



Oil Water Separator

TPL Phase 3 Coalescing Type Oil/Water Separator

The Phase 3 Oil/Water Separator provides optimum efficiency in gravity separation between two immiscible liquid fractions: water and oil. Traditionally, inclined and horizontal coalescing plates have been used to separate free oil from water, with a second stage needed for finer liquid/liquid separation.

Now a unique module has been engineered to produce two and three phase separations within a compact design that can eliminate the need for a second stage of oil separation.

The TPL Phase 3 Coalescing Media Pack contains structured polypropylene tubes as the coalescing media unitized in removable baskets within the Oil/Water Separator. The design of the separator provides uniform, non-clogging flow with excellent dispersed phase distribution and coalescing of oil, especially at lower liquid velocities.

The coalescing media tubes have a large oleophilic surface area that attracts small oil droplets which coalesce to form larger oil droplets. These larger droplets, according to Stoke's Law, will rise exponentially faster to the surface, providing a rapid increase in phase separation. Close pack coalescing cubes are available for installation downstream of the tube packs in the separator for removing smaller oil droplets when the application requires.

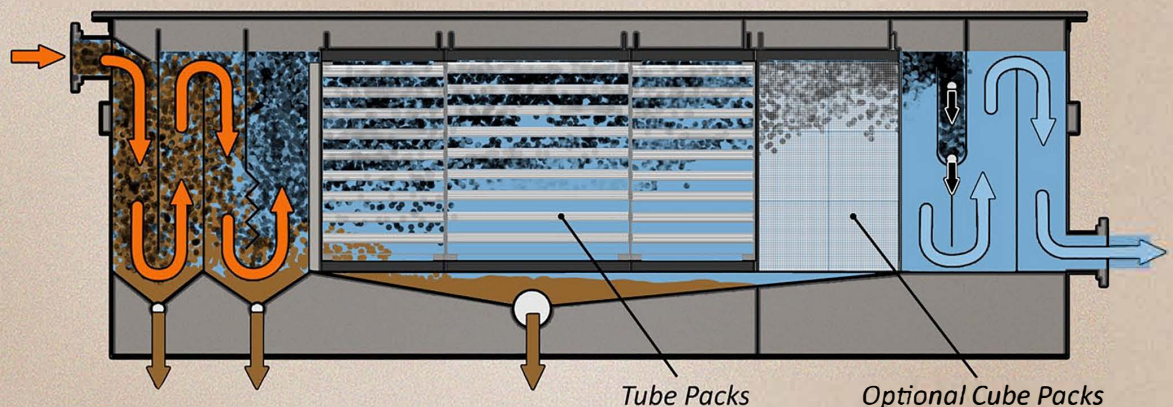


Applications:

- Aviation / Airports
- Chemical Processing
- Machine Tools
- Metal Processing
- Oil Production Facilities
- Petrochemical Plants
- Plastics
- Power Plants
- Processing Plants
- Steel Mills
- Storm Water Run-Off
- Transportation
- Utilities
- Vehicle Washes
- Water Treatment Plants

Features:

- No pre-treatment
- High efficiency separation
- Large surface area coalescing media
- No moving parts on standard units
- Easy cleaning
- Minimal maintenance
- All steel vessel construction
- Large solids settling area



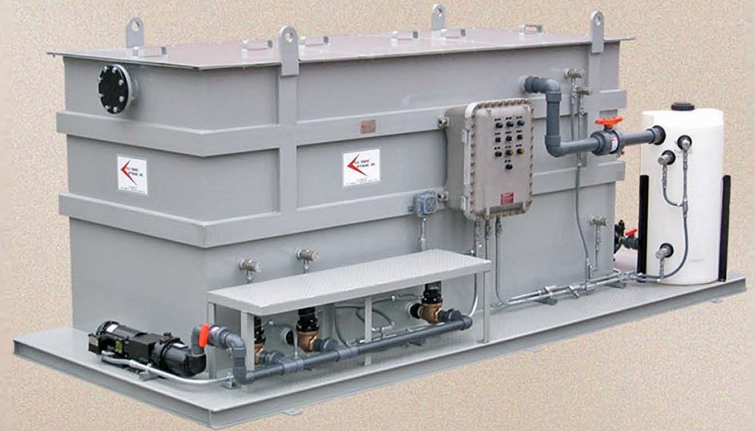
- Oil/Water/Solid Mixture
- Water
- Solids
- Oil



