



SHIP/VESSEL TYPES AND THEIR UTILITY

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- **Bulk Carrier**

The bulk carrier is an excellent vessel to transport dry cargo in huge amounts. This vessel is highly used when transporting coal, ore, grain, cement or steel coils because the ship can carry a huge amount of them. These ships are divided into separated holds covered by hatches, where the cargo is loaded. This ship can either be loaded using machines of the port where it is moored or can be loaded using its own gear if it's equipped with them. The first specialized bulk carrier was built in 1852 and since then teams have been working for developing it, maximizing capacity, safety, efficiency and durability. These vessels make up 21% of the world fleet and a single vessel can carry up to 400000 DWT (metric tons of deadweight). The control bridge in these vessels is normally situated in the stern of the ship.



Figure 1 - Bulk Carrier

- Container Vessels

Container vessels, as its name suggests, are used to transport large amounts of containers with different types of cargo inside of them. Containers are the main way of transporting goods nowadays, as they can be easily transferred into a truck, ship or even a train and go wherever they are needed. These vessels are equipped with cell guides that help containers slot into place and in order to be load, these vessels usually require cranes from the port, as this ships normally don't have their own gear. Some of these vessels, the bigger ones, can carry up to 24000 TEU (Twenty-foot Equivalent Units). In February of 1931, the first container vessel was built, and it had 21 slots for containers. The control bridge of these vessels is normally situated midship. There are currently 5,534 container ships around the world.



Figure 2 - Container Vessel

- **Ro-Ro Vessels**

Ro-Ro vessels or Roll-on Roll-off vessels are used to transport cars, trucks, buses. These vessels are composed of many decks inside of them that simulate a big car parking. Decks have parking slots painted on the ground and have ramps connecting each other and on the back of the boat there is a loading ramp, where all cars enter. Vehicles are loaded manually one by one on this ship. These vessels can carry up to 6000 CEU (Car Equivalent Units). The first Ro-Ro vessel was built in 1956 and was able to transport three trucks. The control bridge of these vessels is normally situated on the bow.



Figure 3- Roll-on Roll-off Vessel

Bridge Positioning

The control bridge positioning of these boats depends on where the engine is placed and its positioned, so the boat is perfectly balanced. The control bridge can either be positioned on the bow, stern or midship. Normally its construction its rectangular and high above deck so the crew can have a wide sight of the ship and its surroundings.



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Figure 4- Ship Control Bridge

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