

Chromalox[®]
PRECISION HEAT AND CONTROL

**Heating and Control Solutions
For the Wastewater Treatment Industry**



WASTEWATER TREATMENT

APPLICATIONS

- Flanged and screw plug immersion heaters for chlorine injection systems
- Heat tracing and controls for freeze protection of valves, pipes, tanks, and instrumentation lines
- General-purpose comfort heaters for
 - ✓ Instrumentation and control rooms
 - ✓ Laboratory and computer rooms
 - ✓ Locker rooms and restrooms
- Heavy-duty heaters for
 - ✓ Pump and blower rooms
 - ✓ Filter rooms and dewatering area
 - ✓ Pipe galleries and machine rooms
 - ✓ Repair shops
- Hazardous-duty heaters for
 - ✓ Grit removal and screening areas
 - ✓ Digester gas control rooms
 - ✓ Sludge gas compressor rooms
 - ✓ Chlorine and sulphur dioxide rooms
 - ✓ Enclosed primary sedimentation tanks
 - ✓ Scum concentration tanks
- Portable heaters for temporary, localized heat on shipping docks; for heating isolated areas; and for isolated zones within a larger, cooler area

ASSURE YOUR PROCESS PERFORMANCE WITH CHROMALOX



Chromalox Value-Added Heating Solutions

When choosing a supplier of heaters and controls, you're choosing between assurance and uncertainty. Choose Chromalox, and you get more than a supplier who builds heaters and controls: you get value-added heating solutions. You get a partner who can help you save time and money even before startup, who works with you to maximize process efficiency and minimize downtime, and who provides the field service and technical support to get the job done.

Chromalox Can Meet Your Specific Challenges

We understand the unique challenges you face in the design and engineering, operation, and maintenance of your wastewater treatment plant. In addition to our experience and know-how, we bring local support and technical skills to meet those challenges with you.

Chromalox has the industry's largest number and most experienced engineers 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.



CHROMALOX ADDS VALUE IN SO MANY WAYS



Lower Maintenance and Installation Expense

Our standardized designs reduce your installed cost as well as your eventual replacement cost. From heater assemblies to integration with controls and sensors, our complete engineered systems reduce installation labor, reduce startup time, and ensure proper operation to specifications.

Reduced Insurance Premiums

Using Chromalox ASME- and FM-certified electric package systems may result in lower insurance premiums for you. Our third-party approvals and certifications are the broadest available, including, but not limited to, CE, NEC, UL, VDE, cUL, CSA, MSHA, BASEEFA, Cenelec, PED, ATEX, GOST, and ISO 9000.

Lower Training Costs

Our in-house engineering and software capabilities allow us to design simple operator interfaces that can reduce your training time and expense, as well as increase repeatable operation. Chromalox also has training tools and resources available to assist you in installation, startup, and operation.

Quick Parts Replacement

Chromalox maintains an inventory of nearly one million items. We also operate the fastest delivery system in the business. For you, this means minimized downtime. 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.

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 your processes and equipment.

24/7 Technical Assistance on the Internet

Chromalox.com offers product specs, training manuals, and technical documentation day or night. You can find answers to questions about anything from electronic temperature controllers, pumps, and fluids, to material compatibility, corrosion, and wire sizing.

Support Marked by Prompt, Expert Troubleshooting

In addition to information available in product literature and at our website, factory and local engineers are as close as your phone to help you return your equipment to service quickly.



UNMATCHED EXPERIENCE

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, power generation, the military, petrochemical . . . and wastewater treatment.

