

REPORT ON BOILERS. No. 2632

Port of Kobe

Received at London Office 19

Survey held at

Kobe

Date, first Survey

Feby. 18th

Last Survey

Oct. 14th 1919

(Number of Visits 17)

Gross 5863

Net 4263

on the Steel Single Screw Steamer "Scotland Maru"

Tons

Builder

K. MURAKAMI

Built at

Kobe

By whom built Kawasaki Dockyard Co. Ltd.

When built

1919

Repairs made at

Kobe

By whom made Kawasaki Dockyard Co. Ltd.

When made

1919

Repairs made at

do

By whom made

do

When made

1919

Indicated Horse Power N.H.P. 440

Owners Kawasaki Kisen Kaisha

Port belonging to

Kobe

WATER TUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Illinois Steel Co. Carnegie Steel Co & Amer Spiral Pipe Wks.

Number for record 5 Total Heating Surface of Boilers 11320 Is forced draft fitted yes No. and Description of Boilers One 5 to Auxury Boiler Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 12-7-19.

Class of Certificate LLOYD'S TEST Can each boiler be worked separately yes Area of fire grate in each boiler 33 No. and Description of Valves to each boiler Two Direct Spring Area of each valve 5.93 Pressure to which they are adjusted 205 lbs.

Are they fitted with easing gear yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Least distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 10'-10" Length 10'-6"

Material of shell plates Steel Thickness 1" Range of tensile strength 28 to 32 Are the shell plates welded or flanged no

Direction of riveting: cir. seams Doub. rivet long. seams Doub. Straps Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 6 29/32 + 3 29/64

Width of butt straps 1 1/2" x 1" Percentages of strength of longitudinal joint 95.2 Working pressure of shell by rules 84.6

Size of manhole in shell 12" x 16" Size of compensating ring (flange) 1" No. and Description of Furnaces in each boiler Two Morrison

Material Steel Outside diameter 40 1/4" Length of plain part ✓ Thickness of plates 9 1/16"

Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 236 lbs. Combustion chamber

Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 7 x 8 1/2 Back 7 13/16 x 8 1/8

If stays are fitted with nuts or riveted heads nuts Working pressure by rules 204 lbs. Material of stays Steel Area at smallest part 5.27

Least part 1.78 Area supported by each stay 66 Working pressure by rules 242 End plates in steam space: Material Steel Thickness 7/8"

How are stays secured Doub. nuts Working pressure by rules 202 Material of stays Steel Area at smallest part 5.27

Area supported by each stay 5 1/4 x 14 1/2 Working pressure by rules 238 Material of Front plates at bottom Steel Thickness 3/4" Material of

Over back plate Steel Thickness 3/4" Greatest pitch of stays 13 1/2 at wide Working pressure of plate by rules 200 Diameter of tubes 3 1/4"

Mean pitch of stays 8 3/4" Material of tube plates Steel Thickness: Front 7/8" Back 3/4" - Mean pitch of stays 8 3/4" Pitch across wide

Working pressures by rules 200 lbs. Girders to Chamber tops: Material Steel Depth and thickness of

der at centre 8 x 13/16 (two) Length as per rule 27" Distance apart 8" Number and pitch of Stays in each 3 @ 7"

Working pressure by rules 256 lbs. Superheater or Steam chest; how connected to boiler ✓ Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

es Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

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

VERTICAL DONKEY BOILER

No. _____ Description _____ Manufacturers of steel _____

Made at _____ By whom made _____ When made _____ Where fixed _____

Working pressure tested by hydraulic pressure to _____ No. of Certificate _____ Fire grate area _____ Description of safety valves _____

No. of safety valves _____ Area of each _____ Pressure to which they are adjusted _____ If fitted with easing gear _____ If steam from main boilers can enter the donkey boiler _____

Dia. of donkey boiler _____ Length _____ Material of shell plates _____ Thickness _____ Range of tensile strength _____

Descrip. of riveting long. seams _____ Dia. of rivet holes _____ Whether punched or drilled _____ Pitch of rivets _____

Per centage of strength of joint _____ Rivets _____ Working pressure of shell by rules _____ Thickness of shell crown plates _____

Radius of do. _____ No. of Stays to do. _____ Dia. of stays _____ Diameter of furnace Top _____ Bottom _____ Length of furnace _____

Thickness of furnace plates _____ Description of joint _____ Working pressure of furnace by rules _____ Thickness of furnace crown _____

Stays by _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

Kawasaki Dockyard Co., Ltd.
The foregoing is a correct description.

Per J. O. Sakane Secretary

Dates During progress of work in shops - - - 1919 Feb. 18, 28th; Mar. 3, 10, 26; June 19, 27; July 7, 11, 12th
During erection on board vessel - - - Sept. 6, 8th; Oct. 1, 6, 7, 11, 14th
Total No. of visits 17

Is the approved plan of _____ boiler forwarded herewith no
Boiler plan same as for s/s. Cape Town Maru
Reg. No. 2622
& s/s PORT SAID MARU
RPT. No. 2589.

W536-0012

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

The Boiler has been made + fitted under Special Survey.
The Rules have been complied with + the materials + workmanship found good.
The vessel is eligible, it is submitted for the record One S. E. Auxiliary Boiler 200 lbs. *AW*

RE
Port of
No. in Reg. Book
Owners
Yard No. 4

DESCRIPTION
Two sets automatic 8" dia.
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Certificate (if required) to be sent to
The Surveyors are requested not to write on or below the space for Committee's Minute.

| | | |
|-------------------------------|----------------|----------------------------|
| The amount of Entry Fee... | included in | When applied for. |
| Special ... | Machinery | 19 |
| Donkey Boiler Fee | 1st Entry Fees | When received |
| Travelling Expenses (if any)£ | | Oct 20 th 1919. |

Alexander Watt.
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute
Assigned
TUE 23 DEC. 1919