

Equipment Specifications – Intermodal

Standard Containers and Trailers

A trailer is freight equipment with undercarriage and wheels used for highway or rail transportation. A container is freight equipment constructed to allow for the attachment of a removable chassis for further transportation.

Equipment must comply with state, federal, and/or municipal size restrictions. NS places size restrictions on equipment shipped via NS as follows:

- Outside length: Minimum 19 feet (19'), and maximum fifty-three feet (53').
- Outside width: Maximum of eight feet, six inches (8'6")
- Overall height: Maximum of thirteen feet, six inches (13'6")

All Trailers and containers are required to have the following general requirements:

- Design and construction suitable for handling by standard Intermodal lift machinery, including lifting arms, twist-locks, side-pins, or any approved lift attachment Kingpin settings of units exceeding 45 ft. in length must not exceed 36 inches.
- Design and construction for safe operation on railcars, streets, and highways, including, but not limited to specifications outlined AAR Specifications M-931, M-930, M-943, and RP-931.
- AAR Intermodal Interchange Rules and AAR Manual of Recommended Standards & Practices (MSRP-I: Intermodal Equipment Manual).
- In compliance with applicable governmental safety regulations and licensing requirements in the jurisdiction where the equipment will be operated. The shipper will be responsible for all licensing for private containers, trailers, or chassis.
- Stenciled with correct unit head marks and numbers that are at least four inch (4") high lettering on all four sides on each container, trailer, and chassis. Such markings should be legible to a person standing on the ground when the equipment is loaded to a rail car.
- Suitable lifting pads and tie down brackets in such condition as to permit safe handling.
- Closed trailers and containers:
 - Must be equipped with closed side and/or end doors that must be tightly fitted and have suitable locking and/or sealing devices; and
 - Loaded open-top or flatbed equipment must be protected by tarpaulin, and other adequate protection supplied and installed by the consignor.
- The shipper is responsible for supply of any additional equipment such as tarpaulin, chains, tie downs, binders, and liners for both private and railroad equipment.
- Locks placed by shippers must be removed by consignee. NS assumes no responsibility for their return.

Shipping Weight Limitations

Gross **Lading Weight** includes the weight of the lading, and all blocking and bracing as listed on the Bill of lading for a shipment.

NS will not accept any shipments where the gross lading weight exceeds the following parameters:

Equipment	Max Gross Weight (Local and Received Service)	Max Weight (Interline Forwarded Service)
Trailer or Container on Chassis	65,000 pounds	The lessor of the connecting carriers' rules governing maximum weight or those outlined for NS local and received service.
Container	52,900 pounds	
Container	67,200 pounds	
Containers on chassis (TOFC)	65,000 pounds	

Tank Containers

A tank container is any tank used for bulk transportation without a permanently affixed undercarriage which may be mounted on a chassis. Tank containers are a restricted equipment type for movement on NS. Such shipments must move under an equipment specific price authority.

Tank containers tendered to NS must confirm to 49 CFR 173.63 and are subject to AAR Intermodal Rules 8 and 9, AAR 600, AAR M-943, and M-931.

Prior to tendering a tank container shipment to NS, shipper is responsible for inspecting and ensuring the following provisions are met:

- The tank container is free of defects, latent or otherwise, including a separated outer shell or problems with the supporting fixture that could result in potential failure.
- That the man-way covers, cam locks, calves, or similar devices are closed and secured, and do not protrude to ensure leakage will not occur.
- Loaded tank container shipments must be loaded to a minimum of 80 percent of rated capacity of tank, and the center of gravity of a loaded tank container on a chassis must not exceed 76 inches above the bottom of the tires.
- Tank containers exceeding 7,000 gallons in capacity must be equipped with baffles so that:
 - No section exceeds 1,200 gallons in capacity or 120 united inches in length, and
 - Each baffle must have an area not less than 80 percent of the cross-sectional area of the tank.

When moving a tank container to or from an NS terminal equipped only with bottom lift facilities (Greensboro, NC):

- Container must have pads or frames to allow bottom side loading or unloading with cranes
- NS reserves the right to refuse to lift container that NS judges to have unsuitable frame support for bottom lifting.
- NS will not be liable for tank container damage due to bottom lifting.