

REPORT ON MACHINERY

No. 40395

Received at London Office

11th SEP 30 1920

Date of writing Report 18. 9. 1920 When handed in at Local Office 18. 9. 1920 Port of Glasgow.

No. in Survey held at Coatbridge.

Date, First Survey 25. 6. 1920 Last Survey 2. 9. 1920

Reg. Book.

on the Machinery for S. S. "ALLAN WATER".

(Number of Visits)

Master

Built at Southampton. By whom built Day Summers & Co. 185.

Tons { Gross
Net
When built 1920

Engines made at Coatbridge.

By whom made Wm. Beardmore & Co. Ltd. 18564.

when made 1920.

Boilers made at Southampton

By whom made Messrs. Day, Summers & Co. Ltd.

when made 1920

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28 83

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion

No. of Cylinders 3

No. of Cranks 3

Dia. of Cylinders 13" 21" 35" Length of Stroke 24" Revs. per minute

Dia. of Screw shaft as per rule 7.33"

Material of screw shaft M. S.

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 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 2'-8"

Dia. of Tunnel shaft as per rule

Dia. of Crank shaft journals as per rule 4.81"

Dia. of Crank pin 7"

Size of Crank webs 13 3/4" x 4 1/2" Dia. of thrust shaft under

collars 7" Dia. of screw 9'-0" Pitch of Screw 11'-6"

No. of Blades 4

State whether moveable No

Total surface 34 ft.

No. of Feed pumps 2 Diameter of ditto 2 1/2" Stroke 12"

Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 2 1/2" Stroke 12"

Can one be overhauled while the other is at work Yes

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 sizes

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
plate

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

Thickness of plates

crown
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

Lloyd's Register
Foundation

W429-0108

IS A DONKEY BOILER FITTED? N° If so, is a report now forwarded? ✓

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

WILLIAM BEARDMORE & CO., LIMITED.

Manufacturer.

per R. Sneddon.

Dates of Survey while building { During progress of work in shops -- } 1920 Jun 25 29 July 2 12 Aug 12 17 Sep 2
{ During erection on board vessel -- }
Total No. of visits 7

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders 12.7.20 Slides 17.8.20 Covers 12.7.20 Pistons 12.8.20 Rods 12.8.20
Connecting rods 17.8.20 Crank shaft 29.6.20 Thrust shaft 17.8.20 Tunnel shafts none Screw shaft 2.7.20 Propeller 2.7.20

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 M.S. Identification Mark on Do. 5106 Material of Thrust shaft M.S. Identification Mark on Do. 5674
Material of Tunnel shafts none Identification Marks on Do. 3R.Y. Material of Screw shafts M.S. Identification Marks on Do. 5674

Material of Steam Pipes Test pressure 2.7.20

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 yes If so, state name of vessel S.S. "Cambalu"

General Remarks (State quality of workmanship, opinions as to class, &c. The Engines have been built under Special Survey. The materials & Workmanship are good. The engines have been dispatched to Southampton to be fitted on board the vessel.

The above machinery has been efficiently fitted on board, and on trial proved satisfactory. (See separate report attached.)

The amount of Entry Fee ... £ 1 : - :
Special ... £ 6 : 5 :
Donkey Boiler Fee ... £ : :
Travelling Expenses (if any) £ : :
When applied for, 29.7.20
When received, 14.12.20

John Barr. & A. H. Boyle
Engineer Surveyor to Lloyd's Register of Shipping.

FRI. DEC. 31 1920

Committee's Minute

GLASGOW

29 SEP 1920

Assigned Deferred.



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