The Merchant Shipping (Cargo Ship Construction And Survey) Rules, 1974

UNION OF INDIA
India

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Rule
THE-MERCHANT-SHIPPING-CARGO-SHIP-CONSTRUCTION-AND-SUR of 1974

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1898.

G.S.R. 295, dated 6th March, 1974. - Whereas a draft of the Merchant Shipping (Cargo Ship Construction and Survey) Rules, 1972, was published as required by sub-section (1) of Section 299-B of the Merchant Shipping Act, 1958 (44 of 1958), at pages 3693 to 3701 of the Gazette of India, Part II-Sec. 3, sub-section (i), dated the 23rd December, 1972 under the notification of the Government of India in the Ministry of Shipping and Transport, No. G.S.R. 1606, dated the 19th December, 1972, inviting objections and suggestions till the 5th February, 1973, from all persons likely to be affected thereby;And whereas the said Gazette was made available to the public on the 23rd December, 1972;And whereas no objections or suggestions have been received;Now, therefore, in exercise of the powers conferred by sub-section (1) of Section 284 and Section 299-B of the Merchant Shipping Act, 1958 (44 of 1958), the Central Government hereby makes the following rules, namely :-

1. Short title, Commencement, application and exception.

(1)These rules may be called the Merchant Shipping (Cargo Ship Construction and Survey) Rules, 1974.(2)They shall come into force at once.(3)Unless expressly provided otherwise, they shall apply to :(i)all sea-going cargo ships of 500 tons gross or more, other than pleasure yachts and fishing vessels registered in India;(ii)all sea-going cargo ships of 500 tons gross or more, other than

pleasure yachts and fishing vessels, not registered in India when they are at a port or place in India or within the territorial waters of India :Provided that rule 4, except sub-rule (1) of that rule, rules 6 to 12 both inclusive, sub-rule (2) of rule 13, sub-rule (2) of rule 18, Cls. (c) and (d) of sub-rule (2) of rule 20, rule 24, rule 25, except sub-rule (1) of that rule, rule 27 and sub-rule (2) of rule 29 shall not apply to any ship the keel of which was laid before the 26th May, 1965.

2. Definitions.

- In these rules, unless the context otherwise requires. -(a)"Act" means the Merchant Shipping Act, 1958 (44 of 1958);(b)"B Class Panel" means a panel which complies with the requirements of rule 12 of these rules;(c)"bulkhead deck" means the uppermost deck up to which the majority of transverse watertight bulkheads are carried;(d)"cargo ship construction certificate" means a cargo ship construction certificate issued under these rules to a ship of five hundred tons gross or more which is not engaged in international voyages;(e)"cargo ship safety construction certificate" means a cargo ship safety construction certificate issued under these rules to a ship of five hundred tons gross or more which is engaged in international voyages;(f)"combustible material" means any material which is not an incombustible material;(g)"control stations" means spaces in which radio equipments, main navigating equipments, Central fire-recording equipment or the emergency generator are or is located;(h)"equivalent material" where the words are used in the expression "steel or other equivalent material" means any material which by itself or due to insulation provided, has structural and integrity properties equivalent to steel at the end of an appropriate fire test;(i)"gross tonnage" has the same meaning as is assigned to it in the Merchant Shipping (Tonnage Measurement of Ships) Rules, 1960, except that where a ship has dual tonnages, the higher of the two shall be deemed to be its tonnage for the purposes of these rules;(j)"incombustible material" means a material which neither burns nor gives off inflammable vapours in sufficient quantity to ignite at a pilot flame, when heated up to approximately 750°C.(k)"length" in relation to the length of a Ship means-(i)the length in metres on the summer load water-line from the foreside of the stem to the after side of the rudder post; or(ii)for ships with no rudder post, the length in metres from the foreside of the stem to the axis of the rudder stock; or(iii)for ships with cruiser sterns, the length in metres which shall be taken at 96 per cent of the total length on the summer load water-line or as the length from the foreside of the stem to the axis of the rudder stock whichever is greater;(l)"machinery control room" means a room from which the propelling machinery and boilers serving the needs of propulsion may be controlled;(m)"machinery space" means any space used for propelling auxiliary or refrigerating machinery, boilers, pumps, engineer's workshops, generators, ventilation or air-conditioning machinery, oil filling stations and similar spaces and trunkways to such spaces;(n)"maximum service speed" means the greatest speed which the ship is designed to maintain at sea at its deepest sea-going draught;(o)"oil fuel unit" means the equipment used for the preparation of oil fuel for delivery to the oil burners of an oilfired boiler and includes the oil pressure pumps, filters, and heaters;(p)"settling tank" means an oil storage tank having a heating surface of not less than 0.183 sq. metres per tonne of oil capacity;(q)"standard fire test" means a test in which a specimen of the material to be tested with a surface area of not less than 4.65 sq. metres and height not less than 2.44 metres, is exposed in a test furnace to a series of time temperature relationships approximately as follows, namely :-(i)at the end of the first five minutes 538°C(ii)at the end of the first ten minutes 704°C(iii)at the end of the first thirty minutes

843°C(iv)at the end of the first sixty minutes 927°C(r)"steering gear power unit" means :-(i)in the case of electro-hydraulic steering gear, the electric motor, and its associated electrical equipment; or(ii)in the case of electro-hydraulic steering gear, the electric motor, and its associated electrical equipment and connected pump;(iii)in the case of steam-hydraulic or pneumatic hydraulic steering gear, the driving engine and connected pump;(s)"suitable" in relation to material means approved by the Central Government as suitable for the purpose for which it is used;(t)"working day" means any day on which Mercantile Marine Department Offices are open for transacting business excepting a Sunday or a closed holiday including second Saturday of a month.

3. Structural strength.

- The structural strength and the number and disposition of transverse water-tight bulkheads of every ship shall be adequate for the service for which the ship is intended.

4. Water-tight doors.

(1)In every ship in which water-tight doors are provided to maintain the water-tight integrity of a bulkhead, every such water-tight door shall be made of a suitable material and shall be efficiently constructed for its intended use.(2)In every ship,--------(a)every water-tight door of the sliding type shall be capable of being operated by efficient hand-operated gear both at the door itself and from an accessible position above the bulkhead deck;(b)the gear, operated from above a bulkhead deck for operating any sliding water-tight door fitted in the bulkhead of a machinery space, shall be situated outside the machinery space unless such a position is inconsistent with the efficient arrangements of the necessary gearing;(c)where there is access from the lower part of a machinery space to a water-tight shaft tunnel, the access opening shall be provided with a sliding water-tight door which shall be capable of being operated locally on both sides of the door;(d)means shall be provided at remote operating positions to indicate when a sliding door is closed;(e)water-tight doors shall be capable of being operated when the ship is listed up to 15 degrees either way.

