

GENERAL INFORMATION

External and minimum internal dimensions (according to ISO)

The following table summarizes the overall and minimum internal dimensions defined in ISO 668. General-purpose containers are classified by ISO 668, which specifies the following general parameters:

General Purpose Shipping Container Dimensions		Length		Width	Heig	ht
	mm ft	mm ft	mm ft	mm ft	mm ft	mm ft
Dimonoione	6,058	12,192	13,716	2,438	2,591	2,896
Dimensions	20'	40'	45'	8'	8' 6"	9' 6"
Minimum Internal Shipping Container Dimension	5,898 19 ' 41/8 "	12,029 39' 51/2"	13,556 44' 55/8 "	2,350 7 ' 81/2 "	2,350 7 ' 81/2 "	2,667 8' 9"
Minimum door opening dimensions				2,337 7 ' 8 "	2,261 7' 5 "	2,565 8' 5 "

GENERAL INFORMATION

Maximum gross weights:

20' containers: For general-purpose containers, the maximum capacity is up to 32,500 kg (71,650 lbs), while for Flatracks it is up to 45,000 kg (99,207 lbs).

40' and 45' containers: For general-purpose containers, the maximum weight is 32,500 kg (71,650 lbs). For Flatracks, this is up to 60,000 kg (123,276 lbs) and for reefer containers it's up to 35,000 kg (77,161 lbs).

Weight limits for road and rail transport:

Contact any On-Site Storage Solution office near you for individually valid restrictions.

Floor loads:

A forklift truck with a maximum axle load of 5,460 kg (12,037 lbs) might be loaded onto a container floor if the contact surface area per wheel is at least 142 cm2 (22 in2), whereas steel-floor containers can carry up to 9,200 kg (20,282 lbs), as long as they comply with ISO 1496/I.

The maximum spread load should not exceed:

- for 20' containers: 4.8 tons (10,582 lbs) per running meter in length, and 7.6 tons (16,755 lbs) for steel floor containers only
- for 40' containers: 3 tons per running meter in length, and 6.0 tons (6,614 lbs) for steel-floor containers only
- load must not exceed maximum payload

GENERAL INFORMATION

Gooseneck tunnel on 40' containers:

The 40' containers of all On-Site Storage Solutions include a gooseneck tunnel for easy movement on a gooseneck truck.

Timber treatment:

Timber exposed to the elements is made ready according to Australian, European, Chinese, and American standards.

Container markings:

Containers display the ISO size type code.

Tolerances internal dimensions

The interior dimensions and door apertures of On-Site Storage Solutions' containers meet ISO requirements. The figures given on the following pages are merely approximations. A variation in measurement is possible as a result of manufacturing tolerances:

Shipping Container	Len	gth	Wic	lth	Height		
Dimension Tolerances	mm	ft	mm	ft	mm	ft	
Maximum difference	10	3/8	10	3/8	10	3/8	



Dry van (DV) shipping containers are another name for general purpose containers. These DV containers are the same ones seen stacked on ships, transported by trucks, and in stacks at ports.

DRY VAN CONTAINERS

These dry van shipping containers might have different door configurations depending on their use.





- Any type of freight is suitable.
- Liner bags for bulk cargo, such as malt, might be added to containers.
- Allowable floor height: 170 mm (ground level to interior floor surface, tolerance deviation possible)
- There are three distinct lashing systems on the top and bottom longitudinal rails, as well as four corner posts, with a permissible weight of 1,000 kg (2,205 lbs) each.
- Lashing rings on each top longitudinal rail, especially effective for transporting hanging garment equipment
- Most containers were assessed and certified for ONE-DOOR-OFF OPERATION, but with a restricted stack weight. (Allows for the container to be shipped with 1 door open or off)
- Maximum container load weights indicated may exceed permissible weight limits for road and rail transport.

