

Hydroguard® System

Containment Solutions™ Underground Fiberglass Tanks



Fiber Glass Systems | **NOV**

Solutions for your industry... Yesterday, today, and tomorrow

The HydroGuard® System combines the proven technology of double-wall fiberglass tanks with the advanced protection of double-wall tank sumps in a hydrostatically monitored environment, creating the industry's most dependable fuel storage solution. With unmatched leak detection capabilities and a 30-year warranty, HydroGuard® provides the security your investment demands.

Hydrostatic Monitoring detects leaks in either the primary or secondary tank walls (or sump walls) in all installed conditions. First the cavity between the inner and outer walls, known as the annular space, is filled with monitoring fluid. Hydrostatic pressure is then applied to the annular space enabling monitoring of both the primary containment and the secondary containment areas. An electronic sensor alarm is triggered if the monitoring fluid level changes. This means that 100% of the storage area is monitored at all times.

HydroGuard, the premier underground storage solution for the petroleum industry, is available in a Single-Sump or Multi-Sump System.

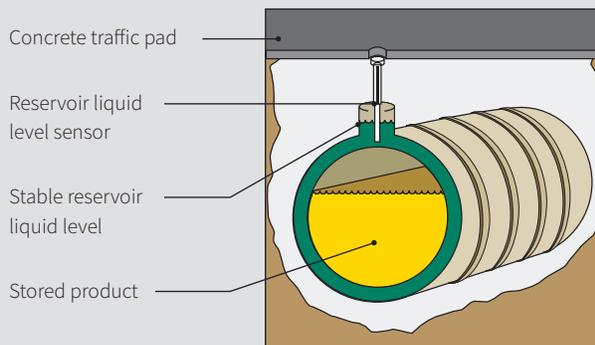


Hydrostatic monitoring

detects leaks in either the primary or secondary tank walls in all installed conditions.

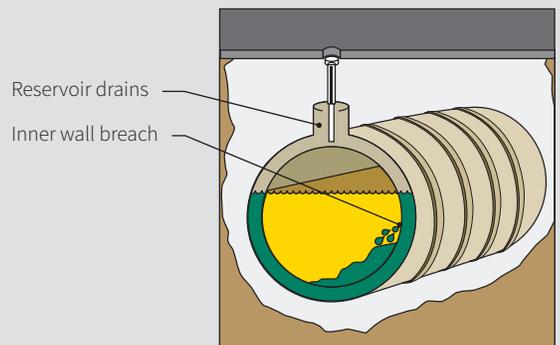
NORMAL CONDITIONS

The reservoir liquid level will be stable if both the inner and outer tank are tight. The reservoir sensor will activate an alarm if the reservoir drains or overfills.



INNER WALL BREACH

Monitor fluid drains into the primary tank causing the reservoir to drain. The petroleum product remains safely contained in the primary tank.



Hydrostatic Monitoring

Some fuel storage systems only monitor the tank but the most common leak points are within the tank sump(s), typically improperly installed piping penetrations or corroded equipment. Single-wall tank sumps, turbine or spill (fill/vapor), utilize monitoring sensors to protect against liquid within the sump which can cause steel components to corrode. However the most devastating potential concern is environmental contamination. A double-wall hydrostatically monitored sump will protect against both internal and external leaks.

Containment Solutions™ double-wall sumps have two independent walls with an annular space filled with monitoring fluid. The design is ideal for communicating the fluid level in all directions equally. HydroGuard® System sumps also feature EZ-Fit adhesive channels that reduce installation time and expense. EZ-Fit sumps are available in 42", 48", and 54" diameters.

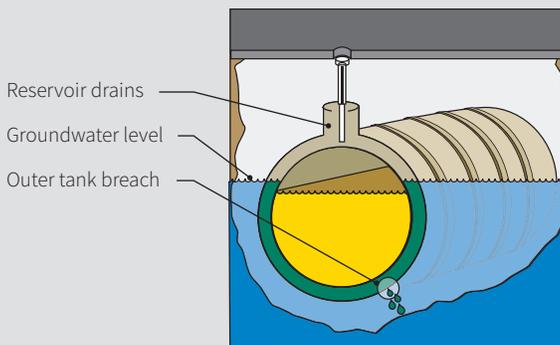


Transport or handling damage is instantly identifiable by a contrasting colored brine solution, an exclusive feature of a Containment Solutions™ hydrostatically monitored double-wall tank.



