

REPORT ON BOILERS.

No. 2571

Received at London Office

Port of Kobe TUE SEP 23 1919

No. in Survey held at Kobe Date, First Survey 22nd Jan'y 1919 Last Survey 31st May 1919
 (Number of Visits 13) } Gross 5859
 Reg. Book. on the Steel Single Screw Steamer "Chile Maru" Tons } Net 4260

Master Built at Kobe By whom built Kawasaki Dockyard Co., Ltd. When built 1919.
 Engines made at Kobe By whom made Kawasaki Dockyard Co., Ltd. When made 1919
 Boilers made at do By whom made do When made 1919
 Registered Horse Power Owners The Kawasaki Kisen Kabushiki Kaisha Port belonging to Kobe

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Illino. Wm Bros. Bessemer + American Spiral Pipe Works

Letter for record S. Total Heating Surface of Boilers 1132⁰ Is forced draft fitted yes No. and Description of Boilers One S. to Aux. Boiler Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 8 March 1919

No. of Certificate 400 LRS Can each boiler be worked separately yes Area of fire grate in each boiler 33⁰ No. and Description of safety valves to each boiler Two Direct Spring Area of each valve 5.93⁰ 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 ✓

Smallest 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 tons Are the shell plates welded or flanged no

Description of riveting: cir. seams Doub. riv. long. seams Triple riveted Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 6 3/4" + 3 29/32"

Width of plates or width of butt straps 14 1/2" x 1" Per centages of strength of longitudinal joint rivets 95.2 Working pressure of shell by plate 84.6

Size of manhole in shell 12" x 16" Size of compensating ring (4 1/2" flange) 1" No. and Description of Furnaces in each boiler Two Morrison Material Steel Outside diameter 40 1/2" Length of plain part top 9 1/16" bottom 9 1/16" Thickness of plates crown 9 1/16" bottom 9 1/16"

Description of longitudinal joint Weld No. of strengthening rings ✓ Working pressure of furnace by the rules 236 lbs. Combustion chamber plates: 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 1/16 x 8 1/2"

7" x 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 1.78⁰ Area supported by each stay 66⁰ Working pressure by rules 242 lbs. End plates in steam space: Material Steel Thickness 7/8"

Pitch of stays 15 1/4 x 14 1/2" How are stays secured Doub. nuts Working pressure by rules 202 lbs. Material of stays Steel Area at smallest part 5.27

Area supported by each stay 15 1/4 x 14 1/2" Working pressure by rules 238 lbs. Material of Front plates at bottom Steel Thickness 3/4" Material of cover back plate Steel Thickness 3/4" Greatest pitch of stays 13 1/2" at wide space doubled 5/8" Working pressure of plate by rules 200 lbs. Diameter of tubes 3 1/4"

Width of tubes 1 3/4" mean Material of tube plates Steel Thickness: Front 7/8" Back 3/4" Mean pitch of stays 8 3/4" Pitch across wide per spaces 13 3/4" double 5/8" Working pressures by rules 200 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 8 x 13/16 (two) Length as per rule 24" Distance apart 8" Number and pitch of Stays in each 3 @ 7"

Working pressure by rules 256 lbs. Steam dome: description of joint to shell _____ % of strength of joint _____

Diameter _____ Thickness of shell plates _____ Material _____ Description of longitudinal joint _____ Diam. of rivet holes _____

Pitch of rivets _____ Working pressure of shell by rules _____ Crown plates _____ Thickness _____ How stayed _____

SUPERHEATER. 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 _____

VERTICAL DONKEY BOILER— No. _____ Description _____ Manufacturers of steel _____

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

Tested by hydraulic pressure to _____ Date of test _____ No. of Certificate _____ Fire grate area _____ Description 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 _____

Description 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 _____ Plates _____

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 _____

Radius of do. _____ Stayed by _____ Diameter of uptake _____ Thickness of uptake plates _____

Thickness of water tubes _____

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

Per. J. Ota Kane Secretary.

During progress of work in shops - - - 22, 25 Jan'y, 1, 7, 13, 18, 22, 26 Feb'y
 During erection on board vessel - - - 6, 8 March - - - 12, 15, 31 May 1919
 Total No. of visits 13

Is the approved plan of main boiler forwarded herewith ✓ with Reg. No. 2528 on 2.2.
 " " " donkey " " " Glasgow Memor. Foundation

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

This boiler has been made & fitted under Special Survey in accordance with the requirements of the Rules & materials & workmanship have been found good.

The vessel is eligible in our opinion for the notation *Aut. S. E. B. 200* U.S.

13.

REPORT

of *Robt*
 in on the Iron or Steel
 Book Built at
The Rawas
 No. *457* Elect

DESCRIPTION OF DYNAMO

Two sets of commutators enclosed
dia 6" stroke
 Capacity of Dynamo
 Where is Dynamo fixed
 Position of Main Switch Board
 Positions of auxiliary switches
on the lower board

cut outs are fitted on main circuits *yes*
 Vessel is wired on the direct system
 Are the cut outs of non-oxidizing metal
 Are all cut outs fitted in each circuit
 Are all switches and cut-outs permanent instruments

Total number of lights provided

A	114
B	13
C	31
D	2
E	
	2 Mast head light
	2 Side light
	7

If are lights, what protection

Where are the switches

DESCRIPTION OF CABLES

Main cable carrying /
 Branch " " "
 Branch cables carrying "
 Branch cables carrying "
 Leads to lamps carrying
 Cargo light cables carrying

DESCRIPTION OF INSULATION

Conductor's tape. Cable steel armor
 Joints in cables, how made
with water

Are all the joints of cables made in bunkers

Are there any joints in cables

How are the cables insulated

Additional

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	£	When applied for,
Special	£	19
Donkey Boiler Fee	£	When received,
Travelling Expenses (if any)	£	19

Fees included in Spec. Sur. Fee of Machinery

A. L. Jones & A. Watt

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute TUE 7-OCT. 1919
 Assigned

