

The Ultimate Guide to Shipping Container Types: What Every Shipper Should Know in 2025

Article Summary: Learn the differences between GP, High Cube, Double Door, Open Top, Flat Rack, Reefer, and other ocean freight containers. This comprehensive guide helps exporters, eCommerce brands, and logistics managers choose the right shipping container type to save money, reduce damage, and improve shipping efficiency in global trade.

Why Understanding Shipping Container Types Matters for Global Logistics

As global trade accelerates in 2025, more exporters and eCommerce brands are building independent websites to reach international customers directly. But one challenge remains universal: choosing the right shipping container type for each shipment.

Whether you are sending consumer products, machinery, fresh food, or long oversized cargo, understanding [ocean freight containers](#) can significantly reduce [logistics costs](#), prevent cargo damage, and improve transit efficiency.

This article explains all major shipping container types, including GP, High Cube, Double Door, Open Top, Flat Rack, Reefer, and more—using simple language tailored for shippers and logistics teams who need practical guidance for real-world shipping decisions.

9+

Main container types

20-40 ft

Standard sizes

95%

Use GP containers

30-50%

Cost savings with right choice

Overview of the Most Common Shipping Container Types

Below is a complete breakdown of the [container types](#) most frequently used in global ocean freight shipping. Understanding these options will help you make informed decisions that protect your cargo and optimize shipping costs.

Key Container Categories

Modern shipping containers are designed for specific cargo requirements. Selecting the appropriate container type can mean the difference between successful delivery and costly damage claims.

Container Type	Abbreviation	Best For	Key Feature
General Purpose	GP / DRY	General cargo, boxes, pallets	Most economical
High Cube	HC / HQ	Bulky lightweight cargo	1 foot extra height
Double Door	DD	Long cargo, steel pipes	Front and rear doors
Open Top	OT	Over-height cargo, machinery	Removable roof
Flat Rack	FR / FK	Oversized equipment, vehicles	Open sides
Platform	PL	Ultra-heavy project cargo	Flat platform only
Reefer	RF / RE	Frozen food, pharmaceuticals	Temperature controlled
Ventilated	VENT	Coffee, cocoa, agricultural	Airflow system
Flexitank	FLEXI	Bulk liquids, oils, juices	GP with flexible bag

Types of Shipping Containers & Their Uses



Dry Container

General use for dry goods (textiles, electronics, boxes)



Reefer (Refrigeriated)

For perishable items like food, dairy, and pharma



Open Top

For cargo taller than the container (e.g. heavy machinery)



Flat Rack

For large, awkward-shaped or heavy cargo (e.g. vehicles, pipes)



Tank Container

For bulk liquids, chemicals, and gases



Ventilated Container

For airflow-sensitive items like coffee, cocoa



Insulated Container

Keeps temp stable (not powered), short-distance cooling



Double Door Container

Doors on both ends, fast loading/unioading

Quick Reference: Container Specifications and Parameters

Understanding container specifications is crucial for accurate [freight calculations](#)

and cargo planning. Below is a comprehensive comparison of key parameters for the most common container types.

Container Type	Size	Internal Dimensions (L×W×H)	Capacity (CBM)	Max Payload	Tare Weight
GP Container	20ft	5.90m × 2.35m × 2.39m	33 CBM	28,200 kg	2,300 kg
GP Container	40ft	12.03m × 2.35m × 2.39m	67 CBM	26,700 kg	3,800 kg
High Cube (HC)	40ft	12.03m × 2.35m × 2.70m	76 CBM	26,580 kg	3,920 kg
High Cube (HC)	45ft	13.56m × 2.35m × 2.70m	86 CBM	27,700 kg	4,800 kg
Reefer Container	20ft	5.44m × 2.29m × 2.27m	28 CBM	27,700 kg	3,080 kg
Reefer Container	40ft	11.58m × 2.29m × 2.27m	60 CBM	27,300 kg	4,800 kg
Open Top (OT)	20ft	5.89m × 2.34m × 2.35m	32 CBM	28,200 kg	2,360 kg
Open Top (OT)	40ft	12.01m × 2.34m × 2.35m	66 CBM	26,700 kg	3,940 kg
Flat Rack (FR)	20ft	5.94m × 2.35m × 2.35m	N/A	28,000 kg	2,650 kg
Flat Rack (FR)	40ft	12.13m × 2.40m × 2.13m	N/A	40,000 kg	5,000 kg

