

## Container Handler

Used Container Handler Canada - Container handlers are also called container ships and cargo ships since they transport loads in sizeable intermodal containers. Containerization is the shipping method that utilizes commercial freight transport to carry seagoing cargo in non-bulk sizes. The capacity of container ships is measured in units equivalent to twenty-foot equivalent 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. 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. 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. 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. Efficiency has tremendously increased break-bulk cargo shipping. It is estimated that shipping time has been reduced by eighty-four percent and costs have been reduced by approximately thirty-five percent. 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. Container ships eliminate the individual holds, hatches and dividers normal within traditional cargo vessels. The typical container ship's hull is a basically a large warehouse that is divided by vertical guide rails into cells. These cells have been designed to transport 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. There was skepticism regarding potential dock and port worker job loss when containerization was announced for fear that numerous manual jobs would disappear. 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. Initially, it took days to unload and load traditional cargo vessels. Container ships have transformed timelines by only requiring a few hours for loading and unloading. Cutting labor finances and shortened shipping times between ports has been hugely successful. It only takes a few weeks to deliver items from India to Europe and vice versa, whereas it used to take months previously. 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. Cargo that used to arrive in bales, crates, bags, cartons or barrels now arrives in containers sealed from the factory. There is a product code on the contents utilized by scanning machines and computers to trace. 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 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. Shipping companies provide boxes to the exporters for loading merchandise into. Materials are delivered by rail or docks or a combination of both and then loaded into

container handlers. It used to take huge groups of men and numerous hours to fit cargo into different holds prior to containerization. The shipping industry today relies on cranes either installed on the ship or on the pier to situate containers on board. 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 travel on break-bulk vessels. Cargo holds that have been designated to cargo ships have been specially designed to enhance the processes of loading and unloading in order to keep containers safe while crossing the seas. 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. Wooden boards and tarps initially covered the hatches and held the battens secure until the 50s. 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. Cell guides are another main component within container ship design. The cell guides are vertical pieces constructed of strong metal that is attached to the cargo hold within the ship. These guide the containers into certain locations and offer travel support on the high seas. 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 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 forms the second coordinate. It starts in the bottom area of the cargo holds and the second tier is located on top of the first one and continues to grow. The third coordinate is found in the third row. 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. Container handlers carry 20, 40 and 45 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. Container shipping is responsible for moving approximately ninety percent of the freight across the globe, while roughly eighty percent of global freight moves with 40 foot containers.