

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 Kobe 10 Port of Kobe
 No. in Survey held at Kobe Date, First Survey 7th Nov. 1919 Last Survey 12th May 1920
 Reg. Book. (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 Hlinois 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

Description of riveting: cir. seams Doub. rivet long. seams Doub. straps Diameter of rivet holes in long. seams 1 1/8" 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 1/4" + flange) 1" No. and Description of Furnaces in each boiler Two Morrison Material Steel Outside diameter 40 1/4" Length of plain part top Thickness of plates crown 9/16" bottom 1/16"

Description of longitudinal joint Weld No. of strengthening rings yes 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"

7" x 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 1.79" Area supported by each stay 64" Working pressure by rules 223 lbs. End plates in steam space: Material Steel Thickness 7/8"

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

Area supported by each stay 15 1/4" x 14 1/2" 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

Order 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

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

les 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 board vessel - - - April 15, 19, 23, 27, 28; May 5, 12. Total No. of visits 18

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.E. Aux. Bk 200 lbs.

Survey Fee ... When applied for, 19

Travelling Expenses (if any) ... When received, 19

Committee's Minute

Assigned

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TUE. JUL. 20 1920

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

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