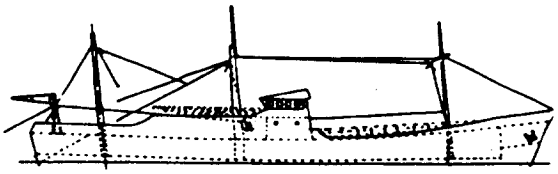
Canadian
Coast Guard

TP 9912

Standard for Inspection of Tackle on Large Fishing Vessels



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STANDARD FOR INSPECTION OF TACKLE ON LARGE FISHING VESSELS

1 SCOPE

1.1 This Standard applies to Tackle and Tackle Arrangements, not including Fishing Gear, onboard fishing vessels exceeding 24.4 m. in length or 150 tons gross tonnage.

2. DEFINITIONS

2.1 "A" FRAME OR BIPOD POST; means a mast generally located toward the stern of the trawl deck resembling in configuration the letter A.

2.2 ANCHORING DEVICE; means any combination of welds, nuts and bolts, etc., used to secure trawling block attachments.

2.3 COMPETENT PERSON; means a person having qualifications appropriate to the duties required by him as set out in Schedule II.

2.4 FISHING GEAR; means any net line or other gear for catching fish that is used in the water.

2.5 GALLOWS OR GANTRY; means a mast located towards the stern of the trawl deck which generally comprises two main uprights and an horizontal cross member to which the trawling and hauling blocks and lugs are attached or any similar configuration intended for the same purpose.

2.6 GALLOWS BLOCKS; means a block or blocks generally attached to the under side of the Gallows cross member or similar configuration located above the trawl deck.

2.7 GILSON BLOCK; or Power Block or Boom Block generally located adjacent to and above the winch and is primarily used to facilitate handling of the gear.

2.8 ICE DAVIT BLOCK; means a block that may be adjusted radially from a high point outboard to a low point inboard, which purpose is to guide the trawl warps to the ice free portion of the trawlers wake, close to the transom. when fishing in ice covered waters.

2.9 INTEGRAL GEAR; means, as it relates to fishing vessels, those components as follows:

.1 Safety Chains
.2 Shackles and Pins
.3 Support lugs, U-Bolts, Eye bolts, etc.
.4 Swivels
.5 Lifting Hooks and Rings
.6 Anchoring devices to masts and decks
.7 Ropes

2.10 LIFTING HOOKS; means the hooks used for handling trawling gear or cargo.

2.11 KNOCK OUT BLOCK; means a block used in relation to hauling or shooting the fishing gear.

2.12 RIGGING PLANS; means a drawing or drawings which indicate or illustrate the arrangement and designed safe working capacity of each component used in the fishing operation.

2.13 RINGS; means a ring used in conjunction with lifting hooks.

2.14 SAFETY CHAIN; means the chains attached to blocks and supporting structures such as to provide an auxiliary means for restraint should a block or supporting structure fail under load.

2.15 SHACKLE; means a connecting device used to join integral parts.

2.16 STANDING GEAR; means as it relates to fishing vessels, the ,"A" frame or bipod masts when fitted with its auxiliary components as follows:

.1 Gallows Blocks
.2 Knock-Out Blocks
.3 Gilson Blocks
.4 Tension Metering Blocks
.5 Ice Davit Blocks
.6 Yo-Yo Blocks

2.17 SUPPORT LUGS, U-BOLTS, EYE BOLTS; means the methods of anchoring or supporting blocks.

2.18 SWEEP LINE BLOCK; means those blocks used to facilitate the smooth travel of the trawl warps with respect to the sweep line winches.

2.19 SWIVELS; means those devices used to join components to minimize twisting of equipment and wire.

2.20 TACKLE; means equipment or devices used for handling the fishing gear and cargo.

2.21 TENSION METERING BLOCK; means that block or blocks located aft of the trawl winch, positioned such as to electronically record the tension in the fishing warps while trawling.

2.22 WARPS; means the wire rope(s) which is deployed from the spool or barrel of the winch.

2.23 YO-YO BLOCK; means that block attached to the outboard end of the Yo-Yo boom, and which is used to deploy the gear.

2.24 YO-YO BOOM; means a boom, attached to the after Gantry arrangement, which protrudes to the extreme aft of the fishing vessel.

3. GENERAL

3.1 Replacement components shall have equivalent or higher strength than that indicated on the ship's Rigging Plan.

4. INSPECTION

4.1 An Initial inspection of all Tackle and Rigging Plans shall be made by a Competent Person as defined in Schedule II Section 1.

4.2 A Visual inspection of all Tackle shall be made by the Master or Mate at intervals not exceeding one month.

4.3 A Thorough inspection of all Tackle shall be made by a Competent Person at intervals not exceeding one year.

4.4 A Quadrennial inspection of all Tackle shall be made by a Competent Person as defined in Schedule II Section 1.

5. APPLICATION OF INSPECTION AND TESTING

5.1 The Initial inspection required under 4.1 shall be a visual examination supplemented by the testing and examination of Tackle in the manner set out in Schedule 1 in accordance with the Rigging Plan.

5.2 The Visual inspection required under 4.2 shall be a visual survey carried out as carefully as conditions permit in order to determine whether any part has any readily detectable deformation, distortion, malfunction, wear, corrosion or any other visible defect liable to affect the continued safety of the appliance.

5.3 The Thorough inspection required under 4.3 shall be a visual inspection supplemented by other means such as non-destructive testing, dismantling of components, measurement of wear, evaluation of moving parts under working conditions and any other means to arrive at a reliable conclusion as to the safety of the Tackle.

