Chromalox®
PRECISION HEAT AND CONTROL

Chromalox Calderas eléctricas tipo paquete, de agua caliente, calderas de vapor, son fuente de calor seguras y versátiles que producen vapor a baja o alta presión, o agua caliente para procesos industriales o comerciales, y aplicaciones de calentamiento para confort.

Industries We Serve

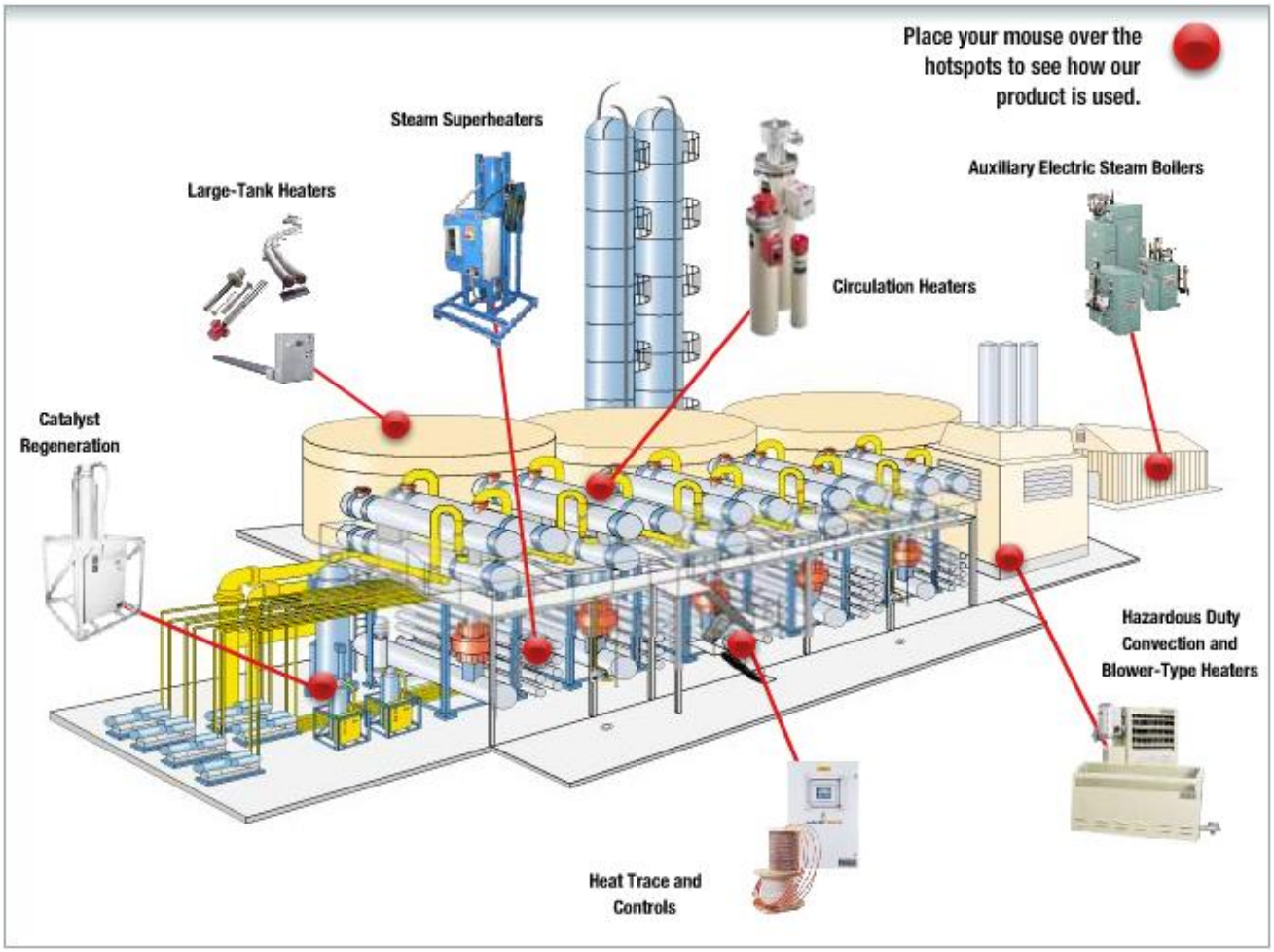
Petroquimica

Complete precision heat and control solutions for the petrochemical industry

Today Chromalox is a global leader in designed precision heat and control systems for petrochemical processing. From polyethylene, propylene, and ethylene plants, to ammonia/urea production, to aromatics, butane, pentane, and hexane products, to LNG and MTBE production, no one knows how to apply heaters and heater controls to petrochemical processing better than Chromalox.

