

Oil/Water Separator

Rectangular and Circular Units



WESTECH®

 **SWIRE WATER**

WesTech Oil/Water Separators



Designed according to the American Petroleum Institute (API) 421, WesTech Oil/Water (O/W) Separators combine state-of-the-art separation, skimming, and sludge transport technologies into a highly efficient primary oil separation device.

Why Choose an Oil/Water Separator?

Removing the bulk of free oils and greases from plant wastewater streams reduces overloading and other problems in downstream treatment processes. WesTech O/W Separators are the right choice for general refinery wastewater, tank wash, bilge water, ballast water, desalter waste and storm wastewater runoff.

WesTech O/W Separators typically come completely assembled within a steel tank. Additionally, the internals are easily configured to fit existing tanks for an effective retrofit, improving performance and extending the useful life of the equipment. Elevated, on-grade, and in-ground configurations are standard. Steel, stainless steel, and concrete are primary tank materials of construction.

WesTech has incorporated the design features of API 421 in both rectangular and circular basins. They also have the ability to convey higher density and quantity of solids, eliminate sealing issues from wall penetrations, and incorporate WesTech's premier heavy-duty, maintenance-friendly drive unit.

Applications

- Waste Treatment Load Reduction
- Free Oil Recovery
- Process Treatment Improvement
- Refinery Wastewater
- Storm Run-off Water
- Bilge Water
- Desalter Waste
- Ballast Water
- Slop Oil Water Reduction
- Asphalt Waste

Conical Distribution Nozzles

Even feed distribution is critical in a properly operating O/W Separator. WesTech's conical distribution nozzles effectively eliminate forward velocity and evenly distribute influent to enhance gravity separation of free oil droplets along the length of the separation unit.

VOC Containment Cover

All WesTech O/W Separators can be equipped with VOC containment covers, designed for a nitrogen blanket, complete with pressure/vacuum relief valves and emergency manways. Both fixed and floating style covers are available.

