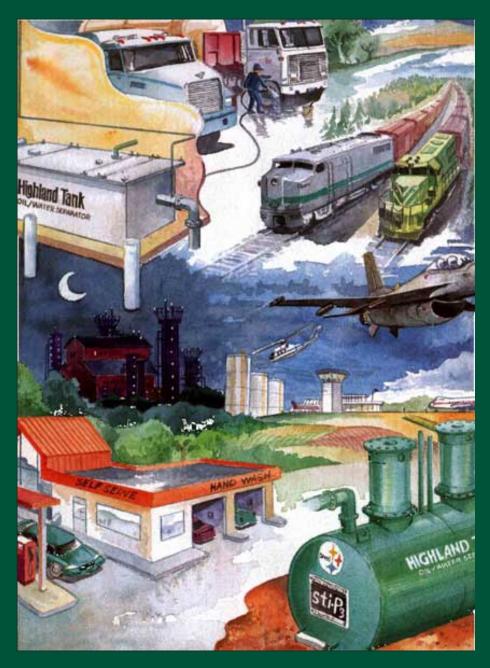
# **Oil/Water Separators and Interceptors**



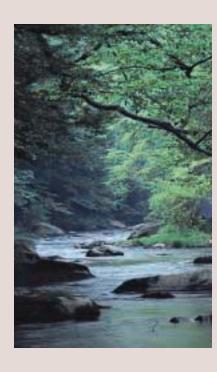
Working Together for a Cleaner Environment.





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Highland's Oil/Water Separators are unparalleled in performance, structural strength, product compatibility, and corrosion resistance. With thousands of high-performance separators in commercial operation throughout the world, Highland's patented oil/water separators have a proven record of reliability.

With ever increasing oil and grease discharge regulations, industrial facilities must develop spill and wastewater treatment plans and install the equipment necessary to implement those plans. Highland engineers have designed a functional means of primary separation that not only meets these federal, state, and local oil and grease discharge limitation requirements, but also

fabrication, delivery and service. Highland separators come directly from one of Highland's six strategically located manufacturing facilities. This practice ensures complete quality control, from expert design to timely delivery by our experienced drivers. Construction and performance certification of the separator in strict accordance with Underwriters' Laboratories Subject SU-2215 is also available.

In addition, all protected Highland Oil/Water Separators carry a 30-year limited warranty against corrosion and structural failure.

From the solid heavyweight construction to the patented design and operating simplicity, a

# High and operating simplicity, a light and the patented design and operating simplicity.

surpasses them. And unlike other oil/water separators, Highland separators are easy to operate and maintain!

Highland Oil/Water Separators handle a wide range of oily discharges from paved surfaces at petroleum, industrial, military, commercial, and municipal facilities. Most common applications include facilities with vehicle fueling, repair/maintenance areas and wash pads.

Highland's Oil/Water Separators come in a variety of capacities and designs, available in either a cylindrical or rectangular vessel. Single and double-wall construction is available for both underground and aboveground applications.

Each oil/water separator is backed by Highland Tank's professional design, engineering,

Highland Oil/Water Separator is a product of experience, backed by a company with 50+ years of private ownership and management.

Highland Oil/Water Separators are competitively priced and are readily available from a network of knowledgeable regional factory representatives and distributors. In addition, Highland provides a wide array of support information, including an engineering manual with detailed information, specifications, and engineering drawings for selecting and specifying oil/water separators and accessories. You can depend on Highland Tank to provide you with environmentally safe and structurally sound oil water separator solutions well into the 21st century and beyond.

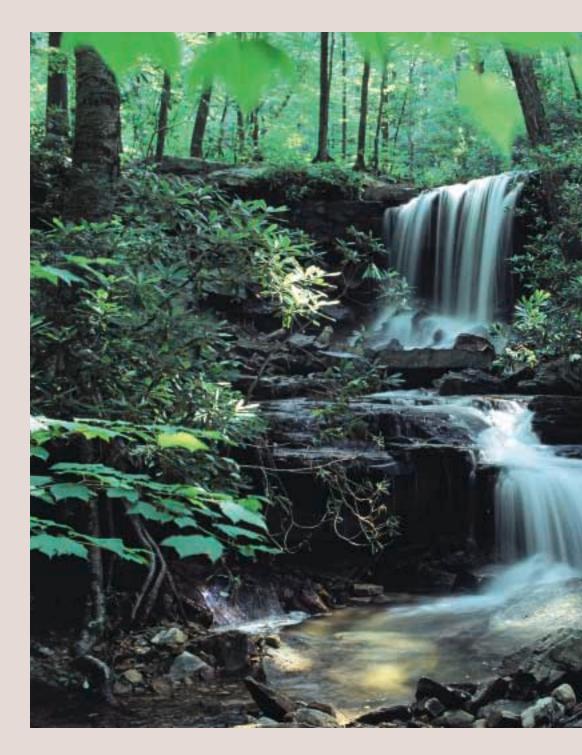
# **Environmental Regulations**

Increasing public interest in the conservation of our nation's water resources has directly affected industries worldwide. Pressure to control harmful oil discharges and spills from industrial facilities has resulted in increasingly more stringent regulations and high penalties for noncompliance.

