



BULLETIN  
BH-250

# Laboratory Bench Ovens

Grieve Bench Ovens provide long service life at an economical price. UL Recognized hydraulic primary and safety thermostats perform reliably year after year. Variety of models to suit your application and your budget.

## STANDARD FEATURES

- Temperatures to 270°C (518°F)
- Gravity or mechanical convection
- Hydraulic primary control thermostat
- Second independent safety thermostat
- 304 stainless steel interior for easy cleaning
- Recessed control panel sheltered from spills
- Heavy gauge, two-tone enameled steel cabinet
- Two chrome plated no-tip wire shelves  
adjustable on 1 $\frac{3}{4}$ " centers
- Plug style door construction prevents heat loss
- 3" insulation for minimum heat loss
- One-piece silicone door gasket and positive locking door latch
- 3-wire line cord
- Electrical overload protection
- 1 year limited warranty

## GC SERIES

Gravity convection ovens designed for general laboratory use when temperature control and uniformity are less critical. Ideal when dependable performance is demanded at a sensible price. Temperatures to 270°C (518°F). Choice of capacities—2.9, 3.8 and 4.8 cubic feet. Natural convection enhanced by top and floor vents.

## FC SERIES

Forced convection ovens feature a blower system for improved performance. An ideal choice when temperature uniformity and control are important considerations. The blower gently circulates heated air throughout the chamber improving temperature uniformity and control. This forced convection also reduces heat-up and recovery time. Temperatures to 270°C (518°F). Digital display provides temperature readings. Capacities of 2.5, 3.5 and 4.4 cubic feet are available.



EASILY PORTABLE  
GRAVITY AND  
FORCED CONVECTION  
BENCH OVENS



MODEL GCA-271



MODEL FCD-271

# SPECIFICATIONS

NOT FOR USE WITH FLAMMABLE SOLVENTS OR VAPORS. OTHER MODELS AVAILABLE FOR THESE APPLICATIONS—PLEASE CONSULT FACTORY.

Model		Work Space		Outside Dimensions (WxDxH)	Max Temp	Number of Shelves*	Insulation	Watts	Operating Characteristics†			Approx Shipping Weight
		Dimensions (WxDxH)	Volume Cu Ft						Control Accuracy	Oven Uniformity	Rise Time	
Gravity Convection	GCA-271	15" x 17 <sup>1</sup> / <sub>8</sub> " x 19 <sup>1</sup> / <sub>2</sub> "	2.9	21 <sup>5</sup> / <sub>8</sub> " x 25 <sup>1</sup> / <sub>4</sub> " x 35 <sup>1</sup> / <sub>2</sub> "	270°C	2	3"	1200	±5°C	±6°C	30 min	150 lbs
	GCB-271	20" x 17 <sup>1</sup> / <sub>8</sub> " x 19 <sup>1</sup> / <sub>2</sub> "	3.9	26 <sup>5</sup> / <sub>8</sub> " x 25 <sup>1</sup> / <sub>4</sub> " x 35 <sup>1</sup> / <sub>2</sub> "	270°C	2	3"	1800	±5°C	±6°C	30 min	155 lbs
	GCC-271	25" x 17 <sup>1</sup> / <sub>8</sub> " x 19 <sup>1</sup> / <sub>2</sub> "	4.8	31 <sup>5</sup> / <sub>8</sub> " x 25 <sup>1</sup> / <sub>4</sub> " x 35 <sup>1</sup> / <sub>2</sub> "	270°C	2	3"	1800	±5°C	±6°C	30 min	180 lbs
Forced Convection	FCD-271	13" x 17 <sup>1</sup> / <sub>8</sub> " x 19 <sup>1</sup> / <sub>2</sub> "	2.5	21 <sup>5</sup> / <sub>8</sub> " x 25 <sup>1</sup> / <sub>4</sub> " x 35 <sup>1</sup> / <sub>2</sub> "	270°C	2	3"	1300	±1°C	±1.5°C	30 min	150 lbs
	FCE-271	18" x 17 <sup>1</sup> / <sub>8</sub> " x 19 <sup>1</sup> / <sub>2</sub> "	3.5	26 <sup>5</sup> / <sub>8</sub> " x 25 <sup>1</sup> / <sub>4</sub> " x 35 <sup>1</sup> / <sub>2</sub> "	270°C	2	3"	1900	±1°C	±1.5°C	30 min	170 lbs
	FCF-271	23" x 17 <sup>1</sup> / <sub>8</sub> " x 19 <sup>1</sup> / <sub>2</sub> "	4.4	31 <sup>5</sup> / <sub>8</sub> " x 25 <sup>1</sup> / <sub>4</sub> " x 35 <sup>1</sup> / <sub>2</sub> "	270°C	2	3"	1900	±1°C	±1.5°C	30 min	185 lbs

\*25 lbs distributed loading, 75 lbs maximum oven load

†Accuracy and uniformity at 100°C. Rise Time in minutes to 100°C. Tests run with empty oven and minimum exhaust. Performance will vary with load, exhaust rate and application. See Bulletin TC-920 for additional details.

## STANDARD EQUIPMENT

### • Standard Electrical Characteristics

- 120 volts, 50-60 Hz, 3-wire cord and plug
- 240 volts, 50-60 Hz, 3-wire cord (Can be operated on 208 volts. Heat input will be reduced by 20%).

### • Standard Temperature Control System

Primary hydraulic control thermostat sets desired oven temperature. Second independent safety thermostat for automatic over-temperature protection should the primary thermostat fail. Pilot lights indicate which thermostat is controlling the temperature. Digital temperature display provided on FC Series only.

## GC SERIES

### • Gravity Convection

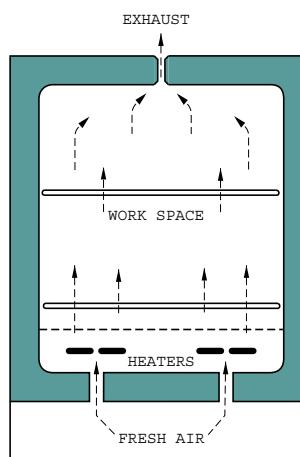
Heat is transferred directly from bottom up through the oven chamber, and exits by gravity convection through vents in top.

## FC SERIES

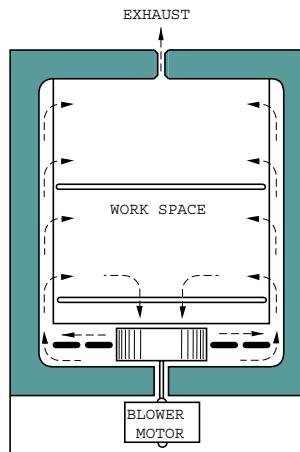
### • Forced Convection

Includes forced circulation for improved temperature uniformity, large moist loads, or to speed up drying times. Heated air is gently forced up both sides of the oven chamber where it exits through openings in the sidewall plenums. It circulates through the oven, is drawn down through the center of the chamber, reheated and recirculated. Exhaust is through two vents in the top of the oven.

Circulation Diagrams  
(Front View)



GC Series  
Gravity Convection



FC Series  
Forced Convection