



## Aircraft Hangar Drainage & Treatment

HT-2014

Oil/water separator installation at airports is a code requirement. National Fire Protection Association NFPA 409 Standard on Aircraft Hangars 2016 states that:

5.11.2.10 Oil separators shall be provided for the trench drainage systems serving all aircraft storage and servicing areas. These separators shall be permitted to serve each hangar trench drainage system or a group of hangar trench drainage systems or be installed as part of a general airport trench drainage system.

Aircraft hangars are often protected by a foam firefighting system. This type of protection is necessary to protect valuable and mission-essential aircraft and hangar facilities.

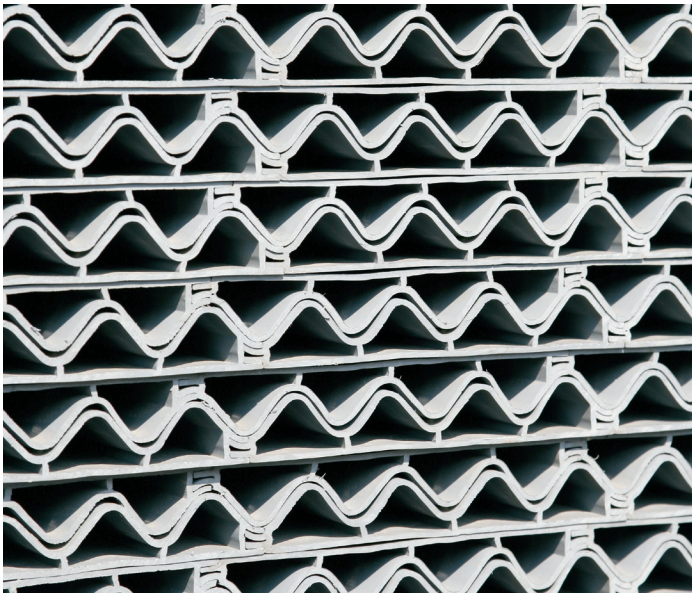
In large volumes, AFFF foam can be harmful to the environment. AFFF solution should not be allowed to flow untreated into the ecosystem or into the sewage systems in large quantities. The primary concern is discharge from unwanted activations and from periodic testing.

NFPA 409 addresses this concern:

*5.11.2.11 In aircraft storage and servicing areas protected by water sprinkler systems or foam-water systems, a bypass shall be provided around the separator to allow for emergency direct disposal of water and flammable liquids. Separator systems shall discharge flammable liquid products to a tank, cistern, or sump located away from any exposures.*

The foam can also adversely affect the oil/water separator by causing chemical emulsification of the oil and water. The solution is a by-pass sump and discharge valve installed in conjunction with the oil/water separator, as illustrated above.

When the firefighting system is deployed, the valve will open the bypass, stopping flow to the oil/water separator and directing flow into wastewater storage tanks. The bypass line with an electronically actuated valve remains closed until the fire suppression system turns on. The tanks can then be pumped out or discharged at a controlled rate to the sanitary sewer, based on regulatory requirements.