5.4 The Quadrennial inspection required under 4.4 shall be a visual examination supplemented by the testing and examination of Tackle in the manner set out in Schedule I and in addition shall include hammer tests, drilling, the opening of blocks, shackles or machinery, the lifting of goose necks and such other tests as are necessary to determine the condition of the Tackle.

5.5 Any component or part thereof which is deemed by the competent person to be unsuitable or is excessively worn, shall be replaced with material which matches or exceeds the original manufacturers specifications to satisfy the Rigging Plan and be recorded in the Register of Ships Cargo Handling Machinery and Gear.

6. CERTIFICATION AND RECORDS

6.1 All new components shall be provided with a Certificate from either a testing laboratory, a firm engaged in manufacture or repair of the gear concerned or any competent person, firm or association attesting to the fact that due tests have been conducted and a Safe Working Load has been derived.

6.2 At the Initial inspection all existing non-certificated components shall be tested by taking representative samples of the components and applying proof loads in accordance with Section 4 of Schedule 1.

6.3 The Certificates required under 6.1 and 6.2 shall be obtained by the purchaser and kept on record.

6.4 All components shall be marked in such a manner as to identify and relate them to the certificate required under 6.1

6.5 A record shall be maintained of all inspections required by this Standard.

6.6 A Rigging Plan shall be provided for each fishing operation arrangement and be kept up-to-date.

6.7 All Certificates, Records and Rigging Plans shall be kept on board the ship and be readily accessible for inspection.

SCHEDULE 1

Testing and Examination of Tackle on Large Fishing Vessels

1) Every hoisting appliance with the whole of the gear accessory thereto shall be tested with a proof load that shall exceed the safe working load as follows:

Safe Working Load	Proof Load
Up to 10 tonnes	2 x SWL
Over 10 tonnes	1.25 x SWL

When the hoisting appliance is a crane, the proof load shall be lifted and swung as far as possible in both directions; if the jib of the crane has a variable radius, it should be tested with a proof load, as defined above, at the maximum and minimum radii of the jib; in hydraulic cranes where, owing to the limitations of pressure, it is impossible to lift a load of 25 percent in excess of the safe working load, it will be sufficient to lift the greatest possible load.

All other types of hoisting appliances may be tested with a dynamometer which shall be rigged to the appliance.

On side trawlers, the proof load shall be lifted with the ship's normal tackle with the boom at an angle that should not be more than 15 degrees from the horizontal or the lowest practicable angle at which the boom can be worked; the angle at which the test was made shall be stated in the certificate of test; after the proof load has been lifted it should be swung as far as possible in both directions.

2) Where a dynamometer is used, it shall be one that has been calibrated to the satisfaction of a competent person not more than 12 months prior to the test, and the test shall not be regarded as satisfactory unless the indicator remains constant for a period of at least 5 minutes.

3) Wire ropes shall be tested by sample, a piece being tested to destruction, and the safe working load shall not exceed one-fifth of the breaking load of the sample tested. Test Certificates shall be provided for all wire ropes.

4) Chains, rings, hooks, shackles, blocks, swivels, pressed and socketted fittings and other integral gear (whether accessory to a machine or not) shall be tested with a proof load equal to that shown against the article in the following table.

	Article of Loose Gear	Proof Load
1)	Single Sheave Blocks	4 x SWL
2)	Multi Sheave Blocks:	2 x SWL
	SWL up to and including 25 tonnes	
	SWL over 25 tonnes up to and including 160 tonnes	(0.933 x SWL) + 27
	SWL over 160 tonnes	1.1 x SWL
3)	Hooks, shackles, chains, rings, swivels:	
	SWL up to and including 25 tonnes	2 x SWL
	SWL over 25 tonnes	(1.22 x SWL) + 20
4)	Lifting beams, spreaders, frames:	
	SWL up to and including 10 tonnes	2 x SWL
	SWL over 10 tonnes up to and including 160 tonnes	(1.04 x SWL) + 9.6
	SWL over 160 tonnes	1.1 x SWL

NOTES:

1. The safe working load for a single sheave block including single sheave blocks with beckets is to be taken as one half of the resultant load on the head fitting.

2. The safe working load for a multi-sheave block is to be taken as the resultant load on the head fitting.

5. All Hanging Blocks i.e. Gallows Blocks, Gilson Blocks, Ice Davit Blocks, Knock-Out Blocks, Yo-Yo Blocks and Cod End Dumping Tackle are to be considered fixed gear not subject to the testing required in Section 4; they shall remain in their permanent position as tested with the proof load in Section 1 and shall not be utilized for any other purpose.

6) Safety Factors:

For all metal structural parts used when the SWL is 10 tonnes of less.....	5
For all metal structural parts used when the SWL is over 10 tonnes.....	4
For wooden structural parts used.....	8
Chains.....	$4^{1/2}$
Wire Rope.....	5
Fibre Rope.....	7

7) After being tested, all tackle shall be examined, the sheaves and pins of blocks being removed for the purpose, to see whether any part has been injured or permanently deformed by the test.

SCHEDULE II

Qualifications of Competent Persons

Competent Person Work Qualified for	Work
1. exclusive surveyor employed by a classification society acceptable to the Board.	All testing and examination of gear
2. Responsible person having the necessary and appropriate technical qualifications employed by: a) a testing laboratory or b) a firm engaged in manufacture or repair of gear concerned or c) any other approved person, firm or association	The manufacture, repair and testing of gear appropriate to the qualification of the person, or field of specialization of the firm.
3. Any responsible person having the experience to allow him to carry out the work of inspection satisfactorily.	Annual thorough inspections.