

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 11.11.23

Date of writing Report

19

When handed in at Local Office

9.7.28 Port of

WEST HARTLEPOOL

No. in Survey held at West Hartlepool

Date, First Survey 2nd Feb 1928. Last Survey 4th July 1928

Reg. Book.

(Number of Visits 74.)

on the

S.S. "ALPHACCA"

Gross

Tons

Net

Built at Sunderland By whom built Wm Gray & Co. Ltd.

Yard No. 1004

When built 1928

Engines made at West Hartlepool By whom made Central Marine

Engine No. 1004

when made 1928

Boilers made at ditto By whom made Engine Works

Boiler No. 1004

when made 1928

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Rule 592

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

Trade for which Vessel is intended

Ocean going

ENGINES, &c.—Description of Engines

Triple expansion

Revs. per minute 73

Dia. of Cylinders 27" 44" 73" Length of Stroke 51

No. of Cylinders 3

No. of Cranks 3

Crank shaft, dia. of journals as per Rule 14.65 as fitted 15" Crank pin dia. 15"

Crank webs Mid. length breadth 22"

Thickness parallel to axis 9 3/8"

Mid. length thickness 9 3/8"

Thickness around eye-hole 6 1/2"

Intermediate Shafts, diameter as per Rule 13.95" as fitted 14 1/2"

Thrust shaft, diameter at collars

as per Rule 14.65 as fitted 15"

Tube Shafts, diameter as per Rule as fitted

Screw Shaft, diameter as per Rule 15.45 as fitted 16"

Is the tube screw shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule 7.72 as fitted 3 1/2"

Thickness between bushes as per Rule 5.79 as fitted 1 1/2"

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

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

If 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 shaft

Length of Bearing in Stern Bush next to and supporting propeller

5'-2 1/2"

Propeller, dia. 18'-0" Pitch 17'-6" No. of Blades 4

Material Bronze

whether Movable no

Total Developed Surface 140 sq. feet

Feed Pumps worked from the Main Engines, No. 2

Diameter 4 1/2"

Stroke 28"

Can one be overhauled while the other is at work yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 4 1/2"

Stroke 28"

Can one be overhauled while the other is at work yes

Feed Pumps No. and size 2. 12" x 9" x 21. Simplex

Pumps connected to the

No. and size 2 Main & 1

10" x 1 1/2" x 10 duplex

How driven Steam

Main Bilge Line

How driven Steam

Ballast Pumps, No. and size 1 10" x 1 1/2" x 10 Dup.

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

Are two independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary

Bilge Pumps;—In Engine and Boiler Room 3 of 3" dia

Tunnel 1 of 2 1/4"

In Holds, &c. No 1 2 of 3" dia

No 2 2 of 3" dia

Reserve hold 2 of 2 1/2"

No 3 2 of 3" dia

No 4 2 of 3" dia

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 9"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 of 5" dia

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

yes

Are the Bilge Suctions in the Machinery Space led 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

yes

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates

yes

Are the Overboard Discharges above or below the deep water line below.

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 Suctions from forward hold

How are they protected Strong wood casings.

What pipes pass through the deep tanks none

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 upper deck

MAIN BOILERS, &c.—(Letter for record R)

Total Heating Surface of Boilers

8934 sq. ft.

Is Forced Draft fitted yes

No. and Description of Boilers 3 single ended

Working Pressure 200 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? yes

IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting

Main Boilers

yes

Auxiliary Boilers

yes

Donkey Boilers

(If not state date of approval)

Superheaters yes

General Pumping Arrangements

yes

Oil fuel Burning Piping Arrangements

yes

SPARE GEAR. State the articles supplied:—

2 bolts & nuts for connec. rod top ends. 2 ditto for

bottom ends. 2 ditto for main bearings. 1 set coupling bolts & nuts.

1 set rings for H.P. & M.P. pistons. 1 set crosshead brasses. 1 set crank pin bearings.

