



# Coffin World Water Systems

Designers & Manufacturers of Water & Wastewater Treatment Systems

## HELI-SEP®

### Industrial Oily Water Separators



#### FEATURES & BENEFITS

- Single vertical vessel design has small footprint and is compact.
- Integral low shear system pump prevents mechanical emulsion of oils, solids and air.
- Permanent matrix and polishing pack eliminates messy replacement of disposable filter elements.
- Integral sensors control automatic oil separation, discharge and cleaning cycles, reducing operator involvement.
- Units are pre-piped and pre-wired to simplify installation and reduce related costs.
- Heavy-duty industrial components offer enhanced durability reducing maintenance costs.

MODEL	CAPACITY		OILY WATER INLET		OIL OUTLET		CLEAN WATER INLET		PROCESSED WATER OUTLET DISCHARGE		POWER kW
	m³/h	GPM	mm	IN	mm	IN	mm	IN	mm	IN	
500	0.5	2.2	25	1.0	25	1.0	15	0.50	15	0.50	0.45
1000	1.0	4.4	25	1.0	25	1.0	15	0.50	15	0.50	0.45
2000	2.0	8.8	40	1.5	25	1.0	15	0.50	25	1.00	0.65
2500	2.5	11.0	40	1.5	25	1.0	15	0.50	25	1.00	0.65
5000	5.0	22.0	50	2.0	25	1.0	15	0.50	25	1.00	1.25
10000	10.0	44.0	50	2.0	40	1.5	20	0.75	40	1.50	1.55

\* Data are for information purposes only. Actual dimensions may vary.

### Coffin World Water Systems, LLC.

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# HELI-SEP<sup>®</sup> OILY WATER SEPARATOR

## DESCRIPTION:

The HELI-SEP<sup>®</sup> Oily-Water Separator is a single vertical cylindrical vessel utilizing system generated vacuum, fluid velocity reduction, differential specific gravity, and coalescence to separate and remove non-soluble oil, solids and entrained air from oily water. The system, which can process oily water at its rated capacity, is designed for continuous and intermittent operation without the need for chemical or other additives. Oil content in the discharge is reduced to 15 PPM or less. After the system has been started it is capable of automatic operation.

Oily water is pulled into the system by the vacuum created by low shear positive displacement pump located on the treated water discharge. As the water enters the vessel solids begin to fall out of suspension and drop to the bottom, the water flows into the inclined corrugated matrix where the oil impinges on the surface and additional solids fall out. The oil droplets that form coalesce and become larger, float to and collect in the top of vessel. The water is then pulled through an oleophilic polishing pack where fine droplets are captured. When sufficient oil is collected the oil sensors initiate the oil discharge cycle and backwash of the polishing pack, then when the sensors are clear of the oil the unit returns to the separation mode. The treated water is pumped to the customers holding tank or discharged.

## The HELI-SEP<sup>®</sup> consists of the following components:

- Integral low shear positive displacement pump
- Single heavy-duty vertical process vessel.
- Permanent corrosion resistant corrugated matrix.
- Permanent oleophilic polishing pack.
- Oil sensing probe assembly.
- Electrical wiring, starter and control panels.
- All necessary piping, valves, gauges, switches required for operation.

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