JSTR Series

ASME Boiler Buffer Tank
For Additional Thermal Storage Volume in
High Efficiency Heating Systems

APPLICATION
- JSTR Series boiler buffer tanks are designed to ensure that sufficient water volume is available to maintain optimum temperature control in a closed loop high efficiency heating system.
- Having the right water volume increases the thermal mass and flywheel effect. Water has a very high thermal capacity. Thermal mass can store and even out fluctuations in temperature.
- Some small volume low-mass condensing boilers require additional water volume to deliver high-efficiency operation throughout the range of load conditions. Using a buffer tank to add volume to the system increases reliability by stabilizing temperatures and minimizing boiler cycling.

DESIGN PRESSURE AND TEMPERATURE
- Maximum design pressure: 125 PSI (862 kPa)
- 150, 175, 200, 250, 300 PSI available upon request
- Maximum design temperature: 500°F (260°C)

TYPICAL DESIGN SPECIFICATION
Furnish and install as shown on plans a John Wood Model No. JSTR-____-____ (____ gallon / ____ liter) ASME code stamped Boiler Buffer Tank. The tank shall have ______ flanged / FNPT / grooved-end pipe system inlet and outlet connections. The tank shall be fitted with a FNPT vent and drain connections on the top and bottom. The vessel must be designed and constructed in accordance with the ASME Boiler and Pressure Vessel Code Section VIII, Division 1 with a stamped MAWP of 125 PSI (862 kPa) and a maximum design temperature of 500°F (260°C).
<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>MAWP</th>
<th>VOLUME</th>
<th>A DIA</th>
<th>B OH</th>
<th>C DIM</th>
<th>D DIM</th>
<th>E DIM</th>
<th>F DIM</th>
<th>G BOSS</th>
<th>H BOSS</th>
<th>I BOSS</th>
<th>J BOLT</th>
<th>K DIM</th>
<th>TANK WEIGHT</th>
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<tbody>
<tr>
<td>*JSTR-22-033</td>
<td>125</td>
<td>120 454</td>
<td>24</td>
<td>64%</td>
<td>4</td>
<td>9</td>
<td>47%</td>
<td>3</td>
<td>2</td>
<td>1½</td>
<td>1¼</td>
<td>16½</td>
<td>20</td>
<td>225</td>
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<tr>
<td>*JSTR-22-036</td>
<td>125</td>
<td>220 833</td>
<td>30</td>
<td>76½</td>
<td>4</td>
<td>9</td>
<td>56</td>
<td>3</td>
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<td>2</td>
<td>1¼</td>
<td>19½</td>
<td>20</td>
<td>345</td>
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<td>*JSTR-24-039</td>
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<td>300 1136</td>
<td>36</td>
<td>71½</td>
<td>4</td>
<td>10</td>
<td>46</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1¼</td>
<td>22½</td>
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<td>465</td>
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<tr>
<td>JSTR-24-310</td>
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<td>400 1514</td>
<td>36</td>
<td>93%</td>
<td>4</td>
<td>10</td>
<td>68</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1¼</td>
<td>22½</td>
<td>20</td>
<td>600</td>
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</table>

Dimensions are subject to change
Weights are approximate
*Stock model