



Healthcare Logistics

Cool Corridors: lowering costs and CO₂ emissions

Temperature-controlled routes

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In pharmaceutical Air Logistics, temperature excursions rarely come down to a single failure. They happen when time, handling, packaging performance and human behaviour intersect. Even small disruptions can put product integrity at risk.

Cool Corridors is designed for exactly this reality. By combining

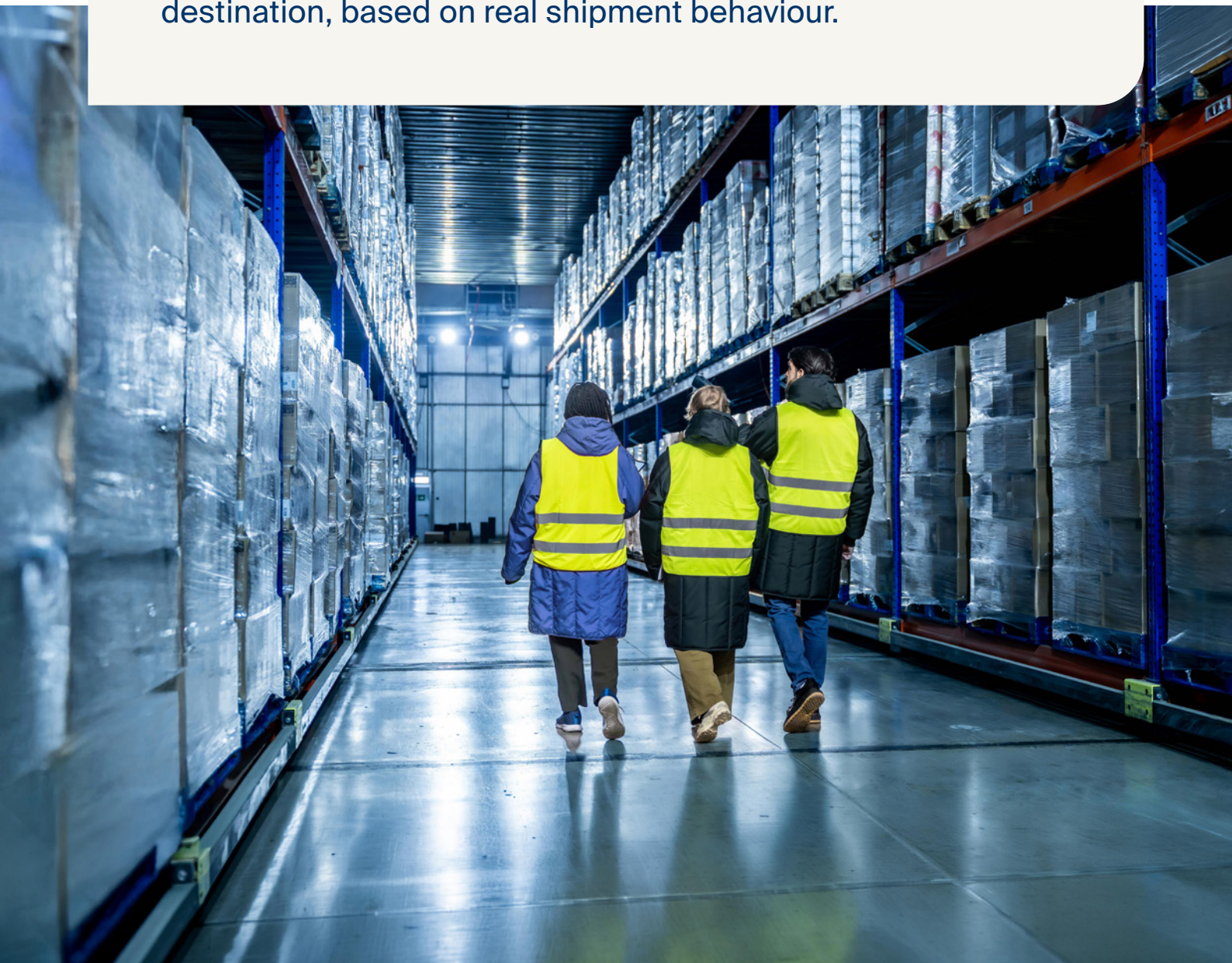


validated processes, aligned partners, optimised passive packaging, and real-world testing, they create reliable, temperature-controlled routes. Because there is no such thing as a standard shipment, every corridor is built on preparation, testing and transparency to reduce risk and deliver dependable outcomes on a global scale.

