

# Reefer claims loss prevention

A loss prevention America Focus publication

## Phase 7 – Final Delivery of the Refrigerated Container

Proper care and handling of refrigerated containers during the last leg of their journey are equally important to all the proceeding steps. Failure at this phase of the trip can send misleading signals to valued receivers of refrigerated cargoes.

Accordingly, shipping lines should ensure in advance of vessel arrival that there are enough gensets to cover their weekly volumes. If there are not enough gensets at the discharge port to cover all of the local truck moves and containers being loaded to the rail, the shipping lines operations teams must make arrangements to reposition gensets to the port of discharge.

After the refrigerated container has been discharged from the vessel and connected to a source of electric power at the container yard, preparations should be made for final delivery.



Prior to pick up by the trucker, the shipping line must check that the ocean freight has been paid, the original bill of lading has been submitted and the cargo has cleared all customs and other regulatory formalities.

When arriving at the terminal, the trucker must request a chassis and genset. The driver must ensure that the refrigerated container, chassis and genset are in

good operating condition. The truck driver should also check the temperature and fresh air exchange (vent) setting to ensure they are correctly set according to the information received from the shipping line and the drayage bill of lading or waybill. The trucker should also ensure that there is adequate fuel to power the refrigeration unit for the final delivery to the consignee. Any discrepancies should be brought to the gate clerk's attention at the terminal so that the clerk can notify representative at the shipping line to validate and ensure proper settings.

If the trucker does not want to use a genset and the haul is longer than 1 hour or the ambient temperature exceeds 80F, the shipping line should be notified.

The shipping line must contact the trucking company to find out the reason that a genset is not needed or can't be utilized. If the addition of a genset will cause the total vehicle weight (tractor, chassis, container and cargo) to exceed 80,000 lbs. (US highway limit) and/or violate axle weight and/or other over the road weight regulations, the shipping line should refer to the Loss Prevention article for guidance covering overweight containers handling guidelines for containers.

### Overweight Guidelines

The refrigerated container Partlow chart should be removed and a new chart installed prior to releasing the container to the trucker. Furthermore, the new chart should be filled out with appropriate shipments details prior to release of the refrigerated container to the trucker. The Partlow chart that was used during the ocean transit should never accompany the container during final delivery. A Partlow chart that falls into the hands of the consignee and/or other cargo interests could result in an unwarranted claim being filed due to a non detrimental temperature variance and/or a consignee mis-reading or misinterpreting the chart.



The terminal personnel should document, in part, the refrigerated container number, the temperature and vent setting, the weight of the container, cargo and chassis and the seal number on the equipment interchange receipt ("EIR").

Upon arrival at the consignee's premises, the receiving personnel should immediately check the refrigerated container's temperature and fresh air exchange (vent setting) against the driver's paperwork and inform the trucking company verbally and in writing of any discrepancies.

The refrigeration unit should not be running during the devanning of the refrigerated container to avoid the possibility of damaging the cargo due to condensation buildup on the interior of the container and cargo and /or the movement of and undesirably hot or cold outside ambient air into the container. Cold tunnels and refrigerated docks should also be used whenever possible to ensure that the cargo temperature is maintained during the devanning of the container.



Cargo should be held at the required temperature and correctly stowed in the cold rooms in order to facilitate adequate air flow management and optimal temperature management while being stored at the receiving warehouse.

The trucking company should return to the shipping line's designated terminal or off dock CY the empty refrigerated container in good order and condition. The shipping line

receiving personnel or their designee should record any damages to the container and remove and store the Partlow chart in an accessible and secure area by date.

The shipping line should take the refrigerated container out of service if any suspected temperature problems were experienced during transit and/or if the consignee has reported alleged cargo damage. While the container is out of service, the shipping line personnel should arrange a post trip inspection of the refrigerated container. As part of the post-trip inspection, the microprocessor should be fully downloaded to procure the pre-trip, event log and temperature records. All post-trip records should be maintained in an accessible and secure area by date. Responsible sales and claims management should be notified of alleged cargo damage.

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# Overweight container guide

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## Why are overweight containers and mis-declared weights a problem in the US?

