

# ARTICLE ABOUT BOATS, SHIPS AND / OR VESSEL

## HISTORY

The history of boats parallels the human adventure. The first known boats date back about 10,000 years ago. These early vessels had limited function: they could move on water, but that was it. They were used mainly for hunting and fishing. The oldest dugout canoes found by archaeologists were often cut from coniferous tree logs, using simple stone tools. About 5,000 years ago, people living near Kongens Lyngby in Denmark invented the segregated hull, which allowed the size of boats to gradually be increased. Boats soon developed into keel boats similar to today's wooden pleasure craft. At about the same time, the first navigators began to use animal skins or woven fabrics as sails. Affixed to the top of a pole set vertically in a boat, these sails gave early ships great range. This allowed man to explore widely, allowing, for example the settlement of Oceania about 3,000 years ago.

The ancient Egyptians were perfectly at ease building sailboats. A remarkable example of their shipbuilding skills was the Khufu ship, a vessel 143 feet (44 m) in length entombed at the foot of the Great Pyramid of Giza around 2,500 BC and found intact in 1954. According to Herodotus, the Egyptians made the first circumnavigation of Africa around 600 BC.

The Phoenicians and Greeks gradually mastered navigation at sea aboard triremes, exploring and colonizing the Mediterranean via ship. Around 340 BC, the Greek navigator Pytheas of Massalia ventured from Greece to Western Europe and the British Isles. Before the introduction of the compass, celestial navigation was the main method for navigation at sea. In China, early versions of the magnetic compass were being developed and used in navigation between 1040 and 1117. The true mariner's compass, using a pivoting needle in a dry box, was invented in Europe no later than 1300.

Until the Renaissance, navigational technology remained comparatively primitive. This absence of technology didn't prevent some civilizations from becoming sea powers. Examples include the maritime republics of Genoa and Venice, and the Byzantine navy. The Vikings used their knarrs to explore North America, trade in the Baltic Sea and plunder many of the coastal regions of Western Europe.

Towards the end of the fourteenth century, ships like the carrack began to develop towers on the bow and stern. These towers decreased the vessel's stability, and in the fifteenth century, caravels became more widely used. The towers were gradually replaced by the forecastle and sterncastle, as in the carrack Santa María of Christopher Columbus. This increased freeboard allowed another innovation: the freeing port, and the artillery associated with it.

In the sixteenth century, the use of freeboard and freeing ports become widespread on galleons. The English modified their vessels to maximize their firepower and demonstrated the effectiveness of their doctrine, in 1588, by defeating the Spanish Armada.

At this time, ships were developing in Asia in much the same way as Europe. Japan used defensive naval techniques in the Mongol invasions of Japan in 1281. It is likely that the Mongols of the time took advantage of both European and Asian shipbuilding techniques. In Japan, during the Sengoku era from the fifteenth to seventeenth century, the great struggle for feudal supremacy was fought, in part, by coastal fleets of several hundred boats, including the atakebune.

Fifty years before Christopher Columbus, Chinese navigator Zheng He traveled the world at the head of what was for the time a huge armada. The largest of his ships had nine masts, were 130 metres (430 ft) long and had a beam of 55 metres (180 ft). His fleet carried 30,000 men aboard 70 vessels, with the goal of bringing glory to the Chinese emperor.

Parallel to the development of warships, ships in service of marine fishery and trade also developed in the period between antiquity and the Renaissance. Still primarily a coastal endeavor, fishing is largely practiced by individuals with little other money using small boats.

Maritime trade was driven by the development of shipping companies with significant financial resources. Canal barges, towed by draft animals on an adjacent towpath, contended with the railway up to and past the early days of the industrial revolution. Flat-bottomed and flexible scow boats also became widely used for transporting small cargoes. Mercantile trade went hand-in-hand with exploration, which is self-financing by the commercial benefits of exploration.

During the first half of the eighteenth century, the French Navy began to develop a new type of vessel, featuring seventy-four guns. This type of ship became the backbone of all European fighter fleets. These ships were 56 metres (180 ft) long and their construction required 2,800 oak trees and 40 kilometres (25 mi) of rope; they carried a crew of about 800 sailors and soldiers.

Ship designs stayed fairly unchanged until the late nineteenth century. The industrial revolution, new mechanical methods of propulsion, and the ability to construct ships from metal triggered an explosion in ship design. Factors including the quest for more efficient ships, the end of long running and wasteful maritime conflicts, and the increased financial capacity of industrial powers created an avalanche of more specialized boats and ships. Ships built for entirely new functions, such as firefighting, rescue, and research, also began to appear.

