

REPORT ON MACHINERY.

No. 2662.

Received at London Office

FRI. JUL. 23 1920

Report 8-6-19 20 When handed in at Local Office

Port of YOKOHAMA

Survey held at YOKOHAMA

Date, First Survey 14-8-19

Last Survey 25th May, 19 20

(Number of Visits 39)

the Steel S.S. "Kinno Maru"

Gross 3825.73

Net 2336.27

When built 1920.

Built at Yokohama

By whom built Yokohama Dock Co., Ltd

Surveyed at Yokohama

By whom made Yokohama Dock Co., Ltd

when made 1920.

Surveyed at Yokohama

By whom made Yokohama Dock Co., Ltd

when made 1920.

Horse Power

Owners Furukawa & Co

Port belonging to YOKOHAMA

Power as per Section 28 343

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

Engines, &c.—Description of Engines

Triple reciprocating

No. of Cylinders 3

No. of Cranks 3

Dimensions 23 x 38 x 64

Length of Stroke 48

Revs. per minute 84

Dia. of Screw shaft as per rule 13.71

Material of S

shaft fitted with a continuous liner the whole length of the stern tube Yes

Is the after end of the liner made water tight

Miller boss Yes If the liner is in more than one length are the joints burned XX

If the liner does not fit tightly at the part

bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive XX

If two

liners, is the shaft lapped or protected between the liners XX

Length of stern bush 65"

Dia. of shaft as per rule 12.47

Dia. of Crank shaft journals as per rule 13.09

as fitted 13.5

Dia. of Crank pin 14

Size of Crank webs 8 1/2 x 25 1/2 x 39 1/2

Dia. of thrust shaft under

Dia. of screw 16'-6" Pitch of Screw 17'-3"

No. of Blades 4

State whether moveable Yes

Total surface 80

Pumps 2

Diameter of ditto 4 1/2

Stroke 24

Can one be overhauled while the other is at work Yes

Yes

Pumps 2

Diameter of ditto 4 1/2

Stroke 24

Can one be overhauled while the other is at work Yes

Yes

Engines 4

Sizes of Pumps 2-8 x 6 x 7 1/2

1-7 x 5 x 17 1/2

1-9 x 12 x 10

No. and size of Suctions connected to both Bilge and Donkey pumps

Room and Poiler room 3 - 3 1/2

In Holds, &c. F.P. 1-3", No 1 Hold 2-3 1/2, No 2 Hold 2-3 1/2,

No 3 Hold 2-3 1/2, No 4 Hold 2-3 1/2, T.W. 1-2 1/2, A.P. 1-2 1/2.

Injections 1 sizes 8

Connected to condenser, or to circulating pump Yes

Is a separate Donkey Suction fitted in Engine room & size 1-2 1/2

Are the suction pipes fitted with roses Yes

Are the roses in Engine room always accessible Yes

Are the sluices on Engine room bulkheads always accessible X

Are the connections with the sea direct on the skin of the ship Yes

Are they Valves or Cocks Both

Are they 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 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

Are they carried through the bunkers XX

How are they protected XX

Are the valves, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

Are the Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Is the Shaft Tunnel watertight Yes

Is it fitted with a watertight door Yes

Is it worked from Top Engine room

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

2 S B.

Working Surface of Boilers 4414.4

Is Forced Draft fitted Yes

No. and Description of Boilers 2 Scotch Marine type

2 Scotch Marine type

Working pressure 200

Tested by hydraulic pressure to 400

Date of test 26-3-20

No. of Certificate 108

Can they be worked separately Yes

Area of fire grate in each boiler 52.8

No. and Description of Safety Valves to

2 Spring loaded

Area of each valve 9.6

Pressure to which they are adjusted 200

Are they fitted with easing gear Yes

Yes

Are there any spaces between boilers or uptakes and bunkers or woodwork XX

Mean dia. of boilers 14'-1 5/8"

Length 11'-9 1/2"

Material of shell plates S

Range of tensile strength 26 to 32 Tons

Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams D.R.L.

D.R.D.E.S. Diameter of rivet holes in long. seams 1 3/8"

Pitch of rivets 9 1/2"

Lap of plates or width of butt straps 20 1/2"

Working pressure of shell by rules 201.9

Size of manhole in shell 16 x 12

Working pressure of longitudinal joint rivets 88.25

plate 85.5

Working pressure of shell by rules 201.9

Size of manhole in shell 16 x 12

Size of manhole in shell 16 x 12

Is there a reinforcing ring X

No. and Description of Furnaces in each boiler 3 Morison

Material S

Outside diameter 40 5/8"

Is the plain part top X

Thickness of plates crown 9/16

Description of longitudinal joint Welded

No. of strengthening rings X

Working pressure of furnace by the rules 216.9

Combustion chamber plates: Material S

Thickness: Sides 3/4"

Back 3/4" Top 3/4" Bottom 15/16"

