



MED MODEL OVSS



**Mueller
Environmental
Designs, Inc.**



**Air Filtration
Evaporative Cooling
Noise Control
Mist Elimination
Turnkey Projects**



MED Model OVSS Blowdown Separator Silencer

Application

Mueller Environmental Designs Inc.'s Blowdown Separator Silencer Model OVSS is designed to remove 99% of the entrained lubricating fluids and condensation 8 microns and larger from high pressure gas discharging to the atmosphere and reduce the resulting vent noise to the specified level.

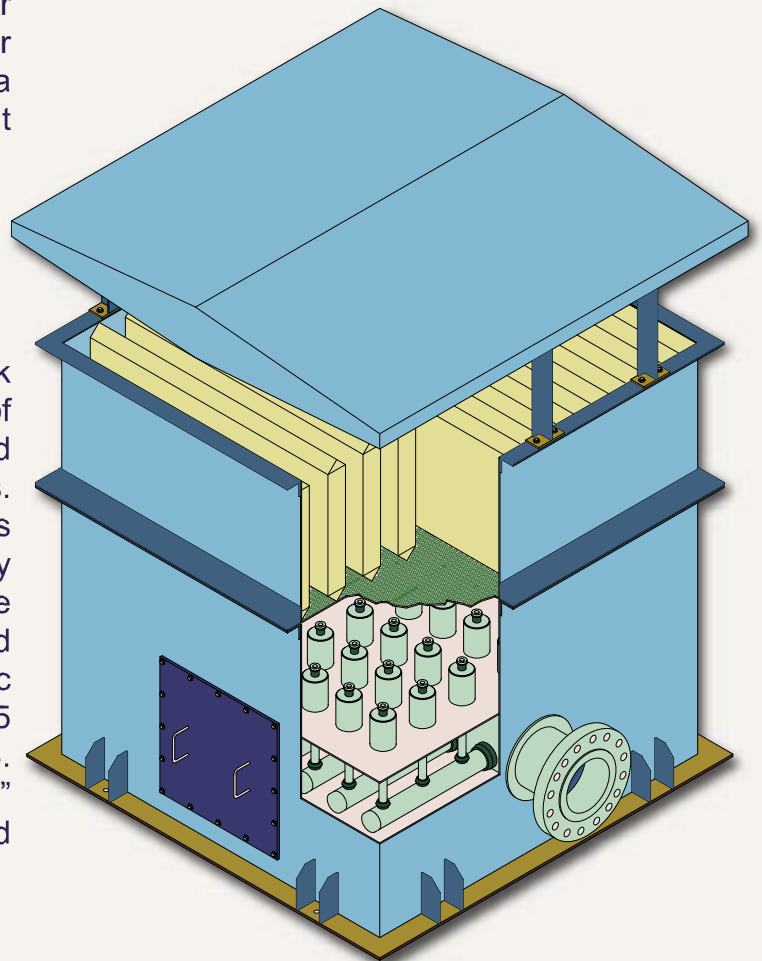
Separator Design

The OVSS separator section is designed to hold line pressure. The unit employs multiple individual centrifugal separating elements manifolded together to form a single unitized blowdown system. All manifold circumferential welds are 100% X-ray'd with welds graded to UW-51. All welds are completed in accordance with ASME Section IX Procedures and performed by qualified welders. All units are hydro tested to 1.5 times maximum operating pressure and registered for 4 hours with a chart recorder.

As gas enters the OVSS, it encounters the manifolded separating element section. The separating element consists of stationary blades arranged in a tangential pattern. Gas and entrained fluids impinge on the separating element developing centrifugal forces which direct liquid particles to the shell wall. These liquid particles wipe around the shell, creating a sheeting action, then become trapped in a pocket drain. Due to gravity, the separated liquid flows into the sump for collection. The air or gas stream, free of entrained fluids, exits the separator section through an orifice and enters the silencer section. Prior to entering the silencer section, a vortex breaker located in the separating element prevents re-entrainment of the liquid.

