Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Freezer longliners

updated : 03-Oct-200

Classification : 4Category (intl.) : Longliners **Subcategory (intl.) : Freezer longliners**

no image available

Freezer long liner:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked vessels

General Description: These vessels are medium and large sized long liners with the same general characteristics mentioned for long liner. The majority of long liner operating on high sea waters are freezer long liners.

Deck Arrangement: The wheelhouse can be situated aft or forward, but on larger vessels the bridge is generally placed aft. In typical arrangements the gear is hauled from the bow or from the side with a mechanical or hydraulic line hauler and the lines are set over the stern.

Catch Handling Mode: Frozen fish

Features

Equipment:

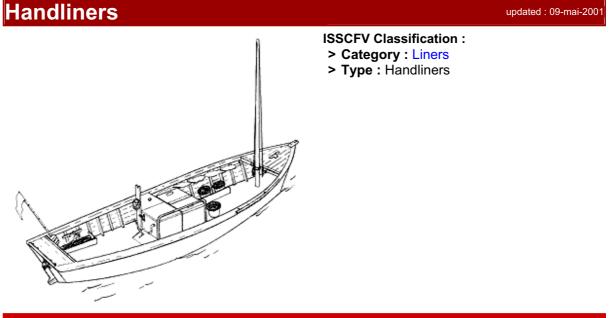
Deck Equipment: Several automatic or semi-automatic systems are used on medium and large sized vessels to bait the hooks and to shoot and haul the lines, e.g. baiter, hydraulic hauler, hook and line storage equipment and, containers or tanks for storing the bait.

Fish Detection Equipment: Typical fish detection equipment of long liners includes echo-sounder. On larger vessels also sonar is usually present on board.

Fishing Gear: Longlines

Catch Handling and Processing Equipment: Freezer long liners are outfitted with refrigerating plant and freezing equipment. The holds are insulated and refrigerated.





Vessel characteristics

Profile

Vessel Class:

Length: <12 m

Power: all

Tonnage: all

Deck Type: Normally undecked vessels comprising canoes and other small or medium sized vessels without any special features for gear handling.

General Description: Hand lines boats operate all over the world, some in shallow waters and some fishing depths of up to 300 meters deep. Traditional handliners use no winch or gurdy.

Deck Arrangement: No typical deck arrangement exists for handliners

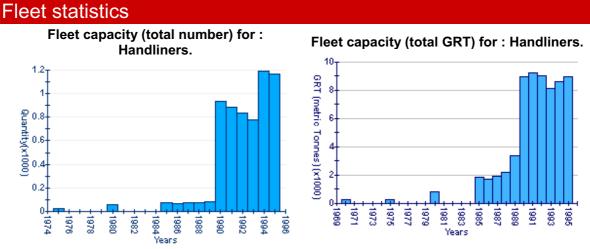
Catch Handling Mode: Wet-fish

Features

Equipment:

Deck Equipment: Handlines can be set and hauled either manually or by electrically or hydraulically poweredreels. If mechanised reels are used they are normally either fastened to the gunwale or set on stanchions close to and possibly overhanging the gunwale.

Fish Detection Equipment: On handliners, search of fish is more often linked to the fishermen's personal knowledge of fishing grounds rather than the use of special detection equipment.

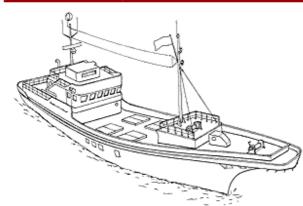


Fishing Gear: Hooks and lines



Japanese type pole and line vessels

updated : 09-mai-2007



ISSCFV Classification :

>Category : Liners

>Type : Pole and line vessels

>Subtype : Japanese type pole and line vessels

Vessel characteristics

Profile

Vessel Class:

Length: 24-45 m Power: all

Tonnage: all

Deck Type: Decked vessels

General Description: On these vessels the fishermen stand at the railing on the forward end of the vessel.

Deck Arrangement: This type of vessels is fitted with a narrow platform protruding all round the vessel at deck level. The bridge and accommodation are placed aft. The holds are placed in the middle part of the vessel.

Catch Handling Mode: Wet fish, Frozen fish

Features

Equipment:

Deck Equipment: Tanks with live bait and a water spray system for fish attraction are typical features of these vessels, as well as, the presence of a main central hold usually refrigerated on the larger vessels.

Fish Detection Equipment: According to the size of the boat, typical fish detection equipment of pole and line vessels consists usually of a sonar and an echo-sounder.

Fishing Gear: Pole and lines



Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Jigger vessels

updated : 03-Oct-200

Classification : -Category (intl.) : Line vessels -Category (intl.) : Jigger vessels

no image available

Jigger vessels:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked vessels

General Description: In general two types of jigger vessels are engaged in fisheries. Specialised squid jigger vessels working mostly in the southern hemisphere and smaller vessels using the jigging technology in the northern waters mainly for catching cod.

Deck Arrangement: On squid jigger vessel the typical arrangements are the jigger winches placed at the rail around the vessel. The number of winches depends on the size of the vessel. There are single and double drum winches in use. Arrangements of strong lamps are used to attract the squid. The vessels engaged in fishery on cod use single jigger machines. Lights to attract the fish are not installed. The fish is attracted by the jigging motion and the artificial bait.

Catch Handling Mode: all

Features

Equipment:

Deck Equipment: Depending on the size of the vessel and number on winches installed, one row of powerful lamps in the center of the vessel, or two rows on each side are installed. The bulbs have a power of up to 5000 W each. The distance of the bulbs are 0,5 - 0,6 m. The caught squid are lead by chutes from the jigger winches to the processing plant of the vessel. The jigging motion can be caused mechanically with the shape of the drum or with electronic adjustment of the winch motor. Many vessels are used during the day time as midwater trawlers and during the night as jiggers.

Fish Detection Equipment: Typical fish detection equipment of jigger vessels consists usually of an echo-sounder.

Fishing Gear: Hooks and lines

Fleet statistics



 Long lines
 updated : 09-mai-2001

 SSCFV Classification :
 > Category : Liners

 > Type : Long liners

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked and undecked vessels

General Description: Hand operated longlining can be carried out with boats and vessels of every size. Number of hooks and lines handled depends on the size of vessel, the degree of mechanisation and the size of the crew. Almost any vessel can function as a longliner to some degree; however, there are large purpose built longliners which engage in single species fisheries such as those fortuna.

Deck Arrangement: The wheelhouse can be situated aft or forward, but on larger vessels the bridge is generally placed aft. In typical arrangements the gear is hauled from the bow or from the side with a mechanical or hydraulicline hauler and the lines are set over the stern. In compliance with emerging regulations many longliners now are arranged so that the shooting station aft incorporates the capacity to set the line from an underwater position underwater to minimize bird strikes.

Catch Handling Mode: all

Features

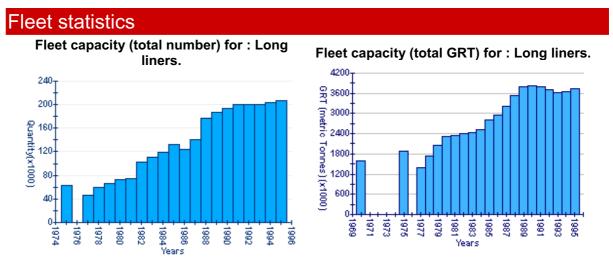
Equipment:

Deck Equipment: Small scale longliners may haul by hand into baskets or tubs or by using a hand cranked line drum. Larger vessels may use automatic or semi-automatic systems to bait the hooks and to shoot and haul the lines. Line storage on larger vessels

normally incorporates a line drum as the lines may be as long as 40 miles. There will also be appropriate means of storing and maintaining bait, depending on the type of operation and the bait to be used as well as baiting and shooting apparatus. Equipment to monitor water temperature may also be carried.

