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# Vacucell

## Dry-Heat Vacuum Ovens



Assuring Your Quality



### Pharmaceutical

Removal of solvents from powders and chemicals



### Research & Laboratory

Drying combustible substances and powders



### Chemistry

Drying-off solvents from granules, compounds and powders



### Aerospace / Automotive

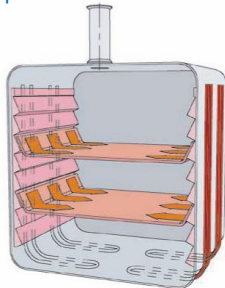
Testing of materials durability, component drying-off solvents, drying seals and ageing



### Industrial

Testing of Components & Materials

Vacucell chamber with patented Servotherm shelves conducts heat via shelves to the media



The **Vacucell** vacuum drying oven is perfect for temperature sensitive, easily decomposable or oxidative materials, which must be dried in a very careful process under vacuum. The Vacucell is also used for drying off solvents from chemicals and powders. As well as complex components with inaccessible spaces. Media is dried quickly, safely and effectively using the patented Servotherm Heat transfer shelves. The Vacucell is designed to be connected to a central vacuum source or can be equipped with a vacuum pump such as the BMT Vacustation for a complete stand-alone system.

- **Chamber Volumes** 22 (.8), 55 (2), 111 (4) liters (ft3)
- **Working temperature** 5°C above ambient up to 200°C
- **Chamber** AISI 316 Stainless steel
- **Door window** in both Vacuum chamber & Vacustation
- **Integrated duct** for sensors etc. (40 mm)
- **Inert gas** connection
- **Needle valve** for fine dosing
- **Pressure resistant** inner chamber
- **Safety Door** designed with **VENTIFLEX** glass
- **Smart Door Handle** with 4-point locking
- **Vacustation cabinet and vacuum pump** (pictured left)

### Standard Control Panel



- large LED readout
- 3 adjustable programs
- RS 232 – interface for printer or PC
- delayed heating start & stop function
- acoustic and visual alarm
- time range 99 hours 59 minutes
- digital safety thermostat
- control of start and stop of vacuum pump when connected to the Vacucell

### Comfort Control Panel



- 6 programs – 40 segments – for varying loads and parameters
- chip card system for individual program storage
- time range 0 – 16 years with 1 min. intervals
- clear user friendly LCD display
- RS 232 – interface for printer or PC
- delayed heating start & stop function
- programming temperature ramps
- digital safety thermostat
- acoustic and visual alarms

### Options

- Vacustation cabinet for vacuum pumps
- chemical resistant vacuum pump with inlet separator and exhaust condenser
- digital vacuum display (Comfort)
- digital built-in vacuum control system
- WarmComm communication software
- BMS relay alarm contacts (Comfort)
- monitor media temperature with a flexible PT-100 sensor
- BMS relay alarm contact
- electronic measurement of pressure and display (Comfort)
- AISI 304 or 316 stainless steel exterior
- Ethernet communication
- Vacuum Pump capacities:  
2m<sup>3</sup>/h, 7mba  
3.4m<sup>3</sup>/h, 1.5mba

Vacucell Specifications		Model	22	55	111
Interior dimensions Interior made of AISI 316L stainless steel	volume	ft <sup>3</sup>	.77	1.94	3.92
		liters	22	55	111
	width	inches	13.39	15.75	21.26
		mm	340	400	540
	depth	inches	10.24	12.6	16.14
		mm	260	320	410
height	inches	11.81	16.93	18.9	
	mm	300	430	480	
Shelves	number of shelf guides in chamber side walls	max number	5	8	9
		shelves incl.	2	2	2
Distance between shelves		Inches	1.57	1.57	1.57
		mm	40	40	40
Maximum shelf load	Per shelf	lbs	44	55	55
		Kg	20	25	25
	Total per unit	Lbs	77	99	
		Kg	35	45	65
External dimensions (including door and handle)	width	inches	22.05	24.41	29.92
		mm	560	620	760
	depth	inches	19.29	21.65	25.2
		mm	490	550	640
	height	Inches	27.56	32.68	34.65
		mm	700	830	880
Weight	net	lbs	143	216	287
		kg	65	98	130
	gross	lbs	168	244	319
		kg	79	114	150
Electric parameters	maximum input	kW	0.8	1.2	1.8
	standby mode	W	5	5	5
	current	A	15	15	15
	nominal voltage	V	115	115	115
Working temperature (regular start)	from 5° C over ambient temperature to °C		200	200	200
Temperature deviation from working temperature with aluminum shelves	Temperature Distribution	@ 100° C	2	2	3
		@ 200° C	<5	<6	<7
Pressure 5-10 mbar** all shelves	Temp. Uniformity	±° C	0.4	0.4	0.4
Temperature deviations from working temperature with steel shelves	Temperature Distribution	@ 100° C	10	10	11
		@ 200° C	18	23	*
Pressure 5-10 mbar** all shelves	Temp. Uniformity	±° C	0.5	1.0	1.0
Time required to reach temperature with aluminum shelves and 230V power	Up to 100° C Up to 200° C	Minutes	60	65	110
			80	85	130
Time required to reach temperature with steel shelves and 230V power	Up to 100° C Up to 200° C	Minutes	130	140	170
			170	180	220
Heat Emissions	@ 100° C @ 200° C	W	150	260	370
			300	520	750
Vacuum Connection	Vacuum Connection Measuring Port Needle valve for inert gas or air Attainable vacuum	DN mm	16	16	16
		DN mm	40	40	40
		Dia mm	8	8	8
		Mbar	5.10 <sup>-3</sup>	5.10 <sup>-3</sup>	5.10 <sup>-3</sup>

\* not measured

Approx. 50% of the tray area can be filled in a way a uniform air circulation is enabled inside the chamber. Note: All technical data are related to 22° C ambient temperature and +/- 10% voltage swing (if not specified). Changes in design and make are reserved.



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