



TOWER
Cold Chain



Airline Handling Manual




KTM21 Tower "Low" Euro Pallet
KTM31 Tower "Low" US Pallet
KTM22 Tower Euro Pallet
KTM32 Tower US Pallet
KTM42 Tower Double Euro Pallet
KTM52 Tower Double US Pallet
KT400 Tower Flexi Fit
KT400D Tower Flexi Fit Ultra Cold

Index




- 03** KT and KTM Product Range – Technical Specifications
 - 04** KTM – Key Features
 - 05** Integrated Bluetooth Data Logger
 - 06** Important Safety Information
 - 07** Mechanical Handling – Forklift & Pallet Trucks
 - 10** Mechanical Handling – Airline ULD Loading
 - 13** Global Hubs & Contact Information
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Technical Specifications



Euro Series: Internal 1200 x 800 Pallet Systems

	Aircraft compatibility	No. of Plates	Config. Temp	Perform. (hrs)	External Dims L x W x H (mm)	System Wgt (kg)			Volumetric Wgt (kg)
						F -25°C to -15°C	R 2°C to 8°C	T 15°C to 25°C	
 KTM21 Tower "Low" Euro Pallet	Narrow bodied	18	F, R, T	120+	1130 x 1550 x 930	305	269	322	271
 KTM22 Tower Euro Pallet	Wide bodied	28	F, R, T	120+	1130 x 1550 x 1580	457	400	483	461
 KTM42 Tower Double Euro Pallet	Wide bodied	44	F, R, T	120+	1950 x 1550 x 1580	685	621	751	796

US Series: Internal 1219 x 1016 Pallet Systems

	Aircraft compatibility	No. of Plates	Config. Temp	Perform. (hrs)	External Dims L x W x H (mm)	System Wgt (kg)			Volumetric Wgt (kg)
						F -25°C to -15°C	R 2°C to 8°C	T 15°C to 25°C	
 KTM31 Tower "Low" US Pallet	Narrow bodied	24	F, R, T	120+	1540 x 1550 x 930	393	344	415	370
 KTM32 Tower US Pallet	Wide bodied	36	F, R, T	120+	1540 x 1550 x 1580	476	403	509	629
 KTM52 Tower Double US Pallet	Wide bodied	52	F, R, T	120+	2360 x 1550 x 1580	840	743	888	963

Loose load Product Range

	Aircraft compatibility	No. of Plates	Config. Temp	Perform. (hrs)	External Dims L x W x H (mm)	System Wgt (kg)			Volumetric Wgt (kg)
						F -25°C to -15°C	R 2°C to 8°C	T 15°C to 25°C	
 KT400 Tower Flexi Fit	Narrow bodied	12	F, R, T	120+	800 x 1200 x 1050	219	188	248	168
 KT400D Tower Flexi Fit Ultracold	Narrow bodied	n/a	Empty	120+	800 x 1200 x 1050	n/a	n/a	n/a	168 (Tare weight 72)



KTM Key Features



Integrated Blue Tooth Data Logger

InTemp CX400 range of Data

Loggers 1 consists of two temperature probes that allows the internal and external temperature monitoring to the KT/KTM systems.

The Data Loggers communicate wirelessly via Bluetooth Low Energy to mobile devices. Using the InTemp app, the status of the Data Logger can be checked, configured,

data viewed, alarms set and a PDF report created and shared securely.

The display provides the Current, Minimum and Maximum internal temperatures since configuration plus the current battery and memory levels. An audible alarm can be enabled to notify of temperature deviations.

The InTemp CX405-RTD Dry Ice Data Logger

2 is specifically designed for ultra-low temperature monitoring. The CX405-RTD built-in temperature probe has the capabilities to measure a temperature range from -95°C (-139°F) up to 50°C (122°F).

- Powered by 2 x AAA Alkaline Cells
- Not restricted SP A123
- RTCA DO 160G Part 21 H Compliant



Important Safety Information



General Information

The information contained in this document does not overrule or replace any local practise governing the operator.

If any damage or fault is found do not use this product.

Always wear gloves. Gloves should be compliant to at least EN388:2003 1111.

Containers should only be moved by either a pallet truck or forklift operator.

Containers should not be stacked whilst product is inside. Empty containers can be double stacked provided the PCM plates are removed.



Before Use

Inspect

Check you have received the correct container. If you need help to identify Tower containers, please contact Tower.

Visually inspect the KT and KTM containers for obvious damage. All products are 100% inspected prior to dispatch but damage can occur in transport

Record (if applicable)

Log serial numbers, delivery date and any completed checks.



Mechanical Handling

KT and KTM containers have a mass between 200kg and 900kg and have a length of between 1550 mm and 2360 mm. Both must be handled with care.

KT and KTM containers are designed to be used with standard goods vehicles and pallet moving equipment. It is the responsibility of the operator to select the correct, capable equipment and use it in a safe manner. Tower accept no liability for damage or injury caused by using unsuitable equipment or operator error.

The KT and KTM containers have feet that allow 4-way entry for fork pallet movers with a minimum fork clearance of 590 x 100mm. The containers are not well suited to straddle style pallet movers.

Forklift & Pallet Trucks

When lifting the KT and KTM containers the fork tines must be fully engaged.

The length of the fork tines must be no less than 75% of the container's depth. For example, to lift a **KTM52 Tower Double US Pallet** from the door side (2360mm deep) the tines must be a minimum of 1800mm in length.

When lifting, fork tines should be equidistant from the centre line of the system.

When in motion the containers must be lifted as low as possible.

The container's feet do not have a base perimeter to allow easy access for pallet trucks, but caution must be used when accelerating, braking and turning.