Chromalox is vertically integrated in manufacturing capabilities and offers full design and engineering for virtually any electric process heat and control requirement in your plant. Our objective is helping you to save time and money by reducing installation labor, reducing start-up time, and ensuring proper operation to specification to maximize your efficiency and minimize your downtime.

View our Petrochemical Processing Industry Brochure



Large Tank Heaters

Chromalox large tank heaters provide cost-efficient heating of stored viscous materials by precisely sequencing operation to take advantage of off-peak electricity rates. They require very little upkeep and maintenance. That helps reduce both labor cost and the time and material costs of inefficient heating. Chromalox offers a number of large tank heater solutions to meet the needs of petrochemical plants.

Flanged Immersion Heaters

Flanged immersion heaters provide virtually 100 percent energy efficiency for the heating of large oil tanks. Their bayonet styling provides high watt densities, and available temperature control options permit extremely tight process temperature tolerances. A wide range of standard designs is available for immediate delivery, or Chromalox can design a custom solution for you.

Heat Trace and Controls

Heat tracing helps avoid process temperature drops that can lead to freeze-ups in plant areas like cooling towers, instrumentation lines, process water, safety showers, fire protection piping, and condensate piping. Providing temperature stability helps prevent unacceptable viscosity increases and solidification of fluids in the lines.

Self-Regulating Heat Trace Cable and Controls

Chromalox self-regulating heat trace and control systems can save energy, 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.

Constant Wattage Cable

Flexible Tank Heaters

Chromalox flexible tank heaters are ideal for underground tanks or units without side entry. They spread heat evenly in tanks made from steel, concrete, or Fiberglas®, preventing hot spots and carbonization. In addition, they install through normal manhole openings, so no modification is required. They also allow for tank system operation with little or no manual attention, and using them enables maintenance work to be done without draining the tanks.

Unitary Large Tank Heaters

Chromalox unitary large tank heaters offer low watt density heating over large heated surfaces with precise temperature control. They are self-contained, can be maintained with little or no manual attention, and eliminate the need to drain tanks. Designed for work under tight space constraints, some models require only three feet of space for installation or removal. And local control panels, complete with weatherproof enclosures, help prevent overtemperature operation and damage from power surges.

Circulation Heaters

Chromalox circulation heaters afford high energy efficiency, fast heating, and uniform heat distribution for numerous petrochemical plants heating applications such as H2-rich and Claus gas heating, desulphurization, and air and flue-gas heating. They also provide high turndown capability, tight outlet temperature control, and variable flow rates. And Chromalox offers a variety of electrical terminal enclosures to meet the unique requirements of petrochemical facilities.

Steam Superheaters

Chromalox circulation heaters also superheat steam, either for higher process temperatures or to clean the steam itself. Our smaller units also help make up line losses during transportation from central steam generation systems. High watt densities and operating temperatures are obtainable with

Provides accurate temperature and reliable heat to 300ºF. Heating output is uniform through its entire length thanks to its parallel heating core. Flexible and rugged. Withstands steam cleaning to 190 psi at 392ºF when de-energized. Can be cut to length in the field, making installation easier.

Mineral Insulated Cable

Ideal for the most rugged pipe tracing applications, up to 1,200ºF. Fire-resistant and does not support combustion. Provides reliable electrical ground for safe operation. Custom configurations available with single or dual conductor cable.

IntelliTRACETM 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, start-up, and use. All IntelliTRACE systems are designed for universal inputs. Each unit comes in a NEMA 4X glass fiber reinforced enclosure that includes a solidstate 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.

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 NEMAtype enclosures, single- or three-phase load requirements, voltages, transformers, fusing, contactors, firing cards, and more. We can design the power contro panel best-suited for your specific application.

Auxiliary Electric Steam Boilers

Chromalox steam superheaters, thanks to the high quality of their INCOLOY® flanges and ASME-certified, carbon steel sheathes.

