



**TOWER**  
Cold Chain

Product Brochure

# **KTM42D Tower Double Euro Pallet Ultra Cold**

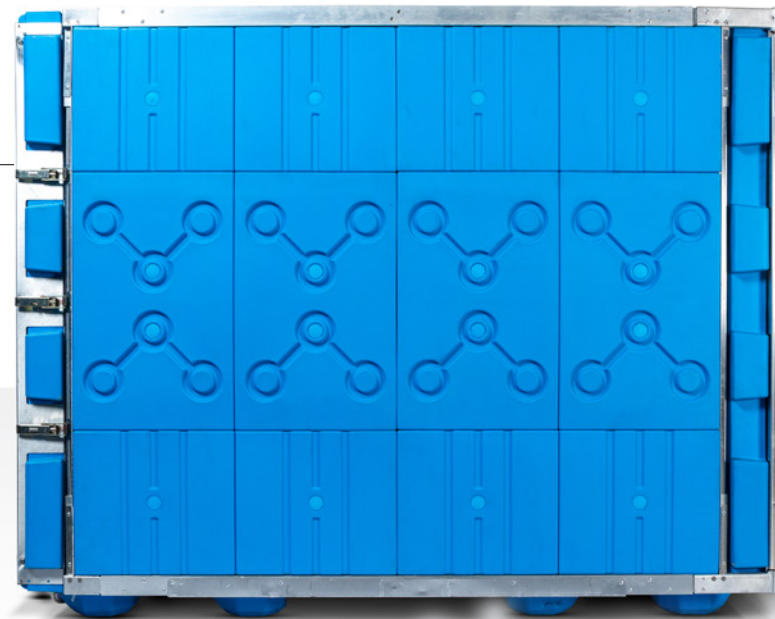


Robust. Reliable. Reusable.

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## The KTM42D Tower Double Euro Pallet Ultra Cold

**Robust. Reliable. Reusable.**

The KTM42D is a double-pallet temperature-controlled packaging solution for the transportation and extended storage of products that require an internal temperature range of  $<-60^{\circ}\text{C}$ . ( $<-76^{\circ}\text{F}$ )

Using 200kg of dry ice the KTM42D can transport two Euro pallets of product at  $<-60^{\circ}\text{C}$  ( $<-76^{\circ}\text{F}$ ) for more than 94 hours, and 227 (nine days) when stored in a  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) freezer. The dry ice can be replenished during the operation of the system to extend its performance indefinitely. The KTM42D's data logger ensures door-to-door-compliant payloads with no human intervention throughout transit. Suitable for use with wide-bodied aircraft, reefers and all road-transport options.



+22.7°C

Air Temp.

KTM42D Temp.

-79.4°C

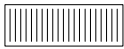
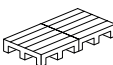
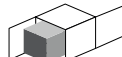
Cargo Hold Temp.

