


SHIP'S DIMENSIONS & TYPES OF SHIPS



SHIP'S DIMENSION

- Ships Dimensions
 - Introduction
 - Linear Dimensions
 - Length
 - Wide
 - Depth
 - Tonnage Capacity
 - Conclusions

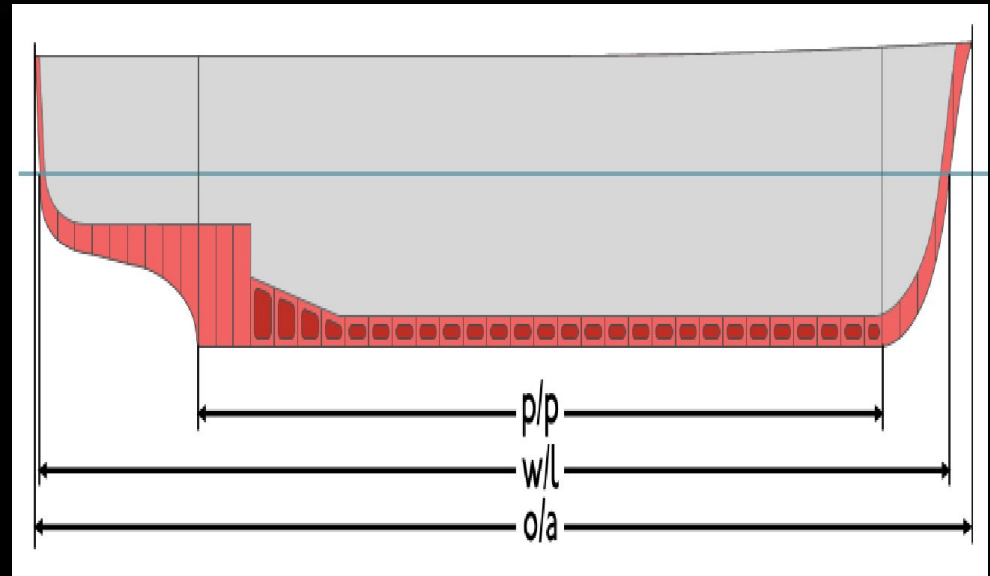
TYPES OF SHIPS

- Types of Ships
 - Introduction
 - Troop Ships
 - Industrial Ships
 - Service Ships
 - Technical Ships
 - Conclusions

SHIP'S DIMENSION

Linear Dimensions

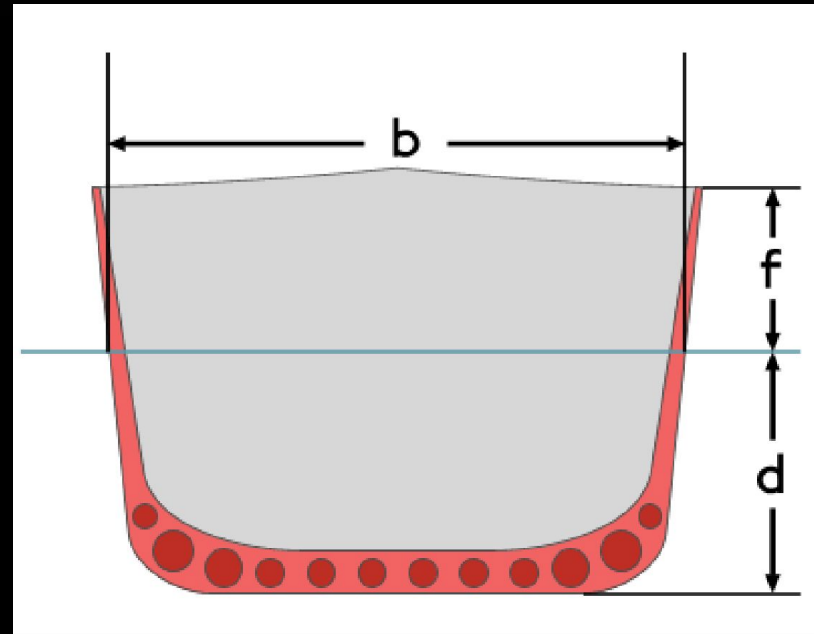
- Length: Distance between stern and bow at ships.



