

SIERRATHERM

PRODUCTION FURNACES INC.

8500 SERIES ELEVATOR BATCH OVENS

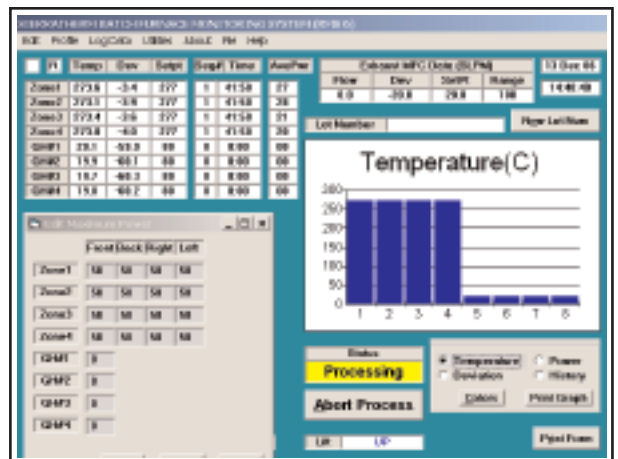
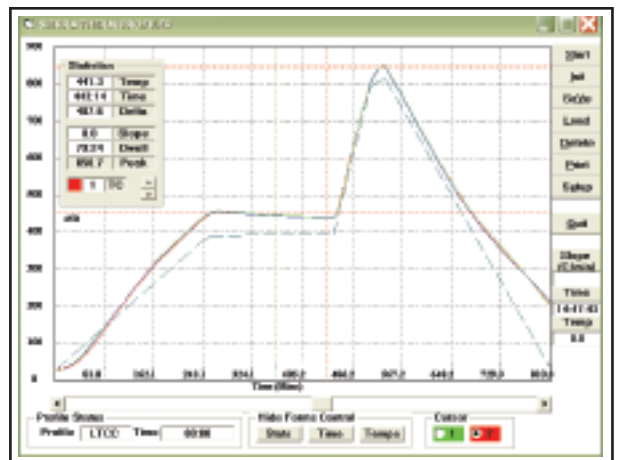
SierraTherm 8500 Series Ovens have a proven record of success in high volume batch processing applications such as firing Low Temperature Co-fired Ceramic (LTCC). These ovens are ideally suited for long, multi-step temperature cycling where a continuous belt furnace would be impractical. Designs are based on years of industry experience and can be used for firing, sintering, brazing, and most electronic packaging and curing applications with process profiles from 100°C up to 1050°C.



ADVANTAGES

- **Precise Temperature Stability**
- **Twenty Segment Temperature & Gas Flow Programming**
- **Energy and Space Saving Efficiency**
- **Unmatched Innovation and Performance**

Rated to 1050°C, the 8500 Series features an energy efficient, ultra clean, low mass refractory heating chamber. All models include the MicroTherm Windows based user interface with 20 segment temperature and gas flow programming. Temperature cycling can be programmed using starting and ending temperature, rise and cooling rates, and time duration. Multiple vertical heated zones, as well as power trimming to all four element panels (left, right, front, back) provide for precise temperature stability and control throughout the process chamber. A sophisticated atmosphere inlet and exhaust system features four independently adjustable gas inlets and corresponding exhaust ports to efficiently extract burn-off effluents throughout the process chamber. This advanced system eliminates leading to trailing edge temperature gradients characteristic in continuous belt furnaces and can process high volume production runs in a fraction of the floor space.



ARISING FROM EXPERIENCE





Elevator Batch Ovens

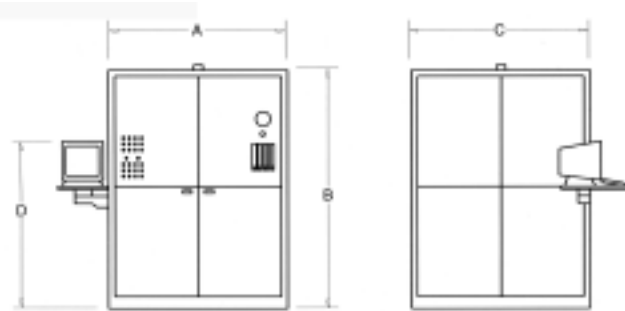
ORDERING INFORMATION AND SPECIFICATIONS

Model	Heating Zones	Heated Chamber Height (in/mm)	Heated Chamber Area (in/mm)	Product Loading Height (in/mm)	Connected Load/ (KW at 230 Volts)
8K16-18-3A	3	18/457	16 x 16/406 x 406	30/362	34/9
8K16-24-4A	4	24/610	16 x 16/406 x 406	20/508	59/15
8K24-24-4A	4	24/610	24 x 24/610 x 610	20/508	65/17

Notes:

1. SierraTherm also manufactures custom designed ovens to meet specific requirements
2. Specifications are subject to change without notice

DIMENSIONS



Type/Model	A	B*	C	D
8K16-18-3A	60/1524	80/2032	60/1524	56/1422
8K16-24-4A	60/1524	86/2185	60/1524	56/1422
8K24-24-4A	70/1778	86/2185	70/1778	56/1422

*Exhaust stack height adds an additional 10 inches (254 mm) to this value

OPTIONS

- Air Filtration System
- 440/480 VAC 3 Phase Power Transformer
- Profiling Thermocouples
- Printers and Plotters
- Status Light Tower
- Automated Hearth Extension
- Afterburner
- Additional Temperature Profiling Ports

PERFORMANCE SPECIFICATIONS

Maximum Temperature Rating: 1050°C

20 Segment Temperature Programming of Start Temp., End Temp., Rate, and Time Duration

Temperature Rise Rates from 0-30°C per minute

Energy Consumption for models operating at typical 850 °C profiles: Typically 20-30% of connected load)

Atmosphere System:

Four independently adjustable gas inlets. Uniform, directional, gas flow distribution throughout the heated chamber

Elevator System:

Microprocessor Controlled, Closed Loop, Digital Feedback, ±0.1% accuracy, programmable early-open for assisted cooling. Dual Speed Loading, Manual Over-ride Switch, Mechanical Belt Slip Clutch

Over-temperature Protection:

Redundant Over-temperature Protection in all zones (maximum 16 zones)

Control System:

MicroTherm Windows Based PC Control System
 Flat Panel Color Monitor
 3 Port Time Temp. Part Profiler
 SPC Data Logging and Historical Display
 OPC Server Interface
 On-line Help Manual

Exhaust System:

2" diameter, air powered venturi exhausts
 Full chamber height exhaust
 Exhaust gas flow monitor and control

Heater Warranty: 1 year

Power Supply:

200/240 Volts, 3 Phase, 50-60 Hz standard (alternatives available)

Note: Performance specifications are based on nominal operating conditions. Actual performance characteristics are dependent on specific processing applications.

SierraTherm Production Furnaces, Inc.

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