Click to go to www.geotechenv.com

Oil/Water Separators

Oil/Water Separators

Geotech offers Oil/Water Separators for separation treatment of groundwater from free phase LNAPL and DNAPL contaminants.

Principle of Operation

Geotech's oil/water separators use parallel corrugated plate technology that causes oil droplets to increase in size, thereby speeding the gravity separation process according to Stokes' Law. We offer a unique inclined plate design design, called HD Q-PAC®, with an internal structure of interconnecting plates having many crossing points between adjacent plates; as the oil water mixture flows through the separator, new droplets coalesce with retained droplets to form larger droplets. The enlarged droplets are released, and they rise to the surface where they decant from the separator. Since the Stokes' Law calculations presume a zero velocity flow through the HD Q-PAC Plates, a Reynold's Number less than 500 will ensure optimum separation in the oil water separator.

FEATURES and BENEFITS

- **Compact size**
- **High surface area**
- **Solids storage**
- **Optional integral oil storage**
- **Low maintenance cost**
- **Easily cleaned through removable vapor tight cover**
- **No moving parts**
- **No power consumption**
- **No consumable wearing elements**
- **Removes 99.9% of oil droplets 20 microns and larger**
- **Meets both EPA method 413.2 and European Standard EN 858-1 (99.9% removal of free oil)**
- **Self cleaning and anti-plugging properties**

Model #	Size	Material
AGS-1	1'W x 2'H x 4'L	SS/CS
AGS-2	2'W x 2'H x 4'L	SS/CS
AGS-3	3'W x 2'H x 4'L	SS/CS
AGM-1	1'W x 2'H x 5'L	SS/CS
AGM-2	2'W x 2'H x 5'L	SS/CS
AGM-3	3'W x 2'H x 5'L	SS/CS
AGM-1-1H	1'W x 3'H x 5'L	SS/CS
AGM-2-1H	2'W x 3'H x 5'L	SS/CS
AGM-3-1H	3'W x 3'H x 5'L	SS/CS
AG-1	1'W x 3'H x 7'L	SS/CS
AG-2	2'W x 3'H x 7'L	SS/CS
AG-3	3'W x 3'H x 7'L	SS/CS
AG-4	3'W x 3'H x 7'L	SS/CS
AG-4-1H	4'W x 4'H x 7'L	SS/CS
HP-1	1'W x 6'H x 8'L	CS
HP-2	2'W x 7'H x 9'L	CS
HP-3	3'W x 7'H x 9'L	CS
HP-4	4'W x 7'H x 9'L	CS
HP-5	5'W x 7'H x 9'L	CS
HP-6	6'W x 7'H x 9'L	CS

Geotech Environmental Equipment, Inc.
2650 East 40th Avenue • Denver, Colorado 80205
(303) 320-4764 • **(800) 833-7958** • FAX (303) 322-7242
email: sales@geotechenv.com website: www.geotechenv.com

Oil/Water Separators

Oil/Water Separators

Advantages of HD Q-PAC® Media in Oil Water Separators

HD Q-PAC® has the following advantages when compared to traditional corrugated type and inclined plate type coalescing media used in oil water separators.

1. 132 ft^2/ft^3 Enlarged droplets are released and rise to the surface to be decanted into a storage tank. Since Stokes' Law calculations are based on a flow of zero velocity through the plates, a Reynold's number of less than 500 will ensure optimum separation.
2. Eliminate the need for 2nd stage polishing pads to attain effluent requirements. HD Q-PAC® can meet effluent requirements without high-maintenance polishing pads.
3. The combination of 90° angle of repose, with round smooth vertical surfaces and 87% void volume provide excellent self-cleaning and anti-plugging properties in oil water separators with heavy sludge, dirt, and biological growth loadings.
4. Polypropylene construction allows operating temperatures up to 212°F (100°C).
5. Optimized design allows oil to coat the entire surface of HD Q-PAC® media, unlike corrugated and inclined plate media in which much of the surface is unavailable for coalescing of rising oil droplets.

SPECIFICATIONS

Fabrication

Tank
The tank is a single wall construction conforming to ASTM A240, type 304 stainless steel. Welding will be in accordance with AWS D1.1 to provide a watertight tank that will not warp or deform under load. Pipe connections to the exterior shall be as follows.

Pipe Connections
All connections 3" and smaller are FNPT couplings. All connections 4" and larger are flat face flanges with ANSI 150 pound standard bolt circle. Use flanged piping connections that conform to ANSI B16.5.

Lifting Lugs
The tank is provided with properly sized lifting lugs for handling and installation.

Covers
The tank is provided with vapor tight covers for vapor control. Gas vents and suitable access openings to each compartment will be provided. The covers are constructed of the same material as the tank and will be fastened in place. A gasket is provided for vapor tightness. 304 SS Latches will be provided for cover attachment.

Inlet Compartment
The inlet chamber is comprised of a non-clog diffuser to distribute the flow across the width of the separation chamber. The inlet compartment is of sufficient volume to effectively reduce influent suspended solids, dissipate energy and begin separation. The media will sit elevated on top of a sludge baffle. The sludge baffle is designed to retain settleble solids and sediment from entering the separation chamber.

Geotech Environmental Equipment, Inc.
2650 East 40th Avenue • Denver, Colorado 80205
(303) 320-4764 • **(800) 833-7958** • FAX (303) 322-7242
email: sales@geotechenv.com website: www.geotechenv.com