Pitch of stays to ditto: Sides 10 1/8 x 8

Back 10 1/8 x 9

Top 9 1/4 x 8

If stays are fitted with nuts or riveted heads D. Nuts

Working pressure by rules 236

Material of stays S

Area at smallest part 207

Area supported by each stay 82.25

Working pressure by rules 226.6

End plates in steam space:

Material S

Area at smallest part 7.6

Area supported by each stay 360

Working pressure by rules 217

Material of Front plates at bottom S

Thickness 31/32

Material of Lower back plate S

Thickness 31/32

Greatest pitch of stays 13 1/2"

Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2"

Material of tube plates S

Thickness: Front 31/32

Back 27/32

Mean pitch of stays 9

Pitch across wide water spaces 13 3/4"

Working pressures by rules 203

Thickness of girder at centre 11 x 1 1/2"

Length as per rule 36

Distance apart 9 3/4"

Number and pitch of stays in each 3 at 8

Working pressure by rules 229.6

Steam dome: description of joint to shell XX

% of strength of joint XX

Diameter XX

Thickness of shell plates XX

Material XX

Description of longitudinal joint XX

Diam. of rivet holes XX

Pitch of rivets XX

Working pressure of shell by rules XX

Crown plates XX

Thickness XX

How stayed XX

PERHEATER. Type XX

Date of Approval of Plan XX

Tested by Hydraulic Pressure to XX

Date of Test XX

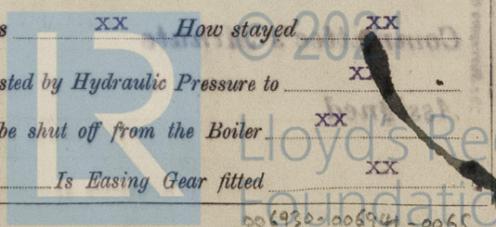
Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler XX

Diameter of Safety Valve XX

Pressure to which each is adjusted XX

Is Easing Gear fitted XX

Is Easing Gear fitted XX



REPORT ON MACHINERY

IS A DONKEY BOILER FITTED? No Yes If so, is a report now forwarded? Yes No

SPARE GEAR. State the articles supplied:— 2 Each connecting rod top & bottom and bolts and nuts, 2 main bearing bolts, 1 set coupling bolts, 1 set feed and bilge pump valves, 1 set each H.P. I.P.L.P. piston rings, 2 propeller blades, 1 air pump rod, 1 circulating pump rod, 2 safety valve springs, 1 set air pump valves, 1 complete set valve springs, 1 seat for feed pump, a quantity of assorted bolts and nuts, 1/30 of whole number condenser tubes, a quantity of iron

The foregoing is a correct description,

Tanataro, Sipi Manufacturer.

Dates of Survey while building: During progress of work in shops -- Aug 14, Sept 30, Oct 1, 15, Nov 25, Dec 16, 18, 26, Jan 7, 9, 10, 13, 15, 20, 22, 23, 31; During erection on board vessel -- 3, 4, 9, 10, 13, Mar 5, 11, 25, 27, Apr 7, 11, 16, 21, 30, May 4, 7, 10, 17, 20, 22, 25. Total No. of visits 39.

Dates of Examination of principal parts: Cylinders 13-4-20, Slides 13-4-20, Covers 19-4-20, Pistons 4-5-20, Rods 4-5-20, Connecting rods Crank shaft 11-4-20, Thrust shaft 11-4-20, Tunnel shafts 11-4-20, Screw shaft 30-4-20, Propeller 30-4-20, Stern tube 11-4-20, Steam pipes tested 19-4-20, Engine and boiler seatings 21-4-20, Engines holding down bolts 20-5-20, Completion of pumping arrangements 20-5-20, Boilers fixed 17-5-20, Engines tried under steam 22-5-20, Completion of fitting sea connections 20-5-20, Stern tube 20-5-20, Screw shaft and propeller 20-5-20, Main boiler safety valves adjusted 17-5-20, Thickness of adjusting washers, Lock nuts, Material of Crank shaft S, Identification Mark on Do. A, Material of Thrust shaft Steel, Identification Mark on Do. A, Material of Tunnel shafts S, Identification Marks on Do. A, Material of Screw shafts Steel, Identification Marks on Do. A, Material of Steam Pipes Copper, Test pressure 400, 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 Yes, Is this machinery duplicate of a previous case Yes, If so, state name of vessel Shin-I Maru Rpt No. 2632.

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery and boilers of this vessel were constructed under special survey of materials tested to Rules requirements and workmanship was found sound throughout, On completion the machinery was thoroughly tested under working conditions with satisfactory results, In my opinion the machinery is eligible to be classed

Register Book L M C 5-20.
Electric Light fitted.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 5-20 F.D.
JUD 27/7/20

The amount of Entry Fee **YEN 30.00** : When applied for, Special **YEN 650.00** : 25-5-19-20, Donkey Boiler Fee **£** : When received, Travelling Expenses (if any) **£ 15.00** : 28-5-19-20

Committee's Minute **FRI. JUL 30 1920**
Assigned *L.M.C. 5-20 F.D.*



Certificate (if required) to be sent to YOKOHAMA

CERTIFICATE WRITTEN