SPCC brochure

SECONDARY OIL CONTAINMENT SOLUTIONS

FOR SPILL PREVENTION, CONTROL, AND COUNTERMEASURE REGULATED INDUSTRIES (SPCC)

OILMinder®

EARLY DETECTION OF AN OIL SPILL IS CRITICAL TO PREVENTING HARMFUL POLLUTION AND ENVIRONMENTAL CONTAMINATION.

Secondary Oil Containment Solutions must be designed to provide immediate detection of an oil spill to avoid the threat of chemical exposure to human and animal life and destruction of vegetation, as well as service disruption and system downtime. At the same time, companies need to take into consideration the liability and fines associated with non-conformity and damage associated with an oil spill.

CODE COMPLIANCE

The Code of Federal Regulations addresses the discharge, control, and countermeasure plans for oil spills. Originally published in 1973 under the authority of §311 of The Clean Water Act, The Oil Pollution Prevention regulation sets forth requirements for the prevention of, preparedness for, and the response to oil discharges at specific non-transportation related facilities.

The goal of this regulation is to prevent oil from reaching navigable waters and adjoining shorelines, and to contain discharges of oil. The regulation requires these facilities to develop and implement Spill Prevention, Control, and Countermeasure (SPCC) plans and establish procedures, methods, and equipment requirements.

Substances Applicable to Code:

- Petroleum and Non-petroleum oils
- Crude and Fuel Oil
- Sludge
- Oil Refuse and Oil mixed with wastes
- Synthetic Oil
- Animal Fats, Oils and Greases
- Vegetable Oils

Does Your Facility Require an SPCC Plan?

The federal requirements of the U.S. for discharge, control, and countermeasure plans for oil spills are contained in the Code of Federal Regulations, Title 40 (40CFR), Parts 110 and 112. The regulations only apply if the facility meets the following conditions:

Facilities with above-ground storage capacities greater than 660 gal in a single container or 1320 gal in aggregate storage

OR

Facilities with a total storage capacity greater than 42,000 gal of buried oil storage

THE OIL MINDER SOLUTION

Oil Minder® is a pump and control system allowing water to be automatically pumped without danger of ejecting potentially harmful hydrocarbons or oily substances into sewers, rivers, and waterways.

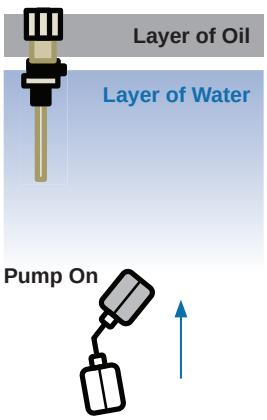
Designed in compliance to the EPA Spill Prevention, Control, and Countermeasure Plan (40 CFR, Part 112), Oil Minder sensing products and controls comply with federal code regulations while minimizing environmental and safety risks.

Oil Minder® provides solutions across a wide-range of industries required to meet SPCC:

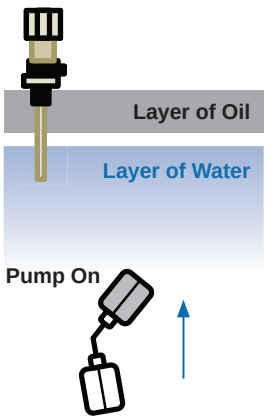
Stancor Pumps and Controls, an Industrial Flow Solutions Company, is committed to providing customized solutions that redefine expectations in the market. For more than 20 years and with more than 25,000 systems operating reliability in the field, Oil Minder® is specifically designed to meet SPCC requirements.

How It Works

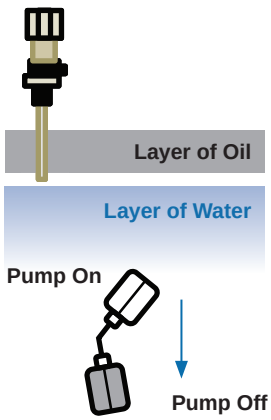
The real differentiator for Oil Minder® is how the control panel interacts with the oil probe and pump to ensure proper performance, redefining expectations for operations and maintenance. Measuring conductivity in a liquid, Oil Minder has proven reliability to differentiate oil and water. Self-cleaning, conductivity probes are maintenance free compared to optical sensors that attract contaminants. The result is a newfound level of safety, maintenance practices, condition monitoring, and protection against liability.



