

Vacucell

Vacuum Drying Ovens

Patented Servotherm Direct Heat Transfer System



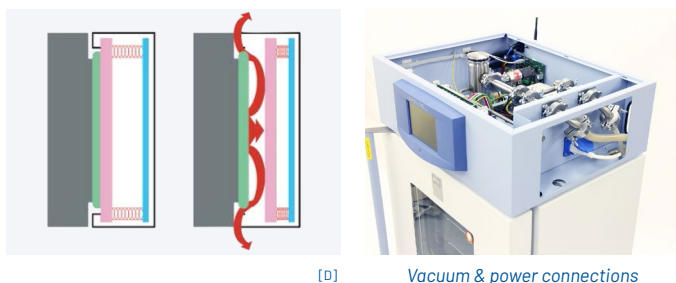
Working Temperatures

Ambient + 5°C up to 200°C / 300°C

ECO EVO

Servotherm Direct Heat Transfer System

- Servotherm aluminum shelving brackets and shelves conduct heat from heating elements mounted to the exterior surface of the chamber. The conducted heat is evenly distributed across the entire surface of the shelves and passed to the load. [figures B & C]
- Precisely milled aluminum shelves or optional stainless steel shelves fully contact the chamber walls, allowing for improved heat absorption.
- Fast, efficient and uniform heating of samples under gentle vacuum.



Built-In Safety Systems

2cm thick Ventiflex Safety Glass

Patented Systems for Assured User Safety

- 2cm thick VENTIFLEX glass is mounted to the chamber door by four guide rails and springs. In the event of over-pressure in the chamber, the glass is released by the springs, relieving pressure inside the chamber and preventing possible combustion. [figure D]
- The chamber doors feature a patented multi-point locking system that utilizes four locking posts, distributing force evenly across the door panel, rather than concentrating it at a single point. As a result, the door remains securely closed and air-tight.

Maximum Reachable Vacuum

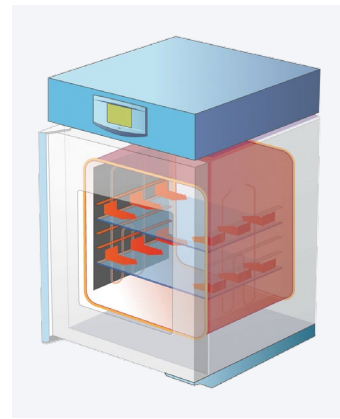
0.0005 mbar | 0.000375 Torr | 0.00001 inHg

Precise Vacuum Regulation

- Capable of achieving deep vacuum of 0.0005 mbar / 0.000375 Torr.
- Automated Danfoss pressure valves provide precise vacuum control.

Vacustation

- Integrated cabinet for housing the vacuum pump that also elevates the VacuCell to a more convenient height. [figure A]



Chamber Construction

AISI 316 Stainless Steel | 5 Layers of Insulation

Pharmaceutical-Grade Components & Materials

- AISI 316 stainless steel pressure resistant chamber.
- 5 layers of insulation — including 2" of rock-wool — ensure temperature stability and uniformity throughout the chamber.
- Internal shelving system can be fully removed for easier cleaning.
- Integrated stainless steel DIN 40mm access port installed.

Control System

Real-Time Control for Optimal Conditions

Fuzzy Logic Enabled Digital Controller

- BMT ECO and EVO digital controllers continuously monitor process data and adjust input values in real-time to ensure optimal chamber conditions throughout the cycle.
- Warmcomm 4.0F software, available as an option with any VacuCell device, enables real-time data collection, trending, and remote device control, as well as FDA 21 CFR part 11 compliance.