



MMM Group

# ECOCELL, DUROCELL VENTICELL, STERICELL VACUCELL

Laboratory drying ovens



...Blue Line

**innovative heat technology**



protecting human health

# Laboratory drying ovens



## Drying ovens – as specific as your application

Approval acc. to 73/23/EEC; 89/336/EEC.

The STERICELL product line complies also with requirements of Medical Device Directive 93/42/EEC.

### The versatile standard line with microprocessor control unit

- 3 programs
- RS 232 – interface for printer or PC-communication
- delayed heating start and stop function
- acoustic and visual alarm in error state
- time range 99 hours 59 minutes
- mechanic safety thermostat type 2
- manual control of the air exhaust flap (the suction and air exhaust only VENTICELL, the air exhaust only ECOCELL, DUROCELL)
- adjustable ventilation rate 50–100% (only Venticell)



### The high-tech comfort line with multi-functional microprocessor control unit

- 6 programs
- chip card system for individual program storage
- RS 232 – interface for printer or PC-communication
- delayed heating start and stop function
- acoustic and visual alarm in error state
- time range 0–40 years with 1 min intervals
- digital safety thermostat type 2
- real time
- selectable rate of temperature increase or decrease – “RAMPS”
- programming of program time segments – “SEGMENTS”
- programme cycles
- adjustable ventilation rate 10 to 100 % (VENTICELL)
- manual control of the air exhaust flap (the suction and air exhaust only VENTICELL, the air exhaust only ECOCELL, DUROCELL)
- keyboard blocking



## Natural convection

### ECOCELL

#### Application

The highly cost-effective heating oven series for simple drying processes. The ECOCELL line produces no noise and provides a very soft air convection within the chamber.

#### Technical data

**Volume:** 22, 55, 111, 222, 404, 707 litres  
**Working temperature:** 5 °C above ambient temperature up to 250 °C/300 °C  
**Interior:** stainless steel, mat. No. 1.4301 (AISI 304)

### DUROCELL

Special- purpose drying ovens DUROCELL with highly resistant EPOLON coating, protecting the internal chamber of aggressive substances like acids or alkaline liquids. This device ensures an optimum goods temperature equalisation. It is ideal for acid and basic hydrolysis, extraction of non-flammable materials and decomposition of substances in solid phase.

**Volume:** 22, 55, 111, 222 litres  
**Working temperature:** 5 °C above ambient temperature up to 125 °C  
**Interior:** stainless steel, mat. No. 1.4301 (AISI 304)

## Vacuum

### VACUCELL

Temperature sensitive, easy decomposable or oxidative materials can be dried very tenderly in VACUCELL vacuum drying ovens, where there is the opportunity of extrusion of air by inert gas. Also complicated components with hardly accessible hollow spaces are drying quick and effectively in VACUCELL ovens.

**Volume:** 22, 55, 111 litres  
**Working temperature:** 5 °C above ambient temperature up to 200 °C  
**Door window integrated duct for sensors etc. (Ø 40 mm)**  
**Inert gas connection**  
**Needle valve for fine dosing**  
**Pressure resistant inner chamber**  
**Safety valve-door VENTIFLEX**  
**Interior:** stainless steel, mat. No. 1.4571 (AISI 316Ti)

## Forced convection

### VENTICELL

Due to a patented ventilation system the air within the VENTICELL chamber is ventilated in a regular spiral way. This leads to a homogenous temperature profile throughout the chamber and short heating times. Operating economy is ensured by higher rate and precision of heating in laboratories. Especially suitable for very moist goods.

**Volume:** 22, 55, 111, 222, 404, 707 litres  
**Working temperature:** 10 °C above ambient temperature up to 250 °C/300 °C  
**Interior:** stainless steel, mat. No. 1.4301 (AISI 304)

### STERICELL

STERICELL® is intended for hot air sterilization of materials under specified temperature and duration. It is characterized by quiet running with a patented fine system of forced air circulation in the chamber by means of a built-in fan which eliminates the “cold air” area formation. Loose and deposit-forming substances can be sterilized in closed bottles. The device is suitable for medical and veterinary clinics, hospitals, pharmacies, health care centres, and laboratories.

