



# Large Drying Ovens

WRH Walk in Ovens, Horizontal Air Flow 750°F.

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## LOCATIONS

### WEST COAST

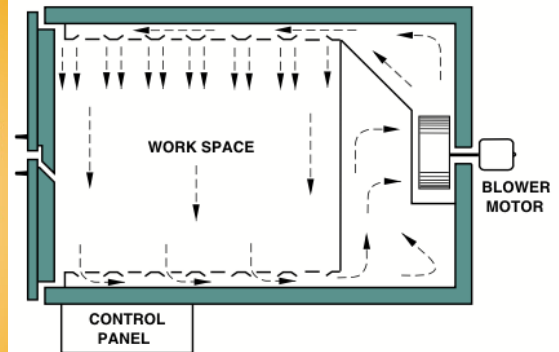
718 N. Fries Avenue  
Wilmington, CA 90744

### EAST COAST

3740 NW 124th Ave  
Coral Springs, FL 33065



**MODEL WRH566-500 GAS**  
WITH STANDARD PLATE FLOOR AND DOORSILL



**Circulation Diagram**  
(Top View)

### Description:

Horizontal air flow, ideal for shelf drying of numerous samples, or any other heat processing of parts at temperatures to 750°F. Oven size conveniently accommodates materials handling equipment. Choice of either combination or full horizontal air flow in either rear or top mounted heat chamber configurations. Designed and constructed for long, hard, continuous use.

### Standard Features

® UL LISTED CONTROL PANEL

Standard walk-in ovens 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

Easy-to-see pilot lights.

### Safety Features, Electric Oven

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

### Safety Features, Gas Oven

Adjustable, thermocouple actuated, manual reset excess temperature controller  
electronic flame safeguard protection  
Powered forced exhauster for combustion venting  
Exhauster air flow safety switch  
Recirculating blower air flow safety switch

Latch-type manual reset main gas valve

Testing device to test tight closure of main gas valve

Solenoid blocking valve up to 400,000BTU/HR heat input; motorized backup valve and vent valve over 400,000BTU/HR

Purge timer, High gas pressure switch, Low gas pressure switch.

### **Horizontal Air Flow**

Best suited for drying material on shelves. Heated air is blown horizontally across the workspace between full coverage duct work. For shelf truck loading applications with densely loaded shelves, solid bottom trays, or flat sheets where heated air can only pass sideways above and below each level. Also used for heating stacks of plates, separated by spacers, placed on oven floor or loaded on a flatbed truck.

### **Construction Specifications**

Adjustable patented opposed louvers on full coverage supply and return duct work Choice of rear or top heat chamber Available with doors at each end Choice of floor configurations, flat plate, & insulated floor, truck wheel guide tracks Exceptionally heavy duty doors Aluminized steel interior Aluminized steel exterior with enamel finish High temperature door gasket with stainless steel spring insert 6 lbs./cf. density industrial rock wool insulation Brushed stainless steel control panel face 1 year limited warranty Every oven fully assembled and individually factory tested

### **Specifications Subject to Change Without Notice**

Operates on 208 volts, 3-phase, 60 Hz or 230 volts, 3-phase, 60 Hz (Standard) or 460 volts, 3-phase, 60 Hz and 380 V/3 Ph/50 Hz. Other electrical characteristics available. Aluminized steel interior. Carbon steel structural members and steel plate painted with high temperature aluminum paint. Trilite Green enamel painted aluminized steel exterior. Two air flow patterns available Combination air flow for random shapes and sizes or for large bulky objects where heated air can move upward, around and through the load. Horizontal air flow for applications where heated air must move sideways to pass through a load such as trays or flat sheets. See circulation diagrams below. Two oven configurations available Rear heat chamber for easy handling, low profile equipment. Top mounted heat chamber to minimize factory floor space occupied or to allow installation of doors at each end. Doors on front and rear allow for pass through operation or for loading from both ends.

**See Table on following pages for detailed specifications for each size oven.**

Model	Work Space		Outside Dimensions* (WxDxH)	Max Temp	Blower		Insulation	Heat Input		Operating Characteristics†				Approx Shipping Weight
	Dimensions (WxDxH)	Volume Cu Ft			CFM	HP		KW	BTU/HR	Control Accuracy	Oven Uniformity	Rise Time		
												Electric	Gas	
WRH446-500	48" x 48" x 72"	96	67" x 86" x 83"	500°F	3300	2	6"	30	250,000	±0.3%	±6°F	40 min	20 min	2945
WRH446-650	48" x 48" x 72"	96	69" x 88" x 84"	650°F	3300	2	7"	40	300,000	±0.3%	±8°F	45 min	25 min	3355
WRH446-800	48" x 48" x 72"	96	73" x 90" x 86"	800°F	4000	3	8"	45	350,000	±0.3%	±10°F	55 min	35 min	3775
WRH566-500	60" x 72" x 72"	180	81" x 110" x 83"	500°F	4200	3	6"	40	300,000	±0.3%	±6°F	40 min	20 min	3930
WRH566-650	60" x 72" x 72"	180	83" x 112" x 84"	650°F	4200	3	7"	45	350,000	±0.3%	±8°F	50 min	25 min	4645
WRH566-800	60" x 72" x 72"	180	87" x 114" x 86"	800°F	5000	5	8"	60	400,000	±0.3%	±10°F	50 min	35 min	4765
WRH586-500	60" x 96" x 72"	240	83" x 134" x 83"	500°F	6000	5	6"	45	350,000	±0.3%	±6°F	40 min	25 min	4090
WRH586-650	60" x 96" x 72"	240	85" x 136" x 84"	650°F	6000	5	7"	60	400,000	±0.3%	±8°F	45 min	30 min	5005
WRH586-800	60" x 96" x 72"	240	88" x 152" x 86"	800°F	7800	5	8"	80	600,000	±0.3%	±10°F	50 min	35 min	5855
WRH666-500	72" x 72" x 78"	234	95" x 110" x 89"	500°F	6000	5	6"	45	350,000	±0.3%	±6°F	40 min	25 min	4085
WRH666-650	72" x 72" x 78"	234	97" x 112" x 90"	650°F	6000	5	7"	60	400,000	±0.3%	±8°F	45 min	30 min	5000
WRH666-800	72" x 72" x 78"	234	102" x 128" x 92"	800°F	7800	5	8"	80	600,000	±0.3%	±10°F	50 min	35 min	5860
WRH686-500	72" x 96" x 78"	312	97" x 148" x 89"	500°F	7800	5	6"	60	400,000	±0.3%	±6°F	40 min	25 min	6685
WRH686-650	72" x 96" x 78"	312	99" x 150" x 90"	650°F	7800	5	7"	80	600,000	±0.3%	±8°F	45 min	25 min	7000
WRH686-800	72" x 96" x 78"	312	104" x 152" x 92"	800°F	10,000	7½	8"	100	700,000	±0.3%	±10°F	45 min	30 min	8230
WRH6106-500	72" x 120" x 78"	390	100" x 173" x 88"	500°F	10,000	7½	6"	80	600,000	±0.3%	±6°F	30 min	20 min	7555
WRH6106-650	72" x 120" x 78"	390	102" x 174" x 89"	650°F	10,000	7½	7"	100	700,000	±0.3%	±8°F	35 min	25 min	7870
WRH6106-800	72" x 120" x 78"	390	108" x 176" x 91"	800°F	12,500	10	8"	120	800,000	±0.3%	±10°F	45 min	35 min	8605
WRH6126-500	72" x 144" x 78"	468	104" x 197" x 88"	500°F	12,500	10	6"	80	600,000	±0.3%	±6°F	40 min	20 min	8735
WRH6126-650	72" x 144" x 78"	468	106" x 198" x 89"	650°F	12,500	10	7"	100	700,000	±0.3%	±8°F	45 min	25 min	9050
WRH6126-800	72" x 144" x 78"	468	116" x 206" x 91"	800°F	17,500	15	8"	120	800,000	±0.3%	±10°F	55 min	35 min	11,220
WRH688-500	72" x 96" x 96"	384	98" x 149" x 106"	500°F	10,000	7½	6"	80	600,000	±0.3%	±6°F	30 min	20 min	7550
WRH688-650	72" x 96" x 96"	384	100" x 150" x 107"	650°F	10,000	7½	7"	100	700,000	±0.3%	±8°F	35 min	25 min	7860
WRH787-500	84" x 96" x 84"	392	112" x 149" x 94"	500°F	10,000	7½	6"	80	600,000	±0.3%	±6°F	35 min	20 min	8255
WRH787-650	84" x 96" x 84"	392	114" x 150" x 95"	650°F	10,000	7½	7"	100	700,000	±0.3%	±8°F	40 min	25 min	8670
WRH7107-500	84" x 120" x 84"	490	116" x 173" x 94"	500°F	12,500	10	6"	80	600,000	±0.3%	±6°F	40 min	25 min	9435
WRH7107-650	84" x 120" x 84"	490	118" x 174" x 95"	650°F	12,500	10	7"	100	700,000	±0.3%	±8°F	45 min	30 min	9850
WRH7127-500	84" x 144" x 84"	588	122" x 203" x 94"	500°F	17,500	15	6"	100	700,000	±0.3%	±6°F	40 min	25 min	11,145
WRH7127-650	84" x 144" x 84"	588	124" x 204" x 95"	650°F	17,500	15	7"	140	1,200,000	±0.3%	±8°F	40 min	25 min	11,565
WRH8108-500	96" x 120" x 96"	640	132" x 179" x 106"	500°F	17,500	15	6"	120	800,000	±0.3%	±6°F	35 min	25 min	11,365
WRH8108-650	96" x 120" x 96"	640	134" x 180" x 107"	650°F	17,500	15	7"	160	1,200,000	±0.3%	±8°F	35 min	25 min	11,880
WRH8128-500	96" x 144" x 96"	768	140" x 210" x 106"	500°F	24,500	20	6"	140	1,200,000	±0.3%	±6°F	35 min	25 min	13,705
WRH8128-650	96" x 144" x 96"	768	142" x 211" x 107"	650°F	24,500	20	7"	180	1,200,000	±0.3%	±8°F	35 min	25 min	14,215