In light of this, classification of vessels by type or function can be difficult. Even using very broad functional classifications such as fishery, trade, military, and exploration fails to classify most of the old ships. This difficulty is increased by the fact that the terms such as sloop and frigate are used by old and new ships alike, and often the modern vessels sometimes have little in common with their predecessors.

**Boats and ships** remain essential tools for international and domestic trade, national security and cultural purposes.

In 2007, the world's fleet included 34,882 commercial vessels with gross tonnage of more than 1,000 tons, totaling 1.04 billion tons. These ships carried 7.4 billion tons of cargo in 2006, a sum that grew by 8% over the previous year. In terms of tonnage, 37.5% of these ships are tankers, 35.8% are bulk carriers, 10.9% container ships and 10.3% general cargo ships.

The size of the world's fishing fleet is more difficult to estimate. The largest of these are counted as commercial vessels, but the smallest are legion. Fishing vessels can be found in most seaside villages in the world. In 1997, the United Nations Food and Agriculture Organization identified 2.285 million fishing vessels worldwide. An estimated 132.2 million tonnes of fish and shellfish were produced in 2003. In 1990, 29 million fishermen were active in the world.

A ship is a large vessel that floats on water. Ships are generally distinguished from boats based on size. Ships may be found on lakes, seas, and rivers and they allow for a variety of activities, such as the transport of persons or goods, fishing, entertainment, public safety, and warfare.

Ships and boats have developed alongside mankind. In major wars, and in day to day life, they have become an integral part of modern commercial and military systems.

Fishing boats are used by millions of fishermen throughout the world. Military forces operate highly sophisticated vessels to transport and support forces ashore.

Commercial vessels, nearly 35,000 in number, carried 7.4 billion tons of cargo in 2007. These vessels were also key in history's great explorations and scientific and technological development. Navigators spread inventions as the compass and gunpowder. On one hand, ships have been used for colonization and the slave trade. On the other, they also have served scientific, cultural, and humanitarian needs.

There is no universal rule to distinguish a ship from a boat. Usually, ships are larger than boats. A commonly used rule of thumb is that if one vessel can carry another, the larger of the two is a ship. As dinghies are common on sailing yachts as small as 35 feet (11 m), this rule of thumb is not foolproof.

A number of large vessels are traditionally referred to as boats. Submarines are a prime example. Other types of large vessels which are traditionally called boats are the Great Lakes freighter, the riverboat, and the ferryboat. Though large enough to carry their own boats and heavy cargoes, these vessels are designed for operation on inland or protected coastal waters.

## TYPES OF BOATS AND SHIPS

There are many different types of sailing vessels. Most of them you have heard of, some of them you have not. No matter what intention or feature you need out of a boat, you can find the right sailing vessel for you. There are different kinds of sailing vessels for different kinds of sailing, as with any kind of vehicle. Be careful when choosing your sailing vessel, and be sure that the vessel you choose is the right one for you. Make sure when you look for a sailing vessel, your buy is well-researched and not an impulse buy. This can result in a bad buy or unsatisfactory vessel.

There are multiple types of sailing vessels out there that are available to anyone. They are: **barque, barquentine, bilander, brig, brigantine, caravel, carrack, clipper, cog, corvette, cutter, dhow, dinghy, frigate, fishing smack, fluyt, galleon, hermaphrodite brig, junk, ketch, Koch, longship, lugger, luzzu, pram, schooner, ship of the line, snow, sloop, xebec, yawl, catamaran.** They are all traditional vessels

This seems like a nearly unlimited line is ships, but when you get down to it, it really isn't very much. It all depends on what you want your boat to do. If you are looking for a fun, race-type boat, a **dinghy** is right up your alley. If you looking to sail the open seas in style a **caravel** is an impressive looking ship and it's easy to maneuver. If you're looking for an old-style cargo ship, a **fluyt** is perfect. They are old, large ships that were primarily used as cargo ships for the Dutch. Some ships, such as the **Koch**, were made to be sailed through cold and icy waters.

A merchant vessel is a ship that transports cargo and passengers during peace time. During wars, the same ships are auxiliaries to the navies of their respective countries, and are called upon to deliver military personnel and materiel.

