Blowdown Heat Recovery Modules
“BDHR” Series

Description
The packaged Blowdown Heat Recovery system is an effective means of reclaiming valuable heat normally lost in the control of boiler water chemistry and cooling the wastewater to temperatures safe for discharge into sewer systems. The centrifugal blowdown vessel effectively separates flash energy from the condensate and discharges condensate through a heat exchanger typically to preheat make up water. The flash steam generated is used to heat make up water in the DA tank maximizing energy efficiency.

Typical applications
Automatic Boiler Blowdown Systems controlling the level of dissolved solids in make up water. Use with single or multiple boilers to recover valuable heat energy.

Standard Features
- Spirax Sarco centrifugal high efficiency flash tank
- Pressure relief valve
- Spirax Sarco mechanical or electronic level controls
- Plate and Frame heat exchanger
- Heavy duty C/S base
- Hydrotested, blasted, and coated with SSI Hi temp black enamel
- Fabricated in accordance with ANSI/ASME B31.3 by ASME Section IX certified welders.
- ASME Section VIII Code Stamped flash vessel and heat exchanger.

Additional Options are available

Suggested Specification
- Furnish and install where shown on plans, Spirax Sarco Inc. Model BDHR____-____-____-____
Blowdown Heat Recovery System
- The system shall be a complete pre-piped factory package requiring only service connections for a fully functional system.
- The carbon steel receiver shall be ASME Constructed and stamped for 150 PSIG WP.
- All condensate piping shall be schedule 40 Seamless C/S pipe
- No threaded connections above 2” NPS on the package piping are permitted.
- The package shall be sized to meet (or exceed) the actual required condensate system load.
- The package shall include a structural steel skid and painted with 1 coat Hi-Temp black enamel.

Capacity
For sizing data, see Selection & Capacity Chart.

Typical Construction

<table>
<thead>
<tr>
<th>Model</th>
<th>BDHR- Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMO</td>
<td>125 psig</td>
</tr>
<tr>
<td>Design Pressure (PMA)</td>
<td>125 psig @ 320°F</td>
</tr>
<tr>
<td>Capacity Range</td>
<td>100 to 100,000 lbs./hr</td>
</tr>
<tr>
<td>Flash Vessel</td>
<td>ASME Constructed and Stamped 150 psig @ 550°F</td>
</tr>
<tr>
<td>Heat Exchanger</td>
<td>Plate and Frame – ASME Constructed and stamped for 150 Psig 316L stainless steel plates and EPDM gaskets</td>
</tr>
<tr>
<td>Hydrotest Pressure</td>
<td>188 psig</td>
</tr>
<tr>
<td>Construction Materials</td>
<td>Flash Vessel – Carbon Steel Heat exchanger- Carbon steel covers with 316L SS plates Frame- Carbon steel Isolation valves - Carbon Steel 150# Piping - A106 Seamless Carbon Steel</td>
</tr>
</tbody>
</table>

Dimensions & Weight
See SSI Sales Drawings

Approved for construction when signed and dated below:

Model: BDHR-

Project/P.O. No.:

Customer:

Approved: Date: