

Rpt. 4b.

REPORT ON OIL ENGINE MACHINERY.

25 MAY 1936

Received at London Office

No. 46845

26 MAY 1936

Date of writing Report

When handed in at Local Office

Port of

No. in Survey held at Reg. Book.

Date, First Survey

Last Survey

Number of Visits

37091 on the Single Triple Quadruple Screw vessel

"ASHANTI"

Tons ^{Gross} 534 _{Net} 274

Built at Goole By whom built Goole S.B. & Repg Co Ltd Yard No. 312 When built 1936
Engines made at Cologne By whom made Humboldt, Deutz & Brown A.G. Engine No. 370109/15 When made 1936
Donkey Boilers made at None By whom made None Boiler No. None When made None
Brake Horse Power 410 Owners J. E. Evans & Co Ltd Port belonging to London
Nom. Horse Power as per Rule 82 Is Refrigerating Machinery fitted for cargo purposes None Is Electric Light fitted Yes
Trade for which vessel is intended Ocean-going 11" 17 1/2"

OIL ENGINES, &c.—Type of Engines Heavy Oil (Deutz - R.V. 7. M. 345) 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 50 kg/cm² Diameter of cylinders 280 mm Length of stroke 450 mm No. of cylinders 7 No. of cranks 7
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 307.5 mm Is there a bearing between each crank Yes
Revolutions per minute 350 Flywheel dia. 1250 mm Weight 2600 kg Means of ignition Comp^m Kind of fuel used Heavy Oil
Crank Shaft, dia. of journals as per Rule 190 mm Crank pin dia. 170 mm Crank Webs as per Rule 4.35 Mid. length breadth 339 mm Thickness parallel to axis shrunk
Flywheel Shaft, diameter as per Rule 160 mm Intermediate Shafts, diameter as per Rule 4.58 Thrust Shaft, diameter at collars as per Rule 160 mm
Tube Shaft, diameter as per Rule 5.00 Is the tube as fitted 5 3/8 Is the screw shaft fitted with a continuous liner None
Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted 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 Yes
shaft Yes If so, state type Stewart Length of Bearing in Stern Bush next to and supporting propeller 21"
Propeller, dia. 65 Variable Pitch 35-45" No. of blades 4 Material C.I. whether Moveable None Total Developed Surface 10.8 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 forced
Thickness of cylinder liners 25 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or 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 Up funnel
Cooling Water Pumps, No. One & cross connected to bilge pump Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
What special arrangements are made for dealing with cooling water if discharged into bilges Water overboard

Bilge Pumps worked from the Main Engines, No. One Diameter 100 mm Stroke 85 mm Can one be overhauled while the other is at work Yes
Pumps connected to the Main Bilge Line No. and Size 2-Aux Bilge pumps 3" 40 ton/h^r and Above main engine pumps
How driven Cum Heavy Oil Engine
Ballast Pumps, No. and size All above pumps Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size One & one Spare
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 @ 3" In Pump Room 2 @ 3"
In Holds, &c. Fore peak 1 @ 3" No 1 Ballast Tank 3 @ 3" No 2 det. 3 @ 3" Aft peak 1 @ 3" Hold 2 @ 3"
Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 @ 3" included above
Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces Yes
led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Strum
Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Yes
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 Above
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 None How are they protected Yes
What pipes pass through the deep tanks Yes Have they been tested as per Rule Yes
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 None Is it fitted with a watertight door Yes worked from None
If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Yes

Main Air Compressors, No. One No. of stages 2 Diameters 145" & 60" Stroke 85 mm Driven by Main Engine
Auxiliary Air Compressors, No. One No. of stages One Diameters 28" & 24" Stroke 450 lb/s Driven by Aux Engine
Small Auxiliary Air Compressors, No. None No. of stages None Diameters None Stroke None Driven by Hand starting
Scavenging Air Pumps, No. None Diameter None Stroke None Driven by None
Auxiliary Engines crank shafts, diameter as per Rule See Saw Reports 0.1466 No. Auxiliary Main Gov. & Aux Gov
Position Side by side Port side Port side Port side Port side

