

How Containerized Water Treatment Equipment

Improves Efficiencies



HOW ISO
CONTAINERS DELIVER
LONG-TERM SAVINGS
FOR INDUSTRIAL
ORGANIZATIONS



INTRODUCTION

Energy companies are pushing water treatment equipment manufacturers to offer modular, turnkey equipment enclosures. A shift to modular enclosures makes financial sense, because it enables water treatment equipment end users to reduce time and costs associated with:

- Expensive field wiring and plumbing.
- Onsite testing and troubleshooting.
- Project management.
- Equipment footprints.

In response, water treatment original equipment manufacturers (OEMs) are transitioning to mobile shipping container equipment enclosures as a preferred solution. In fact, leading OEMs in the water treatment space are developing entire product strategies around containerizing their products. Some have even created standardized products and rental fleets to meet end user demand.

Energy companies can improve efficiencies with containerized equipment enclosures while treating waste byproducts during the building and operation of power plants, as well as at cleanup sites. Municipalities can also benefit from containerized solutions that support efforts to meet mandated water quality standards.



SECURITY

Shipping containers excel in keeping equipment securely in and unauthorized people out. The unassuming exterior does not attract vandalism and the steel doors are extremely difficult to break into. Water treatment equipment enclosures can be outfitted to meet other safety requirements by the OEM, such as hazardous material container.

MODULAR UNITS

Over time, the end user may need to replace the water treatment equipment and enclosure units. Because the units are modular, replacements can be waiting in the OEM's factory on standby, reducing downtime.





LONG-TERM SAVINGS

Because they were designed to protect cargo at sea, they require minimal maintenance, and resist the elements. Containers are also reusable. Initial costs can be steadily amortized as the enclosure is picked and relocated, sparing you the cost of rebuilding at each site.

SIMPLER PROCESSES

Containers can compress an equipment enclosure, its utility ports, ventilation, drainage, electrical connections, and more into one purchase order. Our technical sales team is prepared to collaborate with engineers to create a design that's both function and practical.

On average, shipping containers have a 25 year lifespan.





FACTORY INSTALLATION

Once the OEM receives the container enclosures, they can proceed with equipment installation and testing in their factory. This benefits both the OEM and the end user because factory set up reduces the costs associated with field wiring and equipment testing.

RAPID DELIVERY

Instead of sending contractors to the field, a complete enclosure can be delivered in six to eight weeks.



OEMs ship out their equipment in the enclosure as one self-contained unit.



Challenge: Create an equipment enclosure at half the cost of the typical solution.

USE CASE:

Water Treatment Equipment Enclosure for a Power Plant

A leading water treatment OEM tapped Falcon Structures to develop a containerized equipment enclosure for power plant applications in the U.S.

When Falcon met with the OEM, they asked us to help them overcome one key challenge: creating a financially feasible domestic solution that typically costs half the amount when built overseas.





Solution: Reduce costs by using alternative materials, including a 20-foot shipping container.

Adjusting the overall design to work within a 20-foot shipping container dramatically cut costs. We also developed a spec list with the OEM and found alternative building materials to further trim the budget.

Key Features:

- Industrial grade climate control system
- Full seam welded, epoxy coated, metal tread plate flooring for liquid containment.
- Drains and plumbing.
- Ventilation.
- Multiple pass-through access points to accommodate pipes and electrical.





Challenge: Reduce downtime and costs associated with building multiple equipment shelters.

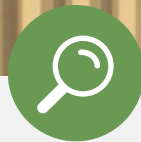
USE CASE:

Containerized Water Treatment Plant for Coal Ash Pond Clean-up

OEM WesTech needed a modular water treatment solution for a client that had been federally mandated to clean up hundreds of coal ash ponds.

The process to treat coal ash pond water is extremely sensitive. However, building stick built enclosures at each coal ash pond is costly and time consuming.





Solution: Create reusable mobile enclosures that travel with the equipment.

Containerized enclosures can be easily relocated once a cleanup is completed. Because there is no need to build a new enclosure near every pond, and shipping containers typically require no special foundation or skirting, the client reduced costs considerably.

Key Features:

- Industrial grade climate control system
- Epoxy coated flooring for liquid containment.
- Multiple pass-through access points to accommodate pipes and electrical.





Have questions or need additional resources? [Let's talk.](#)

While the majority of our clients' container applications fall into one of our standard product categories, we regularly complete custom container modification requests too. If you're not finding the tools or insight you need here, contact us. We can walk you through the process and share additional resources to help transform your vision from concept into reality.

ABOUT FALCON STRUCTURES

When we repurpose steel shipping containers, we're not just leveraging a stronger, more readily available building material; we're creating long-lived business assets. Whether your business plans to quickly deploy a field camp or assemble a multi-story apartment complex, Falcon Structures can provide code-compliant modules for your project. Countless industries now rely on our modified containers to create modular container buildings with superior quality. Founded in 2003, Falcon Structures is based in Austin, Texas.

[Contact Falcon Structures](#) today for information on modified, steel shipping containers for your next project.



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