

REPORT ON MACHINERY.

No. 3310.

Date of writing Report 12 April 1924 When handed in at Local Office Yokohama Received at London Office MON. 26 MAY. 1924
 No. in Survey held at Yokohama Date, First Survey 14 Feb 1924 Last Survey 14 Feb 1924
 Reg. Book. on the Steel Screw Steamer Fuki Maru (Number of Visits 26)
 Master Yokohama Built at Yokohama By whom built Ishikawajima Shipbldg & Engng Coy.
 Engines made at Ishikawajima By whom made Ishikawajima Shipbldg & Engng Coy. Tons Gross 5699.36 Net 3447.67
 Boilers made at do By whom made do when made 1924
 Registered Horse Power 513 Owners Hashimoto S. S. Coy. Port belonging to Kobe
 Nom. Horse Power as per Section 28 512.7 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

ENGINES, &c.—Description of Engines One Vert triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 26.43 1/2 Length of Stroke 48 Revs. per minute 88 Dia. of Screw shaft as per rule 14.9 Material of screw shaft Steel
 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 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 If two liners are fitted, is the shaft lapped or protected between the liners
 Dia. of Tunnel shaft as per rule 13.53 Dia. of Crank shaft journals as per rule 14.2 Length of stern bush 17' 5"
 Dia. of Crank pin 14 3/4 Size of Crank webs 57" x 27 1/2" Dia. of thrust shaft under collars 14 1/2 Dia. of screw 17-9 Pitch of Screw 19-0 No. of Blades 4 State whether moveable Total surface 99 sq ft
 No. of Feed pumps 2 Diameter of ditto 4 1/2 Stroke 24 Can one be overhauled while the other is at work
 No. of Bilge pumps 2 Diameter of ditto 4 1/2 Stroke 24 Can one be overhauled while the other is at work
 No. of Donkey Engines 2 Sizes of Pumps 7x5x7 & 9x12x10 No. and size of Suctions connected to both Bilge and Donkey pumps 2 independent feed pumps 10 1/2 x 8 x 18"
 In Engine Room 4 - 3 1/2" dia In Holds, &c. 10 @ 3 1/2" dia

No. of Bilge Injections 1 sizes 9" Connected to condenser to circulating pump Is a separate Donkey Suction fitted in Engine room & size yes see 2/18 etc. 9/18/24
 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 Both
 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 Above
 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 E.R. Top platform

OILERS, &c.—(Letter for record 358) Manufacturers of Steel 358
 Total Heating Surface of Boilers 7376.4 Is Forced Draft fitted No. and Description of Boilers 3 Single Ended
 Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Date of test Aug 1923 No. of Certificate
 Can each boiler be worked separately Area of fire grate in each boiler 58.2 No. and Description of Safety Valves to each boiler 2 Spring loaded Area of each valve 11.045 Pressure to which they are adjusted 200 lbs Are they fitted with easing gear
 Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 14-3" Length 11-6" Material of shell plates Steel
 Thickness 1 1/8 + 1/32 Range of tensile strength 28-32 Are the shell plates welded or flanged Descrip. of riveting: cir. seams DR
 Long. seams TRABS Diameter of rivet holes in long. seams 1 1/2 Pitch of rivets 10" Lap of plates or width of butt straps 22"
 Percentages of strength of longitudinal joint rivets 93.5% Working pressure of shell by rules 217 Size of manhole in shell 12 x 16
 plate 85% No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 3-8 5/8"
 Size of compensating ring 5" Description of longitudinal joint Need No. of strengthening rings
 Length of plain part top 218 Thickness of plates crown 204 bottom 8 Combustion chamber plates: Material Steel Thickness: Sides 1/16 + 1/64 Back 1/16 Top 1/16 + 1/64 Bottom 15/16
 Working pressure of furnace by the rules 218 Working pressure by rules 228 End plates in steam space:
 Pitch of stays to ditto: Sides 10 1/2 x 7 1/2 Back 8 1/2 x 8 1/8 Top 9 1/4 x 8 If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 228
 Material of stays Steel Area at smallest part 20 Area supported by each stay 78.8 Working pressure by rules 228 End plates in steam space:
 Material Steel Thickness 1 3/16 Pitch of stays 1-7 x 1-4 1/2 How are stays secured DN & W Working pressure by rules 207 Material of stays Steel
 Area at smallest part 7.67 Area supported by each stay 314 Working pressure by rules 252 Material of Front plates at bottom Steel
 Thickness 3/4 Material of Lower back plate Steel Thickness 3/4 Greatest pitch of stays 9 1/4 Working pressure of plate by rules 312
 Diameter of tubes 3" Ex Pitch of tubes 4 1/4 x 4 1/8 Material of tube plates Steel Thickness: Front 3/4 Back 3/4 Mean pitch of stays 4 1/4
 Pitch across wide water spaces 13 1/2 Working pressures by rules 225 Girders to Chamber tops: Material Steel Depth and
 Thickness of girder at centre 9 x 7 1/8 Length as per rule 29 13/16 Distance apart 8" Number and pitch of stays in each 2-9 1/4
 Working pressure by rules 306 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 _____



