

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office

11 AUG 1932

Date of writing Report 30th July 1932 When handed in at Local OfficePort of West HartlepoolNo. in Survey held at West Hartlepool

Date, First Survey

6-11-31

Last Survey

3-8-1932

Reg. Book.

on the

S.S. "KEPWICK HALL"(Number of Visits 112)

Gross

Tons

Net

Built at West Hartlepool By whom built Wm Gray & Co LtdYard No. 1052When built 1932Engines made at West HartlepoolBy whom made Central MarineEngine No. 1052when made 1932Boilers made at dittoBy whom made Engine WorksBoiler No. 1052when made 1932

Registered Horse Power

owners West Hartlepool Stm. Nav. Co LtdPort belonging to West Hartlepool

Nom. Horse Power as per Rule

467

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

Quadruple expansion ("Quadropod")Revs. per minute 78

Dia. of Cylinders

20.28 1/2 x 41 1/2 x 61Length of Stroke 48No. of Cylinders 4No. of Cranks 4

Crank shaft, dia. of journals

as per Rule 13.133Crank pin dia. 13 3/8

Crank webs

Mid. length breadth 19Thickness parallel to axis 8 1/4

Intermediate Shafts, diameter

as per Rule 12.507as fitted 12 5/8

Thrust shaft, diameter at collars

as per Rule 13.133as fitted 13 3/8

Tube Shafts, diameter

as per Rule 14.007as fitted 14 1/2

Screw Shaft, diameter

as per Rule 14.007as fitted 14 1/2

Is the

tube

screw

shaft fitted with a continuous liner

yes

Bronze Liners, thickness in way of bushes

as per Rule 727as fitted 3 1/4

Thickness between bushes

as per Rule 545as fitted 9/16

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

fitting

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

shaft

no

If so, state type

Length of Bearing in Stern Bush next to and supporting propeller 62

Propeller, dia.

18-0Pitch 15-6No. of Blades 4Material bronzewhether Moveable noTotal Developed Surface 104 sq. feet

Feed Pumps worked from the Main Engines, No.

1Diameter 4Stroke 26

Can one be overhauled while the other is at work

Bilge Pumps worked from the Main Engines, No.

2Diameter 4Stroke 26

Can one be overhauled while the other is at work

Feed

No. and size 2 main 9 1/2 x 7 x 24

Pumps connected to the

Main Bilge Line

No. and size 2 main 4 x 261 Ballast 9 x 10 1/2 x 10How driven Steam

Ballast Pumps, No. and size

1. 9 x 10 1/2 x 10 duplex

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

1. 9 x 10 1/2 x 10 duplex

Are two independent means arranged for circulating water through the

Oil Cooler

yes

Bilge Pumps;—In Engine and Boiler Room

4 of 3" dia.

Suctions, connected to both Main Bilge Pumps and Auxiliary

Tunnel 1 of 2 1/2" dia.Deep tank 2 of 2 1/2"

Holds, &c.

No 1. 2 of 3"No 2. 2 of 3"No 3. 2 of 3"No 4. 2 of 2 1/2"No 5. 2 of 3" dia.

Main Water Circulating Pump Direct Bilge Suctions, No. and size

1 of 5" dia.

Independent Power Pump Direct Suctions to the Engine Room Bilges,

1 of 8" 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

above

Are the Blow Off Cocks fitted with a spigot and brass covering plate

yes

That Pipes pass through the bunkers

Forward suction

How are they protected

Under timber boards

Have they been tested as per Rule

yes

That pipes pass through the deep tanks

none

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

main deckMAIN BOILERS, &c.—(Letter for record 3)

Total Heating Surface of Boilers

6811 square feet.

