

EB. 24. 1916

Date of writing Report 5th Jan'y 1916 When handed in at Local Office

Port of Kobe

No. in Survey held at
Reg. Book.

Osaka

Date, First Survey

Last Survey 30th Decem. 1915

on the Steel Single Screw Steamer "Jensho Maru"

(Number of Voids)

Master S. Tanaka Built at Osaka

By whom built The Osaka Iron Works, Ltd

Gross 3185
Net 3004

When built 1915-12

Engines made at Osaka

By whom made The Osaka Iron Works, Ltd.

when made 1915

Boilers made at do

By whom made do

when made do

Registered Horse Power

Owners Hankyo Kisen Kabushiki Kaisha Port belonging to Ushio

Nom. Horse Power as per Section 28 288

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 22" 34" 61"

Length of Stroke 42"

Revs. per minute 70

Dia. of Screw shaft

as per rule 12.8

Material of

as fitted 13" screw shaft

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

in the propeller boss Yes If the liner is in more than one length are the joints burned One length 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 Tightly fitted If two

liners are fitted, is the shaft lapped or protected between the liners

Length of stern bush 4' 8 3/4"

Dia. of Tunnel shaft as per rule 11.2

as fitted 11 3/8"

Dia. of Crank shaft journals as per rule 11.77

as fitted 12"

Dia. of Crank pin 12"

Size of Crank webs 7 3/8 x 23

Dia. of thrust shaft under

collars 12"

Dia. of screw 16" 0"

Pitch of Screw 16" 0"

No. of Blades 4

State whether moveable No

Total surface 73 1/2

No. of Feed pumps Two

Diameter of ditto 3 1/4"

Stroke 24"

Can one be overhauled while the other is at work Yes

No. of Bilge pumps Two

Diameter of ditto 3 1/2"

Stroke 24"

Can one be overhauled while the other is at work Yes

No. of Donkey Engines Two

Sizes of Pumps Bal. 7 x 8 1/2 x 9 Dup.

Gen. 4 x 6 x 6

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

In Engine Room Two 3" x 1/2" in Boiler room Two 3"

In Holds, &c. Two 3" in each hold. After web 3 1/2"

Tunnel well 2 1/2"

No. of Bilge Injections 1 size 4"

Connected to condenser, or to circulating pump As p.

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 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

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

Dates of examination of completion of fitting of Sea Connections 26. 11. 15

of Stern Tube 26. 11. 15

Screw shaft and Propeller 29. 11. 15

Is the Screw Shaft Tunnel watertight Yes

Is it fitted with a watertight door Yes

worked from Upper grating in Eng. Rm

BOILERS, &c.—(Letter for record S) Manufacturers of Steel Parkhead & Leeds Forge.

Total Heating Surface of Boilers 3824

Is Forced Draft fitted Yes

No. and Description of Boilers Two Single ended

Working Pressure 180 lbs

Tested by hydraulic pressure to 360 lbs

Date of test 19. 11. 15

No. of Certificate B 19. 11. 15 A.L.J

Can each boiler be worked separately Yes

Area of fire grate in each boiler 45

No. and Description of Safety Valves to

each boiler Two, Spring loaded Area of each valve 3 1/2" dia Pressure to which they are adjusted 185 lbs

Smallest distance between boilers or uptakes and bunkers or woodwork 10"

Mean dia. of boilers 13" 6"

Length 11" 6"

Material of shell plates Steel

Thickness 1 3/32"

Range of tensile strength 28 3/4 to 32

Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Double

long. seams 4 riv. riv. Diameter of rivet holes in long. seams 1 3/16"

Pitch of rivets 8 1/8" x 1 1/4"

Gap of plates or width of butt straps 1 3/4 x 1"

Straps

rivets 92.9 x 88.5 count

Working pressure of shell by rules 184 lbs

Size of manhole in shell 12 x 16 in end plate

Per centages of strength of longitudinal joint plate 85.46 x 86.4 in strap

Size of compensating ring Flanged end pl.