Oil bearing waste water discharges occur in many types of facilities, in many locations, and for many reasons. Relatively small but chronic oil discharges result from routine operations — engine and parts steam cleaning; regular vehicle maintenance and wash down; storage tank dike draining; and intentional hose-downs of loading racks, fueling islands, and vehicle parking areas.

Large, catastrophic spills usually result from human error and equipment failure associated with loading and dispensing operations. Fire and environmental codes require that the surface on which spills may





1948 United States Water Pollution Control Act

1956 Federal Water Pollution Control Act

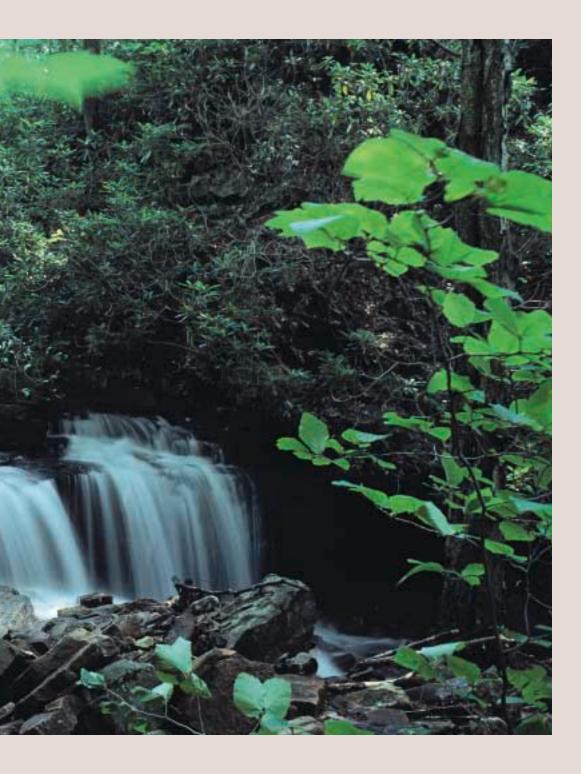
1965 Quality Act of 1965

1972 Federal Water Pollution Control Act Amendments/ National Pollutant Discharge System (NPDES) 1974 Spill Prevention, Control and Countermeasures and Recovery (SPCC) Plan Regulations

Resource Conservation Act (RCRA)

Clean Water Act (CWA)

1980 "Superfund" Comprehensive Environmental Response Compensation and Liability Act (CERCLA)



occur be fully paved, curbed, and drained so that all spills flow to an adequately sized drain and oil/water separator. In most cases, oil and grease discharge regulations state that "any facility which discharges a harmful quantity of oil, or any petroleum product, and the oil enters a navigable body of water of the United States, by whatever means, is liable for significant penalties for clean-up costs and ecological damage."

Highland Tank offers many innovative solutions for industrial waste-water problems. Highland's Oil/Water Separator meets or exceeds current federal, state and local oil and grease limitations under the new Sewer Pretreatment Rules and Pollutant Discharge Elimination Systems Regulations for storm water discharge.

Highland Tank — helping you plan now for the future.

1984 Hazardous and Solid Waste Amendments (HSWA) to

RCRA

"Superfund" Amendment and Reauthorization Act (SARA)

Safe Drinking Water **Amendments** 

1987 Water Quality Act (WQA)

> NPDES Storm Water Regulations

1990 Publicly-Owned Treatment Works (POTW)

Rules

1990 Discharge Elimination Pre-treatment System (NPDES) Storm Water Regulations

Act (OPA)

National Pollution SPCC II Plan Regulation Revisions Oil Pollution

1999 Phase II NPDES Storm Water Regulations impact Small Industrial Sites (over 1 acre) & Sewer Systems of 50,000 gallons or more

March 10, 2003 Phase II NPDES Storm Water Regulations Mandatory Compliance Date

"Gasoline stations, parking lots and other commercial retail sites will be dramatically affected by the new EPA Phase II **NPDES** regulations for controlling contaminated storm water runoff."

# **Vessel Construction**

Highland Tank's Steel Oil/Water
Separators and Interceptors are second to none in design, quality and workmanship.
Our HTC and R-HTC Model Separators are now available with the UL-SU-2215
Label. The following information describes
Highland's standard vessel construction and fabrication options for steel separators and interceptors.

