

REPORT ON OIL ENGINE MACHINERY.

No. 23800.

Received at London Office

19 JAN 1949

Date of writing Report 10th JAN 1949. When handed in at Local Office 14th JAN 1949 Port of GREENOCK

No. in Survey held at
Reg. Book.Date, First Survey 13th APRIL 1948. Last Survey 30th Dec. 1948.
Number of Visits 53.on the Single
Twin
Triple
Quadruple Screw vessel

"BRITISH PROGRESS"

Tons ^{Gross}
_{Net}

Built at GLASGOW

By whom built BLYTHSWOOD S.B. & L^o.

Yard No. 89 When built 1948

Engines made at GREENOCK

By whom made JOHN G. KINCAID & CO L^o

Engine No. 4202 When made 1948

Donkey Boilers made at do

By whom made do

Boiler No. 4190 When made 1948

Brake Horse Power 3200 ✓

Owners BRITISH TANKER CO L^o

Port belonging to

Nom. Horse Power as per Rule 488 = 625 = MN

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted YES

Trade for which vessel is intended

OPEN SEA SERVICE

OIL ENGINES, &c. Type of Engines DIESEL (under piston Dup^{ts}) 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 650 lb ✓

Diameter of cylinders 740 ✓

Length of stroke 1500 ✓

No. of cylinders 6 ✓

No. of cranks 6 ✓

Mean Indicated Pressure 115 ✓

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 988 ✓

Is there a bearing between each crank YES ✓

Revolutions per minute 115 ✓

Flywheel dia. 2489 ✓

Weight 2499 kg ✓

Means of ignition Compression ✓

Kind of fuel used Diesel oil ✓

Crank Shaft, { Solid forged
Semi built dia. of journals
All built as per Rule App^d
as fitted 505 ✓

Crank pin dia. 505 ✓

Crank Webs

Mid. length breadth 980 ✓

Mid. length thickness 310 ✓

Thickens parallel to axis 310 ✓

Thickens around eye hole 292.5 ✓

Flywheel Shaft, diameter as per Rule ✓
as fittedIntermediate Shafts, diameter as per Rule App^d
as fitted 17 ✓Thrust Shaft, diameter at collars as per Rule App^d
as fitted 4.54 ✓Tube Shaft, diameter as per Rule ✓
as fittedScrew Shaft, diameter as per Rule App^d
as fitted 16 ✓Is the { tube
screw } shaft fitted with a continuous liner YES ✓Bronze Liners, thickness in way of bushes as per Rule 3/4 ✓
as fitted 1 1/16 ✓Thickness between bushes as per Rule 9/16 ✓
as fitted 13/16 ✓

Is the after end of the liner made watertight in the

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 No. If so, state type ✓

Length of Bearing in Stern Bush next to and supporting propeller 5'4" ✓

Propeller, dia. 15'9" ✓

Pitch 10'9" ✓

No. of blades 4 ✓

Material Bronze, whether Moveable No

Total Developed Surface 88 ✓

sq. feet

Method of reversing Engines Air pump motor Is a governor or other arrangement fitted to prevent racing of the engine when declutched YES ✓

Means of lubrication

Forced Thickness of cylinder liners 53% top 417 bottom

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 ✓

Cooling Water Pumps, No. Two M.E. drive Two standby 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. None ✓

Diameter ✓

Stroke ✓

Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line

No. and Size

One 170 tons/hr ✓

Two 100 tons/hr ✓

How driven

Steam ✓

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 ✓

Ballast Pumps, No. and size One 170 tons/hr ✓

Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size One M.E. 100 tons/hr ✓
One Steam 100 tons/hr ✓

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 Three 2 3/2" ✓

In Pump Room Mto 2 1/2" ✓
Fop 1 1/2" ✓

In Holds, &c. Two 2 2 1/2" ✓

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size Two 2 6" ✓

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

Are the Bilge Suctions in the Machinery Spaces

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

Are they fitted with Valves or Cocks Both ✓

Are all Sea Connections fitted direct on the skin of the ship YES ✓

Are the Overboard Discharges above or below the deep water line Above ✓

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates YES ✓

Are the Blow Off Cocks fitted with a spigot and brass covering plate YES ✓

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel YES ✓

How are they protected

What pipes pass through the bunkers None ✓

Have they been tested as per Rule

What pipes pass through the deep tanks ✓

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 None ✓

Is it fitted with a watertight door

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. Two ✓

No. of stages Two ✓

Diameters 1 1/4 & 4 3/4 ✓

Stroke 8" ✓

Driven by

Small Auxiliary Air Compressors, No. ✓

No. of stages

Diameters

Stroke

Driven by

What provision is made for first Charging the Air Receivers Steam compression as above ✓

Savenging Air Pumps, No. ✓

Diameter ✓

No.