Fish Detection Equipment: Typical fish detection equipment of long liners includesechosounder. On larger vessels alsosonar is usually present on board.

Fishing Gear: Midwater orbottom longlines.





Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Midwater longliners

updated : 25-Jan-2002

Classification : 4Category (intl.) : Longliners 4Category (intl.) : Midwater longliners 4Subcategory (intl.) : Tuna longliners 4Subcategory (intl.) : Swordfish longliners

Vessel characteristics

Profile

Deck Type: Decked vessels.

General Description: Midwater longliner are generally medium sized vessels operating worldwide and purpose built to catch large pelagics. The line hauler is usually placed on the star-board side forward and a gate in the rail is provided to haul in the fish. A baiting table and a chute are located on the stern, from where the lines are set. The basic requirements of this type of vessels are: • adequate speed to reach far away fishing grounds, • enough endurance to conduct continued fishing in distant oceans, • facility for very efficient freezing storage to keep the highly valued catch, • suitable machineries to shoot and haul up longlines quickly and proper storage facilities for keeping the fishing gears and accessories.

Deck Arrangement: The wheelhouse can be situated aft or forward, but on larger vessels the bridge is generally placed aft. In typical arrangements the gear is hauled from the bow or from the side with a mechanical or hydraulic line hauler and the lines are set over the stern. To avoid incidental catches of seabirds outboard setting funnel are installed on longliners. This funnel guides the line from the setting position on the stern down to 1-2 m depth.

Catch Handling Mode: Freezing.

Features

Equipment:

Deck Equipment: In general the longline systems consists of rail roller, dehooker and hook cleaner, line hauler, hook separator, storage rack or drum. Different types of baiting machines makes the operation more efficient. Brine freezing tanks are typical equipment for midwater longliner.

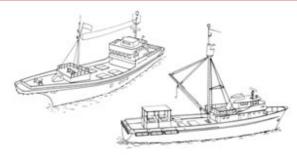
Fish Detection Equipment: More important as echo-sounders are temperature sensors in midwater longlining.

Midwater longlines.



Pole and line vessels

updated : 09-mai-2007



ISSCFV Classification :

- >Category : Liners
- **>Type :** Pole and line vessels American type pole and line vessels Japanese type pole and line vessels

Vessel characteristics

Profile

Vessel Class: Length: 10-45 m Power: all Tonnage: all

Deck Type: Decked vessels

General Description: On these vessels, used primary for catching of tuna and skipjack, the fishermen stand at the railing or on special platforms and fish with poles and lines.

Deck Arrangement: On smaller vessels the fishermen are fishing from the main deck all around the boat. With reference to the larger types of pole and line vessels, two main deck arrangements can be distinguished: the Japanese type and the American type. On a Japanese type the fishermen handling the poles stand at the rail in the forepart of the vessel. The vessel is drifting during the fishing operations. On the American type the fishermen are standing on platforms arranged over the side abaft amidships and around the stern of the vessel. The vessel is moving ahead during fishing operation.

Catch Handling Mode: all

Features

Equipment:

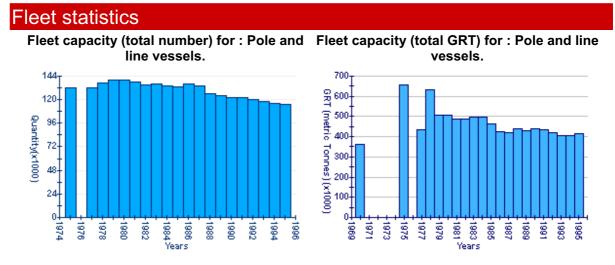
Deck Equipment: Deck equipment is minimal on a pole and line vessel. Acapstan is always useful for landing the catch and an anchor windlass is also a normal requirement for most fishing boats. Tanks with live bait and a water spray system for fish attraction are typical features of these vessels, as well as, the presence of a main central hold.

Fish Detection Equipment: According to the size of the boat, typical fish detection

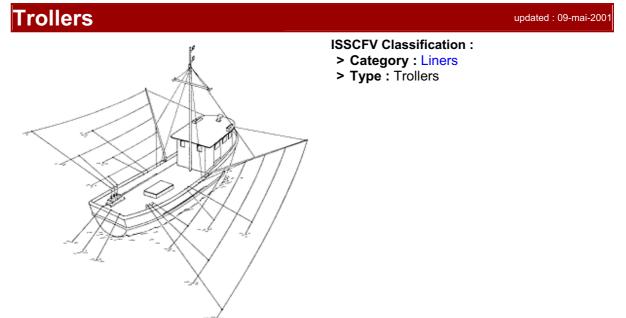
equipment of pole and line vessels consists usually of anecho-sounder and may have asonar.

Fishing Gear: Pole and lines

Catch Handling and Processing Equipment: The fish hold is divided up into a main central hold and smaller holds or tanks. The main hold where the fish is stored is usually refrigerated on the larger vessels. Smaller "day boats" use only ice to preserve the catch.







Vessel characteristics

Profile

Vessel Class: Length: <30 meters

Power: all

Tonnage: all

Deck Type: Decked vessels

General Description: Trollers range from small open boats and canoes up to large refrigerated vessels of 25 or 30 meters length. These vessels may work day trips or month long voyages. Normally the vessels are powered by engines but the use of sails is also common in trolling operations as the vessel is making way when fishing. In many tropical areas, trolling is conducted by sailing canoes, usually having outriggers for stability. Using a properly designed vessel, trolling can be an economical and efficient way of catchingtunas,mackerel and otherpelagic fish swimming close to the surface.

Deck Arrangement: According to area of operation, vessels laid out with wheelhouse and mast in most cases forward.

Catch Handling Mode: all

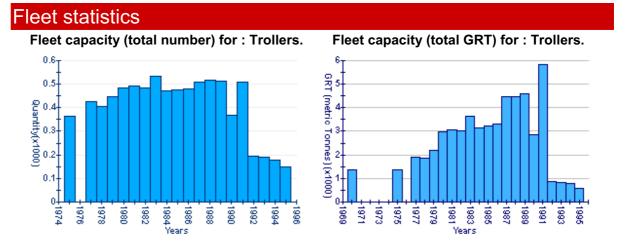
Features

Equipment:

Deck Equipment: Undecked canoes may have no equipment or only a hand cranked reel. Purpose built trollers are usually equipped with two or four trolling booms which are raised and lowered by topping lifts and held in fishing position by adjustable stays. Hydraulic or electrically powered reels (gurdies) are frequently used to haul in the lines.

Fish Detection Equipment: No specific fish detection equipment is required for trolling. Visual scouting to detect fish aggregation areas such as floating weed lines is a very common practice.

Fishing Gear: Trolling lines





Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Wet-fish longliners

updated : 03-Oct-200

Classification : -Category (intl.) : Longliners Subcategory (intl.) : Wet-fish longliners

no image available

Wet-fish long liner:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Additional information: This type of vessel consists usually of small and some medium sized long liners.

Deck Type: Decked vessels

General Description: In the wet-fish long liners the fish is kept in the hold in the fresh/"wet" condition. These vessels therefore operate usually in areas not too far distant from the landing place. For quality reasons the fishing time of such vessels is limited.

Deck Arrangement: These vessels are small sized long liners with the same general characteristics mentioned for long liner .

