

## Container Handler

Used Container Handler Fullerton - Also known as container ships or cargo ships, container handlers use large intermodal containers to transport their goods. This type of shipping is called containerization and it is a specific kind of freight transport that carries non-bulk types of seagoing cargo. The capacity of container ships is measured in units equivalent to twenty-foot 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. These ships are one of the main oil tanker rivals due to their size as one of the biggest sea-worthy ships. There are two main categories for dry cargo which are break-bulk and 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. 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. Grouping cargo into containers allows for 1000-3000 cubic feet of cargo to be simultaneously moved once every container has been secured with standardization techniques. Break-bulk cargo shipping has greatly increased overall efficiency. Costs have been reduced to around 35% and shipping time has been reduced by 84%! 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. Container ships do not rely on individual hatches, holds and dividers that are part of regular cargo ships. Essentially the container ship's hull is similar to a huge warehouse that uses vertical guide rails to divide it into cells. The cargo in the containers is held by these specially designed cells. Most cargo ships are designed from steel but additional materials such as plywood, fiberglass and wood are used. Many containers are categorized by their size and function since they are designed to be transferred to and from trucks, trains, coastal carriers, semi-trailers and more. 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. After roughly 10 years of legal battles, container ships initiated international service. In 1966, a container liner service from Rotterdam to the US began and this transformed global shipping. Loading and unloading of cargo ships has been reduced to a few hours instead of the days it used to take traditional cargo vessels. 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. Overall, there is less damaged cargo thanks to less physical handling and reduced cargo shifting due to properly securing loads. Containers are closed before shipping and opened once they arrive at their destination to prevent disruption, damage and theft. 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. Scanning machines work with computers to trace the product code on the contents. Technological advancements have enabled this accurate tracking system to be precise within fifteen minutes on arrival of a two-week voyage. Manufacturing times and delivery have been greatly enhanced with these advancements. Raw materials show up in sealed containers from factories in under an hour prior to being used in the manufacturing industry; resulting in fewer inventory expenses and greater accuracy. Shipping companies provide boxes to the exporters for loading merchandise into. Materials are delivered by rail or docks or a combination of both and then loaded into container handlers. Before containerization, it would take large groups of men and many hours fitting cargo items into different holds. Cranes are used in the shipping industry or on the pier to organize containers. Once the hull has been completely loaded, more

containers can be secured onto the deck. An efficient design has been a huge priority for shipping containers. Containers may travel on break-bulk vessels. Cargo holds that have been designated to cargo ships have been specially designed to enhance the processes of loading and unloading in order to keep containers safe while crossing the seas. The specialized hatch design allows openings from the main deck to access the cargo holds. These openings are situated along the entire cargo hold breadth, surrounded by a raised steel structure called the hatch coaming. The hatch coamings have hatch covers located on them. Wooden boards and tarps initially covered the hatches and held the battens secure until the 50s. These days, hatch covers often consist of solid metal plates that are lifted on and off the ship with cranes. Some hatch models utilize articulated mechanisms and hydraulic rams to facilitate opening and closing. Cell guides are another main component within container ship design. Attached to the cargo hold in the ship, cell guides are vertical pieces of metal that help organize the cargo. They work by guiding containers into particular rows while loading and help to support items during travel. The container ship design relies on cell guides so much that organizations as the United Nations Conference on Trade and Development use them to differentiate between regular break-bulk cargo ships and container ships. There is a system used in cargo plans consisting of three dimensions to outline a container's position aboard the ship. The first coordinate is the bay which begins at the front 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. The third coordinate is found in the third row. Rows found on the port side of the ship exhibit even numbers and those located on the starboard side are given odd 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 largest size fits only above deck while the 40 foot size makes up for the majority of the load or approximately ninety percent of the container shipping. 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.