

REPORT ON MACHINERY.

No. 6344

Report made at London Date, First Survey October 25th 1920 Last Survey Nov. 4th 1920
 Port of London
 S.S. "Bulgarian" ex "H. Kalthoff"
 Built at Hamburg By whom built Hamburg-Chiffet & Co. Tons { Gross 2064
 Net 1268
 When built 1904
 By whom made Hamburg-Chiffet & Co. when made 1904
 Owners Ellerman Line Ltd. Port belonging to London
 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

8c. — Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
2 1/2 x 35 1/2 x 55 Length of Stroke 35 7/16 Revs. per minute 10.55 Dia. of Screw shaft 10 3/8 as per rule Yes Material of steel
 Is the after end of the liner made water tight 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 Yes
 Is the space charged with a plastic material insoluble in water and non-corrosive Yes
 Is the shaft lapped or protected between the liners Yes Length of stern bush 10.05
 Dia. of Crank shaft journals 10.55 as per rule Yes Dia. of Crank pin 10 3/8 as fitted 10 3/8 Size of Crank web 18 1/2 x 7 1/2 Dia. of thrust shaft under 10 3/8
 Pitch of Screw 10 3/8 No. of Blades 8 State whether moveable Yes Total surface 2
 Diameter of ditto 3 5/16 Stroke 23 1/2 Can one be overhauled while the other is at work Yes
 Diameter of ditto 3 1/4 Stroke 23 1/2 Can one be overhauled while the other is at work Yes
 Sizes of Pumps 7 1/2 x 9 x 10 1/2 No. and size of Suctions connected to both Bilge and Donkey pumps 2 - 2 3/4
 In Holds, &c. 2 - 2 3/4

Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room, & size 1 - 2 1/2
 Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes
 Are they Valves or Cocks Yes
 Are the Discharge Pipes above or below the deep water line above
 Are the Blow Off Cocks fitted with a spigot and brass covering plate Yes
 How are they protected Yes
 Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes
 Is it fitted with a watertight door Yes worked from top platform

8c. — (Letter for record 2567) Manufacturers of Steel Yes
 Surface of Boilers 2644 Is Forced Draft fitted Yes No. and Description of Boilers 2. Single ended
 Tested by hydraulic pressure to 170 Date of test 2567 No. of Certificate 2567
 Area of fire grate in each boiler 35 1/2 No. and Description of Safety Valves to 2
 Area of each valve 7.07 Pressure to which they are adjusted 11.3 3/4 Are they fitted with easing gear Yes
 Mean dia. of boilers 11.3 3/4 Length 11.3 3/4 Material of shell plates Steel
 Are the shell plates welded or flanged Yes Descrip. of riveting: cir. seams 8 to R
 Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 7 7/8 Lap of plates or width of butt straps 18 1/8
 Working pressure of shell by rules 190 Size of manhole in shell 15 3/4 x 12
 No. and Description of Furnaces in each boiler 2 horizontal Material Steel Outside diameter 44 1/2
 Thickness of plates 1 1/2 Description of longitudinal joint welded No. of strengthening rings 1
 Combustion chamber plates: Material Steel Thickness: Sides 1 1/2 Back 1 1/2 Top 1 1/2 Bottom 1 1/2
 Working pressure by rules 205
 Area at smallest part 1.45 Area supported by each stay 59.30 Working pressure by rules 195 End plates in steam space: Yes
 Thickness 1 1/2 Pitch of stays 53.14 How are stays secured nuts & washers Working pressure by rules 200 Material of stays Steel
 Area supported by each stay 23.0 Working pressure by rules 250 Material of Front plates at bottom Steel
 Thickness 1 1/2 Greatest pitch of stays 12 Working pressure of plate by rules 200
 Material of tube plates Steel Thickness: Front 1 1/2 Back 2 1/2 Mean pitch of stays 7 13/16
 Working pressures by rules 200 Girders to Chamber tops: Material Steel Depth and 10 1/4
 Length as per rule 2 - 9 Distance apart 7 1/2 Number and pitch of stays in each 3 - 7 1/2
 Steam dome: description of joint to shell Yes % of strength of joint 100
 Thickness of shell plates 1 1/2 Material Steel Description of longitudinal joint welded Diam. of rivet holes 1 1/2
 Working pressure of shell by rules 200 Crown plates 1 1/2 Thickness 1 1/2 How stayed Yes
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes
 Pressure to which each is adjusted 200 Is Easing Gear fitted Yes

5520-0255

IS A DONKEY BOILER FITTED?

no

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 - -	{	Oct. 25-27-30 Nov 3-4
		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 shafts

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
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Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on

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

<i>Material of Steam Pipes</i>	<i>Test pressure</i>
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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. The engines & boiler
been examined and the dimensions compared with the
and checked with the enclosed plans.

The machinery & boilers appear to be in good condition and the propeller, screw shaft & peacocks have been examined & reported on and the safety valves adjusted under steam, & will be eligible in my opinion for the notation of LUB 11-20. Working pressure of boilers 170 lbs per sq.

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

St. John's

Engineer Surveyor to Lloyd's Register

Committee's Minute TUE. DEC. 14 1920

Assigned

FRI. 18 FEB. 1921

Lloyd's Register
Foundation