Forced Draft fitted

yes

No. and Description of Boilers

3 single ended

Working Pressure

260 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

yes

IS A DONKEY BOILER FITTED?

no

If so, is a report now forwarded?

yes

PLANS. Are approved plans forwarded herewith for Shafting

yes

Main Boilers

yes

Auxiliary Boilers

yes

Donkey Boilers

yes

Superheaters

yes

General Pumping Arrangements

yes

Oil fuel Burning Piping Arrangements

yes

SPARE GEAR. State the articles supplied:—

2 Bolts & nuts for counce. rods top ends. 2 ditto forbottom ends. 2 ditto for main bearings. 1 set coupling bolts & nuts.1 set H.P. piston rings & springs. 1 set valves for feed & bilge pumps. 6 padsfor Michell thrust block. 1 propeller shaft. 1 propeller.complete dup. valve, complete with cage, spindles, springs &c. for each cylinder.1 set of springs for same of each kind 10 in all. 2 plunger springs of each kind 4 in all.4 valve spindles of each kind 8 in all. 3 ball races & 5 bushes for same.Various spare parts for fan engine.Bolts, nuts and iron assorted.1 H.P. & 1 L.P. valve spindle plungercomplete, & brass.The foregoing is a correct description,
FOR THE CENTRAL MARINE ENGINE WORKS.

(W. Gray & Co. Ltd.)

W. Gray & Co. Ltd.

Manufacturer.

MANAGING DIRECTOR C.M.E.W.



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Lloyd's Register
Foundation

W1183-0091

Dates of Survey while building
 During progress of work in shops -- 1931. Feb. 6-13-18-20-23-26-28. Dec. 25-29-31 - (1932) Jan. 4-7-11-13-14-15-18-19-20-21-25-27. Feb. 1-2.
 During erection on board vessel --- 3-5-8-9-11-12-15-16-18-19-22-23-24-25-26-29. Mar. 1-2-3-4-7-8-9-10-11-14-15-17-18-21-22-23-24-30-31
 Apr. 1-4-11-14-19-20-21-26-27-28-29 May 2-3-4-5-6-9-10-11-12-14-15-19-20-23-24-25-26-27-31 June 1-2-6
 P-9-10-13-14-15-16-22-23-26-27-29-30 July 4-5-7-12-15-27 Aug 5-11-22
 Total No. of visits 112

Dates of Examination of principal parts—Cylinders 25.2.32—24.5.32. Slides 12.2.32—3.5.32 Covers 23.3.32—31.3.32
 Pistons 21.3.32—26.5.32. Piston Rods 2.3.32—18.5.32 Connecting rods 21.12.31—18.5.32
 Crank shaft 23.12.31—10.3.32 Thrust shaft 18.2.32—10.3.32 Intermediate shafts 17.3.32—23.5.32
 Tube shaft ✓ Screw shaft 23.2.32—23.5.32 Propeller 20.4.32—31.5.32
 Stern tube 24.3.32—20.5.32 Engine and boiler seatings 20.5.32—22.6.32 Engines holding down bolts 29.6.32—4.7.32
 Completion of fitting sea connections 14.4.32—20.5.32
 Completion of pumping arrangements 5.5.32—1.7.32 Boilers fixed 7.7.32. Engines tried under steam 20.7.32
 Main boiler safety valves adjusted 12.7.32. Thickness of adjusting washers $\frac{1}{32}$ P $\frac{1}{32}$ S $\frac{1}{32}$ C P $\frac{1}{32}$ S $\frac{1}{32}$ P $\frac{1}{32}$ S $\frac{1}{32}$
 Crank shaft material S.M. Eng. Steel Identification Mark 6522 H. Thrust shaft material S.M. I. Stl. Identification Mark 24.7. MAB
 Intermediate shafts, material S.M. I. Stl. Identification Marks (1) 281 } MAB (2) 272 }
 Screw shaft, material S.M. I. Stl. Identification Mark 274 MAB. Steam Pipes, material Hot-rolled seamless steel Test pressure 780 lb. Date of Test 24.5.32
 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.)

These engines are fitted with drop valves to all cylinders actuated by oscillating cam shafts worked by eccentrics.

This vessel's machinery has been built and installed under Special Survey. The materials and workmanship are good and efficient. On completion it was tried under full working conditions at sea and all found satisfactory.

This vessel's machinery, in my opinion, is eligible to have the notation ∇ L.M.C. 8.32.

The amount of Entry Fee ... £ 5 : 0 :
 Special ... £ 95 : 1 :
 Donkey Boiler Fee ... £ ✓ :
 Travelling Expenses (if any) £ ✓ :
 When applied for, 10.8.1932
 When received, 14.9.1932

Committee's Minute TUE. 16 AUG 1932

Assigned

+ L.M.C. 8.32

F.D. C.L.

R.D. Shilston.

Engineer Surveyor to Lloyd's Register of Shipping.



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