

# REPORT ON MACHINERY.

No. 83921

Received at London Office 15 JAN 1921

Date of writing Report

10

When handed in at Local Office

15 JAN 1921

Port of

London

15 JAN 1921

Survey held at  
eg. Book.

Date, First Survey

Mar 22<sup>nd</sup> 1916

Last Survey

30<sup>th</sup> November 1920

(Number of Visits

8 (during construction)

on the

Engines 614<sup>B</sup>

S.S. Mary Nickerson

aster

Built at Chester

By whom built J. J. Abdala + Mitchell Ltd

Tons

Engines made at

Kings Lynn

By whom made

Dodman & Co. Ltd.

when made 1920

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

nm. Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

GINES, &c.—Description of Engines

Compound surface condensing

No. of Cylinders

No. of Cranks

a. of Cylinders

15" + 31 1/2"

Length of Stroke

24"

Revs. per minute

Dia. of Screw shaft

as fitted 7 1/4"

Material of

Steel

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

the propeller boss

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

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

Yes

Length of stern bush

2-5"

a. of Tunnel shaft

as per rule

6.59

Dia. of Crank shaft journals

as per rule

6.42

Dia. of Crank pin

6 3/4"

Size of Crank webs

4 1/2 x 12 1/2"

Dia. of thrust shaft under

6 3/4"

lars

6 3/4"

Dia. of screw

8-0"

Pitch of Screw

10-0"

No. of Blades

4

State whether moveable

No

Total surface

24 1/2"

a. of Feed pumps

1

Diameter of ditto

2 1/4"

Stroke

12

Can one be overhauled while the other is at work

a. of Bilge pumps

1

Diameter of ditto

2 1/4"

Stroke

12

Can one be overhauled while the other is at work

a. of Donkey Engines

Sizes of Pumps

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

Engine Room

In Holds, &c.

a. of Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size

re 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

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

Are they Valves or Cocks

re 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

re 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

that pipes are carried through the bunkers

How are they protected

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

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

the Screw Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

ILERS, &c.—(Letter for record

Not Known

Manufacturers of Steel

total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

Working Pressure

130 lb.

Tested by hydraulic pressure to

Date of test

No. of Certificate

in each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

ch 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

ickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

eg. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

er centages of strength of longitudinal joint

rivets

Working pressure of shell by rules

Size of manhole in shell

ze of compensating ring

No. and Description of Furnaces in each boiler

Material

Outside diameter

ngth of plain part

top

Thickness of plates

crown

Description of longitudinal joint

No. of strengthening rings

orking pressure of furnace by the rules

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

ch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

aterial of stays

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

aterial

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

rea at smallest part

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

ickness

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

ickness 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

UPERHEATER. 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

W1653-0049



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

None supplied by engine builder

The foregoing is a correct description,

For ALFRED DODMAN & CO. Ltd.

Asby Crisp

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 1916: Mar 22 Nov 20 1917: July 2 Nov 2 1920: Aug 10 Sep 1. 19. Nov 5.  
During erection on board vessel - - -  
Total No. of visits

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders 10-8-20 Slides 14-9-20 1-12-20 Covers 1-12-20 Pistons 14-9-20 Rods 1-9-20 1-12-20

Connecting rods 1-12-20 Crank shaft 20-12-16 Thrust shaft 1-12-20 Tunnel shafts ✓ Screw shaft 1-12-20 Propeller

Stern tube 10-8-20 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 10-8-20 Screw shaft and propeller

Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft Steel Identification Mark on Do. No 7713 Material of Thrust shaft Steel Identification Mark on Do.

Material of Tunnel shafts ✓ Identification Marks on Do. ✓ Material of Screw shafts Steel 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 have been constructed

under Special Survey, and the materials & workmanship are sound & good.

On completion were despatched to Queensferry for installing on board.

The amount of Entry Fee ... £

Special ... £ 6 : 8 : 0

Donkey Boiler Fee ... £

Travelling Expenses (if any) £ 2 : 3 : 6

When applied for,

15/11/19

When received,

15/11/19

A. G. Farmer  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



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