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
Can the internal surfaces of the receivers be examined and cleaned Yes Is a drain fitted at the lowest part of each receiver Yes
Pressure Air Receivers, No. None Cubic capacity of each None Internal diameter None thickness None
less, lap welded or riveted longitudinal joint Yes Material Steel Range of tensile strength 38 kg/cm² Working pressure 30 kg/cm²
ting Air Receivers, No. 2 Total cubic capacity 1000 litres Internal diameter 450 mm thickness 12 mm
less, lap welded or riveted longitudinal joint lap welded Material Steel Range of tensile strength 38 kg/cm² Working pressure 30 kg/cm²

Working pressure 30 kg/cm²
Actual 30 kg/cm²
by Rules 30 kg/cm²
Actual 30 kg/cm²

Working pressure 30 kg/cm²
Actual 30 kg/cm²
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Working pressure 30 kg/cm²
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by Rules 30 kg/cm²
Actual 30 kg/cm²

4110-9114

IS A DONKEY BOILER FITTED?

None

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)

31-12-35

Receivers

21-7-32

Separate Tanks

22-1-36

Donkey Boilers

✓

General Pumping Arrangements

20-24-12-35

Oil Fuel Burning Arrangements

✓

PLAN OF ENGINE ROOM PUMPING ARRANGEMENTS AS ACTUALLY FITTED FORWARDED HEREWITH.
SPARE GEAR.

Has the spare gear required by the Rules been supplied

Yes

State the principal additional spare gear supplied

See Due Report.

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building
During progress of work in shops--
During erection on board vessel--
Total No. of visits

1935:- Dec. 18. 1936:- Mar 2. 23. 26. Apr 2. 9. 23. 28. 30. May 4. 6.
11

Dates of Examination of principal parts—Cylinders Due Rpt. Covers Due Rpt. Pistons Due Rpt. Rods ✓ Connecting rods Due Rpt.

Crank shaft Due Rpt. Flywheel shaft None. Thrust shaft Due Rpt. Intermediate shafts 9-4-36 Tube shaft None

Screw shaft 23-3-36 Propeller 26-3-36 Stern tube 22-3-36 Engine seatings 23-3-36 Engines holding down bolts 23-4-36

Completion of fitting sea connections 26-3-36 Completion of pumping arrangements 4-5-36 Engines tried under working conditions 4-5-36

Crank shaft, Material Steel Identification Mark 10411 Flywheel shaft, Material None Identification Mark

Thrust shaft, Material Steel Identification Mark 308. H.B. Intermediate shafts, Material Steel Identification Marks

Tube shaft, Material None Identification Mark Screw shaft, Material Steel Identification Mark 285.C.S.P. 28/3

Is the flash point of the oil to be used over 150° F. Yes (FORGING REPORTS WITH N°313 "BENGUELA")

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

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with None.

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.)

The Machinery of this Vessel has been fitted on board under Special Survey, the workmanship & materials are good, and when tried at sea was found satisfactory in every respect.

The Machinery of this Vessel is eligible, in my opinion, to have the record of L.M.C. 5.36. 06 & the notations of Oil Eng. 4.S.C. SA. 7.C. 11-17 1/16 82 N.H.P.

The amount of Entry Fee .. £
Special ...
Donkey Boiler Fee ...
Travelling Expenses (if any) £

When applied for,

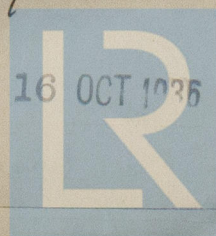
When received,

Committee's Minute TUE. 30 JUN 1936

Assigned + Lmb 5.36 subject oil eng. of

FRI. 14 AUG 1936

FRI. 16 OCT 1936



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