#### Single-wall

Standard single-wall vessels are constructed of mild carbon or stainless steel meeting ASTM specifications. Material thicknesses from 7 gauge to ½ " can be specified. Superior "ribbed" strength is achieved with continous exterior full-fillet lap welds, employing a minimum ½ " overlap on both head and shell joints. All separators and interceptors are factory air tested for leaks at 5 psi.

#### **Double-wall**

Double-wall vessels are constructed by wrapping a secondary steel wall completely around the primary vessel. Each double-wall vessel is constructed employing the same basic fabrication techniques as are used on single-wall vessels. The area between the vessel walls, known as the interstice, can be monitored with a leak detection system installed in the monitor tube, located on the vessel head.

#### **Double-wall with Stand-Off**

Double-wall with Stand-Off vessels consist of a primary vessel that is completely contained by the secondary, exterior steel wall. The two walls are physically separated by standoffs that provide a defined space between the primary and secondary tank. This heavy-duty construction is based on the same fabrication techniques used on the single-wall and double-wall vessels. A fitting located between the inner and outer heads of the vessel permits monitoring of the interstice with a leak detection system.

Standard 24", 30" and 36" diameter manways permit access to the inside of the vessel for maintenance from above. Double bolt ring manways for secondary containment sumps and custom, large rectangular access chambers to allow for total unconfined, unrestricted access from above, are also available.



Rolling Steel
Steel plates from 7 ga. to ½" are rolled to form the rigid shell of the vessel.



Forming Heads Sheet steel is cut with a rotary shear and flanged to form tank head.



Fitting Components

Manways, flanged and threaded fittings, and other special components are fitted to the vessel, then welded in place.

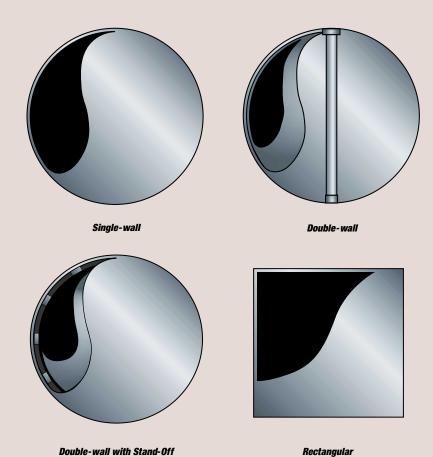
#### **Rectangular Construction**

Rectangular separators are fabricated with flanged top surfaces and removable lids for easy access. All separators are constructed of a minimum 7 gauge mild carbon or stainless steel, meeting ASTM specifications. Steel plates are formed, fitted, and welded creating a separator of superior strength.

Highland Tank Oil/Water Separators carry the following patents and approvals:

U.S. Patent # 4,722,800 Canadian Patent # 1,296,263

Approved by:
Underwriters' Laboratories - SU 2215
for Construction and Performance
City of New York, Board of Standards and Appeals
Under Calendar Number 1215-88-SA
Metropolitan Dade County, FL, Code #93-0512.01
Massachusetts Board of State Examiners of Plumber
and Gas Fitters Approval Code P1-0594-25
Passed DIN 1999 Parts 4 and 5;
DIN 38 409 Part 18 Testing and Analysis





**Welding**All separators are sealed with a continuous exterior full-fillet lap weld.



**Testing**All separators are air tested for leaks at 5 psi.
All seams are inspected to ensure weld integrity.



Coating
Polyurethane, fiberglass reinforced polyester
or other high-grade coatings are applied
based on the separator's end use.

# Cylindrical Design **UL-SU-2215** Approved

Highland Oil/Water Separators help industries comply with oil and grease discharge regulations!

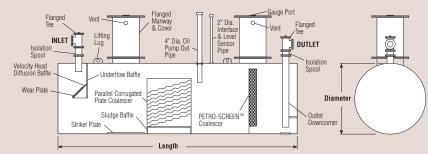
Highland Oil/Water Separators are used specifically for the removal of free floating oil, grease, and settleable oily coated solids from oil/water discharges associated with many types of industrial facilities. Designed to remove oils with a specific gravity less than .95, high performance separators from 15 ppm oil/grease discharge (Model HT) down to UL-Approved 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), Underwriters

Laboratories (UL®), and Steel Tank Institute (STI®) ACT-100-U® or STI-P3® specifications.