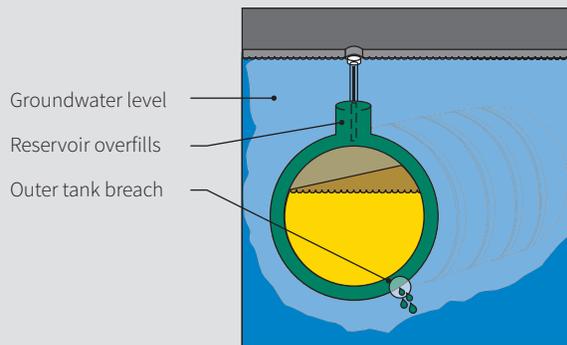
OUTER WALL BREACH

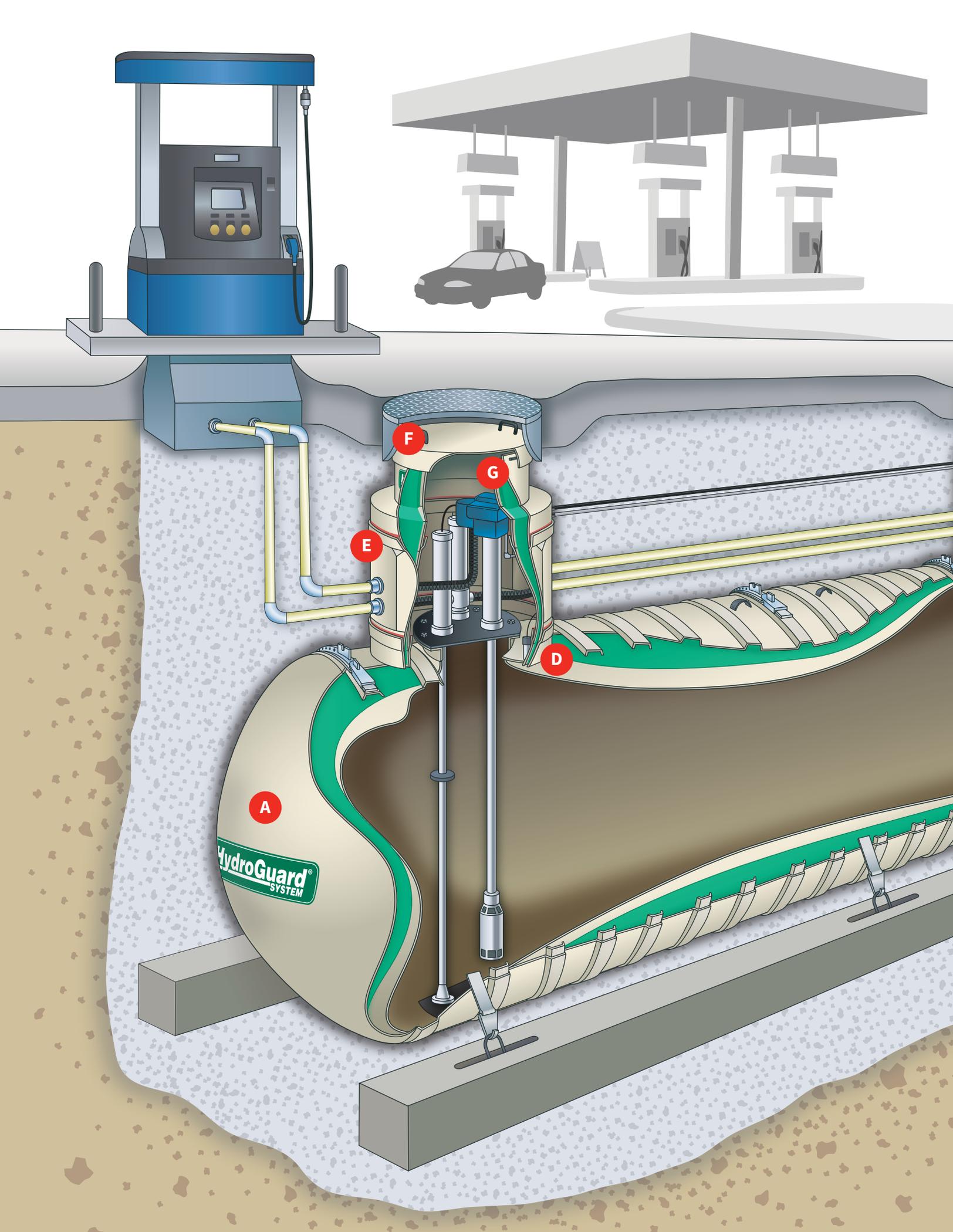
If the groundwater is below the tank top, the non-toxic monitor fluid drains into the ground causing the reservoir to drain.

