

REPORT ON OIL ENGINE MACHINERY.

No 33415

Received at London Office

16 JUN 1942

15 JUN 1942

Port of

Sunderland.

When handed in at Local Office

Sunderland.

Date, First Survey

Oct 14 '41

Last Survey 12th June 1942

Number of Visits 35

of writing Report

in Survey held at Book.

on the ^{Single} ~~Triple~~ Screw vessel

"LAMBROOK"

Tons: Gross Net

at ^{Burntisland} ~~Sunderland~~

By whom built

Burntisland S.B. Co. L^{td}
Wm Leoyford & Sons L^{td}

Yard No. 260. When built 1942.

By whom made

Engine No. 224 When made 1942.

By whom made

Boiler No. When made

Owners

Port belonging to LONDON.

ake Horse Power 2500

n. Horse Power as per Rule 516

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

de for which vessel is intended

ENGINES, &c.

Type of Engines

Opposed piston airless injection 2 or 4 stroke cycle 2

Single or double acting

Single

imum pressure in cylinders

540 lb/sq

Diameter of cylinders

600 mm

Length of stroke

Upper 980 mm

Lower 1340 mm

No. of cylinders

3

No. of cranks

3 (3 throws)

n Indicated Pressure

88 lb/sq

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

108

Flywheel dia.

F. 2300 mm

Weight

A. 5 1/2 tons

Means of ignition

Compression

Kind of fuel used

—

olutions per minute

108

as per Rule

418 mm

as fitted

450 mm

as per Rule

308 mm

as fitted

365 mm

as per Rule

13 1/2 mm

as fitted

16 3/4 mm

nk shaft,

as per Rule

418 mm

as fitted

450 mm

as per Rule

341 mm

as fitted

392 mm

as per Rule

13 1/2 mm

as fitted

16 3/4 mm

as per Rule

16 3/4 mm

wheel Shaft, diameter

as fitted

418 mm

as per Rule

450 mm

as fitted

341 mm

as per Rule

392 mm

as fitted

13 1/2 mm

as per Rule

16 3/4 mm

as fitted

16 3/4 mm

ce Shaft, diameter

as per Rule

18 mm

as fitted

2 1/2 mm

as per Rule

13 1/2 mm

as fitted

16 3/4 mm

as per Rule

16 3/4 mm

as fitted

16 3/4 mm

as per Rule

16 3/4 mm

nze Liners, thickness in way of bushes

as per Rule

18 mm

as fitted

2 1/2 mm

as per Rule

13 1/2 mm

as fitted

16 3/4 mm

as per Rule

16 3/4 mm

as fitted

16 3/4 mm

as per Rule

16 3/4 mm

eller boss

Ylo.

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

one length.

he 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

Is an approved Oil Gland or other appliance fitted at the after end of the tube

wo 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

4. No

If so, state type

—

2. Peller, dia.

15' 9"

Pitch

11' 9"

No. of blades

4

Material

Bronze

whether Moveable

no.

Total Developed Surface

90

sq. feet

Method of reversing Engines

Hand lever

Is a governor or other arrangement fitted to prevent racing of the engine when detached

Ylo.

Means of lubrication

ced

Thickness of cylinder liners

25 mm

as per Rule

25 mm

as fitted

25 mm

as per Rule

25 mm

as fitted

25 mm

as per Rule

25 mm

as fitted

25 mm

conducting material

Ylo.

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

one engine driven

one steam driven

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

(F.W. Cooling).

oling Water Pumps, No.

one

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

(F.W. Cooling).

ge Pumps worked from the Main Engines, No.

none

Diameter

—

Stroke

—

Can one be overhauled while the other is at work

—

ups connected to the Main Bilge Line

No. and Size

1 @ 4" x 4" x 12"

How driven

Steam.

Ballast Pump.

—

he 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

—

one engine driven 85 mm x 610 mm

one steam driven 4" x 4" x 12"

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ngements

1 @ 10" x 11" x 12" (duplex)

Power Driven Lubricating Oil Pumps, including Spare Pump

Ylo.

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

In Pump Room

—

two independent means arranged for circulating water through the Oil Cooler

Ylo.

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aps, No. and size:—In Machinery Spaces

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Holds, &c.

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

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

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

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AIR RECEIVERS:— Have they been made under survey

State No. of Report or Certificate

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.

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

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
(If not, state date of approval)

Receivers

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 (2 cpl. bearings for top & bottom ends of Cam. rods).

State the principal additional spare gear supplied

1 C.I. Propeller, 1 cpl. liner & jacket Complete, 1 main piston head, 24 piston rings, 4 fuel valves Complete, 8 Spray plugs, 2 Side & Centre top & bottom end bearings & nuts, 1 N.R. Starting air valve, 1 cpl. relief valve, 4 Scavenge pump 1/2 discs, 1 fuel body with X.Hd. Start. hull crank low hull valves & tappet, 3 rubber hoses for upper part, Cooling water Service, 6 links of roller chain for Camshaft drive.

The foregoing is a correct description.

WILLIAM DOUGLAS & SONS, Limited.

Manufacturer.

Dates of Survey while building	During progress of work in shops--	During erection on board vessel--	Total No. of visits
	1941 Oct 14. Nov. 24. 28. Dec. 8. 29. 30. 1942 Jan. 7. Feb. 13. 17. 19. 21. March 2. 3. 4. 5. 6. 9. 10. 12. 13. 14.	18. 19. 20. 23. 24. 25. 27. June 4. 5. 8. 11. 12	35
Dates of Examination of principal parts—Cylinders	14/3/42	23/2/42	Covers ✓
Crank shaft	14/3/42	Flywheel shaft as crank	Thrust shaft as crank
Screw shaft	12/6/42	Propeller 4/6/42	Stern tube 4/6/42. Engine seatings -
Completion of fitting sea connections		Completion of pumping arrangements -	Engines holding down bolts -
Crank shaft, Material Ingot Steel	Identification Mark N° 224 WHF	Flywheel shaft, Material as crank	Identification Mark as crank
Thrust shaft, Material as crank	Identification Mark as crank	Intermediate shafts, Material Ingot Steel	Identification Marks N° 428, 429, 430, 432, 433, 435 W.H.F.
Tube shaft, Material -	Identification Mark -	Screw shaft, Material Ingot Steel	Identification Mark 435 W.H.F.
Identification Marks on Air Receivers	-		

N° 11359
WHF 12/6/41

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

General Remarks (State quality of workmanship, opinions as to class, &c.) This machinery has been built

Under Special Survey in accordance with the approved Plans Specification & the rules of the Society. The materials & workmanship are good. On completion it has been tried under full load conditions on the test bed with satisfactory results.

It has been despatched, together with intermediate & screw shafting, stern tube & propeller, to Bursat Island for installation on board the vessel & upon satisfactory completion of same will be eligible in my opinion to have notation of 100 L.M.C. (oil Eng) with date, T.S. (CL).

The amount of Entry Fee	£ 6	When applied for,	15 JUN 1942
Special Specification	£ 64 4	When received,	
Donkey Boiler Fee	£ 16 16		
Welded Constr.	£ 12 12		
Travelling Expenses (if any)	£		

Committee's Minute

Assigned

See Let. N° 30771

Doyle Haser.

Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation