

# **Crankcase Ventilation**

# **Marine Diesel Engine Tow / Tug**

## The Challenge

A Caterpillar Power Systems dealer was looking for a reliable crankcase ventilation solution. The solution needed to effectively capture oil mist and keep it out of the surrounding environment. This was a re-power of two boats receiving two new C280-12 marine propulsion engines. These engines would power the boat on the inland waterways.

#### The Solution

Solberg scheduled an on site visit to review installation details and provide installation location recommendations. Solberg provided its SME Series Advanced Crankcase Ventilation System. This included Solberg's Recirculation technology specifically designed for the marine market. This 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. Four total units were provided. Solberg stayed engaged throughout the process and even assisted in upgrading the units per the customers requirements.

#### 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 captured the oil mist and drained it back to a Solberg waste oil console. The SME's were run in an open configuration and provided clean, filtered air out to the waterway atmosphere.





Rev: SMEC280-12US1905K

### Solberg Products Provided

SME-R-C-A175-MOR

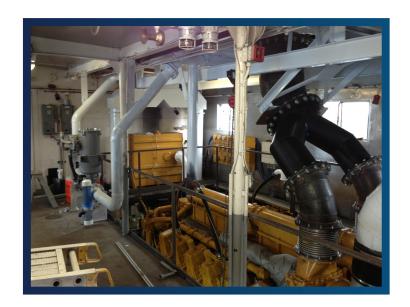
SME Series - Advanced Crankcase Ventilation System

**ACV840** 

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"

