

REPORT ON BOILERS.

No. 2836

Received at London Office **WED JUL 7 1920**

Date of writing Report **25th May 1920** When handed in at Local Office **10** Port of **Kobe**
 No. in Survey held at **Kobe** Date, First Survey **7th Nov. 1919** Last Survey **12th May 1920**
 Reg. Book. **Kobe** (Number of Visits **18**) } Gross **5872.89**
 on the **Single Screw Steel Steamer "BELGIUM MARU"** Tons } Net **4253.90**
 Master **K. Hayashi** Built at **Kobe** By whom built **Kawasaki Dockyard Co. Ltd.** When built **1920**
 Engines made at **Kobe** By whom made **Kawasaki Dockyard Co. Ltd.** when made **1920**
 Boilers made at **do** By whom made **do** when made **1920**
 Registered Horse Power **N.H.P. 440** Owners **Kawasaki Kisen Kaisha** Port belonging to **Kobe**

MULTITUBULAR BOILERS ~~MAN~~ AUXILIARY OR DONKEY. — Manufacturers of Steel **Illinois Stl. Co. Carnegie Stl. Co. Am. Sp. Midvale, Worth Bros.**

Letter for record **S** Total Heating Surface of Boilers **11320'** Is forced draft fitted **yes** No. and Description of Boilers **One S. & Auxy. Boiler** Working Pressure **200 lbs.** Tested by hydraulic pressure to **400 lbs.** Date of test **13-3-20**
 No. of Certificate **LLOYD'S TEST** 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 casing gear **yes** In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler **yes**
 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 **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"**
 Gap of plates or width of butt straps **1 1/2" x 1"** Per centages of strength of longitudinal joint **95.2** Working pressure of shell by plate **84.6**
 Size of manhole in shell **12" x 16"** Size of compensating ring **(7/4" + flange) 1"** No. and Description of Furnaces in each boiler **Two Morrison** Material **Steel** Outside diameter **40 1/4"** Length of plain part **top 9 1/16"** Thickness of plates **bottom 9 1/16"**
 Description of longitudinal joint **Weld** No. of strengthening rings **1** Working pressure of furnace by the rules **218 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"**
 If stays are fitted with nuts or riveted heads **nuts** Working pressure by rules **213 lbs.** Material of stays **Steel** Diameter at smallest part **1.790"** Area supported by each stay **640"** Working pressure by rules **223 lbs.** End plates in steam space: Material **Steel** Thickness **7/8"**
 How are stays secured **Doub. nuts** Working pressure by rules **202 lbs.** Material of stays **Steel** Diameter at smallest part **5.270"**
 Doubling strips **102" x 7/8"** Working pressure by rules **248 lbs.** Material of Front plates at bottom **Steel** Thickness **3/4"** Material of lower back plate **Steel** Thickness **3/4"** Greatest pitch of stays **15" above space doubled 5/8"** Working pressure of plate by rules **237 lbs.** Diameter of tubes **3 1/4"**
 Pitch of tubes **4 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-
 inter spaces **13 3/4" doubled 5/8"** Working pressures by rules **266 lbs.** Girders to Chamber tops: Material **Steel** Depth and thickness of girder at centre **8" x 3/4" (two)** Length as per rule **26 5/8"** Distance apart **8"** Number and pitch of Stays in each **3 @ 7"**
 Working pressure by rules **246 lbs.** Superheater or Steam chest: how connected to boiler **yes** Can the superheater be shut off and the boiler worked separately **yes**

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

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 casing gear

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

Dates } During progress of work in shops - - } **1919. Nov. 7, Dec 8, 27; 1920. Jan 9, 19; Feb 2, 17, 23; Mar 3, 4, 13.** Is the approved plan of boiler forwarded herewith **yes**
 while } During erection on } **April 15, 19, 23, 27, 28; May 5, 12.** Total No. of visits **18**
 building } board vessel - - - }

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c. **This Boiler has been made and fitted under Special Survey. The Rules have been complied with and the materials and workmanship found good. The vessel is eligible, it is submitted, for the record I.S.I. Aux. Btl 200 lbs.**

Survey Fee ... **Incl. with** ... When applied for, 19.....
 Travelling Expenses (if any) £ **mony fee** ... When received, 19.....

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

TUE. JUL. 20 1920

Committee's Minute
 Signed