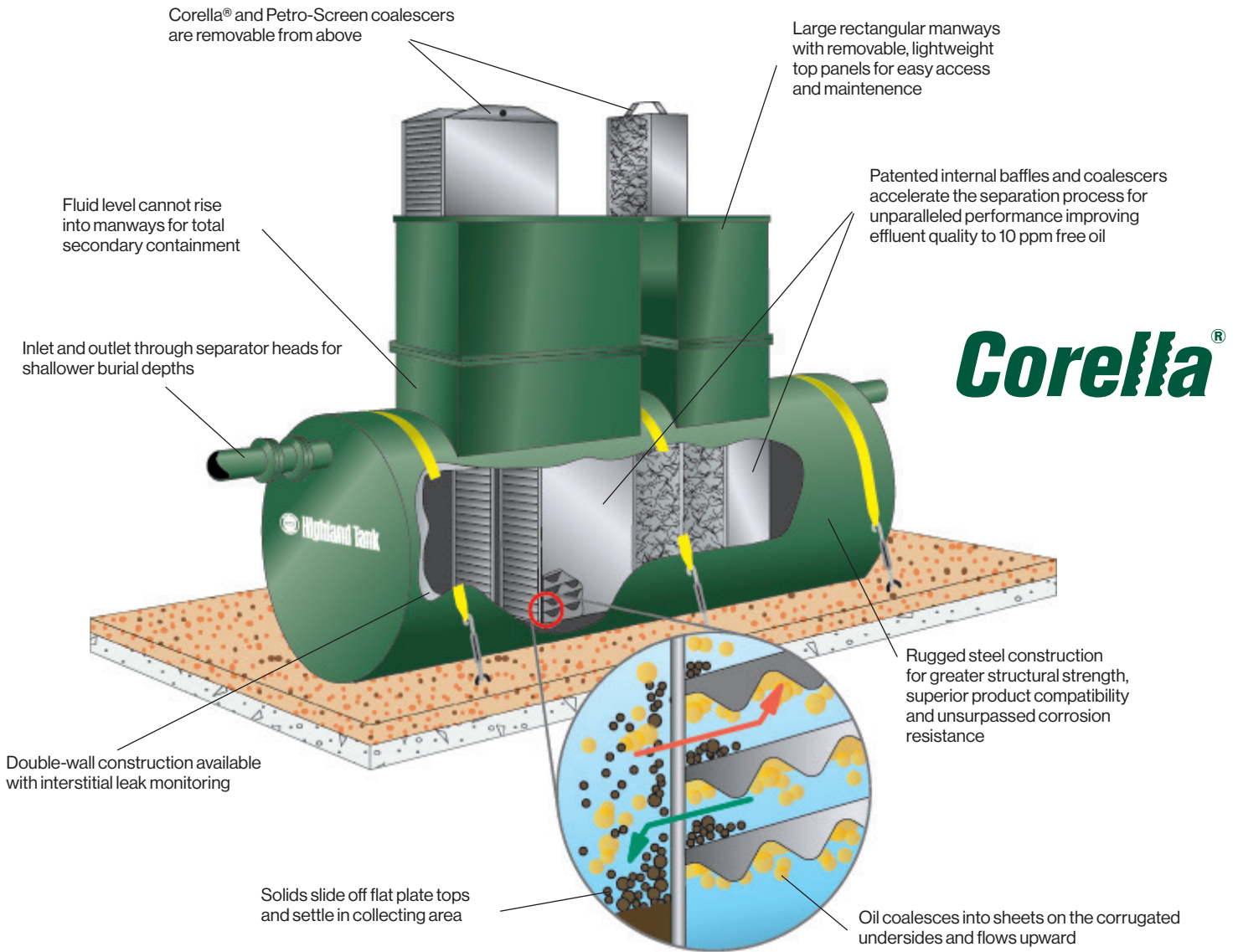


**Corella® The Newest Advancement  
in Oil/Water Separation Technology**

The Corella® Coalescer is a removable, inclined parallel, flat/corrugated plate coalescer that enhances separation of both oil and solids from all strata of the wastewater stream. It is individually engineered to specific application and job-site requirements to maximize utility.

