

REPORT ON OIL ENGINE MACHINERY.

No. 21263

Received at London Office

31 AUG 1934

Date of writing Report 25/8

1934 When handed in at Local Office

10 Port of Hamburg

No. in Survey held at Hamburg

Date, First Survey 6.8.34

Last Survey 15.8.34 19

2617 on the Single Twin Triple Quadruple Screw vessel "Pine Court" ex Henry Horn

Number of Visits 8

Tons Gross 3219 Net 1934

Built at Kiel By whom built Fried. Krupp Germaniawerft A.G. Yard No. 462 When built 1924

Engines made at Kiel By whom made - ditto - Engine No. 1756 When made 1924

Donkey Boilers made at Kiel By whom made - ditto - Boiler No. 3608 When made 1924

Brake Horse Power 1400 Owners Knoll Line Port belonging to London

Net Horse Power as per Rule 383 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended 25 9/16 39 3/8

L ENGINES, &c.—Type of Engines Krupp 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 35 kg/cm² Diameter of cylinders 650 mm Length of stroke 1000 mm No. of cylinders 6 No. of cranks 6

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 870 mm Is there a bearing between each crank yes

Revolutions per minute 110 Flywheel dia. 1950 mm Weight 10600 Means of ignition Diesel system Kind of fuel used Gas & Diesel oil

Crank Shaft, dia. of journals as per Rule 387.4 mm Crank pin dia. 390 mm Crank Webs Mid. length breadth 580 mm Thickness parallel to axis shrunk

Flywheel Shaft, diameter as per Rule 387.4 mm Intermediate Shafts, diameter as per Rule 267 mm Thrust Shaft, diameter at collars as per Rule 281 mm

Stern Tube Shaft, diameter as per Rule 390 mm Screw Shaft, diameter as per Rule 293 mm Is the shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 15.7 mm Thickness between bushes as per rule 11.8 mm 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 yes

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 yes

If two liners are fitted, is the shaft lapped or protected between the liners yes Is an approved Oil Gland or other appliance fitted at the after end of the tube

Length of Bearing in Stern Bush next to and supporting propeller 1415 mm

Propeller, dia. 3850 mm Pitch 3000 No. of blades 4 Material Bronze whether Moveable yes Total Developed Surface 5.07 sq. feet

Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled and lagged with non-conducting 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 yes

Cooling Water Pumps, No. 1 (Ballast as spare) 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. 1 Diameter 2 Stroke 2 Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size Ballast 150 tons/h 2 x 220/250 1 Gen. Serv. 45 tons/h 2 x 145/125 1 Gen. Serv. 60 tons/h

How driven electrically electrically electrically

Ballast Pumps, No. and size 1 of 150 tons/h 2 x 220/250 Lubricating Oil Pumps, including Spare Pump, No. and size 1 rotary of 16 m/h

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 4 of 77 mm dia

In Holds, &c. No 1: 2 of 77 mm dia, No 2: 2 of 77 mm dia, No 3: 2 of 77 mm dia, Shaft tunnel: 2 of 77 mm dia

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 of 77 mm dia

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

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

Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks valves & cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line cooling w. line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes

What pipes pass through the bunkers heating coils only How are they protected

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

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 yes Is it fitted with a watertight door yes worked from work shop on shelter deck

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. 1 No. of stages 3 Diameters 580/500/150 Stroke 500 mm Driven by extension of cranksh.

Auxiliary Air Compressors, No. 1 No. of stages 2 x 3 Diameters 320/230/30 mm Stroke 250 mm Driven by port aux oil eng.

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 120/45 mm Stroke 60 mm Driven by hot bulb oil engine, can be started by hand.

Scavenging Air Pumps, No. none Diameter Lee J E for 4 SESA 2 G. 350 x 500 Span 485

Auxiliary Engines crank shafts, diameter as per Rule 190.2 mm as fitted 200 mm

Are Receivers:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes For aux. motors air rec. now made.

Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces covers & manhole doors

Is there a drain arrangement fitted at the lowest part of each receiver Starting air receivers and main injection: yes. Internal pipes

High Pressure Air Receivers, No. 1, 2, 1 Cubic capacity of each 410 50 25 litres Internal diameter 410 236 185 mm thickness 12.5 12 10 mm

Material 0.4 Steel Range of tensile strength 41-47 kg/cm² Working pressure by Rules 65-235 265 kg/cm²

Starting Air Receivers, No. 3 Total cubic capacity 8160 2500 litres Internal diameter 1000 mm 1000 mm thickness 31 mm 18 mm

Material 0.4 Steel Range of tensile strength 41-47 kg/cm² Working pressure by Rules 49.5 101.5 kg/cm²

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9/6/34
app. for 65, 75, 85, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300, 310, 320, 330, 340, 350, 360, 370, 380, 390, 400, 410, 420, 430, 440, 450, 460, 470, 480, 490, 500, 510, 520, 530, 540, 550, 560, 570, 580, 590, 600, 610, 620, 630, 640, 650, 660, 670, 680, 690, 700, 710, 720, 730, 740, 750, 760, 770, 780, 790, 800, 810, 820, 830, 840, 850, 860, 870, 880, 890, 900, 910, 920, 930, 940, 950, 960, 970, 980, 990, 1000

015273-015283-0400

IS A DONKEY BOILER FITTED? Yes If so, is a report now forwarded? Yes

PLANS. Are approved plans forwarded herewith for Shafting Receivers Separate Tanks
(If not, state date of approval)
 Donkey Boilers General Pumping Arrangements Oil Fuel Burning Arrangements

SPARE GEAR In accordance with the Society's Rules and a considerable number of parts in addition.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building During progress of work in shops --
 August 1934: - 6, 7, 8, 9, 11, 13, 14, 15
 Total No. of visits 8

Dates of Examination of principal parts—Cylinders 8-9-11/8/34 Covers 8-9-11/8/34 Pistons 8-9-11/8/34 Rods 8-9-11/8/34 Connecting rods 8-9-11/8/34

Crank shaft 8-9-11/8/34 Flywheel shaft 8/8/34 Thrust shaft 8/8/34 Intermediate shafts 8/8/34 Tube shaft —
 Screw shaft 7/8/34 Propeller 6/8/34 Stern tube 6/8/34 Engine seatings 8/8/34 Engines holding down bolts 9/8/34

Completion of fitting sea connections 9/8/34 Completion of pumping arrangements 9/8/34 Engines tried under working conditions 14-8-34

Crank shaft, Material O.H. Steel Identification Mark G. & L. Flywheel shaft, Material O.H. Steel Identification Mark G. & L.
 Thrust shaft, Material O.H. Steel Identification Mark G. & L. Intermediate shafts, Material O.H. Steel Identification Marks G. & L.
 Tube shaft, Material Identification Mark Screw shaft, Material O.H. Steel Identification Mark G. & L.

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 no If so, have the requirements of the Rules been complied with

Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. All working parts of this machinery have been opened up and were found in good order and safe working condition, and in accordance with the scantlings as given in the submitted plans. The shafting is free from defects. The pumping arrangements are as shown in the submitted plans. All requirements as contained in London Letter E 27/7/34 and further correspondence have been complied with and the necessary alterations were carried out to my satisfaction. The machinery, donkey Boiler and Electric Installation are in good and safe working conditions, in accordance with the submitted plans and eligible in my opinion to be classed in the Society's Register Book with notations of:
"L.M.C-8,34", "Oil Eng.", "TS(CL) seen-8,34" "DB-7016"
and "Electric Light"

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

The amount of Entry Fee £ 5: - : When applied for,
 Special ... £ 47: - : 28. 8. 19. 34
 Donkey Boiler Fee ... £ - : - : When received,
 Travelling Expenses (if any) £ 2: - : 11. 9. 19. 34

Committee's Minute **FRI. 14 SEP 1934**

Assigned L.M.C 8.34
DB 7016 5(CL) 8.34 DB 8.34

J.A. M... ..
 Engineer Surveyor to Lloyd's Register of Shipping.

