

REPORT ON MACHINERY

No. 1710

Received at London Office

JAN. 11 1916

of writing Report

When handed in at Local Office

19

Port of

Kobe

in Survey held at

Kobe

Date, First Survey

14 Jan

Last Survey

Oct 20 1915

Book.

on the Steel Single Screw Steamer "Kohoku Maru"

Number of Plates

30

Gross 2610

Net

ster

Built at

Kobe

By whom built

The Kawasaki Dockyard Co. Ltd.

When built

1915

ines made at

Kobe

By whom made

The Kawasaki Dockyard Co. Ltd.

when made

1915

lers made at

do

By whom made

do

when made

do

istered Horse Power

2122 I.H.P.

Owners

The Osaka Shosen Kaisha

Port belonging to

Osaka

Horae Power as per Section 28

267

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

GINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders

3

No. of Cranks

3

No. of Cylinders

20" 33 1/2" 57"

Length of Stroke

39"

Revs. per minute

85

Dia. of Screw shaft

as per rule 12 1/2"

Material of

Steel

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

No

Is the after end of the liner made water tight

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

If two

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

Yes

Length of stern bush

4' 8"

No. of Tunnel shaft

as per rule 10 1/4"

Dia. of Crank shaft journals

as per rule 11 1/4"

Dia. of Crank pin

11 1/2"

Size of Crank webs

21' 7 3/4"

Dia. of thrust shaft under

bars

ars 11 1/4"

Dia. of screw

14' 3"

Pitch of Screw

16' 10"

No. of Blades

4

State whether moveable

No

Total surface

75 sq. ft.

No. of Feed pumps

2

Diameter of ditto

3 1/4"

Stroke

19 1/2"

Can one be overhauled while the other is at work

Yes

No. of Bilge pumps

2

Diameter of ditto

3 1/4"

Stroke

19 1/2"

Can one be overhauled while the other is at work

Yes

No. of Donkey Engines

Three

Sizes of Pumps

Gen. br. 9 x 7 1/2 21 duplex

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

Ballast 1-7 3/8 x 10"

In Holds, &c.

Fore hold two 3"

Aft hold two 3"

Deep tank bilge two 3"

Engine Room

1-3 1/2" 2-3" 1 in stokehold

1-2 1/2" to tunnel well

of Bilge Injections

1

size 6"

Connected to condenser, or to circulating pump

Yes

Is a separate Donkey Suction fitted in Engine room & size

Yes 3 1/2"

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

all connections with the sea direct on the skin of the ship

Yes

Are they Valves or Cocks

Larger valves. Smaller cocks

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

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

at pipes are carried through the bunkers

None

How are they protected

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

Yes

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

Yes

tes of examination of completion of fitting of Sea Connections

17/8/15

of Stern Tube

2/8/15

Screw shaft and Propeller

13/8/15

the Screw Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from Upper platform of Eng. Rm.

TERS, &c.—(Letter for record

S)

Manufacturers of Steel

W. Beardmore

Steel Co. of Scot.

Lud. Ing.

Rheinische Stahlwerke

al Heating Surface of Boilers

3645

Is Forced Draft fitted

Yes

No. and Description of Boilers

Two Single Ended

orking Pressure

200 lbs

Tested by hydraulic pressure to

400 lbs

Date of test

2 13 Aug 15

No. of Certificate

Dated 13/8/15

each boiler be worked separately

Yes

Area of fire grate in each boiler

51

No. and Description of Safety Valves to

boiler

Two direct Springs

Area of each valve

3 1/2" dia.

allest distance between boilers or uptakes and bunkers or woodwork

1' 0"

Mean dia. of boilers

13' 0"

Length

11' 0"

Material of shell plates

Steel

ickness

1 1/4"

Range of tensile strength

28-32 tons

Are the shell plates welded or flanged

No

Descrip. of riveting: cir. seams

Butt riv.

seams

Hot riv. shop

Diameter of rivet holes in long. seams

1 5/16"

Pitch of rivets

8 5/16" 4 5/32"

Exp. of plates or width of butt straps

18" x 1 1/4"

centages of strength of longitudinal joint

96.6

Working pressure of shell by rules

212 lbs

Size of manhole in shell

16" x 12"