20' General Purpose Shipping Container - 8' 6" high	Insid	e dimens	sions	Door op	penings	Weights			Capacity
	Length	Width	Height	Width	Height	Max. gross	Tare	Max. payload	
	mm ft	mm ft	mm ft	mm ft	mm ft	kg Ibs	kg Ibs	kg Ibs	M3 ft3
Steel container with corrugated walls, and wooden floor	5,900 19' 4 ¼"	2,352 7' 85/8"	2,393 7' 10¼"	2,340 7 ' 81/8"	2,292 7' 6¼"	32,500 71,650	2,300 5,071	30,200 66,579	33.2 1,172

20' General Purpose Shipping Container - 8' 6" high	Insid	e dimens	sions	Door openings		Weights			Capacity
	Length	Width	Height	Width	Height	Max. gross	Tare	Max. payload	
	mm ft				mm ft	kg Ibs	kg Ibs	kg Ibs	M3 ft3
Steel container with corrugated walls, and Steel floor	5,900 19' 4¼ "	2,352 7 ' 85/8 "	2,393 7' 10¼"	2,340 7' 81/8"	2,292 7 ' 6¼"	32,500 71,650	2,250 4,960	30,250 66,690	33.2 1,172



- Any type of freight is suitable.
- Liner bags for bulk cargo, such as malt, might be added to containers.
- Allowable floor height: 170 mm (ground level to interior floor surface, tolerance deviation possible)
- Lashing rings on each top longitudinal rail, especially effective for transporting hanging garment equipment
- Most containers were assessed and certified for ONE-DOOR-OFF OPERATION, but with a restricted stack weight.
- Maximum container load weights indicated may exceed permissible weight limits for road and rail transport.

40' General Purpose Shipping Container 8' 6" high	Inside dimensions			Door o	oenings		Capacity		
	Length	Width	Height	Width	Height	Max. gross	Tare	Max. payload	
	mm ft	mm ft	mm ft	mm ft	mm ft	kg Ibs	kg Ibs	kg Ibs	M3 ft3
Wooden floor steel container with corrugated walls	12,032 39' 55/8"	2,352 7' 85/8"	2,395 7' 10¼"	2,340 7' 81/8"	2,292 7' 6¼"	32,500 71,650	3,700 8,157	28,800 63,493	67.7 2,391



- Suitable for large objects weighing up to 2.70 m (8' 101/4") in height
- The height from the ground to the interior floor surface is 170 mm. (tolerance deviation possible)
- There are a variety of lashings systems with a maximum load of 1,000 kg (2,205 lbs) on each top and bottom longitudinal rails and corner posts.
- Lashing rings on each top longitudinally running rail, particularly good for transporting hanging garment equipment.
- The majority of containers have been tested and certified for ONE-DOOR-OFF OPERATION, but with a limited stack weight. (Allows for the container to be shipped with 1 door open or off)
- Consider the possibility of over-height vehicles (bridges, clearances, tunnels, and so on) for inland transportation.

40' High Cube General Purpose Shipping Container 9' 6" high	Insi	de dimens	sions	Door o	penings		Weights		Capacity
	Length	Width	Height	Width	Height	Max. gross	Tare	Max. payload	
	mm	mm	mm	mm	mm	kg	kg	kg	M3
	ft	ft	ft	ft	ft	Ibs	Ibs	Ibs	ft3
Steel container with corrugated walls and wooden floor	12,032	2,432	2,700	2,340	2,597	32,500	3,850	28,650	76.3
	39' 55/8"	7 ' 11¾"	8' 10¼"	7' 81/8 "	8' 6¼"	71,650	8,488	63,162	2,695



- Suitable for large objects weighing up to 2.70 m (8' 101/4") in height
- The height from the ground to the interior floor surface is 170 mm. (tolerance deviation possible)
- There are a variety of lashings systems with a maximum load of 1,000 kg (2,205 lbs) on each top and bottom longitudinal rails and corner posts.
- Lashing rings on each top longitudinally running rail, particularly good for transporting hanging garment equipment.
- The majority of containers have been tested and certified for ONE-DOOR-OFF OPERATION, but with a limited stack weight. (Allows for the container to be shipped with 1 door open or off)
- Consider the possibility of over-height vehicles (bridges, clearances, tunnels, and so on) for inland transportation.

