

# REPORT ON OIL ENGINE MACHINERY.

No. 83127  
13 AUG 1928

Received at London Office Tyne  
Newcastle

When handed in at Local Office 16.8.1928 Port of Trinidad - N. Tyne  
in Survey held at Trinidad - N. Tyne Date, First Survey 20 Feb 1928 Last Survey 11 Aug 1928  
Number of Visits 43

on the Single Screw vessel MOTOR SHIP BRITISH PLUCK Tons Gross 1100  
Triple  
Quadruple Net 540

built at Walker on Tyne By whom built Snow Hunter & Richardson Ltd Yard No. 1254 When built 1928  
Engines made at Walker on Tyne By whom made S. Hunter & Richardson Ltd Engine No. 1254 When made 1928  
Boilers made at Traffic By whom made Riley Bros. Boiler No. 5774 When made 1928  
Horse Power 820 Owners British Tanker Co Ltd. Port belonging to Swania  
Horse Power as per Rule 286 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted Yes  
for which vessel is intended Oil carrier.

ENGINES, &c.—Type of Engines Atlas Diesel 4 stroke cycle 2 Single or double acting Single  
Maximum pressure in cylinders 500 lb Diameter of cylinders 4 20 7/8 Length of stroke 7 20 7/8 No. of cylinders 6 No. of cranks 6  
Revolutions per minute 135 Flywheel dia. 1500 7/8 Weight 2.1 tons Means of ignition Compression Kind of fuel used Fuel oil  
Crank Shaft, dia. of journals as per Rule 271 7/8 Crank pin dia. 275 7/8 Crank Webs Mid. length breadth 375 7/8 Thickness parallel to axis 152 7/8  
Flywheel Shaft, diameter as per Rule 271 7/8 Intermediate Shafts, diameter as per Rule 8.76 8.11 Thrust Shaft, diameter at collars as per Rule 217 7/8  
Screw Shaft, diameter as per Rule 9.02 9 Is the shaft fitted with a continuous liner yes

Size Liners, thickness in way of bushes as per Rule .571 Thickness between bushes as per rule .428 Is the after end of the liner made watertight in the stern 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 the 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 shaft no  
Length of Bearing in Stern Bush next to and supporting propeller 3'-2"

Propeller, dia. 10'-3" Pitch 8'-9" No. of blades 4 Material Brass whether Moveable Solid Total Developed Surface 34 7/8 sq. feet  
Method of reversing Engines Hand gear Is a governor or other arrangement fitted to prevent racing of the engine when dealthed yes Means of lubrication Feed  
Thickness of cylinder liners 40 7/8 Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with 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 yes  
Suction Water Pumps, No. 2 MD Centrifugal Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes  
Main Engines, No. 2 Diameter 110 7/8 Stroke 220 7/8 Can one be overhauled while the other is at work Yes  
Pumps connected to the Main Bilge Line { No. and Size General Service pump 7x7x9  
How driven Steam

Oil Pumps, No. and size 1. 7x7x9 Lubricating Oil Pumps, including Spare Pump, No. and size 2 7 50 7/8 MD driven  
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 1 7 3 ER AFT 1 7 2 1/2 GR.P. 1 7 2 1/2 GR.S.  
Holds, &c. Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 7 3 1/2 DIRECT 16 G S Pump and connected to off-Bilge pumps.  
Are all the Bilge Suction pipes in Holds and yes Are the Bilge Suctions in the Machinery Spaces 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 both  
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 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  
How are they protected yes  
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 yes

Are all means provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork yes  
Main Air Compressors, No. one No. of stages 3 Diameters LP 400 7/8 Stroke LP 500 7/8 Driven by Main Engines  
Auxiliary Air Compressors, No. one M. Driven No. of stages 3 each Diameters MP 290 7/8 Stroke MP 230 7/8 Driven by MP 115 7/8 Stroke MP 230 7/8  
All Auxiliary Air Compressors, No. one No. of stages 3 Diameters 8 1/2 Stroke 5 1/2 Driven by Steam/Motor  
Revolving Air Pumps, No. one Diameter 420 7/8 Stroke 720 7/8 Driven by Main Engines  
Auxiliary Engines crank shafts, diameter as per Rule as fitted

