

FLEXWELL-HL

Pipe system for gas stations

Flexible, double-wall corrugated pipe system with permanent 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 in above ground applications such as marinas and bulk facilities. FLEXWELL-HL can be operated as a suction or pressure systems 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) or 316Ti (1.4571) corrugated stainless steel primary and secondary pipes with a reinforcement tape in the interstitial space for elevated operating pressures of up to 360 psig (25 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 1/4" (DN 32) to 2" (DN 50) for conventional use at an operating pressure of up to 145 psig (10 bar) and temperatures between -50 °C (-58 °F) to +50 °C (+122 °F). For gases such as LPG the pipe can be operated at up to 360 psig (25 bar) with a special end fitting that connects the reinforcement tape in the interstitial space.

The 1 1/2" and the 2" size pipes are available with UL label.



Installation

FLEXWELL-HL is manufactured in factory lengths up to 1,500 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.

Double-wall joints and Ts

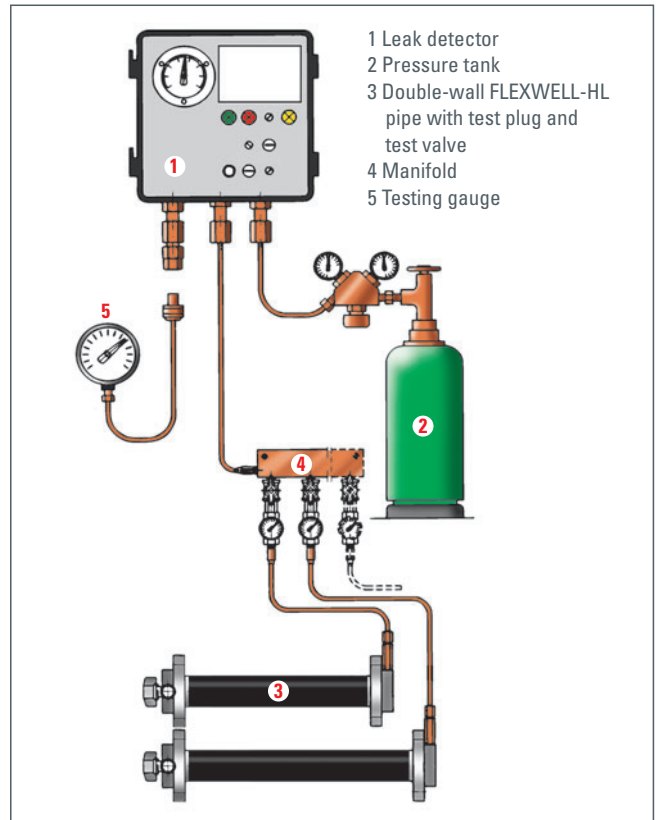
All our joints, T-pieces and other connections are designed for continuous leak monitoring throughout the system.

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.



- 1 corrugated stainless steel primary pipe
- 2 corrugated stainless steel secondary pipe
- 3 polyethylene jacket



- 1 Leak detector
- 2 Pressure tank
- 3 Double-wall FLEXWELL-HL pipe with test plug and test valve
- 4 Manifold
- 5 Testing gauge

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FLEXWELL-HL pipe

Positive pressure leak detection

Physical properties of FLEXWELL-HL pipes

Model:		HL 32	HL 40	HL 50
Material:	<ul style="list-style-type: none"> • primary pipe: 316L/Ti (1.4571/1.4404) • secondary pipe: 316L/Ti (1.4571/1.4404) • corrosion protection: LDPE jacket 	•	•	•
Operating pressure	• vacuum	suction operation	suction operation	suction operation
Primary pipe (fuel etc.):	• pressure	10 bar / 150 psig	10 bar / 150 psig	10 bar / 150 psig
Primary pipe (LPG):	• pressure	25 bar / 360 psig	25 bar / 360 psig	25 bar / 360 psig
Nominal ID:		DN 32 (1 1/4")	DN 40 (1 1/2")	DN 50 (2")
Dimensions:	<ul style="list-style-type: none"> • inside diameter (ID) • outside diameter (OD) • volume of primary pipe (liter/m) 	39 mm / 1.5" 60 mm / 2.4" 1.3	48 mm / 1.9" 71 mm / 2.8" 2.0	60 mm / 2.4" 83 mm / 3.3" 3.0
Mean bending radius:		600 mm / 23.6"	650 mm / 25.6"	700 mm / 27.6"
Weight:	(kg/linear m) / (lb/linear ft.)	2.3 / 1.6	3.8 / 2.7	4.8 / 3.1
Permanent monitoring pressure secondary pipe*	• vacuum	- 0.6 bar	- 0.6 bar	- 0.6 bar
	• pressure	up to 10 bar	up to 10 bar	up to 10 bar

All technical data subject to change.

*Other maximum permissible limits may apply due to different legal requirements from country to country.



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