RAILWAY Chromalox®

Chromalox®
PRECISION HEAT AND CONTROL

Precision Electric Heat and Control Systems for Railways

RAILWAY

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

Overhead Duct Heaters

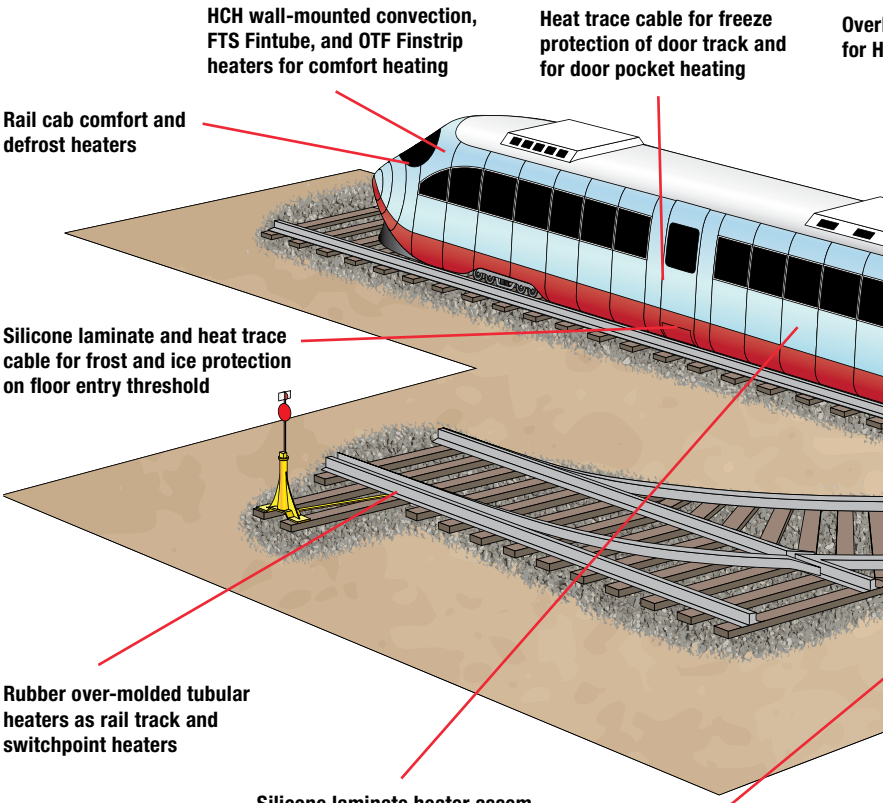
Electric duct heaters can be customized to fit any application. Frame and housing can be provided in several types of materials, including stainless steel. Duct heaters can be provided with open coil, finned tubular, and tubular heating elements.

Rail Cab Heater

Chromalox can custom-design and -build blower assemblies to fit any rail cab. From finned tubular to open coil, Chromalox has the capabilities to fit elements in tight spaces and put the heat where you need it.

HCH Wall-Mounted Convection Heater

Type HCH convection heaters are designed for easy installation in hard-use areas. The patented metal sheath Fintube® radiating heating elements with furnace-brazed steel fins assure long life and superior heat transfer. The cabinet is constructed of heavy 18-gauge steel with a zinc chromate primer and an almond polyester powder-coat finish. Each unit is self-contained, complete with thermostat, automatic reset (standard) and manual reset (optional) cutout.



Finned Tubular Heaters

Chromalox® Fintube® heating elements are designed for optimum heat transfer because the fins greatly increase surface area. They are superior to open-coil elements because the heating coil is completely encased in a metal sheath, minimizing shock hazard and hot spots. They can be bent to provide higher concentrations of installed kilowatts for a given area.

Finstrip Heater

Chromalox® Finstrip® heating elements are superior to open coil elements since the heating coil is completely encased in a metal sheath, minimizing a shock hazard due to accidental contact with the heater. The rigid metal sheath minimizes hot spots and electrical shorting likely with open coil elements. Application temperatures to 565°F (296°C) are typical.

Flexible Silicone Laminate Heaters

Versatile Chromalox silicone laminate/flexible 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 meet a broad range of specifications.

Cartridge Heaters

Cartridge heaters are inserted into drilled holes to heat metal parts or small spaces. Chromalox provides an array of sizes, wattage ratings, voltages, lead, and mounting options. Optional end seals resist contaminants and moisture from entering the heater as operating temperatures increase.

