



BULLETIN  
CA-420

# Shelf Ovens

These compact ovens extend only 42" from a wall yet provide large work space at low cost. Ideal for shelf processing applications such as baking, drying, curing and preheating at temperatures to 550°F.

## STANDARD FEATURES

- **UL LISTED CONTROL PANEL**
- Standard Shelf Ovens from Grieve meet the requirements of National Fire Protection Association Standard 86, Industrial Risk Insurers, Factory Mutual and OSHA standards. For some applications, such as those involving flammable solvents or hazardous locations, the above organizations require additional safety devices.

### ● Controls

- Digital, microprocessor based, thermocouple actuated, indicating temperature controller
- Modulating burner on gas ovens
- Motor control push buttons and on-off heat switch
- LED pilot lights

### ● Safety Equipment—Electric Oven

- Adjustable, thermocouple actuated, manual reset excess temperature controller
- Separate heating element control contactors
- Recirculating blower air flow safety switch

### ● Safety Equipment—Gas Oven

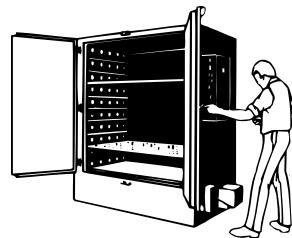
- Adjustable, thermocouple actuated, manual reset excess temperature controller
- Electronic flame safeguard protection
- 325 CFM powered forced exhauster for combustion venting
- Exhauster air flow safety switch
- Recirculating blower air flow safety switch
- Purge timer
- High gas pressure switch
- Low gas pressure switch
- Two pilot safety shutoff valves with leak test stations
- Two main safety shutoff valves with leak test stations
- Valve position indicator on main safety shutoff valves

### ● Construction

- Side-to-side horizontal air flow specifically adapted for shelf processing
- Adjustable opposed louvers on full coverage supply and return duct work
- 304 stainless steel interior
- Aluminized steel exterior with enamel finish
- Brushed stainless steel control panel face
- Integrally welded construction
- Explosion venting latches
- 6" of 10 lbs/cf density industrial rockwool insulation
- Built-in baffles prevent radiant heat
- Silicone rubber door gasket
- Two (2) nickel plated wire shelves
- Channel shelf supports prevent shelves tipping
- Adjustable fresh air intake and exhaust dampers
- High pressure recirculating blower
- 1 year limited warranty

### ● Every oven fully assembled and individually factory tested

Specifications Subject to Change Without Notice  
Copyright The Grieve Corporation All Rights Reserved  
Printed in U.S.A. 6/07



LOW COST  
ELECTRIC AND  
GAS OVENS FOR  
CONVENIENT  
SHELF LOADING



**MODEL SB-550 ELECTRIC**  
WITH OPTIONAL PROGRAMMABLE TEMPERATURE  
CONTROLLER AND RECORDING THERMOMETER



**MODEL SC-550 GAS**  
WITH STANDARD MODULATING BURNER SYSTEM

# SPECIFICATIONS

CAUTION: OVENS PROCESSING COMBUSTIBLE MATERIAL ARE REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION STANDARD 86 TO HAVE A FIRE SUPPRESSION SYSTEM. IF FLAMMABLE SOLVENTS OR VAPORS ARE PRESENT IN AN OVEN, OSHA REQUIRES CONFORMANCE WITH NFPA 86 WHICH DEFINES OVENS FOR THESE APPLICATIONS AS CLASS A OVENS. A POWERED FORCED EXHAUSTER AND OTHER NON-STANDARD SAFETY EQUIPMENT MUST BE ADDED. SEE BULLETIN TC-940 AND CONSULT FACTORY.

| Model  | Work Space            |                 | Outside Dimensions*<br>(WxDxH) | Max Temp | Blower |    | Insulation | Doors  | Heat Input |         | Operating Characteristics† |                 |           |          | Approx Shipping Weight |
|--------|-----------------------|-----------------|--------------------------------|----------|--------|----|------------|--------|------------|---------|----------------------------|-----------------|-----------|----------|------------------------|
|        | Dimensions<br>(WxDxH) | Volume<br>Cu Ft |                                |          | CFM    | HP |            |        | KW         | BTU/HR  | Control Accuracy           | Oven Uniformity | Rise Time | Electric |                        |
| SA-400 | 50" x 30" x 54"       | 46.9            | 70" x 46" x 80"                | 400°F    | 1000   | 1  | 6"         | Double | 10         | 50,000  | ±0.3%                      | ±4°F            | 35 min    | 20 min   | 1675 lbs               |
| SA-550 | 50" x 30" x 54"       | 46.9            | 70" x 46" x 80"                | 550°F    | 1000   | 1  | 6"         | Double | 15         | 75,000  | ±0.3%                      | ±6°F            | 60 min    | 30 min   | 1875 lbs               |
| SB-400 | 56" x 30" x 60"       | 58.3            | 76" x 46" x 86"                | 400°F    | 1000   | 1  | 6"         | Double | 15         | 75,000  | ±0.3%                      | ±4°F            | 40 min    | 15 min   | 1875 lbs               |
| SB-550 | 56" x 30" x 60"       | 58.3            | 76" x 46" x 86"                | 550°F    | 1000   | 1  | 6"         | Double | 20         | 100,000 | ±0.3%                      | ±6°F            | 60 min    | 25 min   | 2085 lbs               |
| SC-400 | 68" x 30" x 66"       | 77.9            | 88" x 46" x 92"                | 400°F    | 1000   | 1  | 6"         | Double | 20         | 100,000 | ±0.3%                      | ±4°F            | 20 min    | 10 min   | 2650 lbs               |
| SC-550 | 68" x 30" x 66"       | 77.9            | 88" x 46" x 92"                | 550°F    | 1000   | 1  | 6"         | Double | 25         | 125,000 | ±0.3%                      | ±6°F            | 35 min    | 20 min   | 2760 lbs               |

\*All models — Control panel overhang 9" right side.  
Blower motor overhang 10" right side  
Gas models—Burner overhang 15" left side.