UNMATCHED EXPERIENCE

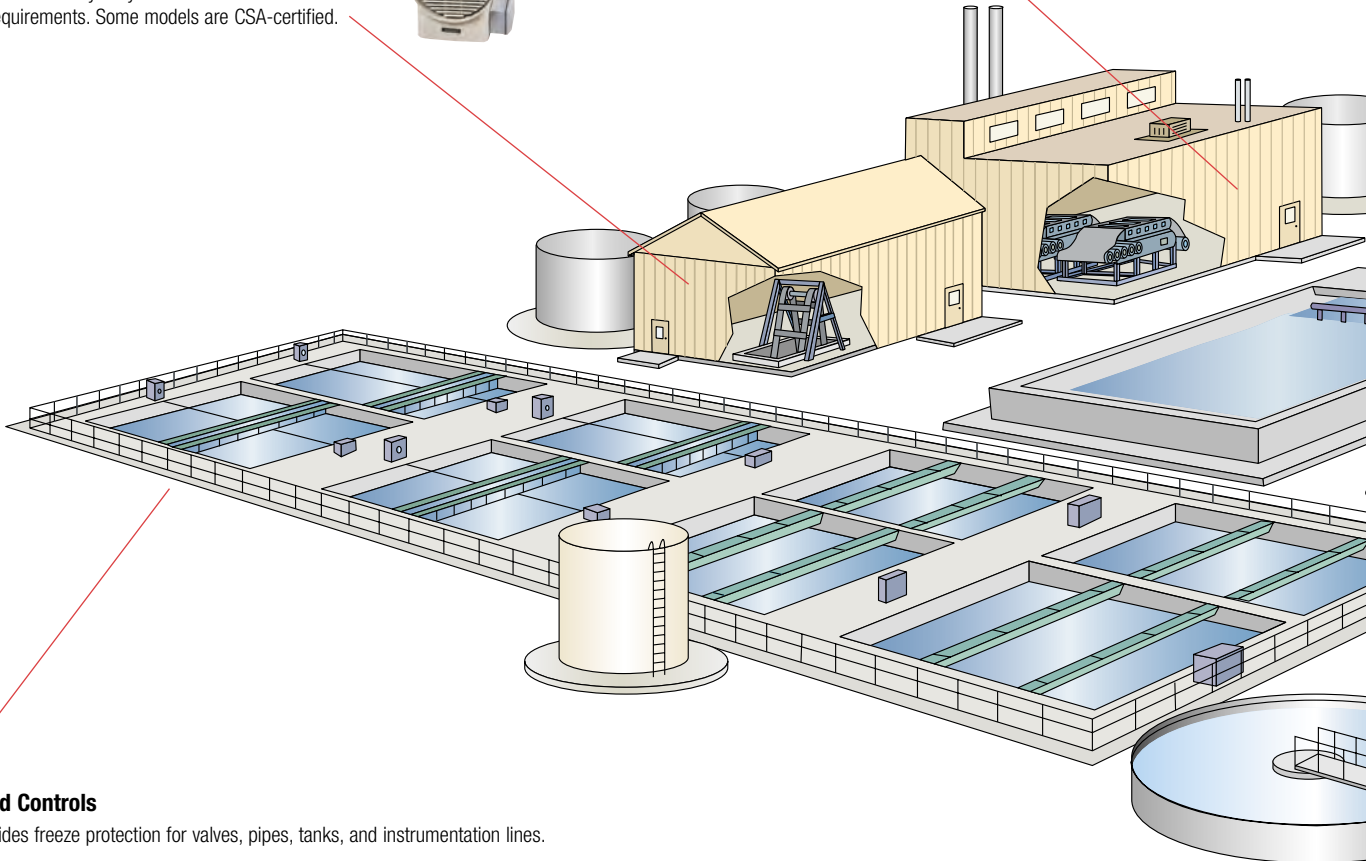
General-Purpose Blowers

Heavy-gauge steel blowers trimmed in a polyester powder coat come in horizontal or vertical configurations that can be ceiling- and wall-mounted. Adjustable louvres direct airflow. Chromalox general-purpose blowers meet UL, CSA, NEC, and OSHA requirements. LJH series heaters include seismic qualifications. Various built-in control options are available.