◀ **Patented Corella® technology**

**Corella® - Cleaner. Safer. Smarter.**



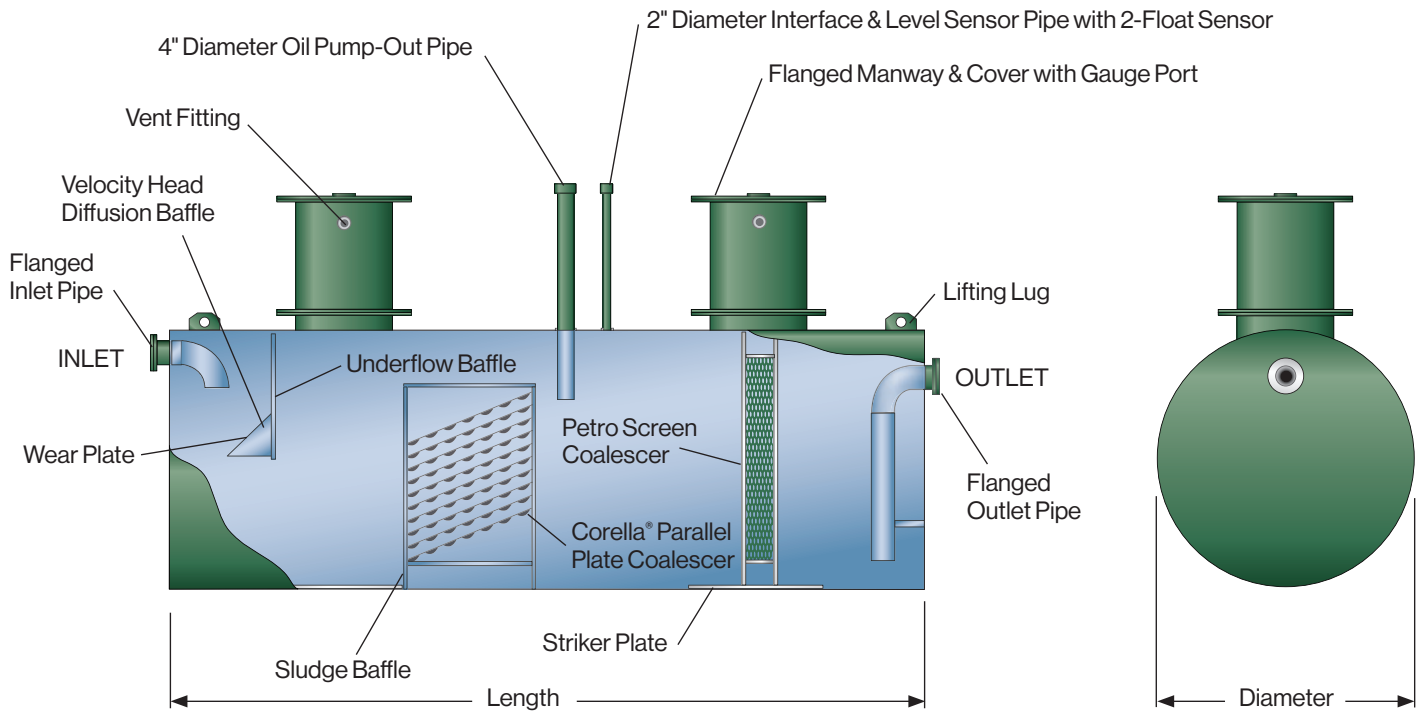
**Corella®**

**UL-2215 LISTED**



**Highland Tank®**

# Oil/Water Separator Drawing & Details

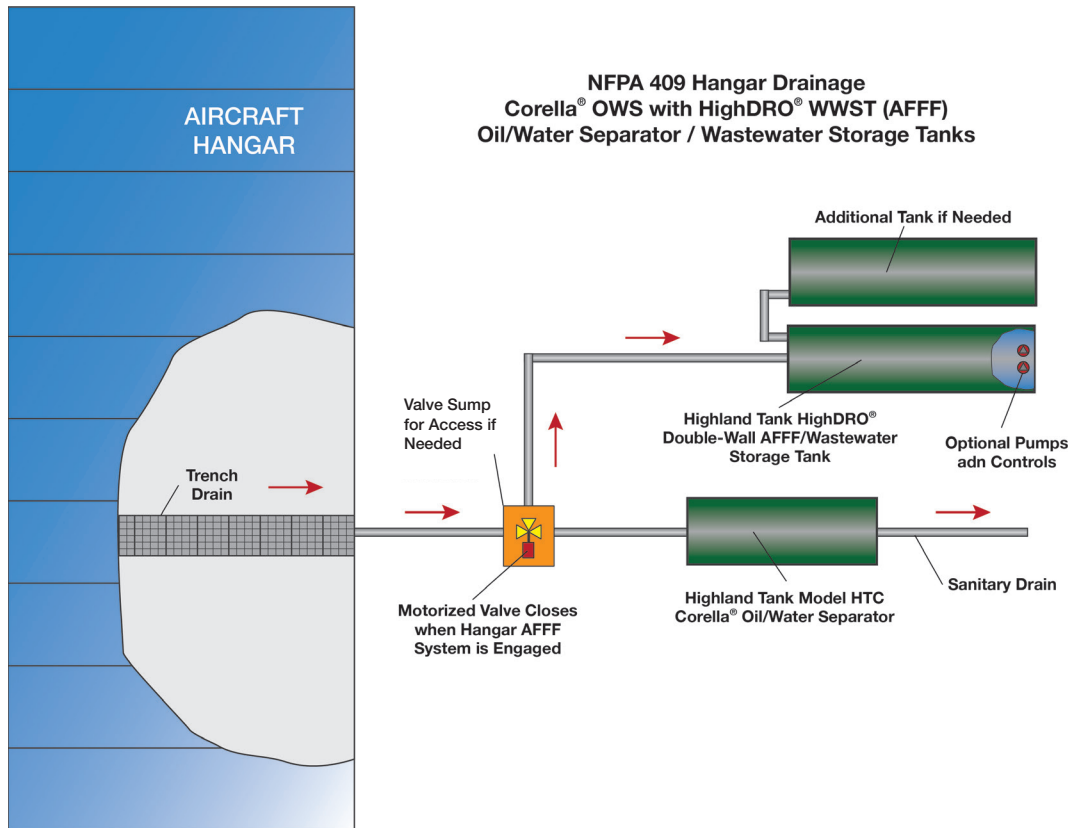


Model HT or HTC	Flow Rate Gal/Min	Recommended Total Volume Gallons	Oil Pump-Out Gallons	Nominal Dimensions		Inlet & Outlet Diameter
				Diameter	Length	
350	35	350	70	3'-6"	6'-0"	4"
550	55	550	110	3'-6"	7'-9"	4"
1,000	100	1,000	200	4'-0"	10'-9"	6"
2,000	200	2,000	400	5'-4"	12'-0"	6"
3,000	300	3,000	600	5'-4"	18'-0"	8"
4,000	400	4,000	800	5'-4"	24'-0"	8"
5,000	500	5,000	1,000	6'-0"	23'-10"	8"
6,000	600	6,000	1,200	6'-0"	28'-8"	10"
7,000	700	7,000	1,400	7'-0"	24'-4"	10"
8,000	800	8,000	1,600	7'-0"	28'-0"	10"
9,000	900	9,000	1,800	8'-0"	24'-0"	12"
10,000	1,000	10,000	2,000	8'-0"	26'-8"	12"
12,000	1,200	12,000	2,400	8'-0"	32'-0"	12"
