

REPORT ON MACHINERY.

No. 11065

Received at London Office

SAT. 29 OCT. 1921

Date of writing Report 21st Oct. 1921 When handed in at Local Office 27th Oct. 1921 Port of SouthamptonNo. in Survey held at Southampton
Reg. Book.Date, First Survey 10th Nov. 1920. Last Survey 18th Oct. 1921

on the S.S. "BLACKCOCK"

(Number of Visits 25)

Master Built at Southampton By whom built Day, Summers & Co. Ltd.

Gross 492.31

Net 226.02

When built 1921

Engines made at Southampton By whom made Day, Summers & Co. Ltd.

when made 1921

Boilers made at Southampton By whom made Day, Summers & Co. Ltd.

when made 1921

Registered Horse Power

Owners General Steam Navigation Co. Ltd. Port belonging to London

Nom. Horse Power as per Section 28 91.8

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted No

ENGINES, &c.—Description of Engines Triple Expansion Surface Condenser No. of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 13 $\frac{1}{4}$ "-22"-37" Length of Stroke 27" Revs. per minute 130 Dia. of Screw shaft as per rule 7.92" Material of screw shaft Steel

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 yes 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 6.9" Dia. of Crank shaft journals as per rule 7.23" Dia. of Crank pin 7 $\frac{1}{4}$ " Size of Crank webs 5" Dia. of thrust shaft undercollars 7 $\frac{1}{4}$ " Dia. of screw 9'-0" Pitch of Screw 9'-6" No. of Blades 4 State whether moveable No Total surface 35 sq ftNo. of Feed pumps 2 Diameter of ditto 2 $\frac{1}{2}$ " Stroke 13 $\frac{1}{2}$ " Can one be overhauled while the other is at work yesNo. of Bilge pumps 2 Diameter of ditto 2 $\frac{1}{2}$ " Stroke 13 $\frac{1}{2}$ " Can one be overhauled while the other is at work yes

No. of Donkey Engines 2 Sizes of Pumps 6" x 4" x 6" & 6" x 6" x 6" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2-2" and stokehold 2-2" In Holds, &c. 2-2"

No. of Bilge Injections 1 sizes 3 $\frac{1}{2}$ " Connected to condenser, or to circulating pump C. Pump. Is a separate Donkey Suction fitted in Engine room & size yes 2"

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

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

What pipes are carried through the bunkers Fuel Suctions How are they protected Steel plate guards

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

Is the Screw Shaft Tunnel watertight — Is it fitted with a watertight door — worked from —

OILERS, &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	Thickenss	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	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	Thickenss of plates	Description of longitudinal joint	No. of strengthening rings	Working pressure of furnace by the rules
Combustion chamber plates: Material	Thickenss: Sides	Back	Top	Bottom	Pitch of stays to ditto: Sides
Back	Top	Bottom	Working pressure by rules	End plates in steam space:	Material of stays
Area at smallest part	Area supported by each stay	Working pressure by rules	Material of Front plates at bottom	Thickenss	Material of Lower back plate
Thickenss	Greatest pitch of stays	Working pressure of plate by rules	Diameter of tubes	Material of tube plates	Thickenss: Front
Back	Mean pitch of stays	Pitch across wide water spaces	Working pressures by rules	Girders to Chamber tops: Material	Depth and
thickenss 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	Thickenss of shell plates	Material	Description of longitudinal joint	Diam. of rivet holes
Pitch of rivets	Working pressure of shell by rules	Crown plates	Thickenss	How stayed	

UPPERHEATER. 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 _____

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Com^{ce} Rod top-end bolts & nuts. 2 Com^{ce} Rod bottom-end bolts & nuts. 2 Main bearing bolts & nuts. 1 Set of Coupling bolts. 1 Set of valves each for Feed pump, Bilge pump, Air pump, Circ. pump & Donkey pump. 1 Propeller. 2 cuts of iron of various sizes and a quantity of assorted bolts and nuts.

The foregoing is a correct description,

James L. Day
Manufacturer.



Dates of Survey while building
During progress of work in shops -- 10, 20.31, 11, 12, 1920.
During erection on board vessel -- 26, 1.3.5.22.26.29, 6.7.11.18, 8, 9, 10, 1921.
Total No. of visits 25

Is the approved plan of main boiler forwarded herewith

yes

Dates of Examination of principal parts—Cylinders 5-8-21 Slides 25-7-21 Covers 25-7-21 Pistons 7-1-21 Rods 25-7-21
Connecting rods 25-7-21 Crank shaft 25-7-21 Thrust shaft 25-7-21 Tunnel shafts ✓ Screw shaft 11-8-21 Propeller 5-9-21
Stern tube 26-8-21 Steam pipes tested 6-10-21 Engine and boiler seatings 5-9-21 Engines holding down bolts 11-10-21
Completion of pumping arrangements 11-10-21 Boilers fixed 26-9-21 Engines tried under steam 18-10-21
Completion of fitting sea connections 5-9-21 Stern tube 3-9-21 Screw shaft and propeller 5-9-21
Main boiler safety valves adjusted 11-10-21 Thickness of adjusting washers $P = \frac{11}{32}$ S = $\frac{11}{32}$
Material of Crank shaft Iron Identification Mark on Do. 389 44095 25-7-21 A.H.B. Material of Thrust shaft Steel Identification Mark on Do. 854 44095 11-8-21 A.H.B.
Material of Tunnel shafts ✓ Identification Marks on Do. 388 44095 11-8-21 A.H.B. Material of Screw shafts Steel Identification Marks on Do. 388 44095 11-8-21 A.H.B.
Material of Steam Pipes Copper Test pressure 360 lbs.
Is an installation fitted for burning oil fuel No 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 No If so, state name of vessel

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

The Machinery has been built under Special Survey, and during section on board.
The materials and workmanship are sound and good.
The spare gear is in order with the rule requirements.
On trial the machinery and boiler proved satisfactory and the same is eligible in my opinion to have notation + L.M.C. 10.21.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. - 10.21. C.L.

L. G.
31/10/21. *Am.*

The amount of Entry Fee ... £ 2 : 0 ✓
Special ... £ 12 : 5 ✓
Donkey Boiler Fee ... £ ✓
Travelling Expenses (if any) £ ✓

When applied for,

Oct 29th 1921

When received,

29-10-1921

Committee's Minute

FRI. 4 NOV. 1921

Assigned

+ L.M.C. 10.21

C.L.

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



© 2021

Lloyd's Register Foundation