Heavy-Duty Blowers

Heavy-duty forced-air heaters feature heavy-duty construction for use in dirty, corrosive environments. Some models are available with NEMA 4X control enclosures and stainless steel construction to resist dirt contamination and chemical attack, and can be hosed down. Chromalox heavy-duty heaters are UL-listed and meet NEC and OSHA requirements. Some models are CSA-certified.



Heat Trace and Controls

Heat tracing provides freeze protection for valves, pipes, tanks, and instrumentation lines.

Self-Regulating Heat Trace Cable and Controls

Chromalox self-regulating heat trace and control systems can save energy and reduce maintenance and the risk of overtemperature. The cable can be single-overlapped without burnout, cut to length in the field, and easily spliced. Outperforms industry competitors in field life, insulation integrity, and resistance against increasing temperatures.

IntelliTRACE™ Controls

A complete control solution for heat trace applications with a modular design for selection of only the features needed for specific heat trace installations, minimizing the purchase price and simplifying system configuration. Single-channel system using microprocessor-based control. Comes completely pre-wired and assembled. Easily programmed standard features further simplifies installation, startup, and use. All IntelliTRACE systems are designed for universal inputs. Each unit comes in a NEMA 4X glass-fiber-reinforced enclosure that includes a solid-state relay (30A at 40°C), mounted on a heatsink, and with a current transformer to measure operating current. Optional GFI modules have a shutdown contactor and illuminated reset switch. A terminal block is used for field connections on all units.



Flanged and Screw Plug Immersion Heaters

Ideal for chlorine injection systems, flanged and screw plug immersion heaters are fitted directly through tank walls to heat chlorine liquid and gas by direct contact. Flanged immersion heaters are constructed of hairpin-bent tubular elements welded or brazed into a flange and provided with electrical enclosures. A wide selection of flange sizes and electrical enclosures are available. Screw plug immersion heaters consist of tubular elements in a threaded hex plug and are provided with a thermowell for the temperature control sensor and a variety of electrical enclosures for electrical connections.



Hazardous Duty Heaters

Hazardous-duty convection and forced-air blower-type heaters are designed for rugged industrial use in the presence of potentially flammable or explosive gases, vapors, powdered metals, or dusts in locations such as sewage treatment plants, petroleum refineries, and chemical processing plants. Numerous control options are available. Units are UL-listed, and GSA- and MSHA-certified models are available for wall or ceiling mounting. Consult the National Electric Code for classification of your hazardous area before selecting your heater.



Custom Power Control Panels

Panels engineered with solid-state controls built to the most rigid standards and sized for virtually any application or specification. Select from many NEMA-type enclosures, single- or three-phase load requirements, voltages, transformers, fusing, contactors, firing cards, and more. We can design the power control panel best-suited for your specific application.



