

# **Vapor Bladders**

**Emission Recovery Membranes** 

Mesa Vapor Bladders are designed for collecting and storing vapor emissions as part of a complete Vapor Recovery System located in a storage tank terminal or refinery. The system is used to capture emissions during tank truck loading.

Emissions are stored in a Vapor Bladder tank until they can be used or delivered to a burner unit for processing. The Vapor Bladder serves as an accumulator/surge suppressor/storage unit.

Mesa Vapor Bladders are installed as either **Truncated Cone** or **Hemispherical** configurations in a steel holding tank. A stabilizing weight is included to ensure the Bladder remains in a predictable position.



**Truncated Cone Vapor Bladder** 

## **Truncated Vapor Bladder**

- The Truncated Cone Vapor Bladder is secured to an attachment bar around the tank shell and to a floating ring, including a stabilizing weight to ensure position.
- MesaThane<sup>™</sup> material ensures vapor compatibility and hydrolytic stability on both sides of the Bladder. (Other materials available for custom applications).
- Effectively operates as a "piston" within the tank eliminating the formation of a vapor and air ignition atmosphere.
- Allows continuous measurement of vapor holder gas levels using retractable tape gauges.
- Provides the highest percentage of tank volume for vapor capacity in the steel holding tank.



Emission recovery during tank truck loading helps ensure safety and operational efficiency for the facility.















### **Hemispherical Vapor Bladder**



## **Hemispherical Vapor Bladder**

- The simple and efficient Hemispherical Bladder is secured to an attachment bar around the tank wall.
  Bladder contains a dollar plate to maintain position.
- MesaThane<sup>™</sup> material ensures vapor compatibility and hydrolytic stability on both sides of the Bladder (Other materials available for custom applications).
- Easily installed using a minimum of operational components and installation labor.

### **Vapor Bladder Benefits**

Eliminates the need for large scale vapor processing, which requires additional costs and power consumption.

Evens the flow of vapors in the system to provide reliable surge suppression and reduce stress on equipment.

Allows the facility to regulate vapor storage to continually operate and meet any processing time restrictions.

Can reduce the need for assist gasses to maintain burner.

Proven service life (under normal operating procedures) of over 10 years in applications including gasoline, ethanol, MTBE, pure Benzene, Toluene and other products.

### **Northeast**

4141 Airport Road Cincinnati, OH 45226-1643 Phone: 513.321.4511

Fax: 513.321.8178

### Southeast

9202 Meadow Vista Blvd. Houston, TX 77064-2012 Phone: 281.469.8098 Fax: 281.469.9524

### West

1726 South Magnolia Ave. Monrovia, CA 91016-4595 Phone: 626.359.9361 Fax: 626.359.7985 Innovative Bladder Material Low Vapor Transmission Reduces Emissions High Chemical Resistance Improves Terminal Efficiency Longest Service Life

# **MesaThane**<sup>™</sup>

### **Seal Material**

The Vapor Bladder is produced in-house to ensure quality control over each stage of the production process. Vapor Bladders are constructed of a custom MesaThane™ material containing a closely woven nylon fabric for high tensile strength. The material is maximized for chemical resistance, tensile strength and extreme temperature applications.



Vapor Bladders are designed and manufactured to include overlapping seams that maintain the seal while providing superior bond strength--stronger than the base material itself. MesaThane material also features high abrasion resistance to meet the demands of the Vapor Holder application. See Mesa's 6036FCAS material specification sheet for a complete listing of properties.









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