

## **Container Handler**

Used Container Handler Mississippi - Container handlers are also called container ships and cargo ships since they transport loads in sizeable intermodal containers. 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. 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 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. 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. Thanks to these new systems, shipping time has been reduced by eightyfour 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. 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. 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. Most shipping containers are constructed from steel; however, additional materials including 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. 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. 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. 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. There is generally less damage to goods due to less handling. Less cargo shifting during a voyage is also beneficial. Containers are closed before shipping and opened once they arrive at their destination to prevent disruption, damage and theft. 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. A product code on the contents is traced with the help of computers and scanning equipment. 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! This has helped with guaranteed delivery and manufacturing times. 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. 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. It used to take huge groups of men and numerous hours to fit cargo into different holds prior to containerization. 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. Efficiency has been one of the main design elements for cargo ships. Containers may be carried on breakbulk ships. 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. There is a sophisticated hatch design to allow openings from the main deck to reach the cargo hold locations. A raised steel apparatus called the hatch coaming surrounds these openings that are found along the cargo hold breadth. The hatch coamings have hatch covers located on them. 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. 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. 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 first coordinate is the bay which begins at the front 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 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. 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. 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.