No. and Description of Furnaces in each boiler

3 Morrison

Material

Steel

Outside diameter

41 1/4"

of compensating ring

3' 1" x 2' 9" 1 3/8"

Thicknes of plates

9/16"

Description of longitudinal joint

Weld

No. of strengthening rings

7

Working pressure of furnace by the rules

213 lbs

Combustion chamber plates: Material

Steel

Thickness: Sides

h of stays to ditto: Sides

7 3/4" x 8 3/16"

Back

7 3/16" x 8 3/16"

Top

7 3/4" x 8 3/16"

If stays are fitted with nuts or riveted heads

Nuts

Working pressure by rules

208 lbs

Material of stays

Steel

Thickness

1 1/16"

Pitch of stays

aterial of stays

Steel

at smallest part

1' 9" 2' 1"

Area supported by each stay

63' x 80"

Working pressure by rules

236 lbs

End plates in steam space

Material

Steel

Thickness

1 1/16"

Pitch of stays

aterial of stays

Steel

at smallest part

6' 33"

Area supported by each stay

15 3/4" x 17 1/2"

Working pressure by rules

238 lbs

Material of Front plates at bottom

Steel

Thickness

3/4"

IS A DONKEY BOILER FITTED? No.

If so, is a report now forwarded? Yes

SPARE GEAR. State the articles supplied:— 2 Crank pin bolts. 2 crosshead bolts. 2 main bearing bolts. Set coupling bolts. Feed & bilge pump valves. Set piston rings. Assorted bolts & iron. Propeller shaft. Piston rod each size. Valve rod each size. Crank pin bushes. Air pump rod. 2 Springs for safety valves. Condenser tubes. Boiler tubes, etc. etc.

The foregoing is a correct description,
KAWASAKI DOCKYARD COMPANY, LTD.

J. Kawasumi Secretary Manufacturer.

Dates of Survey while building { During progress of work in shops - - 14 Jan to 26 Aug (launched)
During erection on board vessel - - - 27 Aug to 20 Oct 1915
Total No. of visits 30

Is the approved plan of main boiler forwarded herewith Yes

1915

Dates of Examination of principal parts—Cylinders 22/6 etc Slides 8/7 etc Covers 9/7 etc Pistons 16/6 etc Rods 22/6 etc
Connecting rods 22/6 etc Crank shaft 16/6 etc Thrust shaft 2/9 etc Tunnel shafts 17/8 etc Screw shaft 8/5 etc Propeller 13/8 etc
Stern tube 2/8 etc Steam pipes tested 18/9 Engine and boiler seatings 3/8 etc Engines holding down bolts 20/9
Completion of pumping arrangements 20/9 Boilers fixed 7/9 Engines tried under steam 2/10
Main boiler safety valves adjusted 2/10 Thickness of adjusting washers Starbd. Boiler F. 9/16 Port Boiler F. 3/4
Material of Crank shaft Steel Identification Mark on Do. LLOYDS 8/5/15 & 21/5/15 Material of Thrust shaft Steel Identification Mark on Do. LLOYDS 6/1/15
Material of Tunnel shafts Steel Identification Marks on Do. LLOYDS 27.3.15 Material of Screw shafts Steel Identification Marks on Do. LLOYDS 8/1/15
Material of Steam Pipes 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. Yes

Have the requirements of Section 49 of the Rules been complied with Yes

Is this machinery duplicate of a previous case No If so, state name of vessel

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

The machinery has been made & fitted under special survey in accordance with the requirements of the Rules & the workmanship has been found good throughout.

A report on the Electric Lighting is forwarded.

The shafting was made at the Kobe Steel Works. A copy of the Certificate was forwarded in May.

The machinery in my opinion renders the vessel eligible for the record + LMC 10.15 in the Register.

It is submitted that
this vessel is eligible for
THE RECORD + LMC 10.15. F.D.

The amount of Entry Fee ... Yen 20 : When applied for,
Special ... Yen 500 : 19.10.1915
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ : 12.11.1915

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

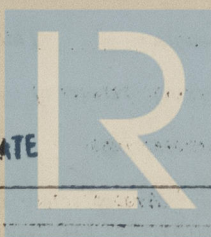
Committee's Minute

FRI.-7 APR. 1916

Assigned

+ L.M.C. 10.15 F.D.

MACHINERY CERTIFICATE
WRITTEN.



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Foundation