

Circulation Heater Systems

Pre-engineered Packaged Units

- Skid Mounted, Prewired Packaged Unit
- Carbon Steel or Stainless Steel Pipe Body, 150 Lb Construction
- 30 - 600+ kW
- Standard and Special Voltages
- General Purpose, Moisture Resistant/Explosion Resistant, Explosion Resistant or Moisture Resistant Terminal Enclosure
- Copper, Steel, Stainless Steel, INCOLOY® or INCONEL® Sheath Elements (45, 23 or 15 W/In²)
- Solid State (SCR) Control Panels, Standard



Heater vessel designed for Class 150 pressure-temperature rating. ASME certification and higher temperature and pressure ratings available.

heating water. INCOLOY® for heating steam, gas, demineralized or de-ionized water and corrosive fluids. Carbon steel is used for heating oils.

Flanged Immersion Heaters — Heater assemblies are easily removed for periodic cleaning and inspection.

Heater Vessels — Available in a range of sizes and materials to meet most kilowatt and corrosion resistance requirements.

Horizontal or Vertical Mounted Heater Vessel — Pre-assembled packages oriented to fit within the space limitations of the system.

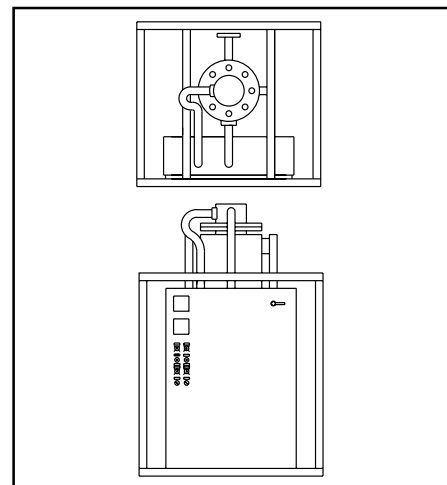
Skid Mounted Construction — Heavy gauge metal skid with heater vessel and control panel securely attached to frame supports. Lifting lugs are provided for easy handling.

Solid State Control Panels — Standard SCR power controller provides a higher degree of process control than mechanical means, matching the heater output to various flow and temperature demands.

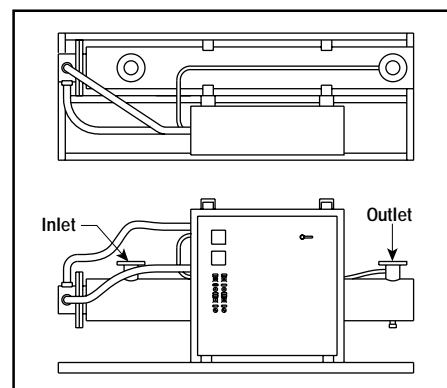
Control Panels — Integral or remote mounted control panels with electronic controls and solid state (SCR) or contactor power controllers can be provided using virtually any combination of control devices. Consult the Controls Section for details.

For detailed information on ratings and dimensions, consult your Local Chromalox Sales office.

Vertical Mount



Horizontal Mount



Applications

Compact Packaged Heaters — Automatically controlled heating of any flowing media including water, oil, heat transfer solutions, steam, air or other gases for booster, in-line or side-arm applications.

Features

Kilowatt Selection — Package units available from 30 - 600 kW. Units can be connected in series or one large unit can be provided for higher wattages (see Table).

Terminal and Control Enclosures — Standard construction of terminal enclosures and control panels is NEMA 1 E1 General Purpose. NEMA 12 control enclosures and Moisture Resistant E4 terminal enclosures are available as assembly stock. Contact your Local Chromalox Sales office for Explosion Resistant and Moisture Resistant E2, Explosion Resistant E3 terminal and control enclosures.

Elements — 0.475" Dia. elements provide superior strength and rigidity. Chromalox elements utilize high quality resistance wire for coil construction. Copper is used for

Kilowatt Selection

| kW @ Approx. W/In ² | | | Heater Vessel Pipe Size |
|--------------------------------|-----|-----|-------------------------|
| 45 | 23 | 15 | |
| 30 | 15 | 10 | 5 |
| 45 | 20 | 15 | 5 |
| 60 | 30 | 20 | 5 |
| 75 | 35 | 25 | 5 |
| 90 | 45 | 30 | 5 |
| 80 | 40 | 30 | 8 |
| 120 | 60 | 40 | 8 |
| 160 | 80 | 55 | 8 |
| 200 | 100 | 70 | 8 |
| 240 | 125 | 80 | 8 |
| 90 | 45 | 30 | 10 |
| 135 | 70 | 45 | 10 |
| 180 | 90 | 60 | 10 |
| 235 | 120 | 40 | 10 |
| 270 | 140 | 90 | 10 |
| 120 | 60 | 40 | 12 |
| 180 | 90 | 60 | 12 |
| 240 | 125 | 80 | 12 |
| 330 | 170 | 110 | 12 |
| 360 | 185 | 120 | 12 |
| 180 | 90 | 60 | 14 |
| 270 | 140 | 90 | 14 |
| 360 | 185 | 120 | 14 |
| 450 | 230 | 150 | 14 |
| 540 | 275 | 180 | 14 |
| 300 | 155 | 100 | 16 |
| 450 | 230 | 150 | 16 |
| 600 | 305 | 200 | 16 |