5. Bilge pumping arrangement.

- Every ship shall he provided with efficient bilge pumping plant and means for drainage so arranged that water entering any part of the hull (other than a space permanently appropriated for the carriage of fresh water, water ballast, oil fuel or liquid cargo and for which other efficient means of pumping or drainage are provided) can be pumped out through at least one suction pipe when the ship is on even keel or is listed not more than 5 degrees either way. Wing suctino shall be provided, where necessary for the purpose. Efficient means shall be provided whereby water may easily flow to the suction pipes:Provided that the Central Government may allow the means of pumping or drainage to be dispensed with in particular compartments of any ship or class of ships if it is satisfied that the safety of the ship is not thereby impaired.

6. Electrical equipment and installations.

(1)In every ship the electrical equipment and installations, including any electrical means of propulsion shall be such that the ship and all persons on board are protected against electrical hazards and shall conform to the standards accepted by the Central Government.(2)Every ship in which electric power is the only power for maintaining auxiliary services essential for the propulsion or safety of the ship, shall be provided with two or more generating sets of such power so that the aforesaid services can be maintained when any one of the sets is out of service.(3)In every ship in which the electrical load includes services essential for the propulsion or safety of the ship and the normal sea load is such as to require simultaneous working of two or more generators, arrangements shall be made to trip automatically sufficient non-essential load when the total current exceeds the connected generator capacity.

7. Emergency source of electric power in ships of 5000 tons gross or over.

(1)In every ship of 5000 tons gross or over, a self contained emergency source of electric power shall he provided in a position above the uppermost continuous deck and outside the machinery casings, so arranged as to ensure its functioning in the event of fire or other casualty causing failure of the main electrical installation.(2)In every such ship the emergency source of electric power required under sub-rule (1), shall be capable of operating the following services simultaneously, for a consecutive period of not less than six hours; namely :-(a)the emergency lighting required under the Indian Merchant Shipping (Life Saving Appliances) Rules, 1956;(b)the emergency lighting system provided in the main machinery space, the space containing the ship's main electric generating plant, on the navigating bridge and in the chart room;(c)the general alarm, if electrically operated;(d)the ship's navigation lights, if solely electric; and(e)the day light signalling lamp, if it is operated' the ship's main source of electric power.(3)In every such ship.----(a)the emergency source of electric power required under sub-rule (1) shall be either accumulator (storage) batteries, capable of complying with the requirements of sub-rule (2) without being recharged or suffering an excessive voltage drop, or it shall be a generator driven by internal combustion type machinery with an independent fuel supply and with efficient starting arrangements and the fuel provided for such machinery shall have a flash point of not less than 43°C;(b)the emergency source of electric power shall be so arranged that it will operate efficiently when the ship is listed 22-1/2 degrees and when the trim of the ship is 10 degrees from an even keel;(c)provision shall be made for the periodical testing of the emergency source of electric power and its associated circuits.

8. Emergency source of electrical power in ships of 1600 tons gross or over but less than 5000 tons gross.

(1)In every ship of 1600 tons gross or over but of less than 5000 tons gross a self-contained source of electric power shall be provided in a position above the uppermost continuous deck or raised quarter deck and outside the machinery casings, so arranged as to ensure its functioning in the event of fire or other casualty causing failure of the main electrical installation.(2)The emergency source of electric power required under sub-rule (1) shall be capable of operating the following

services simultaneously, for a consecutive period of not less than three hours, namely :-(a)the emergency lighting required under the Indian Merchant Shipping (Life Saving Appliances) Rules, 1956;(b)the general alarm, if electrically operated; and(c)the ship's navigation lights, if solely electric.(3)In every such ship-(a)the emergency source of electric power required under sub-rule (1) shall be either accumulator (storage) batteries capable of complying with the requirements of sub-rule (2) without being recharged or suffering an excessive voltage drop or it shall be a generator driven by internal combustion type machinery with an independent fuel supply and with efficient starting arrangements and the fuel provided for such machinery shall have a flash point of not less than 43°C;(b)the emergency source of electric power shall be so arranged that it will operate efficiently when the ship is listed 22-1/2 degrees and when the trim of the ship is 10 degrees from an even keel;(c)provision shall be made for the periodical testing of the emergency source of electric power and its associated circuits.

9. Emergency source of electric power in ships of less than 1600 tons gross.

(1)In every ship of less than 1600 tons gross not having its main source of electric power situated above the uppermost continuous deck or raised quarter deck and outside the machinery casings, a self contained emergency source of electric power shall be provided in a position above the machinery casings, arranged as to ensure its functioning in the event of fire or other casualty causing failure of the main electrical installation.(2)The emergency source of electric power required under sub-rule (1) shall be capable of operating the following services simultaneously, for a consecutive period of not less than three hours, namely :-(a)the emergency lighting required under the Indian Merchant Shipping (Life Saving Appliances) Rules, 1956;(b)the general alarm, if electrically operated; and(c)the ship's navigation lights, if solely electric.(3)In every such ship-(a)the emergency source of electric power required under sub-rule (1) shall be either accumulator (storage) batteries capable of complying with the requirements of sub-rule (2) without being recharged or suffering an excessive voltage drop or it shall be a generator driven by internal combustion type machinery with an independent fuel supply and with efficient starting arrangements and the fuel provided-for such machinery shall have flash point of not less than 43°C;(b)the emergency source of electric power shall be so arranged that it will operate efficiently when the ship is listed 22-1/2 degrees and when the trim of the ship is 10 degrees from an even keel;(c)provision shall be made for the periodical testing of the emergency source of electric power and its associated circuits.

10. Electric and electrohydraulic steering gear.

(1)In every ship, which is fitted with electric or electrohydraulic steering gear, indicators shall be provided which will show when the power units of such steering gear are running. These indicators shall be situated in the machinery control room or in such other position or positions as the Central Government may approve and on the navigating bridge.(2)In every ship of 5000 tons gross or over the following provision shall be made, namely :-(a)electric and electrohydraulic steering gear shall be served by two circuits fed from the main switch board one of which may pass through the emergency switch board, if an emergency switch board is provided on the ship. Each circuit shall have adequate capacity for supplying all the motors which are normally connected to it and which operate simultaneously, and if transfer arrangements are provided in the steering gear room to

permit either circuit to supply any motor or combination of motors, the capacity of each circuit shall be adequate for the most severe load condition. The circuits shall be separated as widely as is practicable throughout their length;(h)short circuit protection only shall be provided for such circuits and motors.(3)Every ship under 5000 tons gross, in which electric power is the sole source of power for both main and auxiliary steering gear, shall comply with the requirements of sub-rule (2) except that if the auxiliary steering gear is powered by a motor primarily intended for other services, suitable overload protection maybe fitted.

