Immersion Heaters

Overview

- · Screw Plug Heaters
- · Flanged Heaters
- · Over-the-Side Heaters

Immersion heaters are designed for direct contact heating of water, oils, viscous materials, solvents, process solutions and gases. Since all heat is generated within the liquid or process, virtually 100% energy efficiency is achieved. Various temperature control options permit very tight process temperature control. Basic mounting options of threaded screwplug connections, flanges or simple over-the-side designs facilitate customer installation. A large selection of designs is available from stock for immediate delivery. Products are available for heating any fluid, from plain water to corrosive solutions, highly viscous oils, and for many specialized applications such as high pressure and hazardous areas. Custom engineered designs are also routinely manufactured by Chromalox.

Screw Plug Heaters



Screw Plug Immersion Heaters consist of hairpin bent tubular elements brazed or welded into a screw plug and provided with terminal enclosures for electrical connections. Screw plug immersion heaters are screwed directly through a threaded opening in a tank wall or into a matching half coupling.

Over-the-Side Immersion Heaters are designed for installing in the top of a tank with the heated portion directly immersed along the side or at the bottom. This provides easy removal of the heater and ample working space inside the tank. These heaters are available with heating elements made of copper, steel, stainless steel, lead, cast iron, INCOLOY®, Titanium, Teflon® coated and quartz.

Flanged Heaters



Flanged Immersion Heaters consist of hairpin bent tubular elements welded or brazed into a flange and provided with terminal enclosures for electrical connections. Flange heaters are installed by bolting to a matching flange welded to the tank wall or nozzle.

Over-the-Side Heaters



Immersion

Screw Plug Immersion Heaters

Overview

Description

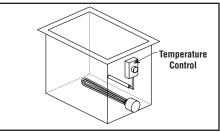
Screw Plug Immersion Heaters consist of hairpin bent tubular elements brazed or welded into a screw plug and provided with terminal enclosures for electrical connections. Screw Plug Immersion Heaters are screwed directly through a threaded opening in a tank wall or through a matching pipe coupling or half coupling. Sizes of screw plug heaters are available with 1/2, 3/4, 1, 1-1/4, 2 and 2-1/2" pipe threads. A wide selection of screwplug sizes, kilowatt ratings, voltages, sheath materials, terminal enclosures and thermostats makes these compact heaters ideal for all types of applications.

Applications

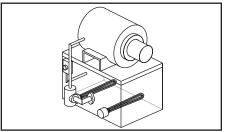
Screw Plug Immersion Heaters are used for heating liquids and gases in a variety of processes. These heaters are ideal for process water heating and freeze protection. All types of oils and heat transfer solutions can also be heated using these compact, easily controlled units. The direct immersion method is energy efficient and well suited for many applications.

- · Hot Water Storage Tanks
- · Warming Equipment
- · Preheating all Grades of Oil
- Food Processing Equipment
- · Cleaning and Rinsing Tanks
- · Heat Transfer Systems
- · Process Air Equipment
- · Boiler Equipment
- Freeze Protection of Any Fluid

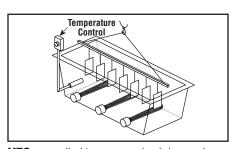




MT — screwed into tank wall parallel to bottom for use as a hot water rinse.



MTO — used to preheat oil to ensure efficient lubrication for heavy motor.



MTO — applied to conveyorized degreasing operation of many parts at once.