FLEXWELL®-HL
Double Wall Stainless Steel Pipe for Above Ground, Below Ground, Marina and Commercial Fuel Systems

Flexible, double-wall corrugated pipe system with continuous interstice for leak detection

General description
The FLEXWELL®-HL pipe system is specifically designed for hazardous fluids and gases, such as gasoline, ethanol blends, biodiesel, LPG and other hazardous fluids typically transported in chemical plants. The pipe is used in gas stations underground as well as in above ground applications such as marinas and bulk facilities. FLEXWELL®-HL can be operated as a suction or pressure system and can be continuously monitored via suitable and approved leak detection systems.

Construction
FLEXWELL®-HL is a flexible pipe system made of corrugated 316L (1.4404) stainless steel primary and secondary pipes for operating pressures of up to 145 PSI/G (10 bar). The interstitial space between primary and secondary pipe can be used for leak detection. The pipe is corrosion protected by a polyethylene jacket. The stainless steel pipe provides an enduring, impermeable barrier, even with future new fuels or fuel combinations.

Applications
• Suction pipes
• Pressure pipes
• Fill pipes
* Subject to compliance with local and national regulations

Sizes and pressure ratings
FLEXWELL®-HL is available with an ID of 1" (ND 25) to 3" (ND 80) for conventional use at an operating pressure of up to 145 PSI/G (10 bar) and temperatures between -50 °C (-58 °F) to +50 °C (+122 °F). For gases such as LPG, FLEXWELL-LPG single-walled pipe can be operated at up to 360 PSI/G (25 bar).

Closed end fitting
Open end fitting
Available in NPT or EZ-Fit

Installation
FLEXWELL®-HL is manufactured in factory lengths up to 3,000 ft. FLEXWELL®-HL can be laid directly into a trench in one piece following any directions without necessity of intermediate joints or fittings. The corrugated design of the primary and secondary pipes assure excellent impact resistance while at the same time providing a high degree of flexibility.

Leak detection
The interstitial space between the primary and secondary pipes is designed for leak detection via either pressure or vacuum, depending on local regulations or operating requirements.
**Physical properties of FLEXWELL®-HL pipes**

<table>
<thead>
<tr>
<th>Model:</th>
<th>HL 30/48</th>
<th>HL 48/71</th>
<th>HL 60/83</th>
<th>HL 98/134</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>• primary pipe: 316L (1.4404)</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td></td>
<td>• secondary pipe: 316L (1.4404)</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<tr>
<td></td>
<td>• corrosion protection: LDPE jacket</td>
<td>•</td>
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<td>•</td>
</tr>
<tr>
<td>Operating pressure:</td>
<td>• suction operation</td>
<td>• suction operation</td>
<td>• suction operation</td>
<td>• suction operation</td>
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<tr>
<td>Primary pipe (fuel etc.):</td>
<td>• pressure</td>
<td>145 PSIG / 10 bar</td>
<td>145 PSIG / 10 bar</td>
<td>145 PSIG / 10 bar</td>
</tr>
<tr>
<td>Nominal ID:</td>
<td>1&quot; / ND 25</td>
<td>1 1/2&quot; / ND 40</td>
<td>2&quot; / ND 50</td>
<td>3&quot; / ND 80</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>• inside diameter (ID)</td>
<td>1.2&quot; / 30 mm</td>
<td>1.9&quot; / 48 mm</td>
<td>2.4&quot; / 60 mm</td>
</tr>
<tr>
<td></td>
<td>• outside diameter (OD)</td>
<td>1.5&quot; / 48 mm</td>
<td>2.8&quot; / 71 mm</td>
<td>3.3&quot; / 83 mm</td>
</tr>
<tr>
<td></td>
<td>• volume of primary pipe (gal/ft.) / (liter/m)</td>
<td>0.06 / 0.8</td>
<td>0.16 / 2.0</td>
<td>0.24 / 3.6</td>
</tr>
<tr>
<td>Min. bending radius:</td>
<td>• with bending machine</td>
<td>20&quot; / 500 mm</td>
<td>26&quot; / 650 mm</td>
<td>28&quot; / 700 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>(lb/linear ft.) / (kg/linear m)</td>
<td>0.9 / 1.3</td>
<td>2.7 / 3.8</td>
<td>3.1 / 4.8</td>
</tr>
<tr>
<td>Available end fitting:</td>
<td>• closed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• open</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Permanent monitoring pressure secondary pipe:</td>
<td>• vacuum</td>
<td>−8.7 PSI / −0.6 bar</td>
<td>−8.7 PSI / −0.6 bar</td>
<td>−8.7 PSI / −0.6 bar</td>
</tr>
<tr>
<td></td>
<td>• pressure up to</td>
<td>145 PSIG / 10 bar</td>
<td>145 PSIG / 10 bar</td>
<td>145 PSIG / 10 bar</td>
</tr>
</tbody>
</table>

All technical data subject to change.

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**FLEXWELL®-HL pipe**

**Pressure leak detection (vacuum available, too)**

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Flexible solutions