



With over 35 years of technical experience in the petroleum industry, Separation By Design, Inc., is a leader in the design and manufacture of custom fuel systems, transload facilities, crude oil transfer skids and storage tank facilities. Our patents include an aboveground oil/water separator, blending skids and an aboveground piping chase, the "Speed Bump". In addition to these products, Separation By Design, Inc., has become a leader in the DEF storage and dispensing market with its KlearBlue™ line of products. Our DEF dispensers use an electronics package that allows our equipment to communicate with a variety of third party point of sale (POS) systems. This electronics package was originally developed by Triangle Microsystems and was marketed as The VRR. Separation By Design, Inc., acquired the VRR product line in 2013 and with further development, now offers the SBD-100 kit. This kit replaces the mechanical computer found in older dispensers and has a sleek backlit digital display and the ability to communicate with virtually any point of sale. We are currently developing our aviation and bio-diesel blending dispensers. Our patent pending KlearBlue™ insulated triple-wall mini-bulk DEF storage tanks are available in "island friendly" widths with 400 and 1000 gallon capacities. Separation By Design, Inc., has designed and manufactured equipment that is in operation all over North America. The key to our success is the ability to understand our customers' needs and to modify our basic packages to accommodate most any design request. This dedication has set us apart from other manufacturers at both the design and service level.

Aboveground Oil/Water Separator



patent # US 7,445,704 B2





Aboveground Oil/Water Separator Features

- Turnkey unit initiates operation automatically when water is detected in containment area and shuts down when water is removed
- Solution for disposal of rain water discharge from diked petroleum bulk plants
- Patented Klerwater coalescer efficiently separates oil and grease from water media
- Heating element keeps pump and tank from freezing in cold temperatures
- No elevation concerns when discharging
- Unit tested by 3rd party independent laboratory for oil, grease and suspended solids retention:
 - 95% suspended solids retention
 - Average effluent less than 5 ppm
- Unit comes with high oil sensor to activate visual alarm and will shut down system to prevent oil overfills
- Unit is portable
- Retains resale value
- Tanks are UL-142 listed and come with 1 year limited warranty

Applications

- Bulk Oil and Fuel Terminals
- Material Handling Facilities
- Refineries
- Utilities
- Petro Chemical Plants
- Military Installations
- Tank Farms
- Loading Dock Areas



Electronic Controls

- Electronic control panel is listed as constructed to UL 508/698-A intrinsically safe for areas:
 - Class 1, Groups A, B, C & D
 - Class II, Groups E, F & G
- Other electronic packages available depending on application areas
- Units can be built for single or three phase power operation
- Disconnect on panel closure allows for lockout when servicing
- Phone modem is available for remote alarm notification

Explosion-Proof Pump

- The explosion-proof diaphragm pump is designed to minimize agitation of oil and water
- Provides required flow rate to accommodate operation parameters
- Pump operates automatically when water is detected in containment area, and shutting down when water has been removed



Components

- UL-142 construction
- Removable Pump Enclosure
- Emergency Vent
- Normal Vent
- Lifting Lugs
- Channel Support Legs
- Patented Internal Coalescer
- Trash Receptor Screen
- Removal Covers
- Effluent Outlet
- Oil Removable Opening
- Drain Opening
- Explosion-Proof Diaphragm Pump
- Lock Out Tag Out Panel
- Explosion-Proof Control Panel
- Electrical Conduits
- Float Activated Operation
- Influent Pickup Tube with Screen
- Internal High Level Sensor
- Visual Alarm
- Bayonet Heating Element
- Thermostatically Controlled Heater
- Ambient Temperature Probe
- Internal Lining
- Blue Exterior Paint