

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY.

No. 79960

-6 JAN 1926

Received at London Office

Date of writing Report *Feb 19th 1925* When handed in at Local Office

Feb 19th 1925 Port of

NEWCASTLE ON TYNE

No. in Survey held at *Amble*

Date, First Survey *Oct 14th 1925*

Last Survey *Feb 18th 1925*

Reg. Book.

Number of Visits *4*

on the *Single* *Twin* *Triple* Screw vessels

Motor vessel "Southgate"

Tons *Gross 143.43*
Net 54.98

Built at *Amble*

By whom built *Amble S. B. Co. Lim*

Yard No. *39* When built *1925*

Engines made at *Manchester*

By whom made *S. Gardner & Sons Lim*

Engine No. *26399* When made *1925*

Donkey Boilers made at *Home*

By whom made

Boiler No. When made

Brake Horse Power *140*

Owners *Anglo American Oil Co Lim*

Port belonging to *London*

Nom. Horse Power as per Rule *40*

Is Refrigerating Machinery fitted for cargo purposes *No*

Is Electric Light fitted *Yes*

OIL ENGINES, &c.—Type of Engines

Vertical Semi Diesel

2 stroke cycle *2* Single or double acting *Yes*

Maximum pressure in cylinders No. of cylinders Diameter of cylinders No. of cranks Length of stroke

Span 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 shrunk 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 *Yes* 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 at 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 *Yes* *Nichols* 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 *Exhaust into funnel*

Cooling Water Pumps, No. 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. Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size *one 2"* *one 2"* *Rotary pump* *in main engine*

Ballast Pumps, No. and size *one* *4"* *Rotary type (30 tons per hour)* Lubricating Oil Pumps, including Spare Pump, No. and size

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 Engine and Boiler Room *one 2" aux* *one 2" main*

In Holds, &c. *None* *Hand pump 4"-2" in Fore Peak*

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *as mentioned above*

Are all the Bilge Suction pipes in Holds and Turret 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* *strum boxes at ends*

Are all Sea Connections fitted direct on the skin of the ship *Yes* Are they fitted with Valves or Cocks *Cocks*

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 *None*

What pipes pass through the bunkers *None* *(no bunkers)* How are they protected

What pipes pass through the deep tanks *None* 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 *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 *None* 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 *steel panel*

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

IR 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	✓	✓	✓	✓	✓
AIR PIPES	✓	✓	✓	✓	✓
FUEL PIPES	✓	✓	✓	✓	✓
FUEL PUMPS	✓	✓	✓	✓	✓
SILENCER	✓	✓	✓	✓	✓
" WATER JACKET	✓	✓	✓	✓	✓
SEPARATE FUEL TANKS	✓	✓	✓	✓	✓

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 hot bulb; one pair of bottom end frames, 2 pair of bottom end bolts, one gudgeon pin, one pair of gudgeon pin frames, one pair of gudgeon pin bolts, one set of rings, Gears for fuel pump stroke, one air valve, one set of small springs on engine, small quantity of thin sheet steel, muntz metal & tin, 6 Lodge sparking plugs

FOR
AMBLE SHIPBUILDING CO., LTD.,

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops -
During erection on board vessel -
Total No. of visits
1925. Oct 14 - Nov 27 - Dec 4 - 18.
4

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 27.11.25 Stern tube 27.11.25 Engine seatings 27.11.25 Engines holding down bolts 27.11.25
Completion of fitting sea connections 27.11.25 Completion of pumping arrangements 4.12.25 Engines tried under working conditions
Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks
Tube shaft, Material 2000 Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F. 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.) This vessel's machinery was examined whilst being fitted on board and the materials and workmanship found to be good and in accordance with the rules requirements. On completion it was submitted to trial and found satisfactory. It is therefore eligible in my opinion to be closed with the notation of +LNC 12.25 in the R. Book.

The amount of Entry Fee ... £
see Manchester Rpt 5694
Special ... £ 3 : 8

When applied for,
5 JAN 1926

Donkey Boiler Fee ... £

When received,

Travelling Expenses (if any) £ 1 : 11-6

Committee's Minute

FRI. 8 JAN 1926

Assigned

+LNC 12.25. C.L.
oil engine & gears

Maurice Peterson

Engineer Surveyor to Lloyd's Register of Shipping.



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Foundation