

REPORT ON OIL ENGINE MACHINERY.

No. 21930

Received at London Office

MAY 20 1938

Date of writing Report

19

When handed in at Local Office

19.5

19.58 Port of

Antwerp

No. in Survey held at

Serain and Hoboken

Date, First Survey

5-10-37

Last Survey

2-5-1938

Reg. Book.

Number of Visits 55

on the Single
Triple
Quadruple

Screw vessel

M. V. "Excant"

Tons ^{Gross}
_{Net}

Built at

Hoboken

By whom built

J. G. J. Beckwith

Yard No. 657 When built 1938

Engines made at

Serain

By whom made

J. G. J. Beckwith

Engine No. 6124 When made 1938

Donkey Boilers made at

Amman

By whom made

Bocher & Co. Amman Ltd

Boiler No. 13917 When made 1938

Brake Horse Power

1000

Owners

Commerciaal de V. W.

Port belonging to Antwerp

Nom. Horse Power as per Rule

198.5

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which vessel is intended

Deep Sea

OIL ENGINES, &c. Type of Engines 635 V. F. 63 2 off stroke cycle Single or double acting single

Maximum pressure in cylinders 4.917 cm² Diameter of cylinders 350 mm Length of stroke 630 mm No. of cylinders 6 No. of cranks 6

Mean Indicated Pressure 6.35 kg/cm² Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 470 mm Is there a bearing between each crank yes

Revolutions per minute 240 Flywheel dia. 1024 mm Weight 320 kg Means of ignition Electric Kind of fuel used gas oil

Crank Shaft, dia. of journals as per Rule 223.5 mm Crank pin dia. 240 mm Crank Webs Mid. length breadth 580 mm Thickness parallel to axis 150 mm
as fitted 240 mm Mid. length thickness 150 mm Thickness around eyehole 125 mm

Flywheel Shaft, diameter as per Rule 174.5 mm Intermediate Shafts, diameter as per Rule 166 mm Thrust Shaft, diameter at collars as per Rule 174.5 mm
as fitted 220 mm as fitted 172 mm as fitted 220 mm

Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule 183.6 mm Is the screw shaft fitted with a continuous liner yes
as fitted as fitted 194 mm as fitted 194 mm

Bronze Liners, thickness in way of bushes as per Rule 12.5 mm Thickness between bushes as per Rule 9.5 mm Is the after end of the liner made watertight in the
as fitted 12.5 mm as fitted 9.5 mm 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 If so, state type yes Length of Bearing in Stern Bush next to and supporting propeller 135 mm

Propeller, dia. 2540 mm Pitch 1.580 m No. of blades 4 Material Brass whether Moveable no Total Developed Surface 2.380 m²

Method of reversing Engines Compound Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced

Thickness of cylinder liners 24/25 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-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 funnel

Cooling Water Pumps, No. 2 + 1 aux. att. Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Bilge Pumps worked from the Main Engines, No. 1 Diameter 80 mm Stroke 110 mm Can one be overhauled while the other is at work yes

Pumps connected to the Main Bilge Line No. and Size 2 of 80 mm 80 T.H. and 2 of 50 mm 50 T.H. and one attached to main motor 80 mm
How driven 2 electric motor and attached to main motor

Is the 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 arrangements to cooler

Ballast Pumps, No. and size 1.100 mm 80 T.H. 1.80 mm 80 T.H. Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 att. + 1 aux.

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 Machinery Spaces 6.1 x 100 mm 3 x 70 mm 2 x 50 mm In Pump Room yes

In Holds, &c. 4 x 70 mm Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 x 100 mm 1 x 70 mm

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

What pipes pass through the bunkers none How are they protected yes

What 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

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

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

Main Air Compressors, No. 2 No. of stages 2 Diameters 140/155 mm Stroke 125 mm Driven by oil engine

Auxiliary Air Compressors, No. 1 No. of stages 1 Diameters 100 mm Stroke 100 mm Driven by hand

Small Auxiliary Air Compressors, No. one No. of stages 1 Diameters 100 mm Stroke 100 mm Driven by hand

