

## Circulation Heaters



Circulation heaters are the most common types of electric heaters used in the process industries. Tubular elements are welded into a flange to form the heater. One of the most important criteria for designing an immersion heater or a circulation heater is to choose the proper watt density of the heating elements. The liquid, gas, or solid that you are heating must have the correct watt density to ensure that the heater is safe, properly sized, and have a long life.

We have experience in a wide variety of applications from water, oils, and steam to chemicals and hydrocarbon gases. We carefully engineer sheath and vessel materials to the application using appropriate watt densities to maximize life, yet minimize footprint. HEATCO has been supplying and have the capability to supply Circulation Heaters with 110 to 440 VAC as well as wattages from 500 watts to 230 KW. If required, HEATCO will configure circulation heaters with voltages and wattages outside these parameters. For more information on special voltage and wattage configurations, contact your HEATCO representative.

These are complemented by HEATCO's experience in custom engineered solutions. Baffles mounted on the heating element bundle enhance and/or modify liquid or gas flow for better heat transfer. For critical sheath temperature and low flow conditions, baffles may be required.

Contact your HEATCO representative for details.

### **Features & Benefits At A Glance**

- **Suitable for vertical or horizontal vessel orientation.**
- **Custom designed assemblies available.**
- **Available in a range of standard vessel sizes, from 3" to 14"; vessel sizes to 36" or larger are available on custom order.**
- **Available in a range of standard wattages, from 0.6 kW to 168 kW, depending on heater size selected.**
- **Available in a range of standard voltages, from 120V to 600V.**
- **Flanged inlet and outlet.**
- **Cross flow baffles improve heat transfer when heating viscous fluids and high temperature gases.**
- **Built-in thermocouple mounted in the outlet pipe.**
- **Pressure relief and bleed and drain valves available.**
- **Suitable for mounting on a factory supplied frame custom designed, fully pre-wired control panels available.**
- **Mechanical or electronic high limit controls and temperature controls available.**
- **Multiple units can be supplied as multistage assemblies with either horizontal /vertical orientation.**