

# REPORT ON OIL ENGINE MACHINERY.

No. 10,368

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 Reg. Book. Number of Visits 118

on the <sup>Single</sup> Twin <sup>Triple</sup> Screw vessel "IRISBANK." Tons <sup>Gross</sup> <sub>Net</sub>  
 Built at Belfast. By whom built Workman, Clark (1928) Ltd. Yard No. 510. When built 1930.  
 Engines made at Belfast. By whom made Workman, Clark (1928) Ltd. Engine No. 510. When made 1930.  
 Donkey Boiler made at Belfast. By whom made Workman, Clark (1928) Ltd. Boiler No. 510. When made 1930.  
 Brake Horse Power Owners Bank Line Ltd. Port belonging to Belfast.  
 Nom. Horse Power as per Rule 1246. Is Refrigerating Machinery fitted for cargo purposes Yes. Is Electric Light fitted Yes.  
 Trade for which vessel is intended Ocean going.

**IL ENGINES, &c.**—Type of Engines Sultzer - Diesel. 2 or 4 stroke cycle 2 Single or double acting SA.  
 Maximum pressure in cylinders 500 lbs. Diameter of cylinders 680 mm Length of stroke 1200 mm. No. of cylinders 10 No. of cranks 10  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 880 mm. Is there a bearing between each crank Yes.  
 Revolutions per minute 100 Flywheel dia. 7'-3" Weight 14 tons Means of ignition Compression Kind of fuel used Diesel oil.  
 Crank Shaft, dia. of journals as per Rule 436 mm. Crank pin dia. 460 mm. Crank Webs Mid. length breadth Semi built. Thickness parallel to axis 270 mm.  
 as fitted 460 mm. M.d. length thickness 290 mm. Thickness around eyehole 209 mm.  
 Flywheel Shaft, diameter as per Rule 436 mm. Intermediate Shafts, diameter as per Rule 12.58" Thrust Shaft, diameter at collars as per Rule 436 mm.  
 as fitted 460 mm. as fitted 12.76" as fitted 460 mm.  
 Tube Shaft, diameter as per Rule 13.8" Is the shaft fitted with a continuous liner Yes.  
 as fitted 14.2" as fitted 19.3"

Bronze Liners, thickness in way of bushes as per Rule 3.5" Thickness between bushes as per rule 64" Is the after end of the liner made watertight in the propeller boss Yes.  
 If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Yes.  
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive Yes.  
 If two liners are fitted, is the shaft lapped or protected between the liners Yes. Is an approved Oil Gland or other appliance fitted at the after end of the tube Yes.  
 Length of Bearing in Stern Bush next to and supporting propeller 4'-10"

Propeller, dia. 14'-9" Pitch 14'-9" No. of blades 4 Material Bronze. whether Moveable No. Total Developed Surface 75 sq. feet  
 Method of reversing Engines Hand Reversing Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes. Means of lubrication Forced.  
 Thickness of cylinder liners 25" Are the cylinders fitted with safety valves Yes. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes.  
 If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine led to pump.  
 Cooling Water Pumps, No. 2 - Duplex. Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes.  
 Bilge Pumps worked from the Main Engines, No. None. Diameter 1-200 ton duplex. Stroke 1-100 ton Duplex. Can one be overhauled while the other is at work Yes.  
 Pumps connected to the Main Bilge Line No. and Size 1-200 ton duplex. How driven Electric.

Ballast Pumps, No. and size 1-200 ton duplex Lubricating Oil Pumps, including Spare Pump, No. and size 2-  
 Are two independent means arranged for circulating water through the Oil Cooler Yes. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 2-3" (2-2 1/2" to 25 ton transfer pump) 1-2 1/2" to tunnel well.  
 In Holds, &c. 2-3" No 1 hold. 2-3 1/2" No 2 hold. 2-3" deep tank. 2-3" No 4 hold. 2-3" No 5 hold.  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1-6" & 1-7"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes. Are the Bilge Suctions in the Machinery Spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes.  
 Are all Sea Connections fitted direct on the skin of the ship Yes. Are they fitted with Valves or Cocks Yes.  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yes. Are the Overboard Discharges above or below the deep water line Below.  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes. Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes.  
 What pipes pass through the bunkers None. How are they protected Yes.  
 What pipes pass through the deep tanks Bilge pipes only. Have they been tested as per Rule Yes.

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes.  
 Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another Yes. Is the Shaft Tunnel watertight Yes. Is it fitted with a watertight door Yes. worked from  
 If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Yes.  
 Main Air Compressors, No. Two. No. of stages Three. Diameters 1P 570-4795 Stroke 600 Driven by Main engines.  
 Auxiliary Air Compressors, No. One. No. of stages Three. Diameters LPT 570-150 Capacity 120 cu ft free air per min. Driven by Elec motor  
 Small Auxiliary Air Compressors, No. One. No. of stages Two. Diameters LPT 480-130 Capacity 20 cu ft free air per min. Driven by Steam.  
 Scavenging Air Pumps, No. Two. Diameter 1400 mm Stroke 620 mm. Driven by Main engines.

**IR RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes.  
 Can the internal surfaces of the receivers be examined Yes. What means are provided for cleaning their inner surfaces Open ends &/or manholes.  
 Is there a drain arrangement fitted at the lowest part of each receiver Yes. 2-150 litre 54 cuft. 300 mm thickness 16 mm.  
 High Pressure Air Receivers, No. Ten. Cubic capacity of each 8-800" 28" Internal diameter 540 mm thickness 25 mm.  
 Seamless, lap welded or riveted longitudinal joint Yes. Material Steel. Range of tensile strength Working pressure by Rules 5 1/2"  
 Starting Air Receivers, No. Two. Total cubic capacity 2-280. 560 cuft. Internal diameter 5'-0" thickness 1" Ends 1 1/2"  
 Seamless, lap welded or riveted longitudinal joint Yes. Material Steel. Range of tensile strength Ends 26/30. Working pressure by Rules

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