Most countries of the world operate fleets of merchant ships. However, due to the high costs of operations, today these fleets are in many cases sailing under the flags of nations that specialize in providing manpower and services at favourable terms. Such flags are known as "flags of convenience". Ownership of the vessels can be by any country, however.

The Greek-owned fleet is the largest in the world. Today, the Greek fleet accounts for some 16 per cent of the world's tonnage; this makes it currently the largest single international merchant fleet in the world.

Merchant ships may be divided into several categories, according to their purpose and/or size.

## DRY CARGO SHIPS

A cargo ship or freighter is any sort of ship or vessel that carries cargo, goods, and materials from one port to another. Thousands of cargo carriers ply the world's seas and oceans each year; they handle the bulk of international trade. Cargo ships are usually specially designed for the task, often being equipped with cranes and other mechanisms to load and unload, and come in all sizes.

Dry General cargo ships, today are mainly bulk carriers and container ships. Bulk carriers or bulkers are used for the transportation of homogeneous cargo such as coal, rubber, copra, tin, wheat. Container ships are used for the carriage of miscellaneous goods.

## BULK CARRIER

A bulk carrier is ocean-going vessel used to transport bulk cargo items such as iron ore, bauxite, coal, cement, grain and similar cargo. Bulk carriers can be recognized by large box-like hatches on deck, designed to slide outboard or fold fore-and-aft for enable access for loading or discharging cargo. The dimensions of bulk carriers are often determined by the ports and sea routes that they need to serve, and by the maximum width of the Panama Canal. Most lakes are too small to accommodate bulk carriers, but a large fleet of lake freighters has been plying the Great Lakes and St. Lawrence Seaway of North America for over a century. The Colombo Express, one of the largest container ships in the world, owned and operated by Hapag-Lloyd of Germany.

## CONTAINER SHIPS

Container ships are cargo ships that carry all of their load in truck-size containers, in a technique called containerization. They form a common means of commercial intermodal freight transport.

## REEFER CARGO SHIP

A refrigerated container or reefer is a shipping container used in intermodal freight transport that is refrigerated for the transportation of temperature sensitive cargo.

While a reefer will have an integral refrigeration unit, they rely on external power, from electrical power points at a land based site, a container ship or on quay. When being transported over the road on a trailer they can be powered from diesel powered generators ("gen sets") which attach to the container whilst on road journeys.

Some reefers are equipped with a water cooling system, which can be used if the reefer is stored below deck on a vessel without adequate ventilation to remove the heat generated.

Water cooling systems are expensive, so modern vessels rely more on ventilation to remove heat from cargo holds, and the use of water cooling systems is declining.

Another refrigeration system uses liquid carbon dioxide (CO<sub>2</sub>) for cooling. This cryogenic concept was developed in response to rising fuel costs, and was an attempt to find an alternative to the standard mechanical refrigeration systems requiring maintenance, fuel and creating emissions. The CO<sub>2</sub> reefer system can keep the container's cargo frozen solid as long as 30 days.

## TANKERS

A tanker is a ship designed to transport liquids in bulk. Tankers for the transport of fluids, such as crude oil, petroleum products, liquefied petroleum gas, liquefied natural gas and chemicals, also vegetable oils, wine and other food - the tanker sector comprises one third of the world tonnage.

Tankers can range in size from several hundred tons, designed for servicing small harbours and coastal settlements, to several hundred thousand tons, with these being designed for long-range haulage. A wide range of products are carried by tankers, including:

- hydrocarbon products such as oil, LPG, and LNG
- Chemicals, such as ammonia, chlorine, and styrene monomer
- fresh water
- wine

Different products require different handling and transport, thus special types of tankers have been built, such as "chemical tankers" and "oil tankers". "LNG carriers" as they are typically known, are a relatively rare tanker designed to carry liquefied natural gases.

Among oil tankers, supertankers were designed for carrying oil around the Horn of Africa from the Middle East; the FSO Knock Nevis being the largest vessel in the world. Knock Nevis was formerly the ULCC "Jahre Viking".

Apart from pipeline transport, supertankers are the only method for transporting large quantities of oil, although such tankers have caused large environmental disasters when sinking close to coastal regions, causing oil spills.

**LNG CARRIERS** : An LNG carrier is a ship designed for transporting liquefied natural gas (LNG). As the LNG market grows rapidly, the fleet of LNG carriers continues to experience tremendous growth.

