



va-Q-tec
Always the right temperature

Our products, systems and services are tailored to markets which require **excellent thermal insulation** and have **space restrictions**





◀ **2,000 CONTAINERS**

Our high performance container fleet is now the biggest in the world

>100,000 BOXES ▶
to be assembled in the year 2018



>250,000 FULFILLMENTS ▶



◀ **>2 MIO PANELS**

to be manufactured in our production sites in 2018



Quick Facts

2018

Growing global customer base



In-house developed & produced VIP/PCM technology is the basis for our reliable thermal packaging systems

Vacuum Insulation Panels (VIPs)



10x more efficient insulation or 10x less space



Phase Change Materials (PCMs)



PCM = 10x more efficient energy storage

Advanced passive packaging solutions

Single use boxes



va-Q-one

Multi use boxes



va-Q-proof



va-Q-med

Multi and single use
pallet-size for air
and land transportation

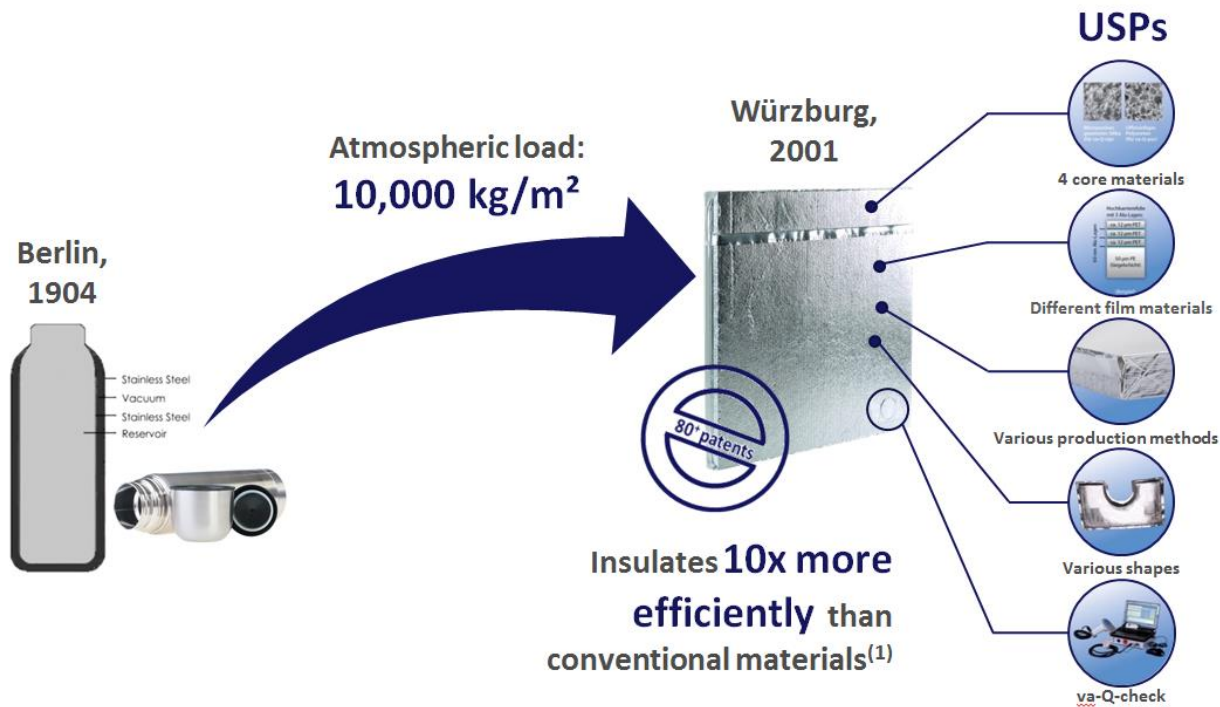


va-Q-tainer



va-Q-pal

Pioneering vacuum insulation panels (VIP)





va-Q-tainer TWIN^x

FORK LIFT

va-Q-tainer TWIN^x

FORK LIFT

JYP20017VQ

JYP200

JYP4

va-Q-tainer TWIN^x

va-Q

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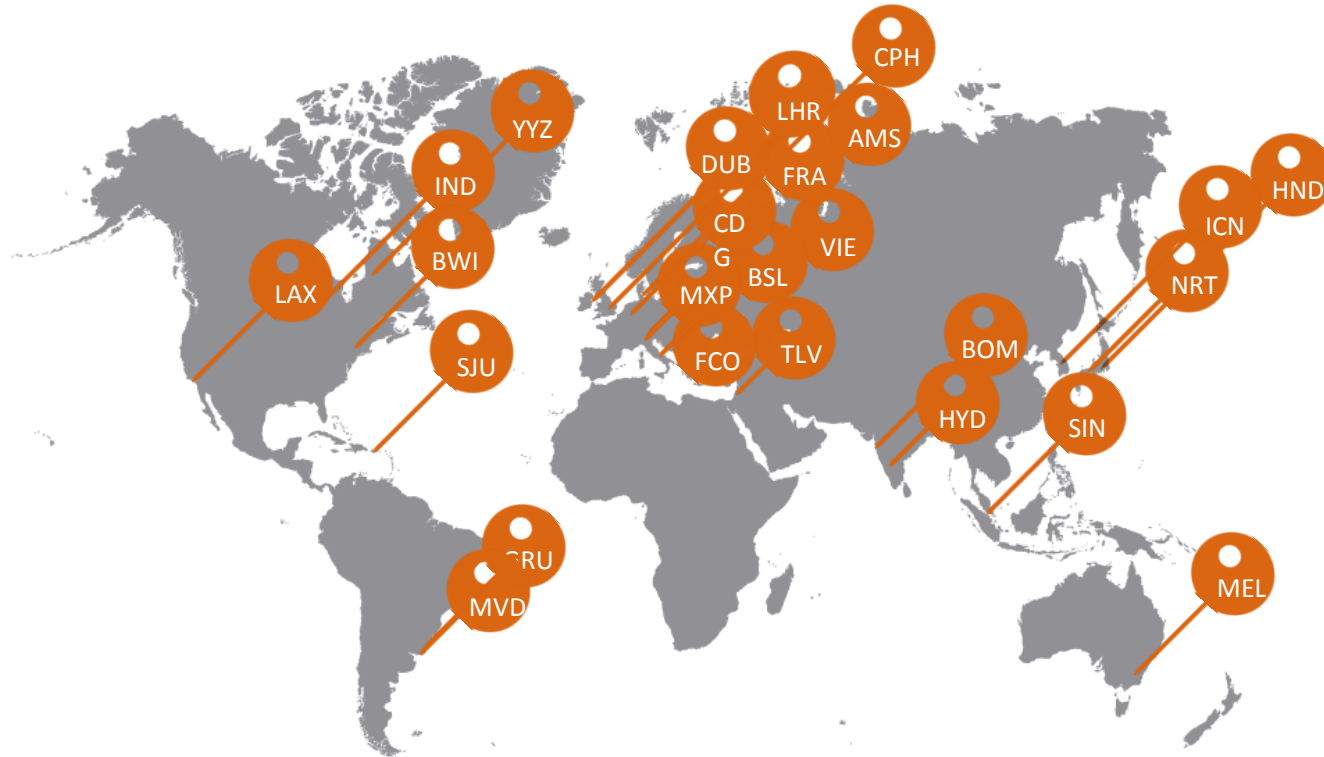
FORK LIFT

va-Q

Portfolio of solutions (single & multi-use)

	va-Q-tainer/case	va-Q-pal	va-Q-proof	va-Q-one	va-Q-med
Solution					
Usage	Clinical/Commercial bulk distribution, multi-use, one-way rental	Clinical/Commercial bulk distribution, single-use, one-way	Clinical/sample shipments multi-use, modular system, purchase/pay per use	Clinical/sample shipments, single-use, purchase	Last mile distribution, multi-use, rental model
Performance	>120 hours (standard ranges)	>96 hours (standard ranges)	96 to 168 hours (standard ranges)	>96 hours (standard ranges)	>24 hours (standard ranges)
Qualification Criteria	+30°C, 0°C constant	ISTA 7D	ISTA 7D	ISTA 7D	ISTA 7E
Sizes	96 litre, 1 EU/US pallets, 2 EU/US pallets	1 EU/US pallet	4 liter to 240 liter	4 liter to 74 liter	7 and 21 liter

va-Q-tec Network Station – Receipt/Release



New Hub in Montevideo to serve the market in Latin America

Global Network of va-Q-tec Airline Partners



Enables container return at more than 400 airports worldwide.