What is a Cool Corridor?

A Cool Corridor is a temperature-controlled airfreight lane for healthcare shipments. It keeps products within +2°C to +8°C and +15°C to +25°C by combining the Kuehne+Nagel HealthChain-certified network, qualified carrier solutions and optimised passive packaging—ensuring consistent quality from origin to destination.

Cool Corridors address this complexity holistically. Rather than compensating for uncertainty with costly active containers, the focus is on controlling every step of the journey, from origin to destination, based on real shipment behaviour.



The origins

Cool Corridors began with test shipments. Early pilot lanes such as Brussels to Chicago and Brussels to Singapore were selected to understand real cargo hold conditions, carrier capabilities, and operational risk points under live conditions.



These test movements made it possible to review passive packaging performance, identify potential failure points, and refine processes before scaling.

At the core of every Cool Corridor is strong process control. When processes are clearly defined, monitored and consistently executed, customers can

confidently reduce reliance on active containers or passive pallet shippers, transition to optimised passive packaging and lower total logistics costs without compromising quality. Live monitoring devices connected to HyperCare provide real-time temperature visibility, enabling rapid intervention where needed.



Adopting Cool Corridors is as much a change-management exercise as it is a logistics project. Within a single pharmaceutical organisation, alignment is often required across various stakeholders, including procurement, quality, operations and supply chain design. Each function assesses risk and value differently, making transparent validation and tailored discussions essential to building confidence.

That confidence is closely linked to packaging strategy. Cool Corridors

rely primarily on optimised passive packaging, avoiding many of the cost and complexity challenges associated with active containers and passive pallet shippers. Compared with active solutions, this approach eliminates unexpected lease-day costs, reduces overall logistics spend by 30–50%, improves pallet stacking and aircraft utilisation, and enables reusable packaging with clearly defined return flows. Packaging configurations are selected lane by lane, based on product stability and observed corridor behaviour.

A structured partner ecosystem

Cool Corridors depend on a fully aligned partner ecosystem, spanning airlines, ground handlers, cool-truck operators, warehouses, and packaging and stacking solution providers. Clear, documented agreements define roles, handling times and escalation paths, creating transparency and trust across the entire corridor.

Unlike other solutions on the market, Kuehne+Nagel's Cool Corridors leverage commercial airline partners. This approach enables broader global reach, direct access to HealthChain-qualified facilities and greater flexibility in destination coverage. At the same time, the use of optimised passive packaging delivers built-in sustainability benefits.

By eliminating heavy active, hybrid, and passive containers, overall shipment weight is reduced, lowering CO₂



emissions, while lightweight reusable packaging and structured return flows further improve environmental performance.

Conclusion

Cool Corridors is not designed as a one-off solution, but as a long-term approach to improving reliability in temperature-sensitive Healthcare Logistics. New lanes continue to be introduced, including connections from Europe and the United States into Brazil, with more in the pipeline. Reliability in pharmaceutical airfreight does not happen by chance. It is the result of preparation, testing and continuous learning, engineered step by step, one corridor at a time.

About us

Kuehne+Nagel is about making logistics work smarter for our customers. With a global network and deep industry expertise, we help businesses navigate complexity and unlock growth through reliable, digital services, advanced technologies and data-driven insights.

As the logistics partner of choice for companies worldwide, we deliver tailored, end-to-end supply chain solutions across Air, Sea, Road, and Contract Logistics.

Discover the future of logistics.

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