

VortClarex® System Superior Oil/Water Separation

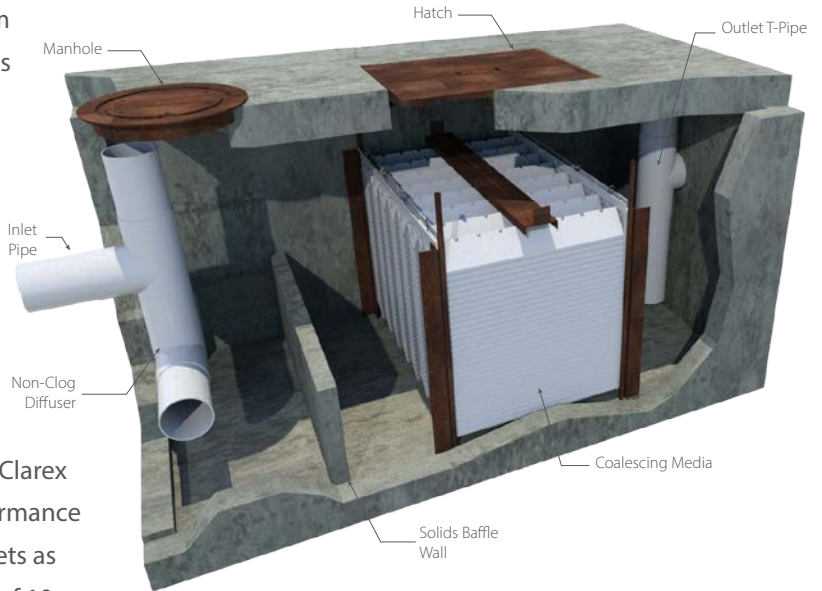
The VortClarex® system is an oil/water separator that utilizes coalescing media to efficiently remove freely dispersed oil and other liquid pollutants from urban runoff and industrial discharges. It specifically targets oil and grease and is designed for sites where removal of these pollutants is of greatest concern or where oil and grease effluent targets are specified. It is typically installed belowground and in-line with the piping system and can also be installed in pre-assembled concrete manhole or vault designs.

Conventional oil/water separators provide gravity separation by using baffles or T-sections, but are only effective on oil droplets greater than 150 microns. The VortClarex coalescing media maximizes surface area, increasing performance and effluent quality. It is typically sized to remove oil droplets as small as 60 microns and achieve an effluent concentration of 10 mg/L or less.

The VortClarex coalescing media is housed within a precast concrete vault.

Unlike other oil/water separators constructed of fiberglass or steel, it does not require anti-floatation hold-down straps or concrete traffic collars. Maintaining the system is easy using a standard water hose and vacuum truck, and the media can be cleaned either inside or outside the structure.

In most cases the system will be installed belowground to treat stormwater runoff; however treating oily water from floor drains and vehicle wash down pads is also possible with the VortClarex. In addition to belowground applications, the VortClarex can also be used to treat process and pumped flow applications in an aboveground configuration.



Learn More:

www.ContechES.com/vortclarex

FEATURE	BENEFIT
PVC coalescing media	Removes up to 99% of free oil droplets down to 60 microns (standard design) Effluent has TPH concentrations of 10 mg/L or less in typical stormwater applications
Non-turbulent flow through the system	Maximizes efficiency by increasing rise rate and size of droplets
Precast concrete structure housing	Ensures durability Meets HS-20 loading requirements Provides for a shallow installation
Belowground system	Maximize land use
Standard and custom models available	Meets Spill Prevention, Control and Counter Measure (SPCC) requirements

VortClarex[®] System

Superior Oil/Water Separation

How it Works

Flows enter the VortClarex system via a non-clog diffuser and are distributed across the chamber width. The influent passes over a solids baffle wall where settleable solids drop out, reducing the amount of solids in the flow as it enters the coalescing media. As the flow passes through the media, oily pollutants accumulate on the surface and come into contact with others to form larger, more buoyant droplets. These buoyant droplets rise upward through the media and are released near the water surface. The oil is trapped behind the outlet T-pipe, and treated water exits the system.

VortClarex Model Sizes and Peak Flow Capacity

MODEL #	DIMENSIONS		TYPICAL SUMP DEPTH		TREATMENT FLOW RATE		RECOMMENDED PIPE SIZE INLET/OUTLET	
	FT	M	FT	M	GPM	LPS	IN	MM
VCL30	6 X 3	1.8 X 0.9	3.75	1.14	110	6.9	6	150
VCL40	8 X 4	2.4 X 1.2	3.75	1.14	150	9.6	6	150
VCL60-1	12 X 6	3.7 X 1.8	3.58	1.09	225	14.2	8	200
VCL60-2	12 X 6	3.7 X 1.8	3.58	1.09	440	27.7	10	250
VCL80-1	16 X 8	4.9 X 2.4	3.25	0.99	300	18.9	12	300
VCL80-2	16 X 8	4.9 X 2.4	3.42	1.03	620	39.1	12	300
VCL80-3	16 X 8	4.6 X 2.4	3.42	1.03	880	55.5	12	300



VortClarex specifically targets oil & grease