



bmtusa.com

Vacucell ECO

Dry-Heat Vacuum Oven to 200°C



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

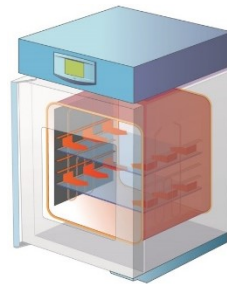


Industrial

Testing of Components & Materials



Patented Servotherm Direct Conductive Heat Shelf System. Shelf conducts heat to the material



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 drying complex components with inaccessible spaces. Media is dried quickly, safely and effectively using the patented Servotherm conductive heating 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 ft3), 55 (2 ft3), 111 (4 ft3)
- Working temperature 5°C above ambient up to 200°C
- Chamber AISI 304 Stainless steel
- Analogue vacuum manometer
- 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 safety glass
- Smart Door Handle with 4-point locking
- Manual control of vacuum pump & valves



ECO LCD Control Panel



- 3" LCD COG display
- constant monitoring of chamber conditions
- fuzzy logic enabled microprocessor
- 9 programs & 2 segments per program for loads and parameters
- RS 232 & USB device ports
- delayed heating start & stop function
- independent digital safety thermostat
- acoustic and visual alarms
- port diameter 40mm
- connecting kit DN 16
- keyboard security against unauthorized use
- manual control of pump and device

Vacustation

- Optional lower cabinet for vacuum pump. No charge with vacuum pump purchase



Options

- USB flash communication port
- **ECO Plus** – add 6 segments per program
- Vacustation lower cabinet for vacuum pumps
- chemical resistant vacuum pump with inlet separator and exhaust condenser
- digital vacuum display 10 – 1,100 mbr
- digital vacuum display 0.1 to 1,100 mbr
- WarmComm communication software
- inner light with switch
- flexible PT-100 sensor through access port
- door sensor & alarm
- inner socket 115V
- BMS relay alarm contact
- AISI 304 or 316 stainless steel exterior
- Ethernet communication port
- Vacuum Pump capacities: 2m3/h, 7mba 3.4m3/h, 1.5mba. Additional vacuum pumps available

Vacucell ECO Specifications		Model	22	55	111	
Interior dimensions Interior made of AISI 304L stainless steel	volume	ft ³	.8	1.9	3.9	
		liters	22	55	111	
	width	inches	13.3	15.7	21.2	
		mm	340	400	540	
	depth	inches	10.2	12.5	16.1	
		mm	260	320	410	
height	inches	11.8	16.9	18.8		
	mm	300	430	480		
Shelves	Shelf capacity / # 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	24.4	29.9	
		mm	560	620	760	
	depth	inches	19.3	21.7	25.2	
		mm	490	550	640	
	height	Inches	27.5	32.6	34.6	
		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 230V devices available for order	maximum input	kW	0.8	1.2	1.8	
	standby mode	W	805	1208	1806	
	current	A	7	10.5	15.7	
	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: 115V & 230V power	Up to 100° C Up to 200° C	Minutes	60	65	110	
			80	85	130	
Time required to reach temperature with stainless steel shelves: 115V & 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	DN mm	16	16	16	
	Measuring Port	DN mm	40	40	40	
	Needle valve for inert gas or air	Dia mm	8	8	8	
	Attainable vacuum	Mbar	5.10 ⁻³	5.10 ⁻³	5.10 ⁻³	

* 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.



BMT USA
14532 169th Dr. SE, Suite 142
Monroe, WA 98272
USA



Model 111 (4 ft³)

ph. 360-863-2252
fax 360-863-2366
e-mail sales@bmtusa.com
www.bmtusa.com