Shown is a UL SU 2215 Listed, Model HTC, Single-wall ACT-100-U®

	Total	Total Spill	Inlet/				
Model	Volume	Capacity	Outlet	Flow Rate	Dimer	sions	Approx. Wt.*
(HT or HTC)	(Gallons)	(Gallons)		(gpm)	Diameter	Length	(lbs.)
**350	350	175	4"	35	3'6"	6'0"	1,590
550	550	275	4"	55	3'6"	7'9"	2,024
1,000	1,000	500	6"	100	4'0"	10'9"	3,001
2,000	2,000	1,000	х6"	200	5'4"	12'0"	4,122
3,000	3,000	1,500	8"	300	5'4"	18'0"	5,001
4,000	2,000	2,000	8"	400	5'4"	24'0"	5,760
5,000	5,000	2,500	8"	500	6'0"	23'10"	8,082
6,000	6,000	3,000	10"	600	6'0"	28'8"	9,484
7,000	7,000	3,500	10"	700	7'0"	24'4"	11,124
8,000	8,000	4,000	10"	800	7'0"	28'0"	11,959
9,000	9,000	4,500	12"	900	8'0"	24'0"	11,983
10,000	10,000	5,000	12"	1,000	8'0"	26'8"	12,696
12,000	12,000	6,000	12"	1,200	8'0"	32'0"	14,131
15,000	15,000	7,500	14"	1,500	10'0"	25'6"	19,567
20,000	20,000	10,000	16"	2,000	10'6"	31'0"	23,316
25,000	25,000	12,500	18"	2,500	10'6"	38'9"	30,456
30,000	30,000	15,000	20"	3,000	10'6"	46'6"	35,586
40,000	40,000	20,000	24"	4,000	12'0"	47'3"	44,389
50,000	50,000	25,000	24"	5,000	12'0"	59'0"	51,511

<sup>\*</sup>Weights shown are for Model HTC Single-wall Separators. Contact Highland for all other weights. Plate spacing and orientation may vary depending on site conditions. \*\* One access manway in separation chamber

## **Design Options**

Separator installations vary greatly with each location. Highland custom fabricates oil/water separators to satisfy your specific needs. The following information illustrates some of the influent and effluent/product handling options available.

#### Series G

Series G Oil/Water Separators feature an integral sand interceptor compartment to permit sand and gravel to settle out before the wastewater enters the oil/water separator.

#### Series H

Series H Oil/Water Separators feature an integral product sump for storing separated oil. A special product weir permits the removal of only the skimmed oil by pump-out. The effluent is discharged by either pump or gravity flow.

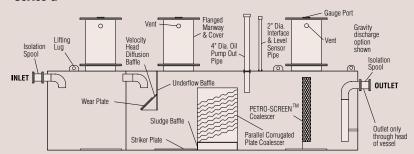
#### Series I

Series I Oil/Water Separators feature an integral product reservoir for receiving skimmed oil. The oil is removed by pump or gravity through a side port to a remote oil storage tank. The effluent is discharged by either pump or gravity flow.

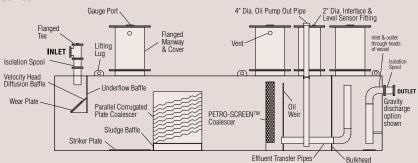
#### Series J

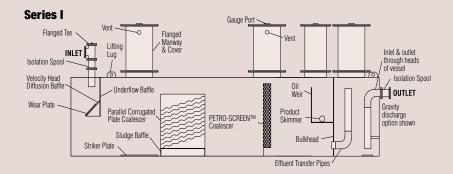
Series J Oil/Water Separators feature an integral effluent pump-out chamber with level controls to operate a pump at prescribed levels. The pumped effluent can then be routed through Highland's Activated Clay/Carbon Filtration unit.