Overweight containers and mis-declared weights are becoming a very serious problem - it is estimated that as many as 20% of containers are overweight or mis-declared. As containers are stacked higher to keep up with the growth of world trade, overweight and mis-declared weights can:

- Lead to vessels being improperly stowed, which can adversely affect vessel stability and possible loss of containers overboard.
- Cause damage to chassis and terminal handling equipment
- Injuries to dock workers while containers are handled in container yards
- Contribute to citations or accidents on highways and railways.

Overweight and mis-declared containers are caused by poor loading controls by shippers who try to maximize the space in the container.

## How much cargo weight can be safely and legally loaded in containers for highway transport in the US?

The maximum cargo weight that can be safely and legally loaded, when a triaxle chassis is used, for most US areas is:

- In a 20" container - 44,000 lbs (19,958kg)
- In a 40" container - 44,500 lbs (20,185kg).

Shippers must be aware that when factoring in the truck, chassis and container weight, the maximum gross vehicle weight cannot exceed 80,000 lbs (36,287kg), which is the basic legal limit for US highway transport. Even though some states allow higher weight limits, we recommend that the cargo weight is limited to the above stated maximums. Shippers must spread the weight evenly throughout the container or the container can be subject to an axle weight violation.

## How much cargo weight can be safely and legally loaded in containers for rail transport in the US?

The maximum weight that US railroads will accept or deliver for rail car movement is (including container weight) 52,900 lbs (23,995kg) in the case of a 20" container, and 67,200 lbs. (30,481kg) in the case of a 40" container. Commodities placing concentrated weight onto small areas of the container floor (such as steel coils, marble slabs etc.) are of particular concern to North American railroads because cargo can fall through the container floor and cause a derailment. Please note that containers loaded up to the rail cargo weight limit cannot move over the road as the container will exceed the 80,000 lb. highway limit.

## Where are containers currently being weighed in the US?

Most marine terminals in the US weigh export containers during the in-gate process. Containers are also weighed at highway weight scale stations and some rail facilities. Import containers are not weighed prior to out-gate from marine terminals, and shipping lines rely on the bill of lading weight supplied by the shipper overseas to determine what action needs to be taken to safely and legally move the container.

## What action should the shipping line take when they become aware that the container is overweight?

Containers found to be overweight should not be loaded onto the ship, or trucked over the road, until the shipping line has notified the shipper or consignee and advised what action the shipping line will take.

For overweight inbound containers, shipping lines can switch the bill of lading to “port to port” and force the consignee or shipper to arrange for trucking at their expense, and transfer risk for any fines or penalties that may result.

For overweight export containers moving from inland origins to the US west coast, shipping lines may have the option to use on dock rail services which eliminates the need for trucking to and from the port. Since these containers are not weighed when they arrive at the marine terminal, the shipping line and vessel planner are relying on the booked weight to stow the container on the vessel.

Shipping lines can utilise overweight corridors such as the Alameda corridor in Southern California or arrange overweight permits to truck the container to or from the rail. There is an additional cost to the shipping line for use of overweight corridor permit options, which can be billed back to the customer.

Shipping lines can utilise special equipment such as a three-axle chassis which allows for an additional 4,500 lbs. of cargo weight in a 20” container. Since these three-axle chassis are not in great supply, there is usually an additional charge when the shipping line uses them.

Shipping lines can arrange to have the overweight cargo reloaded into a second container with all costs billed back to the customer.

At no time should the shipping line force their trucker to accept an overweight container or urge the trucker to move the container at night, when there are less highway patrol officers working and/or highway scales operating.

#### **What are the fines or penalties for overweight containers in the US?**

Effective July 1, 2008 the Burlington Northern Santa Fe Railway will begin fining shippers (shipping lines are railway shippers) US\$5,000 who tender overweight equipment. BNSF will be installing scales at ramps in Chicago, Memphis, Dallas, Houston and Los Angeles, and will begin weighing containers. For shipment weights that are mis-declared, the BNSF will fine shippers US\$100 for each 1,000 lbs. mis-declared.

Shipping lines must insert a clause in the service contract to enable the shipping line to bill railway overweight fines back to the shipper that made the booking.

