Minimize Tower Basin Cleaning and Maintain Downstream Heat Transfer Efficiencies

HydroBooster Features and Benefits:
- Patented LAKOS HydroBoosters create sweeping action on the cooling tower basin floor to reduce under-deposit corrosion, cooling tower nozzle clogging and extend cooling tower life.
- HB and eHB HydroBoosters Vortexing action moves cooling tower solids towards the filtration system by using directed turbulence, thereby preventing solids accumulation on the basin floor, and removing the food source for biological activity.
- Minimize manual basin cleaning, cooling tower maintenance, risk of injury associated with basin floor cleaning, and system downtime.
- HB and eHB HydroBoosters are designed for durability and to resist cooling tower water chemicals.

Operating Requirements:
- **Minimum Pressure Required:**
  - HB Models: 20psi (1.4 bar)
  - TSN Models: 20psi (1.4 bar)
  - eHB Models: 10psi (.7 bar)
- **Recommended Water Depth:**
  - HB and eHB Models minimum water depth: 3 inches (76.2 mm)
  - HB and eHB Models maximum water depth: 3 feet (1524 mm)*
  - TSN minimum water depth: 2 inches (50.8 mm)
- *For greater water depths, LAKOS recommends using Eductors. See LAKOS Literature LS-633

How it works:
Utilizing a patented vortexing action - flow is magnified as it passes through the HydroBoosters. When strategically implemented in a basin, the “directed turbulence” causes more solids to reach the filtration system - resulting in a cleaner cooling tower and protecting downstream equipment.

LAKOS High Efficiency eTCX Systems are only compatible with eHB Models (yellow color HydroBooster) and TSN nozzles.
Models & Dimensions

<table>
<thead>
<tr>
<th>Model</th>
<th>System Compatibility</th>
<th>Connection</th>
<th>Input Pressure</th>
<th>Flow Input/Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>HB-10-K</td>
<td>TC/TB</td>
<td>3/4-inch male NPT</td>
<td>20</td>
<td>1.4</td>
</tr>
<tr>
<td>HB-18-K</td>
<td>TC/TB</td>
<td>3/4-inch male NPT</td>
<td>20</td>
<td>1.4</td>
</tr>
<tr>
<td>TSN-0025-B*</td>
<td>eTCX, TC/TB</td>
<td>1/4-inch male NPT</td>
<td>20</td>
<td>1.4</td>
</tr>
<tr>
<td>eHB-10-K</td>
<td>eTCX</td>
<td>1/2-inch male NPT</td>
<td>10</td>
<td>0.7</td>
</tr>
</tbody>
</table>

* The TSN is a brass, flat-fan spray nozzle for use in applications in which there is a shallow deck in the basin. Can be used along with HydroBoosters™ (see diagram below)

LAKOS High Efficiency Product™

eHB-10-K attached to PVC pipe using an optional HBC-10 clip adapter

HB-10-K using an HB-10-K adapter, attached to PVC pipe using an optional HBC-10 clip adapter

HydroBooster layout in field erected cooling tower

Installation Best Practices:

- Start with a clean basin.
- Required submergence of 2" above centerline inlet of HydroBoosters.
- Position the HydroBoosters to direct solids toward the filtration system’s pump intake and away from any other system pump suction areas.
- Use a closed-loop header in order to equalize the pressure to each HydroBooster.
- Eliminate weirs, baffles or other devices which may promote settling or dead spots within the sump.
- Where possible, take advantage of any existing slopes to direct solids toward the low end of a sump.
- When possible, position the system’s pump intake where solids are most likely to enter the sump.

LAKOS Separators are manufactured and sold under one or more of the following U.S. Patents:
5,320,747; 5,338,341; 5,368,735; 5,475,876; 5,578,203; 5,622,545; 5,653,874; 5,894,995; 6,090,278; 6,143,175; 6,167,960; 6,202,543; 7,000,782; 7,032,760 and corresponding foreign patents, other U.S. and foreign patents pending.

LAKOS Separators are manufactured in the USA.

LAKOS is a proud and contributing member of ASHRAE for over 30 years

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