## CAH & CBH Cabinet Ovens with Operating Temp to 550 F



CATALOG	MODEL
090C-030	CAH-250
090C-031	CAH-550
090C-034	CBH-350
090C-035	CBH-550
090C-032	CAV-350
090C-033	CAV-550
090C-036	CBV-350
090C-037	CBV-550

Standard Floor Level Cabinet 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 interlock
- Separate heating element control contactors
- Recirculating blower air flow safety switch.

## Safety Equipment—Gas Oven

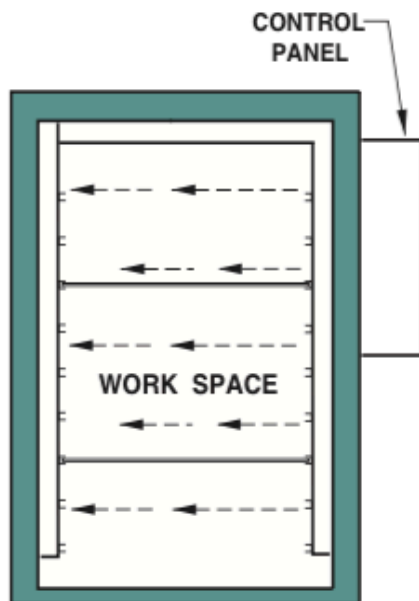
- Adjustable, thermocouple actuated, manual reset excess temperature interlock
- Electronic flame safeguard protection
- 325 CFM powered forced exhauster for combustion venting
- Exhauster air flow safety switch
- Recirculating blower air flow safety switch
- Purge timer
- High gas pressure switch
- 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

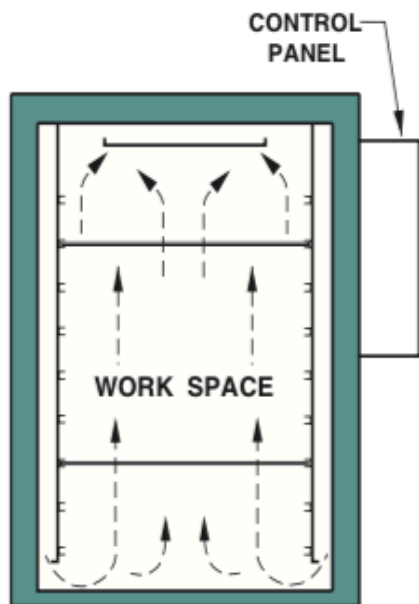
- Choice of air flow patterns for processing large parts or parts on shelves
- Aluminized steel interior
- Aluminized steel exterior with enamel finish
- Brushed stainless steel control panel face
- Explosion venting latches
- 6" of 10 lbs/cf density industrial rockwool insulation
- Built-in baffles prevent radiant heat
- Silicone rubber door gasket
- Two (2) nickel plated wire shelves
- Channel shelf supports prevent shelves tipping
- Fully insulated reinforced floor
- Adjustable fresh air intake and exhaust dampers
- 1 year limited warranty

Catalog Number	Model	Workspace Dimensions (WxDxH)	Volume (CuFt)	Overall Dimensions (WxDxH)	Max Temp	Blower CFM	HP	Insulation	Doors	KW	BTU/HR	Ship Weight
090C-030	CAH-400	36" x 36" x 60"	45	56" x 67" x 74"	400°F	1600	1.5	6"	Double	12	100,000	2330 lbs
090C-031	CAH-550	36" x 36" x 60"	45	56" x 67" x 74"	550°F	1600	1.5	6"	Double	18	150,000	2440 lbs
090C-034	CBH-400	48" x 48" x 60"	80	68" x 79" x 74"	400°F	2000	2	6"	Double	18	125,000	2800 lbs
090C-035	CBH-550	48" x 48" x 60"	80	68" x 79" x 74"	550°F	2000	2	6"	Double	24	175,000	2940 lbs

## Circulation Diagrams (Front View)



**CAH and CBH Series**  
Heated air is blown sideways  
between shelves and across parts



**CAV and CBV Series**  
Heated air is provided from each side  
and pulled upward around the load.

### STANDARD EQUIPMENT

#### Standard Electrical Characteristics

—208 volts, 3-phase, 60 Hz

—230 volts, 3-phase, 60 Hz

—460 volts, 3-phase, 60 Hz

—Other electrical characteristics available

Oven comes with Two (2) reinforced 100 lbs. uniformly distributed load capacity nickel plated wire shelves. Has capacity for Nine (9) pair shelf support channels on 6" centers; first shelf 8" above factory floor.

Fully insulated 2" thick floor reinforced for 500 lbs. distributed loading.

Aluminized steel interior and Trillite Green enamel painted aluminized steel exterior.

#### Electric Models

Each feature completely wired, top 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. Alloy wire heating elements. Exhaust outlet is 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.