Catch Handling Mode: Wet-fish

Features

Equipment:

Deck Equipment: Several manual or semi-automatic systems are used on medium and large sized vessels to bait the hooks and to shoot and haul the lines, e.g. baiter, hydraulic hauler, hook and line storage equipment and, containers or tanks for storing the bait.

Fish Detection Equipment: Typical fish detection equipment of small long liners may include echosounder.

Fishing Gear: Longlines

Catch Handling and Processing Equipment: The fish is stored in boxes covered with ice or stored with ice in the fish hold.



Multipurpose vessels

updated : 09-May-2001

no image available

Not yet found:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked vessel

General Description: These are vessels which are equipped for alternative use of two or more different fishing gear without major modifications to the vessels.

Deck Arrangement: The combination of fishing gear requires that the deck arrangement be planned in advance for dual use.

Features

Equipment:

Deck Equipment: The combination of fishing gear requires that the deck equipment be planned in advance for dual use.

Fish Detection Equipment: The fish detection equipment present on board change according to the fishing gears employed.

Fishing Gear: all

Seiners

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

·Seiners

updated : 26-Apr-200

Category (intl.) : Seiners
 4Subcategory (intl.) : Seine netters
 4Subcategory (intl.) : Anchor seiners
 4Subcategory (intl.) : Scottish seiners

Classification:

Vessel characteristics

Profile

Vessel Class: Length: all Power: all Tonnage: all

Deck Type: Decked and undecked vessels

General Description: These vessels use surrounding and seine nets and comprise a large group appearing in all sizes, ranging from open boats, usually at least 10 m in length, to ocean going vessels. Seiners are normally used to catch aggregating pelagic species but there are special applications that target demersal species.

Deck Arrangement: Varied ranging from large undecked canoes with no mechanical hauling aids and a large crew to highly capitalised enterprises. With regard for the decked vessels in this general classification there will exist deck configurations with the superstructure forward and the working deck aft as well as vessels having the superstructure aft and the working deck amidships.

Catch Handling Mode: Fresh fish.

Features

Equipment:

Deck Equipment: Typical equipment of seiners may consists of a power block or triplex-roller, purse blocks and storage equipment such coilers and net reels for hauling and stowing the net aboard. Varies systems of warp storage will be used depending on the type of seine in use. On larger vessels targeting a species of small size the fish may be pumped on board while on smaller vessels or vessels catching large high quality fish the use of brailers is more common. On boats using small seine nets all operations are generally performed by hand.

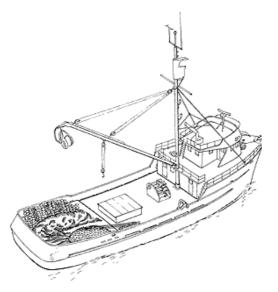
Fish Detection Equipment: In high technology applications, advanced electronic equipment is provided for searching shoals of fish, assessing the size and movement of these, and for keeping in touch the shoal whilst surrounding it with the seine, e.g. echo-sounders, sonar and track plotters.

Fishing Gear: Seine nets



American seiners

updated : 09-May-2001



Classification : 4-Category (intl.) : Purse seiners 4-Category (intl.) : American seiners 4-Subcategory (intl.) : Tuna purse seiners

American seiner:

Vessel characteristics

Profile

Vessel Class:

Length: normally > 25 meters Power: normally > 350 Hp Tonnage: normally > 50 GT

Deck Type: Decked vessels

General Description: American seiners are most common on both coasts of North America and in many areas of Oceana and like all purse seiners are a most effective vessels for catching aggregating species near the surface. The vessel surrounds the shoal with a deep curtain of netting and than the bottom of the net is pursed (closed) underneath the shoal by hauling a wire which runs from the vessel through rings on the bottom of the net and back to the vessel. Searching for shoals and assessing the size and direction of movement of it are the most important part of the fishing operation. To assist in fish detection crows nests are sometimes arranged on masts and on large vessels observation towers and helicopter landing decks are provided. For improved manoeuvrability during fishing operations the vessels may be equipped with bow thrusters.

Deck Arrangement: These seiners have the bridge and accommodation placed forward with the working deck aft.

Catch Handling Mode: all

Features

Equipment:

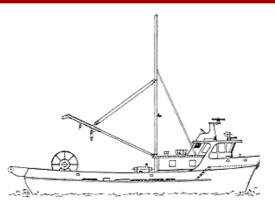
Deck Equipment: The power block is normally attached to a boom from a mast located directly behind the superstructure. A purse line winch will be located near the hauling station, usually on a preferred side amidships, where the rings are taken onboard. The net is stowed and carried at the stern of the vessel from which position the setting will take place.

Fish Detection Equipment: Advanced electronic equipment such as different types of echosounders, sonar, and track plotters are used to: support the search for schools; assess the size and movement of the school; and to keep in touch with the school whilst surrounding it with the seine. Helicopters and spotter planes may also be employed for detecting fish schools.

Fishing Gear: Purse seines

Source : FAO/FIIT - Fisheries Industry and Technologies (?)
Drum seiners

updated : 03-Oct-2001



Drum seiner:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Additional information: Drum seining was developed mainly for small vessels fishing for salmon in river estuaries, bays and creeks on the coast of British Columbia and Alaska.

Classification :

Gategory (intl.) : Purse seiners
Category (intl.) : Drum seiners

Deck Type: Decked vessels

General Description: These seiners have the same basic layout as an American seiner with the exception that a drum is used instead of a power block . This technology is mainly used in Canada and U.S.A.

Deck Arrangement: These seiners have usually the bridge and accomodation placed forward. The drum is mounted on the stern of the vessel.

Catch Handling Mode: all

Features

Equipment:

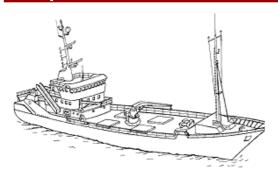
Deck Equipment: Typical equipment of this type of vessels consists of a net drum and power blocks or transport rollers which may be used in addition to the drum on larger drum seiners. The net comes in over a roller on the stern. Between the roller and the drum there is a guide on pair of rollers which move from side to side so that the seine is wound on the whole width of the drum.

Fish Detection Equipment: Advanced electronic equipment as, echo-sounder and sonar, can be provide for fish searching operations.

Fishing Gear: Purse seines

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

updated : 09-May-200



L+Category (intl.) : Purse seiners **Category (intl.) : European seiners**

Classification :

European seiner:

Vessel characteristics

Profile

Vessel Class:

Length: normally > 30 meters Power: normally > 350 Hp Tonnage: normally > 60 GT

Deck Type: Decked vessels

General Description: European seiners are most common in Scandinavia, the North Sea, Baltic and all waters fished by European nations and like all purse seiners are a most effective vessels for catching aggregating species near the surface. The vessel surrounds the shoal with a deep curtain of netting and than the bottom of the net is pursed (closed) underneath the shoal by hauling a wire which runs from the vessel through rings on the bottom of the net and back to the vessel. Searching for shoals and assessing the size and direction of movement of it are the most important part of the fishing operation. For improved manoeuvrability during fishing operations the vessels may be equipped with bow thrusters.

Deck Arrangement: This type of purse seiner has the bridge and accomodation located more to the after part of the vessel with the working deck amidships. The gear is carried and stowed in a net bin at the very aft part of the vessel. The net is set over the stern from this position. The pursing winch will normally be positioned at the forward part of the working deck.

Catch Handling Mode: Normally fresh or RSW

Features

Equipment:

Deck Equipment: For hauling the net a triple roller is used. Seine slide or tube and transport drums assist the transportation of the seine to the bin. The pursing winch is situated at the forepart of the vessel. Fish pumps are used for emptying the seine.

