

# Highland - EZ Access Option for Oil/Water Separators

## Highland Tank

*The Safest Entry for Oil/Water Separators*



Highland Oil/Water Separators help industries comply with oil and grease discharge regulations! Highland Oil/Water Separators are used specifically for the removal of free floating oil, grease, and settleable oily coated solids from oil/water discharges associated with many types of industrial facilities.

Designed to remove oils with a specific gravity less than .95, high performance separators from 15 ppm oil/grease discharge (Model HT) down to 10 ppm discharge (Model HTC) are available.

Highland separators are highly efficient — treating wastewater under a wide

range of conditions. All separators are of the highest quality — constructed to American Petroleum Institute (API) and Underwriters Laboratories (UL), specifications. Highland's oil/water separators come in a variety of designs and are available in single-wall or double-wall construction.

## Typically Regulated Facilities

- Airports & Aircraft Services
- Emergency Services
- Automobile Dealers
- Bus Companies
- Construction Companies
- Garbage Carters
- Gasoline Service Stations
- Industrial Facilities
- Military Installations
- Municipalities
- Railroads
- Trucking & Transportation Companies
- Hazardous Waste Sites
- Petroleum Marketing Facilities
- Parking Areas & Buildings
- Utility Switch Yards

Vehicle services associated with each of these facilities might include:

- Fueling Facilities
- Repair and Maintenance Shops
- Wash Areas

## Unified Facilities Guide Specification (UFGS)

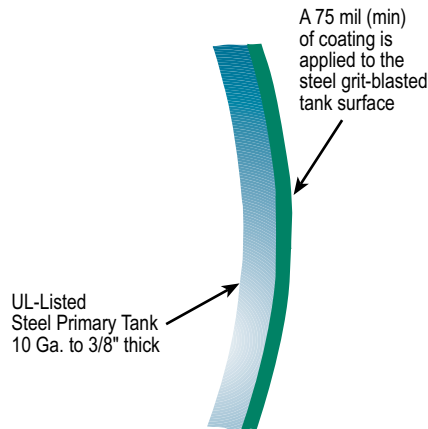
Highland Tank oil/water separator designs are also available in compliance with the latest edition of the Unified Facilities Guide Specification – Division 44- Pollution Control Equipment, Section 44 42 53- Parallel Plate, Gravity Oil-Water Separators dated July 2009.

This guide specification covers requirements for parallel plate gravity oil-water separators to remove free oil and particulate matter from oily waste water in day-to-day operations at USACE, NAVFAC, AFCEA, and NASA facilities.

The two primary design requirements to comply with this specification are a 45 minute retention time at design flow, and easy access to the inside of the oil/water separator to allow for regular inspection and cleaning. Please refer to our sizing schedule for UFGS compliant oil/water separators and flow rates with a 45 minute retention time.

## HighGuard Performance Coating

The HighGuard corrosion protection system is our latest innovation. This coating demonstrates an excellent balance of flexibility, impact strength, abrasion resistance, and corrosion resistance. This plural-component-polyurethane has been approved by Underwriters Laboratories, Inc. under UL 1746 Part IV. Just 75 mils thickness of HighGuard will provide permanent and fully effective corrosion protection that can be measured in decades, rather than years.



Proper surface preparation is the most important factor in any successful coating or lining. Quality assurance is maintained through Highland's complete in-house grit blast cleaning, finishing, and curing facilities. Our facilities are temperature controlled for year round application.

Only qualified and experienced personnel, working under stringent guidelines, are used to apply our wide range of spray applied, high performance formulations, including epoxies and high-build polyurethanes. Exterior coatings and interior linings are selected to meet specific site conditions and service requirements.

## The Corella® Coalescer

The Corella® inclined parallel plate coalescer combines the features of both a flat-plate and a corrugated-plate coalescer into a new, "self-cleaning" design that performs better than traditional plate models. The primary reason for oil/water separator failure is clogging of the coalescing plates with settleable solids. The Corella® solves the problem of extensive separator shutdown and maintenance by simultaneously separating free oil droplets and settleable or suspended solids from water, without clogging the coalescer.

