

REPORT ON MACHINERY

TUE. 5 - AUG. 1919

Received at London Office

Date of writing Report June 7th. 1919 When handed in at Local Office 19 Port of Hong Kong

No. in Survey held at Hong Kong Date, First Survey Jan. 23rd. 1918 Last Survey May 30th. 1919

Reg. Book. on the Steel Single Screw Steamer "WAR DRUMMER" (Number of Visits) 3102.19

Master Frank Adcock Built at Hong Kong By whom built Hong Kong & Whampoa Dock Co. L. When built 1919

Engines made at Hong Kong By whom made Hong Kong & Whampoa Dock Co. Ld. when made 1919

Boilers made at Hong Kong By whom made Hong Kong & Whampoa Dock Co. Ld. when made 1919

Registered Horse Power 259 Owners Shipping Controller Port belonging to Hong Kong

Com. Horse Power as per Section 28 259 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

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

Dia. of Cylinders 23", 38", 61" Length of Stroke 42" Revs. per minute 75 Dia. of Screw shaft as per rule 12.98 Material of Ingot 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

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 Liner fits tightly

liners are fitted, is the shaft lapped or protected between the liners - Length of stern bush 4'-6"

Dia. of Tunnel shaft as per rule 11.46 Dia. of Crank shaft journals as per rule 12.03 Dia. of Crank pin 13 Size of Crank webs 2'0 1/2" x 8 1/4" thick

Collars 12.5 Dia. of screw 16'0" Pitch of Screw 16'0" No. of Blades 4 State whether moveable No Total surface 70 sq. ft.

No. of Feed pumps 2 Diameter of ditto 3 1/2 Stroke 23 Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 3 1/2 Stroke 23 Can one be overhauled while the other is at work Yes

No. of Donkey Engines 6 Sizes of Pumps Cent. 12" No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 2 to Bilge Range 3" Weirs 2- 7 1/2, 5 1/2, 15 In Holds, &c. (2 in Fore Hold 3" 2 in Aft Main Hold 3"

Separate to Donkey Pump 3 1/2" G.S. 6x7x7 (2 in Main Hold 3" 1 in Tunnel 3"

No. of Bilge Injections 1 sizes 7" Connected to condenser, or to circulating pump Pump Is a separate Donkey Suction fitted in Engine room & size Yes, Two 3 1/2"

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 None

Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both (Main Discharge below,

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 others 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 Bilge suction from fore hold How are they protected Wood covering

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 Yes Is it fitted with a watertight door Yes worked from Upper deck

OILERS, &c.—(Letter for record 1/11/17) Manufacturers of Steel Hallside

Total Heating Surface of Boilers 3946 Is Forced Draft fitted No No. and Description of Boilers Two Cylindrical Marine Type

Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 5/4/19 No. of Certificate *

Can each boiler be worked separately Yes Area of fire grate in each boiler 62 sq. ft No. and Description of Safety Valves to

each boiler spring loaded Area of each valve 14.1 Pressure to which they are adjusted 180 Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 15'-0" Length 10'-6" Material of shell plates Steel

Thickness 1 13/32 Range of tensile strength 29-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams lap

Long. seams T.R. Double Diameter of rivet holes in long. seams 1 7/8 Pitch of rivets 9 1/4 Lap of plates or width of butt straps 1'-9 3/8"

butt straps 88 16 Per centages of strength of longitudinal joint rivets. 85.2 Working pressure of shell by rules 213 lbs. Size of manhole in shell 16" x 12"

Size of compensating ring 1, 13/32" No. and Description of Furnaces in each boiler 3 Morison Material Steel Outside diameter 4'-0"

Length of plain part top - Thickness of plates crown 5/8 Description of longitudinal joint Welded No. of strengthening rings -

Working pressure of furnace by the rules 209.8 Combustion chamber plates: Material Steel Thickness: Sides 11/16 Back 5/8 Top 11/16 Bottom 1"

Pitch of stays to ditto: Sides 9"x 7" Back 7 1/2 x 7 1/4 Top 8 3/8 x 8 1/2 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules S. 188

Material of stays Steel Area at smallest part B. 1.48 Area supported by each stay B. 58.5 Working pressure by rules T. 222 End plates in steam space:

Material Steel Thickness 1" Pitch of stays 15"x 17 How are stays secured Nuts & riveted washers Working pressure by rules 199 Material of stays Steel

Area at smallest part 6.10 Area supported by each stay 255 Working pressure by rules 248 Material of Front plates at bottom Steel

Thickness 7/8 Material of Lower back plate Steel Thickness 3/4 Greatest pitch of stays 12 1/2 x 7 1/4 Working pressure of plate by rules 180