**CHEMICAL TANKERS** : A chemical tanker is a type of tanker designed to transport chemicals in bulk. Ocean-going chemical tankers generally range from 5,000 metric tons of deadweight (DWT) to 40,000 DWT in size, which is considerably smaller than the average size of other tanker types due to the specialised nature of their cargoes and the size restrictions of the port terminals where they call to load and discharge.

Chemical tankers normally have a series of separate cargo tanks which are either coated with specialised coatings such as phenolic epoxy or zinc paint, or made from stainless steel. **The coating or cargo tank material determines what types of cargo a particular tank can carry**: stainless steel tanks are required for aggressive acid cargoes such as sulfuric and phosphoric acid, while 'easier' cargoes - e.g. vegetable oil - can be carried in epoxy coated tanks.

Chemical tankers often have a system for tank heating in order to maintain the viscosity of certain cargoes - typically this system consists of a boiler which pumps pressurized steam through so-called '**heating coils**' - stainless steel pipes - in the cargo tanks, thus transferring heat into the cargo which circulates in the tank by convection. Many modern chemical tankers feature double hull construction and have one tank for each pump with separate piping, which means that each tank can load a separate cargo without any mixing. Tank cleaning after discharging cargo is a very important aspect of chemical tanker operations, because tanks which are not properly cleaned of all cargo residue can adversely affect the purity of the next cargo loaded. Before tanks are cleaned, it is very important that they are properly ventilated and checked to be free of potentially explosive gases.

**Most new chemical tankers are built by shipbuilders in Japan, Korea or China, with other builders in Turkey, Italy, Germany and Poland,**

**OIL TANKERS** : Oil tankers, also known as petroleum tankers, are ships designed for the bulk transport of oil.

There are two basic types of oil tanker: the **crude tanker** and the **product tanker**. Crude tankers move large quantities of unrefined crude oil from its point of extraction to refineries. Product tankers, generally much smaller, are designed to move petrochemicals from refineries to points near consuming markets.

Oil tankers are often classified by their size as well as their occupation. The size classes range from inland or coastal tankers of a few thousand long tons of deadweight (DWT) to the mammoth supertankers of 550,000 DWT.

Tankers move approximately 2 billion tons of oil every year. Second only to pipelines in terms of efficiency, the cost of tanker transport amounts to only two or three U.S. cents per gallon. Some specialized types of oil tankers have evolved. One of these is the naval oiler, a tanker which can [fuel a moving vessel](#). Combination [ore-bulk-oil carriers](#) and permanently moored floating storage units are two other variations on the standard oil tanker design. Oil tankers have been involved in a number of damaging and high-profile [oil spills](#).

## SPECIALIZED SHIPS

Specialized ships, e.g. for heavy lift goods or refrigerated cargo, [roll-on/roll-off cargo \(RoRo\) ships](#) for vehicles and wheeled machinery.

**RO-RO (ROLL-ON-OFF)** : Roll-on/roll-off (RORO or ro-ro) [ships](#) are [ferries](#) designed to carry wheeled [cargo](#) such as [automobiles](#), [trucks](#), [semi-trailer trucks](#), [trailers](#) or [railroad cars](#). This is in contrast to lo-lo (lift on-lift off) vessels which use a [crane](#) to load and unload cargo. RORO vessels have built-in [ramps](#) which allow the cargo to be efficiently "rolled on" and "rolled off" the vessel when in port. While smaller ferries that operate across [rivers](#) and other short distances still often have built-in ramps, the term RORO is generally reserved for larger ocean-going vessels. The ramps and doors may be stern-only, or bow and stern for quick loading. Various types of [RORO](#) vessels include [ferries](#), [cruiseferries](#), [cargo ships](#), and [barges](#).

## COASTERS

[Coasters](#), smaller ships for any category of cargo which are normally not on ocean-crossing routes, but in coastwise trades. Coasters are shallow-hulled [ships](#) used for trade between locations on the same island or continent. Their shallow hulls mean that they can get through [reefs](#) where sea-going ships usually cannot (sea-going ships have a very deep hull for supplies and trade etc.).

