

REPORT ON OIL ENGINE MACHINERY.

No. 49475

Received at London Office 21 JUL 1929

Date of writing Report 10 When handed in at Local Office 29-7-10 Port of Glasgow

No. in Survey held at Glasgow Date, First Survey 12 Nov 1928 Last Survey July 10 1929

on the Single Twin Triple Quadruple Screw vessel Delftdijk Tons Gross Net

at Rotterdam By whom built Messrs Wilton Yard No. When built 1929

was made at Glasgow By whom made Harland & Wolff Ltd Engine No 3672 When made 1929

Boilers made at Annan By whom made Cochran & Co Annan Ltd Boiler No. 11145 When made 1929

Horse Power 6200 Owners Port belonging to

Horse Power as per Rule 1293 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted yco

for which vessel is intended

ENGINES, &c.—Type of Engines Diesel 4 stroke cycle 4 Single or double acting single

Working pressure in cylinders 500 LBS/sq" Diameter of cylinders 740 mm Length of stroke 1850 mm No. of cylinders 16 No. of cranks 16

of bearings, adjacent to the Crank, measured from inner edge to inner edge 1004 mm Is there a bearing between each crank yco

Revolutions per minute 94 TURNING WHEEL dia. 9'-5" Weight 3.84 tons Means of ignition Compression Kind of fuel used above 150 F

Crank Shaft, dia. of journals as per Rule 506.5 mm as fitted 520 mm Crank pin dia. 520 mm Crank Webs Mid. length breadth 340 mm Thickness parallel to axis 320 mm

Intermediate Shafts, diameter as per Rule 14.9" as fitted 15.4" Thrust Shaft, diameter at collars as per Rule 15.65" as fitted 16"

Screw Shaft, diameter as per Rule 16.233" as fitted 17" Is the tube screw shaft fitted with a continuous liner yco

Liner thickness in way of bushes as per Rule .82" as fitted .875" Thickness between bushes as per Rule .615" as fitted .23/32 Is the after end of the liner made watertight in the

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

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 yco

liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after

of the tube shaft Length of Bearing in Stern Bush next to and supporting propeller 6'-5"

Propeller, dia. 16' Pitch 17'-3" No. of blades 3 Material Mang Bry whether Moveable No Total Developed Surface 61 sq. feet

Method of reversing Engines Air Is a governor or other arrangement fitted to prevent racing of the engine yco Means of lubrication

Thickness of cylinder liners TOP 53 mm BOT 32 mm Are the cylinders fitted with safety valves yco Are the exhaust pipes and silencers lagged with

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

Working Water Pumps, No. Is the sea suction provided with an efficient strainer which can be cleared within the vessel

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

Pumps connected to the Main Bilge Line No. and Size How driven

Fast Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size

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

Holdings, &c.

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

How are they protected

How are they protected Have they been tested as per Rule

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IS A DONKEY BOILER FITTED? Yes

If so, is a report now forwarded? No

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

As per attached list which is in accordance with the rules.

[Faint handwritten notes and signatures, including 'Rotterdam' and 'Glasgow']

The foregoing is a correct description,

For HARLAND & WOLFF, LTD.

J. L. Green

Manufacturer.

MANAGER FINNIESTON WORKS

Dates of Survey while building: During progress of work in shops - 1928, Nov 12, Dec 5, 27, 1929 Jan 8, 30, Feb 14, 24, Mar 11, 12, 18, 20, 25, Apr 3, 9, 16, 22, 23, 26, 29, 30, May 2, 3, 7, 9, 15, 16, 17, 22, 24, 27, 28, 29, 31, June 4, 5, 6, 7, 10, 11, 12, 13, 17, 18, 20, 21, 24, 25, 27, 28, July 1, 2, 10. During erection on board vessel - Total No. of visits 53

Dates of Examination of principal parts - Cylinders 24-5-29/10-7-29 Covers 24-5-29/10-7-29 Pistons 27-5-29/10-6-29 Rods 27-5-29 10-6-29 Connecting rods

Crank shaft 7-5-29 ^{TURNING WHEEL} Flywheel shaft 7-5-29 Thrust shaft 24-5-29 Intermediate shafts 10-6-29 Tube shaft

Screw shaft 24-5-29 Propeller 24-5-29 Stern tube 7-6-29 Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions

Crank shaft, Material Siemens Steel Identification Mark ^{TURNING WHEEL} Flywheel shaft, Material Siemens Steel Identification Mark

Thrust shaft, Material Siemens Steel Identification Mark 8389 J.P. Intermediate shafts, Material Siemens Steel Identification Marks 1726, 1727, 1730, 1862, 1827, 1801, 1608, 1624, 1750, 8389

Tube shaft, Material Identification Mark Screw shaft, Material Siemens Steel Identification Mark

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

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 have been built under

special survey in accordance with the rules and the approved plans, the materials and workmanship are good

The machinery is eligible in our opinion for classification with record of + LMC with date on the satisfactory completion of installing the engines on board the vessel in Rotterdam

a.c.
29/7/29

Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee ... £ 105.17/-
4/5 Special ... £ 52.18/-
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 30/7/29
When received, 19.8.29

Chas R Rowcliffe S. C. Dan
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute GLASGOW 30 JUL 1929
Assigned Deferred

TUE 5 NOV 1929
Lloyd's Register Foundation