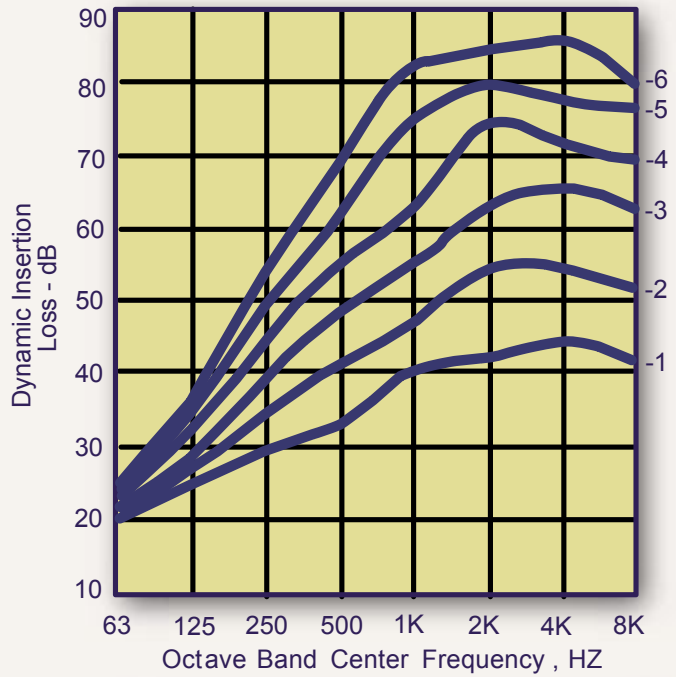
Silencer Section

The silencer baffle assembly is comprised of 4" thick parallel baffles on 8" centers. The baffles consist of 10 ga. CS frame and 18 ga. galvanized perforated design. The baffles are supported from the sides. The 10 ga. CS frame with 24" vertical compartments supports the acoustic fill material preventing any settling due to vibration and flow turbulence. The acoustic fill material is 4# fiberglass compressed 5% and wrapped in a fiberglass pillow. The acoustic fill insulation has a flame spread classification 15 and smoke developed rating of 0 per ASTM E84. The acoustic baffle side panels are 40% open 1/8" hole on 3/16" staggered centers 16 ga. galvanized with solid border for welding attachment to frame.

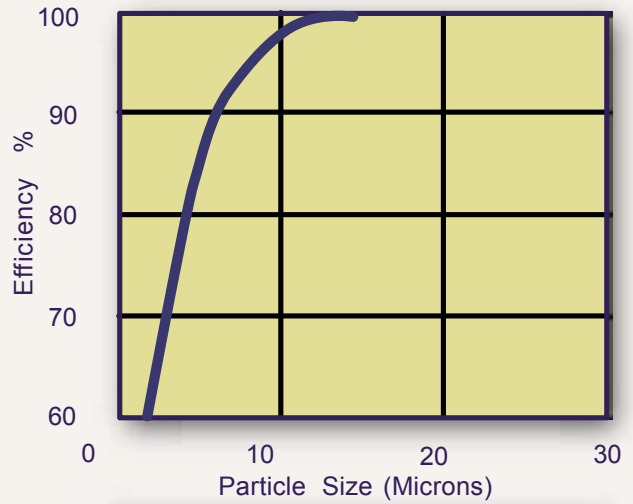


PERFORMANCE

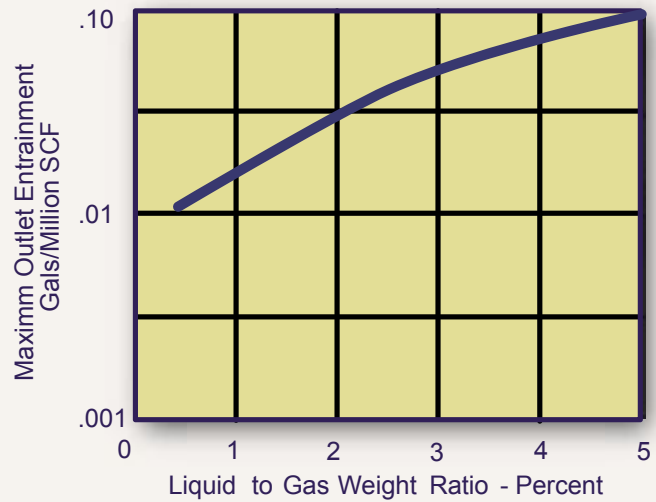
Typical Attenuation Curves



Typical Efficiency, Particle Size



Typical Efficiency, Liquid Entrainment



*(Based on an Average Particle Size of 10 Microns)
The above curve indicates an overall separation efficiency of 99.0% (based on a maximum liquid load of 5% to the separation element). As the liquid to gas weight ratio decreases, the overall separation efficiency increases.*

*Portable Pipeline Blowdown
Separator/Silencer*



*Gas Compressor Station Blowdown
Separator/Silencer*



Mueller Environmental Designs, Inc.

7607 Wright Road

Houston, Texas 77041

713-465-0995

Fax 713-465-0997

E-Mail: sales@muellerenvironmental.com

www.muellerenvironmental.com