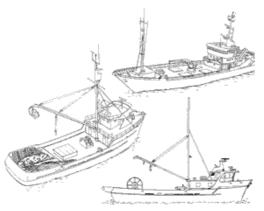
Fish Detection Equipment: Advanced electronic equipment as, different types of echo-sounders and sonars, and track plotters, support the search of shoals, assessing the size and movement of and keep in touch with the shoal whilst surrounding it with the seine.

Fishing Gear: Purse seines

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Purse seiners

updated : 09-May-2001



Classification : Category (intl.) : Purse seiners Category (intl.) : American seiners Category (intl.) : European seiners Category (intl.) : Drum seiners

Purse seiners:

Vessel characteristics

Profile

Vessel Class: Length: normally > 15 meters Power: normally > 90 Hp Tonnage: normally > 30 GT

Deck Type: Decked vessels

General Description: These vessels comprise a large group appearing in all sizes ranging from small boat to open ocean going vessels. Purse seiners are the most important and most effective vessels to catch aggregating species near the surface. The vessel surrounds the shoal with a deep curtain of netting and then the bottom of the net is pursed (closed) underneath the shoal by hauling a wire which runs from the vessel through rings on the bottom of the net and back to the vessel. Searching for shoals and assessing the size and direction of movement of it are the most important part of the fishing operation. To assist in fish detection, sometimes crows nests are arranged on masts and on large vessels observation towers and helicopter landing decks are provided.

Deck Arrangement: From the point of view of deck arrangement three main types of one boat purse seiners can be distinguished: the American seiner (Fig. 1), the European seiner (Fig. 2) and the Drum seiner (Fig. 3).

Catch Handling Mode: all

Features

Equipment:

Deck Equipment: Typical equipment of purse seiners consists usually of a power block or triplexroller and storage equipment for hauling and stowing the net aboard. On larger vessels the fish is pumped on board while on smaller vessels the use of brailers is more common. On boats using small seine nets all operations are generally performed by hand.

Fish Detection Equipment: On the more advanced purse seiners electronic equipment such as different types of echo-sounders and sonar, and track plotters are used to: support the search for schools; assess the size and movement of the school; and to keep in touch with the school whilst surrounding it with the seine.

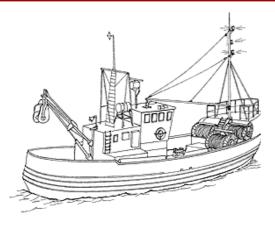
Fishing Gear: Purse seines



Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Seine netters

updated : 09-May-2001



Classification : 4Category (intl.) : Seiners 4Subcategory (intl.) : Seine netters

Seine netter:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked and undecked vessels

General Description: These vessels will assume characteristics dependent on where they are used. In northern Europe the basic types of seine netters are the Anchor seiner and Scottish seiner for which there is no difference between these two vessel types with both having the wheel house aft and the working deck amidships. In Asia the seine netter may frequently assume a configuration with the wheelhouse forward and the working deck aft. However, in regions where the fishing effort is typified by a labour intensive, low technology approach, the vessels employed to operate as seiners are often undecked and may be powered by outboards motors, or in the case of very small scale operations, even powered by sail.

Deck Arrangement: The decked seine netters of Europe will predominately resemble side trawlers as almost all have the wheelhouse and accommodation aft with the working area amidships. The Scottish seiner will normally have the coiler and winch mounted transversally in the forward part of the vessel. The anchor seiner will have the coiler and winch mounted transversally amidships. These vessels may carry a power block and the seine net is normally stored and shot from aft behind the superstructure. The Asian seiner using a configuration with the working area aft will very much resemble a stern trawler configuration.

Catch Handling Mode: Fresh fish.

Features

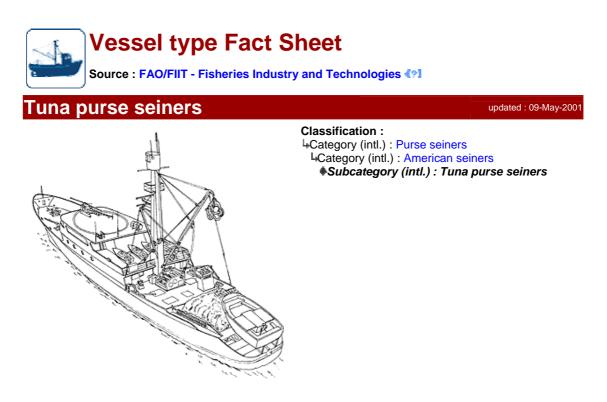
Equipment:

Deck Equipment: Special rope hauling and coiling machines may be installed on deck of the smaller

or older seiners. The new vessels tend to store the seine warps on reels rather than in coils. The winch itself is a small but fast and powerful. Sometimes a power block is fitted aft and the net is hauled in there.

Fish Detection Equipment: Typical fish detection equipment of seine netters consists usually of vertical echo-sounder.

Fishing Gear: Seine nets



Tuna purse seiner:

Vessel characteristics

Profile

Vessel Class: Length: normally over 45 meters Power: normally > 1000 HP Tonnage: normally > 100 GT

Deck Type: Decked vessels

General Description: These vessels are large purse seiners with the same general arrangement as the American seiner, equipped to handle large and heavy purse seines for tuna. For improved manoeuvrability during fishing operations the vessels may be equipped with bow thrusters.

Deck Arrangement: These seiners usually have the bridge and accommodation placed forward. A crows nest or a tuna tower is placed at the top of the mast. A crows nest or tuna tower is normally outfitted with all control and manoeuvre devices. A very heavy boom is fitted at the mast to carry the power block. The search for tuna schools is often carried out by a helicopter, for which a landing platform is provided on the superstructure.

Catch Handling Mode: Frozen fish.

Features

Equipment:

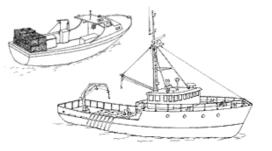
Deck Equipment: Their deck equipment consists of a three drum purse seine winchs and a power block, with topping, vang, cork and other specific winches to handle the heavy boom and net. They

are normally equipped with a skiff located on top of the net or at the stern ramp of the vessel.

Fish Detection Equipment: Visual scouting, whether it be from the crows nest or the helicopter is still the most important method for detection of tuna. But nevertheless the vessels are equipped with advanced electronic equipment for navigation and fish detection.

Fishing Gear: Purse seines





Category (intl.) : Trap setters

trap setters:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked and undecked vessels

General Description: These vessels are used for setting pots or traps for catching fish, lobsters, crabs, crayfish and other similar species. Trap setters range from open boats operating inshore up to larger decked vessels of 20-50 m operating to the edge of a continental shelf.

Deck Arrangement: On small decked trap setters the wheelhouse is located either forward or aft and the fish hold amidships. On larger vessels the wheelhouse is usually located forward.

Catch Handling Mode: Wet or Live fish

Features

Equipment:

Deck Equipment: Larger trap setters are equipped with derricks, cranes or davits for hauling pots onboard. On smaller vessels hydraulic or mechanical pot haulers are fitted.

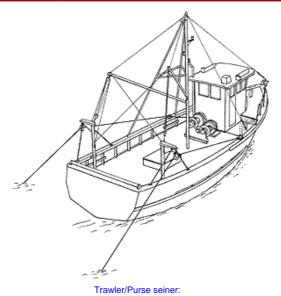
Fish Detection Equipment: Search of fish is more often linked to the fishermen's personal knowledge of fishing grounds rather than the use of special detection equipment. Decked vessels are usually equipped with an echo-sounder. Larger more sophisticated vessels will also have a Loran or GPS.