11. Precautions against shock, fire and other hazards of electrical origin.

(1)In every ship all electrical equipments shall be so constructed and installed that there will be no danger of injury to any person handling it in a proper manner. Subject to the provisions of sub-rule (2), where electrical equipment supplied as ship's equipment is required to be operated at a voltage in excess of 55 volts, the exposed metal parts of such equipment which arc not intended to have voltage above that of earth but which may have such a voltage under fault conditions shall be earthed.(2)In every ship, exposed metal parts of portable electric lamps, tools and similar apparatus supplied as ship's equipment required to be operated at a voltage in excess of 55 volts, shall be earthed through a conductor in the supply cable, unless by the use of double insulation or a suitable isolating transformer, protection, at least as effective as earthing through a conductor is provided. When electric lamps, tools or other apparatus are used in damp spaces, provision shall be made so far as practicable, to ensure that the danger of electric shock is reduced to a minimum.(3)In every ship each main and emergency switch board shall be so arranged as to give easy access to the back and the front thereof, without danger to any person. Every such switch board shall be suitably guarded and a non-conducting mat or grating shall be provided at its back and the front, where necessary. No exposed parts which may have a voltage, between conductors or to earth, exceeding 250 volts direct current or 55 volts alternating current, shall be installed on the face of any such board or control panel.(4)The hull return system of distribution shall not be used in any ship : Provided that the Central Government may exempt any ship other than a tanker from complying with the requirements of this sub-rule.(5)In every ship, each electric cable shall, at every position at which an electrical fault may cause a fire, be flame-retardant, sheathed or armoured or otherwise equally effectively protected. All metal sheaths and metal armour or electrical cable shall be electrically continuous" and shall be earthed.(6)In every ship, lighting fittings shall be so arranged as to prevent rises in temperature which would be injurious to the electrical wiring thereof or which would result in a risk of fire in the surrounding material.(7)In every ship, wiring shall be supported in such a manner as to avoid chafing and other injury.(8)In every ship-(a)each separate electrical circuit, shall be protected against short circuit;(b)each such separate electrical circuit other than a circuit in respect of which the Central Government has granted an exemption, shall be protected against overload. On or near each overload protective device, the current carrying capacity of the circuit which it protects and the rating or setting of the device shall be clearly and permanently indicated.(9)In every ship, all accumulator (storage) batteries shall be housed in boxes or compartments which are constructed to protect the batteries from damage and are ventilated to minimise the accumulation of explosive gas. Devices liable to are shall not be installed in any compartment assigned principally to accumulator batteries.(10)In every ship in which electric space heater forms a part of its equipment every such electric space heater shall be fixed in such a position

and shall be sio constructed as to reduce the risk of fire to the minimum. No such heater shall be constructed with an element so exposed that clothing, curtains or other materials can be scorched or set on fire by heat from the element.

12. Fire protection.

(1)This rule shall apply to all cargo ships of 4000 tons gross or over and sub-rule (9) shall apply also to cargo ships of 500 tons gross or over.(2)In a ship in which a bulkhead is required to be constructed of 'B' class panels, such panels shall be capable of preventing the passage of flame throughout a standard fire test of 30 minutes duration. Every incombustible 'B' class panel used for this purpose shall be such that if either face thereof is exposed to a standard fire test of 30 minutes duration, the average temperature on the unexposed face of the panel shall not increase at any time during the first 15 minutes of the test and during the entire period of the test it shall not exceed by more than 139°C above the initial temperature on that face nor shall the temperature at any one point thereon increase by more than 225°C above the initial temperature. Every combustible 'B' class panel used for this purpose shall be such that if either face thereof is exposed to a fire test of 30 minutes duration the average temperature on the unexposed face of the panel shall not increase by more than 139°C above the initial temperature on that face nor shall the temperature at any one point thereon increase by more than 225°C above the initial temperature.(3)In every ship-(a)the hull including the superstructure, bulkheads, decks and deckhouses shall be constructed of steel :Provided that in special cases the Central Government may permit any of these to be constructed of such other suitable materials as it may deem fit, having regard to the risk of fire;(b)the corridor bulkheads serving accommodation spaces and control stations shall be constructed of steel or 'B' class panels.(4)In every ship-(a)the doorways and similar openings in corridor bulkheads shall be capable of being closed by permanently attached doors or by shutters :(b)the number of ventilation openings in such bulkheads shall be kept to a minimum. Such openings shall, so far as is reasonably practicable, be in the lower part of the door.(5)In every ship, interior stairways, ladders and crew lift trunks within accommodation spaces shall be constructed of steel or other equivalent material.(6)In every ship, the boundary bulkheads of any emergency generator room and the bulkheads separating a galley, paint-room, lamp-room, or boatswain's store from an accommodation space shall be constructed of steel or other equivalent materials.(7)In every ship, deck coverings with accommodation spaces and control station on the deck forming the crown of machinery and cargo spaces shall be of a type which will not readily ignite.(8)In every ship-(a)paints, varnishes and other surface materials having a nitrocellulose or other highly inflammable base shall not be used in accommodation spaces, machinery spaces and control stations;(b)pipes intended to convey oil or other combustible liquids shall be of a material acceptable to the Central Government having regard to the risk of fire;(c)overboard scuppers, sanitary discharges or other outlets close to the waterline shall not be of a material likely to fail in the event of fire and thereby give rise to a danger of flooding; and(d)cellulose nitrate film shall not be used in cinematograph installations.(9)In every ship-(a)the skylights to spaces containing main propulsion machinery or oil fired boilers or auxiliary internal combustion type machinery of a total horse power of 1000 or over shall be capable of being closed and, where, practicable, opened, from outside the spaces in the event of fire and where they contain glass panels, such panels shall be of fire resisting construction fitted with wire reinforced glass and shall have external permanently attached shutters of steel or other equivalent

material;(b)windows shall not be fitted in engine casings except where the Central Government is satisfied that they are necessary and will not constitute a fire hazard. Where such windows are fitted they shall be of non-opening type and shall be of fire resisting construction fitted with wire reinforced glass and shall have permanently attached external shutters of steel or other equivalent material.

