

Product Fact Sheet

PetroLimiter PL 630M OWS

The PetroLimiter PL 630M is a U.S. Coast Guard (USCG) and International Maritime Organization (IMO) MEPC 107(49) approved Oily Water Separator (OWS) that easily handles phase-separated oil, emulsified oil and water. The system processes oily bilge water and reduces petroleum hydrocarbon concentrations to less than 15 parts per million (ppm), typically 1 to 5 ppm. Emulsified oil is also easily handled by the system, whether caused by detergents and/or the ship's operation.

This automated bio-mechanical bilgewater treatment system is safe, reliable, and simple to use. Unlike conventional oil water separators, the PetroLimiter actually destroys oil and grease using naturally occurring microbes.

The automated system is designed to work unattended 24 hours a day, 7 days a week but can accommodate practically any schedule, processing up to 5,400 gallons (20 m³) per day.



PetroLimiter Benefits

Cost Savings: Reduces offloading, maintenance, and operational costs associated with sludge, spent flocculants, filters and/or bilgewater. Some clients have seen a reduction in operational costs of up to 10 times as compared to competitive OWS technologies.

Guaranteed Operating Costs: Ongoing operating and consumable item costs are minimal on the PetroLimiter PL 630M system compared to competitors' systems using replacement filters, chemicals and other consumables. In fact, EnSolve Biosystems will guarantee the operating costs of the unit to lock in your annual Bilge Water treatment costs for your vessels.

Green Technology: Little or no HAZMAT materials to dispose. The microbes in the PetroLimiter consume oil and other organic wastes to produce safe end products.

Industry Proven: The PetroLimiter has been successfully employed on ships of many different platforms since 2000, including cruise ships, ferries, product tankers, ore carriers, military vessels, workboats, offshore oil rigs, etc. All systems installed are still in operation and no discharge violations have been attributed to the PetroLimiter system.

Processing of Emulsified Oils: Chemical and mechanical emulsions are easily processed, including many organic wastes such as anti-freeze, solvents, etc.

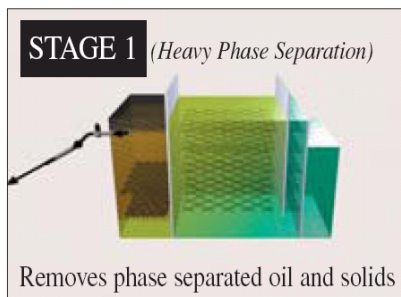
Seatrade Award winner in 2001 for the world's first biomechanical marine oily water separator.



PetroLimator System Operation

The PetroLimator consists of three distinct stages for removing oil and contaminants from Bilge Water.

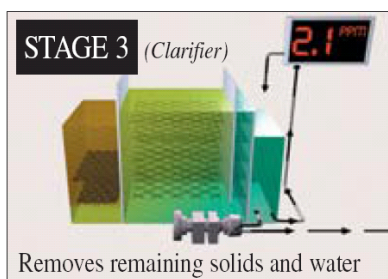
STAGE 1 allows for initial separation and removal of pure oil.



STAGE 2 contains safe, non-pathogenic microorganisms that convert oil, grease, transmission fluid, gasoline, fuel, and other hydrocarbons into harmless end products.



STAGE 3 allows for removal of clean effluent.



About EnSolve Biosystems

Founded in 1995, EnSolve's mission is to provide biotreatment products for maritime customers that yield both economic and environmental benefits. The award winning PetroLimator technology has been used on ships since 2000 including a variety of platforms such as ferries, oil tankers, ore carriers, oil exploration vessels, cruise ships, off-shore drill rigs, Ro-Ro's, car carriers, and military ships.

Frequently Asked Questions

What cost savings can be realized?

This varies from ship to ship but typical operational savings range from 3 to 12 times less costs as compared to physical/chemical OWS systems.

Will the crew have to handle the microbes?

NO. Additionally, limited entry to the system is required. The microbes are harmless, non-pathogenic microorganisms that are safe to handle.

Are any of the microbes, nutrients, or byproducts of the process harmful or considered hazardous material?

NO. The microbes and nutrients provided are safe to handle and use. The byproducts are negligible amounts of carbon dioxide and water.

How much labor does the system require?

The system typically takes less than 15 minutes per day to operate. The PetroLimator does not generate large amounts of sludge and can be operated under normal conditions with minimal cleaning.

What happens to microbes from the system that are pumped overboard or spilled?

The microbes used in the system were isolated from natural sources and pose no hazard to humans or the marine environments. Microbes that enter the bilge may even provide a small benefit to the cleaning/treatment process.

PetroLimator Specifications

Regulatory Certificates: MEPC.107(49), USCG, Transport Canada and Type Approved

Daily Flow Rate:	20 m ³ (5,400 gal.)
Dry Weight:	1,338 kg (2,950 lb.)
Length:	2,21 m (87")
Width:	1,55 m (61")
Height:	1,84 m (73")