Venticell *Eco + Evo*

Patented Forced Air Convection

Heating & Drying Ovens

VENTICELL® patented forced air convection ovens move air vertically and horizontally within the chamber to produce precise temperature uniformity with exceptional drying rates.

Applications for the VENTICELL® include drying and sterilizing glassware, textiles, soils, and non-flammable chemicals, as well as quality and durability testing of materials and components, and ageing studies.

Sterilization and drying of glassware and devices

Quality and durability testing of materials and components; ageing tests

Drying of compounds, components, and media

Temperature Range:
10°C above ambient up to 250°C (300°C temperature option available)

Patented Door Closing Mechanism:
4-point patented door locks for exceptional seal of the door to the chamber

Chamber Volumes:
22 (.8 ft3) • 55 (2 ft3) • 111 (4 ft^3) • 222 (8 ft^3) • 404 (14.3 ft^3)
707 (25 ft^3) • 1212 (43 ft^3)

Chamber Construction:
- AISI 304 stainless steel chamber (AISI 316 SS option available)
- Double wall construction with 5 layers of insulation for more uniform internal chamber conditions

Electrical Data:
115V 50/60HZ: 22, 55, 111, 222; 208V-3P 50/60Hz: 707;
230V 50/60Hz: 222, 404, 1212

ECO Controller

- 3" LCD display
- Fuzzy Logic algorithm constantly monitors chamber conditions & optimizes parameters.
- (9) programs with (2) segments each for varying loads and parameters
- Audible & visual alarms – temperature & time
- Data capture with addition of optional Warmcomm software
- USB flash, device & RS232 ports. Optional Ethernet port
- Integrated USB 30-day data logger for temperature measurement and recording: 222, 404, 707
- Air in-flow & exhaust ports
- Digital control sensor and independent safety sensor
- Delayed start and heating

EVO Controller

- 5.7" LCD touch display
- Fuzzy Logic algorithm constantly monitors chamber conditions and continuously optimizes parameters.
- (100) programs with (100) segments each for varying loads and parameters
- Audible & visual alarms – temperature & time
- USB device, RS232 & optional Ethernet port
- Integrated SD card 30-day data logger & multi-level secure user authentication
- Air in-flow & exhaust ports
- Digital control sensor and independent safety sensor
- Delayed start and heating

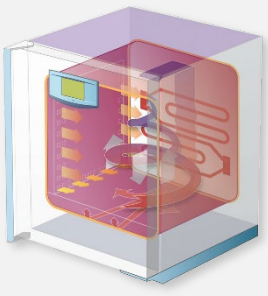
Optional Heavy Load Chamber

- Heavy load internal frame
- Heavy load shelves

Optional Equipment:

- Access ports 25 (1"), 50 (2"), 100 (4") mm
- Heavy load chamber
- Ethernet communication port
- Rolling carts for 22, 55, 111 & 222 models
- HEPA Filter on incoming air
- Door sensor and alarm
- Automatic and key door lock
- Warmcomm data acquisition software:
  - ✓ 4.0B – Receive data
  - ✓ 4.0P – Receive data and control the device
  - ✓ 4.0F – FDA 21 CFR part 11 compliant
- BMS – Building monitoring alarm contact
- Flexible PT 100 sensor
- 304 or 316 AISI stainless steel exterior
- USB Flash drive, 30-day data logging: 22, 55, 111
- Inner electrical socket 230V
- Cleanroom models available
- IQ / OQ protocols with 9pt or 27pt temperature mapping