Pump goes ON with water in contact with sensor probe.

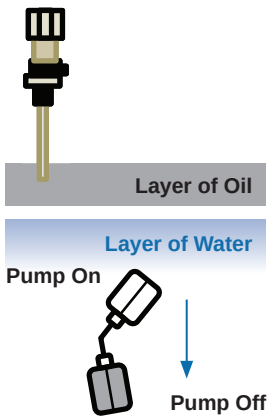


Pump continues to pump down water.

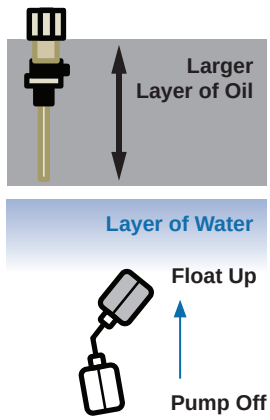


Pump will continue to run, pumping water only until:

- water level drops below tip of sensor probe OR
- only oil is in contact with the sensor probe, eliminating electrical conductivity.

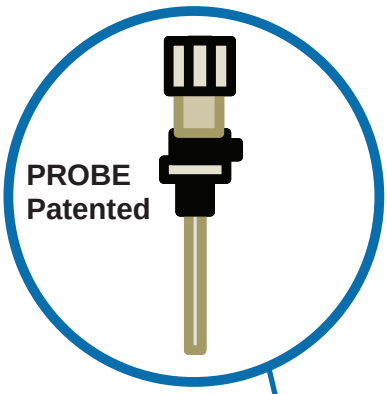


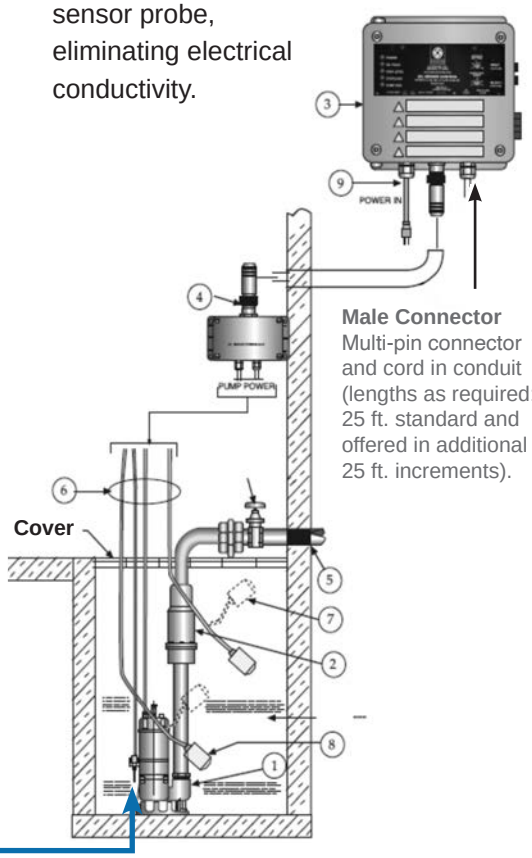
Pump shuts off before oil is pumped, leaving approximately 3" of liquid in bottom sump.



Oil levels in the sump cause the sensor probe to switch the pump off (containing oil). If the water level in the sump increases, then the oil will rise above the oil sensing probe. This will cause the pump to turn back on and function in a normal manner until water is pumped down. Oil will, once again, come in contact with the probe and the pump will stop.

Audible/visual alarms accompany pump activity. This ensures Oil Minder acts as an approved alarm system as specified in ASME 17.1.





Male Connector
Multi-pin connector and cord in conduit (lengths as required: 25 ft. standard and offered in additional 25 ft. increments).

