

REPORT ON MACHINERY.

No. 2721.

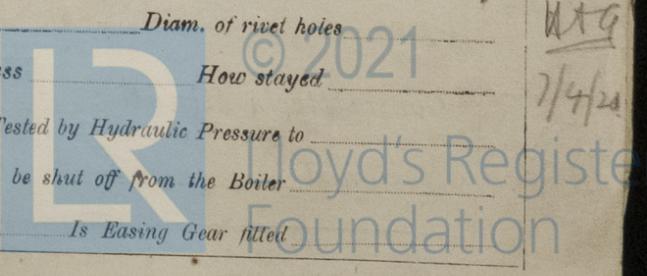
Date of writing Report Feb 12th 1920 When handed in at Local Office Kobe Port of Kobe
 No. in Survey held at Kobe Date, First Survey Aug. 13th 1919 Last Survey Jan. 26th 1920
 Reg. Bool. on the Steel Single Screw Steamer "HOLLAND MARU" (Number of Visits 47)
 Master M. KINOSHITA Built at Kobe By whom built Kawasaki Dockyard Co. Ltd. Gross 5869.86
 Engines made at Kobe By whom made Kawasaki Dockyard Co. Ltd. when made 1920 Net 4268.26
 Boilers made at do By whom made do when made 1920
 Registered Horse Power _____ Owners The Kawasaki Kisen Kaishiki Port belonging to Kobe
 Nom. Horse Power as per Section 28 440 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders Three No. of Cranks 3
 Dia. of Cylinders 26: 43 1/2: 72 Length of Stroke 48" Revs. per minute 70 Dia. of Screw shaft as per rule 15.41 Material of steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube No Linner 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 Yes If two liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5' - 5 1/4"
 Dia. of Tunnel shaft as per rule 13.48 Dia. of Crank shaft journals as per rule 14.15 Dia. of Crank pin 14 3/4" Size of Crank webs 2 1/2" x 20 1/8" Dia. of thrust shaft under collars 14 3/8" Dia. of screw 17' - 6" Pitch of Screw 19' - 0" Mean No. of Blades 4 State whether moveable Yes Total surface 100 sq. ft.
 No. of Feed pumps One Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work Yes (with Weir's feed)
 No. of Bilge pumps Two Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines Three Sizes of Pumps Weir's Feed 9 1/2" x 7" x 24" two No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room Three 3 1/2" Ballast 10" x 11" x 12" dupl. Gen. Sew. 7 1/2" x 5" x 6" dupl. Donkey 5 1/2" x 3 1/2" x 9" dupl. Holds, &c. No. 1, 3 + 4 Hold each two 3 1/2"
One 3 1/2" to tunnel well No. 2 Hold two 4"
 No. of Bilge Injections 1 sizes 9" Connected to condenser, or to circulating pump Yes Is a separate Donkey Suction fitted in Engine room & size Yes 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 Larger Valves Smaller Cocks
 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 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 None How are they protected Yes
 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 Up. platform of Eng. Rm

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Illinois Steel Co., Carnegie Steel Co., Am. Spiral Co.
2304-5 (2252 x 2 + 1132 (Aux. Blv.)) (Summaces)
 Total Heating Surface of Boilers 56360 Is Forced Draft fitted Yes No. and Description of Boilers Two S. & Aux. S. &
 Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 27-11-19, 1-12-19 No. of Certificate No. 1, 2
 Can each boiler be worked separately Yes Area of fire grate in each boiler 60 1/2 sq. ft. No. and Description of Safety Valves to each boiler Two Spring loaded Area of each valve 3 3/4" dia. Pressure to which they are adjusted 205 lbs. Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 14' - 6" Length 12' - 0" Material of shell plates steel
 Thickness 1 5/16" Range of tensile strength 2678 to 32600 Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Ends Doub.
 Long. seams Double straps Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 8 3/4" + 4 3/8" Lap of plates or width of butt straps 19 5/8" x 1 1/4"
 Percentages of strength of longitudinal joint 95.84 Working pressure of shell by rules 201 lbs. Size of manhole in shell 16" x 12"
 Description of compensating ring (1 1/2" + flange) 1 3/8" No. and Description of Furnaces in each boiler 3 Morrison's Material steel Outside diameter 48 1/4"
 Length of plain part top Thickness of plates bottom 2 1/32" Description of longitudinal joint Weld No. of strengthening rings Suspension
 Working pressure of furnace by the rules 221 lbs. Combustion chamber plates: Material steel Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 7/8"
 Pitch of stays to ditto: Sides 8 5/8" x 8 1/2" Back 8 1/2" x 9" Top 8 1/2" x 9 3/8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 203 lbs.
 Material of stays Steel Area at smallest part 2.10" Area supported by each stay 8 1/2" x 9 3/8" Working pressure by rules 230 lbs. End plates in steam space: Material Steel Thickness 1 5/16" Pitch of stays 19 3/4" x 20 1/2" How are stays secured Doub. nuts + small washers Working pressure by rules 202 lbs. Material of stays steel
 Area at smallest part 10" Area supported by each stay 19 3/4" x 20 1/2" Working pressure by rules 260 lbs. Material of Front plates at bottom steel
 Thickness 1 3/16" Material of Lower back plate steel Thickness 3/4" Greatest pitch of stays 13 1/2" at wide Working pressure of plate by rules 232 lbs
 Diameter of tubes 3 1/4" Pitch of tubes 4 1/16" x 4 5/16" Material of tube plates steel Thickness: Front 1" Back 1 3/16" Mean pitch of stays 8 3/4"
 Pitch across wide water spaces 13 3/4" + 5/8" (doub.) Working pressures by rules 240 lbs. Girders to Chamber tops: Material steel Depth and thickness of girder at centre 10 3/4" + 1 3/16" (2) Length as per rule 34 1/2" Distance apart 9 3/8" Number and pitch of stays in each 3 @ 8 1/2"
 Working pressure by rules 220 lbs. Steam dome: description of joint to shell None % of strength of joint _____
 Material _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____
 Material of rivets _____ Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