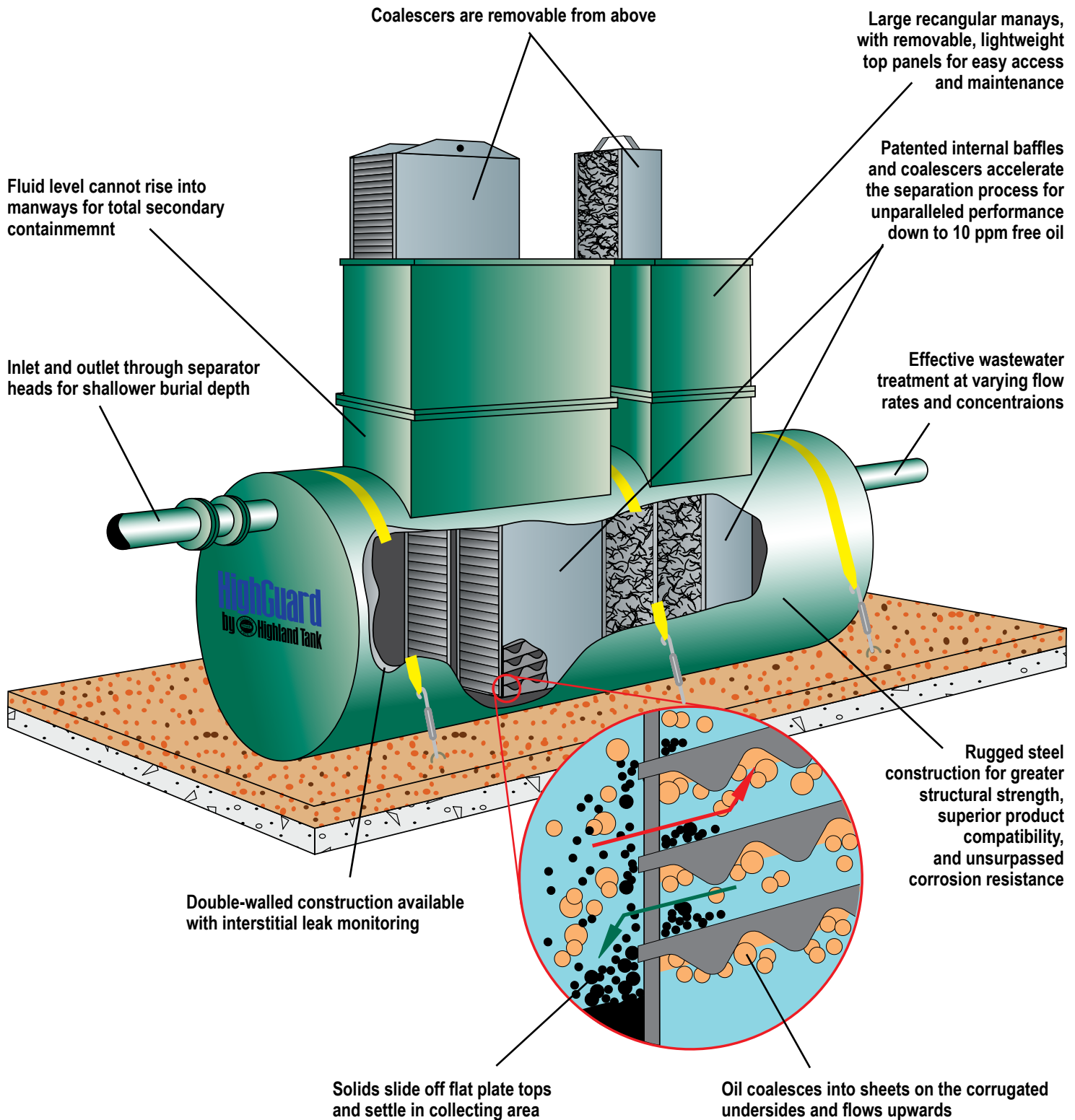
This new "self-cleaning" design performs better than traditional plate coalescers. Corella® plate packs are available with a variety of pack lengths and angles and are tailored to the specified separator duty. They can be configured to meet a wide variety of capacities and conditions and can be integrated with many other unit operations to provide a total solution to a wastewater treatment problem.

