

CASE STUDY

# Cold Chain Reusable Shipper Reduces Risk and Waste

EXPLORING NEW CAPABILITIES  
TO IMPROVE SERVICE QUALITY  
AND SITE EXPERIENCE



## The challenge

A multi-national pharmaceutical company was looking for ways to improve the investigator site experience. Research had revealed that investigator sites were burdened with the need to dispose of shipper packaging and were concerned about waste generated. In addition, the pharmaceutical company felt under pressure to improve sustainability metrics through increased recycling measures and reduced carbon footprint.

During interactions with Thermo Fisher Scientific project managers, the Sponsor mentioned an interest in evaluating a new shipping solution – a reusable shipper strategy. Thermo Fisher Scientific had experience with reusable shippers and believed with the right container,

distribution and collection process, adding a reusable shipper capability to its cold chain service offering would provide value beyond just improved site experience.

## The solution

A reusable shipper strategy, supported by our logistics and distribution experts, was developed and determined to be the optimal solution.

Used for the distribution of Investigational Medicinal Product (IMP) that need to be maintained under specific temperature parameters, reusable shippers are smaller than traditional single use shippers, and are typically made with Vacuum Insulation Panels (VIP) and Phase Change Materials (PCM). Reusable shippers can increase the temperature controlled lifespan from 48 to 96 hours compared to single-use shippers. Furthermore, reusable shippers have proven to help reduce excursions and to allow for more level load shipping.

## The pilot

Thermo Fisher Scientific conducted extensive research and vigorous testing on quality, performance and price in an effort to choose the most effective reusable shipper for the Sponsor's trials.

Systems and processes were put in place to develop a smooth and robust returns management process for these shippers. A pilot project was set up.

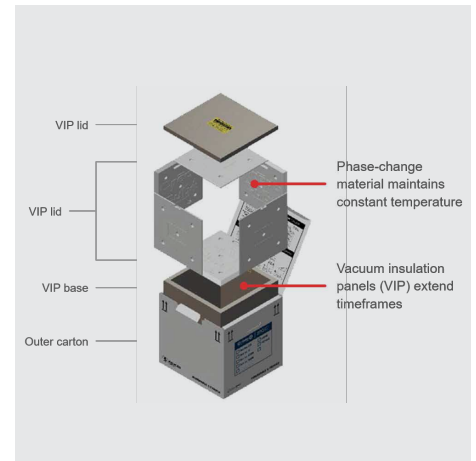
Thermo Fisher Scientific was already making logistics decisions on behalf of the Sponsor in terms of courier selection based on objective cost and performance data. It was decided that the process of deploying, collecting and refurbishing reusable shippers would be included in this Total Transportation Management service offering. As in the past, the Global Logistics Help Desk would continue to proactively track and trace all cold chain shipments providing end-to-end visibility across the supply chain, including the reusable shipping process.

We worked collaboratively with the sponsor to define the scope and success measures for the pilot program. The pilot would roll out for several studies in the United States and Europe and would test protocols and viability of the service offering.

## Pilot program results

The Key Performance Indicators for the study had been defined as:

1. Shipper return rate > 90%
2. Positive feedback from investigator sites



Reusable shippers have proven to help reduce excursions and to allow for more level load shipping.

Within 10 months the pilot program was determined effective at meeting all objectives and was moved out of the pilot phase. The Sponsor, couriers and investigator sites responded positively to the well-defined, seamless returns process for all shippers.

- 97% shipper return rate vs. goal of > 90%
- 300,000 lb. (136 tonnes) waste diverted from landfill

A service that prevents temperature excursions, reduces waste and makes happier investigator sites - Everyone's a winner!



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