15,000	1,500	15,000	3,000	10'-0"	25'-6"	14"
20,000	2,000	20,000	4,000	10'-6"	31'-0"	16"
25,000	2,500	25,000	5,000	10'-6"	38'-9"	18"
30,000	3,000	30,000	6,000	10'-6"	46'-6"	20"
40,000	4,000	40,000	8,000	12'-0"	47'-3"	24"
50,000	5,000	50,000	10,000	12'-0"	59'-6"	24"
60,000	6,000	60,000	12,000	13'-0"	60'-6"	24"

Plate spacing and orientation may vary depending on site conditions. Custom sizing is available. Consult Highland Tank for Series G & J sizing information.



# Three Way Valve



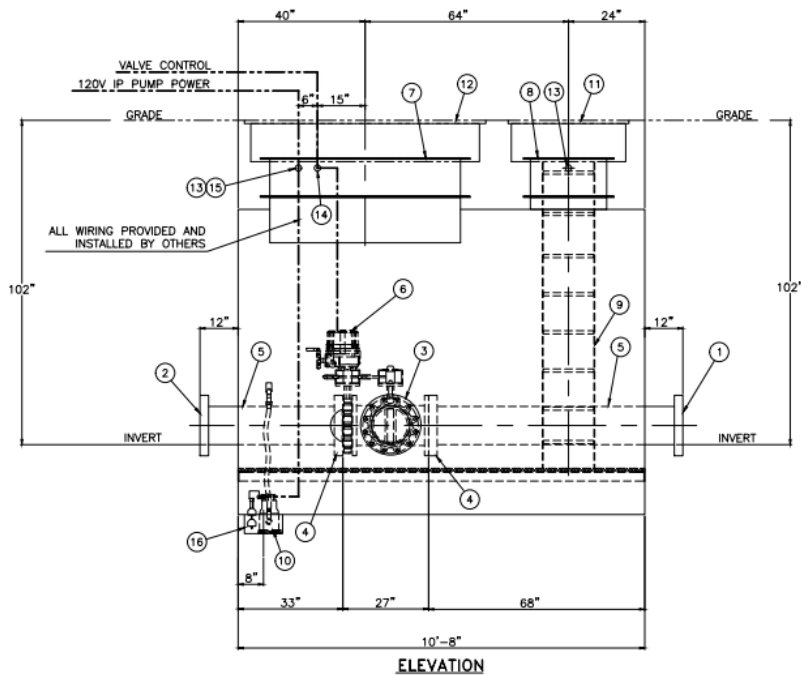
Butterfly Valve Tee Assemblies provide a cost-effective, alternative to a 3-way valve solution. Available for lug style butterfly valves, these unique tee assemblies can be customized to fit your application. Consult factory for valve selection and assembly options. When ordering, please specify actuator and valve position.

