Container Handler

Used Container Handler Illinois - 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. The capacity of these specialty ships is equal to twenty-foot 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. 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. 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 containerization was invented in the 50s, break-bulk items were loaded, secured and unlashed one item at a time. 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. Thanks to these new systems, shipping time has been reduced by eighty-four percent and costs have come down by roughly thirty-five percent. More than ninety percent of non-bulk items were recorded as being transported in containers in 2001. In the 1940s, the first container ships were made from tankers that underwent conversion after World War II. Container ships eliminate the individual holds, hatches and dividers normal within traditional cargo vessels. The hull of the container ship is similar to a sizeable warehouse that uses vertical guide rails to divide the area into cells. These cells have been designed to transport 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. The entire shipping industry has been revolutionized by containerization, although, it did not start out in the easiest manner. 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. 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. 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. 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. 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. Materials are delivered by rail or docks or a combination of both and then loaded into container handlers. 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. Efficiency has been one of the main design elements for cargo ships. Break-bulk ships may carry containers. However, cargo holds that have been dedicated to container ships have been carefully built to speed up the loading and unloading process and designed to keep containers secure while traveling the ocean. The specialized hatch design allows openings from the main deck to access the cargo holds. These openings are situated along the entire cargo hold breadth, surrounded by a raised steel structure called the hatch coaming. There are hatch covers located on top of the hatch coamings. Until the 1950s, wooden boards and tarps were responsible for securing the hatches and holding down the battens. 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. 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. They work by guiding containers into particular rows while loading and help to support items during 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 bay is the first coordinate, starting at the front of the container 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 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 carry 20, 40 and 45 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. 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.