#### CAH AND CBH SERIES

##### Horizontal Air Flow

These electric or gas models come in two sizes. They feature full horizontal air flow with adjustable patented opposed louvers on full coverage supply and return duct work. Commonly used where work is shelf loaded and least restriction to free air passage is in the horizontal direction.

##### CAH Series

Size 36" x 36" x 60" high provides 45 cubic feet of workspace at temperatures to 350°F and 550°F respectively.

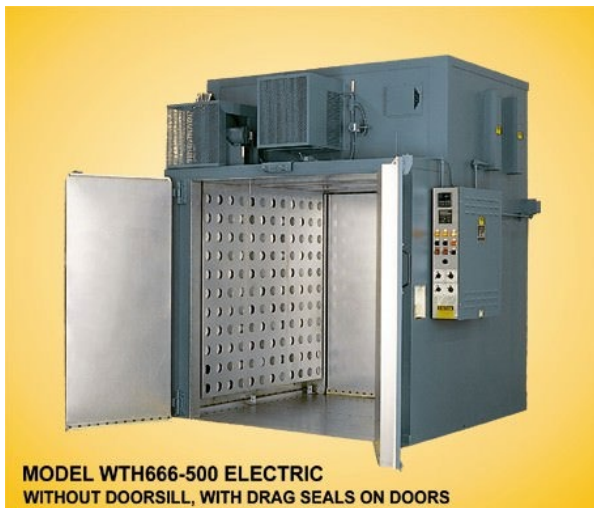
##### CBH Series

Size 48" x 48" x 60" high provides 80 cubic feet of workspace for larger parts and bigger loads.

## 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
- Recording Thermometer, thermocouple actuated, 24-hour, 10" diameter circular chart used in conjunction with standard controller (side mounted)
- Programmable Recording Temperature Controller, microprocessor based, thermocouple actuated, digital display, 24-hour, 10" diameter circular chart, in lieu of standard controller (side mounted)
- Shut Down Timer, with continuous "hold" feature; 1, 5, 10 or 30 hour range
- 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
- 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
- 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
- Recording Thermometer, thermocouple actuated, 24-hour, 10" diameter circular chart used in conjunction with standard controller (side mounted)
- Programmable Recording Temperature Controller, microprocessor based, thermocouple actuated, digital display, 24-hour, 10" diameter circular chart, in lieu of standard controller (side mounted)
- Shut Down Timer, with continuous "hold" feature; 1, 5, 10 or 30 hour range
- 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
- 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.

## Truck Ovens, Large, WTH – B4, 500 F – 1000 F



MODEL WTH666-500 ELECTRIC  
WITHOUT DOORSILL, WITH DRAG SEALS ON DOORS

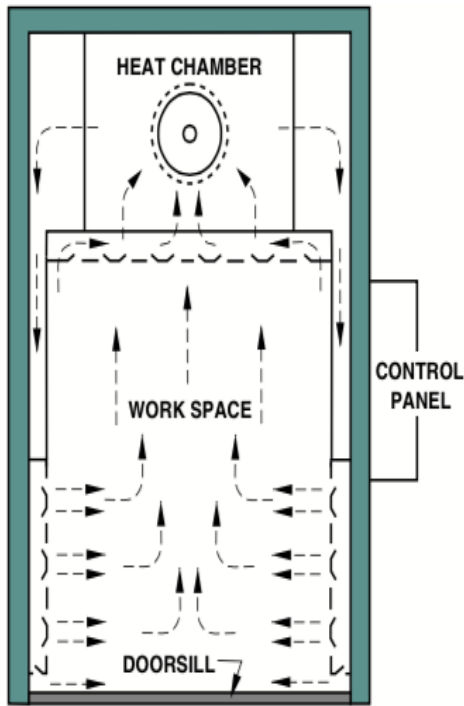
### STANDARD FEATURES

#### Catalog Number 090C

#### UL LISTED CONTROL PANEL

Standard walk-in ovens 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 Easy-to-see pilot lights.

**Circulation Diagram  
(Front View)**



**Safety Equipment – Electric Oven**

Adjustable, thermocouple actuated, manual reset excess temperature controller.

Separate heating element control contactors Re-circulating blower air flow safety switch.

**Safety Equipment – Gas Oven**

Adjustable, thermocouple actuated, excess temperature controller electronic flame safeguard protection.

Powered forced exhauster for combustion venting Exhauster air flow safety switch.

Re-circulating blower air flow safety switch.

Latch-type manual reset main gas valve.

Testing device to test tight closure of main gas valve. Solenoid blocking valve up to 400,000 BTU/HR heat input; motorized backup valve and vent valve over 400,000 BTU/HR Purge timer.

High gas pressure switch.

Low gas pressure switch.

**Construction**

Choice of air flow patterns.

Adjustable opposed louvers on full coverage supply Choice of rear or top heat chamber.

Available with doors at each end.

Choice of floor configurations, flat plate, & insulated floor, truck wheel guide tracks.

Exceptionally heavy duty doors.

Aluminized steel interior.

Aluminized steel exterior with enamel finish High temperature door gasket with stainless steel spring insert.

6 lbs./cf. density industrial rock wool insulation Brushed stainless steel control panel face.

1 year limited warranty.

Every oven fully assembled and individually factory tested

Specifications Subject to Change without Notice.

208 volts, 3-phase, 60 Hz or 230 volts, 3- phase, 60 Hz 380 V/3 Ph/50 Hz, or 460 volts, 3-phase, 60 Hz

Aluminized steel interior. Carbon steel structural members and steel plate painted with high temperature aluminum

paint. Trilite Green enamel painted aluminized steel exterior.

Model	Workspace Dimensions (WxDxH)	Volume (CuFt)	Overall Dimensions (WxDxH)	Max Temp	Blower CFM	HP	Insulation	KW	BTU/HR	Ship Weight
WTH446-500	48" x 48" x 72"	96	70" x 65" x 116"	500°F	3300	2	6"	30	250,000	2970 lbs
WTH446-650	48" x 48" x 72"	96	72" x 66" x 117"	650°F	3300	2	7"	40	300,000	3480 lbs
WTH446-800	48" x 48" x 72"	96	74" x 68" x 119"	800°F	4000	3	8"	45	350,000	3890 lbs
WTH566-500	60" x 72" x 72"	180	84" x 89" x 116"	500°F	4200	3	6"	40	300,000	4070 lbs

<b>WTH566-650</b>	60" x 72" x 72"	180	86" x 90" x 117"	650°F	4200	3	7"	45	350,000	4780 lbs
<b>WTH566-800</b>	60" x 72" x 72"	180	90" x 92" x 119"	800°F	5000	5	8"	60	400,000	4900 lbs
<b>WTH666-500</b>	72" x 72" x 78"	234	100" x 89" x 122"	500°F	6000	5	6"	45	350,000	4330 lbs
<b>WTH666-650</b>	72" x 72" x 78"	234	102" x 90" x 123"	650°F	6000	5	7"	60	400,000	5140 lbs
<b>WTH666-800</b>	72" x 72" x 78"	234	108" x 92" x 135"	800°F	7800	5	8"	80	600,000	6495 lbs
<b>WTH6106-500</b>	72" x 120" x 78"	390	100" x 137" x 132"	500°F	10,000	7/1/2002	6"	80	600,000	7605 lbs
<b>WTH6106-650</b>	72" x 120" x 78"	390	102" x 138" x 133"	650°F	10,000	7/1/2002	7"	100	700,000	7820 lbs
<b>WTH6106-800</b>	72" x 120" x 78"	390	108" x 140" x 135"	800°F	12,500	10	8"	120	800,000	9355 lbs
<b>WTH6126-500</b>	72" x 144" x 78"	468	104" x 161" x 132"	500°F	12,500	10	6"	80	600,000	8700 lbs
<b>WTH6126-650</b>	72" x 144" x 78"	468	106" x 162" x 133"	650°F	12,500	10	7"	100	700,000	9015 lbs
<b>WTH6126-800</b>	72" x 144" x 78"	468	112" x 164" x 145"	800°F	17,500	15	8"	120	800,000	11,090 lbs
<b>WTH787-500</b>	84" x 96" x 84"	392	116" x 113" x 138"	500°F	10,000	7/1/2002	6"	80	600,000	8205 lbs
<b>WTH787-650</b>	84" x 96" x 84"	392	118" x 114" x 139"	650°F	10,000	7/1/2002	7"	100	700,000	8615 lbs
<b>WTH8108-500</b>	96" x 120" x 96"	640	136" x 137" x 160"‡	500°F	17,500	15	6"	120	800,000	11,245 lbs
<b>WTH8108-650</b>	96" x 120" x 96"	640	138" x 138" x 161"‡	650°F	17,500	15	7"	160	1,200,000	11,860 lbs
<b>WTH8128-500</b>	96" x 144" x 96"	768	140" x 161" x 170"‡	500°F	24,500	20	6"	140	1,200,000	13,500 lbs
<b>WTH8128-650</b>	96" x 144" x 96"	768	142" x 162" x 171"‡	650°F	24,500	20	7"	180	1,200,000	14,215 lbs

## Walk in Ovens B1, B2, B3, B4



### Description:

The B-1 through B-4 ovens are standard High Temperature Walk-In Ovens that 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. With a horizontal air flow pattern, they are ideally suited for drying samples in a lab. With a maximum of 122 square feet of drying space (using 10 shelves), it will handle a lot of samples. Oven required a truck and the truck tracks, which are listed as options.



## Controls

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

## Safety Equipment — Electric Oven

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

## Safety Equipment — Gas Oven

Adjustable, thermocouple actuated, manual reset excess temperature controller Electronic flame safeguard protection Powered forced exhauster for combustion venting Exhauster air flow safety switch Re-circulating 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 (Industrial Risks Insurers vent valve only provided on specific request) Valve position indicator on main safety shutoff valves Over 400,000 BTU/HR safety shutoff valve interlocked with purge timer

## Construction

Choice of air flow patterns of Horizontal or Vertical Adjustable patented opposed louvers on full coverage supply and return ductwork Exceptionally heavy duty doors Explosion venting latches Doors equipped with expansion joints on inner face to guarantee uniform sealing at all temperatures Inner and outer door gaskets; inner gasket seals directly against door plug; outer gasket seals against front face of oven 3/8" steel plate oven front to guarantee rigid sealing surface at all temperatures Slip flashing at door openings to allow inner oven to expand with- out effecting outer oven or door sealing surface Aluminized steel exterior with enamel finish Brushed stainless steel control panel face 1 year limited warranty Every oven fully assembled and individually factory tested 208 volts, 3-phase, 60 Hz — 230 volts, 3-phase, 60 Hz — 460 volts, 3-phase, 60 Hz Other electrical characteristics available Exclusive construction is far superior to commonly used panel construction. Consists of

Catalog Number	Model
090C-053	B1-900
090C-054	B1-1050
090C-055	B1-1200
090C-059	B2-900
090C-060	B2-1050
090C-064	B3-900
090C-065	B3-1050
090C-069	B4-900
090C-073	B1H-900
090C-074	B1H-1050
090C-075	B1H-1200
090C-079	B2H-1050
090C-080	B2H-1050
090C-084	B3H-900
090C-085	B3H-1050
090C-089	B4H-900

## Electric Model

Has 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 on all models. The 1200°F models have a heat chamber high limit control. UL listed control panel enclosing terminals for incoming power, temperature controllers, push buttons.

## 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. A 325 CFM powered forced exhauster is included up to 700,000 BTU/HR; at 800,000 BTU/HR a 650 CFM exhauster is included. Both exhausters have 6" outlets. 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.

## 900°F Models

16-gauge aluminized steel interior throughout; 9" of 1250°F 10 lbs/cf density industrial rockwool insulation throughout walls, doors and ceiling; 4" thick insulated floor with 1/8" steel plate cover. 1050°F Models 16-gauge aluminized steel

workspace interior with 16-gauge 304 stainless steel heat chamber interior. Stainless steel re-circulating blower. 10" of 1250°F 10 lbs/cf density industrial rockwool insulation throughout walls, doors and ceiling of workspace. Oven heat chamber insulated with 2" of 1900°F block surrounded by 8" of 1250°F 10 lbs/cf density industrial rockwool insulation. 6" thick insulated floor with 1/4" steel plate cover.

## 1200°F Models

16-gauge 304 stainless steel interior throughout. Stainless steel re-circulating blower. 12" of insulation consisting of 2" of 1900°F block, surrounded by 10" of 1250°F 10 lbs/cf density industrial rockwool insulation throughout walls, doors and ceiling. 7" thick insulated floor with 1/4" stainless steel plate cover.



Model	Work Space		Outside Dimensions* (WxDxH)	Max Temp	Blower		Insulation	Doors	Heat Input		Operating Characteristics†				Approx Shipping Weight
	Dimensions (WxDxH)	Volume Cu Ft			CFM	HP			KW	BTU/HR	Control Accuracy	Oven Uniformity	Rise Time		
													Electric	Gas	
<b>B1-900</b>	48" x 48" x 72"	96	75" x 94" x 92"	900°F	4200	3	9"	Double	60	400,000	±0.3%	±10°F	60 min	45 min	8,300
<b>B1-1050</b>	48" x 48" x 72"	96	79" x 104" x 97"	1050°F	6400	5	10"	Double	80	550,000	±0.3%	±12°F	70 min	45 min	9,280
<b>B1-1200</b>	48" x 48" x 72"	96	87" x 114" x 103"	1200°F	10,000	7½	12"	Double	120	880,000	±0.3%	±15°F	80 min	40 min	15,485
<b>B2-900</b>	54" x 72" x 72"	162	81" x 118" x 92"	900°F	5000	5	9"	Double	80	600,000	±0.3%	±10°F	80 min	50 min	9,220
<b>B2-1050</b>	54" x 72" x 72"	162	87" x 130" x 98"	1050°F	7800	5	10"	Double	100	880,000	±0.3%	±12°F	80 min	50 min	10,625
<b>B3-900</b>	60" x 96" x 72"	240	91" x 152" x 95"	900°F	7800	5	9"	Double	100	700,000	±0.3%	±10°F	80 min	45 min	10,625
<b>B3-1050</b>	60" x 96" x 72"	240	97" x 158" x 98"	1050°F	10,000	7½	10"	Double	120	880,000	±0.3%	±12°F	90 min	50 min	12,405
<b>B4-900</b>	72" x 120" x 72"	360	109" x 178" x 96"	900°F	12,500	10	9"	Double	120	800,000	±0.3%	±10°F	90 min	50 min	12,955
<b>B1H-900</b>	48" x 48" x 72"	96	75" x 108" x 88"	900°F	5000	5	9"	Double	60	400,000	±0.3%	±10°F	60 min	45 min	8,340
<b>B1H-1050</b>	48" x 48" x 72"	96	81" x 110" x 91"	1050°F	7800	5	10"	Double	80	550,000	±0.3%	±12°F	60 min	45 min	9,285
<b>B1H-1200</b>	48" x 48" x 72"	96	95" x 114" x 94"	1200°F	12,500	10	12"	Double	120	880,000	±0.3%	±15°F	70 min	40 min	15,480
<b>B2H-900</b>	54" x 72" x 72"	162	85" x 132" x 88"	900°F	7800	5	9"	Double	80	600,000	±0.3%	±10°F	80 min	50 min	9,275
<b>B2H-1050</b>	54" x 72" x 72"	162	91" x 134" x 91"	1050°F	10,000	7½	10"	Double	100	880,000	±0.3%	±12°F	80 min	50 min	10,630
<b>B3H-900</b>	60" x 96" x 72"	240	93" x 156" x 88"	900°F	10,000	7½	9"	Double	100	700,000	±0.3%	±10°F	80 min	45 min	10,615
<b>B3H-1050</b>	60" x 96" x 72"	240	101" x 158" x 91"	1050°F	12,500	10	10"	Double	120	880,000	±0.3%	±12°F	90 min	50 min	12,385
<b>B4H-900</b>	72" x 120" x 72"	360	119" x 180" x 88"	900°F	17,500	15	9"	Double	120	800,000	±0.3%	±10°F	90 min	50 min	12,970

## **MID-SIZE DRYING OVENS**

# **Lab Ovens, Mid-Size, AA – AG, 500–850 °F**



### **Description**

Front-to-back horizontal air flow accommodates virtually any oven loading without restricting air passage. Work can be shelf loaded or placed directly on the optional reinforced work space bottom. Four sizes from 8 to 36 cubic feet. Designed for baking, drying, preheating or any other application where a dependable source of heated air up to 850°F is required.

### **Standard Features**

UL LISTED CONTROL PANEL

Standard Universal Ovens 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  
Motor control push buttons  
On-off heat switch  
Easy-to-see pilot lights.

### **Safety Equipment**

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

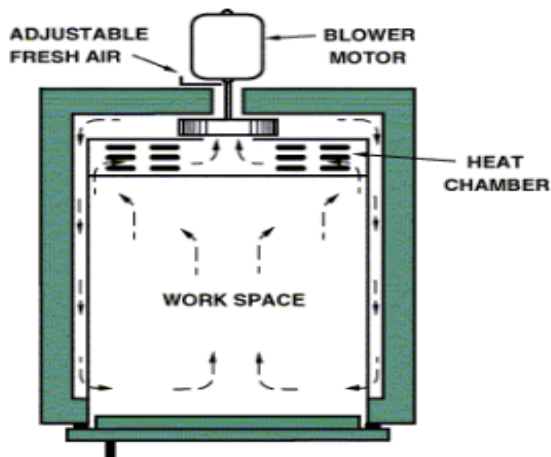


Diagram of Airflow

### **Construction**

- Front-to-back horizontal air flow.
- 304 stainless steel interior.
- Aluminized steel exterior with enamel finish.
- Brushed stainless steel control panel face.
- Explosion venting latches.
- All welded construction.
- 10 lbs/cf density industrial rock wool insulation.
- Built-in baffles prevent radiant heat
- Silicone rubber door gasket on 500°F models only.
- High temperature door gasket (w/stainless steel spring insert on 650°F and 850°F models)
- Two (2) nickel plated wire shelves
- Channel shelf supports prevent shelves tipping
- Adjustable fresh air intake and exhaust dampers
- High pressure re-circulating blower
- 1 year limited warranty.

Model	Workspace Dimensions (WxDxH)	Overall Dimensions (WxDxH)	Max Temp	Blower CFM	HP	Doors	KW	Oven Uniformity	Rise Time	Ship Weight
<b>AA-500</b>	24"x 24"x24"	36"x46"x32.5"	500°F	400	1/3	Single	5	±5°F	35 min	850 lbs
<b>AA-650</b>	24"x24"x24"	40"x52"x36.5"	650°F	400	1/3	Single	6.6	±6°F	45 min	1000 lbs
<b>AA-850</b>	24"x24"x24"	40"x52"x36.5"	850°F	400	1/3	Single	9	±8°F	60 min	1030 lbs
<b>AF-500</b>	24"x36"x24"	36"x58"x32.5"	500°F	400	1/3	Single	5	±5°F	51 min	1020 lbs
<b>AF-650</b>	24"x36"x24"	40"x64"x36.5"	650°F	400	1/3	Single	6.6	±6°F	66 min	1170 lbs
<b>AF-850</b>	24"x36"x24"	40"x64"x36.5"	850°F	400	1/3	Single	9	±8°F	88 min	1200 lbs
<b>AB-500</b>	36"x36"x36"	48"x58"x44.5"	500°F	600	1/2	Single	6.6	±5°F	61 min	1300 lbs
<b>AB-650</b>	36"x36"x36"	52"x62"x48.5"	650°F	600	1/2	Single	9	±6°F	70 min	1630 lbs
<b>AB-850</b>	36"x36"x36"	52"x62"x48.5"	850°F	600	1/2	Single	12	±8°F	83 min	1660 lbs
<b>AG-500</b>	36"x48"x36"	48"x70"x44.5"	500°F	600	1/2	Single	6.6	±5°F	82 min	1650 lbs
<b>AG-650</b>	36"x48"x36"	52"x74"x48.5"	650°F	600	1/2	Single	9	±6°F	93 min	1980 lbs
<b>AG-850</b>	36"x48"x36"	52"x74"x48.5"	850°F	600	1/2	Single	12	±8°F	110 min	2010 lbs

208 volts, 3-phase, 60 Hz

230 volts, 3-phase, 60 Hz

460 volts, 3-phase, 60 Hz

Other electrical characteristics available

Each feature completely wired, top 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. Alloy wire heating elements on 500°F models; Incoloy sheathed tubular heating elements on 650°F and 850°F models. Exhaust outlet 4" diameter.

Two (2) reinforced 100 lbs. uniformly distributed load capacity, nickel plated wire shelves; 304 stainless steel interiors with carbon steel blower and plated hardware. Trilite Green enamel painted aluminized steel exterior.

### **AA and AF Series**

Provides 8 cubic feet and 12 cubic feet of workspace respectively. The AF Series is 12" deeper than the AA Series to handle more or longer parts. Temperature ranges to 500°F, 650°F and 850°F. Accommodates Seven (7) shelves on 3" centers.

### **AB and AG Series**

Our larger Universal ovens with workspace of 27 cubic feet and 36 cubic feet, respectively. The AG Series is 12" deeper than the AB Series, to accommodate longer parts and bigger batches. Temperature ranges to 500°F, 650°F and 850°F.

