

REPORT ON MACHINERY.

No. 6194

TUE APR. 24 1923

Port of *Falmouth*

Received at London Office

Survey held at *Falmouth*

Date, first Survey *19th April* Last Survey *21st April* 1921

(Number of Visits *3*)

the *SS "Nowshera"*

Built at *Belfast*

By whom built *Workman Clark and Co Ltd*

Tons { Gross *7920*
Net *4875*
When built *1919*

made at *Belfast*

By whom made *Workman Clark and Co Ltd*

when made *1919*

made at *Belfast*

By whom made *Workman Clark and Co Ltd*

when made *1919*

Horse Power

Owners *British India Steam Navigation Co Ltd* Port belonging to *Glasgow*

Power as per Section 28 *1138*

Is Refrigerating Machinery fitted for cargo purposes *No*

Is Electric Light fitted *Yes*

S, &c.—Description of Engines *Twin Screw Triple Expansion*

No. of Cylinders *6*

No. of Cranks *6*

Cylinders *26 1/2 - 44 - 73*

Length of Stroke *48*

Revs. per minute

Dia. of Screw shaft

as per rule *14.8* Material of *cast steel*
as fitted *15.75* screw shaft

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

eller 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

bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *✓*

If two

tted, is the shaft lapped or protected between the liners *✓*

Length of stern bush *5 ft 3 in*

el shaft as per rule *13.7* Dia. of Crank shaft journals as per rule

Dia. of Crank pin

Size of Crank webs

Dia. of thrust shaft under

as fitted *13.875* Dia. of screw *17.3* Pitch of Screw *18.0*

No. of Blades *4*

State whether moveable *Yes*

Total surface *90 ft*

pumps *2*

Diameter of ditto *4 1/2*

Stroke *24*

Can one be overhauled while the other is at work *Yes*

pumps *2*

Diameter of ditto *4 1/2*

Stroke *24*

Can one be overhauled while the other is at work *Yes*

key Engines *5*

Sizes of Pumps

2. Hens 15 1/2 x 11 1/2 x 24
1. Bilge 10 1/2 x 24 1/2 x 24
2. Donkey 9 1/2 x 7 x 18

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

Room

In Holds, &c.

Injections *2* sizes *13"*

Connected to condenser, or to circulating pump *Yes* pumps a separate Donkey Suction fitted in Engine room & size

ilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

ections with the sea direct on the skin of the ship *Yes*

Are they Valves or Cocks *Both*

ed 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 *Below*

filled 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*

are carried through the bunkers *Are hold suction*

How are they protected

es, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times *Yes*

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

mination of completion of fitting of Sea Connections *20/4/23*

of Stern Tube *21/4/23*

Screw shaft and Propeller *21/4/23*

Shaft Tunnel watertight *Yes*

Is it fitted with a watertight door *Yes*

worked from *Engine room top platform*

S, &c.—(Letter for record)

