

# REPORT ON MACHINERY

No. 2581

Writing Report

19

When handed in at Local Office

Received at London Office

FEB. 25 FEB. 1920

Survey held at

Osaka

Port of

Kobe

Date, First Survey

10<sup>th</sup> June 1918

Last Survey

5<sup>th</sup> July 1919

on the

Twin Screw Engines for Asano Shipyard No. 17.

(Number of Visits)

made at

Osaka

By whom built

Kubota Iron Works

Tons { Gross  
Net

When built

when made

7. 1919.

Indicated Horse Power

Owners

Port belonging to

Indicated Horse Power as per Section 28

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

ES, &c.—Description of Engines

Triple Expansion, Twin Screws

No. of Cylinders

No. of Cranks

Cylinders

22:36½:61 Length of Stroke 48 Revs. per minute

Dia. of Screw shaft as per rule 13.4

Material of screw shaft

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

Propeller boss

Yes

If the liner is in more than one length are the joints burned

If the liner does not fit tightly at the part

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

Yes

If two

Is the shaft lapped or protected between the liners

as per rule 12.159

Dia. of Crank shaft journals

as per rule 12.76

Dia. of Crank pin

13½

Length of stern bush

5'2"

as fitted 12¾

Dia. of screw

16'0" Pitch of Screw

18'0"

No. of Blades

4

State whether moveable

1/8"

Dia. of thrust shaft under

8¼x24½

Total surface

85.30

Propellers

Yivo

Diameter of ditto

4" Stroke

24"

Can one be overhauled while the other is at work

Yes

Rods

Yivo

Diameter of ditto

4" Stroke

24"

Can one be overhauled while the other is at work

Yes

Propeller key Engines

Sizes of Pumps

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

In Holds, &c.

Room

Injections

Are the roses in Engine room always accessible

Are the sluices on Engine room bulkheads always accessible

Are they Valves or Cocks

Are the Discharge Pipes above or below the deep water line

Are the Blow Off Cocks fitted with a spigot and brass covering plate

How are they protected

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

Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

ES, &c.—(Letter for record)

Manufacturers of Steel

Is Forced Draft fitted

No. and Description of Boilers

Tested by hydraulic pressure to

Date of test

No. of Certificate

Area of fire grate in each boiler

No. and Description of Safety Valves to

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Are the shell plates welded or flanged

Range of tensile strength

Are the shell plates welded or flanged

Length

Material of shell plates

Diameter of rivet holes in long. seams

Pitch of rivets

Descrip. of riveting: cir. seams

Lap of plates or width of butt straps

Working pressure of shell by rules

Size of manhole in shell

No. and Description of Furnaces in each boiler

Material

Outside diameter

Thickness of plates

Description of longitudinal joint

No. of strengthening rings

Combustion chamber plates: Material

Thickness: Sides

Back

Top

Bottom

If stays are fitted with nuts or riveted heads

Working pressure by rules

Area at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Area supported by each stay

Working pressure by rules

Material of Front plates at bottom

Working pressure of plate by rules

Pitch of tubes

Material of tube plates

Thickness: Front

Back

Mean pitch of stays

Working pressures by rules

Girders to Chamber tops: Material

Depth and

Distance apart

Number and pitch of stays in each

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

DATE. Type

Date of Approval of Plan

Tested by Hydraulic Pressure to

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

Pressure to which each is adjusted

Is Easing Gear fitted

003556-003556-0082

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IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

*17.01.1919*  
*17.01.1919*

*1919*

*Kubota Iron Works*

*Osaka*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building: During progress of work in shops - - 10, 14, 20 June. 6 July. 14 August. 30 Sept. 5, 10 Oct. 14 Nov. 4, 25 Dec. 1918  
During erection on board vessel - - - 19 Feb. 10, 21, 28, 31 Mar. 9, 15, 24, 26 April. 5, 8, 12, 14, 27 May. 8 July.  
Total No. of visits *26*

