

Rpt. 4.

NEWCASTLE-ON-TYNE

No 73810

REPORT ON MACHINERY.

No. 40089

WED. JUN. 23 1920

Date of writing Report

19

When handed in at Local Office

17. 6. 1920

Port of

Glasgow

No. in Survey held at Reg. Book. on the

Glasgow

Date, First Survey 19. 11. 19

Last Survey 3rd June 1920

(Number of Visits 16)

Master

Built at Newcastle By whom built Wood & Hunter & Co. Ltd

Tons (Gross 1692 Net 993)

Engines made at

Scott & Lunn

By whom made Jarrow W. L. 1456

When made 1920

Boilers made at

By whom made

when made

Registered Horse Power

Owners (Stephenson & Blake & Co.)

Port belonging to London

Nom. Horse Power as per Section 28 208

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines

Triple

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 20, 33, 54

Length of Stroke 36"

Revs. per minute

Dia. of Screw shaft

as per rule *None supplied* as fitted *Material of screw shaft*

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

Is the after end of the liner made water tight

in the propeller boss 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

Dia. of Tunnel shaft

as per rule as fitted

Dia. of Crank shaft journals

as per rule 10.54 as fitted 10.58

Dia. of Crank pin 10.58

Size of Crank webs 14 1/2 x 6 5/8

Dia. of thrust shaft under collars

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps 2

Diameter of ditto 3 1/2"

Stroke 20"

Can one be overhauled while the other is at work

No. of Bilge pumps 2

Diameter of ditto 3 1/2"

Stroke 20"

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

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

In Engine Room

In Holds, &c.

No. of Bilge Injections

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

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

Are they Valves or Cocks

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

Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

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

What pipes are carried through the bunkers

How are they protected

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

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

Is the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

BOILERS, &c.—(Letter for record

Manufacturers of Steel

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Mean dia. of boilers

Length

Material of shell plates

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

Size of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

Length of plain part

top

Thickness of plates

bottom

Description of longitudinal joint

No. of strengthening rings

Working pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Thickness

Material of Lower back plate

Thickness

Greatest pitch of stays

Working pressure of plate by rules

Diameter of tubes

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Pitch across wide water spaces

Working pressures by rules

Girders to Chamber tops: Material

Depth and

thickness of girder at centre

Length as per rule

Distance apart

Number and pitch of stays in each

Working pressure by rules

Steam dome: description of joint to shell

% 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

Thickness

How stayed

SUPERHEATER. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

Date of Test

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

Diameter of Safety Valve

Pressure to which each is adjusted

Is Easing Gear fitted

2019

Lloyd's Register Foundation

W451-0093

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

None

The foregoing is a correct description,

For Messrs Gammie & Co. C.C.C.C. Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 1919 Nov 19 Dec 9 1920 Jan 23 Feb 15 Mar 8 Apr 14 22 27 May 3 5 10 13.
{ During erection on board vessel - - - } 17 24 28 June 3
Total No. of visits 16..

Is the approved plan of main boiler forwarded herewith *None*

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 17.5.20 Slides 17.5.20 Covers 17.5.20 Pistons 14.6.20 Rods 17.5.20

Connecting rods 17.5.20 Crank shaft 14.6.20 Thrust shaft Tunnel shafts Screw shaft Propeller

Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft *S* Identification Mark on Do. *LLOYDS 1456 14.6.20* Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes Test pressure

Is an installation fitted for burning oil fuel 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 If so, state name of vessel

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

*These Engines, built as N^o 1456 have been sold as N^o 1472 to the North Eastern Marine Engineering Co^{ys} Ltd, Newcastle. Condenser is not supplied.
These Engines have been built under Special Survey. The workmanship and materials are good. It is understood that the Engines will be fitted on board at Walsend.*

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 ... £ 2 : : When applied for,
Special *1/2 Fee* ... £ 15 : 4 : 22.6.20.
Donkey Boiler Fee ... £ : : When received, as per
Travelling Expenses (if any) £ : : *see below / WUC RPP*

M.S. Murray
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 22 JUN 1920

TUE. NOV. 23 1920

Assigned *Deferred* *APP*



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