

Container Handler

Used Container Handler El Cajon - Container handlers are also called container ships and cargo ships since they transport loads in sizeable intermodal containers. Containerization is the shipping method that utilizes commercial freight transport to carry seagoing cargo in non-bulk sizes. 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. Approximately ninety percent of non-bulk cargo across the globe is transported by container ships. 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 fall into the bulk cargo category. They are often moved in their raw form, package-free in large volumes in the hull of the ship. 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. The initial container ships in the 1940s were designed from tankers that were converted post-WWII. Cargo ships do not use individual dividers, holds or hatches that are a part of traditional container ships. The typical container ship's hull is a basically a large warehouse that is divided by vertical guide rails 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. 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. Containerization has revolutionized the shipping industry; however, it did not start out in the easiest fashion. 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. There was skepticism regarding potential dock and port worker job loss when containerization was announced for fear that numerous manual jobs would disappear. 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 closed before shipping and opened once they arrive at their destination to prevent disruption, damage and theft. 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. Scanning machines work with computers to trace the product code on the contents. 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! This time management has helped with manufacturing times and guaranteeing delivery. Sealed containers of raw materials arrive in under an hour to be used in manufacturing facilities, resulting in less inventory costs and higher 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. It used to take huge groups of men and

numerous hours to fit cargo into different holds prior to containerization. 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. 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. Tarps and wooden boards held down the battens and secured the hatches until the 1950s. These days, hatch covers often consist of solid metal plates that are lifted on and off the ship with cranes. There are other hatch models that rely on articulated mechanisms that use strong hydraulic rams for opening and closing. Another important cargo ship design feature is cell guides. The cell guides are vertical pieces constructed of strong metal that is attached to the cargo hold within the ship. 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 that are located along the ships' center are designated lower numbers and they increase for locations found further from the center. Container handlers can handle forty-five, or forty or twenty-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. 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.