

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

Date of writing Report 17.8.1938 When handed in at Local Office 19 Port of LISBON.  
 No. in Survey held at LISBON Date, First Survey 31.5.38 Last Survey 11.8.1938  
 Reg. Book 83553 on the S.S. "SILVA GOUVEIA" (Number of Visits 16)  
 Gross 893  
 Net 511  
 Tons  
 Built at Hamburg By whom built Schiffswerke V.J. & Sch. A.G. Yard No.          When built 1922  
 Engines made at Dresden By whom made Maschfabrik A.G. Vebigan Engine No. 1642 when made 1921  
 Boilers made at " By whom made " Boiler No.          when made 1921  
 Registered Horse Power          Owners Soc. Geral de Comercio, Industrial e Transportes Lda. Port belonging to Lisbon  
 Nom. Horse Power as per Rule 87 120 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

**ENGINES, &c.** — Description of Engines Inverted Cylinder, Reciprocating.  
 Dia. of Cylinders 427.671.1100 Length of Stroke 702 Revs. per minute 80 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journal 215 Dia. of Crank pin 203 Crank webs 410 Mid. length breadth 150 Thickness parallel to axis 150  
 as per rule 215 as fitted 215 as per rule 203 as fitted 203 as per rule 410 as fitted 410 as per rule 150 as fitted 150 as per rule 150 as fitted 150 as per rule 98 as fitted 98  
 Diameter of Thrust shaft under collars 214 Diameter of Tunnel shaft 204 Diameter of Screw shaft 234 Is the Screw shaft fitted with a continuous liner the whole length of the stern tube Yes 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 joints burned Yes If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with 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 appliance fitted at the after end of the shaft to permit of its being efficiently lubricated Lignum vitae  
 Length of Stern Bush 1000 m.m. Diameter of Propeller 3040  
 Pitch of Propeller 13.0" No. of Blades 4 State whether Moveable No Total Surface          square feet.  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 69 Stroke          Can one be overhauled while the other is at work Yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 61 Stroke          Can one be overhauled while the other is at work Yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps Feed - ONE - 167 x 106 x 120. Bilge 190 x 215 x 290  
 No. and size of Pumps connected to the Main Bilge Line One 190 x 215 x 290.  
 No. and size of Ballast Pumps One 190 x 215 x 290 No. and size of Lubricating Oil Pumps, including Spare Pump           
 Are two independent means arranged for circulating water through the Oil Cooler Yes No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps: — In Engine and Boiler Room One Port 60. One Starbd 60 and in Holds, &c. No. 1. P & S each, one - 65 m.m. No. 2. P & S. Ford each, one - 60 m.m. P & S, aft each, one - 60 m.m.

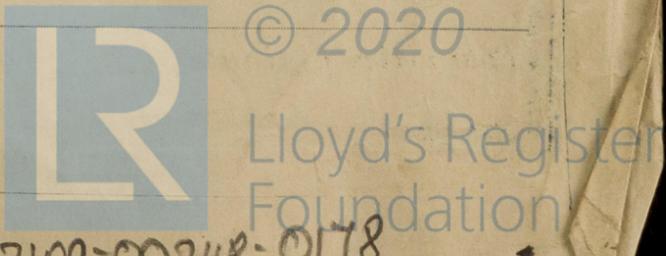
No. and size of Main Water Circulating Pump Bilge Suctions 89 m.m. No. and size of Donkey Pump Direct Suctions           
 to the Engine Room Bilges None Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes  
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. No  
 Are all connections with the sea direct on the skin of the ship No Are they Valves or Cocks Both.  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line above  
 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 are carried through the bunkers None How are they protected           
 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 Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Cylinder Tops.

