

REPORT ON BOILERS.

No. 1316

Received at London Office

THU. 27 APR. 1921

Date of writing Report 10th March 1921 When handed in at Local Office 12th March 1921 Port of Kagasaki

No. in Survey held at Kagasaki Date, First Survey 26th May Last Survey 9th Feb 1921

Reg. Book. on the S.S. "Nishiyama Maru" (Number of Visits 7) Tons } Gross 3016.95
 Net 1822.66

Master F. Fukui Built at Kagasaki By whom built Matsuo Iron Works & Dockyard When built 1921

Engines made at Kagasaki By whom made Matsuo Iron Works & Dockyard When made 1921

Boilers made at Kagasaki By whom made Matsuo Iron Works & Dockyard When made 1921

Registered Horse Power Owners Itaya Shosun Kaisha Port belonging to Koyagi

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ **DONKEY.**—Manufacturers of Steel Illinois Steel Co.

Letter for record S) Total Heating Surface of Boilers 1162.32 Sq. ft. Is forced draft fitted no No. and Description of Boilers One Single ended Cylindrical Working Pressure 180 lbs. Tested by hydraulic pressure to 360 lbs. Date of test 1-12-20

No. of Certificate 107. Can each boiler be worked separately Yes. Area of fire grate in each boiler 34.26 Sq. ft. No. and Description of safety valves to each boiler 2 Spring loaded. Area of each valve 4.81 Sq. in Pressure to which they are adjusted 18.5 lbs.

Are they fitted with easing 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 11'-0" Length 10'-0"

Material of shell plates Steel Thickness 1 7/16" Range of tensile strength 28 to 32 tons Are the shell plates welded or flanged no.

Description of riveting: cir. seams Double Lap, long. seams 2 straps Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 9 1/2"

Gap of plates or width of butt straps 1 7/8" Per centages of strength of longitudinal joint rivets 95.4 plate 86.1 Working pressure of shell by rules 215.2 lbs. Size of manhole in shell 16" x 12" Size of compensating ring 35 1/2" x 8 1/2" x 1 1/16" No. and Description of Furnaces in each boiler Adamson joint Material Steel Outside diameter 3'-1" Length of plain part top 2'-8 3/4" Thickness of plates crown 5/8" bottom 5/8"

Description of longitudinal joint Welded. No. of strengthening rings 2. Working pressure of furnace by the rules 209 lbs. Combustion chamber thickness: Material Steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 3/4" Pitch of stays to ditto: Sides 8 1/4" x 8" Back 8" x 7 3/4"

6" x 7 3/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 204 lbs. Material of stays Steel Area at smallest part 7.68 sq. in Area supported by each stay 59.96 sq. in Working pressure by rules 235 lbs. End plates in steam space: Material Steel Thickness 5/8" double

Pitch of stays 17" x 16" How are stays secured Double nuts / washers. Working pressure by rules 219 lbs. Material of stays Steel Area at smallest part 5.94 sq. in

Area supported by each stay 275 sq. in Working pressure by rules 224 lbs. Material of Front plates at bottom Steel Thickness 3/4" Material of cover back plate Steel Thickness 3/4" Greatest pitch of stays 14" Working pressure of plate by rules 259 lbs. Diameter of tubes 3 3/4"

Pitch of tubes 4 1/2" x 4 7/16" Material of tube plates Steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9" Pitch across wide spaces 14" Working pressures by rules 231 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 7" x 3/4" double Length as per rule 25 1/4" Distance apart 5" Number and pitch of Stays in each 2 27 3/4"

Working pressure by rules 221 lbs. Steam dome: description of joint to shell ✓ % of strength of joint ✓

Material ✓ 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 ✓

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

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

The foregoing is a correct description,

K. Drake's Matsuo Iron Works & Dockyard Manufacturer.

During progress of work in shops - - - 1920 May 26th June 15th 22 July 1. 22 Oct 13th Is the approved plan of boiler forwarded herewith Yes

During erection on board vessel - - - Nov 24, Dec 10 1921 Jan 21. 31. Feb 9. Total No. of visits 12.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This Donkey Boiler has been constructed under special survey, in accordance with the Rules and of good materials & workmanship. It is, in my opinion, eligible for record in the Register for a working pressure of 180 lbs.

Survey Fee YEN 40. : } When applied for, 15-2-21 1921

Travelling Expenses (if any) £ : : } When received, 17-2- 1921.

Committee's Minute TUE. MAY. 4 1921