45' High Cube General Purpose Shipping Container 9' 6" high	Insid	le dimens	ions	Door op	penings		Weights		
	Length	Width	Height	Width	Height	Max. gross	Tare	Max. payload	
	mm ft	mm ft	mm ft	mm ft	mm ft	kg Ibs	kg Ibs	kg Ibs	M3 ft3
Steel container with corrugated walls and wooden floor	13,556 44' 55/8 "	2,352 7 ' 85/8"	2,700 8' 10¼"	2,340 7 ' 81/8 "	2,597 8' 6¼"	32,500 71,650	4,700 10,362	27,800 61,288	86 3,037

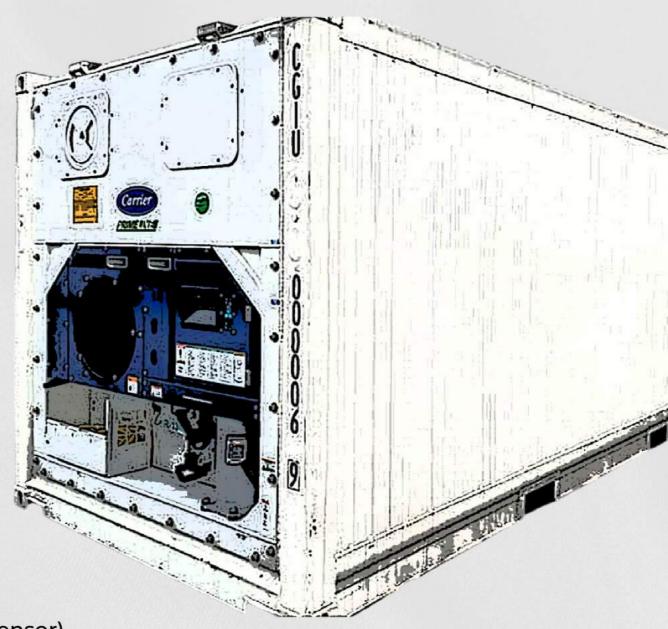
Also known as Reefers, are insulated shipping containers that are used to transport temperature-sensitive cargo.

REFRIGERATED



They are usually fitted with a refrigeration unit of sorts that controls the temperature inside the container.

- Low CO2 footprint due to less power-consuming refrigeration technology
- Pre-Trip Inspection (PTI) and maintenance procedure prior to each shipment
- This structure was designed and tested to fulfill or even surpass industrial criteria and regulations
- Constant high circulation for perishable items ensures the best temperature control
- Hygienically planned sealing-free container with side lining to protect the scuff lining
- Approved for cold treatment control, such as the USDA's requirement that it be insulated with contemporary methods.
- Low tare weight = greater payload due to the container's construction.
- Dedicated equipment available for non-foodstuff cargoes
- The unit has a -40°C to +30°C temperature range for maintaining temperature control
- This unit is also designed to maintain a positive temperature in the surrounding environment of up to 50°C.
- Multi-temperature setting (MTS) option available
- "On demand" defrosting assists to avoid unnecessary heat supply
- Reefer containers equipped with de-humidification option (including sensor)
- Maximum stowage height indicated by red line inside the container in order to ensure proper air circulation
- ATO-DLO certified by Agrotechnological Research Institute e.g. for flower bulb transportation, bulb mode option available
- All containers are suitable for shore power supply, voltages: 380V / 50 Hz to 460V / 60Hz



20' Refrigerated Shipping Container 8' 6" High	Inside dimensions			Door op	Door openings Weights			S	Capacity	
	Length	Width	Height	Max. stow. Height (to load line) mm ft	Width	Height	Max. gross	Tare	Max. payload	
	mm ft	mm ft	mm ft	mm ft	mm ft	kg Ibs	kg Ibs	kg Ibs	M3 ft3	mm ft
	5,450 17' 10½"	2,284 7 ' 57/8 "	2,267 7 ' 5 1⁄4"	2,184 7' 2 "	2,290 7 ' 61/8 "	2,264 7' 51/8"	30,480 67,196	2,905 6,404	27,575 60,792	28.2 996

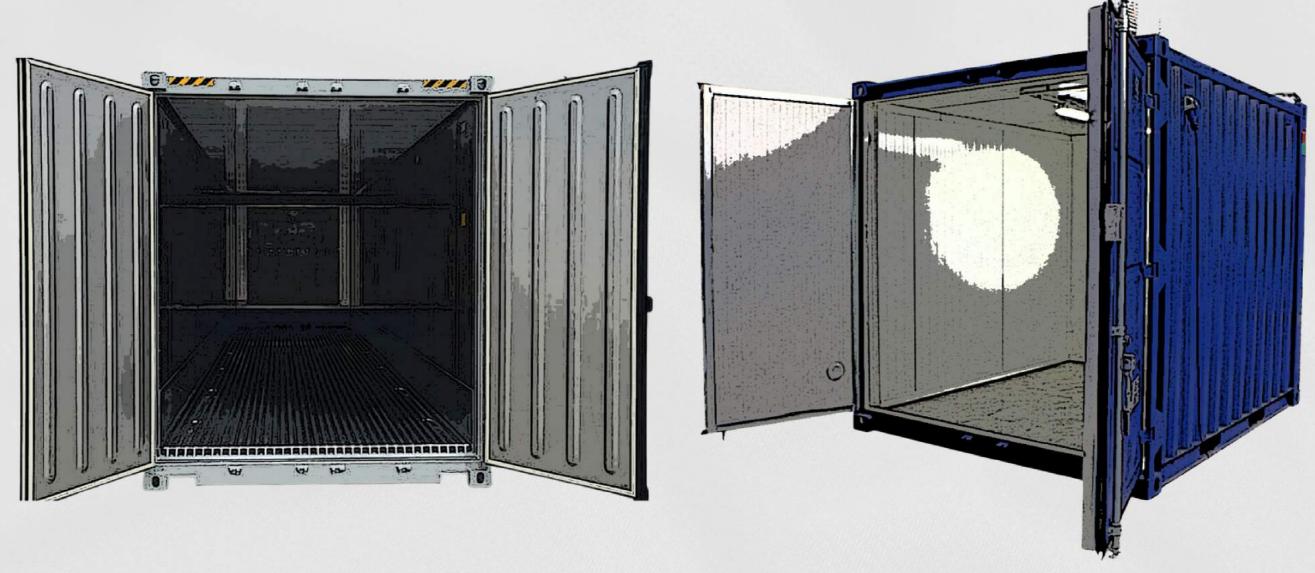


- Low CO2 footprint due to less power-consuming refrigeration technology
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- "On demand" defrosting assists to avoid unnecessary heat supply
- Reefer containers equipped with de-humidification option (including sensor)
- Maximum stowage height indicated by red line inside the container in order to ensure proper air circulation
- ATO-DLO certified by Agrotechnological Research Institute e.g. for flower bulb transportation, bulb mode option available
- All containers are suitable for shore power supply, voltages: 380V / 50 Hz to 460V / 60Hz

40' High Cube Refrigerate d Shipping Container 9' 6" high		Inside d	limensions		Door o	oenings	Weights			Capacity
	Lengt h	Width	Height	Max. stow. Height (to load line)	Width	Height	Max. gross	Tare	Max. payload	
	mm	mm	mm	mm	mm	kg	kg	kg	M3	mm
	ft	ft	ft	ft	ft	Ibs	Ibs	Ibs	ft3	ft
	11,578	2,280	2,525	2,425	2,276	2,535	34,000	4,300	29,700	66.7
	37' 11¾ "	7' 5¾"	8' 33/8"	7 ' 11 ½"	7' 55/8"	8' 3¾"	74,957	9,480	65,477	2,356

INSULATED SHIPPING CONTAINER



- Non-working refrigerated shipping containers are also known as insulated containers or nonoperating reefer containers (NOR) and they usually have one set of double doors on the end.
- These containers are insulated but do not use integrated electric refrigeration for high-powered cooling. Still, because of their significant insulation, non-working reefers protect products from severe temperature variations and the risk of mold or condensation damage far better than standard shipping containers.

SPECIALITY

SHIPPING

CONTAINERS

These containers have been adapted to transport unusual cargo that won't fit inside the typical big metal shipping containers



From transporting over-sized machinery to liquids, there's a speciality container for every need.

COLLAPSIBLE FLAT RACK SHIPPING CONTAINER



- Suitable for big items and oversized freight
- Modified bottom construction designed for loads up to 60,000 kg (123.276 lbs)
- Gooseneck tunnel on both ends of 40' platforms
- Australian standards have been applied to ensure that the timber was treated according to requirements.
- The corner posts, longitudinal rails, and base ends have a lot of powerful lashing devices.
- Allows for the transportation of heavy loads on a small load surface area.
- If you have any special demands for large or hefty goods that exceed the platform capacity, please contact your On-Site Storage Solutions office.
- The static load for 40' platforms is up to 85,000 kg (187,390 lbs) as a foundation base when shipping break bulk.