Oil Water Separator Specs

Unique Liquid/Liquid Separation Solutions

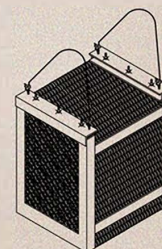
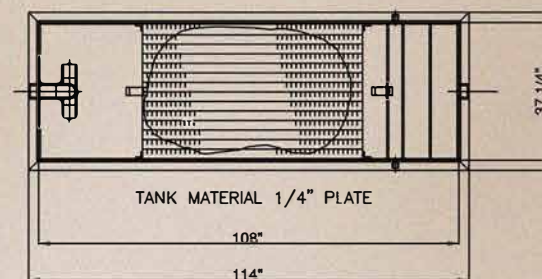
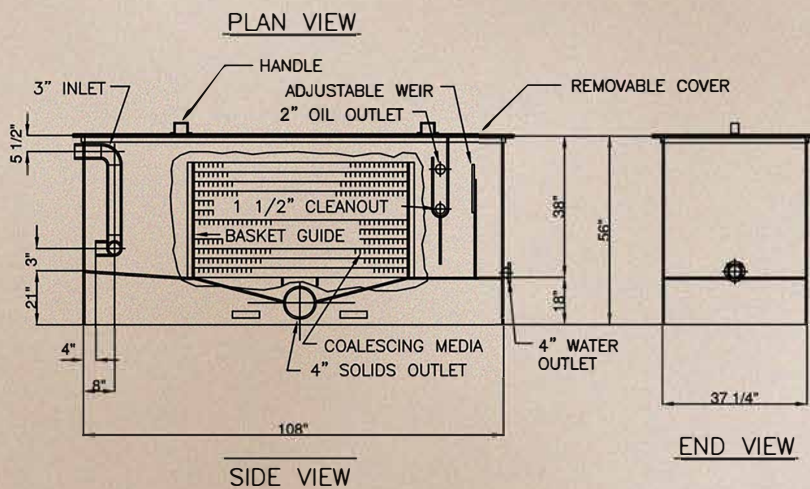
The Phase 3 Oil/Water Separator is fully customizable to suit your needs with GPM flow rates achievable from 5 GPM to over 1,000 GPM. An optional surge tank can be provided to reduce turbulent flow coming to the separator due to the type of pump being used to feed it. Winterization options, level controls, integrated auxiliary oil collection tanks and pumps, sludge pump out systems and alarms are available.



Flow Rates

Phase 3		Flow Rate - Gallons Per Minute										
		5	10	25	50	75	100	150	200	250	500	1000
Vessel Dimensions (Inches)	Length A	58	74	90	120	130	134	124	136	154	180	220
	Width B	15	26.75	37.25	36.75	37.25	49	57	64	68	84	89
	Height C	39	39	39	56	56	56	68	68	75	87	106
	Width D	29.5	41.25	51.75	51.25	51.75	63.5	71.5	78.5	82.5	98.5	103.5
	Height E	33	33.5	34	50.5	51.5	52.5	64.5	65.5	72.5	85.5	105.5
	Height F	10	10.5	10.5	20	17	17	18	18.5	19	21	23
Fitting Sizes	Feed Inlet	1	2	3	3	4	6	6	8	8	10	12
	Oil Inlet	1.5	1.5	1.5	2	3	4	4	6	6	6	8
	Water Outlet	2	3	3	4	6	6	8	8	8	12	14
	Solids Ports Cleanout	4	4	4	6	6	10	8	8	8	10	12
No. of Covers		1	1	1	3	3	3	3	3	3	3	4
Net Weight		910	1255	2215	2410	3500	4700	5488	6650	7997	12090	17842
Operating Weight		1635	2906	5187	7807	9347	11588	16840	20250	26886	44472	69670
Operating Volume (Gallons)		105	250	435	785	850	1170	1652	2035	2720	4712	7550