13. Boilers and machinery-General.

(1)In every ship, the machinery boilers and other pressure vessels shall be of a design and construction adequate for the service for which they are intended and shall be so installed and protected as to reduce to a minimum any danger to persons on board.(2)Without prejudice to the generality of the requirement of sub-rule (1), in boilers and machinery of every ship means shall be provided which will prevent over-pressure of any part of such machinery, boilers and other pressure vessels and in particular every boiler and every oilfired steam generator shall be provided with not less than two safety valves:Provided that the Central Government may, having regard to the output or any other feature of any boiler or unfired steam generator, permit only one safety valve to be fitted if it is satisfied that adequate protection against overpressure is provided.

14. Boilers and other pressure vessels.

(1)In every ship, every boiler or other pressure vessel and its respective mountings shall, before being put into service for the first time, be subjected to a hydraulic test to a pressure suitably in excess of the working pressure of that boiler or the pressure vessel, as the case may be so as to ensure that the boiler or any other pressure vessel together with its mountings is adequate in strength and design for the service for which it is intended having regard to---(a)the design and the material of which it is constructed;(b)the purpose for which it is intended to be used; and(c)the working conditions under which it is intended to be used.(2)Every such boiler or pressure vessel and its respective mountings shall be maintained in an efficient condition.(3)In every ship, provision shall be made which will adequately facilitate the cleaning and inspection of every pressure vessel.

15. Machinery.

(1)In every ship, main and auxiliary machinery essential for the propulsion and safety of the ship shall be provided with effective means of control and the machinery shall be capable of being brought into operation when initially no power is available in the ship.(2)In every ship, where risk from over speeding of machinery exists means shall be provided to ensure that the safe speed is not exceeded.(3)In every ship, where main or auxiliary machinery or any parts of such machinery are subject to internal pressure, such machinery or such parts shall, before being put into service for the first time, be subjected to a hydraulic test to a pressure suitably in excess of their working pressure having regard to---(a)the design and the material of which they are constructed;(b)the purpose for which they are intended to be used;(c)the working conditions under which they are intended to be used.(4)In every ship, main or auxiliary machinery or any parts thereof which are subject to internal pressure shall be maintained in an efficient condition.

16. Means of going astern.

- Every ship shall have sufficient power for going astern to secure proper control of the ship in all normal circumstances.

17. Shafts.

- In every ship, each shaft shall be so designed and constructed that it will withstand the maximum working stresses to which it may be subjected, with a factor of safety which is adequate having regard to--(a)the material of which it is constructed;(b)the service for which it is intended; and(c)the type of engines by which it is driven or of which it form a part.

18. Boiler feed system.

(1)In every ship, every boiler which provide services essential for the safety of the ship and which could be render dangerous by the the failure of its feed water supply, shall be provided with no less than two efficient and separate feed water systems so arranged that either of such systems may be opened for inspection or overhaul without affecting the efficiency of the other. In every such system means shall be provide which will prevent over-pressure in any part of the system.(2)If in any ship a possibility of oil entering the feed water system exists, the arrangements for the supply of boiler feed water shall provide the interception of oil in the feed water.(3)Every feed check valve, fitting or pipe through which feed was passes from a pump to such boilers shall be designed and constructed withstand the maximum working stresses to which it may be subjected, with a factor of safety which is adequate having regard to the material of why it is constructed and the working conditions under which it will be us. Every such valve, fitting or pipe shall, before being put into service for the first time, be subjected to a hydraulic test suitably in excess of the maximum working pressure of the boiler to which it is connected or of the maximum working pressure to which the feed line may be subjected, whichever is greater, and shall be maintained in an efficient condition.(4)The feed pipes referred to in sub-rule (3) shall be adquately supported.

19. Steam pipe system.

(1)In every ship, every steam pipe and every fitting connected thereto through which steam may pass shall be so designed and constructed as to withstand the maximum working stresses to which it may be subjected, with a factor of safety which is adequate having regard to---(a)the material of which it is constructed; and(b)the working conditions under which it will be used.(2)Without prejudice to the requirement of sub-rule (1), every such steam pipe or fitting shall, before being put into service for the first time, be subjected to a test by hydraulic pressure to a pressure suitably in excess of its working pressure to be determined having regard to the requirements of Cls. (a) and (b) of sub-rule (1), and every such steam pipe or fitting shall be maintained in an efficient condition.(3)Steam pipes shall be adequately supported.(4)Provision shall be made which will avoid excessive stress likely to lead to the failure of any such steam pipe or fitting whether by reason of variation in temperature, vibration or otherwise.(5)Efficient means shall be provided for draining

every such steam pipe so as to ensure that the interior of the pipe is kept free of water and that water hammer action will not occur under any conditions likely to arise in the course of the intended service of the ship.(6)If in any ship a steam pipe is required to receive steam from any source at a higher pressure than it can withstand with an adequate factor of safety, an efficient reducing valve, relief valve and pressure gauge shall be fitted to such pipe.

20. Air pressure system.

(1)In every ship in which machinery essential for the propulsion and safety of the ship or persons on board is required to be started, operated or controlled solely by compressed air, an efficient air system shall be provided which shall include a sufficient number of air compressors and compressed air storage vessels so as to ensure that an adequate supply of compressed air is available under all conditions likely to be met in service.(2)(a)Parts of every such compressed air system other than a pneumatic control system which are subjected to air pressure shall be so designed and constructed as to withstand, with adequate factor of safety, the maximum working stresses to which they may be subjected and every air pressure pipe or fitting in such system shall, before being put into service for the first time, be subjected to a hydraulic test to twice its maximum working pressure and be maintained in an efficient condition.(b)Means shall be provided to prevent over-pressure in any part of any such compressed air system and where water jackets or casings of air compressors and coolers might be subjected to dangerous over-pressure due to leakage into them from air pressure parts, suitable and adequate pressure relief arrangements shall be provided.(c)In every such compressed air system provision shall be made-(i)to reduce to a minimum entry of oil into the system;(ii)to drain the system; and(iii)to protect the system from the effects of internal explosion.(d)In every such compressed air system, discharge pipes from starting air compressors shall lead directly to the starting air receivers, and all starting air pipes from the receivers leading to main or auxiliary engines shall be entirely separate from the compressor discharge pipe system.

21. Cooling water system.

- In every ship in which cooling water services are essential for the running of the propelling machinery, at least two means of operating such water services shall be provided.

