

## **Container Handler**

Used Container Handler Santa Clarita - Container handlers, also known as cargo ships and container ships transport their load in a large intermodal container. 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. Container ships are responsible for transporting roughly ninety percent of non-bulk items across the globe. 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 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. 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. Efficiency has tremendously increased break-bulk cargo shipping. Thanks to these new systems, shipping time has been reduced by eighty-four percent and costs have come down by roughly 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. Container ships eliminate the individual holds, hatches and dividers normal within traditional cargo vessels. Essentially the container ship's hull is similar to a huge warehouse that uses vertical guide rails to divide it 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. 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. Container ships only take a few hours to be loaded and unloaded, compared to the days a traditional cargo vessel required. Along with cutting labor finances, it has shortened shipping times between ports to a large extent. Nowadays, it takes only weeks as opposed to months for items to be delivered from Europe to India and vice versa. There is generally less damage to goods due to less handling. Less cargo shifting during a voyage is also beneficial. Containers are sealed prior to shipping and opened only once they arrive at their destination, resulting in less theft and disruption. There has been greater international trade growth due to the reduced shipping expenses and travel time delivered by container ships. Sealed factory containers now carry cargo that used to arrive in barrels, cartons, crates, bags and bales. 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! 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. The shipping companies supply the exporters with boxes for loading products. They are delivered into the docks by rail or road or a combination of both to be loaded onto container ships. It used to take huge groups of men and numerous hours to fit cargo into different holds

prior to containerization. The shipping industry today relies on cranes either installed on the ship or on the pier to situate containers on board. 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 flow along the whole cargo hold area and are surrounded by the hatch coaming which is a raised steel structure. The hatch coamings have hatch covers located on them. Until the 1950s, wooden boards and tarps were responsible for securing the hatches and holding down the battens. Hatch covers are made of secure metal plates and cranes are used to lift them on and off of the ship. Additional hatch models use hydraulic rams and articulated mechanisms for closing and opening. 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 the containers into certain locations and offer travel support on the high seas. 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. 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 second coordinate is the tier. The first tear 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. Next, the third row forms the third coordinate. 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. Container shipping is responsible for moving approximately ninety percent of the freight across the globe, while roughly eighty percent of global freight moves with 40 foot containers.