

FedEx ® Customized Freight

Temperature Control

What is FedEx[®] Customized Freight?

The global reach and reliability of the world's largest all-cargo aircraft network with end-toend shipment customization and management

- Part of the overall FedEx Global Air Freight Portfolio that is time specific, customized to meet your needs, and managed end to end for you
- Flexible pick and delivery options include standard route truck, exclusive-use or temperature-controlled vehicles with specialized handling
- Available for Airport-To-Airport, Door-To-Door, Airport-To-Door, Door-To-Airport
- Specialized handling supports dangerous goods, surge projects, temperature control, product release, and specialized trucking options
- Individual skids of 151 lbs. (68.5 kg) or more; skids exceeding 70" H x 80" W x 119" L (177.8cm H x 203.2cm W x 302.26cm L), or 2,200 lbs. (997.9 kg) requires prior approval





When you have critical airfreight transportation needs, requiring time specific delivery, end-to-end management, specialized handling or temperature control, rely on this customized air freight solution where you can tailor transportation to your specifications along with the power of the FedEx global network to meet your needs.



FedEx Customized Freight is designed to support shippers in specialty verticals with special handling requirements for time sensitive and temperature-controlled freight.

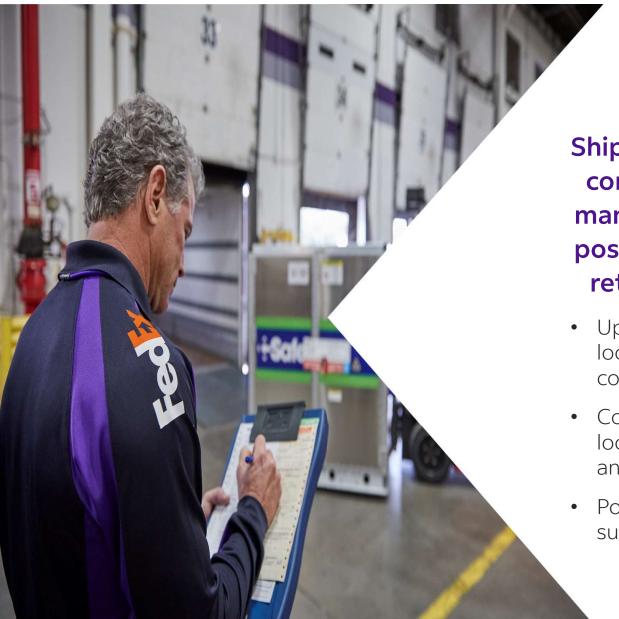
FedEx is the only transportation company with a fleet of CSafe active containers managed end to end to meet your temperature control airfreight needs.

Benefits of FedEx Customized Freight

Complete custodial control within the FedEx[®] network — from pickup through final mile delivery

- Priority movement and boarding on FedEx aircraft with visual and systematic priority identifiers
- Variety of fully qualified and tested active containers and passive temperature-controlled pallet shippers available to accommodate your specific requirements, from -25°C to +25°C
- Proactive work with controls and monitoring to ensure your shipments are handled to your requirements throughout transit 24/7/365
- FedEx Customized Freight's dedicated team and a fully embedded quality management program supports your rigorous regulatory requirements





Temperature control

Shipment management end-to-end with complete container and pallet shipper management, including container lease, positioning, pre-conditioning, container return and contingency management

- Updates with critical shipment details, including location, temperature, regulatory control/clearance status and delivery status
- Coordination with shipping and receiving locations to prepare sites for receiving, loading, and unloading the container or pallet shipper
- Post-shipment temperature data, and supporting a full quality management program

Temperature controlled options

A variety of full-range, qualified temperature-controlled air containers and packaging solutions

From **active** technology that uses compressors or batteries that power fans with dry ice to maintain temperature, to **passive** technology utilizing phase change material, dry ice or gel packs to maintain temperature, paired with a full quality management program and customizability meaning, we have solutions to fit your temperature control needs.



