



Storing Cures, Saving Lives

Ventilated mobile storage plays an important part in life-saving vaccines and therapies.

CHALLENGES

What do rare and unusual diseases and storage solutions have in common? As it turns out, plenty—especially if you’re in the pharmaceutical and biopharmaceutical industries.

In the United States, both of these industries will continue to grow rapidly in the years to come, and the biopharmaceutical industry in particular is expected to grow 6.5% annually through 2015, driven by shifts in production technology as well as more targeted diseases such as cancer and diabetes. Within the top 100 prescription products in the year 2018, biopharmaceutical products are expected to account for more than 50% of sales.

With this growth, many drug producers are adding biopharma manufacturing plants around the world as more high-priced, large-molecule medicines are developed, and, where there aren’t plans for expansion, many companies are renovating storerooms with an eye toward increased storage capacity. Capacity constraints are one of the biggest challenges for this market, with 6 out of 10 bio manufacturers facing at least some kind of storage issue at some stage of the manufacturing process. In addition, the centralization of the chemicals, compounds, and samples being worked with on a daily basis is a priority, and this storage has very specific requirements.

This was the case for a Global Manufacturing Company specializing in biopharmaceuticals for rare diseases located, in the eastern United States. The manufacturer was in the process of building out a new lab space due to a recent expansion, and part of that expansion included a renovated storeroom.



Top: Clear-hinged doors allow for the necessary inspection of the system’s contents.

Bottom: The mechanical-assist system has outfitted with silicone caulk to make the unit more “cabinet-like” and allow for ventilation.



Chemically-resistant wire shelves with a special Teflon powder coat ensure durability without exposure to harmful paint solvents.

"The customer needed the storage to be a bit more airtight—less of a cabinet and more of a shelf. So we sealed the seams of the 4-post unit with silicone caulk, cut openings in the canopy tops, and installed the bottom vents for the HVAC."

Fred Halsall
Life Sciences Manager,
Donnegan Systems

Custom polyurethane trays, sized to fit the shelves perfectly, were created to better organize the chemicals.

SOLUTION

After initially considering a vertical carousel approach, the company worked with authorized Spacesaver Industrial distributor Donnegan Systems to create a 4-post mechanical-assist mobile shelving unit, with modifications to allow for HVAC integration. The system was outfitted for the manufacturer's specifications with chemically-resistant TSS Hybrid Waterfall wire shelves with a special Teflon powder coat, clear-hinged doors, and an additional airflow created by inserting a vent in the 8" base of the 4-post shelving.

Fred Halsall, Life Sciences Manager at Donnegan Systems, worked with the company on the solution. "The customer needed the storage to be a bit more airtight—less of a shelf and more of a cabinet," he said. "So, we sealed the seams of the 4-post unit with silicone caulk, and we also cut openings in the canopy tops and installed the bottom vents for the HVAC." Clear-hinged doors also allow for the necessary inspection of the system's contents for sample monitoring, and custom polyurethane trays, sized to fit the shelves perfectly, were created to better organize the chemicals.

RESULTS

Since the install of the solution two years ago, Halsall says the Facility Manager of the company's storeroom has been consistently impressed with the project. "He is very satisfied with how the custom system works, and it meets all of their expectations," he says.

Similar companies have also taken note of the solution's efficiency, as Halsall says he has recently installed a similar system for another pharmaceutical company with a more chemically-based focus. Both companies are ranked as being two of the top ten pharmaceutical companies worldwide.

"Custom projects like these are an example of why it's so important to meet with the end-users of the product and brainstorm the solution from that point," Halsall says. "Once we understand the challenge the system needs to solve, we can engineer a solution to fit those needs."

