

Chromalox Value-Added Products and Services Are Available Worldwide

Worldwide Customer Service

Argentina	Ecuador	Iran	Puerto Rico
Australia	Egypt	Israel	R.O.C. (Taiwan)
Austria	El Salvador	Japan	Russia
Belgium	England	Korea	Saudi Arabia
Bolivia	France	Kuwait	Singapore
Brazil	Germany	Lebanon	Sweden
Canada	Greece	Malaysia	Switzerland
Chile	Guatemala	Mexico	Thailand
China	Honduras	Netherlands	Turkey
Colombia	Hong Kong	Nicaragua	United Arab Emirates
Costa Rica	Iceland	Norway	United States
Dominican Republic	India	Pakistan	Venezuela
	Indonesia	Peru	

Chromalox® PRECISION HEAT AND CONTROL

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Chromalox® PRECISION HEAT AND CONTROL

Providing Value-Added Heating Solutions for
the Foodservice Equipment OEM Industry



RESTAURANTS SERVICE

VALUE ADDED

CHROMALOX HAS YOUR HEAT AND CONTROL SOLUTIONS

With the broadest product line in the industry, Chromalox provides precision heat and control systems for more processes than anyone in the world. We provide solutions for industries as diverse as transportation, pharmaceuticals, chemical processing, the military, power generation . . . and restaurant/foodservice.

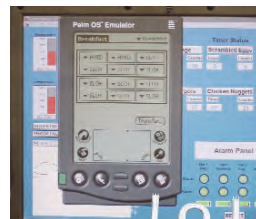
ASSURING YOUR PROCESS PERFORMANCE WITH CHROMALOX



The Chromalox Difference

Some companies build heaters and controls. Chromalox does more. We provide value-added heating solutions for equipment and appliances used throughout restaurant and foodservice operations.

The difference between these two approaches is the difference between uncertainty and assurance. It's the difference between having a supplier who just sells equipment and having a partner who can help you save time and money even before startup, who works with you to maximize efficiency and minimize downtime, and who provides the field service and technical support to get the job done. That's value-added service. And you get it from Chromalox.



Chromalox Can Help Minimize Your Downtime

Quick parts replacement

Chromalox maintains vast inventories of repair and replacement parts for immediate shipment and same-day or next-day delivery. Our toll-free service line can answer your questions quickly at 1-800-368-2493.

Tightening process control with enhanced diagnostics

Chromalox offers proprietary controls and software for shorted SCRs, ground fault, current monitoring, partial load failure detection, and other failure modes. These provide process controls and alarms that protect the equipment and the process.

Support marked by prompt, expert troubleshooting

In addition to information available in product literature and at our website, factory and local engineers can offer answers that return your equipment to service quickly. Factory-trained engineers or technicians will visit your site to evaluate your problem and define the best solution. Call 1-800-443-2640 for the representative closest to you. Or visit chromalox.com.

Broadest Third-Party Approval

Chromalox is the only manufacturer with extensive systems manufacturing in the U.S. and Europe. Approvals and certifications include, but are not limited to, CE, NEC, UL, VDE, cUL, FM, CSA, MSHA, BASEEFA, Cenelec, ASME, PED, ATEX, GOST, and ISO9000.

Technical Assistance on the Internet at www.chromalox.com

Answering your questions 24 hours a day, 7 days a week

This website offers product specs, design wizards, training manuals, and technical documentation day or night. You can find answers to questions about anything from electronic temperature controllers, heaters, and heating elements to material compatibility, corrosion, and wire sizing.



VALUE ADDED

UNMATCHED STOCK, RAPID DELIVERY

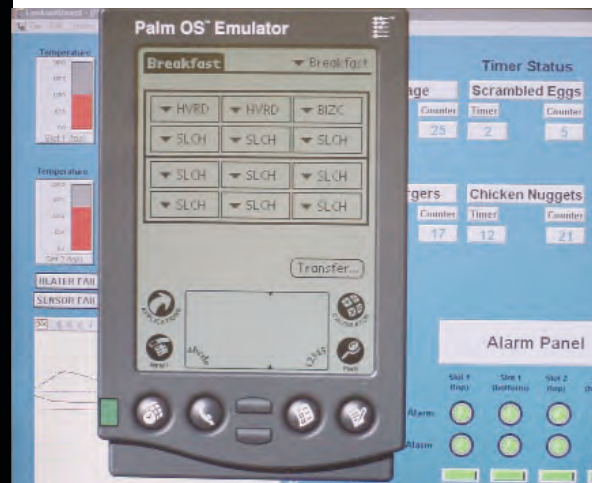
Chromalox maintains an inventory of nearly one million items. We also operate the fastest delivery system in the business. We can ship any component or system we stock within 24 hours through our chromalox.com electronic direct order entry system. Same-day delivery is available for many items. In addition, factory offices, stocking representatives, and over 2,000 authorized distributors carry Chromalox systems and components for same-day pickup.