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes detachable Valve heads  
Are the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces working 300 7/8  
Are there a drain arrangement fitted at the lowest part of each receiver yes working 4.77 CF. working 15 7/8  
High Pressure Air Receivers, No. one one spare Cubic capacity of each one 11-3. Internal diameter one 4.50 7/8 thickness one 21 7/8  
Seamless, lap welded or riveted longitudinal joint Seamless Material steel Range of tensile strength one 32-38 T.P. Working pressure by Rules 1390 lb  
Starting Air Receivers, No. 2 Total cubic capacity 275 c.F. Internal diameter 5-0 7/8 thickness 9/16  
Seamless, lap welded or riveted longitudinal joint Riveted Material steel Range of tensile strength one 30/34 Working pressure by Rules 218 lb  
1 additional receiver fitted 4/29 - See Note 84093.

1910-18M

Engineers' Register  
Foundation

IS A DONKEY BOILER FITTED? **YES.**

If so, is a report now forwarded? **YES.**

PLANS. Are approved plans forwarded herewith for Shafting  
(If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR one spare Cast Iron propeller, one spare Tail Shaft Complete with  
Continuous line & 6 spare Coupling bolts and nuts - Also plans see attached list.

The foregoing is a correct description.  
SWAN, HUNTER & WIGHAM RICHARDSON, LTD.

*G. J. Sweeney*

Manufacturer.

Dates of Survey while building  
During progress of work in shops - 1928 Feb. 20. 27. Mar. 1. 2. 13. 19. 20. 21. 26. Apr. 2. 3. 4. 5. 16. 17. 20. 23. 26. 27. May 1. 7. 9. 10. 18. 24. 29.  
During erection on board vessel - 31. June 4. 15. 18. 19. 21. 22. 25. July 4. 9. 10. 12. 17. 18. Aug. 3. 9. 11.  
Total No. of visits 43.

Dates of Examination of principal parts - Cylinders 17.4.28 Covers 17.4.28 Pistons 22.6.28 Rods 23.4.28 Connecting rods 23.4.28  
Crank shaft 20.4.28 Flywheel shaft 19.3.28 Thrust shaft 19.3.28 Intermediate shafts  
Screw shaft 20.3.28 Propeller 19.3.28 Stern tube 19.3.28 Engine seatings 27.4.28 Engines holding down bolts 9.7.28  
Completion of fitting sea connections 2.4.28 Completion of pumping arrangements 26.7.28 Shop tests June 25/28 Engines tried under working conditions

Crank shaft, Material **Steel** Identification Mark LR.6630 CRH Flywheel shaft, Material **Steel** Identification Mark LR. LGS  
Thrust shaft, Material **Steel** Identification Mark LR 196 MR Intermediate shafts, Material Identification Marks  
Tube shaft, Material Identification Mark LC-5.30.4.28 Screw shaft, Material **Steel** Identification Mark LR-T916 MR

Is the flash point of the oil to be used over 150° F. **YES.**  
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with **YES.**

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo  If so, have the requirements of the Rules 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.)  
These Engine Built under Special Survey the material and workmanship found good and efficient. Hydraulic tests satisfactory. The machinery has been satisfactorily secured against rust under working conditions. In our opinion this vessel is eligible for records + L.M.C. 8.28. T.S.C.L. 8.28

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 8.28

OIL ENGINES 250 S.A.  
bcy 16 9/16 - 28 3/8 286 NHP.  
DB. 100 lb. CL.  
*J. M. 20/8/28*

The amount of Entry Fee ... £ 4 : 0 :  
Special ... £ 67 : 18 :  
Donkey Boiler Fee ... £ 4 : 4 :  
Travelling Expenses (if any) £ : :  
When applied for, 15 AUG 1928  
When received, 17.8.28

L. G. Shallerross, and  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 24 AUG 1928  
Assigned *Thmc 8.28*

DB 100 lb Oil Engines CL



NEWCASTLE-ON-TYNE

in duplicate  
The Survivors are requested to write on or before the space for Committee's Minute.

2 CERTIFICATE WRITTEN