

## **Container Handler**

Used Container Handler Victorville - 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. The majority of typical loads consist of a mix of 40-foot containers and 20-foot 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. Grain and coal are bulk cargo, typically transported in their raw format inside the ships hull, free from packages. Manufactured goods that are in packages comprise the majority of break-bulk cargo. Before containerization was invented in the 50s, break-bulk items were loaded, secured and unlashed one item at a time. 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. Thanks to these new systems, shipping time has been reduced by eighty-four percent and costs have come down by roughly thirty-five percent. In 2001, over ninety percent of non-bulk materials were recorded as being transported in containers. The initial container ships in the 1940s were designed from tankers that were converted post-WWII. 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. Even though the shipping industry has been transformed by containerization, it took some time to streamline the process. Initially, ports, railway companies and shippers were concerned regarding the extensive costs that came with constructing infrastructure, ports and railways required to accommodate the cargo ships and transporting items with rail and roads. 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. 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. 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. Container ships have reduced shipping time and lessened shipping expenses, resulting in enhanced international trade growth. Cargo that was previously shipped in bags, bales, cartons, barrels or crates now arrives in sealed containers from the factory. 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. 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

ship relies on cranes either on the pier or installed on board to organize the containers accurately. 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 be carried on break-bulk ships. 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. 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. 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. 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. 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. 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 initial coordinate starts at the beginning of the ship and increases aft. The tier is the second coordinate, with the initial tier staring at the bottom of the cargo holds with the second, tier situated on top of the first and continuing on. 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. It is possible for container handlers to carry twenty, forty and forty-five foot containers. The biggest sizes only fit above the deck. The forty-foot containers comprise most of the load or roughly 90% of container shipping. 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.