**Accommodates five (5) shelves on 6" centers.**

Catalog Number	Model
090C-001	AA-500
090C-002	AA-650
090C-003	AA-850
090C-006	AF-500
090C-007	AF-650
090C-008	AF-850
090C-011	AB-500
090C-012	AB-650
090C-013	AB-850
090C-016	AG-500
090C-017	AG-650
090C-018	AG-850

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

## TAH, TBH 550 Ovens • 500°F/1000 – 2000CFM



Catalog Number	Model
090C-090	TA-500
090C-091	TAH-500
090C-092	TB-500
090C-093	TBH-500

**UL LISTED CONTROL PANEL** Standard Truck 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

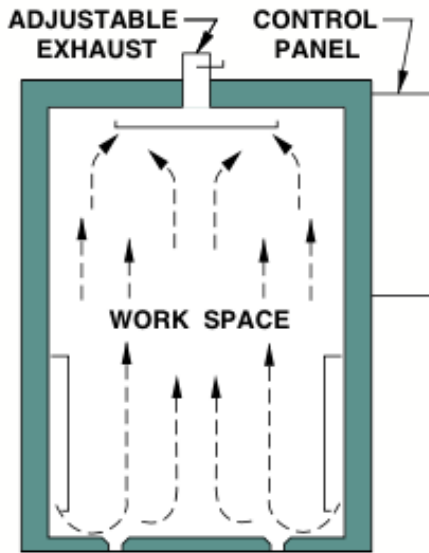
- Digital, microprocessor based, thermocouple actuated, indicating temperature controller
- Modulating burner on gas ovens
- Motor control push buttons and on-off heat switch
- Easy-to-see pilot lights

### Safety Equipment – Electric Oven

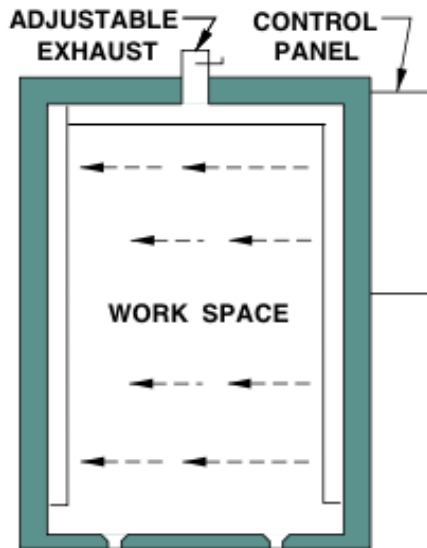
- Adjustable, thermocouple actuated, manual reset excess temperature controller
- Separate heating element control contactors
- Recirculating blower air flow safety switch

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"

## Circulation Diagrams (Front View)



**TA and TB Series**  
Heated air is provided from both sides and pulled upward through the load.



**TAH and TBH Series**  
Heated air is blown sideways between truck shelves and across parts.

- 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
- Insulated floor with truck wheel guide tracks. Aluminized steel interior and Trilite Green enamel painted aluminized steel exterior.

### Electric Models

Each feature 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. Alloy wire 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.

### TA AND TB SERIES

#### Combination Air Flow

These electric or gas models come in two sizes. They feature combination vertical and horizontal air flow for truck processing of various size parts at temperatures to 500°F.

TA Series Size 36" x 36" x 60" high provides 45 cubic feet of workspace. Truck tracks 2" wide, 24" center to center. Optional companion truck holds twelve 30" x 30" shelves on 4" centers.

TB Series Size 48" x 48" x 60" high provides 80 cubic feet of workspace. Truck tracks 2" wide, 36" center to center. Optional companion truck holds twelve 42" x 42" shelves on 4" centers.

### TAH AND TBH SERIES

#### Horizontal Air Flow

Similar to TA and TB Series, these electric or gas models feature full horizontal air flow with adjustable patented opposed louvers on full coverage supply and return duct work. Used when vertical air flow through the load is restricted. Ideal for processing flat sheets, pans of parts or when shelves are densely packed.

# 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* (WxDxH)	Max Temp	Blower		Insulation	Doors	Heat Input		Operating Characteristics†				Approx Shipping Weight
	Dimensions (WxDxH)	Volume Cu Ft			CFM	HP			KW	BTU/HR	Control Accuracy	Oven Uniformity	Rise Time		
													Electric	Gas	
TA-550	36" x 36" x 60"	45	56" x 67" x 74"	550°F	1000	¾	6"	Double	18	150,000	± 0.3%	± 5°F	30 min	15 min	2030 lbs
TB-550	48" x 48" x 60"	80	68" x 79" x 74"	550°F	1200	1	6"	Double	24	175,000	± 0.3%	± 5°F	25 min	15 min	2400 lbs
TC-550	60" x 60" x 60"	125	80" x 91" x 74"	550°F	2000	2	6"	Double	24	175,000	± 0.3%	± 5°F	28 min	15 min	2975 lbs
TAH-550	36" x 36" x 60"	45	56" x 67" x 74"	550°F	1600	1½	6"	Double	18	150,000	± 0.3%	± 5°F	30 min	15 min	2130 lbs
TBH-550	48" x 48" x 60"	80	68" x 79" x 74"	550°F	2000	2	6"	Double	24	175,000	± 0.3%	± 5°F	25 min	15 min	2550 lbs
TCH-550	60" x 60" x 60"	125	80" x 91" x 74"	550°F	2000	2	6"	Double	24	175,000	± 0.3%	± 5°F	28 min	15 min	3160 lbs

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

# ADDITIONAL EQUIPMENT AVAILABLE\*

## ● Companion Trucks and Shelves

Oven Model	Truck Shelf Dimensions	Maximum Shelves	Truck		Truck Shelves†
			700 lbs Capacity	1200 lbs Capacity	
TA-550 TAH-550	30" x 30"	12	TRK700TA	TRK1200TA	SHLFTA
TB-550 TBH-550	42" x 42"	12	TRK700TB	TRK1200TB	SHLFTB
TC-550 TCH-550	54" x 54"	12	TRK700TC	TRK1200TC	SHLFTC

†Nickel plated wire shelves rated 100 lbs. uniformly distributed.

## Forced Air Bench Ovens

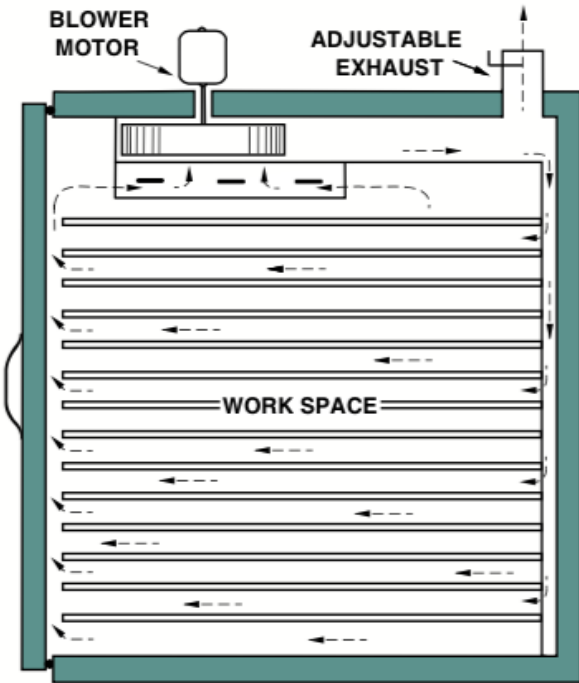


These Bench Ovens are low cost, large capacity and have a maximum temperature of 400 F. Designed to handle a wide variety of applications such as drying, curing and pre-heating.

Catalog Number	Model
090B-022	Model 323
090B-023	Model 333
090B-024	Model 343

**MODEL 343**  
WITH OPTIONAL DIGITAL MICROPROCESSOR  
BASED INDICATING TEMPERATURE CONTROLLER

## Circulation Diagram (Side View)



Heated air is blown forward  
between shelves and across parts

### STANDARD FEATURES

Standard large capacity bench 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
- Motor control push buttons
- On-off heat switch
- Easy-to-see pilot lights

### Safety Equipment

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

### Construction

- 430 stainless steel interior
- Explosion venting latches
- 2" of 6 lb./cf. density industrial rockwool insulation
- Built-in baffle prevents radiant heat
- Silicone rubber door gasket
- Aluminized steel exterior with enamel finish
- Brushed stainless steel control panel face
- Incoloy sheathed tubular heating elements
- Two (2) nickel plated wire shelves

Catalog Number	Model	Dimensions	Volume (CuFt)	Ship Weight
090B-022	323	36" x 21" x 36"	15.8	600 lbs
090B-023	333	36" x 36" x 36"	27	750 lbs
090B-024	343	36" x 48" x 36"	36	850 lbs

## All Models

1. 208 volts, 3-phase, 60 Hz
2. 230 volts, 3-phase, 60 Hz
3. 460 volts, 3-phase, 60 Hz

### Other electrical characteristics available

- Additional Shelves, 50 lbs. distributed load per shelf, 200 lbs. maximum oven load, specify oven model when ordering.
- Digital Indicating Temperature Controller, microprocessor based, thermocouple actuated, in lieu of standard controller
- Programmable Temperature Controller, microprocessor based, digital indicating, thermocouple actuated, in lieu of standard controller
- Recording Thermometer, thermocouple actuated, 24-hour, 10" diameter circular chart used in conjunction with standard controller



- 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
- Digital Shut Down Timer, with continuous “hold” feature
- Digital 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.
- Oven Stand, to hold oven at convenient 24” working height. Specify model number of oven when ordering stand. Shipped
- 80 CFM Powered Forced Exhauster, driven by a 1/8 HP motor, with 4” diameter outlet includes exhauster air flow safety switch
- 304 Stainless Steel Components, including blower wheel, hardware and two stainless steel expanded metal shelves, specify oven model when ordering.
- 304 Stainless Steel Shelves, reinforced expanded metal, specify oven model when ordering.
- Automatic Door Switch turns off blower and heat when door is opened. Restores blower and heat when door is closed separately, requires assembly.

## **SMALL LAB DRYING OVENS**

### **Low-Cost Laboratory Ovens • 200°F**



#### **Description:**

Low cost, fully equipped, all-purpose laboratory ovens for sample drying, baking, annealing, conditioning, sterilizing, evaporating and dehydrating, and other general laboratory work.

Catalog Number	Model
<b>090B-001</b>	LO-201C
<b>090B-0002</b>	LR-271C
<b>090B-0003</b>	LW-201C

#### **MODEL LO-201C**

Compact, economical unit with 12” wide x 10” deep x 10” high workspace. Temperatures to 200°C (392°F).

#### **MODEL LR-271C**

Used where larger workspace and higher temperatures are required. Resilient silicone rubber door gasket. Workspace measures 13” wide x 13” deep x 13” high. Temperatures to 270°C (518°F).

#### **MODEL LW-201C**

Largest laboratory oven affording more than twice the capacity of the LO-201C. Workspace 18” wide x 12” deep x 16” high. Temperatures to 200°C (392°F).

### MODELS LO-201C AND LW-201C

Bimetal control thermostat sets desired oven temperature. Thermal cutoff limits maximum oven temperature. Red pilot light indicates heater operation. Top mounted mercury thermometer.

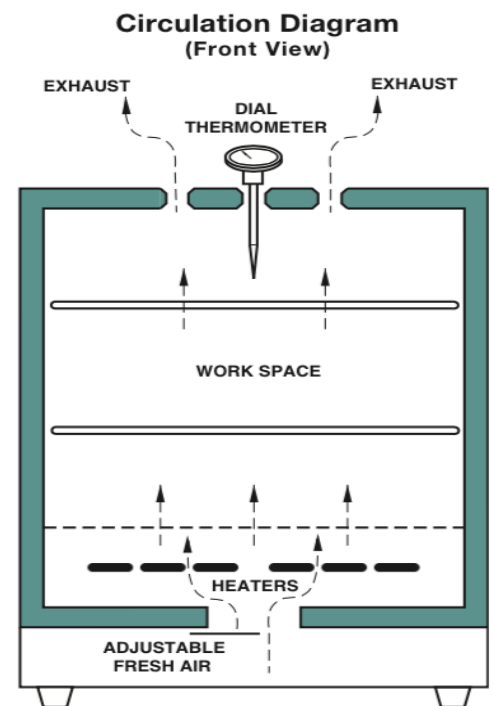
### MODEL LR271C

Primary hydraulic control thermostat sets desired oven temperature. Second manual reset hydraulic thermostat limits maximum oven temperature. Red pilot light indicates heater operation. Top mounted mercury thermometer.

### Gravity Convection All MODELS

Heat is transferred from the bottom up through the oven chamber by natural convection and exits through vents in the oven top. Adjustable fresh air inlet damper at the oven bottom provides control of the amount of fresh air entering the oven.

Catalog Number	Model	Dimensions	Volume (Cu Ft)	Ship Weight
090B-001	LO-201C	14" x 12" x 19"	0.7	41 lbs
090B-002	LR-271C	17" x 17.5" x 24"	1.3	72 lbs
090B-003	LW-201C	20" x 14" x 25"	2	72 lbs



## NB 350 & NB 550 Ovens • 350 to 500°F

The **NB-350** and **NB-550** provide 7 cubic feet of working space at temperatures up to 550 degrees F (NB-550). Ovens are shipped standard with 2 expanded metal shelves, on 2" centers, and can hold up to 7 shelves. Double doors make loading and unloading easy. The doors are sealed with a silicone rubber door gasket. The standard temperature controller is a single setpoint unit, but a multi setpoint programmable controller is available upon request. An independent manual reset excess temperature controller protects against failure of main temperature controller. An On/ Off switch located on the panel controls electrical power to the oven and a red light indicates heater operation.



**MODEL NB-350**  
WITH OPTIONAL PROGRAMMABLE CONTROLLER

Catalog Number	Model	Workspace Dim.	Outside Dim.	Power (watts)
090B-004	NB-350	28" X 24" X 18"(H)	41" X 30" X 23"(H)	2000
090B-005	NB-550	26" X 22" X 16"(H)	41" X 30" X 23"(H)	3000

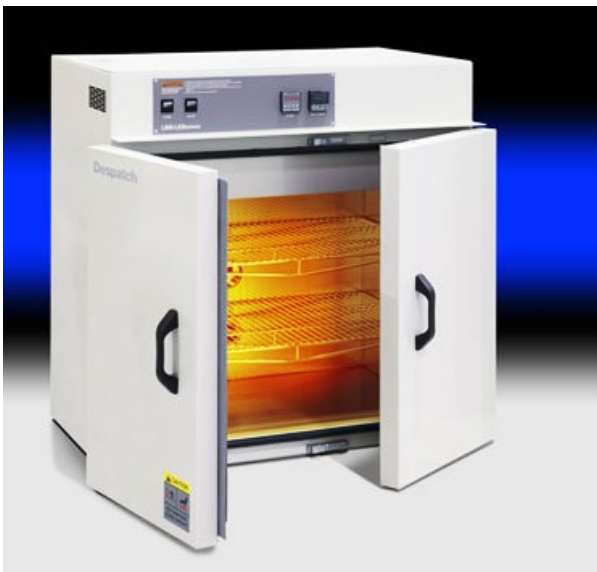
#### Standard Equipment Includes:

115 v/1 Ph/60 Hz – 208 v/1 Ph/60 Hz = 230 v/1 Ph/60 Hz  
 3 wire cord with plug.  
 Calibrated temperature controller & Excess Temp controller  
 Oven comes with two shelves, standard and can have up to 7 shelves on 2" centers.  
 Maximum load per shelf is 20 pounds.