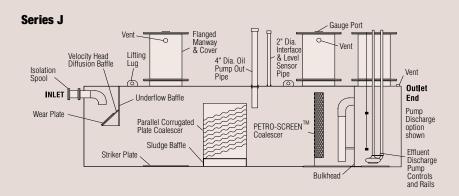
#### **Series G**

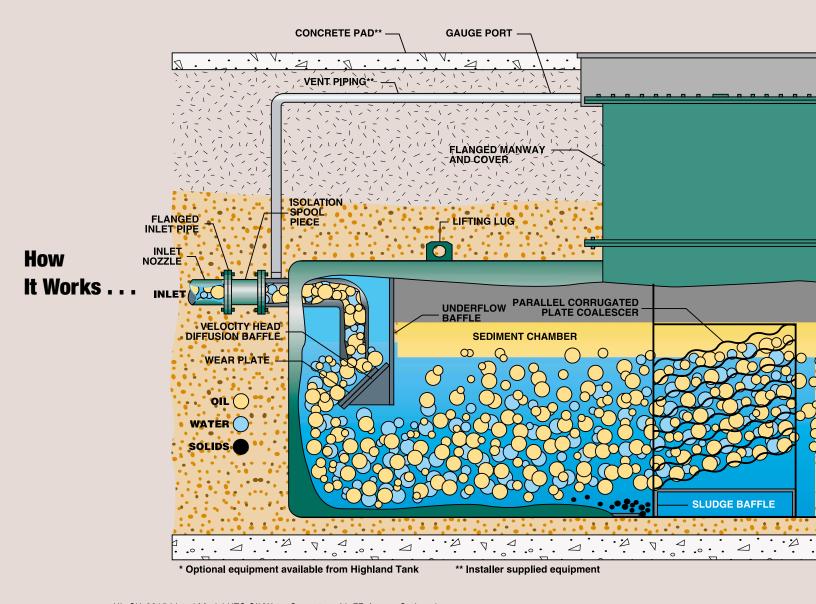


#### **Series H**









UL-SU-2215 Listed Model HTC Oil/Water Separator with EZ-Access Option shown

#### **Highland's Patented Design**

Highland Tank's patented design combines state-of-the-art technology with time-tested materials, making Highland separators the strongest and most reliable high-performance separators in the industry.

The oil/water separator is a stationary underground, wastewater treatment vessel, filled with water. Internal baffles and coalescers accelerate the oil/water separation process. Waste accumulates within the separator while effluent is discharged by gravity. The system is designed for access from above for observation, maintenance and cleaning.

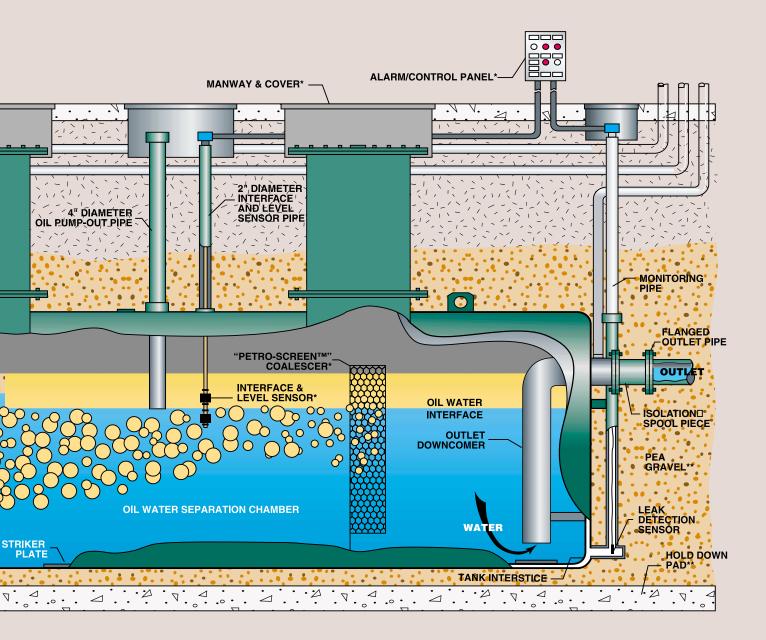
#### **Diffusion Baffle**

The velocity head diffusion baffle, located near the inlet of the separator, is designed to serve four basic functions:

- To dissipate the velocity head, thereby improving the overall hydraulic characteristics of the separator.
- 2. To direct incoming flow downward and outward maximizing the use of the separator volume.
- **3.** To reduce flow turbulence and to distribute the flow evenly over the separator's cross-sectional area.
- **4.** To isolate inlet turbulence from the rest of the separator.

#### **Internal Chambers**

In the sediment chamber, heavy solids settle out, and concentrated oil slugs rise to the surface. As the oily water passes through the parallel corrugated plate coalescer (an inclined arrangement of parallel corrugated plates) the oil rises and coalesces into sheets on the underside of each plate. The oil then creeps up the plate surface, and breaks loose at the top in the form of large globules. These globules then rise rapidly to the surface of the separation chamber where the separated oil accumulates.



The effluent flows downward to the outlet downcomer, where it is discharged by gravity displacement from the lower regions of the separator.

#### Petro-Screen™

For enhanced oil removal efficiency, a "Petro-Screen" polypropylene coalescer (a bundle of oleophilic [oil attracting] fibers, layered from coarse to fine and encased within a solid framework) is used to intercept droplets of oil too minute to be removed by the parallel corrugated plate coalescer.

#### **Monitoring Systems**

For easy and efficient operation and maintenance, an oil level sensor can sound an alarm at high oil levels so waste oil can be removed from the separator. Doublewall separators can be furnished with a leak detection system for the interstitial space.

Additional monitoring equipment is available for oil or water level sensing, alarm and pumpout control.

# **Cylindrical Design**

Highland Single, Double and Triple Basin Interceptors are engineered to collect sand, grit, grease and free oil (hydrocarbons and other petroleum products) from storm water runoff, spills and vehicle maintenance operations.



