

# **CLASS 100 Bench Ovens**

Grieve Class 100 Bench Ovens, with or without HEPA filters, are specifically designed to meet the strict requirements of semiconductor and electronic component manufacturers. They provide excellent uniformity and temperature control, rapid rise and recovery times and meet Class 100 air requirements.

## **STANDARD FEATURES**

- **ALL MODELS**
- Temperatures to 250°C (482°F)
- Microprocessor based programming temperature controller
- Digital set point guarantees repeatable settings
- Large digital temperature display of set point and oven temperature
- Platinum RTD temperature sensor
- Both visual and audible alarms indicate over temperature condition
- 304 stainless steel interior
- Stainless steel blower and heating elements
- Four (4) perforated stainless steel shelves, adjustable on 1 3/4" centers
- Shelf supports and plenums easily removed for cleaning
- Enameled steel exterior
- 3" insulation all sides
- Plug style door to retain chamber heat
- One-piece silicone door gasket
- Adjustable 2" diameter exhaust vent
- 1/8" fitting for introducing inert gas or filtered air
- 3-wire line cord
- 1 year limited warranty

## **MC SERIES**

Specifically designed to meet Class 100 air requirements without the use of filters, simplifying oven maintenance and cleaning. For use in clean areas and where particles are not generated by the load. Temperatures to 250°C (482°F). Choice of capacities—2.6, 3.7 and 4.7 cubic feet.

## **MH SERIES**

Recirculated air flow is continually passed through a high temperature HEPA filter to remove particles introduced by room conditions or work load. High temperature HEPA filter is 99.97% efficient on 0.3 micron particles. Capacity of 2.8 cubic feet and temperatures to 250°C (482°F).

**CLASS 100  
MICROPROCESSOR  
CONTROLLED  
FORCED CONVECTION  
BENCH OVENS**



**MODEL MCF-250**



**MODEL MHP-250**

# 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	Blower		Number of Shelves	Insulation	Watts	Operating Characteristics†			Approx Shipping Weight
	Dimensions (WxDxH)	Volume Cu Ft			CFM	HP				Control Accuracy	Oven Uniformity	Rise Time	
MCD-250	13" x 18" x 19½"	2.6	21⅝" x 24¼" x 35"	250°C	125	1/15	4	3"	1900*	±0.1°C	±1.0°C	22 min	205 lbs
MCE-250	18" x 18" x 19½"	3.7	26⅝" x 24¼" x 35"	250°C	125	1/15	4	3"	3100	±0.1°C	±1.0°C	18 min	240 lbs
MCF-250	23" x 18" x 19½"	4.7	31⅝" x 24¼" x 35"	250°C	125	1/15	4	3"	3100	±0.1°C	±1.0°C	20 min	264 lbs
MHP-250	14" x 18" x 19½"	2.8	26⅝" x 24¼" x 35"	250°C	125	1/15	4	3"	3100	±0.2°C	±1.5°C	11 min	235 lbs

\*2100 watts on 208 volts

†Accuracy and uniformity at 100°C (90°C MHP Series). Rise Time in minutes to 200°C (90°C MHP Series). 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 (Available only on Model MCD)
- 240 volts, 50-60 Hz, 3-wire cord
- Other electrical characteristics available

### • Standard Temperature Control System

Programmable, microprocessor based, temperature controller provides for one program of two ramps and two dwells. Ramp from as low as 0.01°C per minute and dwell from 0 to 9999 minutes. An independent hydraulic thermostat, set by the operator to a temperature slightly higher than the maximum set point, provides a mechanical back-up should the main controller fail. An amber panel lamp signals over-temperature situation. Optional programmable control 4 program 16 segments, ramp from as low as 1°C per minute, dwell from 0.0 to 999.9 minutes listed below.

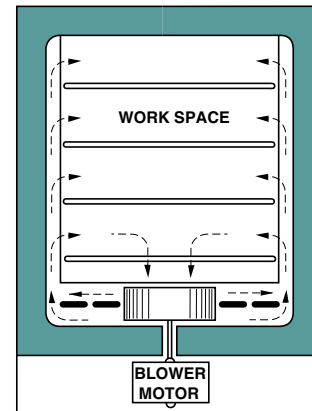
### MC SERIES

Designed to meet the strict requirements of semi-conductor and electronic component manufacturers. Meets Class 100 air requirements through the use of stainless steel components, (including heater elements, blower, shelves, and interior walls) without an internal filter, simplifying maintenance and cleaning.

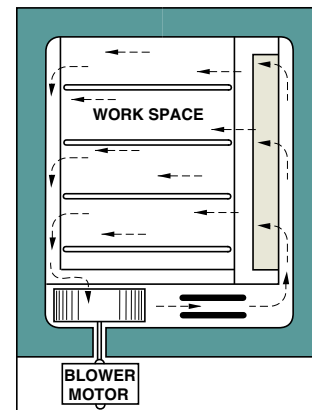
### MH SERIES WITH HEPA FILTER

Construction similar to MC Series above plus, easily replaceable 17" wide x 17" high x 3" deep, high temperature HEPA filter to remove particles introduced from room conditions or product load. Filter is accessible by removing stainless steel cover held in place by four (4) stainless steel screws.

Circulation Diagrams (Front View)



MC Series Without HEPA Filter



MH Series With HEPA Filter

## ADDITIONAL EQUIPMENT AVAILABLE

### ALL MODELS

- **Additional Shelves**, 25 lbs distributed load per shelf, 75 lbs maximum oven load, specify oven model when ordering.
- **Programmable Temperature Controller**, microprocessor based, digital indicating, 4 program 16 segments, ramp from as low as 1°C per minute, dwell from 0.0 to 999.9 minutes, in lieu of standard controller . . . . .MPTC



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