+25.7°C

# KTM42D Specifications

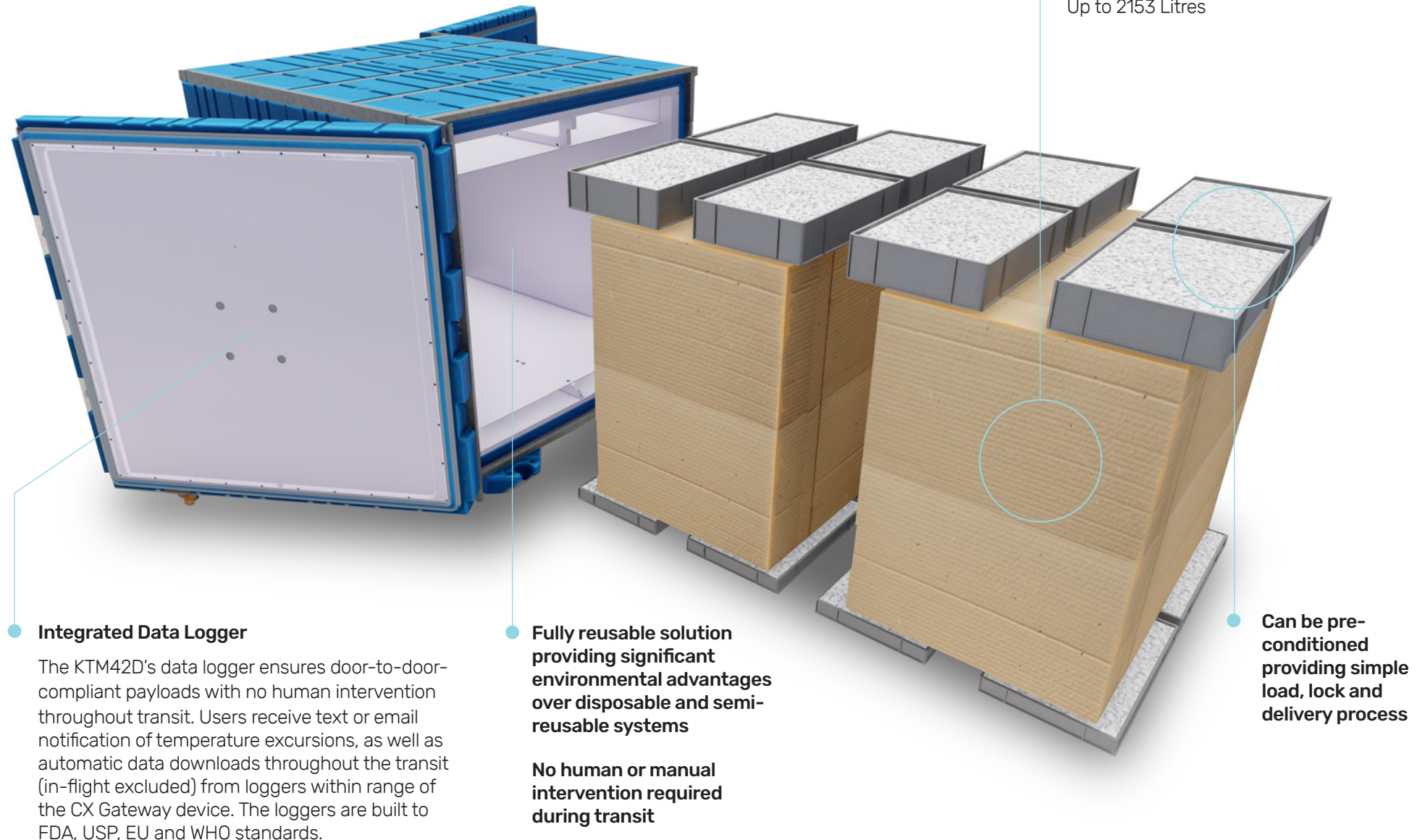
94 hour product protection for <-60°C  
(<-76°F) using dry ice



- |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  |  |  |
| 20" container                                                                       | 40" container                                                                       | TCV                                                                                 | Articulated Lorry                                                                    | Wide bodied                                                                           | Accepts                                                                               | System Tare                                                                           | Volumetric                                                                            | Int. Payload                                                                          |
| Fits 3                                                                              | Fits 7                                                                              | Fits 7                                                                              | Fits 8                                                                               | Fits 16                                                                               | 2 Euro Pallets                                                                        | 617kg                                                                                 | 796kg                                                                                 | 2153L                                                                                 |



# KTM42D Key Features



## Integrated Data Logger

The KTM42D's data logger ensures door-to-door-compliant payloads with no human intervention throughout transit. Users receive text or email notification of temperature excursions, as well as automatic data downloads throughout the transit (in-flight excluded) from loggers within range of the CX Gateway device. The loggers are built to FDA, USP, EU and WHO standards.