### Standard Valve Sizes

- 8"      16"
- 10"     18"
- 12"     20"
- 14"

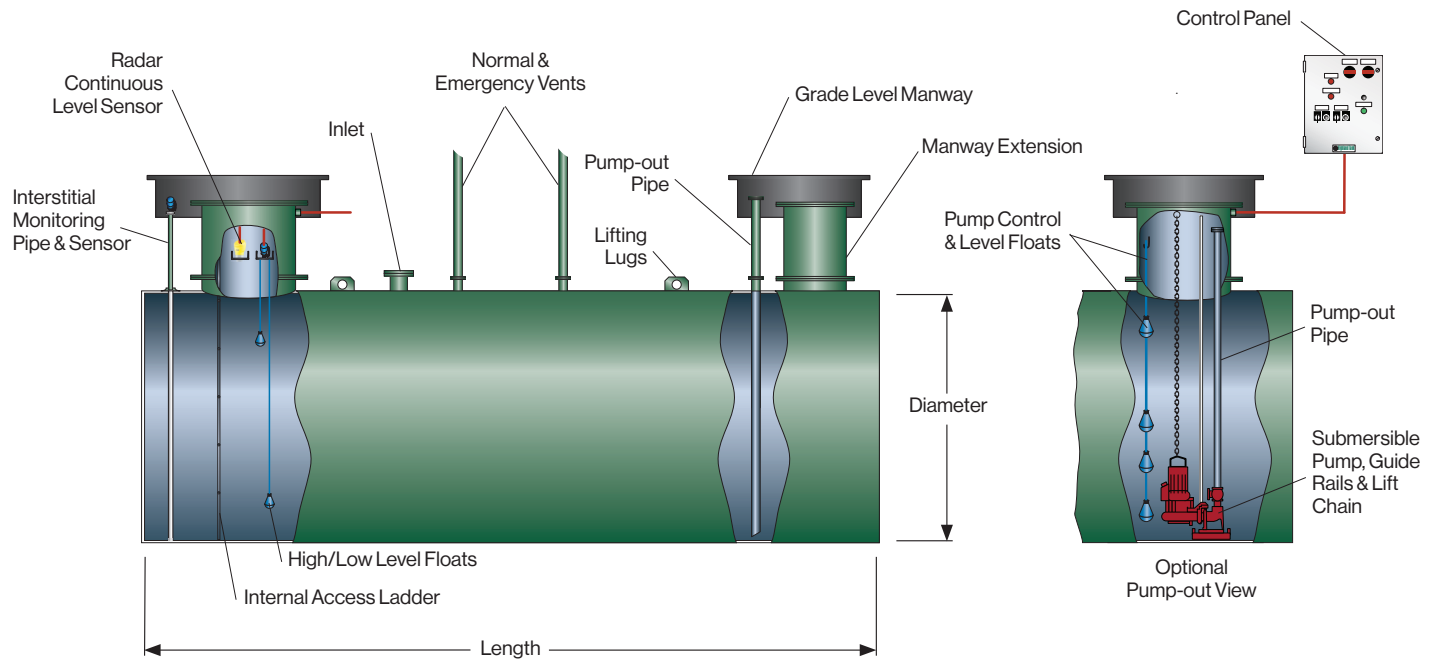
Other valve sizes are available for applications that require alternate sizes

## Underground Valve Containment Tank shown with 12" three way diverter valve



Valve containment tank

# Wastewater Storage Tank Drawing & Details



Underground model shown. Aboveground versions available in the same range of sizes with custom sizing and design available.

Stainless steel construction is also available. These tanks withstand the wider range of temperatures, chemicals and pH factors encountered in industrial applications.

Highland Tank has extensive experience in the design, manufacture and installation of wastewater storage tank systems.

Volume Gallons	Nominal Inside Dimensions	
	Diameter	Length
*1,000	5'-4"	6'-0"
1,500	5'-4"	9'-0"
2,000	5'-4"	12'-0"
2,500	5'-4"	15'-0"
3,000	5'-4"	18'-0"
4,000	5'-4"	24'-0"
4,000	6'-0"	19'-0"
4,000	8'-0"	10'-8"
5,000	6'-0"	23'-10"
5,000	8'-0"	13'-4"
6,000	6'-0"	28'-8"
6,000	8'-0"	16'-0"
8,000	10'-0"	14'-0"

Volume Gallons	Nominal Inside Dimensions	
	Diameter	Length
8,000	8'-0"	21'-4"
10,000	10'-0"	17'-0"
10,000	8'-0"	26'-8"
12,000	10'-0"	20'-6"
12,000	8'-0"	32'-0"
15,000	10'-0"	25'-6"
15,000	8'-0"	40'-0"
20,000	10'-0"	34'-0"
20,000	10'-6"	31'-0"
25,000	10'-6"	38'-9"
30,000	10'-6"	46'-6"
40,000	12'-0"	47'-6"
50,000	12'-0"	59'-6"

\* Single-wall only. All Highland Tank storage tank drawings are available for viewing or downloading in PDF or AutoCAD DXF format at [highlandtank.com](http://highlandtank.com)



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