22. Lubricating and other oil systems.

- In every ship in which oil for lubrication, cooling or operation of the main propelling machinery and its ancillary services is circulated under pressure, adequate provision shall be made so that in the event of the failure of pump an alternative means of circulating such oil is available.

23. Oil and gaseous fuel installations.

(1)In every ship, oil fuel provided for use in boilers or machinery shall have flash point of not less than 65.6°C (closed test):Provided that the Central Government may, subject to such conditions as it may impose-(a)permit any ship to use oil fuel having a flash point of not less than 54.5°C in boilers

or of not less than 43.4 °C in internal combustion type machinery; and(b)permit the use of gaseous fuel in ships designed for the carriage of liquefied gas if such fuel results solely from evaporation of cargo carried.(2)Nothing in sub-rule (1) shall apply to fuel provided for the machinery operating the emergency source of electric power required under Cl. (a) of sub-rule (3) of rule 7, Cl. (a) of sub-rule (3) of rule 8 and Cl. (a) of sub-rule (3) of rule 9.(3)In every ship in which oil or gaseous fuel is used the arrangements for the storage, distribution and utilisation of the fuel shall be such that, having regard to the hazards of fire and explosion which the use of such fuel may entail, the safety of the ship and of persons on board is preserved.(4)In every ship in which oil or gaseous fuel is used in engines or boilers for the propulsion or safety of the ship, the arrangements for the storage, distribution and utilisation of the fuel shall be such that the effective use of the engines can be maintained under all conditions likely to be met by the ship in service.(5)Every oil fuel installation which serves a boilers that supplies steam for the propulsion of the ship shall include not less than two oil fuel units.

24. Communication between bridge and engine room.

- Every ship shall be provided with two means of communicating orders from the navigating bridge to the engine room control platform. One of such means shall be an engine room telegraph.

25. Steering gear.

(1)Every ship shall be provided with efficient main and auxiliary steering gear :Provided that if duplicate steering gear power units and their connections are fitted to the satisfaction of the Central Government and each such power unit complies with the requirements of Cl. (c) of sub-rule (2), and the duplicate units and connections operating together comply with the requirements of Cl. (b) of sub-rule (2) the Central Government may dispense with the requirement of providing an auxiliary steering gear on any ship.(2)In every ship-(a)the main steering gear, including the rudder and associated fittings, shall be of adequate strength and sufficient to steer the ship at maximum service speed. The main steering gear and rudder stock shall be so designed that they are not damaged at maximum astern speed;(b)the main steering gear shall be capable of putting the rudder over from 35° on one side to 35° on the other side with the ship running ahead at maximum service speed. The rudder shall be capable of being put over from 35° on either side to 30° on the other side in 28 seconds at maximum service speed;(c)the auxiliary steering gear shall be capable of being brought rapidly into action and shall be of adequate strength and of sufficient power to enable the ship to be steered at navigable speed. In any ship where a rudder stock of over 35.56 centimetres diameter in way of the tiller is required to comply with the requirements of Cl. (a), the auxiliary steering gear shall be operated by power.(3)In every ship, which is fitted with a power operated steering gear, the position of the rudder shall be indicated at the principal steering station.

26. Space gear.

- Every ship shall be provided with sufficient spare gear having regard to the intended service of the ship.

27. Compasses.

(1)Subject to the provisions of sub-rule (2), every ship shall be provided with two efficient magnetic compasses which shall be mounted in binnacles and sited on the ship's centre line. One of such compasses shall be provided for use as a standard compass and shall be sited near the normal steering position and in a position from which the view of the horizon is least obstructed. The other of such compasses shall be provided for use as a steering compass and shall be sited at the normal steering position unless the projected or reflected image of the standard magnetic compass is provided for this purpose or gyrocompass or a repeater from a gyro or transmitting magentic compass is positioned near the normal steering position, in which case the second magnetic compass, mounted in a binnacle or in a pedestal, may be fitted at the emergency steering position.(2)Where there is no emergency steering position, two magnetic compasses and binnacles shall not be required, provided that the ship is equipped with a standard projector magnetic compass and a gyrocompass with repeaters and provided also that a spare magnetic compass bowl with its gimbal units is carried on board so that it may be interchanged with the standard compass if that compass should become unserviceable.

28. Anchors and chain cables.

- Every ship shall be provided with such anchors and chain cables as are sufficient in number, weight and strength having regard to the size and the intended service of the ship.

29. Means of escape.

(1)In every ship, stairways and ladder ways shall be so arranged as to provide easy means of escape to the lifeboat embarkation deck from all crew spaces, and other spaces in which the crew are normally employed.(2)In every ship, two means of escape shall be provided from each engine room, shaft tunnel and boiler room as widely separated from one another as practicable, one of which may be a watertight door if such a door is available as a means of escape. Where no such watertight door is available the two means of escape shall consist of two sets of steel ladders leading to separate doors in the casing or elsewhere from which there is access to the lifeboat or life raft embarkation deck or decks :Provided that the Central Government may exempt any ship of less than 2,000 tons gross from the requirements of this sub-rule.

30. Means of stopping machinery, shutting off oil fuel, suction pipes and closing of openings.

(1)In every ship means shall be provided for stopping ventilating fans fitted in the machinery, accommodation and cargo spaces. For machinery and cargo spaces, means shall be provided for closing all skylights, doorways, ventilators, annular spaces around funnels and other openings to such spaces. Such means shall be capable of being operated from positions outside the said space which would not become inaccessible by a fire within such spaces.(2)In every ship, machinery driving-forced and induced draught fans, oil fuel transfer pumps, oil fuel pumps and other similar

fuel pumps shall be fitted with remote controls situated outside the spaces in which machinery or pumps are situated. Such controls shall be capable of stopping such machinery or pumps in the event of fire in the said spaces.(3)(a)In every ship, every pipe connected to any oil fuel storage, settling or daily service tank, not being a double bottom tank, which, if damaged, would permit discharge of contents so as to cause a fire hazard, shall be fitted with a valve or cock which shall be secured to the tank to which it is connected and be capable of being closed from a readily accessible position outside the space in which the tank is situated :Provided that if the inlet pipe is fitted to such a tank a non-return valve similarly secured to the tank may be substituted for the valve or cock required under this sub-rule.(b)Every such pipe connected to an oil fuel deep-tank transversed by any shaft or pipe tunnel, in addition to the valve to be fitted to the tank under the requirements of Cl. (a), a valve or valves may be fitted on the pipe line or lines outside the tunnel or tunnels to enable control to be exercised in the event of fire.

