

REPORT ON OIL ENGINE MACHINERY.

No. 19136

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25.11.29 When handed in at Local Office 20th 19 - Port of Greenock

o. in Survey held at Greenock Date, First Survey 12th June 1929. Last Survey 19th December 1929.

g. Book. M/S "Athellaird" Number of Visits 48.

on the Single Twin Screw vessel

Tons { Gross
Net

uilt at Birkenhead By whom built Samuel Laird & Co. Yard No. 959 When built

gines made at Greenock By whom made John & McCaid Engine No. 1149 When made 1929

onkey Boilers made at Greenock By whom made United Machine Co. Boiler No. — When made —

ake Horse Power 3200 Owners United Machine Co. Port belonging to Luskool

om. Horse Power as per Rule 709 Is Refrigerating Machinery fitted for cargo purposes — Is Electric Light fitted —

ade for which vessel is intended Foreign

MAIN ENGINES, &c. Type of Engines Burner & Train (2 Stk) 4 stroke cycle Single or double acting Single

imum pressure in cylinders 500 Diameter of cylinders 630 mm Length of stroke 1300 mm No. of cylinders 12 No. of cranks 12

an of bearings, adjacent to the Crank, measured from inner edge to inner edge 892 mm Is there a bearing between each crank yes

olutions per minute 110 Flywheel dia. 2620 mm Weight 13,500 kg Means of ignition Compression Kind of fuel used Diesel

ank Shaft, dia. of journals as per Rule 403.3 mm Crank pin dia. 415 mm Crank Webs Mid. length breadth shrunk Thickness parallel to axis 240 mm

as fitted 415 mm Mid. length thickness shrunk Thickness around eye-hole 184.4 mm

Wheel Shaft, diameter as per Rule 163/8" Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule 11.8"

as fitted 163/8" as fitted — as fitted 123/8"

be Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the { tube
screw } shaft fitted with a continuous liner —

as fitted — as fitted — as fitted —

ronze 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 — as fitted — as fitted —

opeller 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

ft. — If so, state type — Length of Bearing in Stern Bush next to and supporting propeller —

opeller, dia. — Pitch — No. of blades — Material — whether Moveable — Total Developed Surface — sq. feet

ethod of reversing Engines air Is a governor or other arrangement fitted to prevent racing of the engine when detached yes Means of lubrication

reed Thickness of cylinder liners 36/46 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

n-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

ooling Water Pumps, No. 2 40/8" Is the sea suction provided with an efficient strainer which can be cleared within the vessel —

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

mps connected to the Main Bilge Line { No. and Size
How driven —

allast Pumps, No. and size — Lubricating Oil Pumps, including Spare Pump, No. and size 2 4/8"

re two independent means arranged for circulating water through the Oil Cooler — Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

mps, No. and size:—In Machinery Spaces — In Pump Room —

Holds, &c. —

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

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 —

re 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

re 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

hat pipes pass through the bunkers — How are they protected —

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

re 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 —

a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

ain Air Compressors, No. 9 No. of stages 3 Diameters 600-540-120 mm Stroke 480 mm Driven by Main Engine

ixiliary Air Compressors, No. one No. of stages 3 Diameters 400-360-82 mm Stroke 260 Driven by Steam

ual Auxiliary Air Compressors, No. — No. of stages — Diameters — Stroke — Driven by —

avenging Air Pumps, No. — Diameter — Stroke — Driven by —

axiliary 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

in the internal surfaces of the receivers be examined and cleaned — Is a drain fitted at the lowest part of each receiver —

igh Pressure Air Receivers, No. 4 Cubic capacity of each 150 ft³ Internal diameter 12" thickness 1/2"

amless, lap welded or riveted longitudinal joint Seamless Material S Range of tensile strength 29.33 Working pressure by Rules 1000 lb

arting Air Receivers, No. — Total cubic capacity — Internal diameter — thickness — Working pressure Actual 1000 lb

amless, lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure 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 Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied

State the principal additional spare gear supplied

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 - (1929) June 2, Aug. 1, 19, 26, 30, Sept. 11, 18, 24, Oct. 1, 8, 10, 11, 12, 15, 16, 17, 18, 24, 25, 28, 29, Nov. 1, 2, 5, 8, 13, 14, 15, 18, 19, 20, 21, 22, 25, 26, 27, 28, 29, Dec. 2, 3, 4, 5, 6, 11, 13.
During erection on board vessel - 14, 19.
Total No. of visits 48

Dates of Examination of principal parts - Cylinders 24, 10, 29 Covers 11, 10, 29 Pistons 20, 11, 29 Rods 2, 12, 29 Connecting rods 2, 12, 29

Crank shaft 2, 12, 29 Flywheel shaft 18, 11, 29 Thrust shaft 18, 11, 29 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 ✓

Crank shaft, Material S Identification Mark LR 1149 WGM Flywheel shaft, Material S Identification Mark LR 8605 8600 WGM

Thrust shaft, Material S Identification Mark LR 8605 8600 WGM 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.

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

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

"The Sultan" Ark Reg. No. 1926

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

These engines have been built under special survey in accordance with the approved plans. The workmanship & material are of good quality. They have been fitted on the M/V. & found satisfactory. Have now been shipped to Borkenhead at which port they will be fitted on board.

The machinery, when fitted on board, tried under working condition, will be submitted in my opinion for the record of LMC with date

The amount of Entry Fee £ 6 : -

Special

Donkey Boiler Fee

Travelling Expenses (if any)

When applied for

21st DECEMBER 1929

When received

27.12.29

Committee's Minute GLASGOW

24 DEC 1929

Assigned

Deferred

W. Gordon-Mitchell
Engineer Surveyor to Lloyd's Register of Shipping.



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