Dates of Examination of principal parts—Cylinders *21/3 - 14/5/19* Slides *28/3/19 etc.* Covers *21/3/19 etc.* Pistons *28/3/19 etc.* Rods *14/6/19*  
Connecting rods *12/5/19* Crank shaft *14/8/18 etc.* Thrust shaft *10/6/18* Tunnel shafts *20/6/18 etc.* Screw shaft *4/12/18 etc.* Propellers *28/3/19*  
Stern tube *25/12/18* Steam pipes tested Engine and boiler seatings Engines holding down bolts  
Completion of pumping arrangements Boilers fixed Engines tried under steam  
Completion of fitting sea connections Stern tube Screw shaft and propeller  
Main boiler safety valves adjusted Thickness of adjusting washers

Material of Crank shaft *Steel* Identification Mark on Do. *LLOYDS 19.2.19 X.3.19* Material of Thrust shaft *Steel* Identification Mark on Do. *LLOYDS 30.9.18 5.10.18; 10.10.18 and 14.11.18 X.3.19*  
Material of Tunnel shafts *Steel* Identification Marks on Do. *LLOYDS 30.9.18 5.10.18; 10.10.18 and 14.11.18 X.3.19* Material of Screw shafts *Steel* Identification Marks on Do. *LLOYDS 5.12.18 LINER FITTED 5.5.19*  
Material of Steam Pipes Test pressure *Spare screw sh. 5.12.18 LINER FITTED 5.5.19*

Is an installation fitted for burning oil fuel 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 *Asano Shipyard No 16*

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

*These engines have been made and fitted together at the Kubota Works, Osaka under Special Survey and in accordance with the Rules and materials shafts made at the and workmanship have been found good. The steel forgings (excepting five crank journals & two pins made at the Nippon Steel Works) have been forged and rough turned at the Kobe Works.*

*The engines have been sent to Yokohama to be fitted on board.*

The amount of Entry Fee ... £ : : When applied for, *18<sup>th</sup> 8. 1919*  
Special ... *Yen 200* : :  
Donkey Boiler Fee ... £ : : When received,  
Travelling Expenses (if any) £ : *20* : : 19

Committee's Minute *TUE MAR. 2 - 1920*  
Assigned *See YKa for rpt 2556*

*A. L. Jones* Y. Jo.  
assist. Engineer Surveyor to Lloyd's Register of Shipping

Rpt. 13.

REPO

Port of *Yoko.*  
No. in Reg. Book on the *...*  
Built at  
Owners *United St*  
Yard No. *17*

DESCRIPTION OF DY  
A) Vertical hi  
to 6 poles  
Capacity of Dynamo (B)  
Where is Dynamo fixed (A)  
Position of Main Switch  
Positions of auxiliary su

shelter deck aft  
middle fore l of  
fuses are fitted on ma  
circuits *Yes*  
vessel is wired on the d  
are the fuses of non-oxidiz  
are all fuses fitted in easily  
are permanent instructi  
are all switches and fuses co

total number of lights provid  
Engine & Boiler  
room circuit) *71*  
(After circuit) *30*  
(Middle after  
circuit) *53*  
(Middle fore & fo  
circuit) *58*  
(Navigation lamp  
circuit) *5*

Mast head light with  
Side light with  
*8* Cargo  
arc lights, what protection is  
One morse s  
are the switches controll

DESCRIPTION OF CABLES.  
cable carrying (B) *100*  
(A) *250*  
each cables carrying B *35.5*  
C *29.5*  
each cables carrying D *44.5*  
E *2.5*  
to lamps carrying *4* An

light cables carrying *3* Am  
DESCRIPTION OF INSULATION  
er wire through wa  
pt in living rooms  
in cables, how made, insulated,

the joints of cables thoroughly  
positions, none being made in bu  
ere any joints in or branches fro  
re the cables led through the ship

Certificate (if required) to be sent to

The Surveyors are requested not to write on or below the space for Committee's Minute.



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