

## REPORT ON MACHINERY.

No. 5325.

TUE. MAR. 25 1924

Received at London Office

MANCHESTER.

Date of writing Report

19

When handed in at Local Office

19

Port of

No. in Survey held at *Manchester*  
Reg. Book.  
on theDate, First Survey *6. 6. 20* Last Survey 19

(Number of Visits)

Tons } Gross  
Net

Master

Built at *Ellerman Pnt.* By whom built *The Manchester Dry Dock & Co.* When builtEngines made at *Manchester*By whom made *The Manchester Dry Dock & Co.* when made *1924*

Boilers made at

By whom made

when made

Registered Horse Power

Owners

Port belonging to

Nom. Horse Power as per Section 28 *52*

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ENGINES, &c.—Description of Engines *Compound, surface condensing* No. of Cylinders *2* No. of Cranks *2*Dia. of Cylinders *15 - 32*Length of Stroke *21*Revs. per minute *120*

Dia. of Screw shaft

as per rule *6.57*

Material of screw shaft

*5 1/2*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* *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 *Fitted full length* 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 *6.14*

Dia. of Crank shaft journals

as per rule *6.44*Dia. of Crank pin *6 1/2*Size of Crank webs *1 1/2 x 5*

Dia. of thrust shaft under

collars *6 1/2*

Dia. of screw

Pitch of Screw

No. of Blades

State whether moveable

Total surface

No. of Feed pumps *One*Diameter of ditto *2 1/2*Stroke *10*

Can one be overhauled while the other is at work

No. of Bilge pumps *One*Diameter of ditto *2 1/2*Stroke *10*

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, &amp;c.

No. of Bilge Injections

sizes

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room &amp; 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, &amp;c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers *952*Is Forced Draft fitted *Yes*

No. and Description of Boilers

Working Pressure *130 lb*

Tested by hydraulic pressure to

Date of test

No. of Certificate

Can each boiler be worked separately

Area of fire grate in each boiler *35*

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

crown

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

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

003106-003115-0147



## IS A DONKEY BOILER FITTED?

*If so, is a report now forwarded?*

*SPARE GEAR.* State the articles supplied :—

FOR THE MANCHESTER DRY DOCK COMPANY LTD.

The foregoing is a correct description,

Abel Laid

*Manufacturer.*

		1930	Manager	1921.	1934									
Dates of Survey while building {	During progress of work in shops -	June 27	July 18	Oct 4	Nov 11	Dec 30	Jan 9	Feb 2	Mar 3	Apr 9	May 12	Jun 15	Jul 17	Aug 19
	During erection on board vessel - - -													
	Total No. of visits													

Is the approved plan of main boiler furnished?

*Is the approved plan of main boiler forwarded herewith*

”        ”        ”        *donkey*        ”        ”        ”

*Dates of Examination of principal parts—Cylinders 30.11.20 Slides 1.2.21. Covers 30.11.20 Pistons 9.12.20 Rods 9.12.20*

Connecting rods 9.12.20 Crank shaft 12.11.20 Thrust shaft 17.9.20 Tunnel shafts ✓ Screw shaft 19.3.24 Propeller

Stern tube	Steam pipes tested	Engine and boiler seatings	Engines holding down bolts
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Completion of pumping arrangements	Boilers fixed	Engines tried under steam
.....	.....	.....

Completion of fitting sea connections ..... Stern tube ..... Screw shaft and propeller

<i>Main boiler safety valves adjusted</i>	<i>Thickness of adjusting washers</i>
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Material of Crank shaft S. 4.5 Identification Mark on Do. 12-11-10 AC Material of Thrust shaft S. 4.5 Identification Mark on Do. 444-A-1

Material of Tunnel shafts *Iron* Identification Marks on Do. ✓ Material of Screw shafts *545* Identification Marks on Do. *418, 419*

[illegible]

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 U.S. Sloop No 4655,

*General Remarks* (State quality of workmanship, opinions as to class, &c. *The above machinery has been constructed*

under Special Survey and the materials tested in accordance with the Society's Rules.

The workmanship and materials employed, so far as can be seen, are sound and good and on being satisfactorily fitted on board, the Vessel will be eligible, in our opinion for receipt & L by C. with date.

The machinery has been dispatched to Ellmore Port to be fitted on board

The amount of Entry Fee ... £ : : When applied for.

2/5 Special ... .. £ 5 : 4 : 24. 3. 192

Donkey Boiler Fee	...	£	:	:	When received.
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Travelling Expenses (if any) £ : : *£ 10 10 0*

When applied for.

24. 3. 1929

When received

*Engineer Surveyor to Lloyd's Register of Shipping*

## Committee's Minute

*Assigned*

Lloyd's Register  
Foundation