

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Date of writing Report 3/3/26 When handed in at Local Office 11th April 1926 Port of Greenock  
 No. in Survey held at Greenock Date, First Survey 11th September 1924 Last Survey 15/4/1926  
 Reg. Book. S/S 'Margalan' (Number of Visits 60)  
 on the S/S 'Margalan'  
 Built at Pielangow By whom built Litigore & Co. Yard No. 766 When built 1926  
 Engines made at Greenock By whom made John & Kincaid & Co. Engine No. 621 when made 1926  
 Boilers made at ditto By whom made ditto Boiler No. 621 when made 1926  
 Registered Horse Power 484 Owners Walmor Steamship Co. Ltd. Port belonging to London  
 Nom. Horse Power as per Rule 484 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted yes

## ENGINES, &amp;c.—Description of Engines

Triple Expansion  
 Dia. of Cylinders 26-42-70 Length of Stroke 48" Revs. per minute 70 No. of Cylinders 3 No. of Cranks 3  
 Dia. of Crank shaft journals as per rule 13 1/2" Dia. of Crank pin 13 5/8" Crank webs shrunk Thickness parallel to axis 8 5/8"  
 Diameter of Thrust shaft under collars as per rule 13 1/2" Diameter of Tunnel shaft as per rule 12 8/5" Diameter of Screw shaft as per rule 14 3/4" 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 ✓ 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 ✓  
 If two liners are fitted, is the shaft lapped or protected between the liners ✓ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated ✓

Pitch of Propeller 14' 9" No. of Blades 4 Length of Stern Bush 60" Diameter of Propeller 14' 6"  
 No. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work yes  
 No. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 4" Stroke 24" Can one be overhauled while the other is at work yes  
 Total number and size of power driven Feed and Bilge Auxiliary Pumps 3 (8+6+8) (5 1/4+3 1/2+5) (9+13+10)  
 No. and size of Pumps connected to the Main Bilge Line one (9+13+10)  
 No. and size of Ballast Pumps 2 (8+6+8) (9+13+10) No. and size of Lubricating Oil Pumps, including Spare Pump ✓  
 Are two independent means arranged for circulating water through the Oil Cooler ✓ No. and size of suction connected to both Main Bilge Pumps and Auxiliary Bilge Pumps;—In Engine and Boiler Room 3 2 1/2" Borel Roundell 2 2 1/2" Oldell 1 1/2" and in Holds, &c. No. 1. 2. 3" No. 2. 2 3/4"  
No. 3. 2. 3 1/4" Tunnel Well 1 2 1/4" Deep Tank 2. 3 1/2"

No. and size of Main Water Circulating Pump Bilge Suctions 8" No. and size of Donkey Pump Direct Suctions ✓  
 to the Engine Room Bilges 1- 4 1/2" 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 yes  
 Are all connections with the sea direct on the skin of the ship yes 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 WER Platform

MAIN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 4263 1/2

Is Forced Draft fitted yes No. and Description of Boilers 3 Single Ended Working Pressure 180

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 yes Main Boilers yes Auxiliary Boilers ✓ Donkey Boilers ✓  
 (If not state date of approval)

General Pumping Arrangements ✓ Oil fuel Burning Piping Arrangements ✓

SPARE GEAR. State the articles supplied:—2 Connecting Rod top end bolts, ditto for bottom end, 2 Main Bearing bolts, 1 Set of Coupling bolts, one Set of Feed & Bilge Valves, a quantity of cross & dished bolts, nuts, & flow of various sizes.



(1924) Sept. 11. Oct. 10. 16. 31. Nov. 3. 6. 12. 26. Dec. 1. 3. 9. 12. 17. (1925) Jan. 9. 16. 24. Feb. 3. 11. 25. Mar. 2. 10. 18. 27. 31. Apr. 8. 13. 15. 23. 30. May 1. 5.  
During progress of work in shops --- 12. 13. 20. 27. June 2. 3. 9. July 31. Oct. 19. (1925) Feb. 4. 8. 11. 23. 25. 26. Mar. 1. 2. 4. 10. 11. 12. 15. 19. 24. 26. 30. Apr. 2. 5. 15.  
Dates of Survey while building  
During erection on board vessel ---  
Total No. of visits 60.

Dates of Examination of principal parts - Cylinders 15. 4. 25 Slides 3. 6. 25  
Covers 15. 4. 25 Pistons 2. 3 25 Rods 2. 3 25  
Connecting rods 13. 4. 25 Crank shaft 13. 4. 25 Thrust shaft 31. 4. 25  
Tunnel shafts 4. 2. 26 Screw shaft 31. 4. 25 Propeller 4. 2. 26  
Stern tube 2. 3. 25 Engine and boiler seatings 5. 5. 25 Engines holding down bolts 10. 3. 26  
Completion of pumping arrangements 10. 3. 26 Boilers fixed 10. 3. 26 Engines tried under steam 15. 4. 26  
Completion of fitting sea connections 10. 2. 26 Stern tube 8. 4. 25 Screw shaft and propeller 25. 2. 26  
Main boiler safety valves adjusted 26. 3. 26 Thickness of adjusting washers P 3/8 S 13/32 P 13/32 S 3/8 P 13/32 S 3/8  
Material of Crank shaft S Identification Mark on Do. LR 5522 WGM.  
Material of Thrust shaft S Identification Mark on Do. LR 11943 WGM.  
Material of Tunnel shafts S Identification Marks on Do. LR 11942. 11945. 11941. 5379 5521, 11941. 5520 WGM.  
Material of Screw shafts S Identification Marks on Do. LR 5642. WGM.  
Material of Steam Pipes Steel Test pressure 1540 lb Date of Test 11. 3. 26  
Is an installation fitted for burning oil fuel yes Is the flash point of the oil to be used over 150°F. yes  
Have the requirements of the Rules for carrying and burning oil fuel been complied with yes  
Is this machinery duplicate of a previous case No. If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. These Enguin & Bordin have been built under Special Survey in accordance with the approved plans & the workmanship & material are of good quality. They have been securely fitted on board, tried under steam & found satisfactory. The Machinery is eligible in my opinion for the record of LMC 4.26. Fitted for oil fuel F.P. above 150°F. 4-26

It is submitted that this vessel is eligible for THE RECORD. + LMC 4.26. FD. CL. Fitted for oil fuel 4.26. F.P. above 150°F.

CMS. JWD. 22/4/26.

The amount of Entry Fee ... £ 5 : - : When applied for,  
Special ... £ 97.12 : : 11th April 1926.  
Donkey Boiler Fee ... £ : : When received,  
Travelling Expenses (if any) £ : : 26.5.26

W. Gordon-Mitchell  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 20 APR 1926

Assigned + LMC 4.26 FD

Fitted for oil fuel 4.26 F.P. above 150°F.