Fishing Gear: Pots, Traps



Trawler-purse seiners

updated : 09-May-2001



Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked vessel

General Description: This combination of fishing gear requires that the deck arrangement and equipment be planned in advance for dual use. As the power requirement for trawling is higher the vessel is usually designed as a trawler with a suitable combination winch for both methods.

Deck Arrangement: In the vessel illustrated the combined trawl/seiner winch is placed longitudinally behind the wheelhouse which is situated in the forward part of the vessel.

Catch Handling Mode: all

Features

Equipment:

Deck Equipment: The lead of warps and pursing lines is assured by rollers, blocks, trawl gallows and purse davit with the layout planned to reduce to a minimum the time needed for conversion from one type of fishing to another.

Fish Detection Equipment: According to the size of the boat, typical fish detection equipment of

Trawler/Purse seiner vessels consists usually of a sonar and an echo-sounder.

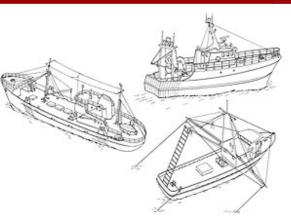
Fishing Gear: Trawls, Seine nets

Note : this Vessel Type Fact Sheet is a preliminary version. Comments and suggestions: send an e-mail to figis-comments@fao.org

FAO/FIIT Fishing Vessels Types Fact-Sheet

Trawlers

updated : 09-mai-2001



ISSCFV Classification : > Category : Trawlers Side trawlers Stern trawlers Outrigger trawlers

Vessel characteristics

Profile

Vessel Class:

Length: all

Power: all

Tonnage: all

Additional information: This parent classification includes all vessels operating in an active manner involving towing one or more nets classified as trawls.

Deck Type: : Normally decked vessels but may, in small scale fisheries include large undecked canoes.

General Description: Depending on the area of operation and trawl used, trawlers range in size from open boats, undecked, powered by outboard engines up to largefreezer trawlers andfactory trawlers which can fish in the most distant waters. Trawling is the most important and one of the most efficient fishing methods in the world. Today, commercial trawling is carried out from very shallow waters up to a depth of 2000 m. These deep water vessels are provided with engines of sufficient power to tow the gear at the appropriate trawling speed.

Deck Arrangement: From the point of view of deck arrangement three main types of trawlers can be distinguished: the side trawler (Fig. 1), thestern trawler (Fig. 2) and theoutrigger trawler (Fig. 3).

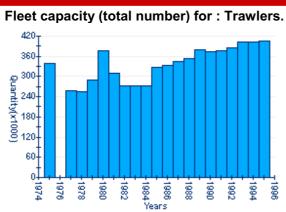
Catch Handling Mode: Fresh fish in ice orrefrigerated sea water and/or frozen fish in blocks or boxes.

Features

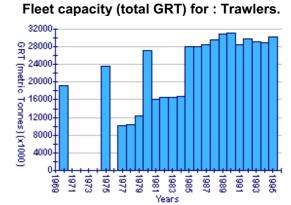
Equipment:

Deck Equipment: There will be various arrangements of the deck equipment depending on the type of trawler concerned. All trawlers will carry atrawl winches for handling and storage of the towing warps.Gilson winches,net drums and other auxiliary winches are commonly installed to handle the gear and the catch. Pelagic trawlers may be equipped with fish pumps for emptying the codend.

Fish Detection Equipment: Typical fish detection equipment of trawlers consists usually of asonar, net sounder, various types ofecho-sounders and trawl control equipment.



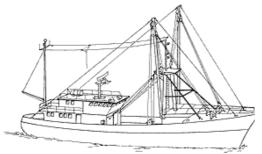
Fishing Gear: Bottom trawl, midwater trawl.



Fleet statistics



updated : 09-May-200



Classification :

Category (intl.) : Trawlers

*Category (intl.) : Beam trawlers

Beam trawler:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked vessels

General Description: These trawlers use strong outrigger booms to tow their fishing gear. Double-rig beam trawlers tow two trawls, one from either side. This technique is very successful used in the shrimp and flatfish fisheries in the North sea .

Deck Arrangement: This type of trawlers usually has the bridge and accomodation located aft.

Catch Handling Mode: all

Features

Equipment:

Deck Equipment: Typical deck equipment consists usually of two very heavy outriggers each towing one beam trawl by means or warps passing through blocks at the end of the outriggers. Typical storage equipment for hauling and stowing the net aboard is usually used.

Fish Detection Equipment: Fish finders are used extensively on board beam trawlers according to the size of the boat; typical equipment consists of a sonar and an echo-sounder.

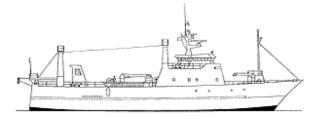
Fishing Gear: Beam trawl

Security Equipment: Safety release systems are sometimes incorporated in the boom stays or winch brakes to prevent the boat from capsizing should the gear snag suddenly on the sea bed. For safety reasons the engine power of flatfish beam trawlers is limited to 1472 Kw (2000 HP).



Factory trawler

updated : 09-mai-2001



Vessel characteristics

Profile

Vessel Class:

Length: over 45 m

Power: all

Tonnage: all

Additional information: These are generally large trawlers, working primarily in distant waters.

Deck Type: Decked vessels

General Description: The equipment of the factories ensure high quality products. The vessels have large buffer capacity (caught fish can be stored inRSW tanks), therefore peaks in the catches can also be used. Main products of factory trawlers are deep frozen fillets, fishmeal and surimi products.

Deck Arrangement: The wheelhouse and accommodations are usually situated in the forward part or amidships of the vessel. On modern vessels the trawl winches are split and situated on each side in the aft part, near the stern.Net drums and gilson-winches are installed to support the handling of gear and catch.Fish pumps are often installed on pelagic trawlers.

Catch Handling Mode: Deep frozen fish products; fish meal.

Features

Equipment:

Deck Equipment: These vessels are fitted with trawl winches and equipment necessary to haul the net on board and lift the cod-end over the deck. There is no difference in the deck equipment compared to a stern trawler.

Fish Detection Equipment: Typical fish detection equipment consists of asonar and anecho-sounder.

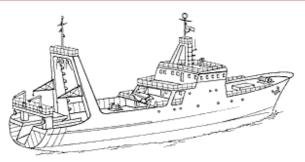
Fishing Gear: Trawls

Catch Handling and Processing Equipment: These trawlers are generally equipped with processing plant including mechanical gutting and filleting equipment with accompanying freezing installation. Fish oil, fish meal are by-products, canning of fish is not so common on board of factory trawlers. Quality control also takes place on board.



Freezer trawlers

updated : 09-mai-2007



Vessel characteristics

Profile

Vessel Class:

Length: 45 m and over

Power: all

Tonnage: all

Additional information: These vessels are medium or large sized trawlers, with the same general arrangement as the stern trawler or side trawlers.

Deck Type: Decked vessels

General Description: These are trawlers on which the fish is preserved by freezing. The majority of trawlers operating on high sea waters are freezer trawlers.

Deck Arrangement: The deck arrangement is similar to that of other trawlers.

Catch Handling Mode: Frozen fish blocks.

Features

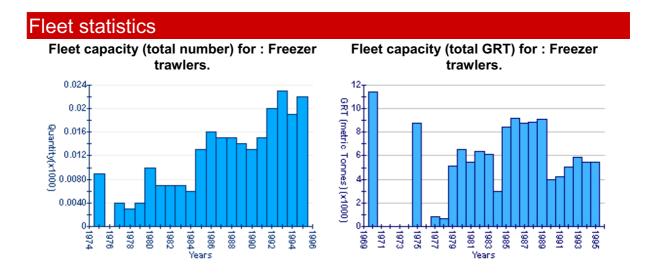
Equipment:

Deck Equipment: These vessels are fitted with trawl winches and equipment necessary to haul the net on board and lift the cod-end over the deck.