SHIP'S DIMENSION

Linear Dimensions

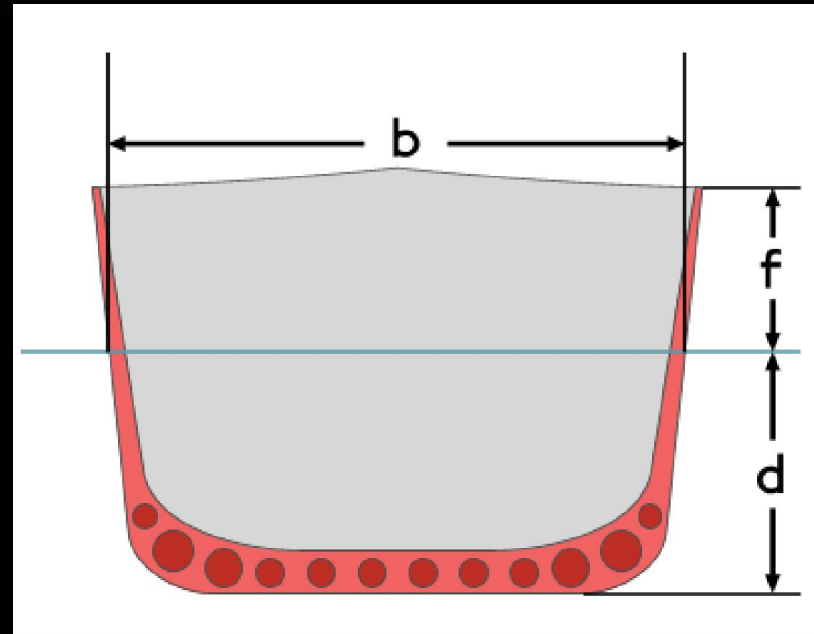
- Beam: Distance from port side to starboard side. Measured at amidships.



SHIP'S DIMENSION

Linear Dimensions

- **Depth**: Distance between the undersides of the deck amidships to the keel's bottom.



SHIP'S DIMENSION

Tonnage Capacity

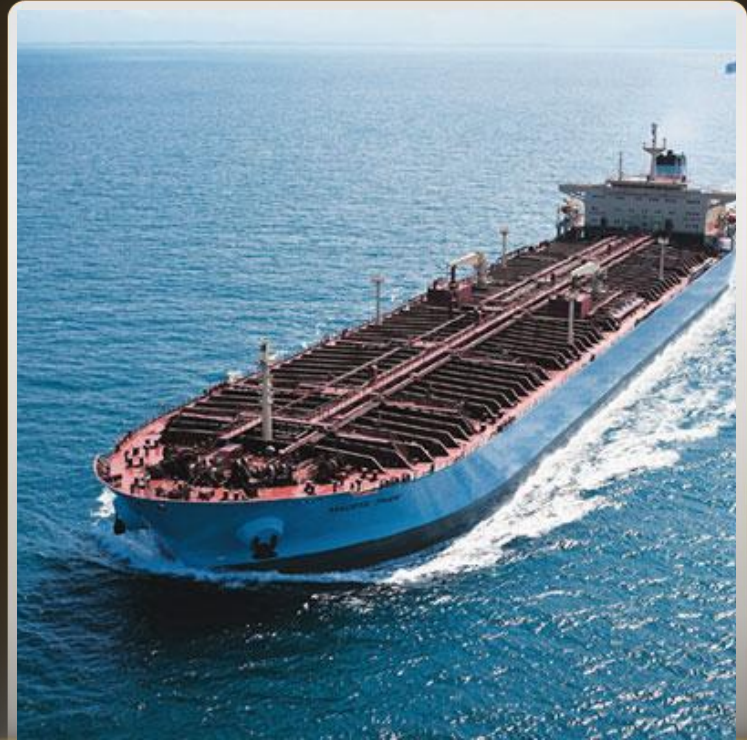
- **Displacement**
 - Light
 - Load
- **Deadweight**
- **Gross Tonnage**
- **Net Tonnage**
- **Cargo Deadweight**



SHIP'S DIMENSION

Conclusion

A ship's size and capacity can be described in two ways--linear dimensions or tonnages. Each is completely different but are related.



TYPES OF SHIPS

Types of Ships

- Vessels can be classified by their purpose in:
 - Naval Ships
 - Civil Ships
- Civil ships are classified according to the use that everyone will have.
 - Civil Ships
 - Troop Ships
 - Industrial Ships
 - Service Ships
 - Technical Ships

TYPES OF SHIPS

Civil Ships

- Troop Ships: Are ships designed to carry freight and passengers
 - Troop Ships
 - Freighters
 - Passenger Ships
 - Special Troop Ships

TYPES OF SHIPS

Troop Ships

- Freighters: Are vessels designed to carry freight.

- Freighters
 - General Cargo ships
 - Specialized Cargo Ships
 - Liquid Cargo Ships

TYPES OF SHIPS

Freighters

- General Cargo Ships: General cargo includes items which are packed or unpacked. They usually have spacious holds which occupy the larger part of the hull.