31. Survey of ships before the issue of cargo ship construction certificate or cargo ship safety construction certificate.

(1)The owner of every ship shall cause his ship to be surveyed by a surveyor for the purpose of issue of a cargo ship construction certificate or a cargo ship safety construction certificate, as the case may be, under these rules.(2)An application for such survey shall be made by the owner, master or agent in Schedule Ito these rules, and it shall be accompanied by plans, designs and such other data and information as the principal officer may require.(3)An application for survey shall be made, not later than 72 hours before the hour at which the survey is desired to be commenced to the principal officer of the district concerned or such other officer or officers whom the Central Government may appoint in this behalf by a notification in the Official Gazette, during office hours on any working day.(4)Fees for survey under these rules shall be levied at the appropriate rates specified in this behalf in Schedule II to these rules and no application shall be entertained unless it is accompanied by appropriate fees.(5)On receipt of an application for survey and the survey fee, the officer receiving it shall deliver to the applicant an official receipt for the fees so paid and an intimation that the application is received.(6)Surveys shall be conducted at the ports of Calcutta, Bombay, Madras, Vishakhapatnain, Cochin, Marmagoa, Bedibunder and at such other ports or places as the Central Government may by a notification issued in the Official Gazette appoint to be the places of survey in India :Provided that, if the applicant so desires and the circumstances so permit, the principal officer, may arrange survey at any other port or place on applicant agreeing in writing to reimburse to the Central Government the expenditure by the Government on the travelling allowance and daily allowance admissible to the surveyor under relevant rules and regulations in this behalf.(7)On receipt of such application, the principal officer shall cause the ship to be surveyed by a surveyor on any working day between 7.00 A.M. and 5.00 P.M.: Provided that, if so required by the applicant and circumstances permitting, the principal officer may arrange survey to be made on a day other than a working day on payment of overtime fees at the rate of Rs. 200 for each visit of the surveyor on such days, in addition to the fees payable under sub-rule (4).(8)If requisite preparations enabling the surveyor to carry out the survey are not made on the day and at the hour for the intended survey mentioned in the application or if the surveyor is unavoidably detained or otherwise prevented from conducting the survey on such day and such hour, any other day and hour may be fixed for the survey of the ship which may be convenient both to the surveyor and the applicant.(9)The surveyor

shall survey the ship and shall satisfy himself that the arrangements, materials and scantlings of the structure, boilers and other pressure vessels and their appurtenances, other than domestic boilers having a heating surface of 4.65 sq. metres or less or a working pressure of 3.52 k. gms. per sq. centimetres or less and other domestic pressure vessels having such a working such a working pressure, main and auxiliary machinery, electrical installations and other equipments comply with the requirements of these rules and are in all respects satisfactory for the services for which the ship is intended having regard to the period for which a cargo ship construction certificate or a cargo ship safety construction certificate, as the case may be, in respect of the ship is to be issued.(10)The surveyor, if satisfied on survey that he may properly do so shall forward to the principal officer a report on the survey in Schedule III to these rules.(11)The principal officer, if satisfied on the scrutiny of the report on survey of the ship that he may properly do so, shall issue a cargo ship construction certificate, as the case may be, in respect of the ship.

32. Intermediate surveys.

(1)The owner of every ship in respect of which a cargo ship construction certificate or a cargo ship safety construction certificate has been issued shall, as long as the said certificate remains in force, cause the ship to be surveyed in the manner and at the intervals specified in sub-rule (2) for the purpose of ascertaining that the ship complies with all such requirements of its cargo ship construction certificate or the cargo ship safety construction certificate, as the case may be, to remain in force and if the ship is not so surveyed the principal officer may cancel the certificate.(2)The survey to be carried under sub-rule (1) shall be as follows :(a)the hull and ship's side fastenings shall be examined in dry dock at intervals not exceeding two years and ship's side fittings shall be thoroughly examined at intervals not exceeding four years :Provided that where the principal officer is satisfied in the case of any ship that an extension of this period is justified, he may, on application of the owner, extend the period between the two surveys by such period as he may consider necessary but such period of extension shall not exceed 12 months.(b)all boilers including exhaust gas or steam heated steam generators, economisers and domestic boilers, other than domestic boilers having a heating surface of 4.65 sq. metres or less and a working pressure of 3.52 k. gms. per sq. centimetre or less, shall be examined internally and externally at intervals not exceeding two years until they are eight years old and thereafter annually :Provided that where the principal officer is satisfied in the case of any ship that the extension of this period is justified, he may on application of the owner, extend the period between two surveys by such period as he may consider necessary, but not exceeding six months.(c)screw shafts and tube shafts with continuous liners or running in oil shall be withdrawn and surveyed at intervals not exceeding three years and other screws and tube shafts shall be withdrawn and surveyed at intervals not exceeding two years :Provided that in the case of single screw ships where shafts have liners or approved oil glands or are made of approved corrosion resistant material, the interval between two surveys may be extended by a period not exceeding twelve months if the principal officer is satisfied that-(i)the shafts are withdrawn and examined at each survey by an efficient crack detection method; and(ii)the design of the keyway is such so as to justify the period of extension.(3)Every application for the survey of a ship under this rule shall be in Schedule I to these rules and shall be made to the principal officer by whom the cargo ship construction certificate or the cargo ship safety construction certificate, as the case maybe, was issued :Provided that where a ship holds a cargo ship construction certificate or a

cargo ship safety construction certificate, as the case may be, issued outside India, the application may be made to the principal officer of any district.(4)The principal officer, on receipt of the application and on payment of fees by the applicant at the appropriate rate specified in this behalf in Schedule II to these rules, shall cause the ship to be surveyed by a surveyor.(5)The surveyor shall survey the ship with a view to satisfying himself-(a)that such of the parts of the ship and its equipment specified in sub-rule (2) as are subject to the application for the survey remain efficient, so far as practicable; and(b)that no material alterations have been made in the hull, machinery or equipment of the ship to which the cargo ship construction certificate or the cargo ship safety construction certificate, as the case may be, relates without the previous approval of the principal officer.(6)On completion of the survey in accordance with the requirements of sub-rule (5), the surveyor shall forward a report of survey of the ship in Schedule III to these rules to the principal officer.(7)The principal officer, if satisfied on the scrutiny of the report of survey that he may properly do so, allow the cargo ship construction certificate or the cargo ship safety construction certificate, as the case may be, to remain in force or cancel it as he may deem fit.