Unit Parts



COALESCER MEDIA BASKET
(TWO REQUIRED)

COALESCING MEDIA
Structured polypropylene (or polyethylene) unitized in horizontal 1.3" cylinders with 1/4" screen openings

APPROX. EMPTY WEIGHT = 1930 LBS. (868 KG)



Oil Water Separator Packages

Oil Water Separator Packages

Flo Trend's Oil Water Separators come in several packages with varying surge tank capacities and pump sizes.

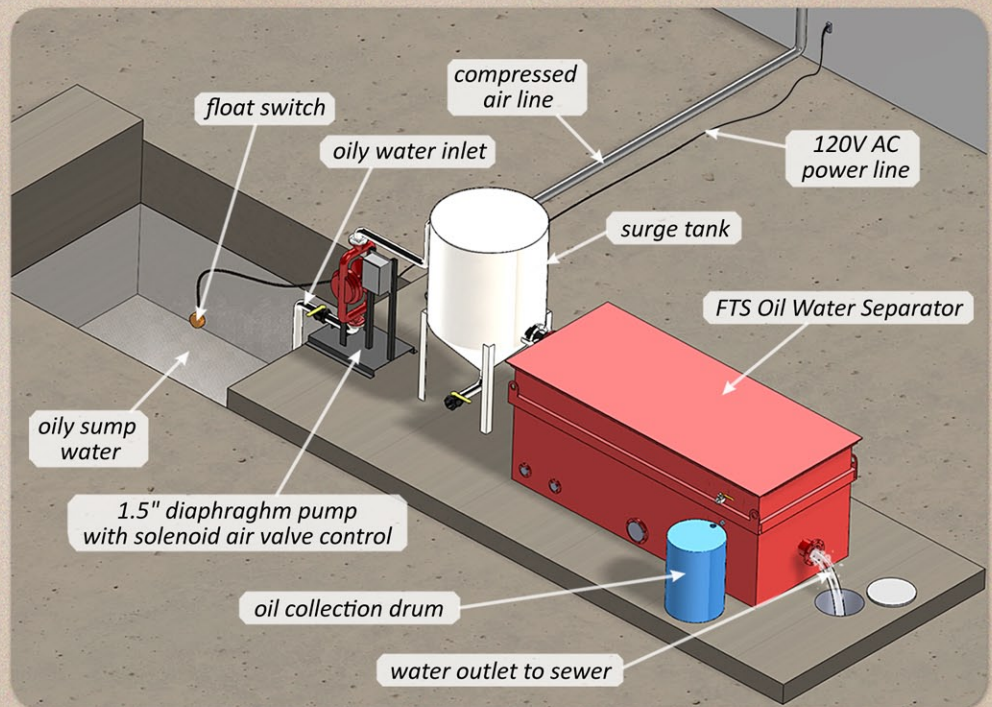
Small Pump Packages

- **TPL 5** + 50 gallon surge tank + 1/2" air diaphragm pump w/ channel base + float switch/solenoid valve + air regulator/water trap
- **TPL 10** + 100 gallon surge tank + 1" air diaphragm pump with channel base + float switch/solenoid valve + air regulator/water trap
- **TPL 15** + 150 gallon surge tank + 1" air diaphragm pump with channel base + float switch/solenoid valve + air regulator/water trap
- **TPL 25** + 250 gallon surge tank + 1.5" air diaphragm pump with channel base + float switch/solenoid valve + air regulator/water trap
- **TPL 50** + 500 gallon surge tank + 1.5" air diaphragm pump with channel base + float switch/solenoid valve + air regulator/water trap



