

## Container Handler

Used Container Handler South Carolina - Container handlers are also called container ships and cargo ships since they transport loads in sizeable intermodal containers. This type of shipping is called containerization and it is a specific kind of freight transport that carries non-bulk types of seagoing cargo. Container ship capacity is measured in units that are equal to 20' equivalent 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. As one of the largest commercial sea-worthy vessels, container ships are the main rival of oil tankers among the largest ships on the ocean. Dry cargo is categorized into two main types: break-bulk cargo and bulk cargo. Grain and coal fall into the bulk cargo category. They are often moved in their raw form, package-free in large volumes in the hull of the ship. Break-bulk cargo typically is made up of manufactured items that are shipped in packaging. Prior to containerization being invented in the 1950s, break-bulk materials were loaded, secured, unlashed and unloaded one piece at a time from the ship. When the cargo was grouped into containers, there were approximately 1000-3000 cubic feet of cargo that can be simultaneously moved after each unit has been standardized and secured. Efficiency has tremendously increased 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. More than ninety percent of non-bulk items were recorded as being transported in containers in 2001. The first cargo ships were born in the 1940s as redesigns from World War II tankers. Cargo ships do not use individual dividers, holds or hatches that are a part of traditional container ships. The hull of the container ship is similar to a sizeable warehouse that uses vertical guide rails to divide the area into cells. These cells have been designed to transport 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. The entire shipping industry has been revolutionized by containerization, although, it did not start out in the easiest manner. At first, many companies and shippers were worried about the huge costs associated with constructing ports, railway infrastructure and the roads needed to transport items via cargo ships. There was skepticism regarding potential dock and port worker job loss when containerization was announced for fear that numerous manual jobs would disappear. There was a decade of legal battles prior to the container ships starting international service. By 1966, after the first container liner service began from Rotterdam, Netherlands to the USA, cargo shipping was transformed. 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. Shipping times have been shortened in between ports extensively along with labor finances. It only takes 3 weeks to have materials delivered from Europe to India as opposed to the months it used to require. Generally, there is less damage to materials thanks to less frequent handling. Securing loads properly also helps with less cargo shifting during transport. Containers are closed before shipping and opened once they arrive at their destination to prevent disruption, damage and theft. There has been greater international trade growth due to the reduced shipping expenses and travel time delivered by container ships. 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. Amazingly, technology has advanced with this accurate tracking system to be so exact that a 2-week voyage can be timed for arrival with accuracy less than 15 minutes! This has helped with guaranteed delivery and manufacturing times. Sealed containers of raw materials arrive in under an hour to be used in manufacturing facilities, resulting in less inventory costs and higher accuracy. Boxes are provided by shipping companies to the exporters to facilitate loading merchandise. They are delivered into the docks by rail or road or a combination of both to be loaded onto container ships. Before containerization, it would take large groups of men and many hours fitting cargo

items into different holds. The shipping industry today relies on cranes either installed on the ship or on the pier to situate containers on board. More containers can be loaded onto the deck after the hull is loaded. 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. A specially designed hatch creates openings to access the main cargo holds from the deck. A raised steel apparatus called the hatch coaming surrounds these openings that are found along the cargo hold breadth. There are secure hatch covers situated 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. Some hatch models utilize articulated mechanisms and hydraulic rams to facilitate opening and closing. Cell guides are another main component within container ship design. These vertical structures are made of strong metal that is attached to the cargo hold on the ship. These guide containers into specific rows during the loading process and offer support during sea travel. 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. To showcase a container's position on the ship, there is a cargo plan system that use three dimensions. The initial coordinate starts at the beginning of the ship and increases aft. The tier forms the second coordinate. It starts in the bottom area of the cargo holds and the second tier is located on top of the first one and continues to grow. Next, the third row forms the third coordinate. Rows are situated on the ship's port side have even numbers while those found starboard have odd numbers. Rows that are located along the ships' center are designated lower numbers and they increase for locations found further from the center. It is possible for container handlers to carry twenty, forty and forty-five 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. Roughly 90% of the freight in the world is delivered via container shipping. Approximately eighty-percent of global freight is shipped via forty-foot containers.