## PASSENGER SHIPS

A passenger ship is a [ship](#) whose primary function is to carry passengers. The category does not include [cargo vessels](#) which have accommodations for limited numbers of passengers, such as the ubiquitous twelve-passenger freighters once common on the seas in which the transport of passengers is secondary to the carriage of freight. The type does however include many classes of ships which are designed to transport substantial numbers of passengers as well as freight. Indeed, until recently virtually all [ocean liners](#) were able to transport mail, package freight and express, and other cargo in addition to passenger luggage, and were equipped with [cargo holds](#) and derricks, kingposts, or other cargo-handling gear for that purpose. Modern [cruiseferries](#) have [car](#)

decks for lorries as well as the passenger's cars. Only in more recent ocean liners and in virtually all cruise ships has this cargo capacity been suppressed.

## CRUISE SHIPS

A cruise ship or a cruise liner is a passenger ship used for pleasure voyages, where the voyage itself and the ship's amenities are considered an essential part of the experience. Cruising has become a major part of the tourism industry, with millions of passengers each year as of 2008. The industry's rapid growth has seen nine or more newly built ships catering to a North American clientele added every year since 1978, as well as others servicing European clientele. Smaller markets such as the Asia-Pacific region are generally serviced by older tonnage displaced by new ships introduced into the high growth areas.

Cruise ships operate on a mostly set roundabout course (i.e. they tend to return to their originating port) whereas ocean liners are defined by actually doing ocean-crossing voyages, which may not lead back to the same port for years.

## FERRIES

A ferry is a form of transportation, usually a boat or ship, but also other forms, carrying (or *ferrying*) passengers and sometimes their vehicles. Ferries are also used to transport freight (in lorries and sometimes unpowered freight containers) and even railroad cars. Most ferries operate on regular, frequent, return services. A foot-passenger ferry with many stops, such as in Venice, is sometimes called a waterbus or water taxi.

Ferries form public transport systems of many waterside cities, allowing direct transit between points at a capital cost much lower than bridges or tunnels.

## BARGES

A barge is a flat-bottomed boat, built mainly for river and canal transport of heavy goods. Most barges are not self-propelled and need to be moved by tugboats towing or towboats pushing them.

Barges on canals (towed by draft animals on an adjacent towpath) contended with the railway in the early industrial revolution but were outcompeted in the carriage of high value items due to the higher speed, falling costs, and route flexibility of rail transport.

Barges are still used today for low value bulk items, as the cost of hauling goods by barge is very low. Barges are also used for very heavy or bulky items; a typical barge measures 195 feet by 35 feet (59.4 meters by 10.6 meters), and can carry up to 1500 tons of cargo.

Self propelled barges may be used as such when traveling downstream or upstream in placid waters and operated as an unpowered barge with the assistance of a tugboat when traveling upstream in faster waters. Canal barges are usually made for the particular canal in which they will operate. They have many kinds such as :

- **Barracks Barge** : Like Living quarters. You can see them in Hong Kong, China.
- **Car Float Barge** : A railroad car float is an unpowered barge with rail tracks mounted on its deck. It is used to move railroad cars across water obstacles, or to locations they could not otherwise access, and is pushed or towed by a tugboat.
- **Dutch Barge** : Dutch barges are flat bottom boats, originally used for cargo carrying in the Netherlands, many of which have now been converted for pleasure or residential use.
- **Dry Bulk Cargo Barge** : A dry bulk cargo barge is a barge designed to carry freight such as coal, finished steel or its ingredients, grain, sand or gravel, and similar materials. Barges are constructed of steel. They have an outer hull, an internal void that is fitted with heavy struts and cross braces, and an internal cargo box. The outer hull of a barge can come in one of two configurations. A rake barge has a curved bow to provide less resistance when being pushed and is usually placed at the head of the tow. A box barge is usually placed in the center and rear of the tow and can hold more cargo.
- **Hopper Barge** : is a kind of non-mechanical ship or vessel that cannot move around by itself, unlike some other types of barges. Designed to carry materials, like rocks, sand, soil and rubbish, for dumping into the ocean, a river or lake for land reclamation. Hopper barges are seen in two distinctive types; raked hopper or box hopper barges. The raked hopper barges move faster than the box hoppers; they are both designed for movement of dry bulky commodities.
- **Jackup Barge / Rig** : A Jack-up Barge or Rig is a type of offshore oil and gas drilling platform that may stand still on the sea floor resting on a number of supporting columns. One of the most popular designs uses 3 columns. The supporting columns may be moved up and down by a hydraulic or electrical system. The whole rig can also be jacked up when the supporting columns are touching the sea floor. During transit, the platform floats on its hull and is typically towed to a new location by offshore tugs. Jackup rigs provide a platform that is more stable than a semi-submersible platform but can only be placed in relatively shallow waters. The rig acts as a kind of platform. This type of rig is mostly used as in connection with oil drilling.
- **Lighter/Flat Bottomed Barge**: A lighter is a type of flat-bottomed barge used to transfer goods to and from moored ships. Lighters were traditionally unpowered and were moved and steered using long oars called "sweeps", with their motive power

