

## Container Handler

Used Container Handler Palmdale - 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 container ships is measured in units equivalent to twenty-foot equivalent loads. The majority of typical loads consist of a mix of 40-foot containers and 20-foot containers. Approximately ninety percent of non-bulk cargo across the globe is transported by 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. Grain and coal are bulk cargo, typically transported in their raw format inside the ships hull, free from packages. Break-bulk cargo items normally consist of manufactured goods that are transported in packages. Before containerization was invented in the 50s, break-bulk items were loaded, secured and unlashd one item at a time. 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. Break-bulk cargo shipping has greatly increased overall efficiency. 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. In the 1940s, the first container ships were made from tankers that underwent conversion after World War II. 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 shipping containers are constructed from steel; however, additional materials including plywood, fiberglass and wood are used. As containers have been designed to completely transferred to and from coastal carriers, semi-trailers, trucks, trains and more, these containers are categorized due to 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. Various trade unions were skeptical about huge job loss with dock and port workers based on the assumption that containers would eliminate numerous cargo handling manual jobs among ports. 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. Loading and unloading of cargo ships has been reduced to a few hours instead of the days it used to take traditional cargo vessels. 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. 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. 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. 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. 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. Items are delivered into the docks by road or rail or a combination to be loaded onto cargo 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. 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. Designated cargo hold on container ships have been built to increase efficiency during loading and unloading to ensure safe travel. 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. 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. Additional hatch models use hydraulic rams and articulated mechanisms for closing and opening. Another important cargo ship design feature is cell guides. 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 bay is the first coordinate, starting at the front of the container ship and increases aft. The tier is the second coordinate, with the initial tier starting at the bottom of the cargo holds with the second, tier situated on top of the first and continuing on. 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. The cargo situated near the centerline showcases lower numbers and as the cargo increases further from the center, the numbers get higher. It is possible for container handlers to carry twenty, forty and forty-five 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.