All Package Specs

Size	Surge Tank	Pump
TPL-5	50 gal	0.5" ADP
TPL-10	100 gal	1" ADP
TPL-15	150 gal	1" ADP
TPL-25	250 gal	1.5" ADP
TPL-50	500 gal	1.5" ADP
TPL-75	750 gal	2" ADP
TPL-100	1000 gal	3" ADP
TPL-150	1200 gal	3" ADP
TPL-200	1500 gal	centrifugal
TPL-250	1650 gal	centrifugal
TPL-300	2000 gal	centrifugal
TPL-500	2500 gal	centrifugal
TPL-750	3000 gal	centrifugal
TPL-1000	5000 gal	centrifugal

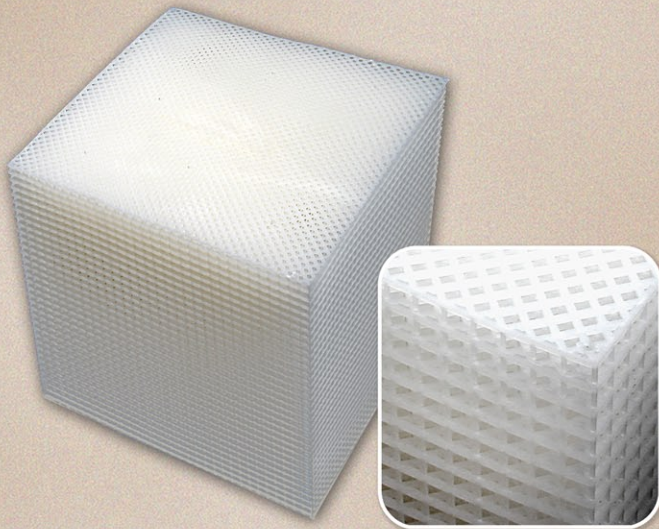




Coalescing Media Options

Oil Water Separator Coalescing Media Packs

Standard TPL Oil Water Separators are supplied with tubular coalescing media. For applications where finer oil separation is required, Flo Trend offers cube pack coalescing media to help capture smaller oil droplets. Cube Packs (sq ft/cu ft) offer more square feet of polypropylene surface area per cubic foot than tube packs (35 sq ft/ft³). This can help to capture oil droplets that have passed through the coalescing tubes. Solids must be settled prior to entering the cubes as the porous space in the cubes is small in comparison to the tubes. For this reason the cubes are only installed downstream of the tube packs. The porous design of the tube packs will allow solids to settle through them into the sump below. Coalescing packs are typically installed in baskets for easy removal.



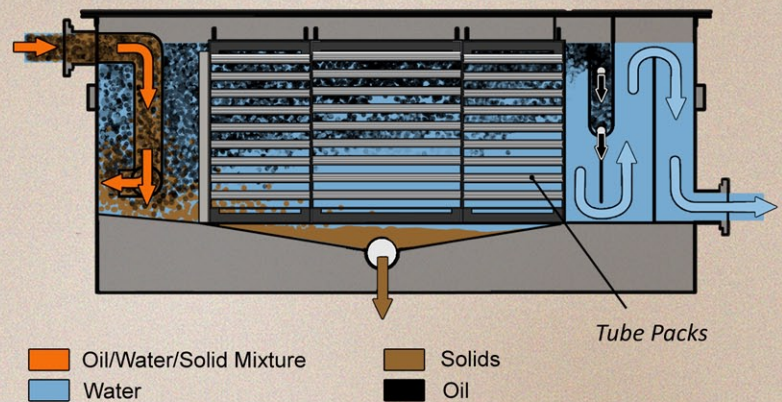
Cube Media Pack



Tube Media Pack

Eco-Model

For applications where solid contamination is at a minimum Flo Trend offers the Eco Model. These units are constructed with the same cubic feet of coalescing media as the standard units but lack the incoming stream baffles and weirs.



Call today!
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Engineered Drawings available Upon Request