†Accuracy as percent of controller span. Uniformity at 50°F below maximum temperature. Rise Time in minutes to 50°F below maximum temperature. Tests run with empty oven and minimum exhaust. Performance will vary with load and application. See Bulletin TC-920 for additional details.

## STANDARD EQUIPMENT

### ● All Models

- 208 volts, 3-phase, 60 Hz
- 230 volts, 3-phase, 60 Hz
- 460 volts, 3-phase, 60 Hz
- Other electrical characteristics available

Two (2) reinforced 100 lbs uniformly distributed load capacity, nickel plated wire shelves; shelf support channels on 6" centers. 304 stainless steel interior with carbon steel blower and plated hardware. Trilite Green enamel painted aluminized steel exterior.

### ● Electric Models

Each features completely wired, side access UL listed control panel enclosing terminals for incoming power, temperature controllers, push buttons and pilot lights. Motor starter and heating element contactors electrically interlocked to shut off heaters if power to blower is interrupted and to permit operation of blower without heat for cooling. Incoloy sheathed tubular heating elements. Exhaust outlet 4" diameter.

### ● Gas Models

- 1,000 BTU natural gas at 6" water column pressure, 1" NPT inlet
- Other gas characteristics available

Control panel as detailed above and safety devices as listed on the front of this bulletin. Automatic pre-ignition purge period and push button electric ignition contributes to ease of operation. Modulating gas burner is protected with electronic flame safety relay.

These electric or gas ovens come in three sizes. They feature full horizontal air with adjustable louvers for balanced air flow. These compact ovens extend only 46" from a wall (42" discounting door hardware) so they take up little room in situations where floor space is at a premium.

First shelf support channel is conveniently located at 25" above factory floor.

### ● SA Series

Nearly 47 cubic feet of work space at temperatures to 400°F and 550°F respectively. Accommodates eight (8) shelves on 6" centers.

### ● SB Series

Over 58 cubic feet of work space at temperatures to 400°F and 550°F respectively. Accommodates nine (9) shelves on 6" centers.

### ● SC Series

Our largest shelf oven with a work space of nearly 78 cubic feet. Temperature ranges to 400°F and 550°F respectively. Accommodates ten (10) shelves on 6" centers.

## ADDITIONAL EQUIPMENT AVAILABLE\*

● Additional Shelves, 100 lbs distributed load per shelf, 400 lbs maximum oven load, specify oven model when ordering.

● Programmable Temperature Controller, microprocessor based, digital indicating, thermocouple actuated, in lieu of standard controller ..... PTC3

● Recording Thermometer, thermocouple actuated, 24-hour, 10" diameter circular chart used in conjunction with standard controller ..... RT

● Programmable Recording Temperature Controller, microprocessor based, thermocouple actuated, digital display, 24-hour, 10" diameter circular chart, in lieu of standard controller ..... PRTC3

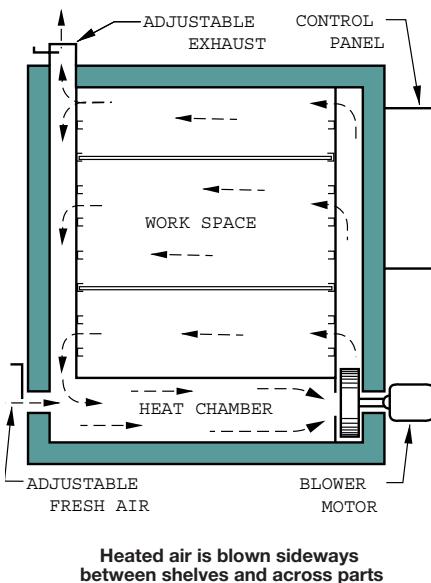
● Digital Timing Temperature Controller, microprocessor based, digital indicating, incorporates 99 hour 59 minute timer, starts timing when temperature reaches set point and shuts down oven at end of set time .... DTS3

● Shut Down Timer, with continuous "hold" feature; 1, 5, 10 or 30 hour range ..... SDT

● Batch Timer, for uniformly timing batch operations. Continuous alarm with door interlock; alarms at end of preset time period until door is opened or timer reset; 1, 5, 10 or 30 hour range ..... BT

● 304 Stainless Steel Components, including blower wheel, hardware and two stainless steel expanded metal shelves, specify oven model when ordering.

**Circulation Diagram  
(Front View)**



● Automatic Door Switch, turns off blower and heat when door is opened. Restores blower and heat on electric models, blower only on gas models, when door is closed .... ADS

● Roof Mounted Powered Forced Exhausters with exhauster air flow safety switch†

| Capacity | HP  | Outlet Diameter | Height |
|----------|-----|-----------------|--------|
| 80 CFM   | 1/8 | 4"              | 16"    |
| 130 CFM  | 1/3 | 4"              | 20"    |
| 325 CFM  | 1/3 | 6"              | 23"    |
| 650 CFM  | 1/2 | 6"              | 23"    |

† Gas ovens include 325 CFM exhauster. Electric ovens may require additional heat input.

Represented By: Ross & Pethtel  
Phone: 225-273-2202 Website

\*See Bulletin TC-960 for modifications and other optional equipment.