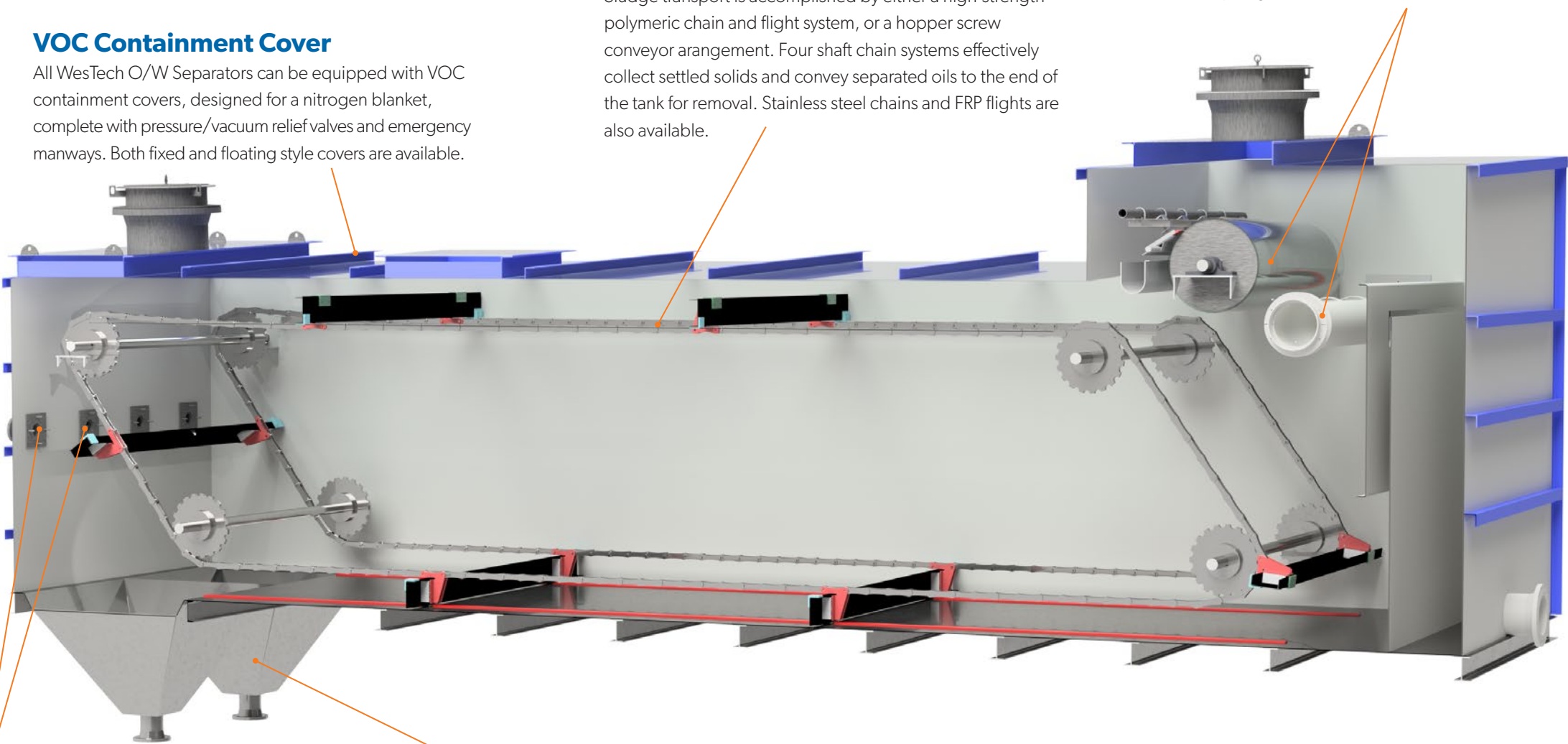
Both Rectangular and Circular Designs

Chain and Flight

Sludge transport is accomplished by either a high-strength polymeric chain and flight system, or a hopper screw conveyor arrangement. Four shaft chain systems effectively collect settled solids and convey separated oils to the end of the tank for removal. Stainless steel chains and FRP flights are also available.

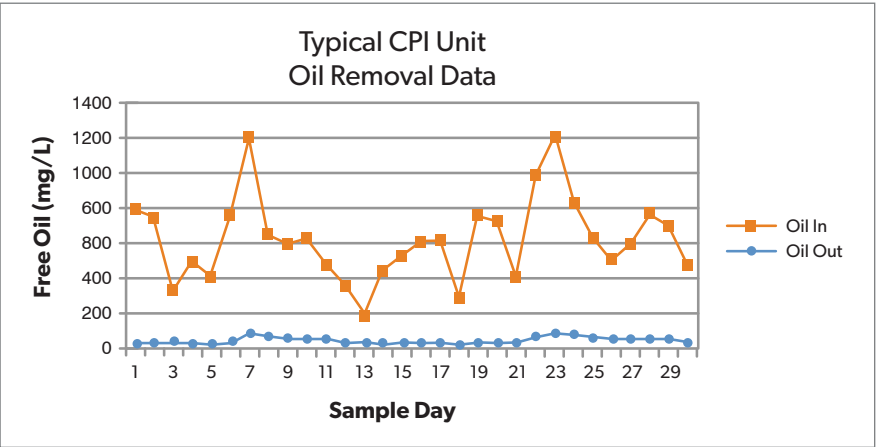
Oil Collection

High efficiency drum and disc-type oil collection skimmers collect floating oil and effectively dewater the oil, making oil recovery much simpler. Slotted rotating pipe skimmers remove the excess oil during peak loading or when the slop oil system can accept higher water content.



Sludge Collection Hoppers

Sludge collection hoppers are sized and configured to handle heavy, sticky sludges and ensure consistent sludge removal from the unit. Special fluidizing nozzles are located in the hoppers to eliminate bridging and plugging by viscous materials.





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