



The Challenge:

A turbine packager in Ohio wanted to reduce the overall size of their current vacuum assisted oil mist eliminator in order to simplify the service and installation processes.

The customer's existing design was excessively tall, which severely limited the service area needed to replace the internal coalescing filter element. Also, the overall size made it difficult to install within the allowable enclosed space.

Solberg's challenge was to reduce the overall size while providing the required flow and vacuum level (negative pressure).

The Equipment:

Turbine Model: MAN Turbo THM1304-11
Lube Oil Reservoir: 600 gallons
Required Flow Rate: 120 SCFM
Required Vacuum Level: -50mbar

The Solution:

Solberg designed a Vacuum Assisted Oil Mist Eliminator (VAE) to fit on the vent port of the lube oil system. When installed, this unit will create a vacuum (negative pressure) in the reservoir to prevent seal leakage. The VAE will also eliminate oil mist emissions and prevent these contaminants from being released into the atmosphere. All of this will be accomplished with a decreased overall height of 10+ inches.

The customer was appreciative of the fact that Solberg could build a customized solution, and they were also pleased that multiple options were available to satisfy their needs.

Installation:

The VAE was specifically built to fit within the customer's space, and they will be installing the unit on a Man Turbo package.

The Solberg VAE:

Vacuum Assisted Oil Mist Eliminator (VAE) design consists of the following components:

- Vacuum rated tank assembly
- Regenerative blower system to create the required vacuum (negative pressure) level
 - An optional automated vacuum regulator allows the customer to monitor and adjust the vacuum level within their tank assembly from a remote computer.
 - Solberg also included an adjustable band/ bracket assembly, so the blower and motor can be adjusted if necessary.
- Coalescing filter element to remove oil mist emissions and smoke from the lubrication reservoir.
 - To protect the surrounding environment, the coalescing filter is 99.97% D.O.P. efficient on .3 micron particles.
 - It is designed for a service interval of 1 year.



Solberg Manufacturing Inc
1151 Ardmore Ave. • Itasca, IL 60143 USA
Sales/Service: 630.616.4411 • Fax: 630.773.0727