**Volume:** 22, 55, 111, 222, 404 litres  
**Working temperature:** 10 °C above ambient temperature up to 250 °C  
**Interior:** stainless steel, mat. No. 1.4301 (AISI 304)

### Options

- door window and interior lighting (excluded volume 22 litres)
- access ports Ø 25, 50, 100 mm (Ø 100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 and 707 litres)
- separate PT 100 sensor
- special software WarmComm
- stainless steel casing of the devices

- access ports Ø 25, 50, 100 mm (Ø 100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 litres)
- separate PT 100 sensor
- special software WarmComm
- stainless steel casing of the devices

- special software WarmComm
- base box Vacustation
- chemical resistant vacuum pump
- chemical resistant vacuum with inlet separator and exhaust condenser
- external vacuum control system
- stainless steel casing of the devices

- door window and interior lighting (excluded volume 22 litres)
- access ports Ø 25, 50, 100 mm (Ø 100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 and 707 litres)
- separate PT 100 sensor
- communication software WarmComm
- HEPA-filter for installation in air inlet
- two-door (passing through) version (possible only by types with volume 222, 404, and 707 litres)
- temperature range enlargement up to 300 °C
- stainless steel casing of the devices

# standard line

### Options

- door window and interior lighting (excluded volume 22 litres)
- access ports Ø 25, 50, 100 mm (Ø 100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 and 707 litres)
- special software WarmComm
- potential-free alarm contact
- measurement of material's temperature with an independent movable sensor PT 100 (with indication on LCD display or PC)
- stainless steel casing of the devices

- access ports Ø 25, 50, 100 mm (Ø 100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 litres)
- special software WarmComm
- potential-free alarm contact
- measurement of material's temperature with an independent movable sensor PT 100 (with indication on LCD display or PC)
- stainless steel casing of the devices

- base box Vacustation
- chemical resistant vacuum pump
- chemical resistant vacuum with inlet separator and exhaust condenser
- built-in vacuum control system
- special software WarmComm
- potential-free alarm contact
- measurement of material's temperature with an independent movable sensor PT 100 (with indication on LCD display or PC)
- stainless steel casing of the devices
- vacuum display

- door window and interior lighting (excluded volume 22 litres)
- access ports Ø 25, 50, 100 mm (Ø 100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 and 707 litres)
- special software WarmComm
- HEPA-filter for installation in air inlet
- potential-free alarm contact
- measurement of material's temperature with an independent movable sensor PT 100 (with indication on LCD display or PC)
- two-door (passing through) version (possible only by types with volume 222, 404, and 707 litres)
- temperature range enlargement up to 300 °C
- stainless steel casing of the devices

# comfort line

### Device characteristic

- 3 preset sterilization programmes (possibility of a user modification by an authorized person);
- Lagged programme switching-on function;
- Acoustic and visual alarm;
- Mechanical protective type 2 thermostat - protects the device, its surroundings and the treated material against an inadmissible temperature rise;
- Manual control of the suction and exhaust flap;
- RS 232 interface for a printer or PC connection.

### Options

- access ports 25, 50, 100 mm (100 mm is not available for 22 litres volume)
- door lock
- left door versions (excluded volume 22 litres)
- separate PT 100-sensor
- special software WarmComm
- HEPA-filter for installation in air inlet
- two-door (passing through) version (possible only by types with volume 222 and 404 litres)
- automatic door lock in two-door (passing through) version
- stainless steel casing of the devices

Application	Device type	Type of the laboratory cabinet	Standard line Comfort line	Safety type Standard/Comfort	Natural convection	Forced convection	Working temperature (°C)	Volume 22 (l)	Volume 48 (l)	Volume 55 (l)	Volume 111 (l)	Volume 170 (l)	Volume 222 (l)	Volume 404 (l)	Volume 707 (l)
drying, tempering, sterilization	<b>ECOCELL</b>	Drying oven	Standard line	2/2	•		5*-250/300	•		•	•		•	•	•
	<b>DUROCELL</b>	Drying oven with inner resistant EPOLON- coating	Standard line	2/2	•		5*-125	•		•	•		•		
	<b>VENTICELL</b>	Drying oven	Standard line	2/2		•	10*-250/300	•		•	•		•	•	•
	<b>STERICELL***</b>	Drying oven / hot-air sterilizer	Standard line	2		•	10*-250	•		•	•		•	•	
	<b>VACUCELL</b>	Vacuum drying oven	Standard line	2/2			5*-200	•		•	•				
incubation	<b>INCUCELL</b>	Incubator	Standard line	3/3	•		5*-99.9	•		•	•		•	•	•
	<b>INCUCELL V</b>	Incubator	Standard line	3/3		•	10*-99.9	•		•	•		•	•	•
	<b>FRIOCELL</b>	Incubator with cooling	Standard line	3		•	-9.9/0-99.9	•		•	•		•	•	•
	<b>CLIMACELL</b>	Incubator with cooling and controlled humidity	Standard line	3		•	-9.9/0-99.9				•		•	•	•
	<b>CO2CELL**</b>	Incubator with CO <sub>2</sub> -atmosphere	Standard line	3	•		1*-50/120		•			•			

All technical data relate to and are valid for the ambient temperature of 22 °C and the voltage fluctuation of ± 10 %.

\* above ambient temperature

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The STERICELL product line complies also with requirements of Medical Device Directive 93/42/EEC.

**No matter where you are – our representatives are always close to you all over the world**



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