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# ECOCELL ECO



## Dry-Heat Oven Natural Gravity Convection



### Research & Laboratory

Sterilization of glassware, devices & media.



### Energy & Chemical Industries

Drying of compounds, components & media



### Industrial & Aerospace

Testing of materials durability, components, ageing tests, cables, wiring, seals, etc. under extended heating conditions



### Construction & Transport

Materials testing for quality and durability in the construction industry – cement, paints, asphalt, construction plastics, adhesives, roofing products etc.



111



55



404

The **ECOCELL** natural gravity convection produces no noise or vibration while providing exceptional temperature uniformity.

Applications for the Ecocell include drying glassware, light powders, textiles, soils, and non-flammable chemicals. As well the Ecocell is used in Hospitals and Animal care for warming blankets and bedding

Industrial uses of the Ecocell include testing material durability, (cement, asphalt, roofing, adhesives) component and ageing testing.

### Natural Gravity Air Convection

**Chamber Volumes** 22, 55, 111, 222, 404, 707 liters  
.8, 2, 4, 8, 14.3, 25 ft3

**Working temperature** 5°C above ambient up to 250 °C

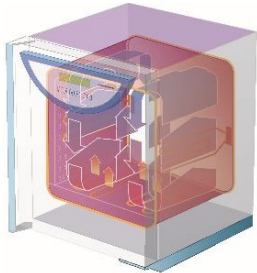
**300°C optional temperature upgrade available**

**Access ports** (optional) 25mm (1"), 50mm (2"), 100mm (4")

**Double Wall** – Removable inner chamber for cleaning  
**Chamber** – AISI 304 seamless stainless steel w/ rounded corners

**Fuzzy Logic** accurate temperatures w/out overshooting

**Smart Handle** with four-point locking for exceptional seal



**Natural Convection**  
Precise uniformity in the chamber is maintained with the double wall chamber design and 5 layers of insulation

### ECO LCD Control Panel



- 3" LCD COG display
- constant monitoring of chamber conditions
- fuzzy logic enabled microprocessor
- 9 programs – 2 segments – for varying loads and parameters up to 99 cycles
- USB device port
- RS 232 – interface for printer or PC
- delayed heating start & stop function
- digital safety thermostat
- acoustic and visual alarms
- exhaust duct
- keyboard security against unauthorized use

### Carts - Rolling & Elevating



**Ecocell ECO 222 (8 ft3)**  
with optional Rolling Cart  
Caster Options ...

- A. rolling, swiveling locking
- B. rolling, swiveling, leveling

### Options

- USB Flash port
- ECO+ Programming rate of temperature change, 9 Programs and 8 Segments
- Temperature up to 300°C
- access ports: 25 (1"), 50 (2"), 100 (4") mm
- Ethernet communication
- rolling carts
- exhaust port extension for connection to external exhaust system
- HEPA filter for air inlet
- Door sensor and alarm
- automatic and key door lock
- WarmComm 4.0B, 4.0P and 4.0F software
- BMS – Building monitoring alarm contact
- Flexible PT 100 sensor
- stainless steel exterior
- internal 115V socket
- protocol printer
- door window and interior lighting
- IQ / OQ protocols with 9pt temp., mapping

EcoCell ECO Specifications			Model	22	55	111	222	404	707
Interior dimensions	volume	ft3	.8	1.9	3.9	7.8	14.3	25	
		liters	22	55	111	222	404	707	
	width	inches	9.5	15.7	21.2	21.2	21.2	37	
		mm	240	400	540	540	540	940	
	depth	inches	11.6	15.3	15.3	21.2	21.2	21.2	
		mm	295	390	390	540	540	540	
height	inches	13.3	13.7	20.8	29.9	55.5	55.5		
	mm	340	350	530	760	1410	1410		
Shelves	Shelf capacity: # of shelf guides / brackets in chamber side walls	max number	4	4	7	10	19	19	
		shelves incl.	2	2	2	2	2	2	
Maximum weight of load(*)	Per shelf / tray	Max lbs	22	44	44	66	66	110	
	Max. inside oven	Max lbs	55	110	110	154	220	286	
Door		No.	1	1	1	1	1	2	
External dimensions (including door and handle)	width	inches	15.9	24.4	29.9	29.9	29.9	45.6	
		mm	406	620	760	760	760	1160	
	depth	inches	22	25.1	25.1	31.1	31.1	31.1	
		mm	560	640	640	790	790	790	
	height	inches	23.7	26.7	33.8	42.9	75.1	75.1	
		mm	604	680	860	1090	1910	1910	
Shipping dimensions	width	inches	18.31	27.95	33.46	33.46	33.46	49.21	
		mm	465	710	850	850	850	1250	
	depth	inches	26.18	28.35	28.35	33.86	33.86	35.83	
		mm	665	730	730	860	860	860	
	height (including pallet)	inches	25.79	35.43	42.52	52	84.65	84.65	
		mm	655	900	1080	1320	2150	2150	
Weight	net	lbs	68.34	121.25	165	221	331	474	
		kg	31	55	75	100	150	215	
	gross	lbs	79.37	134.5	185	258	364	514	
		kg	36	61	84	117	165	233	
Electric parameters 115V unless noted 230V option available	maximum input	kW	.92	1.2	1.8	1.8	3.6	4.5	
	standby mode	W	920	1196	1,806	1,806	3,611	3,128	
	current	A	8	10.4	15.6	15.6	15.7	13.6	
	nominal voltage	V	115	115	115	115 / 230**	230 3P	230 3P	
Working temperature (regular start)	from 5°C above ambient temperature to °C		250	250	250	250	250	250	
Temperature deviation from working temperature.	Temperature Distribution	Approx. ±% of set temp.	2.7	2	2	2	2.5	3.5	
	Temp. Uniformity	±° C	1.0	0.3	≤ 0.8	≤ 0.8	≤ 1	≤ 1	
Time required to reach 250° C with closed air flap and 230V power		Minutes	34	59	60	99	85	95	
Heat Emissions		W	300	590	760	990	1940	2550	
Air exchange at 150°C		Hour	6	8	12	5	4	3	

\* Approx. 50% of the tray/shelf area can be filled in a manner for 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.

\*\* 230V for 300° C models: 222, 404, 707



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Model 707 (25 ft3)

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