## Features, Advantages, and Benefits

- Permits separation of mixtures containing both oil and settleable solids without clogging the coalescer.
- Process flows from 5 to 6,000 GPM.
- Separation of oil droplets of 60 micron or larger size.
- Provides improved oil separating efficiency.
- Operates best from 40° to 120°F.
- Handles wide range and specific gravities of oil and particle concentrations.
- Constructed using multiple cartridges to allow for easy removal.
- Custom packs are available for higher flow rates, temperatures or solids loading.

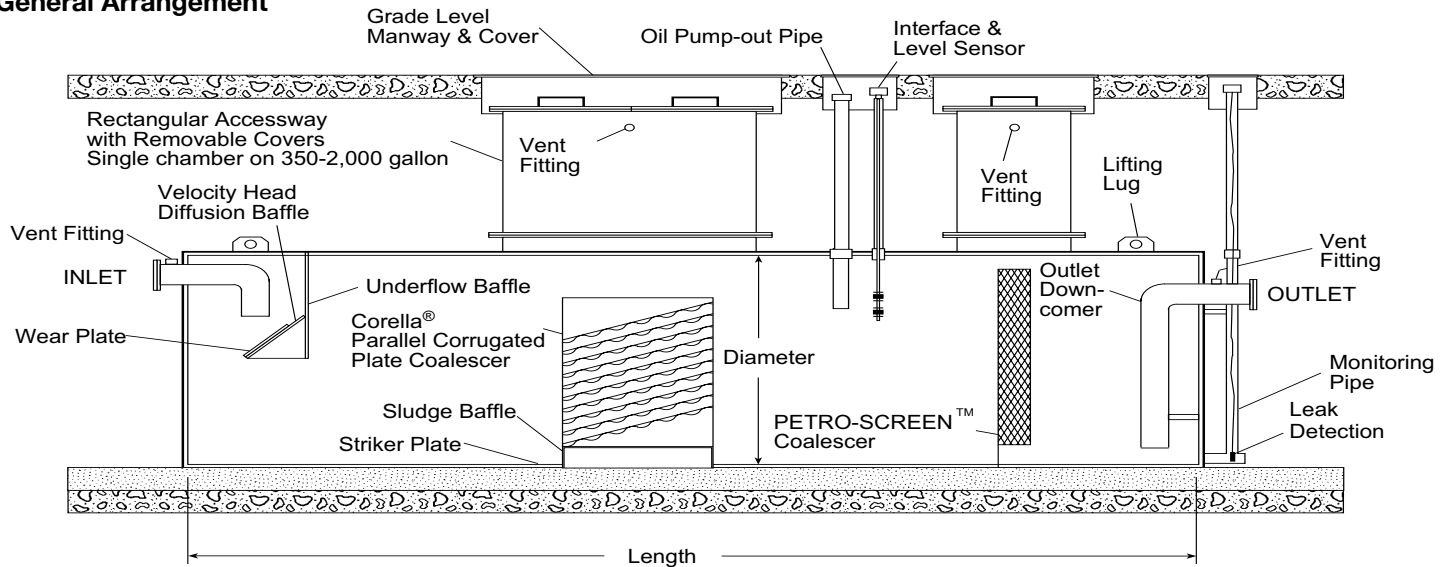
# Easiest Access for Inspection & Maintenance

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.