provided by water currents. They were operated by highly skilled workers called lightermen. The word *lighter* is still used in the modern ship type: Lighter Aboard Ship (LASH). The lighter barge gave rise to the 'Lighter Tug'- a small, maneuverable type of harbour tug. Lighter Tugs (themselves often simply referred to as 'lighters') are designed for towing lighter barges. As such, they are smaller than a traditional harbour tug and lack the power or equipment to handle large ships.

- **Liquid Cargo Barge** : are barges that transport petrochemicals, such as styrene, benzene and methanol; liquid fertilizer, including anhydrous ammonia; refined products, including gasoline, diesel and jet fuel; black oil products, such as asphalt, No. 6 fuel oil and coker fuel; and pressurized products, such as butane, propane and butadiene, which are transported on the waterways from producers to end users. In Russia, Volgotanker operates a fleet of liquid cargo barges on the Volga River system.
- **Pleasure Barge** : A pleasure barge is a flat bottomed, slow moving boat used for leisure. It is contrasted with a standard barge, which is used to transport freight. Many places where canals or rivers play a prominent role have developed pleasure barges for conducting religious ceremonies or waterborne festivities, or for viewing scenery.

## BOATS

- **Tug Boats** : A tugboat, or tug, is a boat used to maneuver, primarily by towing or pushing, other vessels (see shipping) in harbors, over the open sea or through rivers and canals. Tugboats are also used to tow barges, disabled ships, or other equipment like towboats.
- **Pilot Boats**: is used to transport pilots between land and the inbound or outbound ships that they are piloting. Pilot boats can be from 20 feet to over 75 feet in length. They are normally painted a highly visible color such as orange, red or yellow. A pilot boat can be identified by the red and white signal flag or (H)otel signal flag during daytime and showing a white light over a red light at night. Pilot boats also normally have the word "PILOT" written in large black letters on both sides of the cabin.
- **Cable Layer**: A cable layer or cable ship is a deep-sea vessel designed and used to lay underwater cables for telecommunications, electricity, and such. A large superstructure, and one or more spools that feed off the transom distinguish it.
- **Research/ Survey Vessel** : A research vessel (R/V) is a ship designed and equipped to carry out research at sea. Research vessels carry out a number of roles. Some of these roles can be combined into a single vessel, others require a dedicated vessel. Due to the demanding nature of the work these ships have to deal with, research

vessels are often constructed around an icebreaker hull, allowing them to operate in polar waters.

- Icebreaker boat/ ship : An icebreaker is a special purpose ship or boat designed to move and navigate through ice-covered waters. Although the term usually refers to icebreaking ships, it can also refer to smaller vessels (e.g., icebreaking boats that were used on the Canals of Great Britain in the days of commercial carrying). For a ship to be considered an icebreaker it requires three components: a strengthened hull, an ice-clearing shape, and the power to push through, none of which are possessed by most normal ships.
- Offshore Supply vessel / Platform : A Platform supply vessel (often abbreviated as PSV) is a ship specially designed to supply offshore oil platforms. These ships range from 65 to 350 feet in length and accomplish a variety of tasks. The primary function for most of these vessels is transportation of goods and personnel to and from offshore oil platforms and other offshore structures.
- Live Stock Carrier : A livestock carrier, as the name suggests, is a large ship used in the long distance transport of sheep, cattle and goats. They are specially built new or converted from container ships. Seagoing vessels modified or purpose-built for the transportation of live animals.
- Pleasure Yacht / Craft : A yacht is a recreational boat. It designates two rather different classes of watercraft, sailing and power yachts. Yachts are differentiated from working ships mainly by their leisure purpose. It was not until the ascendancy of the steamboat and other types of powerboat that sailing vessels in general came to be perceived as luxury items. However, since the level of luxury on larger yachts has seen an increasing trend, the use of the word yacht to mean any sailing vessel has been diminishing and is more and more limited to racing yachts or cruising yachts.
- Crane vessel : A crane vessel, crane ship or floating crane is a ship that is specialized in lifting heavy loads. The largest crane vessels are often used for offshore construction. The larger vessels are often semi-submersibles, but also conventional monohulls are used. One of the differences with a sheerleg is that the cranes can rotate.
- Drill Ship : A drillship is a maritime vessel that has been fitted with drilling apparatus. It is most often used for exploratory drilling of new oil or gas wells in deep water but can also be used for scientific drilling. It is often built on a modified tanker hull and outfitted with a dynamic positioning system to maintain its position over the well. Drillships are able to drill in water depths of over 2000 meters. In order to drill, a Marine Riser is lowered to the seabed with a Blow Out Preventer (BOP) at the bottom. Drillships are just one way to perform exploratory drilling. This function can also be performed by Semi-submersibles, jackup barges, barges, or platform rigs.

