

# **Ordering equipment**



## Check list of specifications to order fishing equipment

### ORDERING EQUIPMENT

#### ■ Essential data for suppliers

N.B. If you are uncertain of the precise details for the specification, give the manufacturer full details of the vessel, method and intended use and let him suggest the particular size. Much money and time is wasted foolishly specifying much too large a unit, e.g. '10 ton' winch or '100 mesh deep' gillnet.

#### ■ Fishing gear and accessories

**Accessories, Small :**  
(swivel, clasp)

Intended use and in particular nature and resistance of elements placed each side

or from the catalogue (give the name of the supplier) : trade name of model, size number, resistance

a quantity required bearing in mind the handling and selling procedure used by the supplier (box of pieces)

**Buoy :**

Intended use ; marker buoy, mooring buoy, anchor buoy, protecting buoy, seine buoy, etc.

— any mechanical constraints (e.g. crushing, passage for example through a power block)

☐ form : as precise a description as possible, with drawing showing clearly the mooring points, reinforced connectors, central axis (diameter of marking mast to be set)

☐ desired buoyancy or volume (in litres)

☐ number of buoys, bearing in mind the packaging and selling procedure used by the supplier (number per box)

**Float :**

Intended use : float for trawl, gillnet, seine, etc.

— any mechanical constraints (crushing during manoeuvres on a drum or a hauler, etc.) — maximum depth of use

☐ material, shape, central hole or attachment point(s), etc.

☐ unit buoyancy or exact size

☐ quantity required bearing in mind the handling and selling procedure used by the supplier (number per box)

**Fish hook :**

According to the supplier's catalogue (give the name of the supplier) : name, number(s) of the model and size number chosen,

	Fishing gear and accessories (continued)
ORDERING EQUIPMENT	<p>           or            accurate drawing of hook, full-sized            or            use : trolling or rod fishing or handline fishing or bngline fishing            — expected species sought and average size  <input type="checkbox"/> single, double or triple  <input type="checkbox"/> normal or forged  <input type="checkbox"/> normal finish, tinned, galvanised or stainless steel  <input type="checkbox"/> kirbed or reversed bend  <input type="checkbox"/> extremity of hook shank : flatted or eye type  <input type="checkbox"/> with or without lure : description  <input type="checkbox"/> with or without barb  <input type="checkbox"/> possibly with swivel incorporated  <input type="checkbox"/> opening of hook, gap (distance point — shank)  <input type="checkbox"/> long or short shank  <input type="checkbox"/> throat (or depth of the hook)  <input type="checkbox"/> quantity desired, bearing in mind the packaging and selling procedure used by the supplier (box of x hooks)         </p> <p> <b>Gillnet, mounted :</b>            The list of data to be supplied will depend on the supplier's skill and experience in mounting gillnets.            Give a detailed drawing            or            intended used on the bottom : hard or soft bottom; or in midwater; drifting; waters often rough or fairly calm.            — species to be fished            — handling : type of hauler            — method of ranging on board            — volume of expected catch  <input type="checkbox"/> mesh size (size of the bar or stretched mesh to be specified) or, for trommel nets, mesh size of inside net and outside panels.  <input type="checkbox"/> nature of twine : twisted multifilament or mono filament or multimonofilament         </p>

## Fishing gear and accessories (continued)

### ORDERING EQUIPMENT

#### Net webbing :

- ☐ twine material and twine size
- ☐ possibly height of net when hung or stretched net; or number of meshes deep
- ☐ number and type of floats and sinkers
- ☐ possibly colour
- ☐ hanging ratio
- ☐ length of mounted net
- (trade) name of textile
- ☐ twisted (direction of twist: right or left); braided, monofilament or multimonofilament
- ☐ size of the twine (in R tex or m/kg or denier or diameter)
- ☐ colour
- ☐ mesh size, in specified size of mesh bar, or stretched mesh or mesh opening
- ☐ knotted or knotless netting (intended use)
- ☐ for knotted netting : simple or double knot
- ☐ dimensions of netting :
  - length of stretched net or number of meshes
  - depth of stretched net or number of meshes
- ☐ simple selvedge or double row or double mesh
- ☐ placing of selvedges : at top and bottom of netting or along the sides
- ☐ if necessary, treatment (impregnation) of netting