Shipping lines can impose fines to the shippers for overweight or mis-declared weights that arrive at marine terminals. If shipping lines decide to fine shippers for overweight or mis-declared containers, a clause in the service contract would be required. These fines act as a deterrent to force shippers to load legal weights and send a message to the shippers that the shipping lines will no longer tolerate such overloading of cargo by shippers.

Truck transport overweight container and axle weight violations vary from State to State in the US, and range from US\$1,000 to US\$5,000 per incident.

#### **Steps a shipping line should take to ensure accurate weights are recorded at interchange points**

When a booking is accepted, the shipper advises the shipping line the estimated cargo weight.

Once the cargo is actually loaded in the container and the container is scaled at an off-dock weight station, or during the in-gate process at a marine terminal, the accurate weight should be passed to the shipping line so appropriate action can be taken to load or move the container.

Each shipping line should have a process in place to ensure that the actual weight of the container is communicated to the vessel planner in order to arrange proper stowage on the vessel.

The Ocean Carrier Equipment Management Association (OCEMA) has published weight guidelines for cargo transport on their website at [www.ocema.org/cwg.htm](http://www.ocema.org/cwg.htm) and [www.ocema.org/members.html](http://www.ocema.org/members.html).

## Equipment tare weight summary

Below are approximate weights of equipment **before** considering cargo weight (reefer items in magenta).

### Containers

20' dry = 4,800 lbs. (2,177kg)

20' reefer = 6,600 lbs. (2,994kg)

20' reefer w/clip-on genset and full fuel tank = 9,600 lbs. (4,355kg)

40' standard dry = 8,400 lbs. (3,810kg)

40' hi-cube dry = 8,900 lbs. (4,037kg)

40' hi-cube reefer = 9,700 lbs. (4,400kg)

40' reefer w/clip-on genset and full fuel tank:

At rail ITM ramp origin: 12,700 lbs. (5,761kg)

At rail ITM ramp destination for on-street movement: 12,300 lbs. (5,579kg)

45' hi-cube dry = 10,580 lbs. (4,799kg)

### Chassis

20' 2-axle = 6,300 lbs. (2,858kg)

20' 3-axle = 10,500 lbs. to 10,950 lbs. (4,763kg to 4,967kg)

40' 2-axle = 6,800 lbs. (3,084kg)

40' 2-axle chassis with underslung chassis-mount genset = 8,600 lbs. to 9,000 lbs. (3,901kg to 4,082kg)

40' 3-axle = 10,800 lbs. (4,899kg)

45' 2-axle = 7,700 lbs. (3,493kg) "extendables" can be heavier

### Tractor

3-axle standard, no sleeper cab = 18,500 lbs. (8,392kg) average

3-axle road (sleeper cab) tractor = 19,000 lbs. to 21,000 lbs. (8,618kg to 9,526kg) average

### Gensets

Clip-on genset and its fuel (full tank) = 3,000 lbs. (1,361kg)

### Recommended Maximum Gross allowable Cargo Weights

20' Dry on slider chassis: 39,200 lbs. (17,780 kg)

20' Dry on Tri axle slider chassis: 44,000 lbs. (19,960 kg) maximum outside California designated Overweight Corridors, i.e., Alameda Corridor in S. Calif., and Harbor Blvd/Maritime St. in Oakland

20' RF on slider chassis: 34,900 lbs. (15,830 kg)

20' RF on Tri axle slider chassis 39,700 lbs. (18,010 kg) maximum outside California Overweight Corridors when moving with a clip-on genset

40' Dry on standard chassis 44,000 lbs. (19,960 kg)

40' Hi-cube on standard chassis 43,700 lbs. (19,820 kg)

40' RF on standard chassis 39,800 lbs. (18,050 kg) with a clip-on genset

40' RF Hi-cube on standard chassis 39,300 lbs. (17,830 kg) with a clip-on genset

**Maximum axle weights allowed when gross weight allowed is limited to 80,000 lbs. per 5-axle rig are:**

12,000 lbs. front axle (tractor steer axle)

34,000 lbs. middle tandems (tractor drive axles)

34,000 lbs. rear tandems

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