Manufacturers of Steel

ing Surface of Boilers *1707 sq ft*

Is Forced Draft fitted *Yes*

No. and Description of Boilers *3 Double ended cylindrical*

pressure *200 lbs*

Tested by hydraulic pressure to

Date of test

No. of Certificate

iler be worked separately *Yes*

Area of fire grate in each boiler *146.667 ft*

No. and Description of Safety Valves to

Direct spring loaded Area of each valve *14.19*

Pressure to which they are adjusted

Are they fitted with easing gear *Yes*

ance between ~~boilers~~ uptakes and bunkers *on woodwork* *9"*

Mean dia. of boilers *16.3*

Length *20.6*

Material of shell plates *steel*

15" Range of tensile strength *28 to 32 tons*

Are the shell plates welded or flanged *No*

Descrip. of riveting: cir. seams *Lap. B & T*

Butt straps Diameter of rivet holes in long. seams *1 1/2*

Pitch of rivets *10 1/2*

Lap of plates or width of butt straps *22 to 26*

of strength of longitudinal joint rivets *85.2*

Working pressure of shell by rules *207 lbs*

Size of manhole in shell *16 x 12*

ensating ring *McNeil's*

No. and Description of Furnaces in each boiler *8 Deighton*

Material *steel* Outside diameter *44 1/4*

ain part

top *4*

Thickness of plates

crown *3 1/2*

Description of longitudinal joint *Weld*

No. of strengthening rings *—*

ssure of furnace by the rules *213 lbs*

Combustion chamber plates: Material *steel*

Thickness: Sides *1/16*

Back

Top *1/16* Bottom *1/16*

s to ditto: Sides *9 1/2 x 8 1/2*

Back

Top *7 x 6 1/4*

stays are fitted with nuts or riveted heads *nuts inside*

Working pressure by rules *211 lbs*

stays *Steel*

Diameter at smallest part *2 0/7 to 2 1/4*

Area supported by each stay *77 1/2 sq in*

Working pressure by rules *241 lbs*

End plates in steam space:

el Thickness *1 3/32*

Pitch of stays *21 x 16*

How are stays secured *Welded*

Working pressure by rules *201 lbs*

Material of stays *Steel*

smallest part *7.06*

Area supported by each stay *336 sq in*

Working pressure by rules *218 lbs*

Material of Front plates at bottom *Steel*

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

tubes *2 1/2*

Pitch of tubes *3 3/4 x 3 3/8*

Material of tube plates *Steel*

Thickness: Front *1 1/4*

Back *3/4*

Mean pitch of stays *11 1/4 x 7 1/4*

s wide water spaces *13 1/2*

Working pressures by rules *203 lbs*

Girders to Chamber tops: Material *Steel* Depth and

girders at centre *(8 x 3/4) x 2*

Length as per rule *52 1/2*

Distance apart *8 1/2 x 7*

Number and pitch of stays in each *See 6 1/4 x 8 1/2*

ssure by rules *235 lbs* Superheater or Steam chest; how connected to boiler

Can the superheater be shut off and the boiler worked

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

th rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

ssure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

Lloyd's Register Foundation

W65-0052

Report

Date of writing Report

No. in Survey

18837 on the

Gross 79

Net 48

Registered Horse Power 11

No. of Main Boilers

No. of Donkey Boilers

ast Report J

Particulars

Periodical Surveys, wh

use of Repairs, & a

account of Damage, (i

esides being detailed

ates and initials of

damage cases wh

outlined?

the Surveyor person

Do.

his was not done, st

what parts of the

what special mean

urveyor to assure hi

the Surveyor exami

the Surveyor exam

the Surveyor exami

the Surveyor exami

screw shaft now

shaft now been cl

shaft now fitted

the distance betw

Survey is not com

de of the

ler and

hellers; s

incepsta

done-

r mounti

bellers;

e founda

VERTICAL DONKEY BOILER— Manufacturers of Steel

No. Description When made Where fixed
Made at By whom made
Working pressure tested by hydraulic pressure to Date of test No. of Certificate Fire grate area Description of Safety
Valves No. of Safety Valves Area of each Pressure to which they are adjusted Date of adjustment
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 Rivets
Dia. of rivet holes Whether punched or drilled Pitch of rivets Lap of plating Per centage of strength of joint Plates
Working pressure of shell by rules 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 Stayed by
Working pressure of furnace by rules Thickness of furnace crown plates Dates of survey
Diameter of uptake Thickness of uptake plates Thickness of water tubes

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
Manufacturer.

Dates of Survey
During progress of work in shops - -
During erection on board vessel - -
while building
Total No. of visits

Is the approved plan of main boiler forwarded herewith

Cylinders Slides Covers Pistons Rods
Screw shaft Propeller
Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft Thrust shaft Tunnel shafts Engines holding down bolts
Stern tube Steam pipes tested Engine and boiler seatings Engines tried under steam
Completion of pumping arrangements Boilers fixed Thickness of adjusting washers
Main boiler safety valves adjusted Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.
Material of Crank shaft Identification Mark on Do. Material of Screw shafts Identification Marks on Do.
Material of Tunnel shafts Identification Marks on Do. Test pressure 600 lbs.
Material of Steam Pipes Solid drawn steel

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

Certificate (if required) to be sent to
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee... £ 25 0 0
Special ... £
Donkey Boiler Fee ... £
Travelling Expenses (if any) £
When applied for, 14/57
When received, 30/5/29
FRI MAY 11 1903

Committee's Minute
Assigned

A. T. Graham R.W. Coombe
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping