FILTER INNOVATIONS INC.

OIL/WATER SEPARATORS



FEATURES



- REMOVABLE BASKET



- FLOATING INTAKE



- TAPERED BOTTOM FOR SOLID SETTLING



- ADJUSTABLE SLOTTED OIL WEIR

OPTIONS

- HINGED LIDS
- SKID MOUNTED
- FEED PUMPS
- PRE TREATMENT EQUIPMENT
- POST TREATMENT EQUIPMENT
- CUSTOM DESIGN
- TURNKEY SYSTEMS

COALESCENCE TYPE SEPARATORS

A HIGHLY EFFICIENT SOLUTION

Capable of removing oil droplets down to and below 20 micron

Oil removal to below 25 ppm

Oil coalesced and removed at 99% plus concentration

Settled solids removal capabilities for wastewater flow with multiple contaminants

Compact design conserves valuable floor space

Low maintenance/operating costs

Oil/water separation systems are available in carbon steel or stainless steel

Custom treatment designs including pumps, floating intakes, skid mounted, post treatment

OPERATING PRINCIPLES

The operation of the coalescence type separator is based on the use of relatively close tolerance surface areas which reduce the distance an oil droplet must travel before it reaches a collection surface. The coalescence media are constructed of materials which are hydrophobic (water repelling) and oleophilic (oil attracting). When the oil droplet comes in contact with the media it reaches a zone of zero velocity and adheres to the surface. The coalescence surfaces multiply the effectiveness of the natural tendency of oil and water to separate.

As the media becomes coated with continuously agglomerating oil, the oil begins to form droplets. These droplets then coalesce or migrate upward. The oil coating the media surface accumulates at the top edge of the media where it detaches as a droplet and floats to the surface of the separation chamber. There are now two zones of liquid in the separator – oil and water.

The oil which has separated flows into the adjustable oil skimmer for removal.
The clear water underflows the oil and is discharged from the system on a continuous basis.

Simultaneously with the oil/water separation, solids settle out through the spacing of the media pack matrix. They are collected in a hopper-bottomed sludge chamber below the media pack.
The settled solids are stored here for disposal.

MODEL	FLOW RATE (GPM)	DIMENSIONS
OWS-0.5	1/2 US GPM	6"L x 7"W x 14"H
OWS-01	1 US GPM	31"L x 11"W x 26.5"H
OWS-03	3 US GPM	36"L x 14"W x 30"H
OWS-05	5 US GPM	40"Lx24"Wx40"H
OWS-10	10 US GPM	60"Lx24"Wx54"H
OWS-25	25 US GPM	72"Lx36"Wx48"H

MODEL	FLOW RATE (GPM)	DIMENSIONS
OWS 10-50	50 US GPM	8'L x 3'W x 4'H
OWS 10-75	75 US GPM	8'L x 3'W x 5.5'H
OWS 10-100	100 US GPM	12'L x 4'W x 5'H
OWS-150	150 US GPM	12'L x 4'W x 5.5'H
OWS-200	200 US GPM	15'L x 6'W x 6'H
OWS-350	350 US GPM	17'L x 6'W x 6'H

TYPICAL APPLICATIONS

GENERAL MANUFACTURING
Tramp oil removal
Maintenance shops
Floor and drain oils

SITE REMEDIATION
Ground water treatment

UTILITIES
Transformer oil in water
Maintenance/repair shops

OIL/PETROCHEMICAL
Oil refineries

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