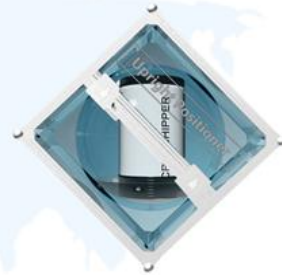




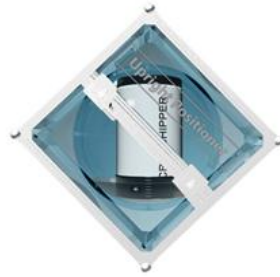
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Shipping in upright position **WAK - Upright Positioner**

Patented: CZ302701; Patent pending: WO 2011/147384



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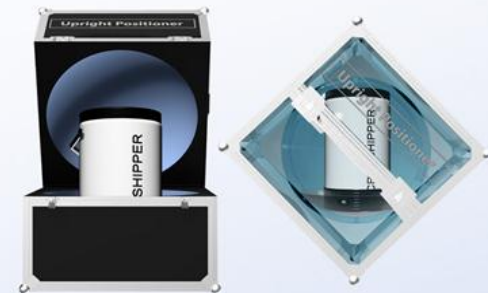
- **Until now:** Shipping at -196°C is performed in Dry/Vapor Shippers

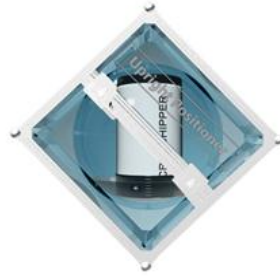


- **Until now:** tilted shippers cause extraordinary leakage of Nitrogen



- **From now on: Upright Positioner** eliminates this leakage



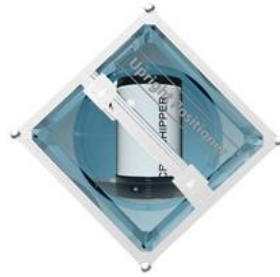


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What can happen with inadequate handling of a Dry/Vapor Shipper?

When tilted or layed cold Nitrogen is leaking out of the absorbant material inside the Dry/Vapor Shipper



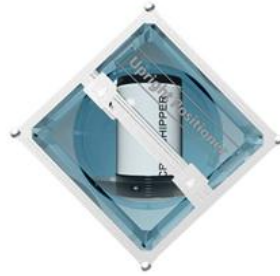


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The chain of transport – full of risks





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How does Upright Positioner overcome these risks during transport?



By maintaining upright position of Dry/Vapor Shipper.

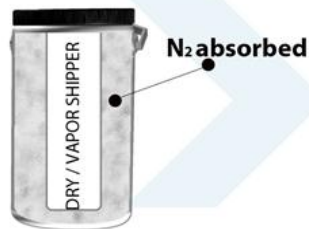


Some remarks on transport regulations:

IATA requires liquid Nitrogen to be absorbed to solid material

Conventional Transport-Containers...

Upright Positioner with Dry/Vapor Shipper mounted inside...



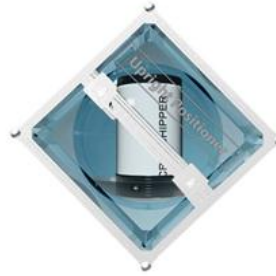
100% of holdtime at -196°C will be obtained only in upright position.
 50% of holdtime in horizontal position
 10% of holdtime upside down

... do not improve the risky situation.

... will maintain upright position during transport & storage.

