

REPORT ON BOILERS.

Received at London Office

of writing Report 21st Octr. 1919 When handed in at Local Office 21st Octr. 1919 Port of NAGASAKI DEC. 1919

No. in Survey held at NAGASAKI. Date, First Survey 17th June 1919 Last Survey 25th Sept. 1919

Book. on the s. s. Delagoa Maru (Number of Visits 11) } Gross 7138
Tons } Net 4367

Master B. Saito Built at Nagasaki By whom built Mitsubishi Zosen Kaisha When built 1919

Engines made at Nagasaki By whom made Mitsubishi Zosen Kaisha When made 1919

Boilers made at Nagasaki By whom made Mitsubishi Zosen Kaisha When made 1919

Registered Horse Power 620 Owners Nippon Yusen Kaisha Port belonging to Tokio

ULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Illinois Steel Coy.

Letter for record S) Total Heating Surface of Boilers 2197.1 sq. ft. Is forced draft fitted Yes No. and Description of Boilers 1 Cylindrical, Single ended Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 28. 8. 19

No. of Certificate 96 Can each boiler be worked separately Yes Area of fire grate in each boiler 54.31 sq. ft. No. and Description of Safety valves to each boiler 2 Spring loaded Area of each valve 9.62 sq. ins. 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 Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 3' 3" Mean dia. of boilers 14' 0" Length 11' 6"

Material of shell plates Steel Thickness 1 3/8" Range of tensile strength 31 " 156 " 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 7/16" Pitch of rivets 9 1/2" x 4 3/4"

No. of plates or width of butt straps 1' 8 1/2" Per centages of strength of longitudinal joint rivets 92.3 Working pressure of shell by plate 85.2

Rules 212 lbs. Size of manhole in shell 16" x 12" Size of compensating ring 37" x 33" x 1 5/16" No. and Description of Furnaces in each boiler 3 Morrison's Bull

Boiler Suspension Material Steel Outside diameter 3' 9 1/4" Length of plain part top Thickness of plates crown 5" bottom 8"

Description of longitudinal joint Welded No. of strengthening rings Yes Working pressure of furnace by the rules 247 lbs. Combustion chamber plates: Material Steel Thickness: Sides 3/4" Back 3/4" Top 3/4" Bottom 15/16" Pitch of stays to ditto: Sides 11 1/2" x 7 1/4" Back 10 3/8" x 9"

No. of stays 11 1/2" x 7" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 211 lbs. Material of stays Steel Area at smallest part 2.63 sq. ins. Area supported by each stay 79 sq. ins. Working pressure by rules 231 lbs. End plates in steam space: Material Steel Thickness 1 3/32"

Pitch of stays 1 5/8" x 1 1/6" How are stays secured Double nuts Working pressure by rules 214 lbs. Material of stays Steel Area at smallest part 7.67 sq. ins.

Area supported by each stay 357 sq. ins. Working pressure by rules 227 lbs. Material of Front plates at bottom Steel Thickness 31/32" Material of lower back plate Steel Thickness 31/32" Greatest pitch of stays 13 3/4" Working pressure of plate by rules 219 lbs. Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates Steel Thickness: Front 31/32" Back 31/32" Mean pitch of stays 11 1/8" Pitch across wide inter spaces 13 3/4" Working pressures by rules 206 lbs. Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 10 1/4" x 59/64 length as per rule 2' 7 29/32" Distance apart 11 1/2" x 9 3/4" Number and pitch of Stays in each 3 @ 7"

Working pressure by rules 217 lbs. Steam dome: description of joint to shell Yes % of strength of joint Yes

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

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

SUPERHEATER. Type Yes Date of Approval of Plan Yes Tested by Hydraulic Pressure to Yes

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

Pressure to which each is adjusted Yes Is Easing Gear fitted Yes

The foregoing is a correct description,
NAGASAKI WORKS, MITSUBISHI ZOSSEN KAISHA, LTD.
W. S. WILKINSON GENERAL MANAGER. Manufacturer.

Dates During progress of work in shops 1919 June 17, 23, July 8, 12, 17. Is the approved plan of boiler forwarded herewith Yes

While during erection on board vessel Aug. 27, 28, Sept. 10, 12, 23, 25. Total No. of visits 11.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This main Boiler has been constructed under Special Survey, in accordance with the Rules, and of good materials and workmanship.

Survey Fee Included in the fees for Special Survey of Machinery. When applied for, 191

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

Committee's Minute TUE. MAR. 9-1920

Signed See Receipt attached

W. S. Wilkinson
Engineer Surveyor to Lloyd's Register of Shipping.