Highland Interceptors can be used in conjunction with high-performance oil/water separators. An optional overflow bypass is available on double basin interceptors to divert flow and prevent separator overflow. Double or triple basin interceptors may be connected directly to a sanitary sewer system or be used in conjunction with a recycle wash water system.

Highland Interceptors are highly dependable — operating under a wide range of conditions.

Highland's Interceptors are constructed of the highest quality materials — to UL®, STI-P3® and ACT-100-U® specifications. Construction options and accessories similar to those for separators are available.

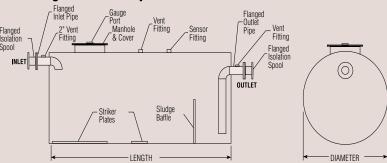
Nominal		Sludge Capacity			Inlet/			
Capacity	SB	DB	TB	Flow Rate	Outlet	Dimer	nsions	Approx. Wt.*
(Gallons)		(Cubic Ft.)		(gpm)	Diameter	Diameter	Length	(lbs.)
550	30	20	10	55	4"	3'6"	7'9"	1,253
1,000	60	40	18	100	6"	4'0"	10'9"	1,734
2,000	120	80	35	200	8"	5'4"	12'0"	2,519
3,000	180	120	53	300	8"	5'4"	18'0"	3,323
4,000	250	160	71	400	8"	5'4"	24'0"	4,339
5,000	310	230	89	500	10"	6'0"	23'10"	6,646
6,000	375	275	107	600	10"	6'0"	28'8"	8,547
7,000	425	315	125	700	10"	7'0"	24'4"	8,361
8,000	500	385	143	800	10"	7'0"	28'0"	8,912
9,000	540	400	160	900	12"	8'0"	24'0"	9,632
10,000	600	465	178	1,000	12"	8'0"	26'8"	10,853
12,000	750	600	214	1,200	12"	8'0"	32'0"	12,279
15,000	900	685	267	1,500	14"	10'0"	25'6"	16,958
20,000	1,200	1,000	356	2,000	16"	10'6"	31'0"	20,299
25,000	1,525	1,250	445	2,500	18"	10'6"	38'9"	27,942
30,000	1,850	1,580	535	3,000	20"	10'6"	46'6"	33,089
40,000	2,400	2,000	713	4,000	24"	12'0"	47'3"	40,121
50,000	3,080	2,650	891	5,000	24"	12'0"	59'6"	47,187

<sup>\*</sup>Weights given are for Triple Basin Interceptors. Other weights available upon request.

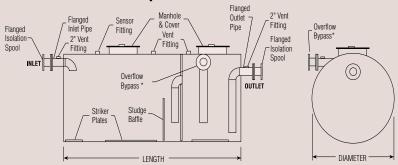
# **Design Options**

Wastewater treatment requirements vary greatly with each location. Highland custom fabricates oil interceptors to satisfy your specific needs. The following information illustrates some of the influent handling options available.

#### **HT-SB Single Basin Interceptor**



#### **HT-DB Double Basin Interceptor**



#### HT-SB Single Basin Interceptor

Single Basin Interceptors are designed for installation where the discharge flows from the Interceptor into a high-performance Highland Tank oil/water separator. HT-SB interceptors are configured with a single collection chamber and sludge baffle for sand, grit, grease and free oil removal.

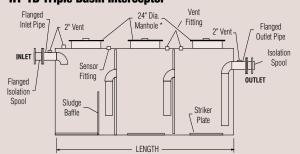
#### HT-DB Double Basin Interceptor

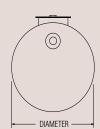
Double Basin Interceptors are designed for installation where the discharge flows from the Interceptor into a high-performance Highland Tank oil/water separator. HT-SB interceptors are configured with two collection chambers and a sludge baffle for sand, grit, grease and free oil removal. Also included on the HT-DB is an optional Overflow Bypass to direct excess flow to an auxillary retention area.

#### HT-TB Triple Basin Interceptor

Single Basin Interceptors are designed for use where they can be connected directly to a sanitary sewer system that does not require a high-performance discharge. The HT-SB interceptor can also be used in vehicle washing applications in conjunction with a Recycle-Wash System. They are configured with a three collection chambers and a sludge baffle for sand, grit, grease and free oil removal.

