

REPORT ON OIL ENGINE MACHINERY.

No 20771

- 5 SEP 1942

Received at London Office

of writing Report

3-9-1942

When handed in at Local Office

3-9-1942

Port of Leith.

in Survey held at

Burntisland

Date, First Survey

25-5-42

Last Survey

31-8-1942.

Number of Visits

15.

Book.

391 on the

Single

Triple

Quadruple

Screw vessel

M.V.

"LAMBROOK."

Tons Gross 7038
Net 5157.

ilt at

Burntisland

By whom built Burntisland S.B. Co. Ltd.

Yard No. 260

When built

1942

ines made at

Sunderland

By whom made Wm. Hoxford & Sons Ltd.

Engine No. 224

When made

1942

akey Boilers made at

Stockton

By whom made Stockton Chem. Eng. & Riley Boilers Ltd.

Boiler No. 6624

When made

1942

ake Horse Power

2500

Owners Austin Friars Steam Shipping Co. Ltd.

Port belonging to London

n. Horse Power as per Rule

516

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

Yes.

ade for which vessel is intended

ENGINES, &c.—Type of Engines

2 or 4 stroke cycle

Single or double acting

imum pressure in cylinders

Diameter of cylinders

Length of stroke

No. of cylinders

No. of cranks

n Indicated Pressure

Is there a bearing between each crank

n of bearings, adjacent to the Crank, measured from inner edge to inner edge

utions per minute

Flywheel dia.

Weight

Means of ignition

Kind of fuel used

ank shaft, { Solid forged
Semi built
All built

dia. of journals

as per Rule

as fitted

Crank pin dia.

Crank Webs

Mid. length breadth

Mid. length thickness

shrunken

Thickness parallel to axis

Thickness around eye-hole

wheel Shaft, diameter

as per Rule

as fitted

Intermediate Shafts, diameter

as per Rule

as fitted

Thrust Shaft, diameter at collars

as per Rule

as fitted

e Shaft, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

Is the

tube

screw

shaft fitted with a continuous liner

nzc 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

e 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

peller, dia.

Pitch

No. of blades

Material

whether Moveable

Total Developed Surface

sq. feet

hod 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

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

ling Water Pumps, No.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Fresh water cooling

e Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

aps connected to the Main Bilge Line

No. and Size

1 Bilge 10' x 11' x 10"

1 Bilge 7' x 7' x 12"

1 Gen. Service Pump 7' x 7' x 12"

How driven

Steam

Steam

Steam

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

gements

last Pumps, No. and size

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

two independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

ps, No. and size:—In Machinery Spaces 2 PORT, 2 STAR = 3" DIA. 1 DIRECT PORT = 5" DIA. 1 DIRECT STAR = 8" DIA. In Pump Room

olds, &c. N°1 Hold 1 P. & 1 S. = 3 1/2" DIA. N°2 Hold 1 P. & 1 S. = 3 1/2" DIA. N°3 Hold 1 P. & 1 S. = 2 1/2" DIA. N°4 Hold 1 P. & 1 S. = 3 1/2" DIA. N°5 Hold 1 P. & 1 S. = 3 1/2" DIA. TUNNEL WELL SUCTION = 2 1/2" DIA.

ependent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 PORT = 5" DIA. 1 STAR = 8" DIA.

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

Yes

Are the Bilge Suctions in the Machinery Spaces

rom 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

Both

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

Below

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

it pipes pass through the bunkers

How are they protected

—

it pipes pass through the deep tanks

Bilge Suctions

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

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

Yes

Is it fitted with a watertight door

No

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

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

What provision is made for first Charging the Air Receivers

Scavenging Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

as per Rule

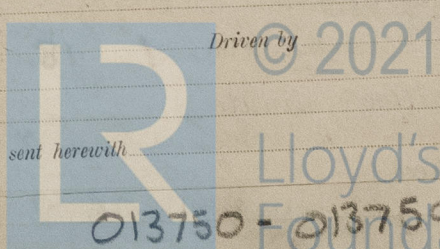
as fitted

Position

Is a report sent herewith

Have the Auxiliary Engines been constructed under special survey

See Sunderland Rpt. N° 33415.



Lloyd's Register

013750-013759-0241

AIR RECEIVERS:— Have they been made under survey *Yes.* State No. of Report or Certificate *C.45772 Glasgow.*
Is each receiver, which can be isolated, fitted with a safety valve as per Rule *Yes. Fusible plug in each receiver & safety valve on compressor*
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 *220 cub. ft.* Internal diameter *4.2"* thickness *1"*
Seamless, lap welded or riveted longitudinal joint *riveted.* Material *steel* Range of tensile strength *—* Working pressure by Rules *600 lbs.* Actual *—*

IS A DONKEY BOILER FITTED? *Yes.* If so, is a report now forwarded? *Yes. Middlesbrough Rpt. N.*
Is the donkey boiler intended to be used for domestic purposes only *✓*

PLANS. Are approved plans forwarded herewith for Shafting *✓* (If not, state date of approval) Receivers *✓* Separate Fuel Tanks *✓*
Donkey Boilers *✓* General Pumping Arrangements *Yes. (Hull)* Pumping Arrangements in Machinery Space *Yes.*
Oil Fuel Burning Arrangements *Yes.*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes. See Sunderland Rpt. N-33415.*
State the principal additional spare gear supplied *—*

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - }
During erection on board vessel - - } *25/6/42, 9/6/42, 12/6/42, 18/6/42, 23/6/42, 27/7/42, 8/7/42, 31/7/42, 10/8/42, 19/8/42, 21/8/42, 24/8/42, 27/8/42, 29/8/42 & 31/8/42.*
Total No. of visits *15.*

Dates of Examination of principal parts—Cylinders Covers Pistons Rods Connecting rods
Crank shaft Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
Screw shaft *in place 18-6-42* Propeller *in place 18-6-42* Stern tube *in place 9-6-42* Engine seatings *12-6-42* Engines holding down bolts *10-8-42*
Completion of fitting sea connections *12-6-42* Completion of pumping arrangements *24-8-42* Engines tried under working conditions *21-8-42*
Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks
Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark
Identification Marks on Air Receivers *2- N-21025, L.C.II. 16-4-42. Glasgow Cert. N-45772.*

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 *Steam perforated pipes in boiler room & engine room & a number of hand extinguishers.*
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.) *This machinery—Sunderland Rpt. N-33415 has been efficiently fitted on board, the materials and workmanship being sound and good. The main and auxiliary machinery was finally tried out at sea, under full load and working conditions, and it was found satisfactory. Manoeuvring tests were carried out, and the capacity of the air receivers was found to be in excess of the rule requirements. In my opinion the Machinery of this vessel is eligible to be classed in the Register Book with the notations of L.M.C. 8-42, Oil engine, T.S.C.L., 21.B. 120 lbs/0".*

The amount of Entry Fee .. £ *33 : 12 : 0* When applied for, *3-9-42*
Special ... £ *—* When received, *—*
Donkey Boiler Fee ... £ *—*
Travelling Expenses (if any) £ *1 : 18 : 9*

Committee's Minute

Assigned

Engineer Surveyor to Lloyd's Register of Shipping, at present

Lloyd's Register Foundation