Container Handler

Used Container Handler Mexico - Container handlers, also known as cargo ships and container ships transport their load in a large intermodal container. 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. Most loads are a mix of 20’ and 40’ containers. Roughly 90% of non-bulk items all over the world travel via container ships. Container handlers are one of the biggest vessels sailing and are the main rival for oil tankers on the ocean. There are two main categories for dry cargo which are break-bulk and bulk cargo. Grain and coal are bulk cargo, typically transported in their raw format inside the ships hull, free from packages. 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. 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. 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. In the 1940s, the first container ships were made from tankers that underwent conversion after World War II. Cargo ships do not use individual dividers, holds or hatches that are a part of traditional container ships. 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 engineered to hold the cargo in containers. The majority of shipping containers are built from steel although extra items including wood, fiberglass and plywood are utilized. 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. 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. 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. 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. Overall, there is less damaged cargo thanks to less physical handling and reduced cargo shifting due to properly securing loads. Containers are sealed prior to shipping and opened only once they arrive at their destination, resulting in less theft and disruption. 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. A product code on the contents is traced with the help of computers and scanning equipment. Technology has made this tracking system accurate and exact to enable a two week voyage to be timed for arrival within an accuracy rate of under fifteen minutes. This has helped with guaranteed delivery and manufacturing times. Sealed containers of raw materials arrive in under an hour to be used in manufacturing facilities, resulting in less inventory costs and higher accuracy. The shipping companies supply the exporters with boxes for loading products. 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 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. 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. These openings flow along the whole cargo hold area and are surrounded by the hatch coaming which is a raised steel structure. 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. Additional hatch models use hydraulic rams and articulated mechanisms for closing and opening. Cell guides are a necessary component in cargo ship design. The cell guides are vertical pieces constructed of strong metal that is attached to the cargo hold within 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 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. Next, the third row forms the third coordinate. Rows situated on the starboard side feature odd numbers and rows situated on the port side showcase even numbers. Rows found along the centerline are given lower numbers and these numbers increase for slots situated further from the center. Container handlers can handle forty-five, or forty or twenty-foot containers. The largest size fits only above deck while the 40 foot size makes up for the majority of the load or approximately ninety percent of the 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.