WELDED PLATE HEAT EXCHANGERS

API Schmidt-Bretten
**API Schmidt-Bretten**

**ALL WELDED PLATE HEAT EXCHANGER**

**A Revolution in Heat Exchange**

Heat transfer technology has been significantly optimized in API Schmidt's totally welded plate heat exchanger.

**Ultimate Efficiency & Compact Size**

To maximize heat transfer, the all-welded model utilizes traditionally styled heat transfer plates to produce highly turbulent fluid flow in a counter-current direction. This results in a smaller, more compact heat exchanger than other conventional designs.

**Heavy Duty Construction**

All parts of the all-welded unit that are in contact with the fluids are made of corrosion resistant 316 stainless steel.

The all-welded construction makes the unit completely gasket-free, resulting in complete dependability and freedom from maintenance.

The welding process utilized in these units does not require any filler materials. This gives the unit greater corrosion resistance and longer life than compact heat exchangers of other designs.

**Consistent Quality**

The API Schmidt exchanger is welded with a fully automated process that guarantees repeatability with high integrity.

This process results in improved resistance to the effects of extremely high temperatures and pressure cycling, prolonging the operational life of the unit.

**Low Pressure Loss**

The all-welded design of the API Schmidt unit does not require brazing to bond the plates together. Therefore, there is no braze material present to impede the flow of the fluids, resulting in a lower pressure loss when compared to other compact designs.

<table>
<thead>
<tr>
<th>API Model</th>
<th>Connection Size</th>
<th>Maximum Flow (GPM)</th>
<th>Max. Heat Transfer Area (sq ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST3</td>
<td>1”</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>ST12</td>
<td>2”</td>
<td>240</td>
<td>180</td>
</tr>
<tr>
<td>ST18</td>
<td>2”</td>
<td>240</td>
<td>270</td>
</tr>
</tbody>
</table>

**Versatility**

The all-welded unit can have operating temperatures as high as 750°F and as low as -320°F, with operating pressures as high as 360 PSI.

The unique concept of this heat exchanger makes it a viable solution to many heat transfer needs:

- Ammonia evaporating and condensing
- Chemical and pharmaceutical processing
- Demineralized water applications
- Heat pumps
- Heat recovery plants
- Food and drink processing
- Medical technology
- Swimming pool heating

**For more information**

Please contact your local API Heat Transfer representative or call API for assistance at 716-496-7550.