

Container Handler

Used Container Handler Downey - 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. The majority of typical loads consist of a mix of 40-foot containers and 20-foot 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. 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. 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. 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. In the 1940s, the first container ships were made from tankers that underwent conversion after World War II. 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. The cargo in the containers is held by these specially designed cells. 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. 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. Numerous trade unions were concerned that containers would affect port jobs and manual labor associated with cargo handling for dock and port workers. 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. 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. 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 have been less shipping expenses and shipping time thanks to container ships which has increased international trade. Sealed factory containers now carry cargo that used to arrive in barrels, cartons, crates, bags and bales. A product code on the contents is traced with the help of computers and scanning equipment. 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. 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. More containers can be loaded onto the deck after the hull is loaded. Efficiency has been one of the main design elements for cargo ships. Containers may travel on break-bulk vessels. 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. There is a sophisticated hatch design to allow openings from the main deck to reach the cargo hold locations. These openings are situated along the entire cargo hold breadth, surrounded by a raised steel structure called the hatch coaming. There are hatch covers located on top of the hatch coamings. Wooden boards and tarps initially covered the hatches and held the battens secure until the 50s. Hatch covers are made of secure metal plates and cranes are used to lift them on and off of the ship. There are other hatch models that rely on articulated mechanisms that use strong hydraulic rams for 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 design of the container ship uses cell guides enough that the United Nations Conference on Trade and Development utilize them to distinguish between container ships and regular break-bulk cargo ships. To showcase a container's position on the ship, there is a cargo plan system that use three dimensions. 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 are situated on the ship's port side have even numbers while those found starboard have 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 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.