Rental ends with the return of the container to the the airline.



va-Q-proof/va-Q-one/va-Q-med



- 4 sizes (4, 11, 23, 43 litre)
- 3 temperature ranges
 - +2 to +8°C
 - +15 to +25°C
 - 25 to -15°C
- Services: preconditioning, repair & maintenance, delivery, data logger, outer cartons, audit trail,...
- Currently available: Würzburg (DE), Dublin (Ireland), Haerkingen (CH), Langhorne (US), Singapore

More than 250,000 deviation-free shipments completed

Proof of concept: Small boxes

Fulfillment of boxes



va-Q-tec



Product loading



ALMAC



Product delivery



Return empty boxes



va-Q-tec

- +250k shipments have been moved throughout Europe since 2016
- Zero temperature deviations
- Less warehouse space needed due to JiT delivery
- Massive waste avoidance through multiuse system

va-Q-tainer XLx +2 to +8°C

+30°C/0°C/+50°C/-20°C constant ambient

No payload, 3 tests

One configuration & one preconditioning process

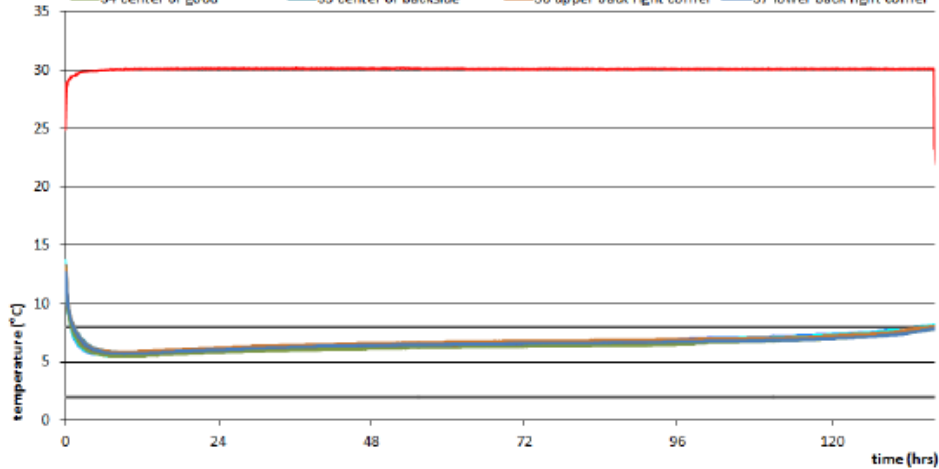
> 120 hours



va-Q-tainer XL with va-Q-accus 27L+05G

Date: 2017-09-28

— ambient — S1 lower front left corner — S2 upper front left corner — S3 center of bottom
 — S4 center of good — S5 center of backside — S6 upper back right corner — S7 lower back right corner