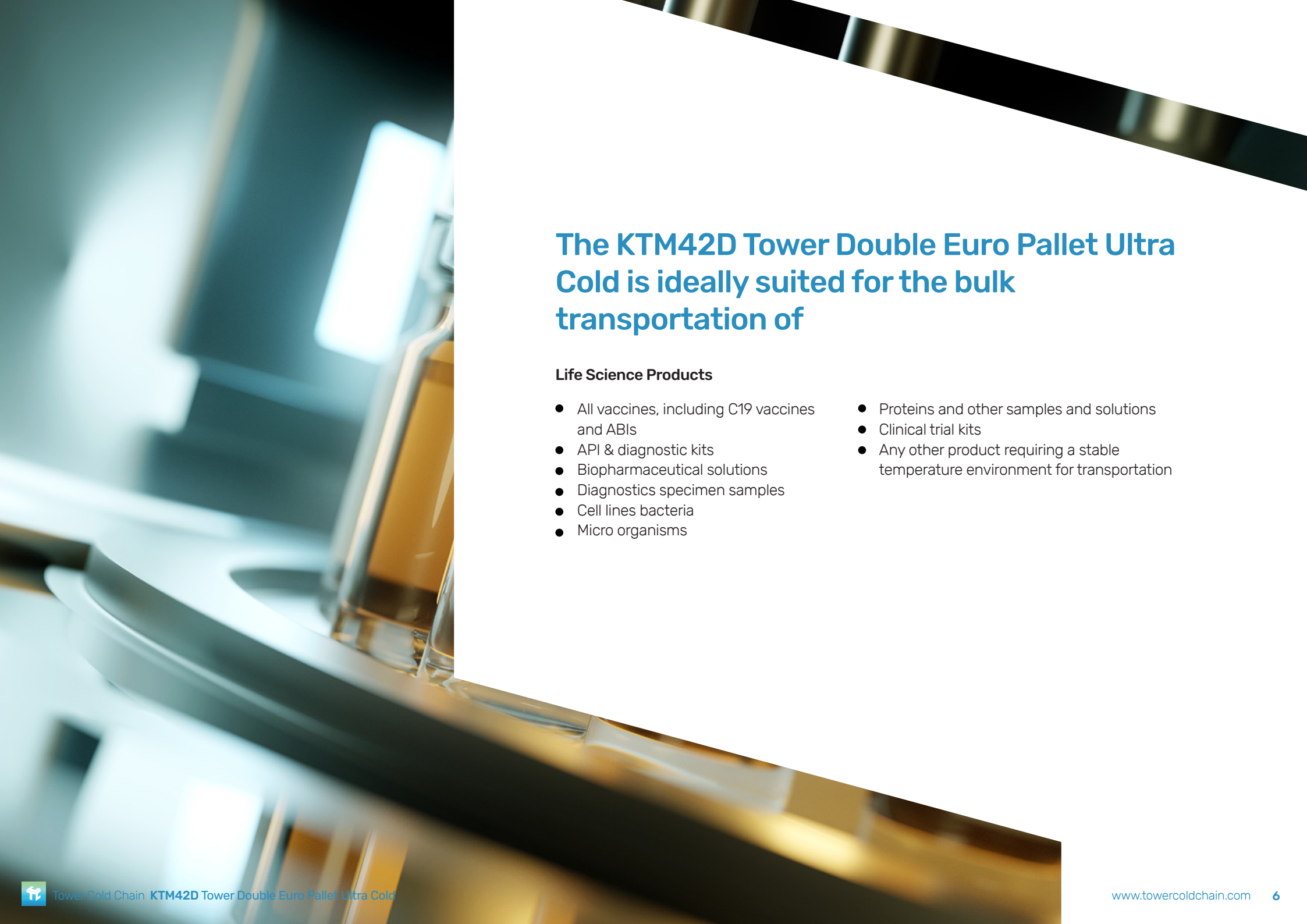
**Fully reusable solution providing significant environmental advantages over disposable and semi-reusable systems**

**No human or manual intervention required during transit**

**Accepts double Euro pallet payload**  
(1250 x 1640 x 1050 mm)

**Internal payload**  
Up to 2153 Litres

**Can be pre-conditioned providing simple load, lock and delivery process**



## The KTM42D Tower Double Euro Pallet Ultra Cold is ideally suited for the bulk transportation of

### Life Science Products

- All vaccines, including C19 vaccines and ABIs
- API & diagnostic kits
- Biopharmaceutical solutions
- Diagnostics specimen samples
- Cell lines bacteria
- Micro organisms
- Proteins and other samples and solutions
- Clinical trial kits
- Any other product requiring a stable temperature environment for transportation

# Key Evaluation Criteria

## General:

- Fewer than 0.1% temperature excursions on average (data supported from over 15,000 shipments)
- Easy load and unload process through top door access
- No external power or human intervention required during transportation
- Integrated blue tooth data logger (RTCA DO 160G Part 21 H Compliant)
- Operational Qualification completed to customer loading and shipping specification
- Global Qualification with near zero thermal mass which stress the containers far more than step tests, reducing associated documentation by half
- Fully reusable circular supply chain solution
- Easy and quick reconfigure for subsequent shipments
- Global availability through our global hub network within 24 hours or less
- Global assurance, used by a wide range of pharmaceutical companies organisations