Scavenging Air Pumps, No. 2 Diameter 419 mm Stroke Rotating Driven by gear wheel

Auxiliary Engines crank shafts, diameter as per Rule 90 mm Position Engine Room

AIR RECEIVERS:—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
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. *1* Total cubic capacity *1,620 m³* Internal diameter *1,000 m.* thickness *15%*
Seamless, lap welded or riveted longitudinal joint *Riveted* Material *Sm. Steel* Range of tensile strength *44/55 1/2* Working pressure *by Rules 28 1/2*
IS A DONKEY BOILER FITTED? *Yes* If so, is a report now forwarded? *see attached Report*
Is the donkey boiler intended to be used for domestic purposes only *for heating purposes*
PLANS. Are approved plans forwarded herewith for Shafting *28/12/37* Receivers *30/6/37* Separate Fuel Tanks
Donkey Boiler *Yes 20/4/37* General Pumping Arrangements *2/12/37* Pumping Arrangements in Machinery Space *1-6-37*
Oil Fuel Burning Arrangements
SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes*
State the principal additional spare gear supplied *see attached list*
air vessels in this vessel: 1 for starting of air 1,620 m³: N: 1106-30-11-37 W.P.: 25 1/2
1 for aux. motor 95.5 dm³: N: 1159-7-2-38 W.P.: 25 1/2

The foregoing is a correct description,

Alway Manufacturer.

Dates of Survey while building	During progress of work in shops--	5-29 10-37 5-19-23-24-30 11-37 7-14-29-28 12-37 7-11-12-18-25-29 1-38 1-9-22-25 2-38 1-2-7-11-15-16-18-25-29 3-38 12-16-22-29 4-38
	During erection on board vessel--	29 3-12 10-24-27-31 11-37 12-37 1-38 3-7-21-28 2-38 14-17-21-24 3-38 4-7-11-14-21-23-27 4-38 2-5-38
	Total No. of visits	55

Dates of Examination of principal parts—Cylinders *15/1/38-8/3/38* Pistons *11-3-38* Rods *✓* Connecting rods *11-3-38*
Crank shaft *11-3-38* Flywheel shaft *✓* Thrust shaft *11-3-38* Intermediate shafts *21-3-38* Tube shaft *✓*
Screw shaft *1-2-38* Propeller *7-2-38* Stern tube *31-1-38* Engine seatings *11/3/38-21/3/38* Engines holding down bolts *21-3-38*
Completion of fitting sea connections *29-11-37* Completion of pumping arrangements *4-4-38* Engines tried under working conditions *2/3/38-14/4/38*
Crank shaft, Material *S.M. Steel* Identification Mark *N: 1118 14/2/37* Flywheel shaft, Material *✓* Identification Mark *✓*
Thrust shaft, Material *S.M. Steel* Identification Mark *N: 1126 21/2/37* Intermediate shaft, Material *S.M. Steel* Identification Marks *N: 1097 19/4/37*
Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *S.M. Steel* Identification Mark *1094-19/4/37*

Is the flash point of the oil to be used over 150° F. *no.*
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 *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 *no* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been built under special survey and fitted in the vessel in accordance with the requirements of the rule and approved plans. The materials have been tested in accordance with the rule requirements and as per specifications.*

The materials and workmanship are good
The donkey boiler N: 13917 as per Glasgow report N: 59365 has now been fitted in this vessel and has been examined under steam and accumulation tests.
The safety valves have been adjusted to 75 lbs per sq. in. casing gas tried 40 lbs between coils.
The machinery of this vessel has been tried under working conditions with satisfactory results.

The machinery is in good condition and eligible in my opinion to be classed in the Society's Register Book and to have records of it L.M.C. 5-38

The amount of Entry Fee *£ 52.50* When applied for, *18.5 19.38*
L.M.C. *£ 87.50*
Special *£ 4.50*
Tax *£ 1.35*
Donkey Boiler Fee *£ 1.35* When received, *7/7 19.38*
Travelling Expenses (if any) *£ 16.60*

Committee's Minute
Assigned *5-38* *Oil dry*
L.B. 75 1/2

J. L. Raban
Engineer Surveyor to Lloyd's Register of Shipping.
© 2019 Lloyd's Register Foundation