Tubular Heaters and Assemblies

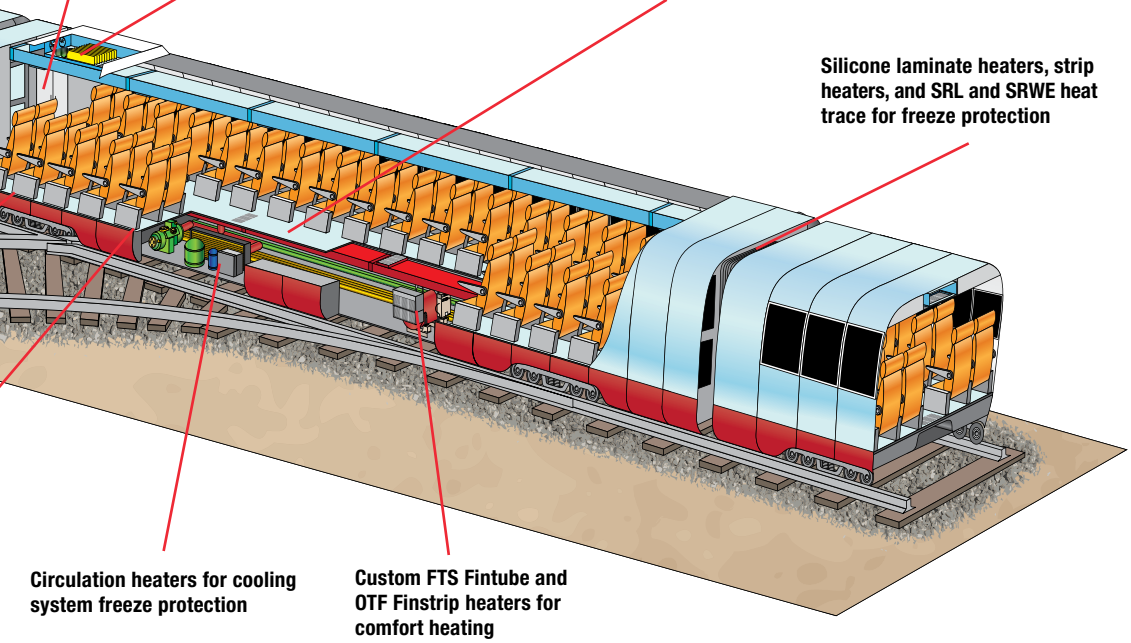
Tubular heating elements are versatile and transfer heat exceptionally well by conduction, convection, or radiant heating to heat liquids, air, gases, and surfaces. Round, triangular, flat press, and formed bends are made to customer requirements. A multitude of sheath materials are available. Elements can be custom-designed with brackets and controls to create an easily installed module. More than 20 optimal terminations and many stocked accessories are available. Can be furnished as UL-listed and CSA-certified. VDE and CE certification are also available.

Cartridge heaters for hot water in lavatories

Silicone laminate heaters for toilet tank freeze protection

Heat trace cable embedded in floor provides convection heat source for cabin comfort heating

Silicone laminate heaters, strip heaters, and SRL and SRWE heat trace for freeze protection



Circulation heaters for cooling system freeze protection

Custom FTS Fintube and OTF Finstrip heaters for comfort heating

Strip Heaters

Rugged and easy to install, strip heaters transfer heat by either conduction or convection to heat surfaces. Strip heaters range from 0.5 to 2.5 in. (12.75 to 63.5 mm) wide and lengths to 72 in. (1.8 m). Units bolt or clamp to many surfaces. Many sheath materials, termination styles, operating temperatures, sizes, voltages, wattage ratings, and mounting devices are available.

Circulation Heaters

Chromalox circulation heaters are packaged units consisting of a screw plug or flanged immersion heater mounted in a thermally insulated heating chamber for efficient heating of a flowing medium by in-line or side-arm operation. Thermocouple sensors can be provided to connect to most any controller. Select from many terminal enclosures, sheath and vessel materials, flanged connections, and controls. Chromalox offers optional ASME, PED, KOSHA, and SELO certification.

SRL and SRWE Heat Trace

Self-regulating cable for ordinary and hazardous environments prevents freezing and maintains temperatures. Constructed of a semiconductive heater matrix extruded between parallel buss wires, the self-regulating cable adjusts its output to independently respond to temperatures along its length. This heat trace cable can be single-layer overlapped. It is flexible and can be cut to length in the field, making it easy to install. Cable can be used in Division 1 and Division 2 hazardous areas.

WHY CHOOSE CHROMALOX?

- Broadest product line and experience unmatched in the industry
- Chromalox engineers more than 3,000 unique, new products every year and has more than 700,000 customer designs on file
- Vertical integration in manufacturing capabilities
- Full design and engineering for virtually any electric process heat and control application
- The industry's largest and most experienced group of engineers, all thoroughly knowledgeable with Chromalox products and applications, is right there in the field ready to serve you

RAILWAY

Chromalox Value-Added Products and Services Are Available Worldwide

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