I

[See rule 31 (2) and 32 (3)]Ref. No.Application for survey for grant or renewal of Cargo Ship Construction Certificate/Cargo Ship Construction Certificate or intermediate survey.(In order to avoid delay, not less than 72 hours notice should be given for surveys or inspections at Bombay, Calcutta, Madras, Visakhapatnam or Cochin. For other ports, as much notice as possible should be given.)Sir,I beg to apply for the survey described overleaf. I forward the survey fee of Rs. ..... herewith and agree to pay the expenses and balance of fees which may be properly chargeable in connection with the case.Date .....Full address :-.....Signature.....Designation.....ToThe Principal Officer/.....Mercantile Marine Department,District.(To be filled in at the Mercantile Marine Office.)The, fee of Rs ..... has been duly received and receipt No. ..... has been granted.Passed to the following Surveyor/Surveyors for necessary action :.....Principal OfficerDistrictDate .....Noted.Date .....Surveyors.

Particularsof Ship

Name of ship	Port of Registry	Official No.	Steam Motor orSail	Registered lenght	Classification, ifany	Tonnage GrossRegister
Hull when andwhere built-Material	Engines when builtand by whom – Brief Particulars IHP/NHP/BHP	Boilers when builtand by whom – Working	Intended voyage orservice	Proposed date ofsailing		

pressure

Name and addressof owners or agents of ship.

Name and TelephoneNumber of Marine/Engineer Superintendent or Agent responsible forarranging surveys.

Details of LastCargo Ship Construction Certification/Cargo Ship SafetyConstruction Certification or other certificate and date ofexpiry.

Nature ofsurvey/inspection now required.

Particulars ofcasualties to the ship since her last survey, (if any).

Place where anddate and hour when ship will be ready for survey.

Any specialremarks.

II

[See rules 31(4) and 32 (4)]Table of fees payable for surveys conducted for the purposes of grant or renewal of a Cargo Ship Construction Certificate or a Cargo Ship Safety Construction Certificate and intermediate surveys conducted for partial inspections.

GrossTonnage of a ship	Feespayable for survey before issue of Cargo Ship ConstructionCertificate/Cargo Ship Safety Construction Certificate	Feespayable for surveys before renewal of Cargo Ship ConstructionCertificate/Cargo Ship Safety Construction Certificate	Feespayable for any intermediate survey during period of validity ofCargo Ship Construction Certificate/Cargo Ship SafetyConstruction Certificate
1	2	3	4
500tons and above but less than 1000 tons.			
1000 tons and above butless than 5000 tons.	Rs.500	Rs.1200	Rs.300
	Rs.5000 for first 1000 tons gross plus Rs. 250 for every 100 tonsmore, or part thereof.	Rs.1200 for first 1000 tons gross plus Rs. 45 for every 100 tonsmore, or part thereof.	Rs.300 for first 1000 tons gross plus Rs. 10 for every 100 tonsmore, or part thereof.
5000tons and above but less than 10,000 tons.	Rs.15,000 for first 5000 tons gross plus Rs. 200 for every 100 tonsmore, or part thereof.	Rs.3000 for first 5000 tons gross plus Rs. 30 for every 100 tonsmore or part thereof.	Rs.700 for first 5000 tons gross plus Rs. 8 for every 100 tonsmore, or part thereof.
10,000tons and above but less than 15,000 tons.	Rs.25,000 for first 10,000 tons gross plus Rs. 150 for every 100tons more, or part thereof.	Rs.4500 for first 10000 tons gross plus Rs. 20 for every 100 tonsmore, or part thereof.	Rs.1100 for first 10,000 tons gross plus Rs. 5 for every 100 tonsmore, or part thereof.
15,000tons and over	Rs.32,500 for first 15,000 tons gross plus Rs. 100 for every 100tons more, or thereof.	Rs.5,500 for first 15,000 tons gross plus Rs. 15 for every part100 tons more, or part thereof.	Rs.1350 for first 15,000 tons gross plus Rs. 4 for every 100 tonsmore, or part thereof.

Notes. -(1)Where a surveyor carries out a survey before the renewal of a Cargo Ship Safety Construction Certificate or as the case may be, Cargo Ship Construction Certificate or an intermediate survey and such survey is not completed in one operation but is effected by two or more partial surveys, fees payable for such survey shall be the appropriate fees in accordance with column (3) or as the case may be, column (4) of the Table hereinbefore set out plus Rs. 60 for each additional visit of Surveyor.(2)Where at the express request of owner or master of the ship, surveyor is detained after 5.00 P.M. an additional fee of Rs. 75 shall be payable if the Surveyor is released before 7.00 P.M. and of Rs. 100 if the Surveyor is released any time after 7.00 P.M.(3)Where a Surveyor carried out concurrently with a survey for classification purposes a survey before issue or renewal of a Cargo Ship Safety Construction Certificate or a Cargo Ship Construction Certificate or an intermediate survey required under these rules, no fees shall be payable according to the Table of fees set out hereinbefore in this Schedule.

III

[See rules 31(10) and 32(6)]Government Of IndiaReport Of Survey For Issue Of A Cargo Ship Safety Construction CertificateName Of Ship :Official Number :Port Of Registry :Name And Address Of Owners :

Nameof Ship	Type(Tanker-Tug) etc.	Portof Registry	
OfficialNumber	GrossTonnage	WhereBuilt	Yearof Build
Nameand Adress of Owners/Agents			
Dateon which keel was laid (if after 26thMay, 1965)		LastPlace and Date of Dry Docking	
ShipSurveyed at		Date/Dateson which Survey was completed	
ClassificationSociety with which vessel is classed.			

Classification Particulars :-(a)Hull :(b)Machinery :(c)Special conditions, in any :Notes. -(i)The attached questionnaire is to be completed for all items for ships keel of which was laid on or after 25th May, 1965.(ii)For ships, whose keels were laid before 25th May, 1965, items marl with an asterik may be answered to the extent possible.

QUESTIONNAIRE

CHAPTER II |

Regulation19-SOLAS CONVENTION, 1960

STABILITYINFORMATION

*1.Has the Ship been inclined and the elements of her stabilitydetermined ?

2.Is the stability data on board ?

*3.If an inclining test has not been made state the reasons fordispensing with the same.

4.Any special remarks concerning the stability of the Ship ?

CHAPTERII |

Regulation26-EMERGENCY SOURCE OF ELECTRICAL POWER

*5.Is there a self-contained emergency source of power locatedabove the uppermost continuous deck and outside machinerycastings ?

*6.Is the location of the emergency source of power in conformitywith approved drawings ?