#### **HT-TB Triple Basin Interceptor**







S E P A R A T O R S

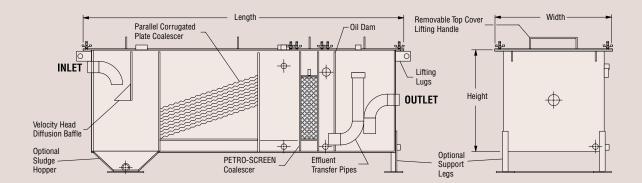
## **Design Options**

- · Available in sixteen popular sizes
- Custom systems available
- · Flow rates ranging 5 to 1,200 GPM
- Patented internal baffles and coalescers for proven performance
- Coalescers are removeable from above for cleaning and maintenance
- Aboveground, grade-level or belowground vaulted installation

- Rugged all-steel construction for superior structural strength
- · Removable, vapor-tight top covers for access and maintenance
- Integral Effluent Clearwell allows for either gravity or pumped discharge
- · Complete with interior/exterior blast and finish coatings

- · Superior product compatibility
- Exterior insulation and immersion heaters available for cold climate installations
- Available with complete equipment packages including sludge hopper, level sensors, alarm/control panels, and pump systems

#### **General Arrangement**



Model R-HTC	Nominal Capacity (Gallons)	Spill Capacity (Gallons)	Flow Rate (gpm)	Dimensions L x W x H	Inlet/Outlet Diameter	Approximate Wt. (lbs.)
100	100	40	5	4'0" x 1'6" x 3'0"	1"	600
200	200	80	10	5'0" x 2'0" x 3'0"	2"	900
300	300	100	25	7'0" x 2'0" x 3'0"	3"	1,200
600	600	200	50	9'0" x 3'0" x 3'0"	4"	1,900
900	900	300	75	10'0" x 3'0" x 4'0"	6"	2,850
1,000	1,000	400	100	11'0" x 4'0" x 4'0"	6"	3,620
2,000	2,000	750	200	12'0" x 5'0" x 5'0"	8"	6,550
3,000	3,000	900	300	18'0" x 5'0" x 5'0"	10"	6,780
4,000	4,000	1,200	400	18'0" x 6'0" x 5'0"	10"	7,730
5,000	5,000	1,500	500	20'0" x 6'0" x 6'0"	10"	9,520
6,000	6,000	1,800	600	19'2" x 7'0" x 6'0"	10"	11,800
7,000	7,000	2,100	700	19'2" x 7'0" x 7'0"	10"	13,600
8,000	8,000	2,400	800	19'2" x 6'0" x 6'0"	10"	15,000
9,000	9,000	2,700	900	18'10" x 8'0" x 8'0"	12"	17,000
10,000	10,000	3,000	1,000	20'11" x 8'0" x 8'0"	12"	17,680
12,000	12,000	3,600	1,200	19'10" x 9'0" x 9'0"	12"	21,000

Weights listed are for HTC models. Contact Highland for all other weights. Plate spacing and orientation may vary depending on site conditions.

## **Deep Sump Basin**

The Deep Sump Basin (DSB) is a complete packaged system consisting of the Deep Sump Basin with Integral Grit and Pump Lift Chambers, Influent Pump Package, and Model HTC Rectangular Aboveground Oil/Water Separator.

The system is designed to remove free floating oil, grease and settleable oily-coated solids from a vehicle maintenance facility's fuel area, wash area, and service bay drains. DSB Systems are available in two standard flow rates. The DSB-300 is sized for 0-25 GPM and the DSB-600 is sized for 0-50 GPM. Higher flow rate systems are also available.



#### **Features**

- DSB- Deep Sump Basin with Inlet
- Pneumatic Influent Diaphragm Pump with Air Filter Regulator, Suction Pipe and Strainer
- R-HTC-300 or R-HTC-600 Oil/Water Separator with Level Sensor and Controls



The DSB is shipped from the factory with pneumatic or electric pump and level controls pre-installed. All pneumatic, all electric or combination systems are available.

# **Advanced Secondary Treatment Systems**

The heart of the system is Activated Clay, a new generation of secondary treatment media which effectively removes organic contamination and impurities from wastewater by physical adsorption.

This convenient, compact, modular system is specially designed for industrial wastewater treatment applications.

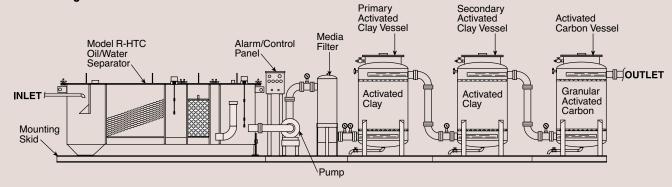
#### **Advantages**

- Consistently removes large quantities of organic contaminants to non-detectable levels or levels meeting regulatory codes.
- Especially effective in removing oil and grease, total petroleum hydrocarbons, and dissolved hydrocarbons.
- Eliminates or reduces waste volume, mobility and toxicity.
- · Uses no anthracite coal fillers