W649-0119

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— One set of piston packing rings. One slide valve spindle
 One set eccentric rods. 11 joint ring bolts. Connecting rod top & bottom end bolts. Set of main bearing brasses
 Main bearing bolts & nuts. 53 Condenser tubes. 59 Condenser ferrules. 1 Air pump rod
 1/2 set air pump valves. 1 impeller. 1 impeller shaft. Feed pump valve seat.
 Feed check valve & spindle. 1 set bilge pump valves & seat. Safety valves springs 3.
 58 fire bars. 12 water gauge glasses. 2 tube expanders. Tube stopper 2. Steel plate & base
 assorted. Assorted bolts & nuts. 1 set. Coupling bolts.

The foregoing is a correct description,

K. Sacks

Manufacturer.

Dates of Survey while building	During progress of work in shops --	1922. June 28 Oct 9. Nov 14. 16 Dec 22.	1923 Jan 23
		March 16. 29. April 12. 17. 24. May 2. 24. 29. June 14. July 1.	July 1.
Total No. of visits	During erection on board vessel ---	Nov 14. 15. 16 Dec 8. 1924. Jan 8. 11. 17. 24. Feb 4. 11.	Is the approved plan of main boiler forwarded herewith <input checked="" type="checkbox"/>
		26. Visits.	" " " donkey " " " <input checked="" type="checkbox"/>

Dates of Examination of principal parts—	Cylinders <input checked="" type="checkbox"/>	Slides <input checked="" type="checkbox"/>	Covers <input checked="" type="checkbox"/>	Pistons <input checked="" type="checkbox"/>	Rods <input checked="" type="checkbox"/>	
Connecting rods	<input checked="" type="checkbox"/>	Crank shaft <input checked="" type="checkbox"/>	Thrust shaft <input checked="" type="checkbox"/>	Tunnel shafts <input checked="" type="checkbox"/>	Screw shaft <input checked="" type="checkbox"/>	Propeller <input checked="" type="checkbox"/>
Stern tube	<input checked="" type="checkbox"/>	Steam pipes tested <input checked="" type="checkbox"/>	Engine and boiler seatings <input checked="" type="checkbox"/>	Engines holding down bolts <input checked="" type="checkbox"/>		
Completion of pumping arrangements	4 th Febry	Boilers fixed <input checked="" type="checkbox"/>	Engines tried under steam	4 th Febry		
Completion of fitting sea connections	<input checked="" type="checkbox"/>	Stern tube <input checked="" type="checkbox"/>	Screw shaft and propeller	<input checked="" type="checkbox"/>		
Main boiler safety valves adjusted	29 th Janry.	Thickness of adjusting washers <input checked="" type="checkbox"/>				
Material of Crank shaft	Steel	Identification Mark on Do.	Material of Thrust shaft	Steel	Identification Mark on Do.	
Material of Tunnel shafts	Steel	Identification Marks on Do.	Material of Screw shafts	Steel	Identification Marks on Do.	
Material of Steam Pipes	Steel	<input checked="" type="checkbox"/>	Test pressure	400 lb	600 lb?	
Is an installation fitted for burning oil fuel	<input checked="" type="checkbox"/>		Is the flash point of the oil to be used over 150° F.	<input checked="" type="checkbox"/>		

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 Ishikawajima No 330 Kori.

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

The machinery of this vessel has been built in accordance with the requirements of the Rules and the materials and workmanship have been found good. The machinery is eligible in my opinion to have the record of +2 MC 2.24.

It is submitted that this vessel is eligible for THE RECORD. + LMC 2.24. FD. CL.

[Signature] 20/5/24
 Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee ... £ 60.
 Special ... £ 15/10.
 Donkey Boiler Fee ... £
 Travelling Expenses (if any) £ 78.
 Committee's Minute TUE JUN. 3 1924
 Assigned + LMC 2.24
 F.D. C.L.