Fish Detection Equipment: Typical fish detection equipment consists of asonar and anecho-sounder.

Fishing Gear: Trawl

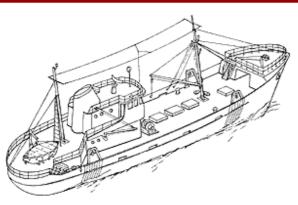
Catch Handling and Processing Equipment: Freezer trawlers are outfitted with refrigerating plant and freezing equipment.RSW tanks ensure that peaks in the catches can be used. The holds are insulated and refrigerated.





Side trawlers

updated : 26-avril-2007



ISSCFV Classification : > Category : Trawlers

> Type : Side trawlers

Vessel characteristics

Profile

Vessel Class:

Length: normally > 15 meters

Power: normally > 90 Hp

Tonnage: normally > 30 GT

Deck Type: Decked vessels

General Description: On side trawlers the trawl is set over the side and the trawl warps pass through blocks hanging from two gallows, one forward and one aft. The side trawler was the most familiar vessel in the North Atlantic deep sea fishing industry until the late sixties and has evolved over a longer period than the other trawler types. This type of vessel, still used in some countries, is progressively being replaced by the stern trawler.

Deck Arrangement: Usually the superstructure and the wheelhouse are placed aft, the fish hold is situated amidships and trawl winch transversally at the front of the superstructure as shown on figure.

Catch Handling Mode: Fresh fish (Wet-fish side trawler) or block frozen fish (Frezeer side trawler).

Features

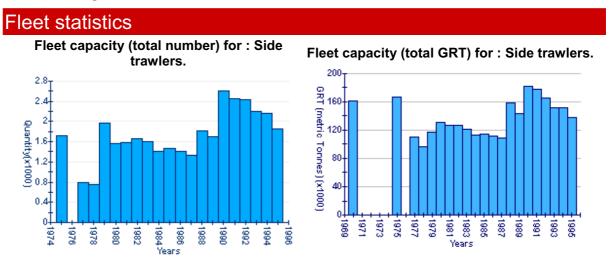
Equipment:

Deck Equipment: Typical equipment on side trawlers consists of two gallows for the towing blocks. There may be a derrick at the foremast and there may be a boom rigged on the mast to assist in hoisting the codend over the side for shooting. Between the hatches and the deckhouse there is a winch from which the warps run forward and aft to the

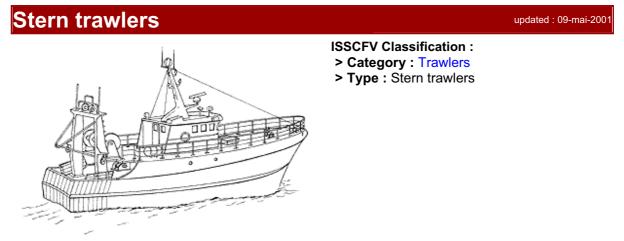
gallows. Sometimes the vessels are equipped with gallows on both sides. Some of the remaining side trawlers are now equipped with net drums.

Fish Detection Equipment: Fish finders are used extensively on board side trawlers according to the size of the boat; typical equipment may consists of a sonar and an echosounder .

Fishing Gear: Bottom trawls, midwater trawls.







Vessel characteristics

Profile

Vessel Class:

Length: normally > 15 meters

Power: normally > 90 Hp

Tonnage: normally > 25 GT

Deck Type: Decked vessels

General Description: On stern trawlers the trawl is set and hauled over the stern. Stern trawlers are designed with or without a ramp, depending on the size of the vessel. Some pelagic stern trawlers are built without a ramp. Stern trawlers are built for nearly all weather conditions. Trawlers can work as single vessel in bottom or midwater trawling or as pair trawlers where two vessels tow one large trawl or a double trawl.

Deck Arrangement: The superstructure is placed forward with the working deck aft. Gallows are placed on the stern quarters or there is a stern gantry for the operation of the otter boards.Net drums andgilson-winches are installed to assist in the handling of gear and catch.Fish pumps are often installed on pelagic trawlers. In most cases the handling of the catch and any processing of fish will take place below deck or in deck houses.

Catch Handling Mode: Fresh fish in ice (Wet-fish stern trawler) orrefrigerated sea water and/or frozen fish in blocks or boxes (Freezer stern trawler) and processed catch (Factory stern trawler).

Features

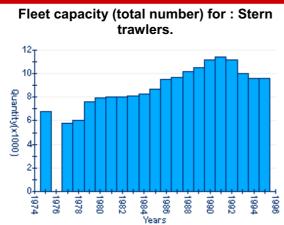
Equipment:

Deck Equipment: There will be various arrangements of the deck equipment depending on the type of trawler concerned. All trawlers will carry trawl winches for handling and storage of the towing warps.Gilson winches,net drums and other auxiliary winches are commonly installed to handle the gear and the catch. Pelagic trawlers may be equipped withfish pumps for emptying the codend.

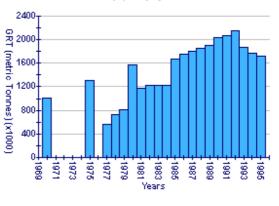
Fish Detection Equipment: According to its size, the stern trawlers may be fitted with a combination of detection equipment such assonar, net sounder, variousecho sounders and some gear control and monitoring equipment; like catch sensors, that gives information about the filling rate of the codend; symmetry sensors, that provide information about the trawls optimal geometry; tension sensors, that gives information about the tension in warps or sweeps; "trawl eye", that gives additional information about fish concentrations over, under and in the trawl opening, plus clearance from the bottom and opening of the trawl.

Fishing Gear: Bottom trawls, midwater trawls.

Fleet statistics



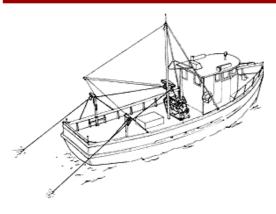
Fleet capacity (total GRT) for : Stern trawlers.



Vessel type Fact Sheet

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Wet-fish trawlers



updated : 19-Feb-2001

Classification : +Category (intl.) : Trawlers *Subcategory (intl.) : Wet-fish trawlers

Small stern trawler:

no image available

Small side trawler:

Vessel characteristics

Profile

Vessel Class: Length: 12-24 m Power: all Tonnage: all

Additional information: This type of vessel consists usually of small and some medium sized trawlers.

Deck Type: Decked vessels

General Description: In the wet-fish trawler the fish is kept in the hold in the fresh/"wet" condition. These vessels therefore operate usually in areas not too far distant from the landing place. For quality reasons the fishing time of such vessels is limited

Deck Arrangement: This vessel type has the general characteristics mentioned for trawler

Catch Handling Mode: Wet-fish

Features

Equipment:

Deck Equipment: These vessels are fitted with trawl winches and equipment necessary to haul the net on board and lift the cod-end over the deck.

Fish Detection Equipment: Typical fish detection equipment of trawlers consists usually of a sonar and an echo-sounder.

Fishing Gear: Trawl

Catch Handling and Processing Equipment: The fish is stored in boxes covered with ice or stored with ice in the fish hold.



