

Received at London Office

Date of writing Report

19

When handed in at Local Office

1 MAY 1924

Port of

Sunderland

FRI. 2 MAY. 1924

No. in Survey held at
Reg. Book.

Sunderland

Date, First Survey

7 Feb. 1924

Last Survey

25 Apr 1924

(Number of Visits)

18

on the new steel S/S "ASHTREE".

Tons

Gross

Net

Master

Built at Stockton

By whom built Craig Taylor & Co. Ltd. (S/S No. 210)

When built 1924

Engines made at

Sunderland

By whom made N.E. Marine Eng. Co. Ltd. (No. 2572)

when made 1924

Boilers made at

Sunderland

By whom made N.E. Marine Eng. Co. Ltd. (No. 2572)

when made 1924

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

189

Is Refrigerating Machinery fitted for cargo purposes

no

Is Electric Light fitted

no

ENGINES, &c.—Description of Engines

Triple expansion

No. of Cylinders

3

No. of Cranks

3

Dia. of Cylinders

19.31.51

Length of Stroke

36

Revs. per minute

82

Dia. of Screw shaft

as per rule 10.98

Material of

S. 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

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

If two

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

yes

Length of stern bush

3'-8"

Dia. of Tunnel shaft

as per rule 9.58

Dia. of Crank shaft journals

as per rule 10.06

Dia. of Crank pin

10 1/2

Size of Crank webs

15 1/2 x 6 5/16

Dia. of thrust shaft under

collars

10 1/2

Dia. of screw

13.9

Pitch of Screw

13.9

No. of Blades

4

State whether moveable

no

Total surface

580 sq

No. of Feed pumps

2

Diameter of ditto

3"

Stroke

16 1/2"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

3 1/2"

Stroke

16 1/2"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

8 1/2 x 8. 5 1/2 x 3 1/2 x 5"

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

In Engine Room

Three @ 2 1/2"

In Holds, &c.

Fore hold 2 @ 3" aft hold 3 @ 3"

No. of Bilge Injections

1

sizes

6"

Connected to condenser, or to circulating pump

b.p.

Is a separate Donkey Suction fitted in Engine room & size

yes, 3 1/2"

Are all the bilge suction pipes fitted with

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

yes

Are the Discharge Pipes 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 are carried through the bunkers

forward hold suction

How are they protected

under timber 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)

(S)

Manufacturers of Steel

John Spencer & Sons Ltd.

2 SB.

Total Heating Surface of Boilers

3188 sq ft

Is Forced Draft fitted

no

No. and Description of Boilers

Two single ended marine

Working Pressure

180

Tested by hydraulic pressure to

320

Date of test

24-3-24

No. of Certificate

3867

Can each boiler be worked separately

yes

Area of fire grate in each boiler

44 sq ft

No. and Description of Safety Valves to

each boiler

Area of each valve

5.94 sq ft

Pressure to which they are adjusted

185

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

4'-0"

Mean dia. of boilers

13'-3 1/2"

Length

10'-0"

Material of shell plates

steel

Thickness

1 3/32"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

no

Descrip. of riveting: cir. seams

DR

long. seams

DRS. TR

Diameter of rivet holes in long. seams

1 1/8"

Pitch of rivets

8 1/8"

Lap of plates or width of butt straps

1'-5"

Per centages of strength of longitudinal joint

rivets 86.6

plate 86.15

Working pressure of shell by rules

181

Size of manhole in shell

16" x 12"

end

16" x 12"

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

3 Deighton

Material

steel

Outside diameter

2-11 1/2"

Length of plain part

top

bottom

Thickness of plates

crown

Description of longitudinal joint

welded

No. of strengthening rings

yes

Working pressure of furnace by the rules

183

Combustion chamber plates: Material

steel

Thickness: Sides

2 1/2"

Back

2 1/2"

Top

2 1/2"

Bottom

2 1/2"

Pitch of stays to ditto: Sides

10 1/2" x 9 1/2"

Back

11" x 10 1/2"

Top

10" x 9 1/2"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

180

Material of stays

steel

Area at smallest part

2.360"

Area supported by each stay

118.250"

Working pressure by rules

180

End plates in steam space:

Material

steel

Thickness

1 1/2"

Pitch of stays

23" x 17 1/2"

How are stays secured

DN & W

Working pressure by rules

186

Material of stays

steel

Area at smallest part

6.490"

Area supported by each stay

402.50"

Working pressure by rules

181

Material of Front plates at bottom

steel

Thickness

7/8"

Material of Lower back plate

steel

Thickness

7/8"

Greatest pitch of stays

4 1/2" x 10 3/4"