1 valve spindle. 1 set air pump valves. 4 hotwell pump valves. 2 bilge pump valves.

1 air pump rod. 1 propeller shaft. 1 cast iron propeller. 6 piston bolts.

For main feed pumps.—1 set piston springs. 1 set valves & springs. 6 bucket rings.

For Cent. Circ. pump.—1 piston. 1 piston valve. 1 set crosshead. crank pin & main bearing

brasses. 1 impeller shaft. For Ballast pump. 1 piston rod. 1 pump rod

4 valves. Various spare parts for fan engine.

5% Boiler tubes. 2 stay tubes. 1/2 set safety valve springs. 2 feed check valves.

The foregoing is a correct description,
FOR THE CENTRAL MARINE ENGINE WORKS,

(W. Gray & Co. Ltd.)

John H. Stearnes

DIRECTOR.

Manufacturer.



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Lloyd's Register
Foundation

W141-0016

1928 Dec. 2, 3, 6, 7, 8, 9, 13, 15, 16, 17, 20, 22, 23, 28, 29 Mar. 1, 5, 6, 19, 20, 21, 22, 30 Apr. 2, 3, 5, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25.
 During progress of work in shops - - -
 11, 27, 30 May. 1, 3, 4, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 21, 22, 24, 25, 30, 31 June 1, 4, 5, 7, 8, 11, 12, 13, 14, 15, 16, 19, 21, 28 July 3, 4
 Dates of Survey while building
 During erection on board vessel - - -
 Total No. of visits 74

Dates of Examination of principal parts—Cylinders 22.3.28—16.5.28 Slides 11.5.28—15.5.28 Covers 20.3.28—15.5.28.
 Pistons 7.5.28—14.5.28. Piston Rods 28.2.28—21.5.28 Connecting rods 24.2.28—10.5.28
 Crank shaft 6.2.28—4.5.28. Thrust shaft 2.4.28—7.5.28. Intermediate shafts 13.4.28—17.5.28
 Tube shaft ✓ Screw shaft 5.4.28—18.5.28 Propeller 15.5.28—17.5.28.
 Stern tube 15.5.28—18.5.28 Engine and boiler seatings 22.2.28—5.5.28 Engines holding down bolts 4.6.28—15.6.28
 Completion of fitting sea connections 19.6.28
 Completion of pumping arrangements 15.6.28. Boilers fixed 4.6.28 Engines tried under steam 4-7-28
 Main boiler safety valves adjusted 28.6.28. Thickness of adjusting washers P.P. 5/16 S 2 1/4 C.P. 9/32 S 9/32 S.P. 1/2 S 3/8 F 5/16 C 5/16 S 11/32 Superheater
 Crank shaft material S.M. Ingot Stl. Identification Mark 6426 H. Thrust shaft material S.M. Ingot Stl. Identification Mark 3711 J.L.
 Intermediate shafts, material S.M. Ingot Stl. Identification Marks 1036, 1184, M.K. Tube shaft, material ✓ Identification Mark ✓
 Screw shaft, material S.M. Ingot Stl. Identification Mark 3795 J.L. 3708 3759 J.L. 1572 V.S. Steam Pipes, material S.D. Steel Test pressure 600 lb. Date of Test 30.5.28
 Is an installation fitted for burning oil fuel no Is the flash point of the oil to be used over 150°F. ✓
 Have the requirements of the Rules for the use of oil as fuel 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 ✓
 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 vessel's machinery has been built and installed under Special Survey, and is in accordance with the Rules.
 The materials and workmanship are good and efficient.
 On completion it was tried under full steam and found satisfactory, and is now eligible in our opinion to have the notation ∇ L.M.C. 7.28

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 7.28 F.D. CL

25th 12/9/28 J.R.K.

Certificate to be sent to

The amount of Entry Fee ... £ 6 : :
 Special ... £ 104 : 12 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 10.7.19.28
 When received, 11.8.28

R.D. Shilston & A. Daintith.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ L.M.C. 7.28



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