

REPORT ON MACHINERY

No. 17350.

WED. SEP. 18. 1918

Received at London Office

Date of writing Report 29th May 1918. When handed in at Local Office 29th May 1918 Port of Greenock.
 No. in Survey held at Port Glasgow. Date, First Survey 9th January, 1918; Last Survey 28th May, 1918
 Reg. Book. on the Steel screw Steamship "Machard". (Number of Visits #)
 Description of Ship Master W. O. Tyers. Built at Port Glasgow. By whom built Russell & Co. Tons { Gross 10463.56
 Net 6654.04.
 When built 1918.
 Engines made at _____ By whom made _____ when made _____
 Boilers made at _____ By whom made _____ when made _____
 Registered Horse Power _____ Owners _____ Port belonging to Liverpool.
 Nom. Horse Power as per Section 28 _____ Is Refrigerating Machinery fitted for cargo purposes _____ Is Electric Light fitted _____

ENGINES, &c.—Description of Engines

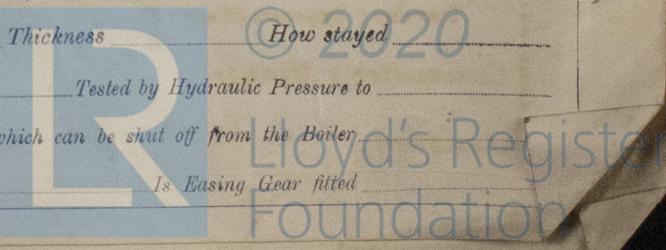
Description of Engines		No. of Cylinders	No. of Cranks
Dia. of Cylinders	Length of Stroke	Revs. per minute	Dia. of Screw shaft as per rule as fitted
Is the screw shaft fitted with a continuous liner the whole length of the stern tube		Is the after end of the liner made water tight	
in the propeller boss		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	
Dia. of Tunnel shaft as per rule as fitted	Dia. of Crank shaft journals as per rule as fitted	Dia. of Crank pin	Size of Crank webs
collars	Dia. of screw	Pitch of Screw	No. of Blades <u>4</u> State whether moceable <u>Yes</u> Total surface
No. of Feed pumps	Diameter of ditto	Stroke	Can one be overhauled while the other is at work
No. of Bilge pumps	Diameter of ditto	Stroke	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, &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 they Valves or Cocks <u>Both</u>	
Are all connections with the sea direct on the skin of the ship <u>Yes</u>		Are they Valves or Cocks <u>Both</u>	
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 <u>Above</u>	
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 <u>Yes</u>	
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	
each boiler		No. and Description of Safety Valves to	
Smallest distance between boilers or uptakes and bunkers or woodwork		Mean dia. of boilers	
Thickness		Range of tensile strength	
long. seams		Are the shell plates welded or flanged	
Per centages of strength of longitudinal joint		Descrip. of riveting: cir. seams	
Size of compensating ring		Working pressure of shell by rules	
Length of plain part top bottom		Size of manhole in shell	
Working pressure of furnace by the rules		No. and Description of Furnaces in each boiler	
Pitch of stays to ditto: Sides		Material	
Material of stays		Outside diameter	
Area at smallest part		No. of strengthening rings	
Material		Thickness of plates crown bottom	
Area at smallest part		Description of longitudinal joint	
Thickness		Working pressure of furnace by the rules	
Material of Lower back plate		Combustion chamber plates: Material	
Diameter of tubes		Thickness: Sides	
Pitch across wide water spaces		Back	
thickness of girder at centre		Top	
Working pressure by rules		Bottom	
Diameter		If stays are fitted with nuts or riveted heads	
Pitch of rivets		Working pressure by rules	
Working pressure of shell by rules		End plates in steam space:	
Crown plates		Material	
SUPERHEATER. Type		Thickness	
Date of Test		How stayed	
Diameter of Safety Valve		Tested by Hydraulic Pressure to	
Pressure to which each is adjusted		Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler	
		Is Easing Gear fitted	

Handwritten notes on the left margin:
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 Feb 16-21-1917
 June 4-6-11-1
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 bell 16/5/18
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3600-0152



IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } 1918 Jan 9-17. Apr 5 May 28
 { During erection on board vessel - - - }
 Total No. of visits 4

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 28-5-18. Engines holding down bolts
 Completion of pumping arrangements Boilers fixed Engines tried under steam
 Completion of fitting sea connections 28-5-18. Stern tube 28-5-18 Screw shaft and propeller 28-5-18.
 Main boiler safety valves adjusted Thickness of adjusting washers
 Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.
 Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts 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.)

Vessel taken to Glasgow, where machinery and boilers will be fitted.

Certificate (if required) to be sent to the Surveyors are requested not to write on or below the space for Committee's Minute.

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

Graham Robertson

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW. 17 SEP 1918

Assigned See G.S. Rpt. No 38162

WMM



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Lloyd's Register Foundation

Rpt. 5a.

Date of writing Report

No. in Survey Reg. Book. on the

Master

Engines made at

Boilers made at

Registered Horsepower

MULTITUBULAR

(Letter for record)

Boilers 222

No. of Certificates

safety valves to

Are they fitted with

Smallest distance

Material of shell

Descrip. of rivets

Lap of plates over

rules 220

boiler 3 Deck

Description of lower

plates: Material

Top 10 1/2 x 9 If

smallest part 2

Pitch of stays 2

Area supported

Lower back plate

Pitch of tubes 4

water spaces 1

girder at centre

Working pressure

separately

holes Pi

If stiffened with

Working pressure

Dates of Survey while building { During work on board

GENERAL

under good

Survey Fee

Travelling

Committee

Assigned