VALUE ADDED

LOCAL TECHNICAL SUPPORT, CUSTOM DESIGN

The industry's largest and most experienced group of engineers are right there in the field with you. The majority of our 300+ field sales representatives are degreed engineers, and all are experienced with Chromalox heating products and applications. Our innovative design engineers are ready to work with your local Chromalox representative to custom-build a precision heating and control system for any application need you have.

ADDING VALUE WITH UNRIVALED DESIGN CAPABILITIES, SERVICE, AND SUPPORT



Lower Installation and Maintenance Expenses

Our standardized designs reduce your installed cost as well as your customers' maintenance and replacement cost. From heating elements and assemblies to integration with controls and sensors, our complete engineered systems reduce installation labor and ensure proper operation to specifications. In addition, Chromalox will provide engineering assistance with integrating our products into your application, and we can provide training tools and resources to assist you with installation. Once installed and in use, Chromalox components require minimal calibration and are easy to maintain.

Lower Training Costs

Our in-house engineering and software capabilities allow us to design simple operator interfaces. These advanced designs can reduce your customers' training time and expense, plus help to ensure proper operation.

Custom Design for Special Needs

Chromalox can design heating solutions for any unique requirement you might face. Our engineers will custom-design the right product to meet your application needs. If an element, sensor, control, or packaged system that we carry in stock doesn't exactly fit your needs, we'll custom-build it—either by expertly adapting an existing product or by designing and manufacturing a completely new one. We are responsive partners, eager to help you produce prototypes for new products and systems. With our experienced design engineers and extensive manufacturing capabilities, we'll work with you to develop innovative designs in the shortest possible turnaround times.

Chromalox Can Improve Your Application's Efficiency

Reducing performance variations

Chromalox standard and custom controllers coupled with heaters optimize temperature control and shrink variations in efficiencies for optimum performance in applications from deep fryers, ovens, and warmers, to hot plates and steam tables.

Flattening out electrical fluctuations

Chromalox power controls, SCRs, and proprietary software precisely sequence heaters, balance electrical loads, control soft starts, and correct power factors.

TECHNOLOGIES THAT REFLECT AN UNDERSTANDING OF RESTAURANT AND FOODSERVICE APPLICATIONS



Chromalox Understands Every Facet of the Process

From immersion heaters for dishwashers to defrost heaters for refrigerators and freezers. From heating elements for ovens, broilers, and range tops to custom controls for deep fryers, warmers, hot plates, and steam tables. Our expertise, combined with the most stringent material and manufacturing standards you'll find in the industry, provides you with an array of products you can count on to perform to your requirements.

Chromalox Meets Your Specific Challenges

With that kind of experience behind us, Chromalox understands the unique challenges that designers and manufacturers of OEM restaurant and foodservice equipment—and those who serve and maintain them—face. And we have the knowledge, experience base, local support, and technical skills to meet those challenges with you.



PRODUCTS

CHROMALOX HAS A LONG HISTORY OF INNOVATION

Chromalox has been developing better means of applying electrical heat since 1915. That year, we introduced the world's first metal-sheathed heating element.

RESTAURANT/ FOODSERVICE

Anywhere in a commercial kitchen where there's a need for precision heat and control, Chromalox has a solution.

Chromalox components can be found in a variety of OEM applications, including:

- Broilers
- Salamanders/Cheese Melters
- Char Broilers
- Pasta Cookers
- Rice Cookers
- Fryers
- Griddles
- Steam-Jacketed Kettles
- Convection Ovens
- Conveyor Ovens
- Cook & Hold Ovens
- Flash Bake Ovens
- Deck Ovens
- Ranges/Stoves
- Rotisseries
- Steam Tables

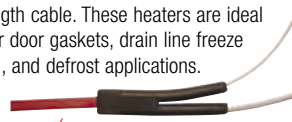
Dishwasher Heaters

Immersion heaters designed for direct contact heating of water are ideal for applications such as commercial dishwashers. Since all heat is generated within the water, energy efficiency is virtually 100 percent. Various temperature control options permit very tight process temperature control. Basic mounting options of threaded screwplug connections or flanges easily accommodate customer design and installation. A large selection of immersion heaters is available from stock for immediate delivery. Chromalox also routinely manufactures custom-engineered designs.



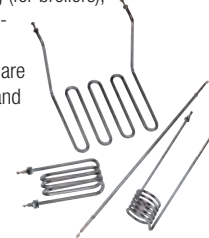
Defrost Heaters

Chromalox manufactures both tubular elements and a unique polymer-sheathed, self-regulating, cut-to-length cable. These heaters are ideal for freezer door gaskets, drain line freeze protection, and defrost applications.



