

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

No. 11421
-6 1937
SEP - 7

Received at London Office

Date of writing Report 2nd Sept. 37 When handed in at Local Office 4th Sept. 1937 Port of Göteborg
No. in Survey held at Trollhättan Date, First Survey 29th June Last Survey 1st Sept. 1937
Reg. Book. 20578 on the Single Screw vessel "ASHANTI" Number of Visits 6

Built at Goole By whom built Goole S.B. & Repg. Co. Ltd. Yard No. _____ When built 1936
Engines made at TROLLHÄTTAN By whom made NYDQVIST & HOLM A.B. Engine No. 1056 When made 1937
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
Brake Horse Power 400 Owners T.E. EVANS & Co. Ltd. Port belonging to LONDON
Nom. Horse Power as per Rule 102 Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____
Trade for which vessel is intended GENERAL

L ENGINES, &c. Type of Engines One diesel oil engine 2 or 4 stroke cycle 2 Single or double acting single
Maximum pressure in cylinders 42 kg/cm² Diameter of cylinders 250 mm Length of stroke 420 mm No. of cylinders 6 No. of cranks 6
Mean Indicated Pressure 5.5 kg/cm²

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 374 mm Is there a bearing between each crank Yes
Revolutions per minute 335 Flywheel dia. 1150 mm Weight 1225 kg Means of ignition Diesel System Kind of fuel used Diesel fuel oil
Crank Shaft, dia. of journals 160 mm Crank pin dia. 160 mm Crank Webs Mid. length breadth 230 mm Thickness parallel to axis _____
Flywheel Shaft, diameter 160 mm Intermediate Shafts, diameter _____ Thrust Shaft, diameter at collars 120 mm

Propeller Shaft, diameter _____ Is the tube/screw shaft fitted with a continuous liner _____
Bronze Liners, thickness in way of bushes _____ Thickness between bushes _____ Is the after end of the liner made watertight in the stern tube _____
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner _____

Method of reversing Engines Direct reversible Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced
Thickness of cylinder liners Rolland 4 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material _____

Cooling Water Pumps, No. 11 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 70 mm Can one be overhauled while the other is at work _____
Pumps connected to the Main Bilge Line _____

Ballast Pumps, No. and size _____ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size Two 67 lit each
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 _____ In Pump Room _____

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes _____ Are the Bilge Suctions in the Machinery Spaces led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges _____

Are all Sea Connections fitted direct on the skin of the ship _____ Are they fitted with Valves or Cocks _____
Are 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 _____
Are 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 _____
What pipes pass through the bunkers _____ 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 _____
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 _____ Is the Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

Main Air Compressors, No. One No. of stages 2 Diameters 150/60 mm Stroke 70 mm Driven by Main engine
Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
Small Auxiliary Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____
Scavenging Air Pumps, No. One, double acting Diameter 520 mm Stroke 420 mm Driven by Main engine
Auxiliary Engines crank shafts, diameter _____ No. _____ Position _____

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AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule. *Old receivers on board to be used.*

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

High Pressure 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 *21.6.37* Receivers Separate Fuel Tanks

(If not, state date of approval)

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 *yes. ✓*

State the principal additional spare gear supplied *1 cylinder liner; 1 gudgeon pin bearing bush, 1 crank pin bearing, 1 set of thrust pads for the thrust bearing. A assortment of springs & packings.*

The foregoing is a correct description,
NYDQVIST & HOLM AKTIEBOLAG
 GUNNAR DELLNER *Oscar Draus.* Manufacturer.

Dates of Survey while building { During progress of work in shops - - } *1937: June 29 July 12, 20 Aug. 18, 23 Sept. 1. = 6 visits.*
 { During erection on board vessel - - }
 Total No. of visits

Dates of Examination of principal parts—Cylinders *12.20/7* Covers *12/7* Pistons *29/6* Rods ✓ Connecting rods *29/6*

Crank shaft *29/6* Flywheel shaft ✓ Thrust shaft *1/9* 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 *23/8*

Crank shaft, Material *S. 17 Steel* Identification Mark *440703 AK 8210 28.3.30* Flywheel shaft, Material ✓ Identification Mark ✓

Thrust shaft, Material *S. 17 Steel* Identification Mark *440703 1320 25.1.9.37* 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. *Yes ✓*

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 *No* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)
This machinery has been built under Special Survey in accordance with the Rules & approved plans.

The workmanship is good.
The cranks & thrust shafts as per forging reports attached. So complete survey. The machinery to be fitted and the installation completed to the Surveyors satisfaction. Spare gear to be checked on board. The engine has been despatched to Rotterdam for installation onboard.

This machinery is eligible in my opinion to be classed in the Register Book with notation of + NE made 9.37 refitted with date when the survey has been completed.

The amount of Entry Fee .. £ : : When applied for,
 Special ... *Nr. 387: 60* : : *4/9 1937*
 Donkey Boiler Fee ... £ : : When received,
 Travelling Expenses (if any) *Nr. 66: 60* : : *28.9 37 26/10*

E. Bosvelius
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI 22 OCT 1937



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