- **Dive Support Vessel** : A diving support vessel is a ship that is used as a floating base for professional diving projects. Commercial Diving Support Vessels emerged during the 1960s and 1970s when the need arose for diving operations to be performed below and around oil production platforms and associated installations in open water in the North Sea and Gulf of Mexico. Until that point most diving operations were from mobile oil drilling platforms, pipe-lay or crane barges. The diving system tended to be modularised and craned on and off the vessels as a package.
- **FSO AND FPSO UNITS** : A Floating Storage and Offloading unit (FSO) is, as its name suggests, a floating storage device, usually for oil. FSOs are commonly used in oil fields where it is not possible or efficient to lay a pipe-line to the shore. The production platform will transfer the oil to the FSO where it will be stored until a tanker arrives and connects to the FSO to offload it. Most FSOs are old single hull supertankers that have been converted. A more advanced FSO with some processing capabilities is called FPSO.
- **MODU (Mobile Offshore Drilling Unit)** : An oil platform or oil rig is a large structure used to house workers and machinery needed to drill and/or produce oil and natural gas through wells in the ocean bed. Depending on the circumstances, the platform may be attached to the ocean floor, consist of an artificial island, or be floating. Generally, oil platforms are located on the continental shelf, though as technology improves, drilling and production in deeper waters becomes both feasible and profitable. A typical platform may have around thirty wellheads located on the platform and directional drilling allows reservoirs to be accessed at both different depths and at remote positions up to 5 miles (8 kilometres) from the platform. Many platforms also have remote wellheads attached by umbilical connections, these may be single wells or a manifold centre for multiple wells.

Most commercial vessels have full hull-forms to maximize cargo capacity. Hulls are usually made of steel, although aluminum can be used on faster craft, and fiberglass on the smallest service vessels. Commercial vessels generally have a crew headed by a captain, with deck officers and marine engineers on larger vessels. Special-purpose vessels often have specialized crew if necessary, for example scientists aboard research vessels. Commercial vessels are typically powered by a single propeller driven by a diesel engine. Vessels which operate at the higher end of the speed spectrum may use pump-jet engines or sometimes gas turbine engines.

## **FISHING VESSELS**

Fishing vessels are a subset of commercial vessels, but generally small in size and often subject to different regulations and classification. They are distinguished by several criteria: the type of fish they catch, the fishing method used, geographical origin, and technical features such as rigging.

Commercial fishermen harvest many aquatic species, from tuna, cod, and salmon to shrimp, krill, lobster, clams, squid and crab, in various fisheries for these species.

Modern commercial fishermen use many methods. One is fishing by nets, such as purse seine, beach seine, lift nets, gillnets, or entangling nets. Another is trawling, including bottom trawl. Hooks and lines are used in methods like long-line fishing and hand-line fishing). Another method is the use of fishing trap.

Fishing boats are generally small, often little more than 30 metres (98 ft)) but up to 100 metres (330 ft) for a large tuna or whaling ship. They feature holds large enough to keep a good-sized catch. The fish can then simply be stored on ice. Aboard a fish processing vessel, they can be made ready for market and sold more quickly once the ship makes port.

The simplest fishing boats have a small cabin with a saloon, a deck designed to accommodate fishing, and fishing equipment such as nets and lines. Trawlers have additional gear such as winches and arms. Other devices are used, such as a rear ramp on a stern-trawler, and a skiff on a tuna seiner.

We understand that from small dhow to big vessel, there is very great history but as compare to our field of maritime, we tried to append only the famous type of vessels, boats and ships in this article.

This article seems to be more definition, Please advise if you have any idea or information about that.