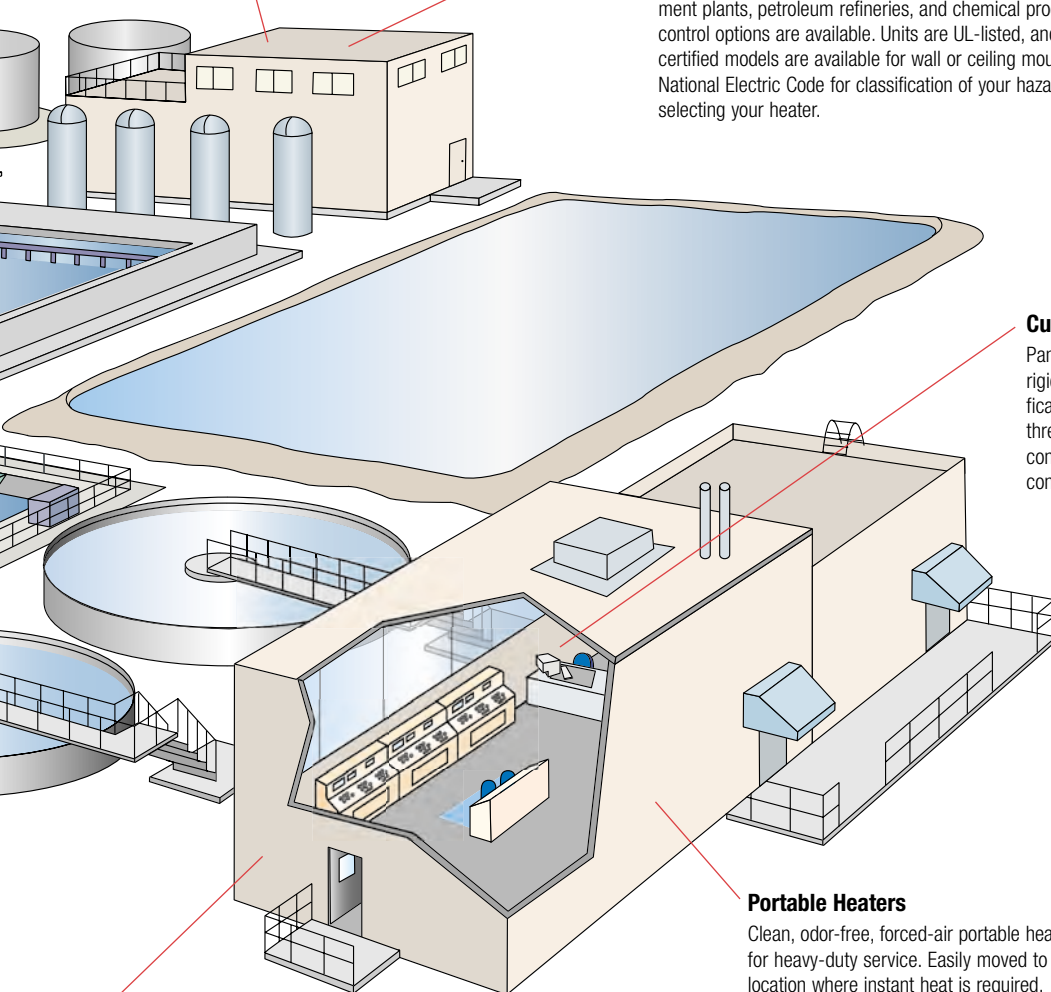
Portable Heaters

Clean, odor-free, forced-air portable heaters constructed for heavy-duty service. Easily moved to virtually any location where instant heat is required. Forced air designs are ideal for worker comfort, drying and curing, thawing pipes and machinery, and where temporary, localized heat is necessary.



Radiant Heaters

Radiant heaters provide virtually instantaneous dependable heat for tough-to-heat areas. They are designed for fixed mounting and will maintain an isolated comfort level within a larger, cooler area. Heavy-duty, metal-sheathed elements resist impact and vibration and are ideal for high-abuse applications.



Chromalox Value-Added Products and Services Are Available Worldwide

Worldwide Customer Service

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

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PRECISION HEAT AND CONTROL

103 Gamma Drive Ext.
Pittsburgh, PA 15238
USA

Phone: (412) 967-3800
Fax: (412) 967-5148
Toll-Free: 1-800-443-2640

email: sales@chromalox.com
www.chromalox.com

Eltron Chromalox

Eltron House
20-28 Whitehorse Road
Croydon, Surrey, CR9 2NA, UK

Tel: +44 (0)20 8665 8900
Fax: +44 (0)20 8689 0571

email: uksales@chromalox.com
www.chromalox.co.uk

Etirex Chromalox

Route de Château-Thierry
Noyant et Aconin
F-02203 SOISSONS Cedex, France

Tel: +33 (0)3 23 74 39 39
Fax: +33 (0)3 23 74 39 00

email: etirexchromalox@wanadoo.fr
www.chromalox.fr