

REPORT ON BOILERS.

No. 2414

MON. 17. MAR. 1919

Received at London Office

Date of writing Report *1st Jan 1919* When handed in at Local Office *191* Port of *Kobe*
 No. in Survey held at *Kobe* Date, First Survey *1st May 1918* Last Survey *8 Jan 1919*
 Reg. Book. on the *Steel Single Screw Steamer "TOFUKU MARU"* (Number of Visits *18*) Gross *5857* Tons Net *4259*
 Master *T. WAKASAWA* Built at *Kobe* By whom built *The Kawasaki Dry Dock Co. Ltd.* When built *1918*
 Engines made at *Kobe* By whom made *The Kawasaki Dry Dock Co. Ltd.* When made *1918*
 Boilers made at *do* By whom made *do* When made *do*
 Registered Horse Power Owners *do* Port belonging to *Kobe*

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel *Union. Amer. Special Pipe Works.*
Alan Wood.

(Letter for record *S*) Total Heating Surface of Boilers *1132 sq ft* Is forced draft fitted *yes* No. and Description of

Boilers *Two. S. Ended.* Working Pressure *200 lbs* Tested by hydraulic pressure to *400 lbs* Date of test *9.9.18*

No. of Certificate *400 LBS* Can each boiler be worked separately *yes* Area of fire grate in each boiler *33 sq ft* No. and Description of

safety valves to each boiler *Two, Spring loaded* Area of each valve *5.93 sq ft* 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 *no*

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 & 32 tons* Are the shell plates welded or flanged *no*

Descrip. of riveting: cir. seams *double riv. long. seams* *Treb. riveted* Diameter of rivet holes in long. seams *1 1/16"* Pitch of rivets *6 29/32 & 3 29/64*

Gap of plates or width of butt straps *14 1/2" x 1"* Per centages of strength of longitudinal joint *double straps* rivets *95.2* Working pressure of shell by

rules *200 lbs* Size of manhole in shell *12" x 16"* Size of compensating ring *(1/4" + flange) x 1"* No. and Description of Furnaces in each

boiler *2 Morrison's* Material *Steel* Outside diameter *40 1/4"* Length of plain part *top* Thickness of plates *crown* *9/16"*

Description of longitudinal joint *Weld* No. of strengthening rings *no* 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 13/16 x 8 1/8"*

Top *7 x 8"* If stays are fitted with nuts or riveted heads *Nuts in c.c.* Working pressure by rules *204 lbs* Material of stays *Steel* Area at

smallest part *1.78 sq ft* Area supported by each stay *66 sq ft* 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 *double nuts* Working pressure by rules *202 lbs* Material of stays *Steel* Area at smallest part *5.27 sq ft*

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

Lower back plate *Steel* Thickness *3/4"* Greatest pitch of stays *13 1/2" at ends* Working pressure of plate by rules *200 lbs* Diameter of tubes *3 1/4"*

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

water spaces *13 3/4" out 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 *27"* 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 *no* % 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

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

Diameter of Safety Valve Pressure to which each is adjusted Is Easing Gear fitted

The foregoing is a correct description,

Kawasaki Dockyard Co., Ltd.

Manufacturer.

Per *J. H. Jones*

Secretary. With Rpt 2411

Dates of Survey: During progress of *1.13.18 May 4.13.24 June 1.12.14* Is the approved plan of boiler forwarded to the Secretary *yes*
 while work in shops *8.26.27 Aug. 7.9 Sep. 12.21.25.27 Dec. 1918* upon Survey *yes*
 building During erection on *8 Jan 1919* board vessel *8 Jan 1919* Total No. of visits *18*
"Tofuku Maru"

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

This boiler has been made fitted under Special Survey in accordance with the Rules & materials & workmanship are good. The vessel is eligible in my opinion for the record *Am. S. S. Boiler 200 lbs.*

Survey Fee *Included in Macher fees* When applied for, *191*

Travelling Expenses (if any) £ : : When received, *191*

Committee's Minute

Assigned

FRI. 21. MAR. 1919

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation

W1359-0106