

Product Brochure

# KT400D

## Tower Flexi Fit Ultra Cold



## Index

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- 03** KT400D Introduction
- 04** Product Specifications
- 05** Key Features
- 06** Suitability
- 07** Key Evaluation Criteria
- 08** Why Tower
- 11** Contact



# The KT400D Tower Flexi Fit Ultra Cold

Robust. Reliable. Reusable.

A unique temperature-controlled packaging solution within the Life Sciences and Healthcare marketplace for the transportation of deep-frozen shipments with a required internal temperature of  $<-60^{\circ}\text{C}$  ( $<-76^{\circ}\text{F}$ ) during transit. With its unique cardboard pack outs, highly robust casing and no

intervention required throughout transit the KT400D suspends products away from the dry-ice providing deep frozen, fully compliant transportation with consistent load space for +120 hours.

KT400D Temp.

$-74.3^{\circ}\text{C}$

$+29.8^{\circ}\text{C}$

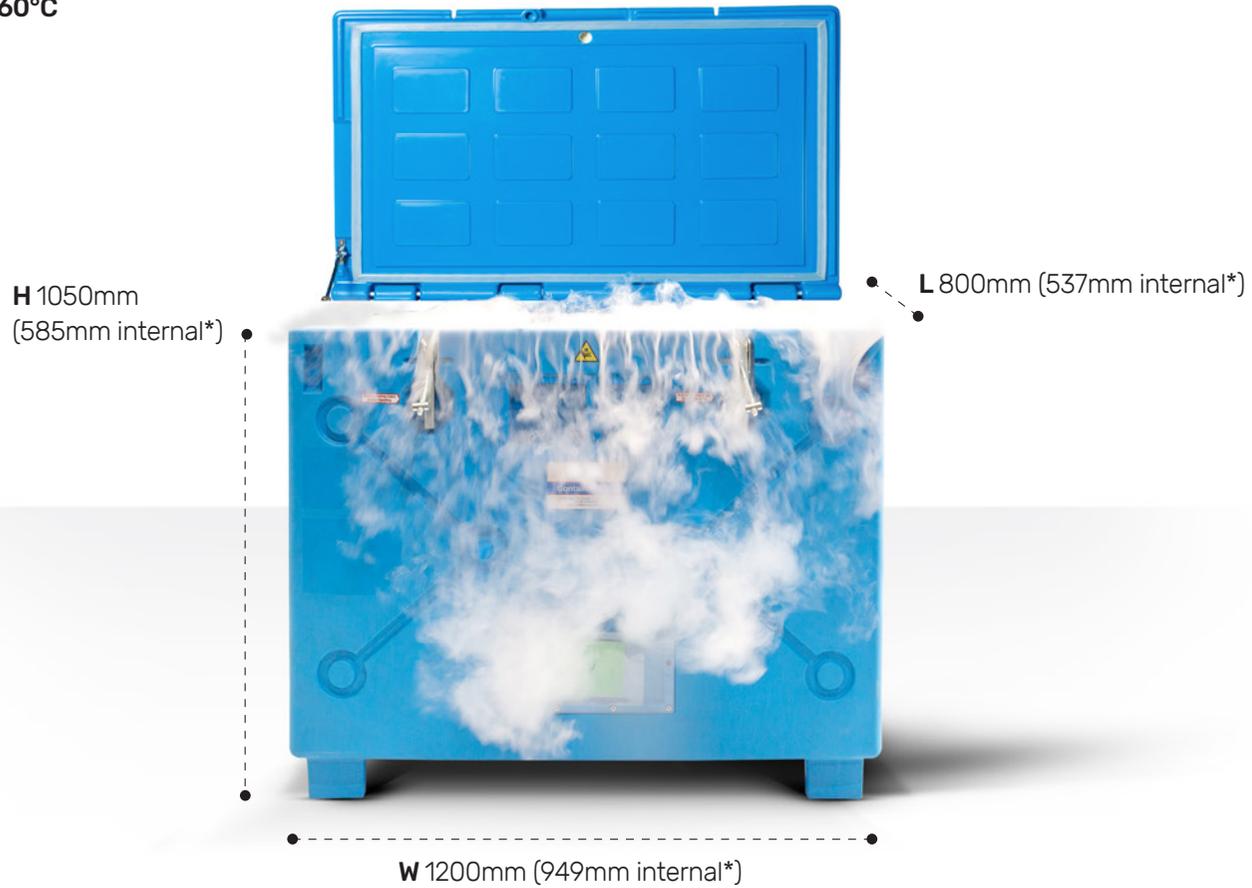
Air Temp.

$+62.5^{\circ}\text{C}$

Surface Temp.

# KT400D Specifications

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



-   
 20' container  
**Fits 22**
-   
 40' container  
**Fits 60**
-   
 TCV  
**Fits 60**
-   
 Articulated Lorry  
**Fits 66**
-   
 Wide / Narrow bodied  
**Fits 48 / 23**
-   
 Accepts  
 Sub Pallet
-   
 System Tare  
**175kg\***
-   
 Volumetric  
**168kg**
-   
 Int. Payload  
**297L\***

\* figures based upon pack out system 143 inclusive of dry ice and packaging

## KT400D Key Features

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

### **Integrated Data Logger**

The KT400D'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.



**Accepts sub-pallet payload up to**  
(947 x 537 x 585 mm)

**Internal payload**  
Up to 297 Litres

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

**Unique pack-outs provide**  
unparalleled product  
protection

The KT400D comes with unique pack-out options allowing for a multitude of different pharmaceutical packaging alternatives to be transported safely, simply and easily.

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



## The KT400D Tower Flexi Fit Ultra Cold is ideally suited for the transportation of

### Primary Packaging

- Sartorius Celsius® FFT shell system
- Varying drum sizes
- RoSS® containers
- Mylar bags
- HDPE bottles
- Nalgene bottles
- Single API drums
- Clamshells
- Cryoboxes
- Cylinders
- Mueller drums
- CurTec drums

### 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:

- Can be pre-conditioned and pre-configured ready for shipment
- Unique pack-out options allowing for a multitude of different pharmaceutical packaging alternatives to be transported safely, simply and easily
- Suitable for wide and narrow bodied aircraft and all road vehicles
- 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 KT400D:

- Under 60 seconds product load time creates minimal exposure to dry-ice and no stress to product during loading
- No dry ice top up so no risk of compliance failure or breakages
- 120+ hours consistent  $<-60^{\circ}\text{C}$  ( $<-76^{\circ}\text{F}$ ) air vtemperature is created throughout the payload
- The product is suspended throughout transit reducing risk of breakages
- Load space is consistent throughout transportation





## 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.

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

