

REPORT ON OIL ENGINE MACHINERY.

No 3570

22 AUG 1942

Received at London Office

YES

✓

by Rules

Actual

3/8"

by Rules

Actual

300

25.2.41

29.4.41

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Writing Report 12/8/1942 When handed in at Local Office

Port of LISBON

Date, First Survey 15th May Last Survey 12 Aug. 1942

Number of Visits 28

Survey held at Lisbon

Single
Triple
Quadruple

Screw vessel

Motor Trawler "PORT LEVEN"

Tons Gross 307
Net 128

at Lisbon

By whom built Cia. Uniao Fabril

Yard No. 110 When built 1942

By whom made Ruston + Hornsby Ltd.

Engine No. 206514 When made 1942

By whom made

Boiler No. When made

Owners Loch Fishing Co.

Port belonging to

Horse Power 560

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted Yes.

Horse Power as per Rule 107

for which vessel is intended Trawling

ENGINES, &c. Type of Engines Vertical solid injection 7 VGBM 2 or 4 stroke cycle 4 Single or double acting Single

num pressure in cylinders 675 lbs. Diameter of cylinders 12 1/2" Length of stroke 15" No. of cylinders 7 No. of cranks 7

Indicated Pressure 100.5 lbs. of bearings, adjacent to the Crank, measured from inner edge to inner edge 13 13/16" Is there a bearing between each crank Yes

utions per minute ENG. 430 PROP. 170 Flywheel dia. 51" Weight 37 cwt. Means of ignition compr. Kind of fuel used Diesel oil

Solid forged dia. of journals as per Rule Appd. 4.8.39 9" Crank pin dia. 7" Crank Webs Mid. length breadth 12" Thickness parallel to axis

as fitted 9" Mid. length thickness 3 5/16" shruak Thickness around eyehole

heel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule Appd. 7.2.41 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 7/8" Is the screw shaft fitted with a continuous liner No.

ize 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

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

ting rods 9.4 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

haft No 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

bolts Yes. If so, state type Newark Length of Bearing in Stern Bush next to and supporting propeller 2'-6"

ons SHOP TRIAL bell, dia. 8'-3" Pitch 8'-1" No. of blades 3 Material M. Bronze whether Moveable No Total Developed Surface 26 sq. feet

rk 14 RS. 2 1/2 : 1. Method of reversing Engines Reverse & Reduction a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication

eks 5977 AS reed Thickness of cylinder liners 1" Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with

le 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

ing Water Pumps, No. 1 Plunger Pump 4 3/4 x 4 3/4" Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes.

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

aps connected to the Main Bilge Line No. and Size 1-2 1/2" No. 5 Inshore "Conquest" G.S. & Bilge Pump - 20 Ton, H.R. How driven 4 VROZ Aux. Eng.

he cooling water led to the bilges No. If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

angements FOR ENGINE 1 1/2" RUSTON GEAR PUMP FOR GEARS 1 1/2" RUSTON GEAR PUMP SPARE 1-2-2" HAMWORTHY ROTOFOL PUMPS

last Pumps, No. and size None. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 1/2" RUSTON GEAR PUMP

two independent means arranged for circulating water through the Oil Cooler Yes. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

aps, No. and size: In Machinery Spaces 1-2" 1-2 1/2" 1-3" In Pump Room

olds, &c. 1 x 2" Staring gear fab. 1 x 2" cofferdam. 1 x 2" Hold. 1 x 2" accom. fat forward. 1 x 2" Chain Locker. 1 x 2" F.P. Tank.

ependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 x 3" M.E. pump 1 x 2 1/2" Aux. eng. driven G.S. pump.

with all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces

orkman from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

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

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

the ves 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

at pipes pass through the bunkers How are they protected

at pipes pass through the deep tanks Have they been tested as per Rule

all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mounting accessible at all times Yes

he 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

partment to another Yes Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

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

in Air Compressors, No. No. of stages Diameters Stroke Driven by

iliary Air Compressors, No. 1 No. of stages 1 Diameters 3" Stroke 3 1/2" Driven by Belt from M.E.

all Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 3 3/4", 1 1/8" Stroke 3/4" Driven by Clutch - Aux. Eng.

provision is made for first Charging the Air Receivers Aux. engine is hand starting.

venting Air Pumps, No. Diameter Stroke Driven by

iliary Engines crank shafts, diameter as per Rule Appd. 17.5.40 as fitted P-3" J. 3" No. One

Position Starboard side of engine room.