TYPES OF SHIPS

Freighters

- Specialized Cargo Ships:
The cargo is carefully distributed according to its type and requirement of special conditions.

- Freighters
 - General Cargo Ships
 - Specialized Cargo Ships
 - Reefers
 - Timbers
 - Containers
 - Barges
 - Ro-Ro
 - Bulks
 - Heavy
 - Cattles
 - Liquid Cargo Ships

TYPES OF SHIPS

Specialized Cargo

- Reefer Cargo Ships: They transport perishable food such as fruit, vegetables, meat, fish and dairy, having a carrying capacity of 8,000 - 12,000 t.



TYPES OF SHIPS

Specialized Cargo

- Timbers Carrier Ships:
One-decked ships designed to carry logs and beams; carrying capacity - 5,000 - 20,000 t, speed - 13-15 knots.



TYPES OF SHIPS

Specialized Cargo

- **Containers Ships**: These ships are classified as unit-load ships because freight is carried in huge boxes of standard size (units), usually from 10 to 40 t.



TYPES OF SHIPS

Specialized Cargo

- Barges-Carrying Ships: This type of ships pertains to the category of containerships but the principle is slightly different.



TYPES OF SHIPS

Specialized Cargo

- Ro-Ro Ships: Used for transporting motor vehicles and other wheeled equipment. Ro-Ro is short for roll-on roll-off ships and is thus called because cargo is carried on wheeled containers or trailers.



TYPES OF SHIPS

Specialized Cargo

- **Bulk Carriers**: Bulk cargo is a wide term. Heavy bulk-carriers usually transport ore, coal and coke, building materials, such as cement and gravel. Light bulkers carry grain, salt and sugar.



TYPES OF SHIPS

Specialized Cargo

- **Heavy Cargo Ships**: Heavy cargo vessels can be divided into: Semi-submersible heavy lift ships, conventional heavy lift ships, tow barges and dock ships. Their construction and stability allows them to carry extremely large and heavy objects.



TYPES OF SHIPS

Specialized Cargo

- **Flo-Flo Ships:** Float-on/Float-off or semisubmersible ships, provide the capability to load, transport and offload outsized military cargo independent of port equipment traditionally used for handling large or extremely heavy cargo, such as tug boats, barges, landing craft, floating cranes, and single anchor leg mooring systems. Lifts range from approximately 50 to as much as 45,000 tons.



TYPES OF SHIPS

Specialized Cargo

- **Cattles Ships**: as the name implies, these ships transport cattle.



TYPES OF SHIPS

Freighters

- Liquid Cargo Ships: They transport cargo in liquid form.

- Freighters
 - General Cargo Ships
 - Specialized Cargo Ships
 - Liquid Cargo Ships
 - Tanker
 - LPG
 - LNG
 - Chemical

TYPES OF SHIPS

Liquid Cargo

- **Tanker Ships**: Cargo ships constructed or adapted for the carriage in bulk of liquid cargoes of an inflammable nature.



TYPES OF SHIPS

Liquid Cargo

- **Liquid Petroleum Gas**: built to carry liquid gases, either natural gases or products of oil processing (methane, propane, butane), for chemical industry; speed 12-20 knots;



TYPES OF SHIPS

Liquid Cargo

- **Liquid Natural Gas**: An LNG carrier is a tank ship designed for transporting liquefied natural gas (LNG)



TYPES OF SHIPS

Liquid Cargo

- Chemical Ships: They transport chemicals such as sulfuric acid, phosphoric acid and ammoniac.



TYPES OF SHIPS

Troop Ships

- Passengers Ships: They transport people.

•Passengers Ships

- Liners

- Cruise

- Coastwise

- Yachts

TYPES OF SHIPS

Passengers Ships

- **Liners Ships**: Liners sail on one and same route (be it through rivers, seas or oceans) according to a timetable.



TYPES OF SHIPS

Passengers Ships

- Cruise Ships: Their purpose is to take tourists to journeys.



TYPES OF SHIPS

Passengers Ships

- **Coastwise Ships**: Not large inland-going ships which sail close to the coast between two or more ports; Their seats for passengers vary from 40 to 600.



TYPES OF SHIPS

Passengers Ships

- Yachts: crafts, propelled either by sail or by power, used for having fun.



TYPES OF SHIPS

Troop Ships

- Special Troop Ships: They transport people and freight.

