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 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.

Flanged 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 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.