

## REPORT ON OIL ENGINE MACHINERY.

No 18

Received at London Office 22 DEC 1941

of writing Report.

When handed in at Local Office

Port of NOTTINGHAM.

in Survey held at LINCOLN.

Date, First Survey 15.7.41. Last Survey 9.12.1941

Number of Visits 12.

Book.

Single  
Triple  
Quadruple  
Screw vessel

PORT MADOC

Tons: Gross  
Net

ilt at LISBON.

By whom built COMPANHIA UNIAO FABRIL.

Yard No. 110

When built 1941.

ines made at LINCOLN.

By whom made RUSTON &amp; HORNSBY LTD.

Engine No 206511 When made 1941

key Boilers made at ✓

By whom made ✓

Boiler No. ✓ When made ✓

ce Horse Power 560

Owners LOCH. FISHING CO [DIRECTOR OF NAVY CONTRACTS] belonging to ✓

Horse Power as per Rule 107

Is Refrigerating Machinery fitted for cargo purposes ✓

Is Electric Light fitted YES

de for which vessel is intended ✓

ENGINES, &amp;c.—Type of Engines VERTICAL SOLID INJECTION. TVGBM. 2 or 4 stroke cycle 4 Single or double acting SINGLE.

num pressure in cylinders 675 LB.

Diameter of cylinders 12½"

Length of stroke 15"

No. of cylinders 7.

No. of cranks 7.

Indicated Pressure 100.5 LB.

of bearings, adjacent to the Crank, measured from inner edge to inner edge 13 13/16"

Is there a bearing between each crank YES.

ations per minute 430

Flywheel dia. 51"

Weight 37 cwt.

Means of ignition COMPRESSION Kind of fuel used HEAVY OIL.

Solid forged  
Semi built  
All built  
dia. of journals as per Rule APPD 4.8.39.  
as fitted 9"

Crank pin dia. 7"

Crank Webs Mid. length breadth 12"

Thickens parallel to axis ✓

Mid. length thickness 3 5/16"

Thickens around eyehole ✓

heel Shaft, diameter as per Rule ✓  
as fitted ✓Intermediate Shafts, diameter as per Rule APPD 7.2.41  
as fitted 6 1/8"Thrust Shaft, diameter at collars as per Rule ✓  
as fitted ✓Shaft, diameter as per Rule ✓  
as fitted ✓Screw Shaft, diameter as per Rule APPD 7.2.41  
as fitted 7 1/8"

Is the screw shaft fitted with a continuous liner No.

ze 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

ler boss ✓

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner. ✓

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 ✓

o 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

If so, state type. ✓

Length of Bearing in Stern Bush next to and supporting propeller.

er, dia. 8'3" Pitch 8'-1" No. of blades 3

Material MANG. BRONZE whether Moveable No.

Total Developed Surface 26 sq. feet

od of reversing Engines REVERSE &amp; REDUCTION

a governor or other arrangement fitted to prevent racing of the engine when declutched YES

Means of lubrication

RCE Thickness of cylinder liners 1" GEAR.

Are the cylinders fitted with safety valves YES

Are the exhaust pipes and silencers water cooled or lagged with

conducting material YES If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine. ✓

ing Water Pumps, No. 1 PLUNGER PUMP 4 3/4 x 4 3/4" the sea suction provided with an efficient strainer which can be cleared within the vessel ✓

e Pumps worked from the Main Engines, No. 1 Diameter 4 3/4" Stroke 4 3/4" Can one be overhauled while the other is at work. ✓

ps connected to the Main Bilge Line No. and Size 1-2 1/2" No. 5 TRUSLOVE "CONQUEST" G.S. & BILGE PUMP - 20 TON/HR.  
How driven 4VROZ Aux. ENG.

e cooling water led to the bilges. ✓

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

FOR ENGINE. 1 1/2" RUSTON GEAR PUMP.  
1 1/2" DRYSDALE HORIZONTAL PUMP.  
FOR GEARS. 1 1/2" RUSTON GEAR PUMP.  
1 1/2" DRYSDALE HORIZONTAL PUMP.  
SPARE:- 2-2" HAMNORTHY ROTOFLOIL PUMPS

ast Pumps, No. and size ✓

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

two independent means arranged for circulating water through the Oil Cooler YES

In Pump Room ✓

s, No. and size:- In Machinery Spaces ✓

olds, &amp;c. ✓

pendent Power Pump Direct Suctions to the Engine Room Bilges, No. and size ✓

all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes ✓

Are the Bilge Suctions in the Machinery Spaces

om easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges. ✓

Sea Connections fitted direct on the skin of the ship ✓

Are they fitted with Valves or Cocks. ✓

ey fixed sufficiently high on the ship's side to be seen without lifting the platform plates ✓

Are the Overboard Discharges above or below the deep water line ✓

ey each fitted with a Discharge Valve always accessible on the plating of the vessel ✓

Are the Blow Off Cocks fitted with a spigot and brass covering plate. ✓

pipes pass through the bunkers ✓

How are they protected ✓

pipes pass through the deep tanks ✓

Have they been tested as per Rule ✓

l Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times. ✓

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

ctment to another ✓

Is the Shaft Tunnel watertight ✓

Is it fitted with a watertight door ✓

worked from ✓

ood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork.