## Specific evaluation criteria KTM42D:

- Product is held at  $<-60^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$ ) for 94 hours (4 days)
- Turns all existing infrastructure  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) freezers into  $<-60^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$ ) deep-freeze units with hugely-reduced running costs, reliability and industry-standard health and safety
- When stored in a  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) freezer unit the KTM42D maintains  $<-60^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$ ) for over nine days and can be replenished with dry ice in under five minutes, providing unlimited deep freeze time
- Provides the largest single industry shipment (two Euro pallets) within airline dry-ice limitation (250kg per container)
- Under five-minute load-and-reload time allows minimal human contact with dry-ice. Industry-leading health and safety working conditions maintained throughout
- Temperature is consistent throughout the payload so no temperature differentiation in container
- Allows remote locations and lorry reefers with freezer capabilities to have deep-freeze capabilities
- Allows for multiple units to be maintained within  $-20^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$ ) freezers with limited unskilled workforce
- Product can be held at  $<-60^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$ ) for an unlimited time if dry-ice is consistently replenished
- Product is held at  $<-60^{\circ}\text{C}$  ( $-76^{\circ}\text{F}$ ) for 227 hours (9 days) when transported at a temperature range of  $<-15^{\circ}\text{C}$  –  $<-25^{\circ}\text{C}$  ( $5^{\circ}\text{F}$  –  $-13^{\circ}\text{F}$ )
- Unique easy lock-and-load process, part product can be removed from the container without undue issues or affecting internal temperature





## Why choose Tower?



### **Robust:** Ensuring product integrity for your patients

Tower delivers proven physical and temperature protection for pharmaceutical and life science products. Our containers are designed to perform in all supply chains, regardless of the transport type or environment. The innovative internal and external structural design of our containers means your products will be transported without the need for in-transit manual intervention.



### **Reliable:** Delivering pharmaceuticals to patients when and how they need them.

Data downloaded from over 15,000 shipments has demonstrated fewer than 0.1% temperature excursions on average, a vital indicator in the maintenance of the cold chain. We achieve this by providing a reusable container that delivers the correct performance for every shipment. Our team focuses on delivering a consistent customer outcome whatever the location.



### **Reusable:** Efficient and effective results for our global customers

All parties in the cold chain have a role to play in sustainability. We see ours as providing a reusable, cost-effective solution that contributes to customers' circular supply-chain ambition. Customers value our long-term lease containers and supply-chain flexibility.



## Delivering value through customer-focused innovation

Tower incorporates innovation through design to meet the regulatory demands of the pharmaceutical supply chain. Our patented design technology meets the GDP requirements of our customers and All our solutions meet the pharmaceutical industry performance standard, providing a minimum of 120 hours temperature compliance in any environment, anywhere in the world. Performance data demonstrates fewer than 0.1% temperature excursions. Our expert teams work closely with our customers, realising their requirements and how we can address emerging needs. Tower collaborates with stakeholders to identify challenges across a supply chain and to deliver customer-focused innovation.



## Product Testing

Tower containers are designed to be used all year round to all destinations using one packaging instruction – avoiding extra levels of complication and uncertainty within either validation or operational control.





### Specialist Expertise

Tower is a preferred supplier of temperature-controlled solutions to the global pharmaceutical and life-science industries. Our team of experts understands emerging challenges and needs, and through collaboration with customers, we play a strategic role in optimising supply chains.

We recognise the complexity and challenges of the industry, and we meet this by investing in people. Our customers work with specialists within Tower who understand their supply chains and operate as an extension to their own teams.



### Promoting Circularity

Tower cold chain recognise the role we play in working with our stakeholders to move from a linear supply chain to a circular one – providing a solution that supports our mutual ambition of waste reduction through reusability keeping our containers in use for longer reducing the need for disposal and recycling of temperature controlled packaging.

## Global availability and support

Our global network uses common processes and standards to deliver consistency for our customers. You will have access to the complete Tower range with a local team of experts to understand specific customer needs. This means we can deliver where and when required.

### **EMEA (Europe, Middle East and Africa)**

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[Click here to see our global hubs >](#)

