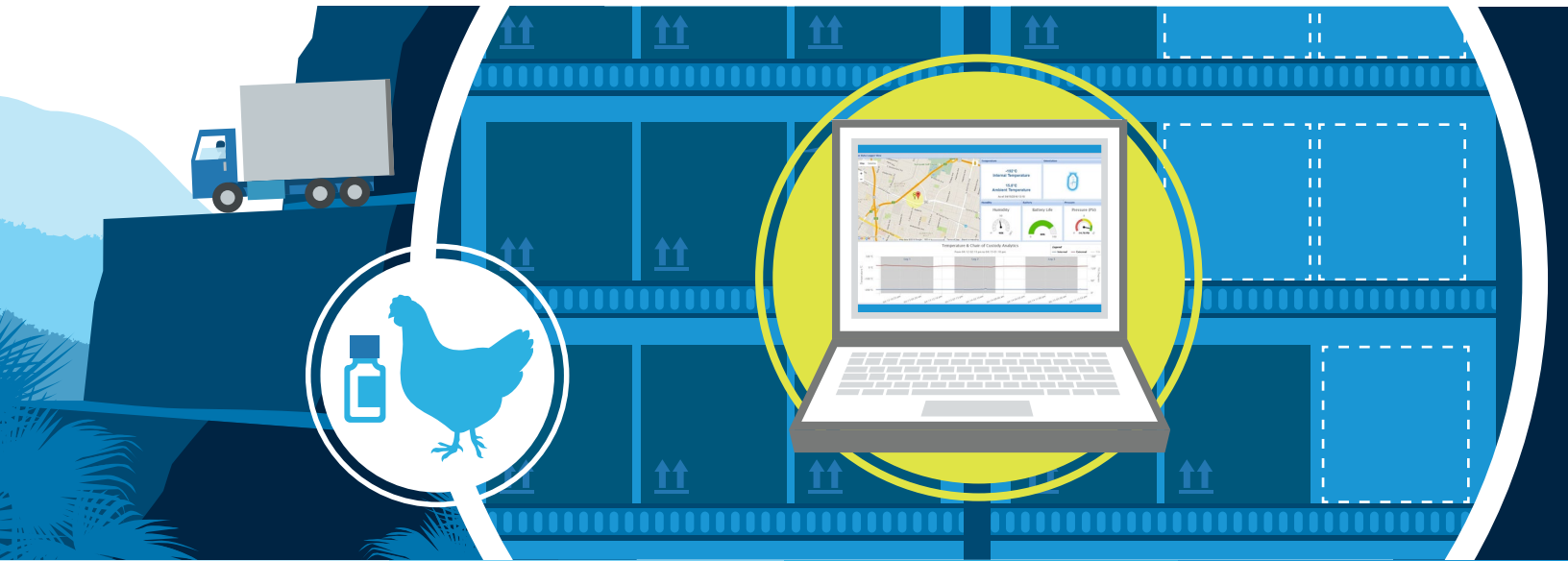


OUTSOURCING DEWAR FLEET MANAGEMENT TO CRYOPORT NETS MANUFACTURER \$1.6 MILLION IN ANNUAL SAVINGS



When in-house management of the dewars used in cryogenic shipping of a poultry vaccine resulted in a 40 percent loss of the fleet every year, Cryoport instituted a system to ensure their safe return, refurbishment and reuse.

Background

In order to ensure poultry health as part of the global food supply, the industry follows a rigorous program of vaccination around the world. Because some vaccines must be shipped cryogenically, shipments are made in cryogenic dewars, specially engineered and constructed shipping containers designed to maintain temperatures of -196°C for up to 10 days. These high-tech dewars represent a significant capital investment for vaccine manufacturers and can be refurbished and reused — but only if they are returned.

Problem

A leading vaccine supplier's global shipping program included domestic locations as well as remote areas of South America and the Middle East. Even when it provided shippers and labels for the return of the cryogenic dewars used in the distribution of poultry vaccines, Cryoport's client found that 40 percent of its fleet of 1,000 dewars went missing every year. In addition to the cost of continually replacing dewars, the client experienced periodic shipping delays: Because so many of the dewars weren't being returned, the client would often find that there weren't enough dewars readily available to use for new shipments, leading to localized product shortages.

Solution

Cryoport began by analyzing the client's existing processes and identifying areas of risk to on-time delivery and vaccine quality as well as dewar failures and the client's resource investment in the dewar fleet. From this analysis, Cryoport developed supply chain processes to minimize risk and embedded two Cryoport employees into the client's team to efficiently manage all operations related to the dewar fleet, including:

- Order entry and fulfillment
- Shipping
- Cleaning and maintenance of the dewars
- Reverse logistics

Additionally, the Cryoport team coordinated the return of the dewars that had been kept by the poultry farms, serialized the fleet and deployed a comprehensive tracking program using Cryoport™, the company's proprietary logistics management platform. Through the Cryoport™, each leg of the shipment is coordinated with the shipping courier, with return labels provided and package pickup scheduled in advance. The Cryoport™ tracks and reports when a shipment is delivered as well as when the returning dewar is picked up from a poultry farm. If a poultry farm doesn't have the dewar ready for the return pickup, it would be noted in the system, triggering follow-up procedures to ensure the return of the dewar. Because both Cryoport and the client are notified when packages are delivered or pickups are missed, there is visibility to the supply chain for every dewar and shipment.

Outcome

After instituting Cryoport's fleet management program, the client experienced a \$1.6 million reduction in annual capital costs, improved on-time delivery to 98 percent and significantly reduced its product quality risk. With Cryoport's comprehensive dewar management solution, the client has clean and well-maintained dewars available for shipments to poultry operations globally. In addition to ensuring a stable and predictable supply of dewars, Cryoport also helped mitigate the risk for shipping delays by switching the client from liquid



nitrogen to LN₂ dry vapor shipping containers. This not only reduced the potential for shipping delays due to hazardous material restrictions, but eliminated the need for pallets and their associated costs.

Conclusion

Cold chain logistics require specialized technology and tools to effectively and efficiently manage the complex forward and reverse logistics schemes. Cryoport overcame key challenges by analyzing the client's entire logistics process, from start to finish, then developing a process to address all the negative aspects in a single, cost-effective and efficient solution.

Cryoport's customized solution demonstrates Cryoport's expertise in analyzing and restructuring a cold chain logistics process, resulting in a significant impact to the bottom line. Cryoport has the experience and tools needed to develop and optimize cold chain logistics processes that will be effective for clients around the world. When you need confidence in your cold chain, **Trust Cryoport.**