Air Compressors, No. ✓

No. of stages ✓

Diameters ✓

Stroke ✓

Driven by ✓

iary Air Compressors, No. 1 ✓

No. of stages 1

Diameters 3"

Stroke 3 1/2"

Driven by BELT FROM MAIN ENG.

Auxiliary Air Compressors, No. 1 ✓

No. of stages 2

Diameters 3 3/4", 1 1/8"

Stroke 3 1/4"

Driven by CLUTCH - 4VROZ, ENG.

provision is made for first Charging the Air Receivers 4VROZ ENG. IS HAND STARTING.

nging Air Pumps, No. ✓

Diameter ✓

Stroke ✓

Driven by ✓

iary Engines crank shafts, diameter as per Rule APPD 17.5.40

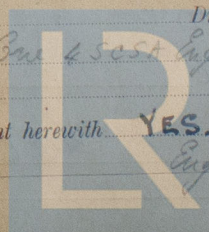
as fitted P. 3" J 3 5/8"

No. ✓

Position ✓

The Auxiliary Engines been constructed under special survey YES

Is a report sent herewith YES.

Lloyd's Register  
Foundation  
WIDC5-0095



AIR RECEIVERS: - Have they been made under survey. YES State No. of Report or Certificate C 527, C 528  
Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES  
Can the internal surfaces of the receivers be examined and cleaned. YES Is a drain fitted at the lowest part of each receiver YES  
Injection 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 Actual  
Starting Air Receivers, No. 2 Total cubic capacity 46.8 CU. FT. Internal diameter 2'-6" thickness 3/8"  
Seamless, lap welded or riveted longitudinal joint SEAMLESS Material S.M. STEEL Range of tensile strength 26-30 Working pressure by Rules APPD. 5 Actual 300 LB

IS A DONKEY BOILER FITTED? If so, is a report now forwarded?  
Is the donkey boiler intended to be used for domestic purposes only  
PLANS. Are approved plans forwarded herewith for Shafting. Receivers 5.5.38 Separate Fuel Tanks  
Donkey Boilers General Pumping Arrangements Pumping Arrangements in Machinery Space  
Oil Fuel Burning Arrangements  
SPARE GEAR.  
Has the spare gear required by the Rules been supplied YES  
State the principal additional spare gear supplied TO ADMIRALTY REQUIREMENTS.

Kuston & Hornsby, Limited.  
The foregoing is a correct description.  
Manufacturer.

Oil & Gas Engine Dept  
15.7.41 To 9.12.41 VISITS, 12.  
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 Covers Pistons Rods Connecting rods  
Crank shaft Flywheel shaft Thrust shaft Intermediate shafts Tube shaft  
Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts  
Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions  
Crank shaft, Material S.M. STEEL Identification Mark 229 25.4.41 Flywheel shaft, Material Identification Mark  
Thrust shaft, Material Identification Mark Intermediate shafts, Material S.M. STEEL Identification Marks 6006 10  
Tube shaft, Material Identification Mark Screw shaft, Material S.M. STEEL Identification Mark 5999 10  
Identification Marks on Air Receivers B 2826 B 2827  
LLOYD'S TEST  
600 LB./SQ. IN.  
W.P. 300 LB./SQ. IN.  
JB. AJ. JB. AJ.

Is the flash point of the oil to be used over 150° F.  
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with  
Description of fire extinguishing apparatus fitted  
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  
If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with  
Is this machinery duplicate of a previous case YES If so, state name of vessel YARD No. 107.

General Remarks (State quality of workmanship, opinions as to class, &c.)  
This engine has been built under Special Survey in accordance with the approved plans and the Society's Rules.  
The materials and workmanship are good. Shop trials carried out at the Maker's Works were satisfactory.  
The engine has been despatched to Lisbon for installation in the vessel.

Now charged :- £20-0-0 as per letter 12/2/43  
2124/T/40/13/48-SS.

The amount of Entry Fee .. £ : : When applied for,  
Special ... £ 20 : 0 : Monthly A/c.  
Donkey Boiler Fee ... £ : : When received,  
Travelling Expenses (if any) £ : :  
Committee's Minute  
Assigned

See Lis. J.E. 35574  
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