

REPORT ON MACHINERY.

MON. SEP 16 1901

Port of Sunderland
 Date, first Survey 8th Jan'y Last Survey 30 Aug 1901
 in Survey held at Sunderland (Number of Visits 23)
 Book. on the Screw Steamer "Roma" Tons { Gross 3633.86
 Net 2363.18
 Built at Sunderland By whom built J. D. Thompson & Sons Ltd When built 1901
 Engines made at Sunderland By whom made John Dickinson & Sons Ltd when made 1901
 Boilers made at Sunderland By whom made John Dickinson & Sons Ltd when made 1901
 Registered Horse Power 306 Owners Rowland & Marwood & Co. Ltd Port belonging to Whitby
 Is Refrigerating Machinery fitted no Is Electric Light fitted no

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 of Cylinders 24 1/2" - 40" - 66" Length of Stroke 45" Revs. per minute 70 Dia. of Screw shaft 12 1/2" Lgth. of stern bush 4'-6"
 of Tunnel shaft 12 1/2" Dia. of Crank shaft journals 13" Dia. of Crank pin 13" Size of Crank webs Patent Dia. of thrust shaft under
 of Feed pumps 2 Diameter of ditto 3 1/2" Stroke 22 1/2" Can one be overhauled while the other is at work yes
 of Bilge pumps 4 Diameter of ditto 4 1/2" Stroke 22 1/2" Can one be overhauled while the other is at work yes
 of Donkey Engines 4 Sizes of Pumps two 8 1/2" x 5" x 5" feed No. and size of Suctions connected to both Bilge and Donkey pumps
 Engine Room 3 1/2" Centre & 8 1/2" port. 8 1/2" Starboard, Suctions In Holds, &c., two 3 1/2" to each hold, port & starboard knees
2 1/2" to tunnel well, 2 1/2" to fore peak
 of bilge injections 1 sizes 4" Connected to condenser, or to circulating pump CP Is a separate donkey suction fitted in Engine room & size yes. 4"
 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 yes
 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
 How are they protected yes
 That pipes are carried through the bunkers none
 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
 When were stern tube, propeller, screw shaft, and all connections examined in dry dock new vessel 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) Total Heating Surface of Boilers 4580 sq ft Is forced draft fitted no
 No. and Description of Boilers 3. S.E. Cyl. Multitubular Working Pressure 160 lbs Tested by hydraulic pressure to 320 lbs
 Date of test 23.4.01 Can each boiler be worked separately yes Area of fire grate in each boiler 45 1/4" No. and Description of safety valves to
 each boiler two direct spring Area of each valve 5-95" Pressure to which they are adjusted 165 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 5'-0" the Bunkers Mean dia. of boilers 13'-3" Length 10'-3" Material of shell plates Steel
 Thickness 1" Range of tensile strength 28 tons Are they welded or flanged no Descrip. of riveting: cir. seams 2. riv lap long. seams hi R.D.A.S.
 Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 7 5/8" Lap of plates or width of butt straps 16 1/2"
 Per centages of strength of longitudinal joint 96% Working pressure of shell by rules 163 lbs Size of manhole in shell 16" x 12"
 Size of compensating ring 8 1/4" x 1" No. and Description of Furnaces in each boiler 3 plain Material Steel Outside diameter 39"
 Length of plain part top 6' 5" bottom 7' 1 1/2" Thickness of plates top 2 3/4" bottom 3 1/2" Description of longitudinal joint weld No. of strengthening rings none
 Working pressure of furnace by the rules 167 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 1/4" Back 1 1/4" Top 1 1/4" Bottom 1"
 Pitch of stays to ditto: Sides 10" x 10" Back 10" x 10" Top 10" x 9" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 163 lbs End plates in steam space:
 Material of stays Steel Diameter at smallest part 2.03" Area supported by each stay 100" Working pressure by rules 160 lbs Material of stays Steel
 Material Steel Thickness 1 1/2" Pitch of stays 16" x 9" How are stays secured D. H. & L. Working pressure by rules 163 lbs Material of Front plates at bottom Steel
 Diameter at smallest part 5'-05" Area supported by each stay 304" Working pressure by rules 166 lbs Material of Front plates at bottom Steel
 Thickness 3/4" Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 11 1/4" x 10" Working pressure of plate by rules 163 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 222 lbs Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 6" x 1" (2) Length as per rule 27 9/16" Distance apart 9" Number and pitch of Stays in each 2 of 10" pitch
 Working pressure by rules 164 lbs Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked
 separately yes Diameter yes Length yes Thickness of shell plates yes Material yes Description of longitudinal joint yes Diam. of rivet
 holes yes Pitch of rivets yes Working pressure of shell by rules yes Diameter of flue yes Material of flue plates yes Thickness yes
 If stiffened with rings yes Distance between rings yes Working pressure by rules yes End plates: Thickness yes How stayed yes
 Working pressure of end plates yes Area of safety valves to superheater yes Are they fitted with easing gear yes

© 2021

Lloyd's Register Foundation

DONKEY BOILER—

No. ☒

Description

None fitted

Made at

By whom made

When made

Where fixed

Working pressure

tested by hydraulic pressure to

No. of Certificate

Fire grate area

Description of safety valves

No. of safety valves

Area of each

Pressure to which they are adjusted

If fitted with easing gear

If steam from main boilers can

enter the donkey boiler

Dia. of donkey boiler

Length

Material of shell plates

Thickness

Range of tensile

strength

Descrip. of riveting long. seams

Dia. of rivet holes

Whether punched or drilled

Pitch of rivets

Lap of plating

Per centage of strength of joint

Rivets

Plates

Thickness of shell crown plates

Radius of do.

No. of Stays to do.

Dia. of stays.

Diameter of furnace Top

Bottom

Length of furnace

Thickness of furnace plates

Description of

joint

Thickness of furnace crown plates

Stayed by

Working pressure of shell by rules

Working pressure of furnace by rules

Diameter of uptake

Thickness of uptake plates

Thickness of water tubes

SPARE GEAR. State the articles supplied:—

Two top end bolts and nuts, two bottom end bolts and nuts, two main bearing bolts & nuts, set of spare coupling bolts & nuts, spare feed & bilge pump valves, assorted iron bolts & nuts

The foregoing is a correct description,

John Dickinson & Sons, Limited.

Manufacturer.

Dates

of Survey

while

building

During progress of

work in shops—

During erection on

board vessel—

Total No. of visits

23

1901. Jan'y: 8. 18. 22. 30. Feb: 12. 13. Mar: 5. 8. 11. 14. 19. 26. 27.
April: 2. 4. 23 May: 26. Aug: 1. 2. 9. 14. 22. 30.

Is the approved plan of main boiler forwarded herewith

retained for duplicate

Monkey

General Remarks

(State quality of workmanship, opinions as to class, &c.)

Material of screw shaft

Wootton

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

No

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

Yes

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

two liners. Shaft painted

The machinery built under Special Survey. The material and workmanship good and efficient.

The main boilers and steam pipes tested under hydraulic pressure to 360 lb. and found sound and efficient in every respect at that pressure.

The Engines tried under steam at their working pressures and found satisfactory.

In my opinion this vessel is worthy of the certification + L.M.C. 8.01 to be made in the Register Book—

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 8.01

The amount of Entry Fee..

£

3:

When applied for,

Special

£

35:

6:

When received,

Donkey Boiler Fee

£

Travelling Expenses (if any)

£

Committee's Minute

FRI. SEP 20 1901

Assigned

Leonard Challers
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



© 2021

Lloyd's Register
FoundationMACHINERY CERTIFICATE
WRITTEN.