Catalyst Regeneration

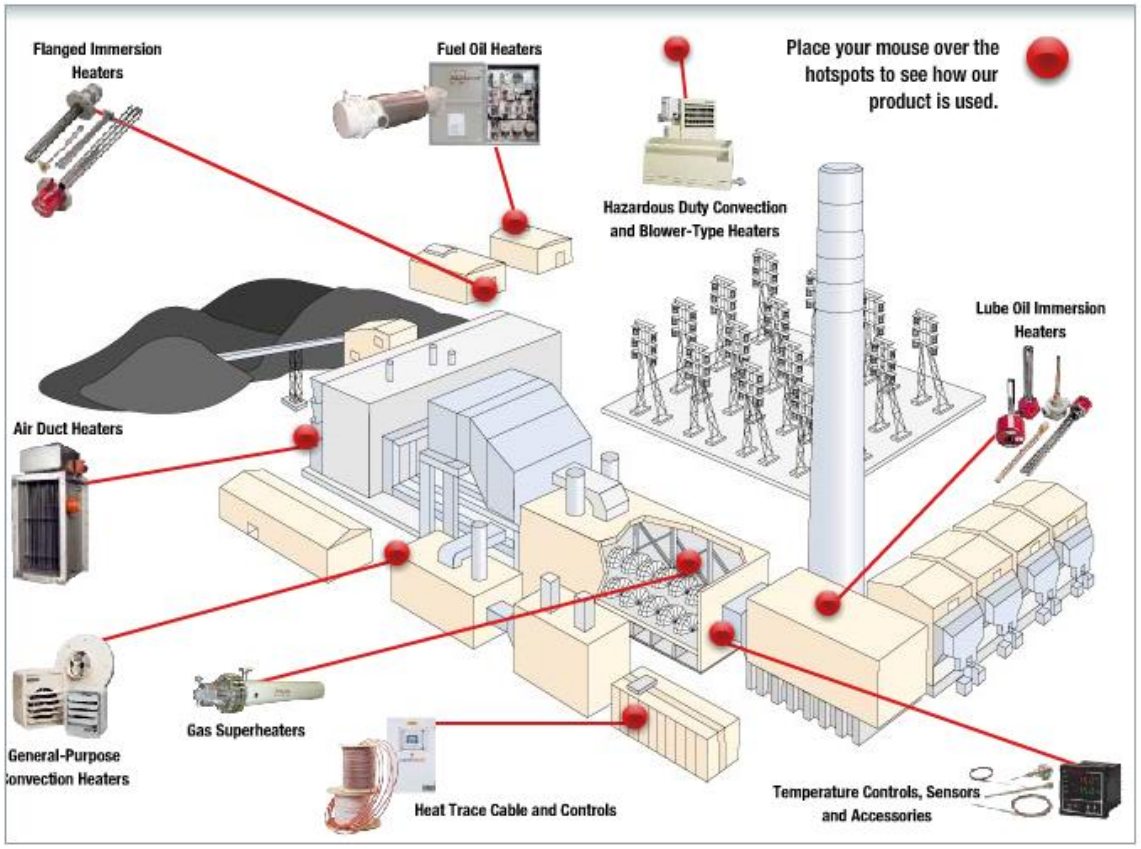
Chromalox prewired, skid-mounted circulation heat systems provide high performance for the burning, reduction gas, and calcination gas heaters inside catalyst regeneration units. Flanged immersion elements provide superior strength and rigidity, and can be easily removed for cleaning and inspection. Heater vessels come in an array of sizes and meet virtually any kilowatt or corrsion resistance requirement. And their metal skid mounts, with vessel and control panel securely attached to the frame supports, enable easy handling.

Chromalox auxiliary steam boilers can be placed anywhere steam is required and electricity is available. They are ideal for remote locations where plant steam is not economical, providing hot water or steam on demand for emergency or maintenance downtime backup. They are simple to use, operate cleanly, and require minimal maintenance.

Hazardous Duty Convection and Blower-Type Heaters

Chromalox hazardous duty convection and blower-type heaters provide comfort, freeze protection, and moisture protection in areas like switchgear, control rooms, outbuildings, and pump houses—particularly where the possibility of explosion or fire exists. Ruggedly designed Chromalox convection and blower-type heaters are UL-listed and CSA- and MSHA-certified. Models are available for wall or ceiling mounting.

Power Generation



Offshore Drilling