COGENERATION

Chromalox®

Chromalox®
PRECISION HEAT AND CONTROL

Precision Electric Heat and Control Systems for Cogeneration Plants

COGENERATION

WHY CHOOSE ELECTRIC HEAT?

- Consistent pricing
- Clean-running operation
- No pollution
- Quiet operation
- Reduced footprint and envelope size
- Minimal maintenance
- Low operating cost
- Safety
- Large turndown / precise control

Fire Water Storage

Large tank heaters with replaceable elements ensure operational readiness for freeze protection applications.

Storage Tanks

Storage tank facilities for products such as sodium hydroxide and DI water are heated with hazardous-duty flanged immersion heaters to ensure precise temperatures needed for process conditions.

Lubricating Oils for Turbines and Compressors

Immersion heaters with or without replaceable elements provide direct heating of lubricants for turbines and compressors.

Auxiliary Steam Generator

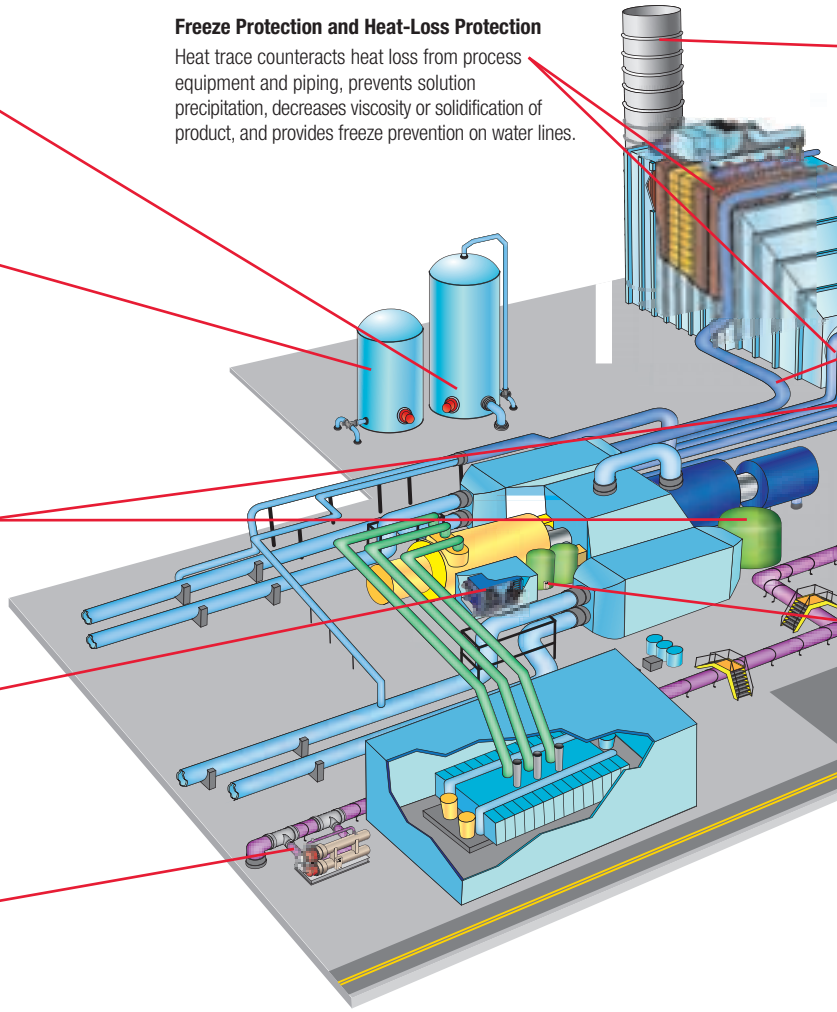
Compact, low-pressure electric steam boilers supply on-demand steam for super critical times during startup and peak demands.

Fuel-Gas Conditioning and Dew Point Heaters

Electric inline circulation heaters preheat and dry out supply gas streams to prevent corrosive condensation from forming and damaging expensive turbine blades.

Freeze Protection and Heat-Loss Protection

Heat trace counteracts heat loss from process equipment and piping, prevents solution precipitation, decreases viscosity or solidification of product, and provides freeze prevention on water lines.



Large Tank Heating Systems

Chromalox large tank heaters employ metal-sheathed tubular or ceramic-insulated, open-coil pipe insert heating components for use in 2- and 3-inch (50- and 75-millimeter) nominal pipe sizes. This unique construction allows heating elements to be changed or field-serviced without draining the tank. Complete with Chromalox controls, these large tank heating systems can be operated to maintain materials at the proper temperature with little or no manual attention.

Immersion Heaters

Chromalox immersion heaters apply heat directly at virtually 100 percent efficiency. Basic mounting options include threaded, flanged, and over-the-side designs. Various temperature control options permit very tight process temperature control. These direct-heating units feature carbon/INCOLOY*/stainless steel sheathed elements and thermowells, integral controls, and moisture- and explosion-resistant terminal enclosures.