No. and Description of Furnaces in each boiler 3 Deighton's

Material Steel

Outside diameter 40 1/2"

Length of plain part top 12" bottom 12"

Working pressure of furnace by the rules 187 lbs

Combustion chamber plates: Material Steel

Thickness: Sides 23/32"

Back 23/32"

Top 23/32"

Bottom 7/8"

Pitch of stays to ditto: Sides 9" x 10"

Back 8 3/4" x 10"

Top 9" x 10 1/2"

If stays are fitted with nuts or riveted heads Nuts

Working pressure by rules 187 lbs

Material of stays Steel

Diameter at smallest part 2.1"

Area supported by each stay 94 1/2"

Material Steel

Thickness 1 3/8"

Pitch of stays 25" x 19"

How are stays secured Nut. Nuts

Working pressure by rules 181 lbs

Material of stays Steel

Diameter at smallest part 3 1/4"

Area supported by each stay 25" x 19"

Working pressure by rules 180 lbs

Material of Front plates at bottom Steel

Thickness 1"

Material of Lower back plate Steel

Thickness 15/16"

Greatest pitch of stays 14"

Working pressure of plate by rules 180 lbs

Diameter of tubes 3"

Pitch of tubes 4 3/8" x 4 1/4"

Material of tube plates Steel

Thickness: Front 1"

Back 13/16"

Mean pitch of stays 10 1/2"

Pitch across wide water spaces 14"

Working pressures by rules 180 lbs.

Girders to Chamber tops: Material Steel

Depth and

thickness of girder at centre 9 1/2" x 13

Length as per rule 32"

Distance apart 10 1/2"

Number and pitch of stays in each 2 @ 9"

Working pressure by rules 202 lbs

Superheater or Steam chest; how connected to boiler

Can the superheater, &c. abut, off, and the boiler, worked

separately

Diameter

Length

Thickness of shell plates

Material

Description of longitudinal joint

Diam. of rivet

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If stiffened with rings

Distance between rings

Working pressure by rules

End plates: Thickness

How stayed

Working pressure of end plates

Area of safety valves to superheater

Are they fitted with easing gear

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W695-0038

Lloyd's Register

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IS A DONKEY BOILER FITTED? *No.*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 Crankhead bolts & nuts ✓ 2 crank pin bolts & nuts ✓
2 main bearing bolts & nuts ✓ Set coupling bolts & nuts ✓ Feed & brge pump valves ✓
Set piston springs ✓ Assorted bolts & nuts ✓ Iron of various sizes ✓

The foregoing is a correct description,

OSAKA IRON WORKS, LTD.

S. Yamaguchi

Manufacturer.

Dates of Survey while building { During progress of work in shops - - 17th April
During erection on board vessel - - 6th Dec to 30th Dec. 1915
Total No. of visits 30

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

Dates of Examination of principal parts—Cylinders 1/6/15 etc Slides 3/7/15 etc Covers 13/7/15 etc Pistons 13/7/15 etc Rods 3/7/15 etc
Connecting rods 13/7/15 etc Crank shaft 30/6/15 etc Thrust shaft 14/5/15 etc Tunnel shafts 14/5/15 etc Screw shaft 19/11/15 etc Propeller 19/11/15 etc
Stern tube 5/10/15 etc Steam pipes tested 17.12.15 Engine and boiler seatings 26.11.15 Engines holding down bolts 17.12.15 etc
Completion of pumping arrangements 17.12.15 Boilers fixed 6.12.15 Engines tried under steam 21.12.15
Main boiler safety valves adjusted 21.12.15 Thickness of adjusting washers 7/16 to 5/8
Material of Crank shaft *Steel* Identification Mark on Do. *LLOYDS* Material of Thrust shaft *Steel* Identification Mark on Do. *14.5.15*
Material of Tunnel shafts *Steel* Identification Marks on Do. *LLOYDS* Material of Screw shaft *Steel* Identification Marks on Do. *LLOYDS*
Material of Steam Pipes *Steel* Test pressure 540 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 *"Peking Maru" & "Nan Kung Maru"*

General Remarks (State quality of workmanship, opinions as to class, &c. *Osaka Iron Works S/S Nos 806 & 807*
Rehe Reports Nos 1498 & 1520

The machinery has been made & fitted under Special Survey in accordance with the requirements of the Rules & the workmanship has been found good.
The shafting has been made at The Rehe Steel Works & a copy of the Certificate issued is enclosed.

An Electric Lighting report is forwarded.

The machinery in my opinion renders the vessel eligible for the record
+ L.M.C. 12.15 in the Register.

Howden's system of forced draught is fitted.

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C 12.15 F.D.

The amount of Entry Fee ... *Yes* 20⁰⁰ When applied for, 27.12.1915
Special ... *Yes* 516⁰⁰
Donkey Boiler Fee ... £
Travelling Expenses (if any) £

Engineer-Surveyor to Lloyd's Register of British & Foreign Shipping.

Committee's Minute TUE. 7-MAR. 1916

Assigned

+ L.M.C 12.15 F.D.

MACHINERY CERTIFICATE
WRITTEN.



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