

# REPORT ON OIL ENGINE MACHINERY.

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Reg. Book.  on the Single  Triple  Quadruple Screw vessel Tons  Gross  Net

Built at Bilbao By whom built Messa<sup>rs</sup> Compania Euskalduna de Construcion y Reparacion de Buques Yard No. 91 When built   
Engines made at Copenhagen By whom made Messa<sup>rs</sup> Akt. Burmeister & Wain's Maskin og Skibsbyggeri. Engine No. 1724 When made 1929-30  
Donkey Boilers made at  By whom made  Designated "EUSKALOUNA 6" Boiler No.  When made   
Brake Horse Power 1200. Owners  Port belonging to   
Nom. Horse Power as per Rule 272. Is Refrigerating Machinery fitted for cargo purposes  Is Electric Light fitted   
Trade for which vessel is intended

**OIL ENGINES, &c.**  one off Type of Engines Vertical Diesel Oil Engine, Crosshead type, Solid injection. 2 or 4 stroke cycle 4 Single or double acting Single  
Maximum pressure in cylinders 39 kg./cm<sup>2</sup> Diameter of cylinders 550 mm = 21 5/8" Length of stroke 1000 mm = 39 3/8" No. of cylinders 6 No. of cranks 6  
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 730 mm Is there a bearing between each crank Yes  
Revolutions per minute 125. Wheel dia. 1362 mm Weight 839 kg. Means of ignition Air compression Kind of fuel used Crude oil flash point above 150° F.  
Crank Shaft, dia. of journals as per Rule 339.98 mm Crank pin dia. 345 mm Crank Webs Mid. length breadth 696 mm Thickness parallel to axis 215 mm  
combined with Thrust Shaft. as fitted 345 mm M. d. length thickness 195 mm shrunk Thickness around eyehole 170 mm  
Flywheel Shaft, diameter as per Rule 9.61" Intermediate Shafts, diameter as per Rule 9 3/4" Thrust Shaft, diameter at collar as per Rule 10.09"  
as fitted as fitted Combined with Crank Shaft. as fitted 340 mm  
Tube Shaft, diameter as per Rule 10.69" Screw Shaft, diameter as per Rule 10 3/4" Is the shaft fitted with a continuous liner Yes.  
as fitted as fitted

Bronze Liners, thickness in way of bushes as per Rule 0.623 Thickness between bushes as per rule 0.468" 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 Liner in one length.  
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  Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft  If so, state type  Length of Bearing in Stern Bush next to and supporting propeller 4'-6"  
Propeller, dia. 11'-6" Pitch 9'-0" No. of blades 4 Material Blade-bronze whether Moveable Yes Total Developed Surface 41.5 sq. feet  
Method of reversing Engines Direct reversible. Is a governor or other arrangement fitted to prevent racing of the engine when de-clutched Yes Means of lubrication Oil

Excess Lubrication Thickness of cylinder liners 38 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine   
Cooling Water Pumps, No. 2 off Centrifugal pumps, 60 tons each Is the sea suction provided with an efficient strainer which can be cleared within the vessel   
Bilge Pumps worked from the Main Engines, No. 1 off 17 tons Diameter of trunk 150 mm Stroke 175 mm Can one be overhauled while the other is at work   
Pumps connected to the Main Bilge Line { No. and Size  How driven

Ballast Pumps, No. and size 1 off Duplex piston pumps, 250 tons Lubricating Oil Pumps, including Spare Pump, No. and size 2 off Log wheel pumps, 25 tons each.  
Are two independent means arranged for circulating water through the Oil Cooler  Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces   
In Holds, &c.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size   
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes  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   
Are all Sea Connections fitted direct on the skin of the ship  Are they fitted with Valves or Cocks   
Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates  Are the Overboard Discharges above or below the deep water line   
Are they each fitted with a Discharge Valve always accessible on the plating of the vessel  Are the Blow Off Cocks fitted with a spigot and brass covering plate   
What pipes pass through the bunkers  How are they protected   
What pipes pass through the deep tanks  Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times   
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  Is the Shaft Tunnel watertight  Is it fitted with a watertight door  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

Main Air Compressors, No. none No. of stages  Diameters A B Stroke  Driven by   
Auxiliary Air Compressors, No. 2 off No. of stages 2 Diameters 320 mm - 280 mm Stroke 170 mm Driven by Auxiliary engines.  
Small Auxiliary Air Compressors, No. off No. of stages 2 Diameters 90 mm - 35 mm Stroke 120 mm Driven by Hand.  
Scavenging Air Pumps, No.  Diameter  Stroke  Driven by   
Auxiliary Engines crank shafts, diameter as per Rule 161.8 mm Auxiliary engines: 2 off, 3 Cyl. 4 S.C.S.A. Diesel oil engine, 150 B.H.P. each, Cyl diam 310 mm stroke 350 mm.  
as fitted 162 mm. Each engine working a direct coupled 100 K.W. Generator.

**AIR 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 The starting air receiver is provided with man hole.  
Is there a drain arrangement fitted at the lowest part of each receiver Yes  
**Emergency Starting High Pressure Air Receivers,** No. 1 off Cubic capacity of each 250 litres Internal diameter 380 mm thickness 11 mm  
Seamless, lap welded or riveted longitudinal joint Lap welded. Material S.M. Steel Range of tensile strength 38.2 kg/mm<sup>2</sup> Working pressure by Rules 32.2 kg/cm<sup>2</sup>  
**Starting Air Receivers,** No. 1 off Total cubic capacity 390 Cubic feet. Internal diameter 6'-0" thickness ends 1 5/16"  
Seamless, lap welded or riveted longitudinal joint double butt straps thru riveted. Material S.M. Steel Range of tensile strength 46.2-48.2 kg/mm<sup>2</sup> Working pressure by Rules 25.9 kg/cm<sup>2</sup>

