

# RECIRCULATION HEATING SYSTEMS



**Ideal for Heating Oils , Acids , Asphalt, Beer, Chocolate , Fatty Acids , Gases, De ionized water, Steam superheating , Cleaning and Electro-Plating Solutions.**

Circulation Heaters are Flanged or Screw plug heaters that are mounted in a pressurized vessel, and are a complete unit for heating flowing gases or liquids. Compact and highly efficient heaters are ideal for side arm or inline applications in either natural circulation or forced/pumped systems. The wide variety of options make Circulation Heaters suitable for most applications like Heating Fuel oil, Air, Steam Superheating, Corrosive gases & liquids, Water and or delicate liquids like brewers grain for Beer.

**Circulation Heaters Features:** • High efficiency heat transfer • Pressure ratings to 600 lbs • ANSI Standard NPT or ANSI Class 150 connections • Heaters could be screw plug or flanged • Stainless steel construction with Canadian Vessel Registration • Various housing options available NEMA 4, 4X, explosion proof • Suitable for steam, oils, chemicals, gases, corrosive solutions

## **Circulation Heaters Specifications / Design Capabilities:**

Voltages. . . . . 120 to 600 Volts  
Inlet/outlet. . . . . NPT or Flange NPT 1 /2" to 2 1/2 " 3 "  
Flanges 2" to 14" 16" to 24"  
Heater. . . . . mount as required Vertical Or horizontal  
Wattage's. . . . . Varied from 150 watts to 1 Megawatt  
Sheath Materials. . . . . Titanium, Monel, Incoloy, 316/304 Stainless,  
Steel, Copper, Carbon Steel  
Max Temperatures. . . . . Incoloy 1600 degrees F (870 C)  
304 / 316 Stainless Steel 1200 degrees F (650 C)  
Steel 750 degrees F (400 C) Copper 350 degree F (175 C)  
Pressure Rating. . . . . 150, 300 or 600 lbs  
Flange Materials. . . . . Standard Carbon Steel or 316/304 Stainless  
Gaskets. . . . . Rubber, Asbestos Free, or Spiral wound Terminal  
Enclosures. . . . . General Purpose (NEMA 1 ), Moisture Resistant (NEMA 4)  
Corrosion Resistant (NEMA 4X), Explosion Resistant (NEMA 7),  
Explosion Moisture Resistant (NEMA 7/4)  
Temperature control. . . . . Thermocouple, RTD, or Thermostat  
High Limit. . . . . High Limit Thermocouple, Hi Limit Tstat,  
Certification. . . . . ASME, CRR, Heater & Vessel certification