### Hi-R-Temp® Packaged Hot Oil Heaters

#### SPECIFICATIONS

**1,500,000 BTU/HR**

### DESIGN DETAILS

#### General Information

- **Type of Boiler**: Coiled Tube
- **Model Series**: 4242
- **Rated Capacity**: 1,500,000 Btu/hr
- **Fluid Capacity**: 34 gal
- **Construction Codes**: ASME, Hartford, National Board
- **Boiler Shell Insulation**: Mineral Wool Insulation
- **Approx. Shipping Weight**: 3,000 lbs

### Power Requirements

- **Main Power**: 230/460/575 VAC, 3 Ph, 60 Hz
- **Control Power**: 120 VAC, 1 Ph, 60 Hz
- **HP required by blower**: 3 HP
- **Circulating Pump HP per customer specifications**

### Overall Dimensions

- **L x W x H**: 81” x 50” x 79”

### Pressure & Temperature

<table>
<thead>
<tr>
<th>Pressure</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>225 psig</td>
<td>750° F</td>
</tr>
</tbody>
</table>

### Controls

- Low Combustion Air Switch, Flame Safeguard Control,
- Low Fluid Flow Switch, Coil Temperature Limit Switch,
- Automatic Time Delay Cooling Cycle, etc.

### Burner

- **Manufacturer**: Vapor Power
- **Fuel**: Natural Gas, No. 2 Fuel Oil, or Combination
- **Type (gas)**: Multiple Orifice Nozzle
- **Type (oil)**: Air Atomized

**Fuel Specifications**:

<table>
<thead>
<tr>
<th>Fluid</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil (No. 2)</td>
<td>141,000 Btu/U.S. gal</td>
</tr>
<tr>
<td>Gas</td>
<td>1000 Btu/cu ft</td>
</tr>
<tr>
<td>Main Burner</td>
<td>2 psig</td>
</tr>
<tr>
<td>Pilot Burner</td>
<td>6” W.C.</td>
</tr>
</tbody>
</table>

**Atomizing Air Requirements**:

<table>
<thead>
<tr>
<th>Fluid</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil (No. 2)</td>
<td>5 scfm @ 40 psig</td>
</tr>
<tr>
<td>Gas</td>
<td>None required</td>
</tr>
</tbody>
</table>

**Ignition Type**:

- **Oil & Gas**: Electric spark - interrupted gas pilot

### Performance Data

- **Fuel Consumption @ Rated Output**
  - **Gas**: 1,923 scfh
  - **Oil (No. 2)**: 13.5 gal/hr

**Turndown Ratios**:

- **Oil & Gas**: 7 to 1

**Combustion and Ventilating Air Required**:

- **Oil & Gas**: 485 scfm

### Customer Connections

- **Stack Outlet**: 10” O.D.
- **Pump Inlet**: 3” 300# flange
- **Heater Outlet**: 3” 300# flange
- **Main Gas Supply**: 2” NPT
- **Pilot Gas Supply**: 1/2” NPT
- **Oil Supply**: 3/4” NPT
- **Oil Return**: 1/2” NPT
- **Atomizing Air**: 3/8” NPT
- **Safety Valve Outlet**: 1 1/4” NPT

*Note: varies on application details*