FLAT RACK SHIPPING CONTAINER

Difference between Flat Racks

	Collapsible flat rack	Non - Collapsible flat rack
Walls	Has end walls are pillar that can be detached or folded down to the base	have solid fixed end walls or pillars that cannot be removed
Strength	Collapsible walls are not intended to balance the weight and evenly distribute forces across the surface.	much stronger and structurally stiffer
Storage	can be collapsed and stacked on each other for easy transport when empty.	Requires more room for storage and cannot be stacked for transport when empty.

FLAT RACK SHIPPING CONTAINER

Flat Rack Container Specifications and Dimensions

	20' Flat Rac	k Container	40' Flat Rac	k Container
	mm	ft	mm	ft
Internal length	5890	19.32	12030	39.46
Internal Width	2350	7.70	2350	7.70
Internal Height	2380	7.80	2380	7.80
External Length	6060	19.88	12190	39.99
External Width	2440	8.00	2440	8.00
External Height	2590	8.49	2590	8.49
	kg	lbs	kg	lbs
Unladen Weight (Tare)	2,360	5,202.90	5,000	11,023.11
Payload Capacity	30,140	66,447.32	40,000	88,184.90
	m3	ft3	m3	ft3
Volume Capacity	32.7	1,154.79	62.2	2,196.57

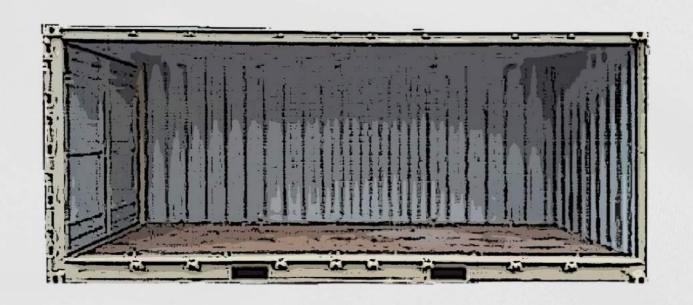
NON - COLLAPSIBLE FLAT RACK SHIPPING CONTAINER

- Suitable for big items and oversized freight
- Fork-lift pockets for loaded containers are available on all models.
- The corner posts, longitudinal rails, and base ends have a lot of powerful lashing devices.
- Each lash device may carry a weight of up to 5,00kg (11,023 lbs).
- If the total floor area of the flat rack is utilized, the maximum payload can only be employed if all goods are equally distributed.



- The payload is reduced as the weight of heavy loads is decreased. Please contact your On-Site Storage Solutions workplace for stowage recommendations.
- Stanchions are not included with flat racks. If stanchions are necessary, please notify us upon booking.
- Twist locks and spring-assisted collapsible end walls interlock 7 units to make an 8'6" high pile.
- Australian standards have been applied to ensure that the timber was treated according to requirements.
- It is absolutely prohibited to weld on flat racks.

OPEN SIDE SHIPPING CONTAINER





- A side opening container, also known as an open-sided container, is a shipping container with two extra pairs of bi-fold doors on one of the longer sides in addition to the normal, lockable double doors on one end.
- It is also known as a ventilated container because it features four sides with doors. This allows the air to enter and exit the container, which keeps the produce fresher for longer.
- Side doors have a bi-fold function, allowing for two different aperture sizes. If you're dealing with a 20-foot side opening container for example, the first hinges that swing open nearest to the container's center make for an eight-foot aperture. You can then expand the side doors even more to create a gap that allows for almost a 20-foot access. As a result, these are frequently known as "full-side access containers."

OPEN TOP SHIPPING CONTAINER



- Open Top Containers (OTCs) are a kind of container unit with a unique design. It features an open-top that is draped by a tarpaulin.
- It's designed to store heavy, bulky items that traditional containers can't handle.



- The top of the container is also accessible through broad open-top doors on either side, allowing normal products to flow through.
- Most of these covers have heavy-duty design specifications and are held in place by clamp locks that cannot be opened without a specific gadget.