Lifting and moving the KT400 and KT400D

- The **KT400** and **KT400D** must be touching the Back Rest when lifting and moving



Lifting and moving the KTM21, 22, 31 & 32 containers

Product shown below is the KTM32 Tower US Pallet

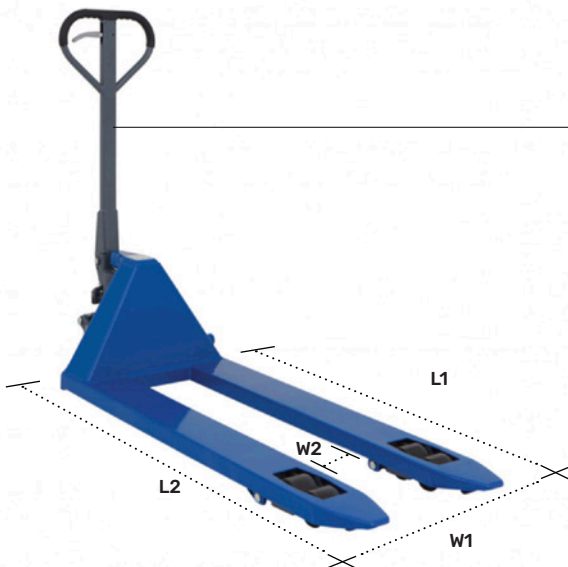


- When in motion the KTM must be lifted as low as possible
- The length of the fork tines must be no less than 75% of the KTM system depth
- The KTM must be touching the Back Rest when lifting and moving

Lifting and moving the KTM42 & 52 containers

Product shown below is the **KTM52** Tower Double US Pallet

- The correct length of forks must be used. The fork tines must be longer than two thirds the length of the KTM
The forklift may require extendable forks.
- The KTM must be positioned against the Back Rest



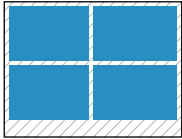
• Standard Sizes

W1	W2	L1	L2
550 mm	230 mm	1000 mm	1375 mm
550 mm	230 mm	1150 mm	1525 mm
550 mm	230 mm	1220 mm	1595 mm
685mm	365 mm	1000 mm	1375 mm
685mm	365 mm	1220 mm	1525 mm

Airline ULD Loading

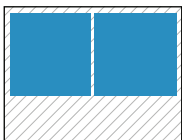
ULD: PMC

4 x KTM22 Tower Euro Pallet



ULD: PMC

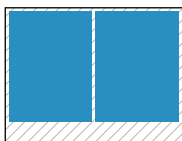
2 x KTM32 Tower US Pallet



Airline ULD Loading

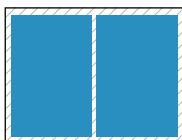
ULD: PMC

2 x KTM42 Tower Double Euro Pallet

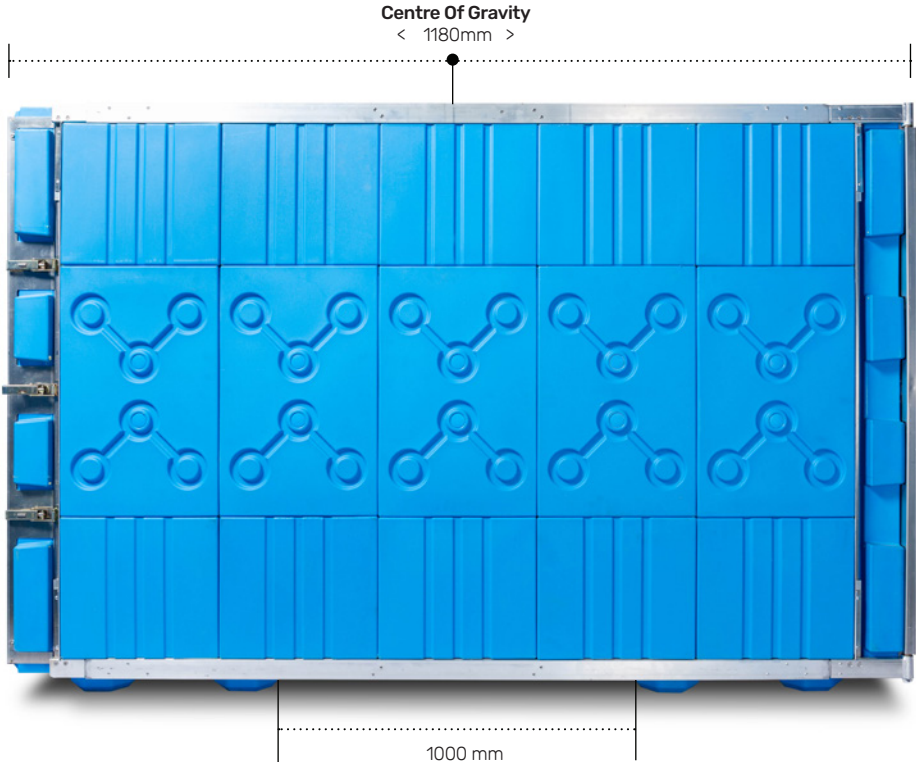


ULD: PMC

2 x KTM52 Tower Double US Pallet



Airline ULD Loading



More information

For further technical information or advice on how to handle our solutions please contact your regional Tower Hub

EMEA (Europe, Middle East and Africa)

E: EMEA@towercoldchain.com

T: +44 118 932 5000 (Europe)

T: +27 72 261 9873 (Middle East & Africa)

Americas

E: NorthAmerica@towercoldchain.com

T: +1 617 997 3017

AsiaPac

E: AsiaPac@towercoldchain.com

T: +61 478 838 140

