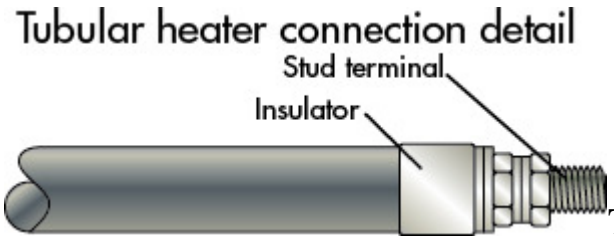
TUBULAR HEATING ELEMENT

Tubular heaters

Heatco make Tubular heaters may be formed into complex geometries with a variety of lengths, diameters, terminations, and sheath materials.



The typical connection on a tubular heater is a threaded stud terminal with either a ceramic or mica insulator. Tubular heaters are used for immersion and air heating. They often get clamped to objects such as vessels and tanks, fitted into grooved platens, immersed directly into a liquid, or even are mounted in ducts for heating air and gas.

The internal make-up of tubular heaters contain a helical Ferro or Nickel-Chrome resistive wire that serves as a heating element. It is welded on each end to terminal pins. The heating element is centered in the sheath which is filled with MgO. The MgO is compacted to stabilize the coil and promote heat transfer to the sheath.

Sheaths: Tubular heaters sheath depends on the temperature surface load and the contents it heats. Incoloy, Titanium and stainless steels are the few sheaths that are regularly used. In addition, tubular heater sheaths may often be copper, when used in water heating, or low-carbon steel, when used for heating tar, asphalt, or similar materials.

Mounting: Tubular heaters may be brazed, soldered, or welded onto surfaces they heat. But the most widely used mounting approach is with a mounting collar or bracket, particularly for containers that are not pressurized and which aren't sealed to hold liquid. The usual way of attaching the heater to the bracket is with staking or crimping. Bulkhead fittings are used to mount heaters through tank walls. The connection method to the heater depends on such factors as the amount of pressure or vacuum present and the qualities of gas or liquid being heated.