

REPORT ON BOILERS.

No. 637

WED. 8 FEB 1911

Ref No 24908

Received at London Office
 MIDDLESBROUGH-ON-TEES
 Survey held at Stockton-on-Tees Date, First Survey 8th Nov 1910 Last Survey 12th July 1911
 on the S.S. "Senpaisan Maru" S.S. No 481
 Description of Turki Built at Sunderland By whom built J. L. Thompson & Sons When built 1911
 made at Stockton By whom made Blair & Co. Ltd when made 1911
 Length made at Stockton By whom made Thos Riley Bros (No 4219) when made 1911
 Indicated Horse Power Owners Mitsui Bussan Kaisha Co. Port belonging to Mike

TITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons
 for record (S) Total Heating Surface of Boilers 1275 sq ft Is forced draft fitted No No. and Description of
One Single Ended Working Pressure 180 Tested by hydraulic pressure to 360 Date of test 1.2.11
 Certificate 4565 Can each boiler be worked separately Yes Area of fire grate in each boiler 35 sq ft No. and Description of
 valves to each boiler 2 Direct Spring Area of each valve 3.980 Pressure to which they are adjusted 180 lb
 fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No
 distance between boilers 15" back between deck Inside Mean dia. of boilers 11'-6" Length 10'-6"
 of shell plates steel Thickness 15 1/16" Range of tensile strength 28-32 Are the shell plates welded or flanged No
 of riveting: cir. seams 2 Riv Lap long. seams 2 Riv-3 Riv Diameter of rivet holes in long. seams 1 1/16" