shapes. They are compatible with all VITROCELL® Smoking Machines & Robots.



Draw actuated e-cigarettes



Heated Tobacco Products (HTP)





Holder systems for JUUL (left) and Vaporesso Renova Zero (right)