Diameter of tubes 3 1/4 Pitch of tubes 4 1/2 Material of tube plates Steel Thickness: Front 15/16" Back 27/32" Mean pitch of stays 11 1/4"

Pitch across wide water spaces 13 1/2" Working pressures by rules W.S. 198 Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 11" x 1 1/2" Length as per rule 2'-9 1/2" Distance apart 8 1/2" Number and pitch of stays in each Three 8 3/8"

Working pressure by rules 280 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 -

SUPERHEATER. 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 -



006787-006796-0313

IS A DONKEY BOILER FITTED? Yes

If so, is a report now forwarded? No

SPARE GEAR. State the articles supplied:— Supplied as per rule and additional spare gear as per attached list.

The foregoing is a correct description,
HONGKONG & WHAMPOA DOCK Co., Ltd.

R. M. Day
Chief Manager

Manufacturer.

Dates of Survey while building	During progress of work in shops --	1918 Jan. 23, Mar. 15, Apr. 9, May 18, Jun. 1, 5, 19, 21, Jul. 12, 24, 25, 26, 29
		Aug. 2, 6, 7, 9, 19, 28, Sept. 4, Oct. 14, 30, Nov. 1, 2, 7, 11, 15, 26, 28, 30
		Dec. 12, 13, 16, 23, 28, 1919 Jan. 4, 6, 9, 10, 11, 18, Mar. 10, Apr. 3, 5, 1919. Sept. 25, Oct. 4, 16, 18, 28, Nov. 20, Dec. 2, 11, 17, 30, 1919 Jan. 7, 29
Total No. of visits	During erection on board vessel ---	Feb. 10, 20, May, 5, 14, 26, 27, 28, 30.
	Is the approved plan of main boilers forwarded herewith Yes	

Dates of Examination of principal parts—Cylinders 7/8/18 Slides 2/10/18 Covers 7/8/18 Pistons 2/10/18 Rods 4/9/18	
Connecting rods 4/9/18	Crank shaft 28/8/18 Thrust shaft 28/8/18 Tunnel shafts 28/8/18 Screw shaft 28/8/18 Propeller 6/8/18
Stern tube 6/8/18	Steam pipes tested 16/5/19 Engine and boiler seatings 18/11/18 Engines holding down bolts 30/12/18
Completion of pumping arrangements 15/5/19	Boilers fixed 1/5/19 Engines tried under steam 30/5/19
Completion of fitting sea connections 9/8/18	Stern tube 9/8/18 Screw shaft and propeller 9/8/18
Main boiler safety valves adjusted 28/5/19	Thickness of adjusting washers Pt. Br. P. 3/16" S. 3/8" St. Br. P. 1/4" S. 3/8"
Material of Crank shaft Steel	Identification Mark on Do. 137 HKg. Material of Thrust shaft Steel Identification Mark on Do. 138 HKg
Material of Tunnel shafts Steel	Identification Marks on Do. 139 HKg Material of Screw shafts Steel Identification Marks on Do. 140 HKg
Material of Steam Pipes Solid drawn copper	Test pressure 400 lbs.
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 workmanship is good and it is recommended that the vessel be classed with Lloyd's Machinery Certificate and the record of **L.M.C. 5,1919** be made in the Register Book. *

Donkey boiler made by The Freeman Manufacturing Co. Racine, Wis. U.S.A. Cert. No. 53 installed on this vessel.

Safety valves of donkey boiler adjusted to blow at 105 lbs. satisfactorily. Thickness of washers Port 9/16", Starboard 9/16". Fitted with easing gear. Safety valve one double spring loaded, 2 1/4" Area 7.95 sq. each.

IDENTIFICATION MARKS ON BOILERS

DONKEY BOILER

No. 68 HKg.
LLOYD'S TEST
360 lbs.
5-4-19
J.L.

No. 69 HKg.
LLOYD'S TEST
360 lbs.
5-4-19
J.L.

No. 53
LLOYD'S TEST
200 lbs.
24-10-18
W. L.

It is submitted that this vessel is eligible for THE RECORD + LMC 5.19
Roll
7/8/19
ARR

The amount of Entry Fee ...	\$ 27.00	When applied for,
Special ...	\$ 439.00	2/6 19 19
Donkey Boiler Fee ...	\$ 50.00	When received,
Electric Light ...	\$ 50.00	4/6 19 19
Travelling Expenses (if any)	\$ 200.00	

W. Morrison for self & Jno. Lamb
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. AUG. 12. 1919
Assigned + Lmc 5.19



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

ORIGINAL CERTIFICATE DESTROYED