

# OIL/WATER SEPARATORS

FOR ABOVE GROUND APPLICATIONS



## **OilDawg**<sup>™</sup>

A cost-effective way to capture and remove oils from wastewater and stormwater discharges.

The OilDawg<sup>™</sup> is an above ground steel tank coalescing type separator that utilizes polypropylene or PVC coalescing materials to capture and remove oil droplets from the outgoing water flow.

Oil/water separators are commonly used to separate oils from a variety of wastewater and stormwater discharges and industrial waste streams. A properly designed, installed, and operated oil/water separator prevents the entry of unacceptable levels of oil contamination into a storm or sanitary sewer system.

#### **Features:**

- Coalescing media installed in easily removed baskets
- Bolted down gasketed hatches on removable lid allow inspection of critical parts and adjustment of oil weir without removing the entire lid
- Rotating pipe skimmer allows skimming level to be adjusted
- Drain ports on both sides of the vessel provide access for removing accumulated sludge
- Designed for a linear flow rate of approximately 1 ft./minute
- Designed to accommodate approximately ½ cubic foot of coalescing media per gpm of incoming flow

### **Applications Include:**

- Stormwater run-off
- Washing pads
- Equipment wash
- Manufacturing plant effluent
- Fueling facilities
- Refinery wastewater
- Power generation effluent
- Airport water run-off
- Vehicle maintenance facilities
- Hydrocarbon storage facilities
- Elevator sump water
- Parking lot run-off
- Rail yards
- Testing facilities
- Steel mills







#### **How It Works**

The OilDawg<sup>™</sup> Oil/Water Separator (OWS) is a coalescing type oil/water separator that uses a containerized tubular polypropylene media (SepPaks) to accomplish the coalescing function. The coalescing tubes attract the oil droplets, binding them together on the surface of the media where they form larger droplets that are more buoyant, causing them to rise faster. The orientation of the OilDawg's SepPak tubes allow for the oil droplets to rise unimpeded to the surface of the vessel. Solids that may be present in the flow can settle to the bottom of the vessel using the same channels. The OilDawg OWS utilizes an inlet distribution manifold that evenly distributes the incoming flow across the width of the vessel. The inlet chamber's down baffle enhances the settling effect and induces laminar flow to the incoming stream. The inlet chamber sump and the media sump are equipped with clean-out ports for easy access to build-up sludge during maintenance operations.

The SepPaks are contained in removable baskets that can be easily lifted out of the OilDawg OWS for cleaning and/or replacement. The SepPak coalescing tubes are made in two different diameters with the larger diameter tube baskets installed in front of the smaller diameter tube baskets. This design discourages fouling from the incoming flow and enhances the separation process. The larger diameter tubes have less square footage of surface area per unit volume and offer the initial coalescing surface for oil droplets to collect and for solids to settle. The smaller diameter tubes with more surface area per unit volume are then more effective in dealing with the smaller diameter oil droplets.

An adjustable rotating pipe skimmer is installed just downstream of the SepPaks to remove the coalesced floating oil. Water passes under a down baffle and over the water weir before exiting the vessel.











