Container Handler

Used Container Handler Rialto - 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 these specialty ships is equal to twenty-foot loads. Typical loads range with a mixture of 20-foot and 40-foot containers. Roughly 90% of non-bulk items all over the world travel via container ships. These ships are one of the main oil tanker rivals due to their size as one of the biggest sea-worthy ships. 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 typically is made up of manufactured items that are shipped in packaging. 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. Overall efficiency has largely increased with break-bulk cargo shipping. Costs have been reduced to around 35% and shipping time has been reduced by 84%! Approximately 90% of non-bulk items were shipped in containers in 2001. The first cargo ships were born in the 1940s as redesigns from World War II tankers. Container ships do not rely on individual hatches, holds and dividers that are part of regular cargo ships. 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. 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. 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. 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. Overall, there is less damaged cargo thanks to less physical handling and reduced cargo shifting due to properly securing loads. Before shipping, containers are closed and only opened after they arrive at their new location to prevent theft and damage. Container ships have reduced shipping time and lessened shipping expenses, resulting in enhanced international trade growth. 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. 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. 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. 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. Containerization has streamlined the process of loading by reducing the number of workers and hours it takes to fit cargo into their holds. The shipping industry today relies on cranes either installed on the ship or on the pier to situate containers on

board. After the hull has been fully loaded, additional containers can be attached to 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 shops have been built to increase efficiency during loading and unloading to ensure safe travel. There is a sophisticated hatch design to allow openings from the main deck to reach the cargo hold locations. These openings flow along the whole cargo hold area and are surrounded by the hatch coaming which is a raised steel structure. There are secure hatch covers situated on top of the hatch coamings. Tarps and wooden boards held down the battens and secured the hatches until the 1950s. 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 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. 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 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. The row is 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. 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. 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.