Position

Auxiliary Engines crank shafts, diameter as per Rule ✓
as fitted

No.

Have the Auxiliary Engines been constructed under special survey

Is a report sent herewith Yes No 17993 15021

003116-003123-0072

AIR RECEIVERS:—Have they been made under survey.

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

Injection Air Receivers, No. *None* Cubic capacity of each *✓*
Seamless, lap welded or riveted longitudinal joint *✓* Material *✓*

Starting Air Receivers, No. *Two* Total cubic capacity *900 cu ft*
Seamless, lap welded or riveted longitudinal joint *TRDBS* Material *SMS*

IS A DONKEY BOILER FITTED?

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)

Donkey Boilers *20-12-47* General Pumping Arrangements
Oil Fuel Burning Arrangements *27-1-48*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *Yes on separate list*

State the principal additional spare gear supplied *Spare Screw shaft LR 16353 CNH 10/8/48*

The foregoing is a correct description,
for JOHN G. KINCAID & CO. LIMITED.

Manufacturer.

Chief Draughtsman.
Dates of Survey while building
During progress of work in shops--
During erection on board vessel--
Total No. of visits

Dates of Examination of principal parts—Cylinders *30/6/48* Covers *2/8/48* Pistons *24/6/48* Rods *10/9/48* Connecting rods *10/9/48*
Crank shaft *10/9/48* Flywheel shaft *✓* Thrust shaft *10-9-48* Intermediate shafts *11-8-48* Tube shaft *✓*
Screw shaft *1-7-48* Propeller *1-7-48* Stern tube *7-6-48* Engine seatings *7-9-48* Engines holding down bolts *5-10-48*

Completion of fitting sea connections *Glasgow* Completion of pumping arrangements *28-12-48* Engines tried under working conditions *28-12-48*
Crank shaft, Material *SMS* Identification Mark *LR 16351 CNH 10/9/48* Flywheel shaft, Material *✓* Identification Mark *✓*
Thrust shaft, Material *SMS* Identification Mark *LR 1649 CNH 10/9/48* Intermediate shafts, Material *SMS* Identification Mark *LR 16353 CNH 11/5/48*
Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *SMS* Identification Mark *LR 16353 CNH 1/7/48*

Identification Marks on Air Receivers
N° 2494 *N° 2495*
LLOYDS TEST *LLOYDS TEST*
584 lbs *584 lbs*
356 w.p. *356 w.p.*
CNH 18/8/48 *CNH 20/8/48*

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 *Steam under boiler & engine platform. 10-2 galn portable 1-10 galn with hose*

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

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *BRITISH COUNCILLOP GRT FE N° 23770*

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

Special Survey in accordance with the Rules & approved plans. The materials & workmanship

are sound & good. The engine & boiler have been efficiently installed in the vessel

& tested on a sea trial under full working conditions with satisfactory results.

This installation is eligible in my opinion to be classed in the Society's Register book

with Record + LMC 12-48 & Notation Screw shaft CL. 2 DB 150 lbs / "FO. Jitter

for oil fuel FP above 150° F.

Surveying certificates common to this engine and K 201 to follow and K 189. K 190. K 200

already reported will be forwarded on completion of the contract

✓

The amount of Entry Fee .. £ 200: : When applied for,

Special £ : : 14th JAN 1949.

Donkey Boiler Fee £ 59 : 10 : When received,

Travelling Expenses (if any) £ 16 : 0 : 19

AIR RECEIVERS

Committee's Minute

Assigned

Lmc 12.48

22.8.1948

F.D.

OIL ENG

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GLASGOW

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