Understanding Container Specifications

- **CBM (Cubic Meters):** Total internal volume capacity - critical for calculating how much cargo fits
- **Max Payload:** Maximum weight of cargo allowed (gross weight minus tare weight)

- **Tare Weight:** Empty container weight - must be factored into total shipment weight
- **Internal Dimensions:** Actual usable space inside container (slightly smaller than external)
- **Door Opening:** Not listed but typically 2.34m wide × 2.28m high for standard containers

Special Container Parameters Summary

Double Door (DD)

Key Feature: Doors at both ends

Capacity: Same as GP (33/67 CBM)

Premium: 15-20% over standard GP

Best For: Long cargo 6m+

Reefer Temperature Range

Range: -30°C to +30°C

Power: Requires electrical connection

Premium: 2-3x standard GP rate

Best For: Food, pharma, chemicals

Flexitank Capacity

Liquid Capacity: 16,000 - 24,000 liters

Base: Standard 20ft GP container

Cost: 50-70% cheaper than ISO tank

Best For: Non-hazardous liquids

❏ **Important Note on Weight Limits:** While containers have maximum payload capacities, many shipping routes impose lower weight restrictions. Always verify with your [freight forwarder](#) the specific weight limits for your origin-destination pair. Overweight containers can result in additional charges or shipping refusal.

Expert Tip: Choosing the correct container type is crucial for [cost efficiency](#) and cargo protection. At [Sunny Worldwide Logistics](#), we help clients analyze cargo dimensions, weight, and special requirements to recommend the most suitable container type for each shipment.

Detailed Container Type Explanations

1. GP Container (General Purpose / Dry Container)

The [General Purpose container](#) is the workhorse of international shipping, accounting for approximately 95 percent of all container shipments worldwide.

Specifications:

- Available in 20ft and 40ft sizes
- Standard height: 8 feet 6 inches
- Fully enclosed with weatherproof construction
- Cargo capacity: 20ft (28 CBM), 40ft (58 CBM)

Best For:

- Cartons, boxes, and palletized cargo
- [Consumer goods](#), textiles, and electronics
- Furniture, tools, and general merchandise
- Any cargo that requires weather protection

Why Shippers Choose GP: Most economical option for standard cargo, available at virtually every port worldwide, fastest booking and lowest freight rates.

2. High Cube Container (HC / HQ)

[High Cube containers](#) offer 1 foot of extra height compared to standard GP containers, providing approximately 10 percent more cargo volume—critical for lightweight but bulky shipments.

Specifications:

- Height: 9 feet 6 inches (1 foot taller than GP)
- Most common in 40ft size (40HQ)
- Cargo capacity: 40HQ (68 CBM vs 58 CBM for standard)
- Same floor dimensions as standard containers

Best For:

- Lightweight but voluminous cargo
- [eCommerce shipments](#) with low-density products
- Furniture and home goods
- Manufacturing parts and components

Cost Benefit: While slightly more expensive than GP containers (typically 10-15 percent premium), High Cube containers can reduce total shipping costs by fitting more cargo per container, potentially eliminating the need for additional shipments.

3. Double Door Container (DD)

[Double Door containers](#) feature doors on both ends, solving a critical challenge for shippers of long cargo: safe loading and unloading without damage.

Specifications:

- Doors at both front and rear ends
- Available in 20ft and 40ft sizes
- Same capacity as standard GP containers

- Facilitates easier loading of long materials

Perfect For:

- Steel pipes, aluminum profiles, and metal bars
- Lumber, wood panels, and construction materials
- Long machinery parts and equipment
- Any cargo requiring front-to-back loading access

Damage Prevention: Double doors eliminate the need to angle long cargo through a single opening, significantly reducing the risk of scratches, dents, and structural damage during loading operations.

4. Open Top Container (OT)

[Open Top containers](#) feature a removable tarpaulin roof instead of a solid top, enabling crane loading for over-height cargo that cannot fit through standard container doors.

Ideal Applications:

- Heavy machinery and industrial equipment
- Large engines and generators
- Construction materials requiring top loading
- Tall cargo exceeding standard door height

5. Flat Rack Container (FR / FK)

[Flat Rack containers](#) have collapsible or no side walls, making them essential for oversized, overweight, or irregularly shaped cargo that cannot fit in standard containers.

Commonly Used For:

- [Industrial machinery](#) and factory equipment

- Vehicles, boats, and yachts
- Large generators and transformers
- Steel structures and construction modules
- Any cargo exceeding standard container dimensions

6. Reefer Container (RF / Refrigerated)

Reefer Containers are designed for cargo that must be transported under **temperature-controlled conditions**, making them essential for food, pharmaceuticals, and chemical industries. Equipped with built-in cooling units, reefer containers maintain stable temperatures throughout the entire shipping journey, whether by sea, land, or multimodal transport.

Specifications:

- Available in 20ft and 40ft sizes
- Temperature range: **-30°C to +30°C** (varies by model)
- Built-in refrigeration and insulation system
- Airflow management for cold-chain stability
- Cargo capacity: 20ft RF (26–28 CBM), 40ft RF (55–60 CBM)
- Power supply required during storage and transit (port & vessel)

Best For:

- Frozen food: meat, seafood, poultry
- Fresh produce: fruits, vegetables, dairy
- Pharmaceuticals and medical supplies
- Temperature-sensitive chemicals
- Any cargo requiring stable, controlled temperatures

Why Shippers Choose Reefer Containers:

Refrigerated containers ensure **precise temperature control**, preserving product quality throughout the supply chain. They are crucial for global cold-chain logistics and offer reliability, consistent airflow, and compliance with food/pharma standards (HACCP, GDP, FDA, etc.).

7. Ventilated Container (VENT / Coffee Container)

Ventilated Containers provide natural or mechanical airflow to prevent condensation inside the container—making them the preferred choice for moisture-sensitive agricultural products. These containers are equipped with ventilation openings along the top and bottom rails.

Specifications:

- Available in 20ft and occasionally 40ft
- Natural or forced ventilation systems
- Standard 8 ft 6 in height
- Cargo capacity similar to GP containers
- Prevents humidity buildup and mildew

Best For:

- Coffee beans
- Cocoa beans
- Tea leaves
- Spices, nuts, and dried agricultural products
- Any cargo requiring moisture control and airflow

Why Shippers Choose Vent Containers:

Ventilated containers reduce the risk of mold, fermentation, and humidity damage during long voyages—especially critical for tropical agricultural exports. They are widely used in South America, Africa, and Southeast Asia for commodity shipments.

8. Flexitank Container (Bulk Liquid Container)

A Flexitank Container is a standard 20ft GP container fitted with a **flexible, disposable liquid bladder** (flexitank), transforming it into a cost-efficient solution for bulk liquid transportation. Flexitanks provide up to 24,000 liters of liquid capacity, replacing the need for drums and IBC totes.

Specifications:

- Installed inside 20ft GP containers
- Liquid capacity: **16,000-24,000 liters**
- Single-use, food-grade or chemical-grade options
- Multi-layer polyethylene construction
- Suitable for non-hazardous liquids
- Requires professional installation to avoid damage

Best For:

- Edible oils (palm oil, olive oil, soybean oil)
- Food liquids: juice, wine, syrup
- Non-hazardous chemicals
- Industrial liquids: lubricants, additives
- Any bulk liquid requiring low-cost transport

Why Shippers Choose Flexitanks:

Flexitanks can reduce costs by **30-40%** compared to drums or ISO tanks. They maximize capacity, reduce labor in filling/emptying, eliminate container cleaning fees, and minimize contamination risk thanks to single-use liners.

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