

Marine Diesel Engine Inland Towing Vessel

The Challenge

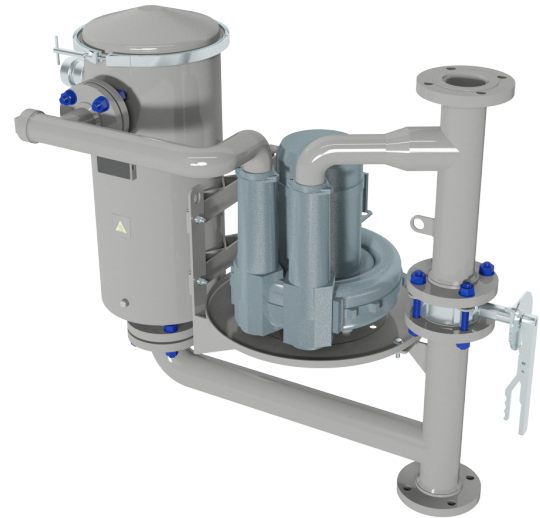
A Caterpillar Power Systems dealer was looking for a reliable crankcase ventilation solution for an inland towing vessel. The solution needed to effectively capture oil mist and keep it out of the surrounding environment. This was an upgrade for two C280-12 marine propulsion engines. These engines would power the vessel on the inland waterways of the United States.

The Solution

Solberg worked closely with the Power Systems dealer to recommend installation locations and provide installation details. Solberg supplied its SME Series Advanced Crankcase Ventilation System. This included Solberg's Recirculation technology specifically designed for the marine market. It is a self balancing system that requires no adjustments and has a built in bypass line to ensure no pressure build up in the crankcase. After calculating the crankcase blow-by and drawing on field tests, one unit would be required per engine. Two total units were provided. Solberg stayed engaged throughout the process to ensure a smooth installation and start up.

Results

With constant communication throughout the entire project, the two Solberg SME units were successfully installed. They are currently running without any challenges. The high efficiency coalescing filter successfully captures the oil mist and drains it back to a Solberg waste oil console. The SME's are run in an open configuration and provide clean, filtered air out to the waterway atmosphere.



Rev: SMEUPC280-12US1905K

Solberg Products Provided

SME-R-C-A175-MOR

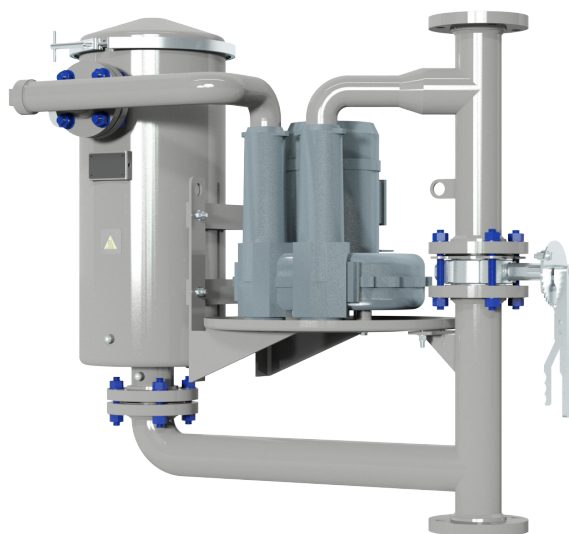
SME Series - Advanced Crankcase Ventilation System

ACV840 - Waste Oil Console

Drain kits with waste oil console

The Product

The SME Series is designed and manufactured to be a high efficiency oil mist removal system. This system captures crankcase blowby oil mist and particulate emissions from turbo machinery and engines. Solberg's SME series optimizes equipment performance, offers a safe and clean work environment, and reduces costly repairs and maintenance.



SME Design Features

- Eliminates visible emissions (99.97% efficient for 0.3 micron oil mist)
- High performance replaceable coalescing elements offer long life
- Flow ranges from 20-175 CFM
- Vacuum level control valve for precise vacuum regulation
- Integrated vacuum relief valve for motor protection
- Drain port for oil recovery
- Pressure differential taps
- Motors for both Standard EU and North American Voltages
- Rugged carbon steel construction
- Industrial grade powder coat finish

PART NUMBER	SME-R-C-A175-MOR
INLET	3" #150 RF Flange
DRAIN	0.5" NPT
GAUGE TAP	.25" NPT
FLOW RATE	175 CFM
HEIGHT	31"
LENGTH	42"
DEPTH	28"

