

Container Handler

Used Container Handler Manitoba - Container handlers are also called container ships and cargo ships since they transport loads in sizeable intermodal containers. 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. Typical loads range with a mixture of 20-foot and 40-foot 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 falls into two main categories: bulk cargo and break-bulk cargo. Grain and coal are bulk cargo, typically transported in their raw format inside the ships hull, free from packages. 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. 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. Break-bulk cargo shipping has greatly increased overall efficiency. Thanks to these new systems, shipping time has been reduced by eighty-four percent and costs have come down by roughly thirty-five percent. 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. 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. 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. 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. There was a decade of legal battles prior to the container ships starting international service. By 1966, after the first container liner service began from Rotterdam, Netherlands to the USA, cargo shipping was transformed. 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. Container ships have reduced shipping time and lessened shipping expenses, resulting in enhanced international trade growth. 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. 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 time management has helped with manufacturing times and guaranteeing delivery. 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. 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 be carried on break-bulk ships. Designated cargo hold on container ships 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 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. Nowadays, solid metal plates comprise the hatch covers and cranes lift them onboard and off of the ship. 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. 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 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 starting 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. Rows found along the centerline are given lower numbers and these numbers increase for slots situated 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.