

# REPORT ON BOILERS.

No. 2680

Received at London Office TUE. 24 FEB. 1920

Report 19 When handed in at Local Office 19 Port of Kobe.

Survey held at Harima Date, First Survey 23<sup>rd</sup> August. Last Survey 24<sup>th</sup> Novbr 1919  
 (Number of Visits 13.) Tons { Gross 6786.01  
 Net 5077.27

in the Steel Single Screw Steamer "Shunko Maru"  
Yamafata Built at Harima By whom built Harima Ship & Coy. When built 1919.  
 made at Kobe By whom made Kobe Steel Works When made 1919  
 made at Kobe & Harima By whom made Centre boiler made by Harima Ship & Coy. When made 1919  
 Horse Power 575. Owners Goko Shokai Port belonging to Amapasaki

## TUBULAR BOILERS - MAIN, AUXILIARY OR DONKEY. - Manufacturers of Steel Indvabe Steel Coy. U.S.A.

record S. Total Heating Surface of Boilers 1852 sq. ft. Is forced draft fitted Yes. No. and Description of  
One single ended. Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Date of test 25 Sept.

LLOYD'S TEST. 400 LBS. WP 200 LBS. 25.9.19 R.  
 Can each boiler be worked separately Yes Area of fire grate in each boiler 47.25 sq. ft. No. and Description of  
 plates to each boiler Two spring loaded. Area of each calve 9.62. Pressure to which they are adjusted 200 lbs.

fitted with easing gear Yes. In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

Distance between boilers or uptakes and bunkers or woodwork ✓ Mean dia. of boilers 13'-6" Length 11'-6"

of shell plates Steel Thickness 1 5/16. Range of tensile strength 26.7-32 Are the shell plates welded or flanged No.

of riveting: cir. seams DR L. long. seams TR DBS. Diameter of rivet holes in long. seams 1 5/16. Pitch of rivets 8 3/4"

width of butt straps 20" Per centages of strength of longitudinal joint rivets 87.65. Working pressure of shell by  
 plate 85.

Size of manhole in shell 12 x 16. Size of compensating ring 2'-9" x 2'-5" x 1 5/16" No. and Description of Furnaces in each  
3 Morrison Material Steel Outside diameter 40 1/2" Length of plain part ✓ Thickness of plates crown 9/16.  
 bottom ✓

Material Steel No. of strengthening rings ✓ Working pressure of furnace by the rules 204 lbs. Combustion chamber  
weld. Sides 25/32 Back 2 1/32 Top 23/32 Bottom 25/32 Pitch of stays to ditto: Sides 10 1/2 x 8 Back 8 1/4 x 8 1/4

Material Steel Thickness: Sides 25/32 Back 2 1/32 Top 23/32 Bottom 25/32 Pitch of stays to ditto: Sides 10 1/2 x 8 Back 8 1/4 x 8 1/4

Working pressure by rules 200 lbs. Material of stays Steel Area at  
 part 1.79 Area supported by each stay 68 sq. in. Working pressure by rules 206 lbs. End plates in steam space: Material Steel Thickness 1 1/8"

How are stays secured DN + W Working pressure by rules 202 Material of stays Steel Area at smallest part 7.5.

supported by each stay 302.6 sq. in. Working pressure by rules 245 lbs. Material of Front plates at bottom Steel Thickness 24/32 Material of  
 back plate Steel Thickness 27/32 Greatest pitch of stays 14 x 14 Working pressure of plate by rules 280 lbs. Diameter of tubes 3"

tubes 4 1/2 x 4 1/4 Material of tube plates Steel Thickness: Front 29/32 Back 7/8. Mean pitch of stays 8 1/2" Pitch across wide  
 plates 14" Working pressures by rules 200 lbs. Girders to Chamber tops: Material Steel Depth and thickness of  
 at centre 11 1/2" x 1 5/8" Length as per rule 34 15/32 Distance apart 10 1/2" Number and pitch of Stays in each 3 @ 8"

pressure by rules 249 lbs. Steam dome: description of joint to shell \_\_\_\_\_ % of strength of joint \_\_\_\_\_

Thickness of shell plates \_\_\_\_\_ Material \_\_\_\_\_ Description of longitudinal joint \_\_\_\_\_ Diam. of rivet holes \_\_\_\_\_

Working pressure of shell by rules \_\_\_\_\_ Crown plates \_\_\_\_\_ Thickness \_\_\_\_\_ How stayed \_\_\_\_\_

HEATER. Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_

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

Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

The foregoing is a correct description,  
 THE TEIKOKU STEAMSHIP CO., LTD. Manufacturer.

During progress of work in shops -- Aug 23, Sept 11, 15, 18, 22 & 25<sup>th</sup>. Is the approved plan of boiler forwarded herewith Yes.  
 During erection on board vessel -- Oct 10, 24, Nov 4, 8, 18, 22 & 24<sup>th</sup> Total No. of visits 13.  
 Director

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

The Boiler has been made and fitted under special survey in accordance with the requirements of the Rules and the materials and workmanship have been found good.

Survey Fee included in \_\_\_\_\_ When applied for, 19 \_\_\_\_\_  
 Travelling Expenses (if any) £ machinery When received, 19 \_\_\_\_\_

Committee's Minute FRI. 27 FEB. 1920  
see report attached

R. B. Batcher  
 Engineer Surveyor to Lloyd's Register of Shipping.