

A Prescription for Change

ZERO

**discarded
shipments**

32%

**freight cost
savings**

\$2M

**annual transportation
cost savings**

Materials used in Crêdo Cube™ shippers include modular TIC™ coolant panels with integrated phase-change material (PCM) and vacuum insulated panels (VIPs). The materials are combined to facilitate easy packing and shipping, while offering effective and dependable year-round conditioning for contents.

When pharmaceutical companies are shipping medications across great distances, it's not only on-time delivery that matters. On-temp delivery is even more crucial for some products. Maintaining the recommended temperature range for the payload is vital. Without it, the potency of the medication is diminished, or depleted altogether. Patient safety is at stake. Providing the packaging that protects this valuable cargo is a tremendous responsibility.

Pelican BioThermal's Crêdo Cube™ is a temperature-controlled passive packaging system distinguished by its outstanding performance. Crêdo Cube shippers offer superior protection and reliability for the transportation of payloads requiring maintenance of a variety of tight temperature ranges that go from controlled room temperatures (CRTs) to several chilled and frozen options. This system is the ideal solution when unavoidable circumstances might present a delay during shipping, whether that delay is expected or unexpected.

Shipping costs are consistently reduced when Crêdo Cube shippers are implemented into the cold chain. Our innovative system is technically advanced, the result of years of testing in our Pelican laboratory by on-staff engineers specializing in new product development, design and rigorous quality testing.

This case study, A Prescription for Change, details the resounding success that was achieved by one of the most successful pharmaceutical companies in the world after they adopted and implemented Pelican BioThermal's Crêdo Cube shippers into their cold chain shipping system.

PAYLOAD PROTECTION PATIENT SAFETY

CLIENT

A leading Fortune 500 pharmaceutical company headquartered in the United States manufactures various medicines that must be shipped over long distances. The company approached Pelican BioThermal seeking improvements to their cold chain shipping system.

CHALLENGE

The company was experiencing temperature excursions of its clinical trial shipments with single-use shipping boxes, a complication that was putting payloads at risk and resulting in discarded products. Approximately 10 percent of the shipments were being thrown away, generating more waste and causing inconvenience to the customer. Pelican BioThermal was asked to implement a solution that would consistently preserve the integrity of the payloads. The pharmaceutical company was also seeking to cut costs and reduce its corporate carbon footprint.

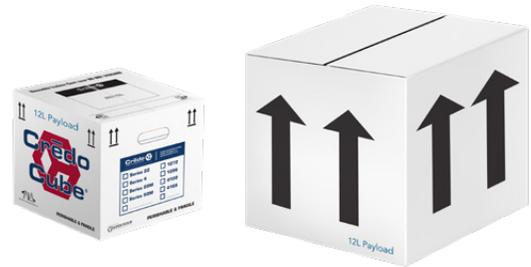
TESTIMONIAL Pharmaceutical Company Management

“The reusable system is efficient and provides a good total cost of ownership as long as we get a high rate of return. We shot for a 71 percent return rate. We are now at 96 percent.”

– Director for CTMS
Management,
CT Distribution,
CT Ancillary Supplies,
and Site Inventor

SOLUTION

The customer selected four different sizes of reusable Crêdo Cube™ shippers to maximize payload capacity while minimizing waste. The cubes are rated to maintain optimum temperatures in the payload area for up to 168 hours (a full seven days).



Reusable

Single-Use

OUTCOME

Replacing single-use shipping boxes with Crêdo Cube shippers produced positive results across the board. Temperature excursions that had previously resulted in discarded shipments dropped from 10 percent to zero. The total cost of ownership was also reduced. Although Crêdo Cube shippers require a higher upfront investment than single-use containers, they can be reused many times due to their technically advanced design and materials that are more durable with a longer life span. This longevity markedly lowered the total cost of ownership over the life span of the boxes. The number of boxes that had to be kept on hand was also significantly decreased. When coupled with the smaller size of the boxes, this reduced storage space requirements. Shipment sizes, and the resulting shipping cost, also dropped. The number of boxes used per shipment decreased by 18.5 percent, outer dimensions of each package fell by 72 percent, and weight dropped by 44 percent. Overall, freight costs were slashed by 32 percent. Transportation cost savings amounted to \$2 million annually. The pharmaceutical company attributed the savings to a variety of factors that were all credited to Crêdo Cube shippers, including less payloads discarded due to temperature excursions, reduced number of boxes used and lower shipping costs.

ENVIRONMENTAL FOOTPRINT

Crêdo Cube shippers are indisputably kinder to the environment than single-use shippers. Pelican BioThermal's proprietary software, which uses barcodes to help track and recover the Crêdo Cube shippers, resulted in 96 percent of the cubes being returned to the pharmaceutical company for reuse over a one-year period. The amount of waste generated was slashed by 424,400 pounds.

In addition to producing far less trash, Crêdo Cube shippers can be effectively recycled. Once the box has reached its recommended lifespan, the outer corrugated materials (both plastic and cardboard components) can be recycled using traditional waste streams. The vacuum insulated panels (VIPs) can be returned to the vendor for core reprocessing, and the VIP encapsulation can be removed and recycled for fuel. The thermal isolation chambers (TICs) can be placed into traditional plastic recycling streams. The phase-change material can be reclaimed and discarded appropriately.