PRODUCT DETAILS

Highland Tank cylindrical underground oil/water separators are typically installed in industrial areas and receive oil waste-water generated during processes such as bulk petroleum storage and handling, aircraft and vehicle fueling, maintenance, washing and environmental remediation of petroleum contaminated sites.

The effluent from oil/water separators is typically discharged to either a storm or sanitary sewer system.

Our high-efficiency oil/water separators are recommended for a wide range of industrial applications, such as:

» Airports & Aircraft Services
» Electric Utilities & Power Plants
» Environmental Remediation
» Industrial Facilities
» Military & Government Facilities
» Municipalities
» Petroleum Production & Marketing Facilities
» Railroad Yards
» Transportation Companies

They are also located in vehicle service areas associated with each of these facilities:

» Fueling Facilities
» Repair & Maintenance Shops
» Wash Areas

Highland oil/water separators set the standard for reliability. Our separators are highly efficient - treating wastewater under a wide range of conditions.

Unlike other oil/water separators, they are easy to install, operate and maintain.
Corella® and Petro-Screen coalescers are removable from above.

Fluid level cannot rise into manways for total secondary containment.

Inlet and outlet through separator heads for shallower burial depths.

Double-wall construction available with interstitial leak monitoring.

Solids slide off flat plate tops and settle in collecting area.

Oil coalesces into sheets on the corrugated undersides and flows upward.

Large rectangular manways with removable, lightweight top panels for easy access and maintenance.

Patented internal baffles and coalescers accelerate the separation process for unparalleled performance improving effluent quality to 10 ppm free oil.

Rugged steel construction for greater structural strength, superior product compatibility and unsurpassed corrosion resistance.

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.

UL-2215 LISTED
Highland Tank 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-SA

Massachusetts 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

pre-engineered design options

Series - G Oil/Water Separators
Feature an integral sand interceptor compartment to permit sand and gravel to settle out before the wastewater enters the separation chamber.

Series - J Oil/Water Separators
Feature an integral effluent pump-out compartment with level controls to operate a pump at prescribed levels. The pumped effluent can then be routed through Highland’s Advanced Hydrocarbon Filtration System to further improve performance.
How It Works

Highland Tank’s patented oil/water separators are stationary wastewater treatment tanks filled with water.

They contain specially designed internal baffles and coalescers to accelerate the separation process.

The tank is designed to allow convenient access for inspection and maintenance from above. Inlet flow is directed against the velocity head diffusion baffle to reduce flow turbulence and to distribute the flow evenly over the separator’s cross-sectional area.

In the sediment chamber, heavy solids settle out and concentrated oil rises to the surface. The oily water then passes through the Corella® Coalescer, an inclined arrangement of stacked, parallel, flat and corrugated plates.

The corrugated underside of the Corella® plates causes the oil to coalesce into sheets. The oil globules then rise to the surface of the separation chamber, where the separated oil accumulates.

Any remaining solids sink to the top of the plates and slide off the plates to the solids collection area.

The effluent flows down and toward the outlet and is discharged by gravity displacement. A Petro-Screen polypropylene impingement coalescer (an encased bundle of layered oil-attracting fibers) is used to intercept droplets of oil that are too minute to be removed by the Corella® Coalescer.

Electronic oil level controls sound an alarm at high oil levels so that waste oil can be removed from the separator. Double-wall separators are monitored with electronic leak detection systems for the interstitial space.
## Cylindrical Separator Sizing Guide

### Model
**Model** | **Flow Rate** (Gal/Min) | **Total Volume** (Gallons) | **Recommended Oil Pump-Out** (Gallons) | **Dimensions** (Diameter x Length) | **Inlet & Outlet** Diameter
---|---|---|---|---|---
HT or HTC | 350 | 35 | 350 | 70 | 3'-6" x 6'-0" | 4"
| 550 | 55 | 550 | 110 | 3'-6" x 7'-9" | 4"
| 1,000 | 100 | 1,000 | 200 | 4'-0" x 10'-9" | 6"
| 2,000 | 200 | 2,000 | 400 | 5'-4" x 12'-0" | 6"
| 3,000 | 300 | 3,000 | 600 | 5'-4" x 18'-0" | 8"
| 4,000 | 400 | 4,000 | 800 | 5'-4" x 24'-0" | 8"
| 5,000 | 500 | 5,000 | 1,000 | 6'-0" x 23'-10" | 8"
| 6,000 | 600 | 6,000 | 1,200 | 6'-0" x 28'-8" | 10"
| 7,000 | 700 | 7,000 | 1,400 | 7'-0" x 24'-4" | 10"
| 8,000 | 800 | 8,000 | 1,600 | 7'-0" x 28'-0" | 10"
| 9,000 | 900 | 9,000 | 1,800 | 8'-0" x 24'-0" | 12"
| 10,000 | 1,000 | 10,000 | 2,000 | 8'-0" x 26'-8" | 12"
| 12,000 | 1,200 | 12,000 | 400 | 8'-0" x 32'-0" | 12"
| 15,000 | 1,500 | 15,000 | 3,000 | 10'-0" x 25'-6" | 14"
| 20,000 | 2,000 | 20,000 | 4,000 | 10'-6" x 31'-0" | 16"
| 25,000 | 2,500 | 25,000 | 5,000 | 10'-6" x 38'-9" | 18"
| 30,000 | 3,000 | 30,000 | 6,000 | 10'-6" x 44'-6" | 20"
| 40,000 | 4,000 | 40,000 | 8,000 | 12'-0" x 47'-3" | 24"
| 50,000 | 5,000 | 50,000 | 10,000 | 12'-0" x 59'-6" | 24"
| 60,000 | 6,000 | 60,000 | 12,000 | 13'-0" x 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.