Is a report sent herewith copy of Nottingham Rpt.

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

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worked from

4B 3570A

AIR RECEIVERS: — Have they been made under survey *Yes.*

State No. of Report or Certificate *C. 580.*

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. *1*

Total cubic capacity *23.4 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.*

Actual *300*

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 Shafing *4.8.39*
(If not, state date of approval) *7.2.41*

Receivers *5.5.38*

Separate Fuel Tanks *15.2.41*

29.4.41

Donkey Boilers *✓*

General Pumping Arrangements *9.7.41*

Pumping Arrangements in Machinery Space *9.7.41*

9.7.41

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes, except set of spare valves for one cylinder.*

State the principal additional spare gear supplied *To admiralty requirements.*

COMPANHIA UNIAO FABRIL

The foregoing is a correct description.

Heera Mundel

Manufacturer.

Dates of Survey while building

During progress of work in shops - *✓*

During erection on board vessel - -

Total No. of visits *28.*

See Nottingham Rpt. No. 25.

1942 May: 15. 19. 20. 26 June: 4. 17. 22. 23. 24. 25. 29.

July: 1. 4. 14. 15. 16. 18. 20. 21. 22. 27. 28. 29. 30. Aug: 1. 3. 5. 12.

Dates of Examination of principal parts—Cylinders *30.7.42* Covers *30.7.42* Pistons *30.7.42* Rods - Connecting rods *30.7.42*

Crank shaft *30.7.42* Flywheel shaft - Thrust shaft *30.7.42* Intermediate shafts *30.7.42* *See* *4.6.42*

Screw shaft *4.6.42* Propeller *4.6.42* Stern tube *4.6.42* Engine seatings *14.7.42* Engines holding down bolts *14.7.42*

Completion of filling sea connections *5.6.42* Completion of pumping arrangements *14.7.42* Engines tried under working conditions *29.7.42*

Crank shaft, Material *S.M. steel* Identification Mark *321 AWT. 27.11.41* Flywheel shaft, Material - Identification Mark -

Thrust shaft, Material *✓* Identification Mark - Intermediate shafts, Material - Identification Marks -

False shaft, Material - Identification Mark - Screw shaft, Material - Identification Mark -

Identification Marks on Air Receivers *B 2838*

*440YD TEST
600 lbs/SQ.INS.
W.P. 300 LB./SQ.INS.
JNB 15.12.41*

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*

Description of fire extinguishing apparatus fitted -

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo *No*

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 *PORT JACKSON. PORT MADOC.*

General Remarks (State quality of workmanship, opinions as to class, &c.)

The above machinery has now been satisfactorily fitted on board this vessel in accordance with the approved plans, the Secretary's letters & the Society's Rules.

The materials and workmanship are good. Mooring and sea trials were satisfactory. One air receiver, instead of two, fitted; see Sec. letter 3.7.42.

Two non-return valves for the lubricating oil lines of the gears and engine did not arrive and temporary tee-pieces have been fitted with renewable flange flanges. Arrangements have been made for these to be fitted on the vessel's arrival at the U.K.

The machinery of this vessel is eligible in my opinion to be classed with record 7+L 8.42, TS(OG) & to have the notations "Oil Eng." "Mech. aff." in the Register Book subject to the amount of Entry Fee being supplied and N.R. oil valves and one air Receiver being fitted on arrival at the U.K.

Special ...

Donkey Boiler Fee *See Enclosure Rpt.*

Travelling Expenses (if any) *see*

When applied for, *19.*

When received, *19.*

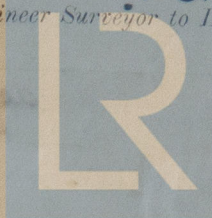
Committee's Minute

Assigned

FRI 28 AUG 1942

*+ Lmb. 8.42 Subject
Oldy. O.G.*

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation