

REPORT ON MACHINERY

No. 28838

Received at London Office

JUN 10 1924

Date of Writing Report

19

When handed in at Local Office

6 JUN 1924

Port of Sunderland

No. in Survey held at
Reg. Book.

Sunderland

Date, First Survey 2nd Apr

Last Survey 1st June 1924

(Number of Visits 17)

on the new steel S/S "TAUNTON"

Tons

Gross

Net

Master

Built at Stockton

By whom built Craig Taylor & Co Ltd (S/N 214) When built 1924

Engines made at

Sunderland

By whom made

N.E. Marine Eng Co Ltd

(Nº 2585)

when made

1924

Boilers made at

Sunderland

By whom made

N.E. Marine Eng Co Ltd

(Nº 2585)

when made

1924

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28

163

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

17½" 29" 48"

Length of Stroke 33"

Revs. per minute 84

Dia. of Screw shaft

as per rule 10½"

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

-

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

✓

Length of stern bush 3'-5½"

Dia. of Tunnel shaft

as per rule 8'78"

8'85"

Dia. of Crank shaft journals

as per rule 9'22"

9'29"

Dia. of Crank pin

9½"

Size of Crank webs

14'5½"

Dia. of thrust shaft under

collars

9½"

Dia. of screw

13'-0"

Pitch of Screw

12'-9"

No. of Blades 4

State whether moveable

no

Total surface

52 sq ft

No. of Feed pumps

2

Diameter of ditto

2¾"

Stroke

16½"

Can one be overhauled while the other is at work

yes

No. of Bilge pumps

2

Diameter of ditto

3"

Stroke

16½"

Can one be overhauled while the other is at work

yes

No. of Donkey Engines

2

Sizes of Pumps

789x9. 5½x3½x5"

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

In Engine Room

3 @ 3"

In Holds, &c. 1st hold - 2 @ 3". After hold - 3 @ 3"

Tunnel well 1mc @ 3"

No. of Bilge Injections

1

size

3½"

Connected to condenser, or to circulating pump

b.p.

Is a separate Donkey Suction fitted in Engine room & size

yes. 3½"

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 wood casing

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

Dates of examination of completion of fitting of Sea Connections

16.5.24

of Stern Tube

24.5.24

Screw shaft and Propeller

27.5.24

Is the Screw Shaft Tunnel watertight

see hull Rpt

Is it fitted with a watertight door

yes

worked from

Top platform

BOILERS, &c.—(Letter for record (S))

Manufacturers of Steel

David Buller & Co Ltd (plates)

John Spencer & Co Ltd (stay)

Total Heating Surface of Boilers

27920 sq ft

Is Forced Draft fitted

no

No. and Description of Boilers

2 single ended marine

Working Pressure

180

Tested by hydraulic pressure to

320

Date of test

6-5-24

No. of Certificate

3877

Can each boiler be worked separately

yes

Area of fire grate in each boiler

35 sq ft

No. and Description of Safety Valves to

each boiler

2 direct spring

Area of each valve

490"

Pressure to which they are adjusted

185

Are they fitted with easing gear

yes

Smallest distance between boilers or uptakes and bunkers or woodwork

1'-8"

Mean dia. of boilers

12'3½"

Length

10'-6"

Material of shell plates

steel

Thickness

1½"

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

1½"

Pitch of rivets

7½"

Lap of plates or width of butt straps

1'4½"

Per centages of strength of longitudinal joint

rivets 91

plate 86

Working pressure of shell by rules

180

Size of manhole in shell

16'x12"

Size of compensating ring

flanged

No. and Description of Furnaces in each boiler

2 Deighton

Material

steel

Outside diameter

3'-4¼"

Length of plain part

top

bottom

Thickness of plates

crown 33"

bottom 32"

Description of longitudinal joint

welded

No. of strengthening rings

✓

Working pressure of furnace by the rules

184

Combustion chamber plates: Material

steel

Thickness: Sides

13"

Back

35"

Top

13"

Bottom

13"

Pitch of stays to ditto: Sides

12½"x9¾"

Back

11½"x10½"

Top

12½"x9¾"

If stays are fitted with nuts or riveted heads

nuts

Working pressure by rules

185

Material of stays

steel

Diameter at smallest part

2.360"

Area supported by each stay

117.80"

Working pressure by rules

180

End plates in steam space:

Material

steel

Thickness

1½"

Pitch of stays

25"x18½"

How are stays secured

DTR & W

Working pressure by rules

180

Material of stays

steel

Diameter at smallest part

7.670"

Area supported by each stay

462.50"

Working pressure by rules

184

Material of Front plates at bottom

steel

Thickness

7"

Material of Lower back plate

steel

Thickness

7"

Greatest pitch of stays

14½"x11½"

Working pressure of plate by rules

187

Diameter of tubes

3½"

Pitch of tubes

4¾"x4½"

Material of tube plates

steel

Thickness: Front

7"

Back

¾"

Mean pitch of stays

10½"

Pitch across wide water spaces

14½"(3.5 ft)

Working pressures by rules

182

Girders to Chamber tops: Material

steel

Depth and

thickness of girder at centre

20 8½"x16"

Length as per rule

2-7½"

Distance apart

12½"

Number and pitch of stays in each

2 @ 9¾"

Working pressure by rules

182

Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

IS A DONKEY BOILER FITTED? None

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,

THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

C. T. Adams.

Manager.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 19 21. Apr. 29. 18. 24. 29. May. 6. 8. 19. 20. 22. 24. 26. 27. 30. June 2. 3. 4

{ During erection on board vessel - - - }

Total No. of visits 17

Mo. visits - 1924 May 16 June 12. 16. 25 July 14. = 5

Is the approved plan of main boiler forwarded herewith yes
" " " donkey " " "

Dates of Examination of principal parts—Cylinders 6-5-24 Slides 22-5-24 Covers 6-5-24 Pistons 22-5-24 Rods 20-5-24

Connecting rods 20-5-24 Crank shaft 8-5-24 Thrust shaft 20-5-24 Tunnel shafts 20-5-24 Screw shaft 20-5-24 Propeller 22-5-24

Stern tube 20-5-24 Steam pipes tested 30-5-24 Engine and boiler seatings 16-5-24 Engines holding down bolts 3-6-24

Completion of pumping arrangements 4-6-24 Boilers fixed 2-6-24 Engines tried under steam 4-6-24

Main boiler safety valves adjusted 4-6-24 Thickness of adjusting washers Port boiler-bolt 5/16. Starboard boiler-F 3/16, A 3/8

Material of Crank shaft I. steel Identification Mark on Do. LLOYD'S No 64 Material of Thrust shaft I. steel Identification Mark on Do. LLOYD'S No 64

Material of Tunnel shafts I. steel Identification Marks on Do. L.C.D. 20-5-24 Material of Screw shafts I. steel Identification Marks on Do. L.C.D. 20-5-24

Material of Steam Pipes Copper Test pressure 400 lbs per sq. in.

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 yes If so, state name of vessel "Passington" SLR No 28812

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 + LMC - 7. 24

Note: - The report on the Electric Light will be forwarded in due course

It is submitted that
this vessel is eligible for
THE RECORD.

+ LMC 7.24. C.L.

15/7/24

The amount of Entry Fee ... £ 3 : : When applied for,
Special ... £ 40 : 15 : : 5 JUN 1924
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : : When received,
18.7.24

S. Davis & W. Morrison
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute

FRI 18 JUL 1924

Assigned

+ LMC 7.24 C.L.



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Foundation