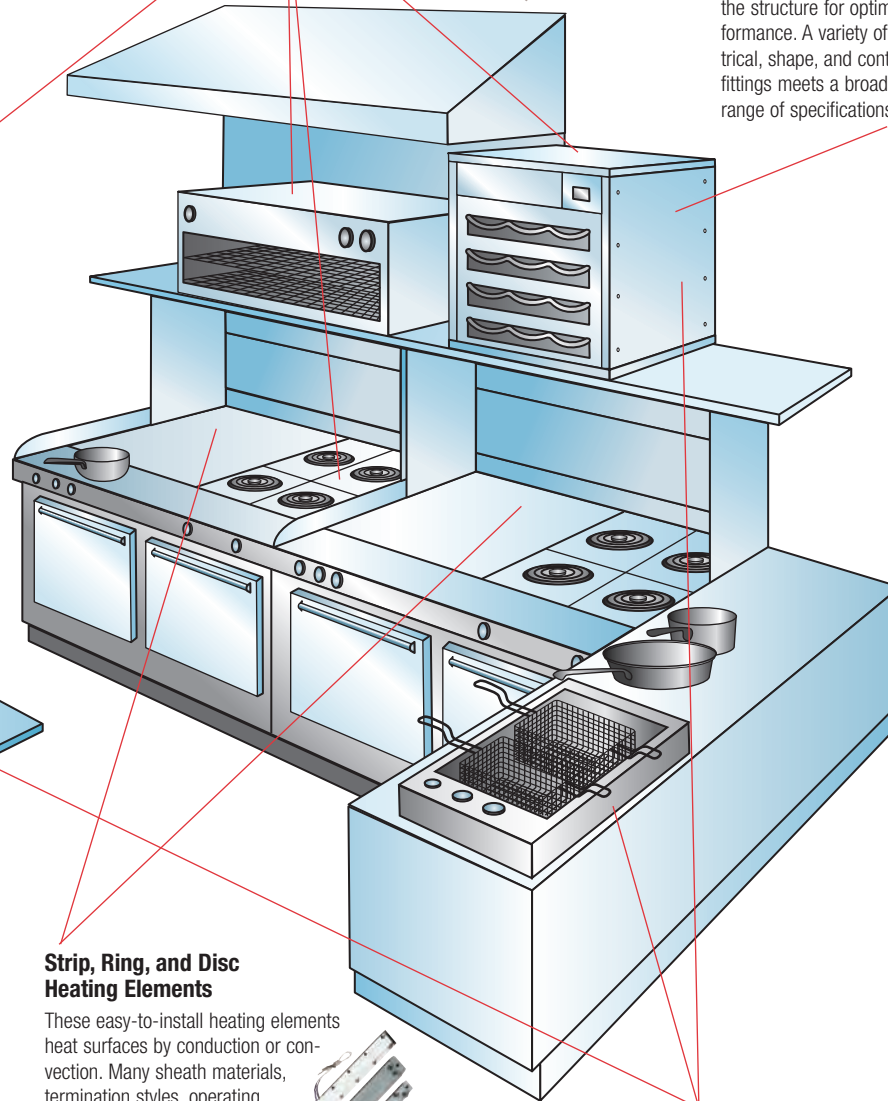
Tubular Heating Elements

These elements are versatile and transfer heat exceptionally well by convection (for convection ovens), by radiant heating (for broilers), and by conduction (for range tops). Round, triangular, flat press, and formed bends are made to customer requirements. Many sheath materials are available as well as more than 20 terminations and many stocked accessories.



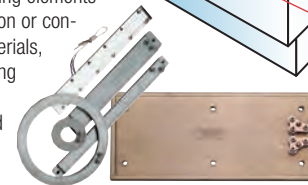
Silicone Laminate/Flexible Heating Elements

Versatile Chromalox silicone laminate/flexible heating elements find use in applications requiring low to medium temperatures. Rugged construction of lightweight material provides chemical and moisture resistance. Wire elements are durable and wound precisely within the structure for optimal performance. A variety of electrical, shape, and contour fittings meets a broad range of specifications.



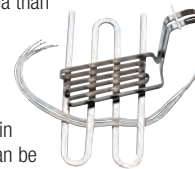
Strip, Ring, and Disc Heating Elements

These easy-to-install heating elements heat surfaces by conduction or convection. Many sheath materials, termination styles, operating temperatures, sizes, voltages, wattage ratings, and mounting configurations are available.



Flat Blade Heating Elements

Flat blade heating elements for griddles and fryers provide more surface area than standard tubular elements. Three-wire construction within the element provides uniform heating. Chromalox flat blade heating elements are available in many sheath materials. They can be as long as 180 inches and may be formed into many configurations.



Immersion Heater with Custom Controller

An immersion heater assembly accurately heats and controls water temperature between 180° and 210°F for applications such as steam tables. Copper-sheathed heating elements are mounted on a brass flange that bottom mounts on your application. The controller maintains temperature at setpoint, detects low water levels, and alerts the operator to low water conditions with an indicator.



RESTAURANT/ FOODSERVICE

Reliable precision heat and control are critical in foodservice applications. Cooking food to the proper temperature is essential for killing many food-borne microorganisms that cause illness. Keeping hot food hot is just as important for preventing the growth of pathogens. Beyond food safety, precision heat and control extends to the safety and safe use of the foodservice equipment itself.

Custom Controls

Chromalox offers a number of standard and custom controllers that can be used in a variety of foodservice equipment, from deep fryers, ovens, and warmers, to hot plates and steam tables.

Chromalox will custom-design controllers for your unique foodservice equipment application.