#### OPTIONAL EQUIPMENT:

Additional shelves  
 Dial thermometer (50 deg. to 550 deg. F Digital timer/single setpoint controller)  
 Programmable temperature controller  
 Recording temperature controller  
 Programmable recording temperature controller.

## Forced Convection Bench Oven Model LBB • 400°F



#### Description:

The Despatch LBB Forced convection benchtop oven features a combination of horizontal and vertical airflow that offers excellent temperature uniformity at a moderate price. It is recommended for a variety of laboratory and production applications including drying, curing, annealing and materials testing.

#### Fast Heat-Up Rates

Powerful open coil heating elements and a forward curved fan deliver faster heat-up rates.

#### Precise Digital Controls

Digital controls regulate temperatures within tight tolerances. A 3/4" (1.9cm) LED panel displays temperatures in large, bright, easy-to-read numbers. Temperatures can be reported in either Fahrenheit or Celsius.

#### Reliable, Trouble-Free Performance

The LBB is designed and manufactured to provide years of dependable service. The fan and heater are top mounted to prevent damage from spills.

When spills do occur, the corrosion-resistant stainless-steel interior and nickel plated shelves clean up easily. The motor is permanently lubricated and virtually maintenance free. Despatch warrants the heater performance for a full five years – the best warranty in the industry.

Every LBB benchtop oven is UL and C-UL listed and receives a thorough performance test before shipping.

#### Forced Convection for Excellent Temperature Uniformity

A top-mounted fan draws air through the heater coils and propels it back to the chamber through plenums in the side walls, resulting in consistent, uniform temperatures.

## Sturdy Shelves

Standard shelves handle up to 50 lbs.; reinforced shelves handle up to 200 lbs. All shelves are nickel plated for maximum durability and easy clean up. Built-in shelf supports make it easy to change shelf locations.

## Fast Delivery

Standard models ship in two to three days.

### Key Features

- Forced convection
- Precise digital controls
- Nickel plated shelves
- UL and C-UL listed

### Standard features Options

- Temperatures up to 400° F (204° C)
- Stainless steel interior
- Five year heater warranty

## UL LISTED

- Forced convection from top-mounted fan
- Reinforced shelves rated to 200 lbs.
- Chart recorder and plenums on sides of chamber (standard shelves rated to 50 lbs.)
- Digital control with 3/4" LED display
- Controls and fan on bottom of oven
- Oven stand
- 304 stainless steel interior
- Protocol Plus microprocessor
- Oven stacking hardware
- 5-year heater warranty time clock and optional PC interface
- European Union (CE)
- High-limit control
- Door with window and interior light Conformance available
- UL and C-UL listed • Process timer

Warning: Not for use with flammable or combustible materials. If your process has flammable solvents, ask about the LFD Model Oven.

- Uniformity figures are based on a nine-point test conducted in an empty oven.
- Minimum operating temperature is based on 20oC ambient temperature measured at the fresh air inlet with the exhaust air damper fully open.
- Maximum load capacity figures are only for standard configurations with controls on top.

**Note: Specifications are subject to change without notice**

## Physical Specifications

Chamber size (w x d x h) *Clear opening width is reducing 1 1/2" (3.8cm) due to 3/4" (1.9cm) shelf supports on each side.	18 x 18 x 12 in. 46 x 46 x 31 cm	30 x 18 x 22 in. 76 x 46 x 56 cm	30 x 20 x 35 in. 77 x 51 x 89 cm
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Capacity in cubic feet (liters)	2.3 (65)	6.9 (195)	12.1 (343)
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Overall size (width x depth x height)	24 x 24.5 x 26 in. 61 x 62 x 66 cm	36 x 24.5 x 36.5 in. 91 x 62 x 93 cm	36 x 26.5 x 51.5 in. 91 x 67 x 131 cm
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\*Depth includes exhaust port

Number of shelves provided	2 light duty	2 reinforced	2
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Max number of reinforced shelves	NA	5 on 4 in. centers*	8 on 4 in. centers*
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Max number of light duty shelves	5 on 2 in. centers	10 on 2 in. centers	16 on 2 in. centers
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Cord and plug	15 amp	None - hardwire	None - hardwire
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Number of doors	1	2	2
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Approximate net weight	140 lbs (63 kg)	245 lbs (112 kg)	315 lbs (144 kg)
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Approximate shipping weight	205 lbs (92 kg)	320 lbs (146 kg)	385 lbs (175 kg)
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## Functional Specifications

Time to temp - no load (40°C to 150°C)	17 minutes	15 minutes	15 minutes
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Time to temp - no load (40°C to 204°C)	30 minutes	26 minutes	30 minutes
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Recovery time after door open 1 min. (150°C)	2 minutes	3 minutes	3 minutes
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Recovery time after door open 1 min. (204°C)	4 minutes	6 minutes	6 minutes
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Temperature uniformity Based on 9 point test in empty oven	+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C
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Operating range with 20°C ambient	35°C - 204°C for all models		
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Maximum load capacity	200 lbs. (91 kg)	400 lbs. (181 kg)	600 lbs. (272 kg)
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Maximum shelf capacity (standard)	50 lbs. (23 kg)	50 lbs. (23 kg)	50 lbs. (23 kg)
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Maximum shelf capacity (reinforced)	n/a	200 lbs. (91 kg)	200 lbs. (91 kg)
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Exhaust capacity	Adj. to 1 CFM (0.5 lps)	Adj. to 3 CFM (1.4 lps)	Adj. to 12 CFM (5.71 lps)
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## Physical Specifications

Chamber size (w x d x h) *Clear opening width is reducing 1 1/2" (3.8cm) due to 3/4" (1.9cm) shelf supports on each side.	37 x 24" x 35 in. 94 x 61" x 89 cm	37 x 37" x 35 in. 94 x 94" x 89 cm
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Capacity in cubic feet (liters)	18 (510)	27.7 (784)
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Overall size (width x depth x height)	43 x 30.5" x 51.5 in. 109 x 78" x 131 cm	43 x 43.5" x 51.5 in. 109 x 111" x 131 cm
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\*Depth includes exhaust port

Number of shelves provided	2	2
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Max number of reinforced shelves	8 on 4 in. centers*	8 on 4 in. centers*
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Max number of light duty shelves	16 on 2 in. centers	16 on 2 in. centers
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Cord and plug	None - hardwire	None - hardwire
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Number of doors	2	2
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Approximate net weight	400 lbs* (182 kg)*	550 lbs* (250 kg)*
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Approximate shipping weight	485 lbs* (221 kg)*	635 lbs* (289 kg)*
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## Functional Specifications

Time to temp - no load (40°C to 150°C)	17 minutes	17 minutes
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Time to temp - no load (40°C to 204°C)	33 minutes	33 minutes
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Recovery time after door open 1 min. (150°C)	3 minutes	4 minutes
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Recovery time after door open 1 min. (204°C)	7 minutes	8 minutes
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Temperature uniformity Based on 9 point test in empty oven	+/- 3°C at 150°C +/- 4°C at 204°C	+/- 3°C at 150°C +/- 4°C at 204°C
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Operating range with 20°C ambient	40°C - 204°C for all models	
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Maximum load capacity	600 lbs. (272 kg)	600 lbs. (272 kg)
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Maximum shelf capacity (standard)	50 lbs. (23 kg)	50 lbs. (23 kg)
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Maximum shelf capacity (reinforced)	200 lbs. (91 kg)	200 lbs. (91 kg)
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Exhaust capacity	Adj. to 14 CFM (6.61 lps)	Adj. to 14 CFM (6.61 lps)
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