- Special Troop Ships
- Ferrys

TYPES OF SHIPS

Special Troop Ships

- Ferrys: Designed to carry wagons, vehicles and passengers by serving as a bridge between two ports, located at the opposite ends of rivers, bays, canals, etc.



TYPES OF SHIPS

Civil Ships

- **Industrial Ships**: Designed to draw out raw materials and food resources from sea.

- Industrial Ships
- Extractive Ships
- Processing Ships

TYPES OF SHIPS

Industrial Ships

- Extractive Ships: Ships used solely for catching

- Extractive Ships
 - Trawlers
 - Seiners
 - Whalers

TYPES OF SHIPS

Extractive Ships

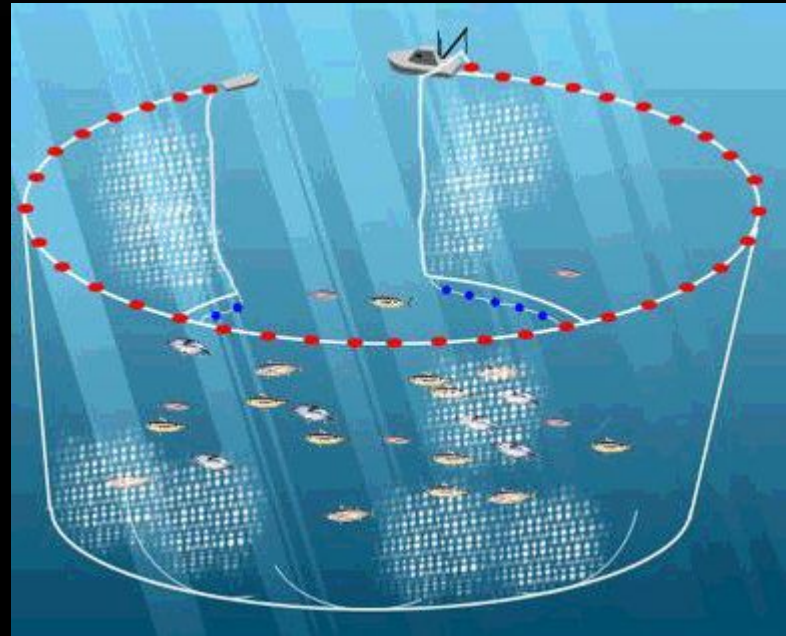
- **Trawlers**: The most widespread type of fishing vessel; The name "trawler" comes from "trawl" - a fishing net which is dragged along the sea floor.



TYPES OF SHIPS

Extractive Ships

- **Seiners**: Seiners use a peculiar kind of net (a purse seine) which hangs vertically in the water and has a rope at its bottom



TYPES OF SHIPS

Extractive Ships

- Whalers: Ships designed for hunting whales



TYPES OF SHIPS

Industrial Ships

- **Processing Ships**: Their main purpose is to receive the catch from extractive ships, process it into usable products and bring it to ports.



TYPES OF SHIPS

Civil Ships

- **Service Ships**: Vessels which serve the merchant fleets and operate in harbors, inland waters and water areas
 - Service Ships
 - Ships Providing
 - Auxiliary Ships
 - Ships Providing Safety
 - Ships with special purposes

TYPES OF SHIPS

Service Ships

- **Ships Providing**: navigation through different waters.
- Ships Providing
 - Hydrographic Ships
 - Pilots Boats
 - Lightships

TYPES OF SHIPS

Ships Providing

- **Hydrographic Ships**: Their purpose is to explore seas and oceans, gather data and report to hydrographic bureaus which on their part, compose maps and charts.



TYPES OF SHIPS

Ships Providing

- **Pilots Boats**: Small vessels that carry a pilot to a ship and then bring him back to the port.



TYPES OF SHIPS

Ships Providing

- **Lightships**: Small vessels painted red and equipped with light and radio-signal devices and anchored at places which are dangerous for ships to pass through.



TYPES OF SHIPS

Service Ships

- Auxiliary Ships: Vessel specially designed to help others ships.
 - Auxiliary Ships
 - Icebreakers
 - Tugboats
 - Push Tugs

TYPES OF SHIPS

Auxiliary Ships

- **Icebreakers**: These are ships maintaining navigation in winter by leading other vessels across ice tracks (and breaking ice-floes).



TYPES OF SHIPS

Auxiliary Ships

- **Tugboats**: High-speed vessels with an approximate length of 60 meters, used for towing barges and damaged ships and taking them across narrow canals or fairways.



TYPES OF SHIPS

Auxiliary Ships

- **Push Tugs**: Vessels used for pushing an assembly of barges; Push tugs have very high superstructures which allow to keep a watch on the vessels in front and way ahead.



