# DuoSphere<sup>™</sup> Gasholders

Maximizing your gas storage capabilities







## DuoSphere<sup>™</sup> Dual Membrane Solution



As energy costs grow, facilities are increasingly seeking alternative fuel sources, including biogas, to help offset power costs for their plants. WesTech has many years of experience in supplying customers with anaerobic digestion equipment that adds value to plant operations.

Whether your municipal or industrial application requires a slab-mounted gasholder or a tank-mounted alternative to steel digester covers, our DuoSphere<sup>™</sup> dual membrane structures are standout solutions for biogas storage. The superior design features high-strength fabric and utilizes a radio frequency welding process for increased strength and safety.

## **Tank-Mounted DuoSphere Covers**

Membrane digester covers offer an innovative and cost-effective solution for new and replacement covers.

- Alternative to more costly steel covers
- Ideal for retrofits
- Variable liquid level

#### **Slab-Mounted DuoSphere Gasholders**

Dual membrane gasholders provide stand-alone digester gas storage with the capacity to suit a variety of needs.

- Mounts to flat concrete slab or short walls
- Gas chamber comes sealed from the factory
- Easy access to inspect inner membrane

## **Advantages of Membrane Gas Storage**

- Constant pressure regulation
- Custom flow and sizes
- Low capital and installation cost
- Absolute odor containment
- No field welding, painting, or blasting
- Often eliminates the need for complex reinforcing cables or frameworks
- When used for retrofits, allows reuse of existing mechanical equipment





## for Biogas Storage

## **DuoSphere Gasholder**



|                            | DuoSphere Gasholder  | DuoSphere Digester Cover                    |  |
|----------------------------|--|---|--|
| Purpose                    | Slab-mounted gas storage   | Tank-mounted digester cover and gas storage |  |
| Materials                  | PVC-coated polyester fabric membranes, stainless steel anchors                             |   |  |
| <b>Fabrication Methods</b> | Radio frequency welds form a very strong seam — Support cables are typically not necessary |   |  |
| Sizes                      | 700 ft. <sup>3</sup> -317,800 ft. <sup>3</sup> (20 m <sup>3</sup> -9000 m <sup>3</sup> )   | Custom fabricated to fit tank               |  |
| Footprint                  | 15–100 ft. concrete slab   | 25–100 ft. diameter plus                    |  |
| Fans                       | AMCA spark-resistant construction, two fans for safe duty/standby operation                |   |  |
| Installation               | 1–3 weeks  | 2–3 weeks                                   |  |





## **Strength and Safety**

The high-strength fabric, radio frequency welding process, and superior design make complex reinforcing cables or frameworks unnecessary in most situations. A gas detection system continuously monitors the air within the space between the membranes for any potential leaks.

## **Getting the Most From Your Biogas**

As energy costs grow, facilities are increasingly seeking alternative fuel sources to help power their plant operations. By storing methane contained in the biogas, the DuoSphere allows a steady fuel source for a variety of functions.

- Process heating
- Sludge drying
- Cogeneration
- Facility heating
- Vehicles and equipment

## **Expert Installation**

Make sure your dual membrane installation goes as quickly and smoothly as possible. Membrane structures are less costly and quicker to install than steel structures, in general. By choosing WesTech for your installation, you'll cut down the installation time even further. Our many years of experience makes the installation experience seamless and efficient for our customers.

| 95' Digester<br>Cover Comparison | Installed<br>Weight (Ibs.) | Gas Storage<br>(cubic feet) | Installation Duration<br>(weeks) |
|----------------------------------|----------------------------|-----------------------------|----------------------------------|
| DuoSphere™                       | 7,500                      | 150,000<br>(above wall)     | 2-3 weeks                        |
| Steel Gasholder                  | 505,000                    | 33,000                      | 2 -3 months                      |

## **More Information**

Contact WesTech to discuss how the DuoSphere can help improve your facility's gas storage. Our anaerobic digestion team can help determine a size and design that will best fit your plant applications.



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