**16" Series**

**Type "WU" Heat Exchangers**

"U" Tube Design

**DESCRIPTION**

B & G Types "WU" Heat Exchangers are of the shell and tube type. The tube bundle is of "U" bend construction with tube ends expanded into a stationary tube sheet. This construction permits ample expansion or contraction for wide temperature variations. A fluid entering the tubes is heated or cooled by a fluid being circulated through a baffled shell. The unit is designed primarily for pumped circulation through the shell.

Standard "WU" Heat Exchangers are constructed according to ASME requirements for pressure and temperatures noted in table on the back. A Manufacturers' Data Report for Pressure Vessels, Form No. U-1, as required by the provisions of the ASME Code Rules, is furnished with each unit upon request. This form is signed by an authorized inspector, holding a national Board Commission, and who is employed by an authorized inspection agency, certifying that construction conforms to the latest ASME code for pressure vessels. The ASME "U" symbol is stamped on each vessel. In addition, each unit is registered with the national Board of Boiler and pressure Vessel Inspectors.

**RECOMMENDED "WU" HEAT EXCHANGER**

**MODEL NO.**

**HEATING SURFACE (SQ. FT.)**

<table>
<thead>
<tr>
<th>TUBE SIDE</th>
<th>SHELL SIDE</th>
<th>APPROVALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. Fluid Circulated
2. Total Flow Expressed in GPM, GRH or lbs./hr
3. Temperature In/Out
4. Transfer BTU/hr
5. Pressure Drop
6. Fouling Factor or Percentage of Additional Surface

**Note:** Following applies only to fluids other than water

7. Specific Gravity
8. Specific Heat
9. Latent Heat
10. Viscosity**
11. Thermal Conductivity

**"Expressed in Proper Units and Temperature such as centipoises @ °F"**
Dimensions are subject to change. If exact dimensions are needed for layout, write for certified prints.

**Design Pressures**

<table>
<thead>
<tr>
<th>Tube Side</th>
<th>Design</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 psi</td>
<td>250 psi</td>
<td>150 psi</td>
</tr>
<tr>
<td>150 psi</td>
<td>300 psi</td>
<td>150 psi</td>
</tr>
</tbody>
</table>

**Design Temperatures**

- Tube & Shell Side
- Cast Iron: 375 °F
- Brass: 300 °F

**Part**

<table>
<thead>
<tr>
<th>2 &amp; 4 Pass</th>
<th>2 &amp; 4 Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shell</td>
<td>Steel</td>
</tr>
<tr>
<td>Head</td>
<td>Cast Iron</td>
</tr>
<tr>
<td>Cast Brass</td>
<td></td>
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</tbody>
</table>

**Standard Cast Iron Unit & Brass Unit**

- Cast Iron: Cooper
- Brass: Royal Naval Brass
- Baffles: Steel
- Nuts & Bolts: Steel

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**Caution:**

A properly sized relief valve must be installed on the heated water side to protect heat exchangers from overheating.