

REPORT ON MACHINERY.

No. 28942

Received at London Office

29 OCT 1924

Date of writing Report

19

When handed in at Local Office

28 OCT 1924

Port of

Sunderland

No. in Survey held at

Sunderland

Date, First Survey

12 June 24

Last Survey

21 Oct 1924

Reg. Book.

on the new steel S/S "HOMESIDE".

(Number of Visits 28)

Tons { Gross 4617
Net 2859

Master

Built at Sunderland

By whom built

Shor Bros Ltd S/S No. 418

When built 1924

Engines made at

Sunderland

By whom made

N.E. Marine Eng Co Ltd (No. 2589)

when made 1924

Boilers made at

Sunderland

By whom made

N.E. Marine Eng Co Ltd (No. 2589)

when made 1924

Registered Horse Power

Owners Charlton S.S. Co. Ltd

Port belonging to Newcastle

Nom. Horse Power as per Section 28

406

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

yes

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 25 1/2 - 42 - 70

Length of Stroke 48

Revs. per minute 68

Dia. of Screw shaft

as per rule 14.2

Material of screw shaft

steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube

yes

Is the after end of the liner made water tight

in the propeller boss

yes

If the liner is in more than one length are the joints burned

no

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

no

If two

liners are fitted, is the shaft lapped or protected between the liners

yes

Length of stern bush

4-9 1/2

Dia. of Tunnel shaft

as per rule 12.73

as fitted 12 7/8

Dia. of Crank shaft journals

as per rule 13.31

as fitted 13 1/2

Dia. of Crank pin

13 1/2

Size of Crank webs

8 1/2 x 20 1/2

Dia. of thrust shaft under

collars 13 1/2

Dia. of screw

17-6

Pitch of Screw

17-9

No. of Blades 4

State whether moveable

no

Total surface

93

No. of Feed pumps

2

Diameter of ditto

4

Stroke 24

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

4

Stroke 24

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

3

Sizes of Pumps 2 @ 7 1/2 x 8. 1 @ 7 1/2 x 9 1/2 x 10 1/2

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room

3 @ 3"

In Holds, &c. No. 1 hold - 2 @ 3". No. 2 hold - 2 @ 3 1/2".

No. of Bilge Injections

1 size 9"

Connected to condenser, or to circulating pump

yes

Is a separate Donkey Suction fitted in Engine room & size

yes 4 1/2"

Are all the bilge suction pipes fitted with roses

yes

Are the roses in Engine room always accessible

yes

Are the sluices on Engine room bulkheads always accessible

none

Are all connections with the sea direct on the skin of the ship

yes

Are they Valves or Cocks

both

Are the Discharge Pipes above or below the deep water line

main below, all others above

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

yes

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

yes

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

yes

What pipes are carried through the bunkers

forward hold suction

How are they protected

under limber boards

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

yes

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

yes

Is the Screw Shaft Tunnel watertight

yes

Is it fitted with a watertight door

yes

worked from Top platform

BOILERS, &c.—(Letter for record (5))

Manufacturers of Steel

David Colville & Sons Limited

Total Heating Surface of Boilers

6774 sq ft

Is Forced Draft fitted

no

No. and Description of Boilers

Coal

3. 5B.

Working Pressure

180

Tested by hydraulic pressure to

320

Date of test

29-8-24

No. of Certificate

3898

Can each boiler be worked separately

yes

Area of fire grate in each boiler

580 sq ft

No. and Description of Safety Valves to

each boiler

two direct spring

Area of each valve

8.290 sq in

Pressure to which they are adjusted

185

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers

2-0

Mean dia. of boilers

14-9

Length

11-6

Material of shell plates

steel

Thickness

1 13/64

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

WR

long. seams

WBS. TR

Diameter of rivet holes in long. seams

1 1/4

Pitch of rivets

8 3/16

Length of plates or width of butt straps

18 3/8

Per centages of strength of longitudinal joint

plate

85.8

Working pressure of shell by rules

180

Size of manhole in

end

16-12

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

3 Dighton

Material

steel

Outside diameter

3 6 5/16

Length of plain part

top

bottom

Thickness of plates

1 17/32

Description of longitudinal joint

welded

No. of strengthening rings

—

Working pressure of furnace by the rules

181

Combustion chamber plates: Material

steel

Thickness: Sides

35/32

Back

25/32

Top

25/32

Bottom

25/32

Pitch of stays to ditto: Sides

12-9 3/4

Back

11-10 3/4

Top

11-9 3/4

If stays are fitted with nuts or riveted heads

nuts inces

Working pressure by rules

180

Material of stays

steel

Area at smallest part

2.360 sq in

Area supported by each stay

1180 sq in

Working pressure by rules

180

End plates in steam space:

