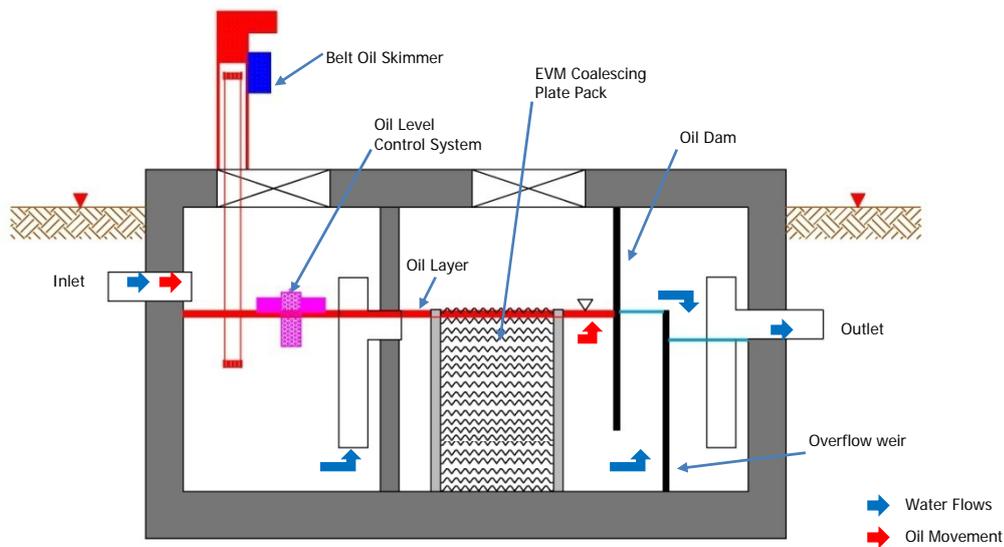




EVMSep Oil Water Separators



EVMSep Oil Water Separator Design

Advance Oil/Water Separator System

The EVMSep oil/water separator system is design to remove oil from contaminated storm water to comply with the most stringent requirement and is un-matched in quality and performance. The system is ideally suited for sites where specific effluent targets are specified, or for sites where removal of oil and grease is the greatest concern. 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 EVMSep oil/water separator coalescing plate pack 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 depending on the design requirement. They are suitable for installation in new and existing underground concrete vault with retrofit module.

How does it work?

Flows enter the EVMSep oil/water separator system via inlet pipe 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 plate pack media. As the flow passes through the coalescing plate pack 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 oil dam, and treated water exits the system through the outlet T-pipe. The oil droplet rise rate to the surface is determine by Stoke's Law, a mathematical relationship that allows calculation of the rise velocity based on the droplet sizes and the difference in specific gravity between the water and the oil.

EVM Coalescing Plate Pack

The configuration of the plates will force hydrodynamic coalescent. The merging of small oil droplets into larger ones will create extremely enhanced coalescence. Before the oil droplets are separated they are captured by the next higher plate. The oleophilic material of the plate ensures the oil droplets never reach the separator outlet. They are concentrated on top of the corrugated plate and will rise through the wipe holes to the developed oil layer above the plate packs and the sludge which gathered around the hollows of the plate fall down to the sediment area.



Floating Control System

Floating Oil Skimmer



Automatic System

EVMSep Oil/Water Separator is fitted with automatic floating control system to monitor oil level and give an early warning alarm to control centre. The oil water differential detection system will annunciate audio visual alarm system located in the control room when oil level goes beyond preset level. The floating design is to ensure that preset level is maintained at all times. An oil skimmer is incorporated to removed oil layer builds on top of water. This back up system is design to prevent the overflow of accumulated oil from the vault.

Features

- Superior performance is assured through the employment of EVM coalescing plate pack system
- Fitted with automatic oil water differential detection system
- Oil removal : belt or floating oil skimmer
- Easy installation
- Minimum maintenance
- Simple and effective method to separate oil and water
- Choice of stainless steel construction tank equip with feed pump for above ground application
- SIRIM tested. Test results show 99.99% removal of Oil & Grease.

Industries

EVMSep Oil/Water Separator have numerous use in wide range of industrial operations, including the pretreatment of process water or removal of free oil from storm water

Petrol Station



Oil Refineries



Power Substation



Car Workshop



Storm Water Runoff



Airport



Carwash Bays



Bus Depots