Outrigger trawlers		updated : 09-mai-2001
	ISSCFV Classification : > Category : Trawlers > Type : Outrigger trawlers	

Vessel characteristics

Profile

Vessel Class:

Length: normally > 20 meters Power: normally > 350 Hp Tonnage: normally > 50 GT

Deck Type: Decked vessels

General Description: Basic equipment of the vessels are theoutriggers, on which the gear is towed. Outrigger trawlers are the most widely used type of fishing vessel inshrimp trawling. On each side one singleotter trawl or a twin trawl can be towed. Another special type of outrigger trawlers is the beam trawler, mainly used in theNorth sea for the catch offlatfish. One beam trawl is towed on each side. Outrigger trawlers employing flatfish beam trawls are medium sized, high powered vessels and tow the gear at speeds up to 8 knots.

Deck Arrangement: Outrigger trawlers may have the superstructure forward with the working deck aft as is the case when shrimp are targeted . In this case the towing winch will be located just aft of the superstructure and is usually installed with its axis along the centreline so that the warps from the drums feed directly to cap-rail bollards and then to the towing blocks at the ends of the outriggers. Outrigger trawlers employing trawls rigged with large beams may have the wheelhouse and accommodations at the aft part of the vessel with the working deck amidships. This arrangements allows for easier stowing and handling of larger beams. In this case the outriggers will be located in association with a mast or A frame set amidships or slightly forward. The towing winch will be located in front of the superstructure and set transverse to the

centreline. The towing warps will be led forward to deck bollards and then to the towing blocks at the end of the booms. The principal characteristic of these vessels is the presence of outriggers which are usually fastened to the mast or at the foot of the mast and extend out over the sides of the vessel during fishing operations.

Catch Handling Mode: all

Features

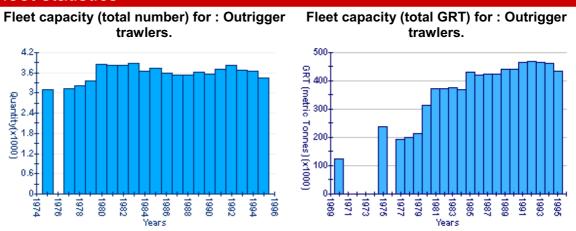
Equipment:

Deck Equipment: Warp winches with capstans are installed at deck of the vessels. Handling of the catch is supported by sorting devices and washing machines.

Fish Detection Equipment: All kind of vertical fish finders are used extensively on board of outrigger trawlers according to the its size.

Fishing Gear: Otter twin trawls; beam trawls ;single trawls.

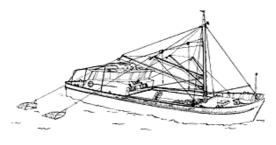
Fleet statistics





Dredgers

updated : 09-May-2001



Dredger:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked vessels

General Description: These vessels use a dredge for collecting molluscs from the bottom. The vessel drags the gear over the seabed digging the shellfish from the ground. The dredges are towed in a manner similar to beam trawlers. Large dredgers may work three or more dredges on each side. On other type of dredgers, heavy mechanical dredging units are operated by special gallows from the bow of the vessel.

Classification:

Category (intl.) : Dredgers

Deck Arrangement: Dredgers do not have a typical deck arrangement; bridge and accommodation can be placed aft or forward.

Catch Handling Mode: all

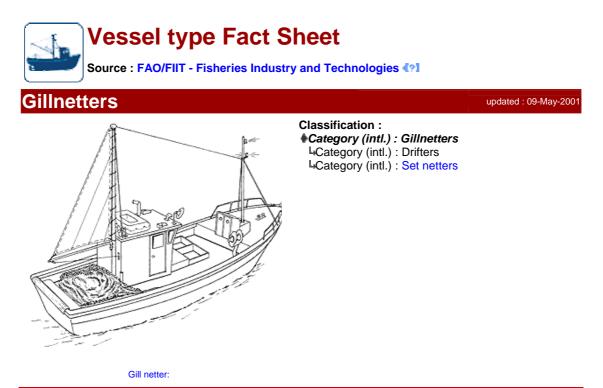
Features

Equipment:

Deck Equipment: If the dredger is employing a hydraulic dredge then a powerful water pump is necessary to operate the water jets on the dredge to flush the molluscs from the bottom. Derricks and winches may be installed for lowering and lifting of the dredge.

Fish Detection Equipment: Typical detection equipment of dredgers consists of an echo-sounder for estimation of water depth and navigation devices.

Fishing Gear: Dredges



Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked and undecked vessels

General Description: The size of the vessels varies from open boats up to large specialised drifters, operating on the high sea. Gillnets can be operated from boats and canoes on inland waters and inshore, decked small vessels in coastal waters and medium sized vessels fishing offshore. In coastal waters it is very common that gillnetting is used as a second fishing method carried out by trawlers or beam trawlers, according to fishing season and targeted species.

Deck Arrangement: Since most of the boats concerned are small and as they probably use more than one type of gear, there are considerable limitations on the deck equipment and working deck layout which may be adopted. Many gillnet boats are not decked at all, and are simply open vessels adopted to enable them to work the gear in question. Small decked gill netters can have their wheelhouse either aft or forward. On medium sized vessels, using drifting gillnets and called drifters, the bridge is usually located aft.

Catch Handling Mode: Wet-fish

Features

Equipment:

Deck Equipment: Setting and hauling operations are performed by hand on small open boats. All

other vessels are often equipped with hydraulic or occasionally mechanical net haulers. The necessary transportation of the gear from the hauling position in the forepart of the vessel to the setting position in the aft part of the vessel may be accomplished by haulers supported by plastic tubes. Net drums may also be used for gill nets.

Fish Detection Equipment: Search of fish is more often linked to the fishermen's personal knowledge f fishing grounds rather than the use of special detection equipment. This kind of vessels can be equipped with an echo-sounder.

Fishing Gear: Gillnets

Fleet statistics



Vessel type Fact Sheet

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Set netters

updated : 25-Jan-2002

Classification : 4Category (intl.) : Gillnetters \$Category (intl.) : Set netters

Vessel characteristics

Profile

Deck Type: Decked and undecked vessels

General Description: The size of the vessels varies from open boats up to large specialised drifters, operating on the high sea. Set netters operating gillnets, during fishing operations the vessel is not attached to the gear.

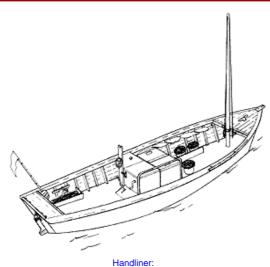
Deck Arrangement: The wheelhouse is usually located aft, as the front deck is used for handling of the gear. Hauling is done over the side at the forepart of the deck, commonly using hydraulic driven net haulers. Normally the nets are set at the aft part of the vessel by steaming ahead.

Catch Handling Mode: Fresh fish in boxes or containers chilled with ice. Larger vessels mightfreeze the catch.



Handliners

updated : 09-May-2001



Vessel characteristics

Profile

Vessel Class: Length: <12 m Power: all Tonnage: all

Deck Type: Normally undecked vessels comprising canoes and other small or medium sized vessels without any special features for gear handling.

General Description: Hand lines boats operate all over the world, some in shallow waters and some fishing depths of up to 300 meters deep. Traditional handliners use no winch or gurdy.

Deck Arrangement: No typical deck arrangement exists for handliners

Catch Handling Mode: Wet-fish

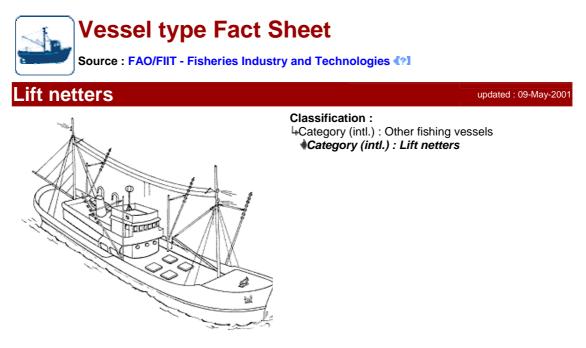
Features

Equipment:

Deck Equipment: Handlines can be set and hauled either manually or by electrically or hydraulically powered reels. If mechanised reels are used they are normally either fastened to the gunwale or set on stanchions close to and possibly overhanging the gunwale.

