

## Container Handler

Used Container Handler Northwest Territories - Also known as container ships or cargo ships, container handlers use large intermodal containers to transport their goods. Containerization is the shipping method that utilizes commercial freight transport to carry seagoing cargo in non-bulk sizes. The capacity of these specialty ships is equal to twenty-foot loads. Most loads are a mix of 20' and 40' containers. Roughly 90% of non-bulk items all over the world travel via container ships. Container handlers are one of the biggest vessels sailing and are the main rival for oil tankers on the ocean. Dry cargo falls into two main categories: bulk cargo and break-bulk cargo. Coal and grain are considered to be bulk cargo items. They are typically transported in their raw form within the hull of the ship, free from packages in immense volume. Break-bulk cargo items normally consist of manufactured goods that are transported in packages. Before the 1950s when containerization hadn't been invented yet, break-bulk materials were loaded, secured and unattached one piece at a time in a very time-consuming process. Once cargo began being grouped into containers, between 1000 to 3000 cubic feet of cargo can be moved simultaneously after each container has been secured with standardization. Overall efficiency has largely increased with break-bulk cargo shipping. It is estimated that shipping time has been reduced by eighty-four percent and costs have been reduced by approximately thirty-five percent. In 2001, over ninety percent of non-bulk materials were recorded as being transported in containers. The initial container ships in the 1940s were designed from tankers that were converted post-WWII. Cargo ships do not use individual dividers, holds or hatches that are a part of traditional container ships. The typical container ship's hull is a basically a large warehouse that is divided by vertical guide rails into cells. These cells have been engineered to hold the cargo in containers. Most cargo ships are designed from steel but additional materials such as plywood, fiberglass and wood are used. Designed to be completely transferred to and from trains, semi-trailers, trucks, coastal carriers and more, there is a variety of container types that are categorized by their function and size. Containerization has revolutionized the shipping industry; however, it did not start out in the easiest fashion. Railway companies, ports and shippers were initially concerned about the extensive costs associated with building the railway infrastructure and ports required to accommodate container ships, along with moving the containers via road and rail. Numerous trade unions were concerned that containers would affect port jobs and manual labor associated with cargo handling for dock and port workers. Approximately ten years of legal battles occurred prior to container ships began international service. A container liner service from the Dutch city of Rotterdam to the USA first started in 1966, soon to change world trade and shipping across the globe. Initially, it took days to unload and load traditional cargo vessels. Container ships have transformed timelines by only requiring a few hours for loading and unloading. Cutting labor finances and shortened shipping times between ports has been hugely successful. It only takes a few weeks to deliver items from India to Europe and vice versa, whereas it used to take months previously. Generally, there is less damage to materials thanks to less frequent handling. Securing loads properly also helps with less cargo shifting during transport. Before shipping, containers are closed and only opened after they arrive at their new location to prevent theft and damage. Container ships have reduced shipping time and lessened shipping expenses, resulting in enhanced international trade growth. Cargo that used to arrive in bales, crates, bags, cartons or barrels now arrives in containers sealed from the factory. There is a product code on the contents utilized by scanning machines and computers to trace. Technology has made this tracking system accurate and exact to enable a two week voyage to be timed for arrival within an accuracy rate of under fifteen minutes. This time management has helped with manufacturing times and guaranteeing delivery. Raw materials are delivered in less than an hour in sealed containers within an hour prior to being utilized for manufacturing. This results in more accuracy and less inventory costs. Boxes are provided by shipping companies to the exporters to facilitate loading merchandise. Items are delivered into the docks by road or rail or a combination to be loaded onto cargo ships.

Containerization has streamlined the process of loading by reducing the number of workers and hours it takes to fit cargo into their holds. Cranes are used in the shipping industry or on the pier to organize containers. After the hull has been fully loaded, additional containers can be attached to the deck. The key design element for container ships has been efficiency. Break-bulk ships may carry containers. However, cargo holds that have been dedicated to container ships have been carefully built to speed up the loading and unloading process and designed to keep containers secure while traveling the ocean. The specialized hatch design allows openings from the main deck to access the cargo holds. A raised steel apparatus called the hatch coaming surrounds these openings that are found along the cargo hold breadth. There are hatch covers located on top of the hatch coamings. Tarps and wooden boards held down the battens and secured the hatches until the 1950s. Nowadays, solid metal plates comprise the hatch covers and cranes lift them onboard and off of the ship. There are other hatch models that rely on articulated mechanisms that use strong hydraulic rams for opening and closing. Another important cargo ship design feature is cell guides. The cell guides are vertical pieces constructed of strong metal that is attached to the cargo hold within the ship. These guide the containers into certain locations and offer travel support on the high seas. Since the design of the container ship utilizes cell guides in such abundance, the UN Conference on Trade and Development relies on them to separate traditional break-bulk cargo ships and container ships. There are three dimensions used in cargo plans to determine the position of the container on board the ship. The first coordinate is the bay which begins at the front of the ship and increases aft. The second coordinate is the tier. The first tier begins in the lower portion of the cargo holds with the second tier found on top of the first tier and continuing in that fashion. The row is the third coordinate. Rows situated on the starboard side feature odd numbers and rows situated on the port side showcase even numbers. Rows found along the centerline are given lower numbers and these numbers increase for slots situated further from the center. Container handlers carry 20, 40 and 45 foot containers. The big containers will only travel and fit above deck. The forty-foot sized containers makes up ninety-percent of the shipping containers. Approximately 90% of the freight moves across the globe with container shipping. It is estimated that 80% of global freight travels with 40-foot containers.