

REPORT ON MACHINERY.

No. 2969

Writing Report *14 Jan 1920* When handed in at Local Office *19* Port of *Major*

Survey held at *Pembroke Dock* Date, First Survey *25 Aug* Last Survey *22 Dec 1920*

Book. on the *Shel S T "William Bance"* (Number of Visits)

Built at *Middlebro* By whom built *Smith Dock Co L* Tons { Gross *276* Net *107* When built *1917*

es made at *Middlebro* By whom made *Smith Dock Co L* when made *1917*

s made at *Newcastle* By whom made *Hawthorn & Leslie* when made *1917*

Rated Horse Power Owners Port belonging to

Horse Power as per Section 28 *87* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*

INES, &c.—Description of Engines *Triple Expansion* No. of Cylinders *3* No. of Cranks *3*

of Cylinders *12 1/2" x 21 x 35"* Length of Stroke *26* Revs. per minute *110* Dia. of Screw shaft *7 1/8* as per rule *7 5/8* Material of *Iron*

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

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

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

are fitted, is the shaft lapped or protected between the liners *✓* Length of stern bush *34*

f Tunnel shaft *6 5/8* as per rule *6 3/4* Dia. of Crank shaft journals *6 9/8* as per rule *7 1/8* Dia. of Crank pin *7 1/8* Size of Crank webs *14 1/2* Dia. of thrust shaft under

as *7 1/8* Dia. of screw *9 1/2* Pitch of Screw *11 1/2* No. of Blades *4* State whether moveable *No* Total surface *85 1/2*

of Feed pumps *2* Diameter of ditto *2 1/2* Stroke *12"* Can one be overhauled while the other is at work *Yes*

f Bilge pumps *2* Diameter of ditto *2 1/2* Stroke *12"* Can one be overhauled while the other is at work *Yes*

f Donkey Engines *27* Sizes of Pumps *6 x 3 x 6, 7 6 x 4 x 6* No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room *1 2" forward 1 2" aft 1 2" separate* In Holds, &c. *1 2" from forehold 1 2" from stow*

so *Separate 2" suction from all parts*

Bilge Injections *1* sizes *3 1/2* Connected to condenser, or to circulating pump *Is a separate Donkey Suction fitted in Engine room & size*

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 *None*

all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Both*

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*

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*

t pipes are carried through the bunkers *Forward Suction* How are they protected *Wood casing*

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

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

e Screw Shaft Tunnel watertight *✓* Is it fitted with a watertight door *✓* worked from *✓*

TERS, &c.—(Letter for record *S*) Manufacturers of Steel

Heating Surface of Boilers *1619* Is Forced Draft fitted *No* No. and Description of Boilers *One Single ended*

king Pressure *180* Tested by hydraulic pressure to Date of test No. of Certificate

each boiler be worked separately *✓* Area of fire grate in each boiler *50* No. and Description of Safety Valves to

boiler *2 direct spring* Area of each valve *4.9* Pressure to which they are adjusted *185* Are they fitted with easing gear *Yes*

test distance between boilers or uptakes and bunkers or woodwork *8'* Mean dia. of boilers *16 1/2"* Length *19 1/2"* Material of shell plates *S*

ness *1 3/2* Range of tensile strength *28 - 32* Are the shell plates welded or flanged *h.* Descrip. of riveting: cir. seams *double*

seams *TRAVERS* Diameter of rivet holes in long. seams *1 5/8* Pitch of rivets *8"* Lap of plates or width of butt straps *17*

centages of strength of longitudinal joint *89.3* Working pressure of shell by rules *180* Size of manhole in shell *16 x 12*

of compensating ring *9 1 3/2* No. and Description of Furnaces in each boiler *3 plain* Material *S* Outside diameter *40 9/16*

th of plain part *81* Thickness of plates *25* Description of longitudinal joint *Welded* No. of strengthening rings *✓*

king pressure of furnace by the rules *188* Combustion chamber plates: Material *S* Thickness: Sides *1/4* Back *2 1/2* Top *1/4* Bottom *7/8*

h of stays to ditto: Sides *9 1/2 x 9 1/2* Back *9 x 9* Top *9 x 9* If stays are fitted with nuts or riveted heads *Nuts* Working pressure by rules *180*

erial of stays *S* Area at smallest part *2.07* Area supported by each stay *7.25* Working pressure by rules *206* End plates in steam space:

erial *S* Thickness *1 1/16* Pitch of stays *17 x 17* How are stays secured *by nuts* Working pressure by rules *181* Material of stays *S*

a at smallest part *6.10* Area supported by each stay *29.5* Working pressure by rules *215* Material of Front plates at bottom *S*

ckness *31* Material of Lower back plate *S* Thickness *1 1/16* Greatest pitch of stays *4 x 9* Working pressure of plate by rules *219*

meter of tubes *3 1/2* Pitch of tubes *5 x 4.75* Material of tube plates *S* Thickness: Front *3/32* Back *7/8* Mean pitch of stays *10*

h across wide water spaces *104* Working pressures by rules *184* Girders to Chamber tops: Material *S* Depth and

kness of girder at centre *8 1/2 x 1 3/4* Length as per rule *32* Distance apart *9 1/2* Number and pitch of stays in each *200 9 1/2*

rking pressure by rules *197* Steam dome: description of joint to shell *✓* % of strength of joint *✓*

meter Thickness of shell plates *✓* Material *✓* Description of longitudinal joint *✓* Diam. of rivet holes *✓*

h of rivets *✓* Working pressure of shell by rules *✓* Crown plates *✓* Thickness *✓* How stayed *✓*

ERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

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

meter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

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004351 004357-0016

IS A DONKEY BOILER FITTED?

No

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 top end bolts, and nuts 2 bottom end bolts & nuts 2 main bearing bolts, and nuts 4 Coupling bolts, and nuts 1 Complete set of suction, and delivery valves for Donkey pumps 2 main feed chest valves 6 journal ring studs and nuts 2 escape valve springs 3 plain boiler tubes 3 Condenser tubes, and flanges assorted bolts and nuts

The foregoing is a correct description,

Manufacturer.

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

Is the approved plan of main boiler forwarded herewith

“ “ “ donkey “ “ “

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft 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 Iron Identification Mark on Do. Material of Thrust shaft Iron Identification Mark on Do.

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

Material of Steam Pipes S D Copper Test pressure

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 Yes

Is this machinery duplicate of a previous case Yes If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. The workmanship of this vessel's machinery appears good, having been built under British Corporation Survey to plans, and specification mutually agreed by this Society, and the British Corporation and in my opinion merits Class 12-20 assigned

The amount of Entry Fee ... £ : : When applied for.
Special ... £ : :
Donkey Boiler Fee ... £ : : When received.
Travelling Expenses (if any) £ : : 19

Committee's Minute

Assigned

TUE. 11 JAN. 1921
L.M.C. 12.20
Signed

J. W. Johnstone

Engineer Surveyor to Lloyd's Register of Shipping.

FRI. 19 MAY. 1922



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