Material

steel

Thickness

1 1/32

Area at smallest part

7.660 sq in

Area supported by each stay

4300 sq in

Working pressure by rules

198

Material of Front plates at bottom

steel

Thickness

7/8

Material of Lower back plate

steel

Diameter of tubes

3 1/4

Pitch of tubes

45/8 x 4 7/16

Material of tube plates

steel

Thickness: Front

7/8

Back

13/16

Mean pitch of stays

10.6

Pitch across wide water spaces

14 1/2 (3/8)

Working pressures by rules

193

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

2 @ 8 x 15

Length as per rule

2-7 1/16

Distance apart

11

Working pressure by rules

189

Steam dome: description of joint to shell

none

% of strength of joint

—

Diameter

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet holes

Pitch of rivets

Working pressure of shell by rules

Crown plates

IS A DONKEY BOILER FITTED? no

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— Two connecting rod top and bottom end bolts and nuts. Two main bearing bolts. one set of coupling bolts. one set of feed and bilge pump valves. iron and bolts of various sizes. one propeller.

The foregoing is a correct description.

C. F. Adams Manufacturer.

Dates of Survey while building: During progress of work in shops - - 1924 June 12 July 9, 29, 31 Aug 7, 14, 18, 19, 21, 26, 27, 29 Sep 5, 4, 8, 11, 16, 18, 29, 30 Oct 4, 6, 8, 10, 14. During erection on board vessel - - - 17, 18, 24. Total No. of visits 28. Is the approved plan of main boiler forwarded herewith yes

Dates of Examination of principal parts—Cylinders 14-8-24 Slides 18-9-24 Covers 19-8-24 Pistons 30-9-24 Rods 26-8-24 Connecting rods 7-8-24 Crank shaft 19-8-24 Thrust shaft 4-9-24 Tunnel shafts 4-9-24 Screw shaft 4-9-24 Propeller 30-9-24 Stern tube 30-9-24 Steam pipes tested 14-10-24 Engine and boiler seatings 4-10-24 Engines holding down bolts 17-10-24 Completion of pumping arrangements 24-10-24 Boilers fixed 10-10-24 Engines tried under steam 18-10-24 Completion of fitting sea connections 29-9-24 Stern tube 4-10-24 Screw shaft and propeller 6-10-24 Main boiler safety valves adjusted 18-10-24 Thickness of adjusting washers Piston P 5/8" S 3/16" bent. bolt 5/16" S 1/8" S 5/16"

Material of Crank shaft J. steel Identification Mark on Do. LLOYDS NO 6949 L.C.O. 19-8-24 Material of Thrust shaft J. steel Identification Mark on Do. LLOYDS GAH. 4-9-24 Material of Tunnel shafts J. steel Identification Marks on Do. LLOYDS GAH. 4-9-24 Material of Screw shafts J. steel Identification Marks on Do. LLOYDS GAH. 4-9-24 Material of Steam Pipes Copper Test pressure 400 lbs

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 Section 49 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.) The materials and workmanship are good. The machinery has been constructed under special survey and is eligible in my opinion for Classification and the record. *LMC 10, 24.

It is submitted that this vessel is eligible for THE RECORD. + LMC 10. 24. CL.

J. W. Davis 30/10/24

J. W. Davis Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 5 : : When applied for. Special ... £ 85 : 18 28 OCT 1924 Donkey Boiler Fee ... £ : : When received. Travelling Expenses (if any) £ : : 2/6

Committee's Minute FRI. 7 NOV 1924 Assigned + LMC 10. 24 C. L.