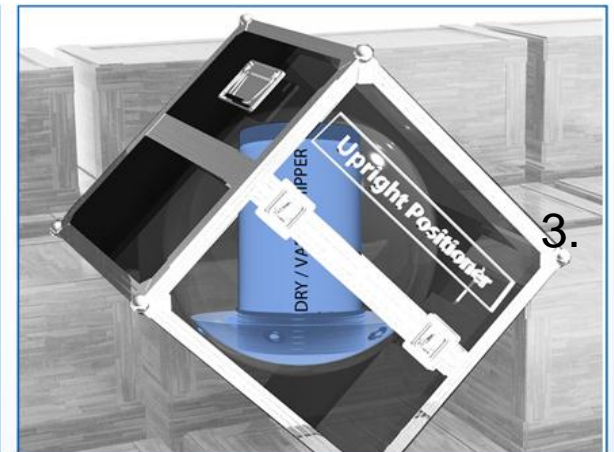
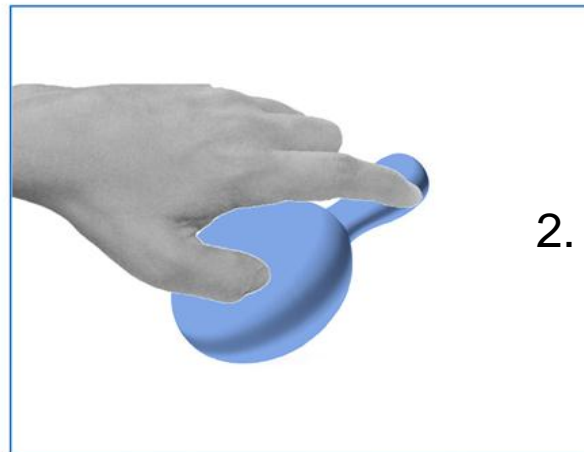
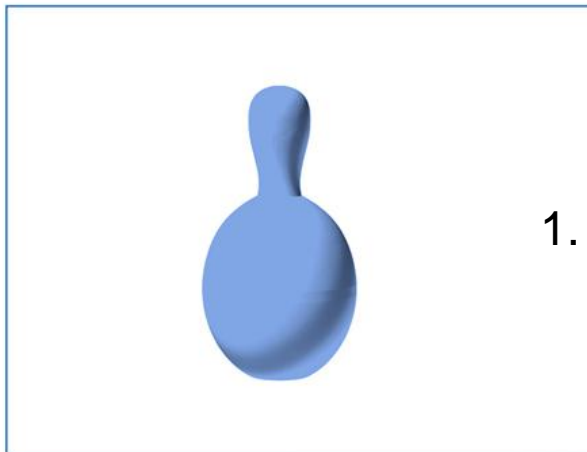
- Resulting in 100% of holdtime
- Full compliance with IATA





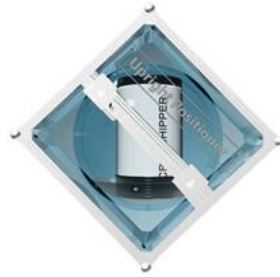
The Physics behind Upright Positioner

1. Upright position depends on center of gravity
2. Outside forces can change position of object
3. No outside forces effect position of object in Upright Positioner



How does that work?

- Object is mounted on a heavy socket, keeping the center of gravity close to the bottom. The ball-bearing fitted roller socket smoothly glides on the high precision spheric interior compartment thus providing immediate adjustment of upright position of the mounted object.



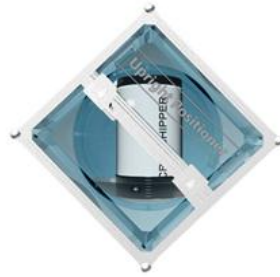
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Upright Positioner + Dry/Vapor Shipper in combination achieve:

- Constant center of gravity in any position
- Full compliance with IATA regulations
- 100% holdtime of -196° C until destination





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- Upright Positioner **has finally closed the safety gap** in transportation of grafts and delicate objects at -196°C
- Upright Positioner is available in 3 sizes:

Outer size: 57 x 57 x 57 cm
Tara Weight: 21,15 kg



Outer size: 66 x 66 x 66 cm
Tara Weight: 26,10 kg



Outer size: 78 x 78 x 78 cm
Tara Weight: 34 kg





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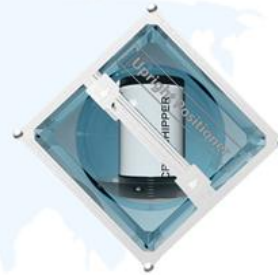
Ordering information:

Model	Dimensions	Fits to the following dry shippers
Upright Positioner -SMALL, Cat# WAK-UP-1	Outer size: 57 x 57 x 57 cm Tara Weight:21,15 kg	CX100 MVE Cryomover
Upright Positioner - MEDIUM, Cat# WAK-UP-2	Outer size: 66 x 66 x 66 cm Tara Weight: 26,10 kg	MVE CRYOSHIPPER MINI
Upright Positioner - LARGE, Cat# WAK-UP-3	Outer size: 78 x 78 x 78 cm Tara Weight: 34 kg	CX500 Taylor Wharton MVE CRYOSHIPPER



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For demonstration video look:

www.upright-positioner.com