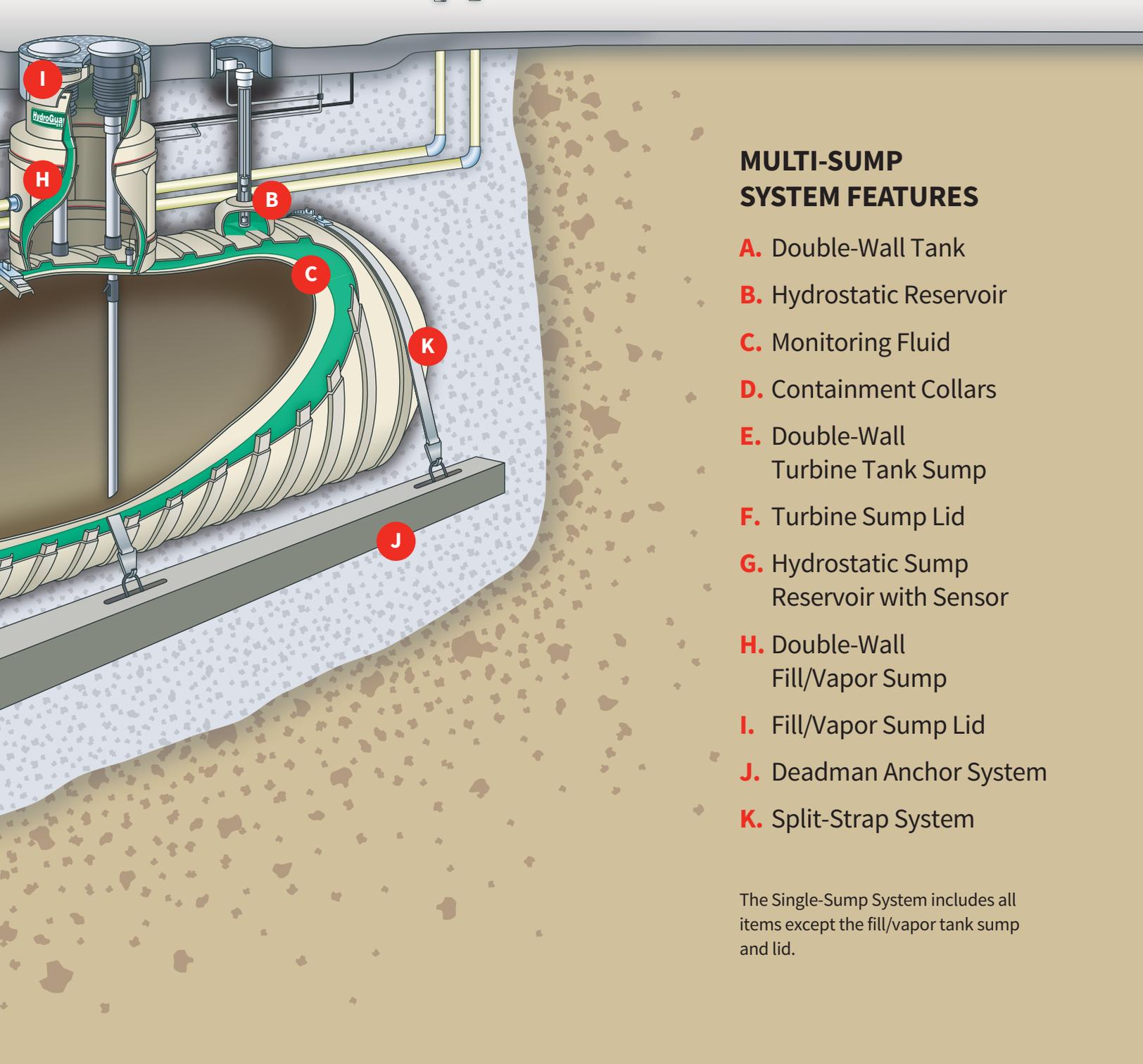
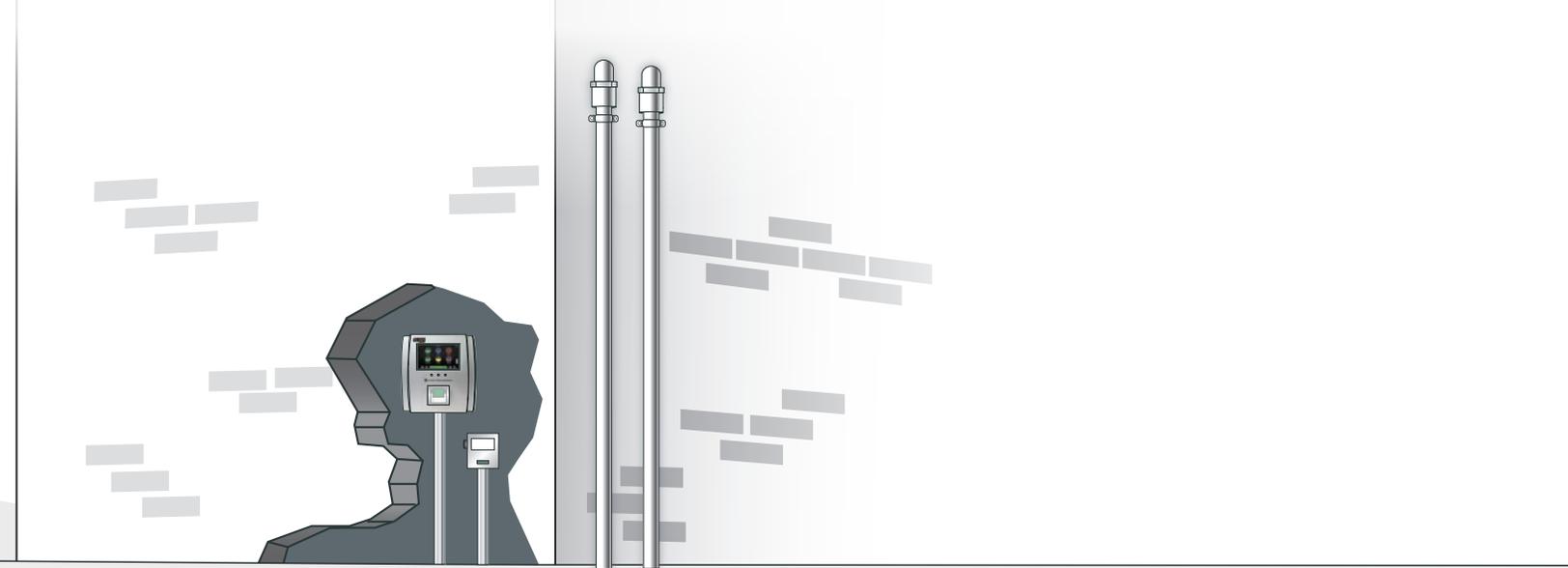