#### Purse seine. mounted :

- The list of data to be supplied will depend on the supplier's skill and experience in mounting seines.
- Give a detailed drawing
- or
- minimum specifications
- Intended use :
- length or tonnage of seine boat and winch power
  - species to be fished, depth of fish and/or water depth
  - ☐ mesh size (body and bunt with specifications of mesh bar or stretched mesh)

	Fishing gear and accessories (continued)
ORDERING EQUIPMENT	<div> <div> <input type="checkbox"/> length when hung (with indication of the hanging ratio along the floatline for each part of the seine)</div> <div> <input type="checkbox"/> depth with stretched net (seine fully hung, including border strips or selvages)</div> <div> <input type="checkbox"/> position and dimensions (width, depth) of bunt</div> <div> <input type="checkbox"/> form of wings</div> <div> <input type="checkbox"/> type of purse rings</div> <div> <input type="checkbox"/> number and buoyancy of the floats</div> <div> <input type="checkbox"/> weight of the ballast on the leadline (type of ballast : lead or chain)</div> </div> <div> <b>Rope, combination rope :</b> </div> <div> <div> (trade) name of textile or composition (fibre synthetic and/or natural and/or steel, with or without core)</div> <div> <input type="checkbox"/> braided or twisted (if possible, direction of twist — Z or S )</div> <div> <input type="checkbox"/> if possible, breaking strength required</div> <div> <input type="checkbox"/> size of the rope : diameter (or circumference)</div> <div> <input type="checkbox"/> colour</div> <div> <input type="checkbox"/> natural or treated</div> <div> <input type="checkbox"/> length</div> <div> intended use of rope — exposure to sunlight; wear</div> </div> <div> <b>Trawl board :</b> </div> <div> <div> Type of board (which implies : use on the bottom or in midwater, material, shape, main characteristics)</div> <div> <input type="checkbox"/> power of trawler</div> <div> a length, height and weight of board</div> <div> <input type="checkbox"/> quantity : the pair or the port board or the starboard board.</div> <div> <input type="checkbox"/> special requirements for backstop fastening or brackets adjustments or eye for lifting, etc.</div> </div> <div> <b>Trawl, mounted :</b> </div> <div> <div> The list of data to be supplied will depend on the supplier's skill and experience in mounting trawls</div> <div> <input type="checkbox"/> trade name of a model considered to be typical and well known (e.g. size of opening lines followed or preceded by a trade name coded in letters and/or figures),</div> </div>

## Fishing gear and accessories (continued)

### ORDERING EQUIPMENT

or give a detailed drawing

or specify bottom trawl or high-opening bottom trawl, 2, 4 or more panels or pelagic trawl for one or two boats (pair trawl)

☐ intended use : power of trawler(s), species to be fished, for trawls in contact with the bottom : relationship of species fished with the bottom, nature of bottom, average trawling speed

☐ mesh size(s) (size of the bar or stretched mesh to be specified) in the fore part

☐ mesh size(s) (size of the bar or stretched mesh to be specified in the aft part)

☐ possibly material and twine size desired

☐ possibly length of headline and footrope

☐ nature, diameter and mounting of groundrope

☐ codend

— mesh size expressed in inside opening of the mesh (regulations in force) or size of the bar or stretched mesh

— length, stretched net

— possibly width

— possibly reinforcements (lines, beackets)

— strop, splitting strap

☐ possibly characteristics of the codend chafer or the double protection codend

☐ list of any accessories to be supplied with the trawl(s) and characteristics (rigging, shackles, swivels, hooks, etc.)