TYPES OF SHIPS

Service Ships

- **Ships Providing Safety:**
Ships specially designed to attend any emergency at sea.

- Ships Providing Safety
 - Rescue Ships
 - Fireboats

TYPES OF SHIPS

Ships Providing Safety

- **Rescue Boats**: Powerful high-speed crafts, able to operate in any conditions and being furnished to save ships which have damage or have suffered an accident onboard and need urgent help.



TYPES OF SHIPS

Ships Providing Safety

- **Fireboats**: Fitted out to fight fire aboard ships and floating platforms (e.g. oil drills) by spraying foam and water from a distance of 60-100 meters.



TYPES OF SHIPS

Service Ships

- **Ships with Special Purposes**: As his name implies are ships designed to special services.
 - Ships with Special Purposes
 - Research Ships
 - Training Ships
 - Floating “houses”

TYPES OF SHIPS

Ships with Special Purposes

- **Research Ships**: ships used for exploring waterways, surveying the sea bottom and ocean processes, locating natural resources (petroleum, cobalt, copper, iron, etc.) and observing marine life.



TYPES OF SHIPS

Ships with Special Purposes

- Training Ships: For training cadets.



TYPES OF SHIPS

Ships with Special Purposes

- Floating “houses”: hospitals, hotels, exhibitions, workshops, laboratories ships.



TYPES OF SHIPS

Civil Ships

- Technical Ships: Ships which provide technical service and create the necessary conditions for ship navigation.

- Technical Ships
 - Dredges
 - Suction Dredges
 - Floating Docks
 - Others

TYPES OF SHIPS

Technical Ships

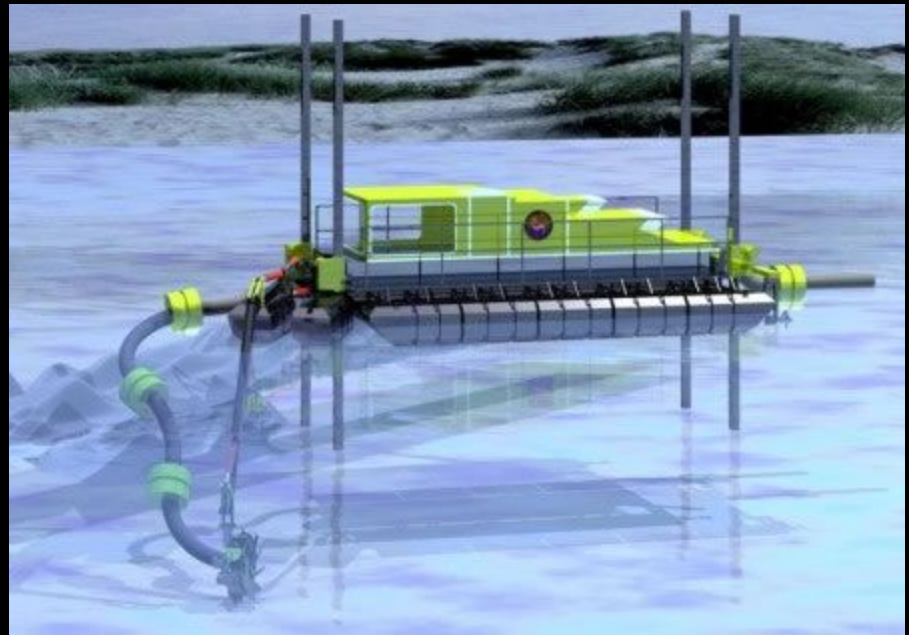
- **Dredges**: These are floating vessels used to make sea- or river-floors deeper (for example, this is done when ports and canals are built or simply maintained).



TYPES OF SHIPS

Technical Ships

- **Suction Dredges**: These crafts have a suction device which gathers sand from the sea floor and carries it away with a system of pipes to land or to another deep place in water which has to be made shallower.



TYPES OF SHIPS

Technical Ships

- **Floating Docks**: the largest representatives of technical ships; Floating docks are floating vessels which cannot move on their own and serve as places for construction and repair of ships.



TYPES OF SHIPS

Technical Ships

- **Others**: floating cranes, power stations and workshops; cable laying ships; oil collector ships (they surround the oil spills and clear them); drill ships; offshore drilling rig supply vessels;



TYPES OF SHIPS

Conclusion

Our presentation aims to describe all types of ships by explaining their typical features, through the use of pictures. It tells mainly on troop ships, because they form the world's merchant fleet and contribute essentially to world trade and transportation.



Do you have any
question???



THANKS

For your attention