

REPORT ON OIL ENGINE MACHINERY.

No. 8538.

Received at London Office

27 AUG 1925

Date of writing Report 24th Aug 1925 When handed in at Local Office 26th Aug 1925 Port of Burda
 No. in Survey held at Burda Date, First Survey 23 Mar 1925 Last Survey 21st Aug 1925
 eq. Book. Number of Visits 41

908 on the Single Twin Triple Screw vessels "ATHELCHIEF"
 Tons Gross 7707.43 Net 4543.6
 Built at Burda By whom built Caledon & B. & Co. Ltd Yard No. 294 When built 1925
 Engines made at Greenock By whom made J. G. Kincaid & Co. Ltd Engine No. K6 When made 1925
 Donkey Boilers made at Greenock By whom made J. G. Kincaid & Co. Ltd Boiler No. K6 When made 1925
 Brake Horse Power 2895 Owners British Indolasses Co. Ltd (Ings) Port belonging to Liverpool
 Nom. Horse Power as per Rule 709 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

L ENGINES, &c. Type of Engines Burmester Hoar Single acting 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 500 lbs No. of cylinders 12 Diameter of cylinders 630 mm No. of cranks 12 Length of stroke 1300 mm
 Mean of bearings, adjacent to the Crank, measured from inner edge to inner edge Is there a bearing between each crank
 Revolutions per minute Flywheel dia. Weight Means of ignition Kind of fuel used
 Crank Shaft, dia. of journals as per Rule as fitted Crank pin dia. Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis Thickness around eye-hole
 Flywheel Shafts, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted
 Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted Is the tube screw shaft fitted with a continuous liner
 Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per rule as fitted Is the after end of the liner made watertight in the
 Propeller boss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner
 If the liner does not fit tightly the part between the bearings in the stern tube, is the space charged with a 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 Oil Gland or other appliance fitted at the after
 End of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet
 Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication
 Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with
 non-conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Tunnel
 Cooling Water Pumps, No. 2 Centrifugal with 6" suction Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

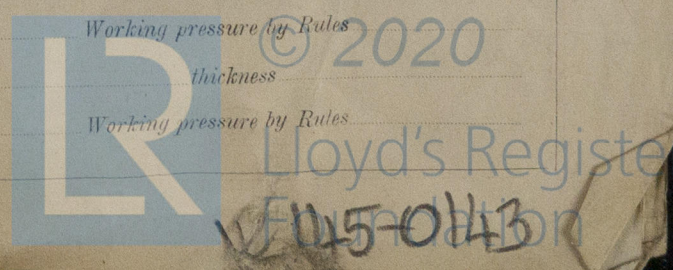
Bilge Pumps fitted to the Main Engines, No. None Diameter — Stroke — Can one be overhauled while the other is at work —
 Pumps connected to the Main Bilge Line No. and Size Two 9" x 8" x 12" (Ballast) 7" x 7 1/2" x 9" (Bilge) How driven Steam
 Ballast Pumps, No. and size one 9" x 8" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size Two 7" x 7" x 9" Steam driven
 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 Engine and Boiler Room 2 @ 3 1/2" 1 @ 6" 1 direct @ 3 1/2" 1 to Cofferdam @ 3 1/2" 2 @ 2 1/2" After Cofferdam @ 2 1/2" Cold Water suction @ 2 1/2"
 Holds, &c. Main Cargo Tanks 1 each @ 10" Fore Hold 2 @ 2 1/2" Main Pump Room 2 @ 4" Vent Pump Room 1 @ 2 1/2" Fore Peak above tank top 1 @ 2 1/2" Cham locks 1 @

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 3 1/2" 1 @ 6"
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Space
 fitted 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 & 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

That pipes pass through the bunkers None How are they protected —
 That pipes pass through the deep tanks None 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 No Tunnel Is it fitted with a watertight door Yes worked from Yes

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. No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
Scavenging Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted
AIR RECEIVERS: — Is each receiver, which can be isolated, fitted with a safety valve as per Rule
 Can the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces
 Is there a drain arrangement fitted at the lowest part of each receiver
High Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness
 Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules
Starting Air Receivers, No. Total cubic capacity Internal diameter thickness
 Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules



IS A DONKEY BOILER FITTED?
HYDRAULIC TESTS:—

If so, is a report now forwarded?

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS					
" " COVERS					
" " JACKETS.....					
" PISTON WATER PASSAGES.....					
MAIN COMPRESSORS—1st STAGE.....					
" 2nd "					
" 3rd "					
AIR RECEIVERS—STARTING					
" INJECTION					
" Starting air	5-8-10-12-14 Aug 1925	356 lbs	1070 lbs	J.R.	
AIR PIPES	12-13-14 Aug 1925	1000 lbs	2000 lbs	J.R.	
FUEL PIPES					
FUEL PUMPS					
SILENCER					
" WATER JACKET					
SEPARATE FUEL TANKS					

PLANS. Are approved plans forwarded herewith for Shafting ☒ Receivers ☒ Separate Tanks ☒
(If not, state date of approval)
Donkey Boilers ☒ General Pumping Arrangements ☒ Oil Fuel Burning Arrangements ☒

SPARE GEAR 1 set each of top Bottom end, main bearing & coupling bolts & nuts, 1 pair each of top Bottom end & cranks. 1 cylinder head, 1 piston rod, 4 sets of piston rings, 6 fuel, 3 air starting, 6 inlet & 6 exhaust valves, 1 set of coils for H.P. Compressor, 6 tubes for M.P. 6 tubes for L.P. 3 H.P. - 3 M.P. & 6 L.P. suction & delivery valves, 1 complete set of springs & rings, & 1 pair of connecting rod top Bottom end & cranks for the engine compressor. Manoeuvring Compressor - 2 H.P. & 2 L.P. suction & delivery valves, 1 set of rings for air & steam pistons. 1 H.P. Compressor. 1 set of top Bottom end & cranks. Emergency Compressor - 1 set of suction & delivery valves, 1 set of rings for air & steam pistons. 1 complete pump for oil cooling. 1 Impeller for circulating Pump. 1 Safety Valve spring, 1 set of check valves, & 6 plain tubes. Complete set of spares for oil burning installation. 1 screw shaft & 2 C.P. propellers. assorted bar iron, bolts & nuts.
The foregoing is a correct description,

Manufacturer.

Dates of Survey while building	During progress of work in shops - -	1925 March 23. Apr. 1. 2. 6. 7. 22. 30.
	During erection on board vessel - -	1925 May 6. 22. 24. JUNE 2. 4. 12. 15. 18. 19. 22. 24. Jy. 1. 2. 4. 10. 14. 17. 20. 21. 23. AUG. 5. 6. 7. 8. 10. 12. 13. 14. 15. 17. 19. 20.
	Total No. of visits	41.

Dates of Examination of principal parts—Cylinders	Covers	Pistons	Rods	Connecting rods
Crank shaft	Flywheel shaft	Thrust shaft	Intermediate shafts	Tube shaft
Screw shaft	Propeller	Stern tube	Engine seatings 15-6-25	Engines holding down bolts 17-23-7-1
Completion of fitting sea connections 4-5-25	Completion of pumping arrangements 19-8-25	Engines tried under working conditions 21-8-25		
Crank shaft, Material	Identification Mark	Flywheel shaft, Material	Identification Mark	
Thrust shaft, Material	Identification Mark	Intermediate shafts, Material	Identification Marks	
Tube shaft, Material	Identification Mark	Screw shaft, Material	Identification Mark	

Is the flash point of the oil to be used over 150° F. ☒

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 Engines have been fitted on board in an efficient manner, tried under working conditions and found satisfactory, and in my opinion are eligible to be classed + L.M.C. 8-25.

The approved Pumping Plans are forwarded herewith together with Greenock Rpt No 18413.

The oil fuel burning installation for the boilers has been fitted in an efficient manner and in accordance with the Rules and approved Plan (attached) (Section 149 of Rules 1921) for a flash point above 150° F.

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

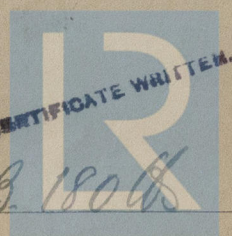
Committee's Minute

Assigned

+ Lmb. 8. 25 Cl.
Oil Engines 20B 1806

FRI. 11 SEP 1925

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register
Foundation