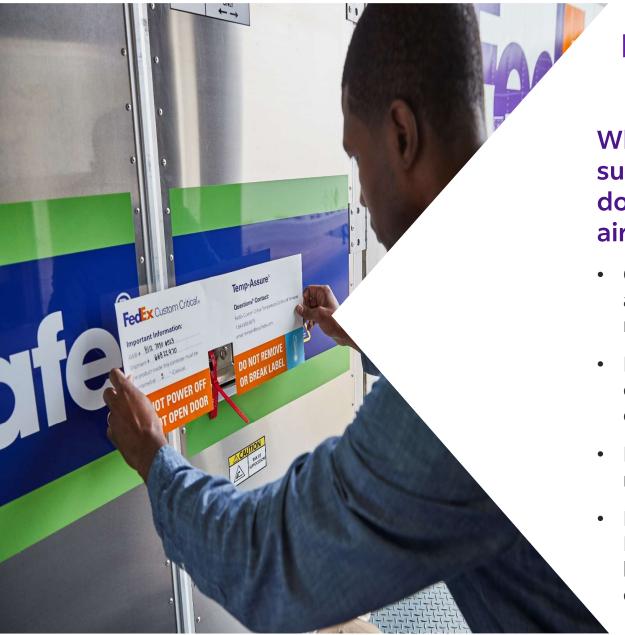
FedEx Customized Freight offers a variety of qualified container options backed by a specialized quality management program

As product moves from clinical to commercial, we can maintain the temperature range to support compliance in each stage.

Container		Insulation	Temp Range	Duration	
	CSafe RKN/RAP	Active, VIP Insulation	4°C to 25°C	130+ Hours	
Image: Section of the section of t	CSafe APS	Passive, Phase Change	< -20°C to 25°C	120+ Hours	
	Envirotainer e1 RKN/e2 RAP	Active	0°C to 25°C	100+ Hours	
	Prooftainer US/2US/Euro/2Euro	Passive, Phase Change	-25°C to 25°C (available at -70°C with dry ice for specialized projects)	120 Hours	
	Silverpod Max	Passive, Phase Change	2°C to 8°C	120 Hours	
	Bring your own passive packaging	To meet FCF quality standards, customer supplied packaging must be forklift able and be validated for transit time plus 24 hours. FXE provided data loggers serve as temperature of record and are required to maintain quality management			
Consult with your FedEx Customized Freight specialist to discover the right					

Consult with your FedEx Customized Freight specialist to discover the right container and size to meet your temperature-controlled requirements

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Embedded end-to-end quality management system

When you require quality management support, regulatory compliance and documentation end-to-end for your airfreight shipments

- Quality program built on cGDP best practices and standards that enable you to meet your regulatory requirements
- Maintaining the integrity of FedEx leased active containers with regular maintenance and calibration processes
- Regular audits to ensure quality standards are met
- Leverage the knowledge and expertise of our FedEx Customized Freight dedicated team to build your unique temperature solution with your customized processes

Quality management program includes:

- Qualified and thermal-mapped equipment
- Temperature documentation
- Deviation reporting
- Document control
- Change control
- Quality audits and agreements
- Corrective and preventative action
- Carrier partnerships managed to meet quality standards
- Quality standard operating and validated procedures
- Contingency planning
- Validation master plan
- Continuous improvement



FedEx Customized Freight includes an embedded quality management program that supports your cGDP requirements

