Container Handler

Used Container Handler Santa Ana - Also known as container ships or cargo ships, container handlers use large intermodal containers to transport their goods. This shipping method is known as containerization. They are commonly utilized as a means of commercial freight transport often used to transport non-bulk forms of seagoing cargo. The capacity of container ships is measured in units equivalent to twenty-foot equivalent loads. Most loads are a mix of 20’ and 40’ containers. Container ships are responsible for transporting roughly ninety percent of non-bulk items across the globe. 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. Dry cargo is categorized into two main types: break-bulk cargo 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. Manufactured goods that are in packages comprise the majority of break-bulk cargo. 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. When the cargo was grouped into containers, there were approximately 1000-3000 cubic feet of cargo that can be simultaneously moved after each unit has been standardized and secured. 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%! 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 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 cargo ships are designed from steel but additional materials such as 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. Numerous trade unions were concerned that containers would affect port jobs and manual labor associated with cargo handling for dock and port workers. 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. 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. Before shipping, containers are closed and only opened after they arrive at their new location to prevent theft and damage. There has been greater international trade growth due to the reduced shipping expenses and travel time delivered by container ships. Sealed factory containers now carry cargo that used to arrive in barrels, cartons, crates, bags and bales. 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! Manufacturing times and delivery have been greatly enhanced with these advancements. Raw materials are delivered in less than an hour in sealed containers within an hour prior to being utilized for manufacturing. This results in more accuracy and less inventory costs. 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. Containerization has streamlined

the process of loading by reducing the number of workers and hours it takes to fit cargo into their holds. The ship relies on cranes either on the pier or installed on board to organize the containers accurately. After the hull has been fully loaded, additional containers can be attached to the deck. The key design element for container ships has been efficiency. Break-bulk ships may carry containers. Designated cargo hold on container shops 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. A raised steel apparatus called the hatch coaming surrounds these openings that are found along the cargo hold breadth. There are hatch covers located 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 a necessary component in cargo 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. Since the design of the container ship utilizes cell guides in such abundance, the UN Conference on Trade and Development relies on them to separate traditional break-bulk cargo ships and container ships. There are three dimensions used in cargo plans to determine the position of the container on board 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 row is the third coordinate. 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. 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. 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.