Venticell Technical Data		Model	22	55	111	222	404	707	1212
Interior Dimensions **Chamber:** AISI 304 stainless steel (AISI 316 stainless steel option available)	Volume	ft^3	.8	1.9	3.9	7.8	14.3	25	43
		liters	22	55	111	222	404	707	1212
	Width	inches	9.4	15.7	21.3	21.3	21.3	37	3x21.3
		mm	240	400	540	540	540	940	3x540
	Depth	inches	12.6	15.4	15.4	21.3	21.3	21.3	21.3
		mm	320	390	390	540	540	540	540
	Height	inches	11.6	13.8	20.9	29.9	55.5	55.5	55.5
		mm	295	350	530	760	1410	1410	1410
Exterior Dimensions (Including door and handle)	Width	inches	16	24.4	29.9	29.9	29.9	45.7	85.9
		mm	406	620	760	760	760	1160	2175
	Depth	inches	22.4/22.83	25.2	25.2	31.1	31.1	31.1	33.3
		mm	560S/580C	640	640	790	790	790	845
	Height (Legs L, Casters C)	inches	25.2	26.8	33.9	42.9	75.2	75.2	75.2
		mm	640L	680L	860L	1090L	1910C	1910C	1910C
Shipping Dimensions	Width	inches	18.3	28	33.5	33.5	33.5	49.2	-
		mm	465	710	850	850	850	1250	-
	Depth	inches	26.2	28.7	28.7	33.9	33.9	35.9	-
		mm	665	730	730	860	860	860	-
	Height	inches	25.8	35.4	42.5	52	84.7	84.7	-
		mm	655	900	1080	1320	2150	2150	-
Shelves: Stainless Steel	Capacity: # of shelf guides in chamber side walls	Maximum #	4	4	7	10	19	19	3x19
		# Included	2	2	2	2	2	2	6
Shelf Distance	Min. distance between trays	Inches	2.4	2.8	2.8	2.8	2.8	2.8	2.8
		mm	60	70	70	70	70	70	70
Useable Shelf Area	Width x Depth	Inches	7.3x10.4	15x13.2	20.5x13.2	20.5x19.1	20.5x19.1	36.2x19.1	20.5x19.1
		mm	185x265	380x335	520x335	520x485	520x485	920x485	520x485
Maximum Shelf Load	Per shelf	lbs	22.1	44.1	44.1	66.1	66.1	110.2	66.1
		kg	10	20	20	30	30	50	30
	Total Per Unit	lbs	55.1	110.2	110.2	154.3	220.5	286.6	661.4
		kg	25	50	50	70	100	130	300
Doors		No.	1	1	1	1	1	2	3
Operation Temperature	From 5°C above ambient	Up to °C	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)	250 (300)
Temperature Deviation from Operation Temperature	Temperature Distribution	± % Temp.	1.1	1	1	1	1.5	2.5	4
	Uniformity	± °C	0.3	0.4	0.4	0.4	0.4	0.4	1.3
Time to Reach Temperature of 250°C with closed air flap and 230V Power		Min	28	49	53	70	58	64	68
Number of Air Exchanges @ 250°C		Per Hour	45	45	49	24	18	12	16
Heat Emission @ 250°C		W	350	590	760	990	1940	2550	5920
Noise Level of Complete Device		dB	<55	<55	<55	<55	<58	<58	<58
Electrical Data	Max Consumption 50/60Hz	kW	.96	1.3	1.9	1.8	3.7	4.9	11.3
		W (standby mode)	5	5	5	5	5	5	-
		A	4.2	11.3	16.5	16.5	19	28	-
		V	115	115	115	230	230	208-3P	230-3P
IP Code			IP20	IP20	IP20	IP20	IP20	IP20	IP20
Weight	Net	lbs	68.3	121.3	165.3	220.5	330.7	474	1047.2
		kg	31	55	75	100	150	215	475
	Gross	lbs	79.4	134.5	185	258	364	514	1157.4
		kg	36	61	84	117	165	233	525



Patented Forced Air Convection

BMT's patented force air convection system moves air vertically and horizontally inside the chamber for precise temperature uniformity and fast heating and cooling times. The process of heating from the bottom of the chamber to the top mimics natural airflow, allowing for more precise simulation of climatic conditions.