Working pressure of plate by rules

192

Diameter of tubes

3 1/4"

Pitch of tubes

4 1/2" x 4 5/8"

Material of tube plates

steel

Thickness: Front

7/8"

Back

3/4"

Mean pitch of stays

10.5"

Pitch across wide water spaces

14 1/2"

Working pressures by rules

181

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

2 @ 8" x 3"

Length as per rule

30 1/2"

Distance apart

10"

Number and pitch of stays in each

2 @ 9 1/2"

Working pressure by rules

188

Steam dome: description of joint to shell

none

% of strength of joint

yes

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

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Pressure to which each is adjusted

Is Easing Gear fitted

Date of Test

Diameter of Safety Valve

Foundation

If not, state whether, and when, one will be sent

002260-002268-0118

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 lift pump valves, iron and bolts of various sizes. one propeller. One safety valve spring: one each of main & donkey feed check valves.

The foregoing is a correct description.

THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

C. T. Adams
Manager.

Manufacturer.

Dates of Survey while building	During progress of work in shops - -		During erection on board vessel - - -		Total No. of days
	Days	Hours	Days	Hours	
1891					
1892					
1893					
1894					
1895					
1896					
1897					
1898					
1899					
1900					
1901					
1902					
1903					
1904					
1905					
1906					
1907					
1908					
1909					
1910					
1911					
1912					
1913					
1914					
1915					
1916					
1917					
1918					
1919					
1920					
1921					
1922					
1923					
1924					
1925					
1926					
1927					
1928					
1929					
1930					
1931					
1932					
1933					
1934					
1935					
1936					
1937					
1938					
1939					
1940					
1941					
1942					
1943					
1944					
1945					
1946					
1947					
1948					
1949					
1950					
1951					
1952					
1953					
1954					
1955					
1956					
1957					
1958					
1959					
1960					
1961					
1962					
1963					
1964					
1965					
1966					
1967					
1968					
1969					
1970					
1971					
1972					
1973					
1974					
1975					
1976					
1977					
1978					
1979					
1980					
1981					
1982					
1983					
1984					
1985					

During progress of work in shops - - 1924. Feb. 7. 8. 22. 26. 28. Mar. 6. 11. 12. 14. 22. 24. 26. Apr. 2. 14. 18. 23. 24. 25

During erection on }
board vessel - - - }

Total No. of visits $18 + 3 = 21$

Is the approved plan of main boiler forwarded herewith

“ “ “ *donkey* “ “ “

Dates of Examination of principal parts—Cylinders 11-3-24 Slides 18-2-24 Covers 2-4-24 Pistons 28-2-24 Rods 22-3-24

Connecting rods 22-3-24 Crank shaft 11-3-24 Thrust shaft 24-3-24 Tunnel shafts 24-3-24 Screw shaft 24-3-24 Propeller 24-3-24

Stern tube 24-2-24 Steam pipes tested 18-4-24 Engine and boiler seatings 14. 3. 24 Engines holding down bolts 23-4-24

Completion of pumping arrangements 25-4-24 Boilers fixed 18-4-24 Engines tried under steam 25-4-24

Completion of fitting sea connections 14.3.24 Stern tube 14-4-24 Screw shaft and propeller 14-4-24

Main boiler safety valves adjusted 26-4-24 Thickness of adjusting washers Port boiler $F \frac{3}{8}$ " $A \frac{7}{16}$ " steel br. brd $\frac{3}{8}$ "

Material of Crank shaft *Steel* Identification Mark on Do. *N^o 2176* Material of Thrust shaft *Steel* Identification Mark on Do. *N^o 2184*

Material of Tunnel shafts *Steel* Identification Marks on Dg. *LLOYDS No 2248* Material of Screw shafts *Steel* Identification Marks on Dg. *LLOYDS No 2196*

Material of Steam Pipes solid drawn copper ✓ Test pressure 400

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 our opinion for classification and the record \dagger LMC 5-24, the survey having now been satisfactorily completed.

It is submitted that
this vessel is eligible for
THE RECORD. + LMC 5. 24. CL

20/5/24

The amount of Entry Fee ... £ 3: 5/11 When applied for,

Special £ 47: 5: 3 0 APR 1924

Donkey Boiler Fee	...	£	:	:	} When received,

Travelling Expenses (if any) £ : : 16.5.24

Committee's Minute FRI. MAY. 23 1924

Assigned + Lib. 524 C. 2

IDENTIFICATE WRITING

Engineer Surveyor to Lloyd's Register of Shipping

© 2020

Lloyd's Register
Foundation