Circulation Heaters

Our circulation heaters are designed to heat a flowing medium using in-line or side-arm piping configurations. A wide selection of kilowatt ratings, materials, vessel sizes, terminal enclosures, control features, and mounting methods are available. INCOLOY* sheathed elements, stainless steel vessels, and high-pressure ASME ratings enhance safety and the service life of turbines.

Comfort Heaters

Chromalox general-purpose convection- and blower-type units are ideal for heating enclosed spaces such as wash water skids and service and maintenance facilities. They provide freeze protection and faster cold starts. Their Fintube® heating system consists of corrosion-resistant steel furnace-brazed to the tubular heating element to assure long life and superior heat transfer. The casing is a heavy-gauge steel with adjustable louvers.

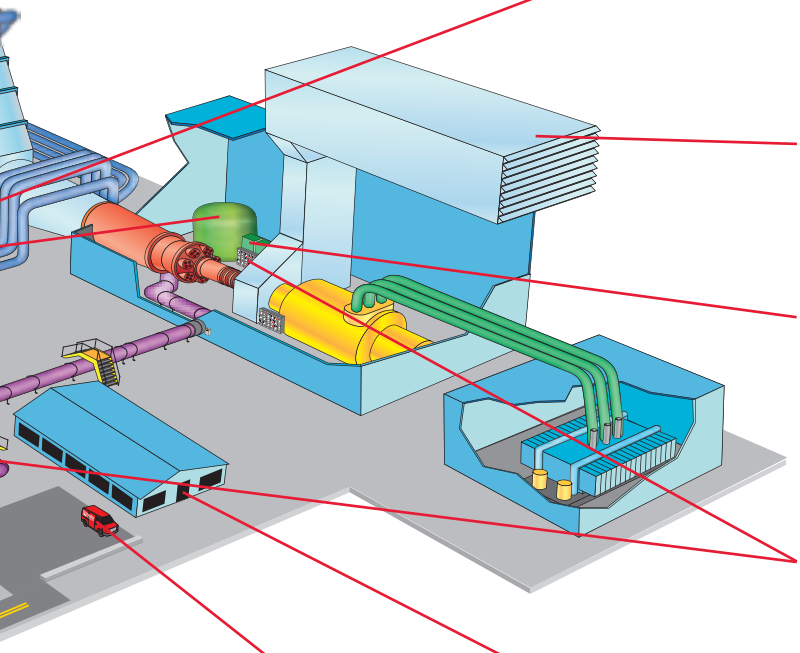
*INCOLOY and MONEL are registered trademarks of Huntington Alloys Corporation.

Exhaust Stack and Accessory Modules

Hazardous-duty convection and forced-air heating units provide safe heating in places like turbine and vent fan enclosures, exhaust stacks, and accessory modules.

High-Pressure Steam Piping

High-temperature metal-sheathed heating cable is used for freeze protection on high-pressure steam piping in hazardous-rated area locations such as the Heat Recovery Steam Generator (HRSG).



Turbine Air Intake

Large electric duct heaters warm incoming air to prevent icing on turbine blades in cold climates.

Motor and Enclosure Heaters

Component strip heaters and silicone laminate heaters for medium to large sized motors and enclosures prevent condensation agents from decreasing life and performance.

Temperature Controls, Sensors, and Control Panels

Thermocouple and RTD sensors, electronic PID DIN temperature control units, and SCR power switching panels minimize temperature swings, increase life of the heaters, and provide tighter control.

Service and Maintenance

Yearly service visits ensure optimal operating conditions and help predict needed maintenance.

Maintenance Facilities and Wash Water Skids

Convection and blower units heat enclosed spaces to warm both equipment and personnel.

Auxiliary Electric Steam Boilers

Constructed of carbon or stainless steel with fiberglass insulation to ASME or PED code, Chromalox steam boilers and steam generators are safe, versatile, and efficient energy management systems that provide low- or high-pressure hot water or steam. They are packaged units that are completely assembled and ready to install, needing only a water feed-source and electric power hook-up to operate from existing distribution voltages, making installation simple.

Heat Trace and Controls

Heat trace is used to counteract the heat loss from process equipment and piping through its insulation, to prevent solution precipitation and the increase of viscosity or solidification of product, and to provide freeze protection. Chromalox offers a variety of heat trace cable; temperature control, monitoring, and management in one, modular package; and all of the necessary components needed to complete the installation.

Controls and Control Systems

From basic, low-cost temperature and process controllers, to monitors and over-temperature controls, to more sophisticated control systems like the Chromalox® intelliPANEL™ 3-phase SCR power control panel featuring unique color touchscreen technology, Chromalox can design the right system for your plant's needs. We are the only heating element supplier offering a complete line of controls, control panels, and accessories.

WHY CHOOSE CHROMALOX?

- Broadest product line and experience unmatched in the industry
- Precision-engineered heat and control systems for more alternative fuels processes throughout the world than anyone
- Full design and engineering for virtually any electric process heat and control application
- Vertical integration in manufacturing capabilities
- Customized service ranging from start-up and training, to ongoing maintenance diagnostics, to emergency response—all based on complete knowledge of your components parts and systems

OPTIMIZATION

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