# Meets OSHA Confined Space Requirements

## General Arrangement



## Highland EZ Access

Highland Tank's high-performance oil/water separators are now available with the All-New EZ Access System. The system is designed for easy access to the removable parallel plate and PETRO-SCREEN coalescers contained within the separator.

Observation, maintenance and cleaning can take place without having to empty the separator or send personnel inside. Separators are configured with one or two rectangular access chambers to allow total, unconfined, unrestricted top access to the separator's internal parts. Highland's EZ Access system meets OSHA's requirements on confined space entry into a vessel containing harmful fumes.

Highland Oil/Water Separators are listed and approved under one or more of the following patents and approvals:  
 Underwriters Laboratories, Inc. UL-SU2215  
 U.S. Patents- 4,722,800, 5,520,825 & 6,605,224  
 Canadian Patents- 1,325,179, 1,296,263 & 2,389,065  
 City of New York, Board of Standards and Appeals under Calendar Number 1215-88-SAMassachusetts Board of State Examiners of Plumber and Gas Fitters Approval Code P1-0594-25  
 Evaluated to DIN Parts 4 & 5, DIN 38-409 Part 18

Model HT or HTC	Nominal Capacity Gallons	Total Spill Capacity Cubic Feet	Flow Rate Gal / Min	**UFGS Flow Rate Gal / Min	Dimensions		Inlet / Outlet Diameter	Access Manways Quantity
					Diameter	Length		
EZ - *350	350	175	35	5	3'6"	6'0"	4"	1
EZ - *550	550	275	55	10	3'6"	7'9"	4"	1
EZ -1,000	1,000	500	100	15	4'0"	10'9"	6"	1
EZ -2,000	2,000	1,000	200	30	5'4"	12'0"	6"	1
EZ -3,000	3,000	1,500	300	50	5'4"	18'0"	8"	2
EZ -4,000	4,000	2,000	400	65	5'4"	24'0"	8"	2
EZ -5,000	5,000	2,500	500	85	6'0"	23'10"	8"	2
EZ -6,000	6,000	3,000	600	100	6'0"	28'8"	10"	2
EZ -7,000	7,000	3,500	700	115	7'0"	24'4"	10"	2
EZ -8,000	8,000	4,000	800	130	7'0"	28'0"	10"	2
EZ -9,000	9,000	4,500	900	150	8'0"	24'0"	12"	2
EZ -10,000	5,000	600	1,000	165	8'0"	26'8"	12"	2
EZ -12,000	6,000	750	1,200	200	8'0"	32'0"	12"	2
EZ -15,000	7,500	900	1,500	250	10'0"	25'6"	14"	2
EZ -20,000	10,000	1,200	2,000	300	10'6"	31'0"	16"	2
EZ -25,000	12,500	1,525	2,500	400	10'6"	38'9"	18"	2
EZ -30,000	15,000	1,850	3,000	500	10'6"	46'6"	20"	2
EZ -40,000	20,000	2,400	4,000	600	12'0"	47'3"	24"	2
EZ -50,000	25,000	3,080	5,000	800	12'0"	59'0"	24"	2

\* These volumes have only one rectangular chamber for accessing both coalescers. \*\* UFGS - Unified Facilities Guide Specification requires 45 minute retention time.



Please visit us at [www.highlandtank.com](http://www.highlandtank.com)

One Highland Road  
 Stoystown, PA 15563  
 814-893-5701  
 FAX 893-6126

4535 Elizabethtown Road  
 Manheim, PA 17545  
 717-664-0600  
 FAX 664-0617

958 19th Street  
 Watervliet, NY 12189  
 518-273-0801  
 FAX 273-1365

2700 Patterson Street  
 Greensboro, NC 27407  
 336-218-0801  
 FAX 218-1292

2225 Chestnut Street  
 Lebanon, PA 17042  
 717-664-0602  
 FAX 664-0631

1510 Stoystown Road  
 Friedens, PA 15541  
 814-443-6800  
 FAX 444-8662