**Twine, in spool :**

(trade) name of textile (or usual abbreviation, PA, PE, etc.)

☐ twisted or braided, or monofilament or multi-monofilament

☐ size of the twine (in R tex or m/kg or denier, or diameter)

☐ breaking strength required

☐ colour

☐ natural or treated

	Fishing gear and accessories (continued)	
ORDERING EQUIPMENT	<p>Warp :</p>	<p><input type="checkbox"/> quantity (weight of one spool or twine length on it, number of spools)</p> <p>Intended use and desired flexibility</p> <p><input type="checkbox"/> length <input type="checkbox"/> diameter</p> <p><input type="checkbox"/> composition : number of wires and fibres, with or without core</p> <p><input type="checkbox"/> finish : galvanised or not (black or bright) or stainless steel</p> <p><input type="checkbox"/> required breaking strength</p> <p><input type="checkbox"/> right or left laid</p> <p><input type="checkbox"/> preparation of ends</p> <p><input type="checkbox"/> delivered in coils or on wooden reel</p>



## Deck equipment

<b>Drum, for net or line :</b>	<p>Intended use : for trawl, seine, gillnet or longline</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> pulling power required</li> <li><input type="checkbox"/> desired winding speed (with corresponding pull)</li> <li><input type="checkbox"/> capacity : <ul style="list-style-type: none"> <li>— for a trawl, seine or gillnet drum : estimated volume of net(s) with any accessories (floats, groundrope, chain, various sinkers, shackle, etc.)</li> <li>— for a longline drum (storage of main line) : length and diameter of line; type of line, multifilament or monofilament</li> </ul> </li> <li><input type="checkbox"/> possibly, in order to avoid crowding the deck : maximum overall dimensions</li> <li><input type="checkbox"/> source of power (main engine, auxiliary, PTO)</li> <li><input type="checkbox"/> means of power transmission</li> </ul>	<b>ORDERING EQUIPMENT</b>
<b>Hauler, for net. line or pot:</b>	<p>Intended use : gillnets or lines or pots hauler</p> <ul style="list-style-type: none"> <li>— tonnage and possibly size of boat</li> <li>— average depth of use</li> <li>— best catches expected (expressed in weight) for a given length of gear</li> <li>— average sea conditions</li> <li><input type="checkbox"/> pull and desired winding speed</li> <li><input type="checkbox"/> for line and pot hauler : diameter of main line</li> <li><input type="checkbox"/> for net hauler : height of gillnet(s) used, type of floats and sinkers</li> <li>— possibly form of groove or throat preferred</li> <li><input type="checkbox"/> axle of hauler : vertical or horizontal</li> <li><input type="checkbox"/> source of power (main engine, auxiliary, PTO)</li> <li><input type="checkbox"/> means of power transmission</li> </ul>	
<b>Power block :</b>	<p>Intended use :</p> <ul style="list-style-type: none"> <li>— tonnage and size of seiner</li> <li>— circumference of bunched seine when floatline and leadline have been joined</li> </ul> <p>or, failing this, greatest height of seine (towards mid-length) expressed in number of meshes and twine size</p>	

