Hydrocarbon Recovery Systems

Geotech Large Diameter Filter Scavenger™

The Geotech Large Diameter Filter Scavenger is a unique separating and pumping system designed for the efficient recovery of hydrocarbon product from the surface water. The system is portable and is electrically safe for use in hazardous locations. The heart of the Large Diameter Filter Scavenger is a floating oil/water separator which passes recovered oil to a remote pump and control assembly. Actual separation of oil or other hydrocarbons from water is effected by a mesh screen located in the floating buoy assembly. This screen is specially treated to pass oil and repel water. It can be used in open environments such as manholes, ponds, trenches, open lagoons or large diameter wells to 20’ (6 m) deep.

FEATURES

• Efficiently separates hydrocarbons from water in-situ using an oleophilic/hydrophobic membrane
• Intake floats on the water surface
  Automatically adjusts as water level fluctuates
• Intrinsically safe explosion-proof design
• Portable self-contained design
  For quick and easy startup, ideal for emergency response
• Durable construction for harsh field conditions
• Recovers hydrocarbons to a sheen
• Aromatic hydrocarbon model available

OPERATION

The Large Diameter Filter Scavenger™ has a floating collection element or “buoy” designed to float precisely at the oil-water interface. This allows hydrocarbons to flow into a collection basin within the unit automatically. This unit is so effective that product layers can be reduced to a sheen.

When approximately one liter of hydrocarbons collects in the buoy base, a float switch is activated, turning the pump on. Thus, water-free product is automatically pumped into a recovery tank. A water sensing switch is also located within the buoy. Should water enter the buoy, a density switch is activated, shutting off the pump and activating an alarm light. This automatic feature prevents recovered hydrocarbons from being contaminated by water.
SPECIFICATIONS

**Applications**  Trenches, manholes, small bodies of water, and wells 24” (61.5 cm) in diameter or larger, with fluctuating water table levels

**Product Recovery Rate**  Up to 4 gpm (15.4 lpm)

**Max. Operating Depth**  20’ (3.7m)

**Dimensions / Weight for Buoy Assembly**  18.5” dia. x 10” high x 5” draft 11 lbs. (47.4cm x 25.6cm x 12.8 cm/5kg)

**Power Requirements**  115/230 VAC 50/60 Hz/600 Watt

**Oil/Water Separation**  Oleophilic/hydrophobic filter membrane

**Base System**  18.5” (47cm) diameter product collection buoy assembly with lid, 100 mesh cartridge for light oils, 20’ (6m) of control cable and 12.5’ (3.75m) of input hose, tankfull probe with 25’ (8m) of cable, 20’ (6m) of ¾” output hose, with grounding clip, explosion proof control panel with ¼ hp pump/motor, 115/230VAC, and 25’ (8m) power cord with plug. It also includes a spare parts kit (fuses, lid spacers, Viton washer).

**Options**  Weatherproof NEMA 3 rated case, EP receptacle, spare filter membrane (mesh size 60), spare filter membrane (mesh size 100), totalizer, aromatic duty system, and modification for deep wells.

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**Geotech Large Diameter Filter Scavenger™ Set-up in Well**

**CALL GEOTECH TODAY (800) 833-7958**

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