*7.Is the power available sufficient to supply simultaneously--

(a)Emergency lighting at every boat station on deck and over-sides,in all alleyways, stairways and exits, in the main machineryspace and main generating set space over the main switchboard,on the navigating bridge and in the chartroom ?

(b)The general alarm ?

(c)Navigation lights if solely electric, and the day-lightsignalling lamp if operated by the main source of electric power?

(d)Is the emergency source of supply, adequate for a continuousperiod of 6 hours ?

*8.(a)Is the emergency source of power an accumulator (storage)battery ?

(b)In that event, is the battery under constant charge?

(c)Is the emergency source of power a generator driven by a dieselengine with an independent fuel supply ?

N.B.- The fuel used shall have a flash point of not less than 43°C.

(d)In that event, is there a separate starting device for thediesel engine, independent of the ships auxiliary machinery ?

(e)Can the emergency power unit be started from the place where itis located?

Ifso, what are the starting arrangements ?

*9.(a) Has the complete emergency (electrical) system been testedand found satisfactory?

(b)Has the emergency lighting been arranged in conformity withapproved drawings?

CHAPTERII |

Regulation27-PRECAUTIONS AGAINST SHOCK, FIRE AND OTHER HAZARDS OFELECTRICAL ORIGIN

*10.Are all exposed metal parts of electrical machinery earthed(grounded) ?

*11.Are main and emergency switchboards arranged as required ?

*12.Has the hull return system of distribution been used ?

*13.Have electric cables been arranged according to the requirementsof the SOLAS Convention, 1960 ?

*14.Have light fittings been arranged according to the requirementsof the SOLAS Convention, 1960 ?

*15.Is wiring supported in such manner as to avoid chafing or otherinjury to the wires ?

*16.Is each separate circuit protected against short circuit andagainst overload ?

*17.Are accumulator batteries suitably housed and are compartmentsfor their accommodation properly constructed and efficientlyventilated ?

CHAPTERII |

Regulation28-MEANS OF GOING" ASTERN

18.Has the ship sufficient power for going astern to secure propercontrol of the ship in all normal circumstances ?

CHAPTERII |

Regulation29-STEERING GEAR

19.Is the ship provided with main and auxiliary steering gear?

*20.Is the main steering gear of adequate strength and sufficient tosteer the ship at maximum speed?

*21.Is the ship provided with auxiliary steering gear of adequatestrength and sufficient to steer the ship at navigable speed ?

*22.Is the auxiliary steering gear capable of being brought speedilyinto action in an emergency ?

23.Can the auxiliary steering gear be operated by power (rudderstock of over 35.56 cros. diameter) ?

CHAPTERII |

Regulation30-ELECTRICAL AND ELECTRO-HYDRAULIC STEERING GEAR

*24.Are the indicators showing if the steering gear motors arerunning located where they can readily be seen from the engine,operating platform and the steering station on the bridge ?

*25.Are the steering gears served by two separate circuits fed fromthe main switch board ?

*26.Is one of the circuits to the steering engine routed through theemergency switch board ?

*27.Has each circuit adequate capacity to supply all the motorsnormally connected to it and operating simultaneously ?

*28.Is the short-circuit protection provided for these circuits andmotors ?

CHAPTERII |

Regulation33-COMMUNICATION BETWEEN BRIDGE AND ENGINE ROOM

29.Is the ship fitted with engine room telegraphs with a replysystem as well as a voice pipe or telephone from the bridge tothe engine room ?

CHAPTERII |

Regulation54 & 69-FIRE PROTECTION

*30.Are the hull, superstructure, bulkheads, engine and boiler roomcasings, decks and deckhouses constructed of steel ?

*31.Are boundary bulkheads of galley, paint and lamprooms,storerooms and adjacent to accommodation, steering gear rooms,spaces, for emergency fire pumps and emergency generators, etc.constructed of steel ?

*32.Are corridor bulkheads fitted with doors leading intoaccommodation of at least "B" Class materials as laiddown in SOLAS Convention, 1960 ?

*33.Are interior stairways made of steel ? If not, give particulars.

*34.Are lifttrunks made of steel and are doors self-closing ?

*35.Are deck coverings in accommodation spaces adjacent to engineand boiler rooms of approved material which will not readilyignite ?

*36.Are ceilings in corridors and stairways made of incombustiblematerial ?

*37.Are all unprotected surfaces on bulkheads and linings below deckin corridors and stairways made of materials with low flamespread ?

38.Can ventilation fans serving machinery passenger and crewspaces. boilers and cargo spaces, be stopped from outside suchspaces ?

39.Can all doorways, ventilators, annulars spaces around funnelsand other openings be closed from outside such spaces ?

40.Are fuel tanks situated above the double bottom ? Are theyfitted with cocks or valves?

41.Are the cocks or valves fitted to fuel tanks capable of beingclosed from outside the space in which tanks are situated ?

CHAPTERII |

Regulation68-MEANS OF ESCAPE, ETC.

42.Are stairways and ladders serving all passenger and crew spacesarranged so as to provide ready means of escape to the life-boatembarkation deck?

*43.Are two means of escape provided from each engine room and fromeach shaft tunnel ?

44.Reference Section 454-A of the M.S. Act, 1958, state whether anyparticular fitting, material, appliance or apparatus required tobe fitted under the SOLAS Convention, 1960, has been substitutedby any other equivalent material.

45.Surveyor's special remarks, if any.

The survey has been carried out at the request of

.....

is hereby certified that the surveys have been carried out in conformity with Regulation 10 of Chapter I of the International Convention on Safety of Life at Sea, 1960 and the Merchant Shipping (Cargo Ship Construction and Survey) Rules, 1974 and that the ship compiled with the applicable requirement of Chapter II (other than those relating to fire extinguishing appliances and fire control plan) and the Merchant Shipping Act, 1958. It is recommended that a Cargo Ship Safety Construction Certificate be issued to the ship for a period of

.....

..... from ..... to

Remarks if any :.....Name of Surveyor.....Signature of SurveyorName and Address of Organisation/Classification :Place :Date :Extract from the Merchant Shipping Act, 1958.Section 454-A. - Where this Act requires that a particular fitting, material/appliance or apparatus or any type thereof shall be fitted or provided for in a ship or that any particular provision shall be made in a ship the, Central Government after satisfying itself by trials or otherwise that any other fitting, material, appliance or apparatus or type thereof or provision is as effective as that so required, may permit, by general or special order, such other fitting, material, appliance or apparatus or type thereof or provision to be used or provided.