	<p><b>Deck equipment (continued)</b></p>
<p><b>ORDERING EQUIPMENT</b></p>	<div> <div> <p><b>Winch for seine :</b></p> </div> <div> <ul style="list-style-type: none"> <li><input type="checkbox"/> means of power transmission</li> <li><input type="checkbox"/> possibly pull and hauling speed required</li> </ul> <p>Intended use :</p> <ul style="list-style-type: none"> <li>— tonnage and size of seiner</li> <li>— main dimensions and weight of seine</li> <li>— common sea conditions</li> <li>— average behaviour of fish : stability of schools swimming speed, any tendency to dive, etc.</li> <li>— stabilisation by bait or attraction to light</li> <li>— day and/or night fishing</li> <li>— any fishing on bottoms where the depth would be less than the height of the seine</li> </ul> <ul style="list-style-type: none"> <li><input type="checkbox"/> two or three drums</li> <li><input type="checkbox"/> with or without warp head(s)</li> <li><input type="checkbox"/> capacity of each drum</li> </ul> <ul style="list-style-type: none"> <li>— winch with two drums (small and medium-sized seiners), length and diameter of the purseline</li> <li>— winch with three drums (large seiners), length and diameter(s) of the purse line, if appropriate in several pieces, + length and diameter of tow line</li> </ul> <li><input type="checkbox"/> possibly : pull and speed</li> </div> </div> <div> <div> <p><b>Winch for trawl :</b></p> </div> <div> <p>Intended use :</p> <ul style="list-style-type: none"> <li>— size of trawler and/or tonnage and/or power of main engine</li> <li>— type of fishing : bottom trawling or pelagic trawling — average depth of the fishing grounds</li> </ul> <p>a driving means : mechanical (power, nature and position of driving power) hydraulic or electric</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> possibly power and/or pull and winding speed required</li> <li><input type="checkbox"/> monobloc (2 joined drums) or separate drums</li> <li><input type="checkbox"/> possibly supplementary bobbins</li> <li><input type="checkbox"/> capacity of each drum : expressed in length of warp of given diameter (if appropriate take into account rigging elements and accessories that could be put on the drum : chain, shackle, swivel, triangle, danleno, sweeps, etc.)</li> </ul> </div> </div>

Deck equipment (continued)

- ☐ warp head : one, two or none
- ☐ manual or automatic warp guide (spooling, level-wind)

ORDERING EQUIPMENT

	Forged accessories, tools	
ORDERING EQUIPMENT	Chain, shackle, anchor, bobbin, etc.:	<p>Intended use clearly indicated (junction, lifting, etc)</p> <p><input type="checkbox"/> elements (nature, size, breaking strength) expected on each side of the accessory</p> <p><input type="checkbox"/> estimated maximum use load</p> <p><input type="checkbox"/> nature of steel (semi-hard, very high resistance, etc.)</p> <p><input type="checkbox"/> finish : black, galvanised or stainless steel</p> <p><input type="checkbox"/> main dimensions and characteristics (e.g. opening of a shackle, forelock, counter sunk, eye screw pin, diameter of eye of a swivel, etc.)</p> <p>or</p> <p>choice from catalogue (give the name of the supplier), indicating exact trade name of accessory and code number or the calibre corresponding to the main dimensions and necessary breaking load (breaking strength = 6 times the estimated maximum use load</p>

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Handbook of trout and salmon diseases	Ocean forum
A history of marine fish culture in Europe and North America	Pair trawling and pair seining
How to make and set nets	Pelagic and semi-pelagic trawling gear
Inland aquaculture development handbook	Penaeid shrimps — their biology and management
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Introduction to fishery by-products	Refrigeration of fishing vessels
The law of aquaculture: the law relating to the farming of fish and shellfish in Great Britain	Salmon and trout farming in Norway
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Making and managing a trout lake	Squid jigging from small boats
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Marine fisheries ecosystem	Study of the sea
Marine pollution and sea life	Textbook of fish culture
Marketing in fisheries and aquaculture	Training fishermen at sea
Mending of fishing nets	Trends in fish utilization
	Trout farming handbook
	Trout farming manual
	Tuna fishing with pole and line

A handy tool for reference on land or sea, this book contains the essential information commercial fishermen need to choose and use fishing equipment. It contains guidelines and recommendations drawn from many years' experience in professional fishing compiled at the Fishing Technology Service of the FAO, covering:

- Materials and accessories
- Fishing gear and operations
- Equipment for deck and wheelhouse
- Fishing vessel operation

All the information is highly illustrated, and there are also many useful formulae and tables for conversions between different systems of measurement.

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