<b>Model</b> ASTS	Flow Rate (gpm)	Activated Clay Fill (lbs.)	Activated Clay Vessel (gal.)	Clay Vessel Dimensions Approx. D x H	Approximate Vessel Wt. (lbs.)
	(9)/	()	(9)		(,
100	5	105	18	1'0" x 3'0"	150
200	10	210	40	1'6" x 3'0"	225
300	25	526	140	2'6" x 3'0"	400
600	50	1,053	210	3'0" x 3'0"	500
900	75	1,579	370	3'6" x 4'0"	725
1,000	100	2,107	445	3'6" x 5'0"	850
2,000	200	4,215	980	5'0" x 5'0"	1,675
3,000	300	6,322	1,395	5'6" x 6'0"	1,900
4,000	400	8,429	1,905	6'0" x 7'0"	2,600
5,000	500	10,537	2,120	6'0" x 8'0"	3,000
6,000	600	12,644	2,679	7'0" x 7'0"	3,200
7,000	700	14,753	3,253	7'0" x 9'0"	3,750
8,000	800	16,860	3,540	7'0" x 10'0"	4,100
9,000	900	18,967	4,008	8'0" x 8'0"	4,200
10,000	1,000	21,075	4,384	8'0" x 9'0"	4,600
12,000	1,200	25,290	5,512	8'0" x 12'0"	5,600

#### **ASTS General Arrangement**





#### **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 corrugated 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



#### **Activated Clay and Carbon Filtration Systems**

Highland's Activated Clay and Carbon Filtration systems are used in applications where strict water quality discharges are mandated. These convenient, compact, modular systems use proprietary media to effectively remove impurities from wastewater by physical adsorption.



## Leak Detection, Level Sensing, Alarm and Control Equipment

Highland Tank Monitoring & Control Systems provide a wide range of capabilities. All system equipment is UL labeled, employs modular components, and is intrinsically safe. Control panels are available in a variety of NEMA enclosures.

#### **Protection Systems**



#### Protective Coating

A tough, heavy duty dielectric coating of polyurethane covers the separator and seals it from the surrounding soil providing the first line of defense against stray current and galvanic corrosion.

#### Electrical Isolation

UL-Listed dielectric nylon bushings or flange isolation kits are used in each opening to electrically isolate the separator from piping, preventing the entry of stray currents or galvanic action through piping connections.

#### Cathodic Protection

Galvanic anodes provide protective current flow to any scratches in the coating that may occur during shipping/handling. The anodes are self-regulating, supplying current only as needed, for extra long life. Every STI-P3 separator is shipped with factory installed PP2 Protection prover cathodic protection monitoring system.



#### Protective Coating

A tough heavy duty dielectric coating of 70 mil polyurethane covers the separator and seals it from the surrounding soil, providing the first line of defense against stray current and galvanic corrosion. The coating is a unique polymer with a high cross-link density which is self-reinforcing. Just 70 mils outperforms other coatings in impact resistance, adhesion, exposure to heat and cold, abrasion resistance and overall corrosion resistance. The Act-100 U® coating is the only resin of its kind on the market which requires absolutely no artificial reinforcement.

#### Electrical Isolation

UL-Listed dielectric nylon bushings or flange isolation kits are used in each opening to electrically isolate the separator from piping, preventing the entry of stray currents or galvanic action through piping connections.



# Highland Tank's Complete Product Line Includes The Following:

- STI-P3® and ACT-100-U® Underground Single and Double-wall steel storage tanks
- Aboveground Horizontal and Vertical Single and Double-wall steel storage tanks
- Fireguard® Thermally Protected Double-wall aboveground steel storage tanks
- Dike Tanks
- ASME Pressure Vessels
- Stainless Steel Tanks
- Lube Storage Tanks

#### **Highland Design Assistance**

Developing a spill control or wastewater treatment system and then selecting the proper equipment is no ordinary task!

Highland has a network of knowledgeable factory representatives located worldwide to assist you in this process. In addition, Highland offers a wide array of information that includes an engineering manual with detailed information for selecting and specifying products and accessories. Specifications and engineering drawings for standard models of separators are also available on CD-ROM.

For assistance in selecting and specifying a Highland high performance oil/water separator and/or interceptor, and for the nearest Highland Oil/Water Separator representative, call, write, or email us at:



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

www.highlandtank.com





#### Highland Manufacturing Locations

One Highland Road Stoystown, PA 15563-0338 Phone 814-893-5701 Fax 893-6126

99 West Elizabethtown Road Manheim, PA 17545-9410 Phone 717-664-0600 Fax 664-0617

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

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

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

354 Route 108 Somersworth, NH 03878 Phone 603-692-2012 FAX 692-2014

Please visit us at www.highlandtank.com