

REPORT ON OIL ENGINE MACHINERY.

No. 3308

Received at London Office

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Date of writing Report 18.8.1930 When handed in at Local Office

Port of Stockholm

No. in Survey held at
eg. Book.

Date, First Survey 8 Jan 1930 Last Survey 11 Aug 1930

Number of Visits 6

Single
on the Twin
Triple } Screw vessel
Quadruple }Tons { Gross
Net

Built at

By whom built

Yard No. 1386 When built

Engines made at

By whom made J. & C. G. Bolander's Co. Ltd.

Engine No. When made 1930

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 120

Owners Messrs. James Pollock, Sons & Co. Ltd.

Port belonging to London

Nom. Horse Power as per Rule 3460

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

MAIN ENGINES, &c.—Type of Engines *2 Cylinder Oil Engine (Type B30M20)* 2 or 4 stroke cycle *Single or double acting*
Maximum pressure in cylinders *21 kg/cm²* Diameter of cylinders *330 mm* Length of stroke *340 mm* No. of cylinders *2* No. of cranks *2*
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *387 mm* Is there a bearing between each crank *yes*
Revolutions per minute *375* Flywheel dia. *710 mm* Weight *387 kg* Means of ignition *hot bulb* Kind of fuel used *brude oil*
Crank Shaft, dia. of journals *as per Rule 125 mm* Crank pin dia. *130 mm* Crank Webs Mid. length breadth *180 mm* Thickness parallel to axis *shrunk*
Flywheel Shaft, diameter *as per Rule 90.2* Intermediate Shafts, diameter *as fitted* Thrust Shaft, diameter at collars *as per Rule 100 mm*
Main Shaft, diameter *as fitted* Screw Shaft, diameter *as fitted* Is the { tube } shaft fitted with a continuous liner {
Bronze Liners, thickness in way of bushes *as per Rule* Thickness between bushes *as fitted* Is the after end of the liner made watertight in the
Propeller boss *If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner*
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
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 *Length of Bearing in Stern Bush next to and supporting propeller*
Propeller, dia. Pitch No. of blades Material whether Moveable Total Developed Surface sq. feet
Method of reversing Engines *Timing* Is a governor or other arrangement fitted to prevent racing of the engine when declutched *yes* Means of lubrication
Pumps Thickness of cylinder liners *none fitted* Are the cylinders fitted with safety valves *no* Are the exhaust pipes and silencers water cooled or lagged with
insulating material *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. *1* Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Bilge Pumps worked from the Main Engines, No. *1* Diameter *100 mm* Stroke *100 mm* Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line { No. and Size
How driven
Ballast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size
Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
Pumps, No. and size:—In Machinery Spaces
Holds, &c.

Special Independent 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*
from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges
all Sea Connections fitted direct on the skin of the ship *Are they fitted with Valves or Cocks*
they 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*
they 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*
at pipes pass through the bunkers *How are they protected*
at pipes pass through the deep tanks *Have they been tested as per Rule*

the all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
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
partment 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
in Air Compressors, *None fitted* No. of stages Diameters Stroke Driven by
Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
all Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by
venting Air Pumps, *None fitted* Diameter Stroke Driven by
Auxiliary Engines crank shafts, diameter *as per Rule*
as fitted

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *yes*
the internal surfaces of the receivers be examined *yes* What means are provided for cleaning their inner surfaces *mudhole 180 mm*
where a drain arrangement fitted at the lowest part of each receiver *yes*
High Pressure Air Receivers, *None fitted* Cubic capacity of each Internal diameter thickness
unless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules
venting Air Receivers, No. *2* Total cubic capacity *202 litres* Internal diameter *284 mm* thickness *8 mm*
unless, lap welded or riveted longitudinal joint *lap welded* Material *S. M. Steel* Range of tensile strength *36 kg/cm²* Working pressure by Rules *21.8 kg/cm²*

IS A DONKEY BOILER FITTED?

PLANS. Are approved plans forwarded herewith for Shafting *E 1.7.27.*
(If not, state date of approval)

If so, is a report now forwarded?

Receivers *E 8.3.16*

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR *to be supplied and inspected on delivery.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - *8/1, 3/4, 13/6, 4, 7 & 11/8 1930*
During erection on board vessel -
Total No. of visits *in shop 6.*

Dates of Examination of principal parts—Cylinders *7 & 11/30* Covers *7 & 11/30* Pistons *11/8 30* Rods Connecting rods *13 4 & 6*
Crank shaft *8/1, 3/4, 4 & 11/8 30* Flywheel shaft Thrust shaft *11/4 & 11/8 30* Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions *in shop 8.*

Crank shaft, Material *S. M. Steel* Identification Mark *LLOYD'S N:03695 A.I. 11.8.30 A* Flywheel shaft, Material Identification Mark
Thrust shaft, Material Identification Mark *LLOYD'S N:03721 A.I. 11.8.30 A* Intermediate shafts, Material Identification Marks
Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Is the flash point of the oil to be used over 150° F.

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *See Sem. Report no. 2991.*

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

I am of opinion, that this motor is of superior material and workmanship, and as it has been designed and constructed under special survey, I have respectfully to submit that it will be eligible to be classed LMC, as soon as it has been fitted in a classed vessel to the satisfaction of the Society's Surveyors.

The amount of Entry Fee ... £ : : When applied for, *18.8.1930*
Special Survey in shop *£ 182.00* : :
Donkey Boiler Fee ... £ : : When received, *17.11.1930*
Travelling Expenses (if any) £ : :

Committee's Minute

Assigned

TUE. 9 DEC 1930

TUE. 17 FEB 1931

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