

REPORT ON OIL ENGINE MACHINERY.

MAR 15 1939

Received at London Office

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Writing Report *9th Mar 1939* When handed in at Local Office *9th Mar 1939* Port of *GREENOCK*
Survey held at *Greenock* Date, First Survey *21st OCTOBER 1934* Last Survey *6th Mar 1939*
Number of Visits *99*
Tons { Gross *11030*
Net *6351*
on the *Single* Screw vessel
Triple
Quadruple
at *Newcastle*
By whom built *Siron, Hunter & Wigham Reith's* Yard No. *1572* When built *1939*
By whom made *J. G. Kincaid & Co. Ltd.* Engine No. *4113* When made *1939*
By whom made _____ Boiler No. _____ When made _____
Horse Power *8700* Owners *Gdynia-America Shipping Lines Ltd.* Port belonging to *Gdynia*
Horse Power as per Rule *1716* Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____
for which vessel is intended _____

ENGINES, &c. Type of Engines *Heavy Oil: Airless Injection* 2 or 4 stroke cycle *2* Single or double acting *Double*
Mean pressure in cylinders *4.9 kg./cm²* Diameter of cylinders *450 mm.* Length of stroke *1200 mm.* No. of cylinders *16* No. of cranks *16*
Indicated Pressure *6.2 kg./cm²* Flywheel dia. *2400 mm.* Weight *G.D.* Means of ignition *Compression* Kind of fuel used *Heavy oil*
of bearings, adjacent to the Crank, measured from inner edge to inner edge *854 mm.* Is there a bearing between each crank *Yes*
Revolutions per minute *125* Crank pin dia. *390 mm.* Crank Webs *Mid. length breadth 860 mm. Thickness parallel to axis 310 mm.*
k { *Solid forged* as per Rule *Approved* *Crank pin dia. 390 mm.* *Mid. length thickness 200 mm. Thickness around eyehole 210 mm.*
aft, { *Semi built* dia. of journals as fitted *390 mm.* *Thrust Shaft, diameter at collars as per Rule *Approved**
All built as fitted *365 mm.*
heel Shaft, diameter as per Rule *Approved* *Intermediate Shafts, diameter as per Rule _____*
as fitted *365 mm.* *Screw Shaft, diameter as per Rule _____*
as fitted _____ Is the { tube } shaft fitted with a continuous liner { _____
screw } _____

ze 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 _____
as fitted _____
ler boss _____ If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner _____

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 _____

eller, dia. _____ Pitch _____ No. of blades _____ Material _____ whether Moveable _____ Total Developed Surface _____ sq. feet
od of reversing Engines *Direct* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *Yes* Means of lubrication _____
ed Thickness of cylinder liners *31 & 30 mm.* Are the cylinders fitted with safety valves *Yes* Are the exhaust pipes and elbows water cooled or lagged with _____

nducting material *Yes* If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine _____
ing Water Pumps, No. _____ Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Pumps worked from the Main Engines, No. _____ Diameter _____ Stroke _____ Can one be overhauled while the other is at work _____
ps 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 _____
gements _____

ast Pumps, No. and size _____ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size _____
wo independent means arranged for circulating water through the Oil Cooler _____ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge _____
os, No. and size:—In Machinery Spaces _____ In Pump Room _____

olds, &c. _____
pendent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____

all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes _____ Are the Bilge Suctions in the Machinery Spaces _____
om easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges _____

ll Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____
hey fixed sufficiently high on the ship's side to be seen without lifting the plating plates _____ Are the Overboard Discharges above or below the deep water line _____

hey 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 _____

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

ll 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 one _____
artment to another _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

wood 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 _____
liary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
liary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

provision is made for first Charging the Air Receivers _____
enging Air Pumps, No. *Two - Each Engine* Diameter *Barneir & Wain's* Stroke *Rotary* Type *Driven by Main Engines*

liary Engines crank shafts, diameter as per Rule _____ Position _____
as fitted _____
the Auxiliary Engines been constructed under special survey _____ Is a report sent herewith _____

AIR RECEIVERS:—Have they been made under survey

Are reports or certificates now forwarded

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

State the principal additional spare gear supplied

1- Piston + Bent In. Sleeve for piston rod: 2- sets piston rings: 2- sets piston cooling pipes
4- Links for cam shaft chain + 4 do. for blower chain: 1- Set each of crank pin + chain bearing
3- Top + 3 bottom exhaust pistons: 1- Top + 1 bottom exhaust chamber: 2- Pair eccentric
end brasses: 8- Top + 8 bottom plungers + sleeves for fuel pumps: 1- set scaveng
rotors + shafts: 1- Port + 1- starboard thrust block collar.

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

Director. Manufacturer.

Dates of Survey while building
During progress of work in shops-- (1934) OCT. 21-22-26-NOV. 1-2-15-DEC. 2-6-9-13- (1935) JAN. 6-12-31- FEB. 8-9-21-23-28- MAR. 8-16-22-23-24-31- APR. 5-11-24- MAY 2-5-12-18-19-24-24- JUNE 2-14-23-24-
During erection on board vessel-- 25-26-27-28-29- AUG. 1-2-4-5-8-9-12-19-25-29-30-31- SEPT. 6-9-14-15-16-20-21-26-28-29- OCT. 4-5-10-13-24-25-26-31- NOV. 1-18-29-30- DEC. 5-4-19-20-21-26-28- (1936) JAN. 5-11-
Total No. of visits 99

Dates of Examination of principal parts—Cylinders { 5-1-39 4 } Covers { 3-3-39 } Pistons { 3-3-39 } Rods { 3-3-39 } Connecting rods { 3-3-39 }
Crank shaft { 3-3-39 } Flywheel shaft { 3-3-39 } Thrust shaft { 3-3-39 } Intermediate shafts { 3-3-39 } Tube shaft { 3-3-39 }

Screw shaft { 3-3-39 } Propeller { 3-3-39 } Stern tube { 3-3-39 } Engine seatings { 3-3-39 } Engines holding down bolts { 3-3-39 }

Completion of fitting sea connections { 3-3-39 } Completion of pumping arrangements { 3-3-39 } Engines tried under working conditions { 3-3-39 }

Crank shaft, Material { Steel } Identification Mark { 7732 J.D.B. } Flywheel shaft, Material { Steel } Identification Mark { 7732 J.D.B. }

Thrust shaft, Material { Steel } Identification Mark { 7732 J.D.B. } Intermediate shafts, Material { Steel } Identification Marks { 7732 J.D.B. }

Tube shaft, Material { Steel } Identification Mark { 7732 J.D.B. } Screw shaft, Material { Steel } Identification Mark { 7732 J.D.B. }

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

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 No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) These Engines (to thrust shaft

couplings) have been built under special survey in accordance with the Rules & the approved plans: Materials & workmanship are good: they have been erected in the works, examined under full load running trials & found satisfactory.

The Engines have been shipped to Newcastle for fitting in the vessel. On completion of fitting out & satisfactory trials this Machinery will be eligible in our opinion to be classed in the Register with record & LMC - with date: Oil Eng.

Approved plans herewith — Crank. Thrust shafts.

The amount of Entry Fee .. £ 6 : — : When applied for, 4th MARCH 1939
Special ... £ 114 : 6/-
Donkey Boiler Fee ... £ — : — :
Travelling Expenses (if any) £ — : — : When received, 6 April 1939

Committee's Minute GLASGOW 14 MAR 1939 WED 31 MAY 1939

Assigned by order.

See Memo. 26-97503
Lloyd's Register Foundation