Key Attributes

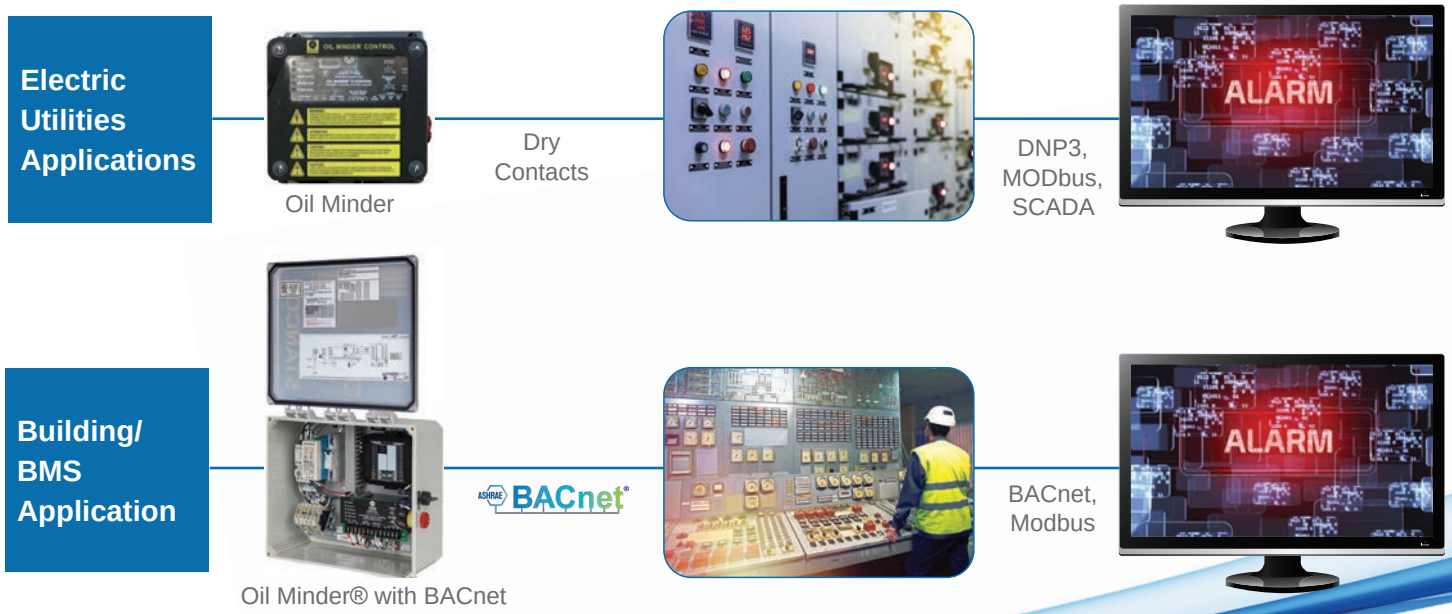
- Long Term Durability and Reliability
  - **NEMA 4X weather-tight** corrosion resistant polycarbonate enclosures
  - **Stainless Steel sensor probe** with patented electronic technology repelling dirt contamination
- Ease of Installation, Maintenance, and Increased Operational Safety
  - **Single direct plug-in power source** for operation of entire system offering ease of installation and increased operational safety
  - Alarms, lights, silence switch, **and remote monitoring circuit for oil, high liquid, and high current conditions**
  - LED Indicator lights for oil spill, power, high liquid level, overload and pump run.
  - Solid state **"push to test"** switch conveniently performs all pump and control diagnostic tests
  - **Complete factory assembly** and testing ensures quality of entire pumps and control system.
- Oil Minder® System can be combined with a variety of different pumps and valves including those that can handle solids.

EARLY DETECTION ELIMINATES POLLUTION

Early warning is an essential element in risk prevention. Designed to detect the smallest sheen of oil, Oil Minder uses patented conductive sensing technology and communication protocols to provide a very early warning notification. Key personnel are notified immediately of a possible dangerous hazard enabling advance actions. Oil Minder allows for quick and accurate development of a countermeasure plan and provides the following communication protocols:

- Pump Failure to Flow
- High Water Alarm
- Pump Overload
- Float Failures
- Oil Fault
- Pump Run Status
- Pump Failure to Start

The Oil Minder System is equipped with state-of-the-art communication protocols for effectively transmitting live signals and alarms to remote monitoring systems.



CUSTOMIZED SOLUTIONS

Combining a full portfolio of pumps with the ability to customize controls, Oil Minder® offers a solution based on each unique application. Oil Minder includes a pump, floats, oil probe, and control panel. Options exist for each component depending on space constraints, location, environmental concerns, and/or communication requirements.

Fluids Handling

- Specialized Pumps
- Custom Impellers
- Plumbing Kits
- Level Floats
- Fluid Sensors

Control Panels

- Stainless Steel Enclosures
- Pit/Vault Heaters
- Anti-condensate Heaters
- Power Monitors
- Fusible Main Disconnects
- Transducer Based Level Control

Information Management

- Alarming
- Fault Coding
- Live View
- Communications

Oil Minder® with BACnet

BACnet

BACnet,
Modbus

Standard models for SPCC applications are SE and SS models, detailed below. A full offering including stainless steel construction, solids handling, and cutter pumps can also be leveraged if warranted by the environment surrounding the application.

SE Technical Data

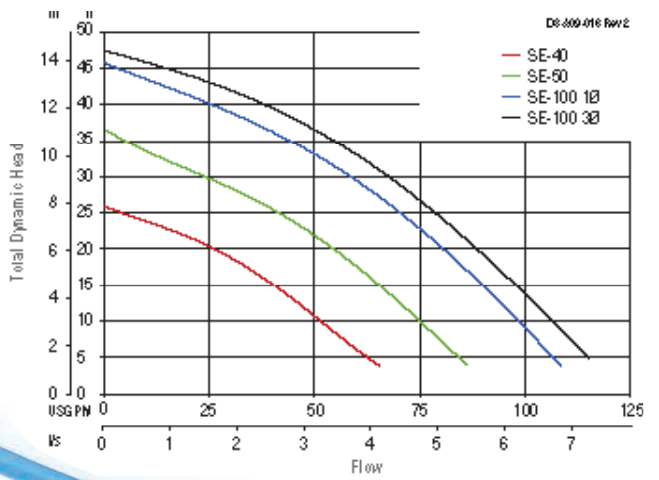
Designation	HP	Phase	Voltage	Rated Full-load Amps	RPM	Discharge (inches)	Head @50 GPM	Head @ 100 GPM	Weight (lbs.)	Height (inches)	Width (inches)
SE40	0.4	1	115 / 208 / 230	5.2 / 2.9 / 2.6	3,450	2"	11'	—	24	15.59"	9.09"
		3	208 / 230 / 460 / 575	2.2/ 2 / 1 / 0.8							
SE50	0.5	1	115 / 208 / 230	8 / 4.4 / 4	3,450	2"	22'	—	29	16.57"	9.09"
		3	208 / 230 / 460 / 575	3.1 / 2.8 / 1.4 / 1.2							
SE100	1.0	1	115 / 208 / 230	12 / 6.6 / 6	3,450	2"	33'	9'	40	19.53"	9.09"
		3	208 / 230 / 460 / 575	4.4 / 4 / 2 / 1.6	3,450	2"	36'	14'			

SS Technical Data SS316 Materials of Construction

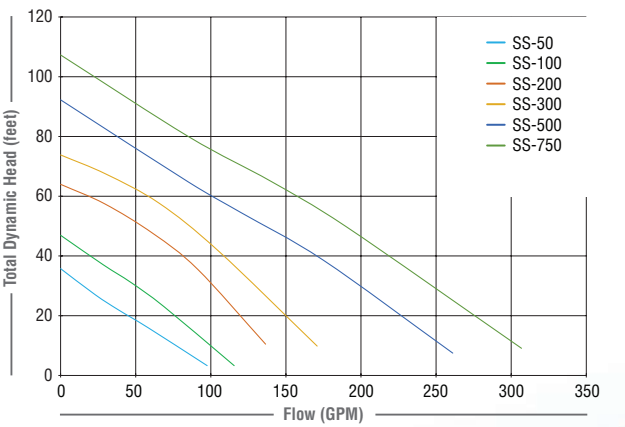
Designation	HP	Discharge (inches)	Head (ft.) @ 50 GPM	Head (ft.) @ 100 GPM	Head (ft.) 150 GPM	Weight (lbs.)	Height (inches)	Width (inches)
SS50	0.5	2"	20'	-	-	29	16.73"	8.98"
SS100	1	2"	30'	9'	-	40	16.91"	8.98"
SS200	2	2"/3"	52'	31'	-	77	20.94"	15.35"
SS300	3	2"/3"	62'	44'	20'	79	21.73"	15.35"
SS500	5	3"/4"	74'	58'	43'	123	24.92"	18.35"
SS750	7.5	3"/4"	92'	78'	64'	137	26.50"	18.35"

SS316 Improves longevity of pumps in a variety of applications.

SE Curves



SS Curves



OIL Minder