Solution Created	Shipment Managed	Shipment Completed
Develop Custom Solution FedEx Customized Freight's dedicated team works with you to develop a customized solution based on your requirements	Request Shipment When you need to ship, simply contact the FedEx Customized Freight team and include all necessary paperwork.	Time Specific Delivery Your critical shipment is delivered to the destination with your time specific commit
Account Set up You will receive a FedEx Customized Freight specific account number with your all in rate per Ib./kg to be used for FedEx Customized Freight shipments only	Shipment Booking FedEx Customized Freight team books the shipment, creates the air waybill, and initiates clearance actions for international shipments	Post Shipment Quality Actions Temperature data reports are provided by the temperature of record devices
	Container and Pallet Shipper Logistics FedEx qualified containers or pallet shippers receive end to end logistics including preconditioning, positioning, return, recording devices and seals.	Invoice FedEx Customized Freight Shipments are billed on your FCF account number and count towards your earned discount
	Proactive Work FedEx Customized Freight team begins advanced work to prioritize your shipment's journey, schedule pick up and delivery based on your customizations and times, enacts special handling and movement within the FedEx network tailored to your solution	
	End to End Management and Visibility Proactive monitoring and specialized shipment handling begins with status updates based on your communication preferences	0-
	Container Handling Specialized container SOPs are followed at each location such as cold storage and plugging in active containers to preserve battery. Container battery level and temperature readings are provided at every touchpoint	Temperature controlled Shipments Only

Clearance considerations to enhance your FedEx Customized Freight experience

Using clearance inclusive FedEx Customized Freight can simplify the international shipment experience ensuring your most critical shipments are prioritized during every aspect of the journey under full FedEx custodial control

FedEx Inclusive Clearance	Special Brokerage Processing	Automated Harmonized System Classification
 Prioritized clearance with freight Pre Clearance processes Improved performance over Broker Select 	 Complete clearance and regulatory management Systems integration for seamless updates 	 Automated HS code classification Systems integration for automatic updates

Pharmaceutical company required support for bulk move of finished goods for new product launch



Customer Challenge

- Pharmaceutical company required bulk temperaturecontrolled finished pharma shipments India outbound for a European launch.
- Competitors could not secure the number of containers and aircraft space for bulk distribution requiring a longer launch and transit time. The longer transit time posed a risk for temperature deviation.
- Destination did not have proper equipment to offload bulk containers.



FCF Customized Solution

- FedEx Customized Freight was able to position qualified FedEx managed assets to the origin for bulk loading.
- FedEx Customized Freight team worked to confirm space on FedEx aircraft and priority movement from origin to destination. Access to assets eliminated the delays to launch and reduced transit time
- FedEx Customized Freight remained agile to address last minute change with contingency actions pivoting the delivery plan to safely and securely offload the bulk freight to a dedicated qualified temperature-controlled vehicle for final delivery.

Healthcare company required highly regulated international move for research and development



Customer Challenge

- Healthcare company R&D team required highly regulated frozen shipments containing human tissue to move internationally for research.
- Competitors were not able to design and contract a solution for such a unique dangerous goods biological commodity.
- Customer required guidance on the correct and most suitable lanes, clearance options, and temperature-controlled containers.



FCF Customized Solution

- Utilizing a FedEx qualified passive solution managed through the Quality Management Program created a more manageable shipping experience for the customer and reduced contractual liabilities
- FedEx Customized Freight Quality team coached the customer through regulatory guidelines and developed a customized journey adhering to the industry standards.
- FedEx Customized Freight team was able to assist with the pre-clearance process and enforce a standard contingency plan in the event of a delay.

Pharmaceutical company's logistics department required regular global distribution of multiple vaccines with varying temperature

requirements



- Pharmaceutical company required global distribution of various finished temperature-controlled vaccines.
- Regional regulatory compliances made shipment set up difficult and resulted in clearance delays.
- Customer's complex requirements included multiple temperature ranges and special handling.



FCF Customized Solution

- FedEx Customized Freight team assisted with initiating pre-clearance steps and provided transportation inclusive clearance options to expedite the clearance process.
- FedEx Customized Freight's array of qualified managed temperature-controlled containers offered a variety of temperature ranges to meet the customer's requirements.
- Quality management systems provided superior handling and controls with end-to-end visibility.