HIGH GROUNDWATER

If the groundwater is over the tank top, the reservoir will overflow with groundwater and activate the high level alarm on the reservoir sensor.







MULTI-SUMP SYSTEM FEATURES

- A.** Double-Wall Tank
- B.** Hydrostatic Reservoir
- C.** Monitoring Fluid
- D.** Containment Collars
- E.** Double-Wall Turbine Tank Sump
- F.** Turbine Sump Lid
- G.** Hydrostatic Sump Reservoir with Sensor
- H.** Double-Wall Fill/Vapor Sump
- I.** Fill/Vapor Sump Lid
- J.** Deadman Anchor System
- K.** Split-Strap System

The Single-Sump System includes all items except the fill/vapor tank sump and lid.

Standard Tank Sizes

The following table represents the most popular tank sizes at various tank diameters. For additional sizes, please contact your sales representative. Multi-Sump System is only available in certain capacities.

Diameter	Capacity (gallons)	Length (ft)	Weight (lbs)
4 ft.	600	7 ft. 3 in	975
	1,000	11 ft. 1 in.	1,235
	2,000	22 ft. 3 in.	2,000
6 ft.	3,000	16 ft. 9 in.	3,000
	4,000	19 ft. 9 in.	3,550
	5,000	24 ft. 9 in.	4,350
	6,000	30 ft. 3 in.	5,100
8 ft.	6,000	19 ft. 6 in.	4,050
	8,000	25 ft. 0 in.	5,000
	10,000	30 ft. 6 in.	5,950
	12,000	36 ft. 0 in.	7,050
	15,000	44 ft. 7 in.	9,350
10 ft.	12,000	23 ft. 9 in.	8,600
	15,000	29 ft. 3 in.	10,500
	20,000	37 ft. 6 in.	13,550
	25,000	46 ft. 0 in.	17,100
	30,000	54 ft. 3 in.	20,400
	35,000	62 ft. 10 in.	24,350
	40,000	71 ft. 4 in.	27,750



Features and Benefits

Standard Features

- UL-Listed Double-Wall Tank and Tank Sump System
- Hydrostatically Monitored Tank and Tank Sump System
- Primary Tank Openings and Critical Tank Top Equipment is Accessible
- Double-Wall FRP Construction Tank and Tank Sumps
- Standard Products
- Extended Warranty
- One Price Approach
- Watertight / Vaportight Tank Sump Lid

Benefits

- Independent Third Party Tested
- Superior Leak Detection and Prevention Provides Maximum Liability Protection
- Lower Operating Costs over UST System Lifetime
- Four, Non-Corrosive Surfaces / Cathodic Protection Hassles Eliminated
- Lower Total Costs / Short Lead Times / Reduces Job Site Coordination Time
- 30-Year Comprehensive Warranty Coverage
- Lower Total System Cost / Simplified Bidding
- Eliminates Water Intrusion and Fuel Spillage



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