SUPERHEATER. Type Yes Date of Approval of Plan _____ Tested by Hydraulic Pressure to _____
 Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler _____
 Material of Safety Valve _____ Pressure to which each is adjusted _____ Is Easing Gear fitted _____

L100-426500-126500



AUXILIARY IS A ~~DOWN~~ BOILER FITTED? *yes*

If so, is a report now forwarded? *yes*

SPARE GEAR. State the articles supplied :-

Four Main bearing bolts + nuts. Set packing rings + springs each piston. Centrifugal pump
 Two Crank pin bolts + nuts. Set junk ring bolts + nuts. Impeller + shaft + nut
 Two Crosshead bolts + nuts. 1 Set of packing for each piston rods + valve rods. A.P. rod + nut.
 Set coupling bolts + nuts. Propeller shaft with nut. 3 Safety valve spring
 Set Feed + Bilge pump valves. 1 Feed check valve + Seat. Cond. + Blr. tubes etc
 Assorted bolts, nuts + iron. Slide valve spindle each size. 1 Set A.P. Head valve

The foregoing is a correct description,

Kawasaki Dockyard Co., Ltd.

Per *J. Ota Kano* Manufacturer. Secretary.

Dates of Survey while building
 During progress of work in shops - - - } 1919 Aug. 13, 25; Sept. 10, 11; Oct. 7, 8, 11, 14, 15, 18, 20, 22, 27, 29, 30; Nov. 4, 5, 6, 7, 10, 11, 13, 15, 17, 18, 20, 22, 24, 26
 During erection on board vessel - - - } 1920 Dec. 1, 2, 4, 8, 10, 11, 12, 17, 27; Jan. 7, 12, 17, 20, 22, 23, 26
 Total No. of visits 47

Is the approved plan of main boiler forwarded herewith *yes*

Dates of Examination of principal parts - Cylinders 11-11-19 Slides 10-12-19 Covers 29-11-19 Pistons 18-11-19 Rods 8-12-19
 Connecting rods 18-11-19 Crank shaft 4-11-19 Thrust shaft 13-11-19 Tunnel shafts 17-11-19 Screw shaft 30-10-19 Propeller 24-11-19
 Stern tube 18-11-19 Steam pipes tested 20-11-19 Engine and boiler seatings 4-12-19 Engines holding down bolts 27-12-19
 Completion of pumping arrangements 20-1-20 Boilers fixed 27-12-19 Engines tried under steam 22-1-20 Overhaul 23-1-20
 Completion of fitting sea connections 1-12-19 Stern tube 20-11-19 Screw shaft and propeller 26-11-19 7" x 8"
 Main boiler safety valves adjusted 27-12-19 Thickness of adjusting washers Locknuts (Sealed) by Government Surveyors
 Material of Crank shaft *F. Steel* Identification Mark on Do. *LLOYDS 4-11-19 W.L.R.* Material of Thrust shaft *F. Steel* Identification Mark on Do. *LLOYDS 17-11-19 W.L.R.*
 Material of Tunnel shafts *F. Steel* Identification Marks on Do. *LLOYDS 17-11-19 W.L.R.* Material of Screw shafts *F. Steel* Identification Marks on Do. *Working 8-11-19 LLOYDS 30-10-19 W.L.R.*
 Material of Steam Pipes *S.D. Steel* Test pressure 600 lbs.

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

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

- S.S. WAR QUEEN Rpt. No. 20
- S.S. NAPLES MARU " " 25
- S.S. PORTSAID MARU " " 25
- S.S. ITALY MARU " " 26
- S.S. FRANCE MARU " " 26
- S.S. ENGLAND MARU " " 26
- S.S. SPAIN MARU " " 26
- S.S. DENMARK MARU " " 27

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this vessel has been made and fitted under Special Survey in accordance with the requirements of the Rules and the workmanship + materials are good.
 The vessel is eligible in our opinion for the notation

⊕ L.M.C. 1-20.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 1-20.F.D.
 2.S.B. & 1 AUX. S.B. 200755

The amount of Entry Fee ... *Yen. 30.⁰⁰* : When applied for, *Jan 28th 1920*
 Special ... *735.⁰⁰* :
 Donkey Boiler Fee ... *Incl^d.* : When received, *Feb 2nd 1920*
 Travelling Expenses (if any) ... *15.⁰⁰* :

Alexander Watt
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. APR 9 1920

Assigned + L.M.C. 1.20 F.D.

CERTIFICATE WRITTEN

