

REPORT ON OIL ENGINE MACHINERY.

No. 1197

10 MAR 1947

Received at London Office

Report Jan. 24th, 1947 When handed in at Local Office 1947 Port of Cleveland, Ohio.

Survey held at Grove City, Pa. Date, First Survey Oct. 3rd, 1946 Last Survey Jan. 4th, 1947

Number of Visits 9

on the Twin Triple Quadruple Screw vessel Tons Gross Net

By whom built Yard No. When built

made at Grove City, Pa. By whom made Cooper-Bessemer Corp. Engine No. 3706 When made 1947

Boilers made at By whom made Boiler No. When made

Horse Power 425 Owners Bowring Bros., St. Johns, Newfoundland. Port belonging to

Horse Power as per Rule 99 = MN. Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

for which Vessel is intended

ENGINES, &c. Type of Engines Diesel, Propulsion, Direct Reversible, with sailing clutch. 2 or 4 stroke cycle 4 Single or double acting S

mm pressure in cylinders 600 lbs. Diameter of cylinders 13" Length of stroke 16" No. of cylinders 6 No. of cranks 6

indicated Pressure 87.5 lbs. bearings, adjacent to the Crank, measured from inner edge to inner edge 14"

ions per minute 325 Flywheel dia. 4'-5" Weight 2670 lbs. Means of ignition Solid Inj. Kind of fuel used Heavy Oil

{Solid forged as per Rule 9 Crank pin dia. 9" Crank Webs Mid length breadth 12" Thickness parallel to axis

{Semi built dia. of journals as fitted 9" Mid length thickness 3-11/16" Thickness around eyehole

{All built as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as fitted 7.75"

Shaft, diameter as fitted 9" Screw Shaft, diameter as per Rule as fitted

Is the {tube screw} shaft fitted with a continuous liner

Shaft, diameter as fitted

Liners, thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the

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

er 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

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

10/4" Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet

d of reversing Engines Sliding Cam Shaft 15/16" (Comb. Is a governor or other arrangement fitted to prevent racing of the engine when started Yes Means of lubrication

TP roed Thickness of cylinder liners Sp. Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or cooled by

12-2ed If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

10 AT 1-Fresh Water 125 GPM & 1-Sea Water 125 GPM. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

25-4 g Water Pumps, No. Pumps worked from the Main Engines, No. Diameter Stroke Can one be overhauled while the other is at work

s connected to the Main Bilge Line {No. and Size How driven

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

ments

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1 - 67.5 GPM

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

No. and size:—In Machinery Spaces In Pump Room

lds, &c.

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

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

m 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

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

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

mpartment 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

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

f Ship Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

provision is made for first Charging the Air Receivers

nging Air Pumps, No. Diameter Stroke Driven by

ary Engines crank shafts, diameter as per Rule No.

the Auxiliary Engines been constructed under special survey Is a report sent herewith

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AIR RECEIVERS:—Have they been made under survey. No State No. of Report or Certificate ABS 136 & 496

Is each receiver, which can be isolated, fitted with a safety valve as per Rule —

Can the internal surfaces of the receivers be examined and cleaned —

Is a drain fitted at the lowest part of each receiver. —

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 - Mfg. Sealife Co. Total cubic capacity — Internal diameter 29-1/2" thickness 3/8" Copper Braze Material Steel Range of tensile strength — Working pressure by Rules — Actual —

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 Yes Receivers — Separate Fuel Tanks — (If not, state date of approval)

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 No

State the principal additional spare gear supplied

The foregoing is a correct description

Manufacturer.

During progress of work in shops - - Oct. 3; Nov. 14, 25, 26; Dec. 6, 19, 31; Jan. 3, 4, 1947.
During erection on board vessel - - -
Total No. of visits - -

Examination of principal parts—Cylinders 10/3-12/6 Covers 10/3-12/6 Pistons 10/3-12/6 Rods - Connecting rods 10/3-12/6

12/6/46 Flywheel shaft - Thrust shaft 12/19/46 Intermediate shafts - Tube shaft -

Propeller - Stern tube - Engine seatings - Engines holding down bolts -

Completion of fitting sea connections - Completion of pumping arrangements - Engines tried under working conditions -

Material Forged Steel Identification Mark LLOYDS 684 Flywheel shaft, Material - Identification Mark -

Material Forged Steel Identification Mark ABS 7723-3 Intermediate shafts, Material - Identification Marks -

Clutch Material - Identification Mark - Screw shaft, Material - Identification Mark -

Marks on Air Receivers -

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 —

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 —

Is 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 —

General Remarks (State quality of workmanship, opinions as to class, &c. This engine was built under this Society's

Special Survey, in accordance with the Rules and approved plans. On completion it was brake tel the

under full and intermediate loads, after which the engine was opened up and inspected. The matom e

and workmanship are of good quality and all tests were satisfactory.

Should the engine be installed, in compliance with the requirements of the Rules, in a vessel e

with the Society, the vessel, in my opinion, will be eligible for the notation *LMC (with appro

date) in the Register Book.

The sailing clutch shaft and the starting air receivers were tested and inspected at the places

manufacture by the American Bureau of Shipping. They were visually examined at the engine buil

works by the undersigned, and found satisfactory. Copies of ABS test certificates are attached

this report.

The amount of Entry Fee ... £ \$200.00 : When applied for,

Special ... £ : : 1/20/ 1947

Donkey Boiler Fee ... £ : : When received,

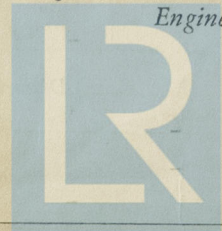
Travelling Expenses (if any) £ \$ 42.00 : 19

Committee's Minute NEW YORK FEB 11 1947

Assigned Transmit to London

E. Diamond

Engineer Surveyor to Lloyd's Register of Shipping



Lloyd's Register Foundation