**MAIN BOILERS, &c.** — (Letter for record 7.5.37) Total Heating Surface of Boilers 95.52 sq. m. 2056 #  
 Is Forward Draft fitted No No. and Description of Boilers 2, Scotch. Working Pressure 13 Kg per sq. cm. 12 kg. = 170 lb.  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** Yes  
**IS A DONKEY BOILER FITTED?** No If so, is a report now forwarded?           
**PLANS:** Are approved plans forwarded herewith for Shafting 7.5.37 Main Boilers 7.5.37 Auxiliary Boilers          Donkey Boilers           
 General Pumping Arrangements          Oil fuel Burning Piping Arrangements         

**SPARE GEAR.** State the articles supplied: — Top & bottom end braces, piston rings for each piston rings for piston valves, main bearing bolts, bottom & top end bolts, coupling bolts, valves for pumps, air pump rod, pump links, other spares.

The foregoing is a correct description.

Manufacturer.



002109-002118-0178

Rpt. 5a.  
 Date of writing  
 No. in Reg. Book.  
 83553

Dates of Survey while building  
 During progress of work in shops --  
 During erection on board vessel ---  
 Total No. of visits

Dates of Examination of principal parts - Cylinders 31. 5. 38 Slides 31. 5. 38  
 Covers 31. 5. 38 Pistons 31. 5. 38 Rods 31. 5. 38  
 Connecting rods 31. 5. 38 Crank shaft 31. 5. 38 Thrust shaft 31. 5. 38  
 Tunnel shafts 31. 5. 38 Screw shaft 8. 7. 38 Propeller 8. 7. 38  
 Stern tube 8. 7. 38 Engine and boiler seatings - Engines holding down bolts 8. 7. 38  
 Completion of pumping arrangements 6. 6. 38 Boilers fixed - Engines tried under steam 11. 8. 38  
 Completion of fitting sea connections - Stern tube - Screw shaft and propeller P. 3 1/2 S. 25  
 Main boiler safety valves adjusted Yes Thickness of adjusting washers P. 5. 3 1/2 S. 5. 30  
 Material of Crank shaft Identification Mark on Do.  
 Material of Thrust shaft Identification Mark on Do.  
 Material of Tunnel shafts Identification Marks on Do.  
 Material of Screw shafts Identification Marks on Do.  
 Material of Steam Pipes Steel Test pressure 26 Kg. per Sq. Cm. Date of Test 27. 6. 38  
 Is an installation fitted for burning oil fuel - Is the flash point of the oil to be used over 150°F. -  
 Have the requirements of the Rules for carrying and burning oil fuel been complied with -  
 Is this machinery duplicate of a previous case - If so, state name of vessel -

**General Remarks** (State quality of workmanship, opinions as to class, &c.)

Vessel placed in drydock. Examined propeller, screwshaft, stem bush & tube, sea cocks & valves, outside fastenings, cylinders, pistons, slide valves, crank, thrust & tunnel shafting, air, feed, circulating, bilge, ballast pumps & valves, condenser under test, pumping arrangements, auxiliaries, electric light installation, spares, bilge injection. The circulating pump casting fractured some months ago & was fitted with a steel band which is considered efficient, the fracture being tight when the machinery was running under full working conditions. A new casting was ordered from the engine builders & it is stated will be fitted at the first convenient opportunity after delivery. The Sup<sup>t</sup> was informed that it would be necessary to fit a direct engine room bilge suction to the ballast pump & as this meant modification of present pipe lines at the pump he stated he would like this confirmed by the Committee as the vessel has been in service some years without it. There is no plan available of pumping arrangements. Suctions to tanks: - Forepeak 75 L. N° 1 Centre 95. N° 2 each P & S 95 <sup>centre</sup> each with wing 75. N° 3 & 4 P & S wing 90 mm. N° 5 P & S. each, wing 85 & centre 95. After peak 1" drain cock to tunnel well. This is a drinking water tank with hand pump above.

Machinery examined on trial run under full working conditions & found satisfactory, & is eligible in my opinion to be classed LMC 8. 38. T.S. 8. 38 C.L.

The amount of Entry Fee ... £ : : When applied for,  
 Special Inclusions Fee £ 40 : : 19  
 Donkey Boiler Fee see ... £ 66 : : When received,  
 Travelling Expenses (if any) £ : : 19

*G. J. Hulland.*  
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 18 OCT 1938  
 Assigned LMC 8. 38  
 S. 8. 38 C.L. Subject

L-1580Y Office

The Surveyors are requested not to write on or below the space for Committee's Minute.

