

REPORT ON MACHINERY.

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No. in Survey held at Kobe Date, First Survey 23 Aug 1917 Last Survey 24 August 1918

Reg. Book. on the Steel Single Screw Steamer "Kofuku Maru" (Number of Visits) Gross 5860 Tons

Master Built at Kobe By whom built Kawasaki Dockyard Co Ltd When built 1918

Engines made at Kobe By whom made The Kawasaki Dockyard Co Ltd when made 1918

Boilers made at do By whom made do when made do

Registered Horse Power Owners The Kawasaki Dockyard Co Ltd Port belonging to Kobe

Nom. Horse Power as per Section 28 4140 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 Three

Dia. of Cylinders 26" 43 1/2" 72" Length of Stroke 48 Revs. per minute 70 Dia. of Screw shaft as per rule 13.41 as fitted 16" Material of screw shaft Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube No liner 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 Length of stern bush 5' 5 1/4"

Dia. of Tunnel shaft as per rule 13.48 as fitted 13 3/4" Dia. of Crank shaft journals as per rule 14.15 as fitted 14 3/8" Dia. of Crank pin 14 3/4" Size of Crank webs 9 1/2" x 26" Dia. of thrust shaft under

collars 14 3/8" Dia. of screw 17" 6" Pitch of Screw 49" 0" No. of Blades 4 State whether moveable Yes Total surface 100" 0"

To. of Feed pumps One Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work Yes (Weir's feed)

To. of Bilge pumps Two Diameter of ditto 5" Stroke 24" Can one be overhauled while the other is at work Yes

To. of Donkey Engines Three Sizes of Pumps Bal. 10-11-12 duplex No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room Three 3 1/2" + one 3 1/2" to tunnel well. Weir 9 1/2" 7" 24 two Gen. serv. 4 1/2" 5.6 duplex In Holds, &c. Nos. 1, 3 & 4 holds, two 3 1/2" to each No. 2, two 4"

To. of Bilge Injections 1 sizes 9" Connected to condenser, or to circulating pump No 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 Yes

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

How are they protected None How are they protected

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 Gratings of Eng Room

MANUFACTURERS, &c.—(Letter for record S) Manufacturers of Steel Illinois Steel Co. Carnegie Steel Co. Leeds Forge

Total Heating Surface of Boilers 5741 sq ft Is Forced Draft fitted Yes No. and Description of Boilers Two S.E. & One A.W.S.E.

Working Pressure 200 lbs Tested by hydraulic pressure to 400 lbs Dates of test 13 & 21 May No. of Certificate 400 LBS LLOYD'S TEST 13/5/18 21/5/18 ALJ R

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

Least distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 14" 6" Length 12" 0" Material of shell plates Steel

Range of tensile strength 29-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. seams Doubt riv.

seams Doubt shape Diameter of rivet holes in long. seams 1 3/8" Pitch of rivets 8 3/4" 14 3/8" Edges of plates or width of butt straps 19 5/8"

Percentages of strength of longitudinal joint rivets 95.8 Working pressure of shell by rules 209 lbs Size of manhole in shell 16" x 12"

Compensating ring (7 1/2" + flange) 1 5/16" No. and Description of Furnaces in each boiler Three Morrison Material Steel Outside diameter 48 1/4"

Thickness of plain part top 5/8" bottom 5/8" Description of longitudinal joint Weld No. of strengthening rings

Working pressure of furnace by the rules 208 lbs Combustion chamber plates: Material Steel Thickness: Sides 1 1/16" Back 1 1/16" Top 1 1/16" Bottom 7/8"

of stays to ditto: Sides 8 5/8" 8 1/2" Back 9" 8 1/2" Top 9 3/8" 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 203 lbs

Area of stays Steel Area at smallest part 2.10 sq ft Area supported by each stay 9 3/8" x 8 1/2" Working pressure by rules 230 lbs End plates in steam space:

at smallest part 10" 0" Thickness 1 5/16" Pitch of stays 19 3/4" 20 1/2" How are stays secured Doubt nuts + small washers Working pressure by rules 201 lbs Material of stays Steel

Material of Lower back plate Steel Thickness 3/4" Greatest pitch of stays 13 1/2" at wide water space Doubt 3/4" Working pressure of plate by rules 200 lbs

of tubes 3 1/4" Pitch of tubes 4 7/8" 4 5/16" Material of tube plates Steel Thickness: Front 13/16" Back 13/16" Mean pitch of stays 8 3/4"

across wide water spaces 13 3/4" Working pressures by rules 200 lbs Girders to Chamber tops: Material Steel Depth and

of girder at centre 10 1/2" x 13" (two) 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 230 lbs Steam dome: description of joint to shell % of strength of joint

Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Working pressure of shell by rules Crown plates Thickness How stayed

HEATER. Type Schmidt Date of Approval of Plan Tested by Hydraulic Pressure to 600 lbs

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler Yes

of Safety Valve 3" Pressure to which each is adjusted 205 lbs Is Easing Gear fitted No

