BWR
FIRETUBE STEAM BOILER

LOW FUEL CONSUMPTION

- Perfect Boiler-Burner match
  The perfect match between the BWR boiler shell and Babcock Wanson burner ensures reliable and efficient operation in standard construction. Efficiencies in excess of 98% (R-Eco) and 105% (Condensing) can be achieved when fitted with a Babcock Wanson matched economiser and heat recovery system.

- Consistently high efficiency
  Consistent high thermal efficiency throughout the firing range is a key feature from Babcock Wanson. Digital micro-modulation control with burner head geometry specifically designed to suit the BWR boiler provides very high turndown ratios with accurate control of excess air and lowest practicable operating costs.

- Low electrical consumption
  Electrical power consumption is reduced by 30% to 50% by the use of variable speed control.

THE COMPLETE BOILER HOUSE SOLUTION
BWR - STEAM OUTPUTS FROM 10 000 KG/H TO 30 000 KG/H

ENVIROMENTALLY FRIENDLY

BABCOCK WANSON are at the forefront of boiler and burner design and construction driving down emissions and exceeding the requirements of statutory regulations.

WHY CHOOSE THE BWR BOILER FROM BABCOCK WANSON?

- High efficiency - Low NOx burners
- High burner turndown ratios
- Simple access for ease of maintenance
- Robust design for very long life
- Flue gas Heat Recovery

- Combustion Air Pre-Heaters
- Dual and mixed fuel firing options
- O₂ and CO trim options
- Simple unattended operation
- Complete steam system solutions

RELIABLE & SAFE DESIGN
ENVIRONMENTALLY FRIENDLY
FLEXIBLE SOLUTION
FULL RANGE OF ANCILLARY EQUIPMENT
BWR FIRETUBE STEAM BOILER

REDUCED OPERATING COST

- Robust Construction for long life
  BWR Boilers are three pass design and include a tubular construction flue gas reversal chamber. This proven feature, unique to Babcock Wanson, enhances water circulation thereby eliminating the risks of internal fouling (sludge accumulation in the bottom of the boiler). Furnace tie rods are not required and uniform shell expansion gives the flexibility to meet large steam load changes with minimal operational stress.

- Simplified Maintenance
  The flue gas reversal chamber is fully water cooled ensuring high efficiency and minimum maintenance requirements. Ease of access to the chamber simplifies inspection.

- High Steam Quality
  High quality dry steam due to generous steam space and integral separator.

- Operation
  Standard equipment options provide fully approved controls for attended, site supervised or fully unattended operation including the Babcock Wanson BW720 Operating System.

### Reduces Operating Costs

<table>
<thead>
<tr>
<th>BWR model</th>
<th>Steam output Kg/h</th>
<th>Power output kW</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>10 000</td>
<td>6545</td>
</tr>
<tr>
<td>120</td>
<td>12 000</td>
<td>7862</td>
</tr>
<tr>
<td>150</td>
<td>15 000</td>
<td>9827</td>
</tr>
<tr>
<td>170</td>
<td>17 000</td>
<td>11 136</td>
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<tr>
<td>210</td>
<td>21 000</td>
<td>13 754</td>
</tr>
<tr>
<td>250</td>
<td>25 000</td>
<td>16 372</td>
</tr>
<tr>
<td>270</td>
<td>27 000 (3)</td>
<td>17 685</td>
</tr>
</tbody>
</table>

(1) At 15 barg and with feedwater at 105°C. (2) Overall dimensions include fitted burner and boiler mountings. (3) 30 000 kg/h with an economiser under certain operating conditions.

For lower steam output requirements please see our BWD and NBWB range of steam boilers.

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Designers and manufacturers of Industrial Boilers, Air Heaters, Thermal Fluid Heaters, Thermal Oxidisers, Water Treatment Plant and associated equipment. Registered Number 573874 London.

Babcock Wanson’s policy is one of continuous improvement and the right is reserved to change specifications and dimensions at any time without notice.

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