86% Efficient!

Oil Fired, Chimney Vented, Cast Iron Steam Boiler

The Only 86% AFUE 3-pass Steam Boiler!

- Unique 3-pass cast iron sectional design
- Four sizes available, 0.75-1.65 GPH, 288-629 sq. ft. of steam
- Very stable waterline, high corrosion resistance
- Superior steam quality – 99% dry!
- Easy installation and servicing; Reversible swing away burner door, no target wall/blanket, removable rear plates provide direct access to flue passages
- Unmatched steam boiler warranty – 10 year limited warranty on heat exchanger, 5 year limited warranty against waterside corrosion
- Tankless heater available

Available With EXCLUSIVE Near Boiler Piping Kit

- Perfect piping EVERY TIME!
- Pre-cut, pre-threaded nipples
- All fittings and nipples included
- Left or right supply, standard or dropped header (10”), all from same kit
- Makes drier steam with a more stable waterline
- Saves installation time, no need to carry and/or use a pipe threading machine
- Includes Hartford loops with “Y” fittings for condensate return
- Works exclusively with Burnham MegaSteam boilers

Burnham
by
U.S. Boiler Company

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## MegaSteam: Technical Information

### Standard Equipment
- 3-pass cast iron section assembly, 50-psi MAWP (maximum allowable working pressure)
- Deluxe, powder coated, removable jacket
- 3\(^\circ\) jacket insulation
- Cast iron reversible swing door
- Vacuum formed burner door insulation
- Boiler drain valve
- Barometric draft regulator
- Safety valve
- Beckett AFG flange mounted oil burner w/easy connect power cord (Riello optional)
- Steam gauge
- L4006A (ST & SL models only)
- Gauge glass set
- Removable stainless steel flueway baffles
- Removable cast iron canopy covers
- Junction box w/plug-in accessor connections
- Mounted spanner bar w/adjustable legs
- Pressure limit
- LWCO - Hydrolevel CG450
- 222B Tankless heater (ST model only)

### MegaSteam Ratings & Specifications

<table>
<thead>
<tr>
<th>Model</th>
<th>Burner Cap. (GPH)(^1)</th>
<th>DOE Heating Cap. (MBH)(^2)</th>
<th>Net AHRI (MBH)</th>
<th>Net AHRI (sq. ft.)(^3)</th>
<th>AFUE</th>
<th>Flue Collar Diameter (In.)(^4)</th>
<th>Approx. Shipping Weight. (lbs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MST288</td>
<td>0.75</td>
<td>92</td>
<td>69</td>
<td>288</td>
<td>86%</td>
<td>6</td>
<td>607</td>
</tr>
<tr>
<td>MST396</td>
<td>1.05</td>
<td>127</td>
<td>95</td>
<td>396</td>
<td>86%</td>
<td>6</td>
<td>607</td>
</tr>
<tr>
<td>MST513</td>
<td>1.35</td>
<td>164</td>
<td>123</td>
<td>513</td>
<td>86%</td>
<td>7</td>
<td>744</td>
</tr>
<tr>
<td>MST629</td>
<td>1.65</td>
<td>201</td>
<td>151</td>
<td>629</td>
<td>86%</td>
<td>7</td>
<td>881</td>
</tr>
</tbody>
</table>

**Notes:**
1. Burner Capacity is based on oil having Higher Heating Value of 140,000 BTU/Gal.
2. DOE Heating Capacity and Annual Fuel Utilization Efficiency (AFUE) are based on US Government tests at 13.0% CO2 with No. 1 maximum smoke and 0.00” draft in the breach on standard equipment package.
3. Net AHRI Ratings are based upon pick-up allowance of 1.3. Consult manufacturer with unusual piping and pickup requirements before selecting boiler.
4. Used for sizing flue connection materials.

### Accessories:
- Near-boiler piping kit for MST 288, 396 & 513 (PN: 101433-01)
- Near-boiler piping kit for MST 629 (PN: 101433-02)

### Dimensions (Inches) & Minimum Chimney Requirements

<table>
<thead>
<tr>
<th>Model</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Round In. (Diam.)</th>
<th>Rectangle (In. x In.)</th>
<th>Height (Feet)</th>
<th>Rating (GPM)</th>
<th>Pressure Drop (PSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MST288</td>
<td>22-5/8</td>
<td>24</td>
<td>6</td>
<td>6</td>
<td>8 x 8</td>
<td>15</td>
<td>3.00</td>
<td>22.0</td>
</tr>
<tr>
<td>MST396</td>
<td>22-5/8</td>
<td>24</td>
<td>6</td>
<td>6</td>
<td>8 x 8</td>
<td>15</td>
<td>3.25</td>
<td>24.3</td>
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<tr>
<td>MST513</td>
<td>28-5/8</td>
<td>30</td>
<td>6</td>
<td>7</td>
<td>8 x 8</td>
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<td>3.50</td>
<td>26.5</td>
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<td>MST629</td>
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<td>7</td>
<td>8 x 8</td>
<td>15</td>
<td>4.00</td>
<td>31.0</td>
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</tbody>
</table>

**Notes:**
Tankless Heater Rating, GPM is based on 100°F temperature rise with 40°F inlet water (intermittent draw) with boiler water temperature of 190°F.