OPEN TOP SHIPPING CONTAINER

Open Top (OT) Shipping Container Specifications	20 Foot 0	Container	40 Foot 0	Container
	mm	ft	mm	ft
Internal Length	5890	19.32	12030	39.46
Internal Width	2350	7.70	2350	7.70
Internal Height	2380	7.80	2380	7.80
External Length	6060	19.88	12190	39.99
External Width	2440	8.00	2440	8.00
External Height	2590	8.49	2590	8.49
Roof Opening Length	5440	17.84	11,570	37.95
Roof Opening Width	2230	7.31	2210	7.25
Door Opening Height	2280	7.48	2290	7.51
	kg	lbs	kg	lbs
Unladen Weight (Tare)	2,260	4,982	3,720	8,201
Payload Capacity	31,260	68,916	28,780	63,449
	m3	ft3	m3	ft3
Volume Capacity	32.7	1,154.3	66.7	2,355

DUO-CON SHIPPING CONTAINER



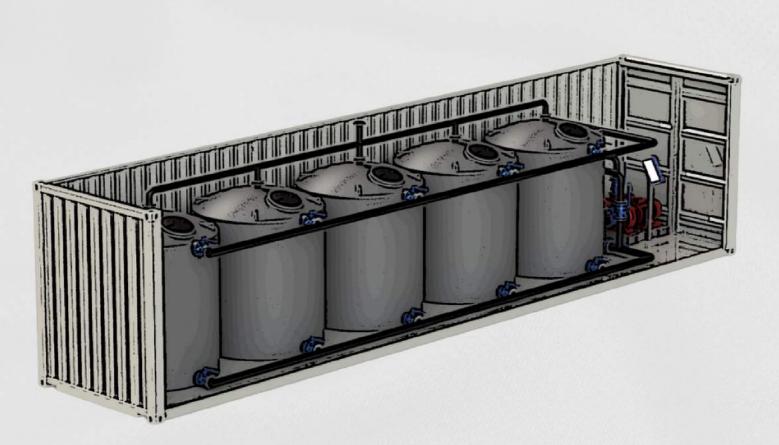


- Duo-Con shipping containers are 20-foot containers that are split in half into two 10-foot containers for easy transport.
- Once the Duo-Con arrives, it is cut in half along the special panel to form the two 10-foot containers.
- The two containers are joined together with the front walls, which must be welded to the containers to create a standard 10-foot shipping container.

DUO-CON SHIPPING CONTAINER

Duo-Con Shipping Container Specifications		n (2x10 Duo iiners)	40' Duo-Con (24x16 Duo Containers)		
	mm	ft	mm	ft	
External Dimensions	L: 6058 W: 2438 H: 2591	L: 19.87 W: 7.99 H: 8.50	L: 12,192 W: 2438 H: 2591	L: 40 W: 7.99 H: 8.50	
Internal Dimensions	L: 5844 W: 2350 H: 2393	L: 19.17 W: 7.70 H: 7.85	L: 5844 W: 2350 H: 2393	L: 19.17 W: 7.70 H: 7.85	
Door Opening		_	W: 2340 H: 2280	W: 7.67 H: 7.48	
	m3	ft3	m3	ft3	
Internal Capacity	32.8	1,158	67.4	2,380	
	kg	lbs	kg	lbs	
Max Growth Rat	30,480	67,196	30,480	67,196	
Max Payload	27,760	61,200	25,980	57,276	
Tare Weight	2,720	5,996	4,500	9,920	

TANK SHIPPING CONTAINER





- A tank shipping container is a cylindrical-shaped container that is used to store and transport dangerous and non-hazardous goods.
- ISO tanks are the safest containers for such delicate goods since they are composed of stainless steel and have an insulating and protective layer of aluminum or polyurethane.

The most common types of goods and products transported in ISO tanks are:

- Liquids
- Gasses
- Powders
- Chemicals
- Perishable and non-perishable food items

TANK SHIPPING CONTAINER

• ISO-compliant tanks are suitable for intermodal transportation. They also come in 20, 40, and 45-foot versions. However, capacity is the most important factor to consider when selecting a tank container.

Capacity	Gross Weight	Tare Weight	Payload	Max. Cargo Temp.	Test Pressure	Working Pressure
M3	Kg	Kg	Kg	°C	BAR	BAR
ft3	lbs	lbs	lbs	°F	Pascals	Pascals
21 m3	36,000kg	3,650kg	32,350kg	120°C	6.00 BAR	4.00 BAR
741.60 ft3	79,366 lbs	8,046 lbs	71,319 lbs	248°F	600000 Pascals	400000Pascals
24 m3	36,000kg	3,900kg	32,100kg	120°C	6.00 BAR	4.00 BAR
847.55 ft3	79,366 lbs	8, 59 8 lbs	70,768 lbs	248°F	600000 Pascals	400000Pascals
25 m3	36,000kg	3,730kg	32,270kg	130°C	6.00 BAR	4.00 BAR
882.86 ft3	79,366 lbs	8223 lbs	71,1143 lbs	266°F	600000 Pascals	400000Pascals
26 m3	36,000kg	4,060kg	31,940kg	130°C	6.00 BAR	4.00 BAR
918.18 ft3	79,366 lbs	8,950 lbs	70,415 lbs	266°F	600000 Pascals	400000Pascals

- It's critical to remember that the tank should be at least 80% full at all times. This will avoid the surge during transit.
- Similarly, you'll want to make sure the tank is less than 95% full to allow for thermal expansion.

SHIPPING CONTAINER CHASSIS



- A container chassis or intermodal chassis is a wheeled device that is used to transport containers between ports, warehouses, and terminals.
- A steel framework with tires and axle systems makes up a chassis. It also includes suspension, braking, and lighting systems.
- A basic chassis can transport two ISO containers (20ft and 40ft) on two axles.
- A tri-axle chassis is required to transport 20ft or 40ft containers weighing 36,000 pounds or 44,000 pounds, respectively.

Size (L x H)	Туре	ISO type group 1	ISO size type 2	ISO type group di* 1a	ISO size type di* 2a
20' x 8"	General Purpose	20GP	20G0		
20'		22GP	22G0		
x 8'6"		22GP	22G1		
20'	General Purpose (Fantainer)	22VH	22V2		
x 8'6"		22VH	22V3 *		22V2
20' x 8'6"	Ventilated	22VH	22V0		
20' x 8'6"	Bulk	22BU	22B0		
20' x 8'6"	Open Top	22UT	22U1		
20' x 8'6"	Hardtop	22UP*	22U6	22UT	22U6

Size (L x H)	Туре	ISO type group 1	ISO size type 2	ISO type group di* 1a	ISO size type di* 2a
20' x 1'11/4"	Platform	29PL	29P0		
20' x 8'	Flat (fixed ends)	20PF	20P1		
20' x 8'6"	Flat (fixed ends)	22PF	22P1		
20' x 8'6"	Flat (collapsible)	22PC	22P3		
20' x 8'6"	Refrigerated	22RT	22R1		
20' x 8'6"	Refrigerated (no foodstuffs)	22RC*	22R9 *	22RT	22R1
40'	General Purpose	42GP	42G0		
x 8'6"		42GP	42G1		
40'	Himb Cuba CD	45GP	45G0		
x 9'6"	High Cube GP	45GP	45G1		

Size (L x H)	Type	ISO type group 1	ISO size type 2	ISO type group di* 1a	ISO size type di* 2a
40' x 8'6"	Open Top	42UT	42U1		
40' x 9'6"	High Cube Open Top	45UT	45U1		
40' x 8'6"	Hardtop	42UP *	42U6	42UT	42U6
40' x 9'6"	High Cube Hardtop	45UP *	45U6	45UT	45U6
40' x 2'	Platform	49PL	49P0		
40' x 8'6"	Flat (fixed ends)	42PF	42P1		

Size (L x H)	Туре	ISO type group 1	ISO size type 2	ISO type group di* 1a	ISO size type di* 2a
40' x 8'6"	Flat (collapsible)	42PC	42P3		
40' x 9'6"	Flat (collapsible)	45PC	45P3		
40' x 8'6"	Refrigerated	42RT	42R1		
40' x 8'6"	Refrigerated (diesel genset)	42RS	42R3		
40' x 8'6"	Refrigerated (no foodstuffs)	42RC *	42R9 *	42RS	42R3
40' x 9'6"	Refrigerated	45RT	45R1		