va-Q-one/va-Q-proof -25 to -15°C

ISTA 7D

No payload

One configuration & one preconditioning process

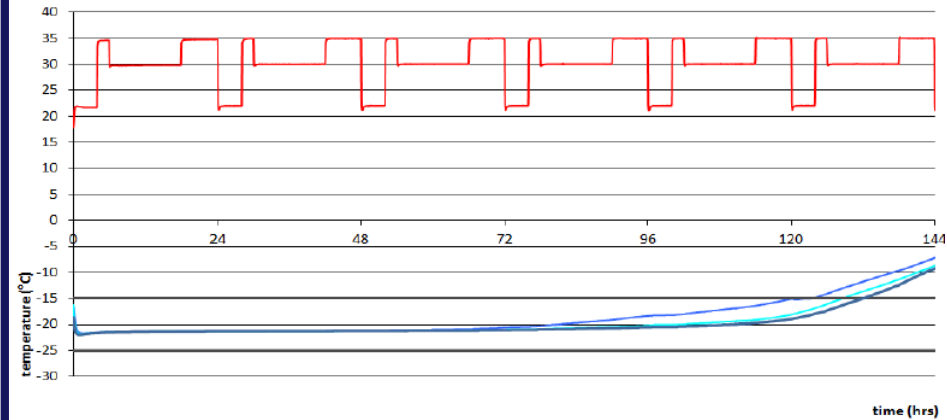
>96 hours



va-Q-proof 11L-21G

Date: 2015-10-26

— ambient — upper corner — center of good — lower corner



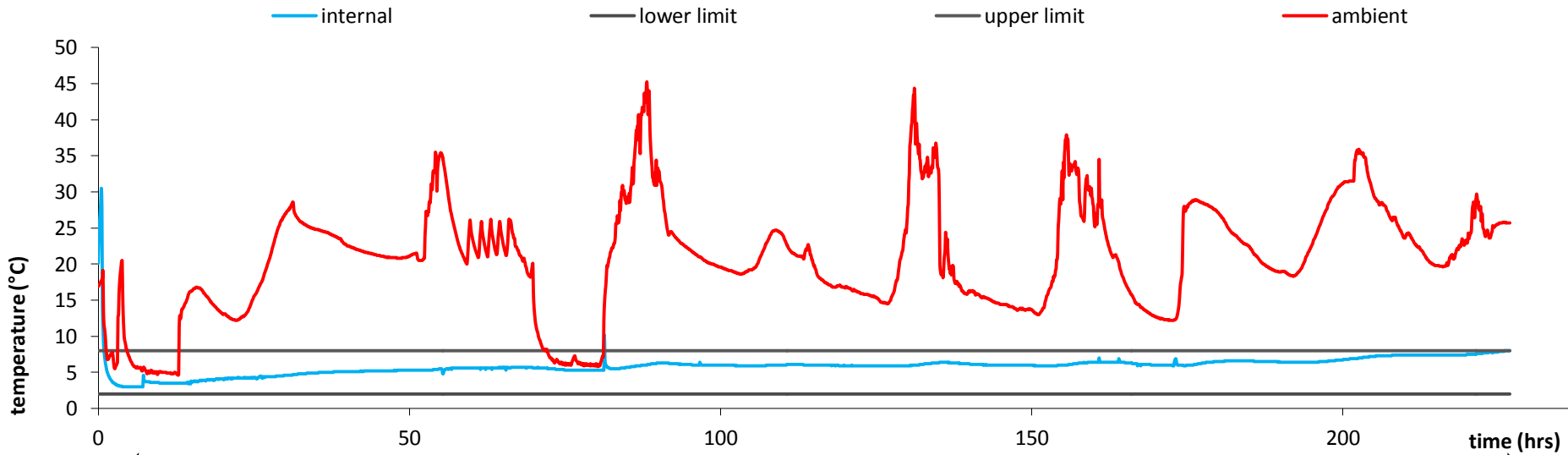
va-Q-tec Live Shipment Data

va-Q-tainer Eurox +2 to +8°C



Vienna to Mexico
Highest Ambient: 45°C
Average Ambient: 20°C

Start Date: 21.08.2017



>10 days +2 to +8°C

va-Q-tec Highlights



- Advanced passive VIP/ PCM based thermal packaging solutions from 4 liter to 2 US pallets
- Serviced rental solutions – LOAD & GO
- One configuration for all seasons
- Space and energy efficient technology → increase payload space and performance
- Dry-ice free deep frozen temperature ranges
- No issues with dry-ice limitations on aircrafts
- Cost-efficient two pallet solutions
- Extended performance through temperature controlled storage and transport
- va-Q-tainers are no ULDs – can be removed from airports ensuring an unbroken TempChain
- Easy to use - no special handling or trained personnel required - just LOAD & GO
- va-Q-tainers are re-qualified before every single shipment using a unique patented check device (va-Q-check)
- Cost-efficient one-way solutions available



Thank you very much for your attention