Fish Detection Equipment: On handliners, search of fish is more often linked to the fishermen's personal knowledge of fishing grounds rather than the use of special detection equipment.

Fishing Gear: Hooks and lines



Lift netter:

Vessel characteristics

Profile

Vessel Class:

Length: all Power: all Tonnage: all

Deck Type: Decked and undecked vessels

General Description: Fishing vessel equipped to operate liftnets, which are held from the ship's side and raised and lowered by means of outriggers. These vessels will range from open boats of approximately 10 meters to larger vessels with open ocean capability.

Deck Arrangement: The vessels if decked will usually have the bridge amidships.

Catch Handling Mode: all

Features

Equipment:

Deck Equipment: The larger vessels are often equipped with derricks and winches for handling the lifting lines, outriggers and light booms. They are often fitted with powerful lights to attract and aggregate the fish to the surface. The open boats operating as liftnetters will often be unmechanized or use hand operated winches.

Fish Detection Equipment: Fish finders are used extensively on board lift netters according to the size of the boat; typical equipment consists of a sonar and an echo-sounder.

Fishing Gear: Lift nets



Liners

updated : 09-mai-2001

ISSCFV Classification : > Category : Liners Long liners Handliners Pole and line vessels

Trollers

Vessel characteristics

Profile

Vessel Class:

Length: all

Power: all

Tonnage: all

Additional information: Most liners are small but some measure over 200 tons with over 500 HP engines.

Deck Type: Decked and undecked vessels

General Description: Vessels of all sizes are used as liners. Certain types of line fishing does require vessels of a particular size and configuration.

Deck Arrangement: Typical characteristic of this type of vessels is a sufficient deck area for attaching the bait to the hooks and a convenient place for preparing the lines for setting and hauling. The wheelhouse can be situated aft or forward.

Catch Handling Mode: all

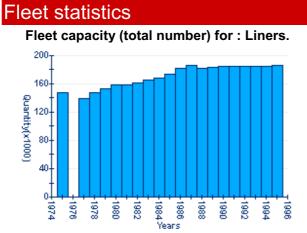
Features

Equipment:

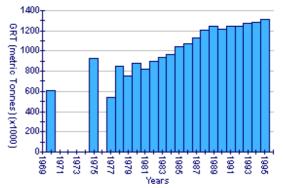
Deck Equipment: Undecked vessels will normally haul by hand or by manual line reel and will have a minimum of equipment. Small and medium sized liners will normally be equipped with some kind ofline hauler, hydraulic or mechanical, and may have a storage drum for the line or may just use tubs to store the line. Larger or more high tech vessels will have baiting machines in addition to the hauling equipment. Depending on the type of operation, there may be a requirement for live bait tanks.

Fish Detection Equipment: On small vessels, the search for fish is most often linked to the fishermen's personal knowledge of fishing grounds rather than the use of special detection equipment. Larger vessels are usually well equipped withsonar andecho-sounder. Large liners may also have equipment for monitoring water temperature as this is an important factor in locating certain species.

Fishing Gear: Hooks and Lines



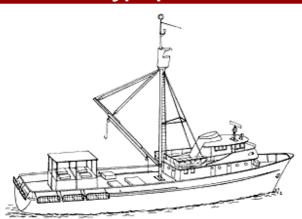
Fleet capacity (total GRT) for : Liners.





American type pole and line vessels

updated : 26-avril-2007



ISSCFV Classification :

>Category : Liners

>Type : Pole and line vessels

>Subtype : American type pole and line vessels

Vessel characteristics

Profile

Vessel Class:

Length: 24-45 m

Power: all

Tonnage: all

Deck Type: Decked vessels

General Description: On these vessels the platforms for fishermen are located around the stern of the vessel.

Deck Arrangement: The bait tanks are placed on the deck aft and the wheelhouse forward.

Catch Handling Mode: Wet fish, Frozen fish

Features

Equipment:

Deck Equipment: Tanks with live bait and a water spray system for fish attraction are typical features of these vessels, as well as, the presence of a main central hold usually refrigerated on the larger vessels.

Fish Detection Equipment: According to the size of the boat, typical fish detection equipment of pole and line vessels consists usually of a sonar and an echo-sounder .

Fishing Gear: Pole and lines

Vessel type Fact Sheet

Rottom long

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Bottom longliners

updated : 25-Jan-2002

Classification : Lacategory (intl.) : Longliners Category (intl.) : Bottom longliners LaSubcategory (intl.) : Salmon longliners

Vessel characteristics

Profile

Deck Type: Decked and undecked vessels. Fresh fish in ice and/or frozen fish in blocks or boxes.

General Description: Longlines can be operated from a dugout canoe or small rowing boat as well as from larger ocean-going vessels. Number of hooks and lines handled depends on the size of vessel, the degree of mechanisation and the size of the crew.

Deck Arrangement: The main characteristics of a longline vessel that distinguish it from other fishing vessels are the rail roller, the longline hauler and in particular the setting chute on traditional longline vessels or the baiting and gear handling system on mechanised longliners. The wheelhouse can be situated aft or forward, but on larger vessels the bridge is generally placed aft. In typical arrangements the gear is hauled from the bow or from the side with a mechanical or hydraulic line hauler and the lines are set over the stern.

Features

Equipment:

Deck Equipment: Small scale longliners handling the gear by hand. The line is stored into baskets or tubs or by using a hand cranked line drum. On larger vessels automatic or semi-automatic systems are installed to bait the hooks and to shoot and haul the lines. In general such systems consists of rail roller, dehooker and hook cleaner, line hauler, hook separator, storage rack or drum. Different types of baiting machines makes the operation more efficient.

Fish Detection Equipment: The importance of fish finding equipment is relatively low in bottom longlining. Echo sounders are mainly used to record the water depth and provide information about bottom substrate and configurations.

Bottom longlines.



Vessel type Fact Sheet

Source : FAO/FIIT - Fisheries Industry and Technologies (?)

Factory longliners

updated : 03-Oct-2001

Classification : +Category (intl.) : Longliners *Subcategory (intl.) : Factory longliners

no image available

Factory long liner:

Vessel characteristics

Profile

Vessel Class: Length: over 45 m Power: all Tonnage: all

Deck Type: Decked vessels

General Description: These vessels are large sized long liners working mostly on distant waters. They have the same general characteristics mentioned for long liner.

Deck Arrangement: The wheelhouse is generally placed aft. In typical arrangements the gear is hauled from the bow or from the side with a mechanical or hydraulic line hauler and the lines are set over the stern.

Catch Handling Mode: Processed fish

Features

Equipment:

Deck Equipment: Several automatic systems are used on large sized vessels to bait the hooks and to shoot and haul the lines, e.g. baiter, hydraulic hauler, hook and line storage equipment and, containers or tanks for storing the bait. The equipment of the factories ensure high quality products. Quality control take also place on board. The vessels have large buffer capacity (caught fish can be stored in RSW tanks), therefore piks in the catches can also be used.

Fish Detection Equipment: Typical fish detection equipment of large long liners includes echosounder and sonar

Fishing Gear: Longlines

Catch Handling and Processing Equipment: Factory long liners are generally equipped with processing plant including mechanical gutting and filleting equipment with accompanying freezing installation, fish oil, fish meal and sometimes canning plants.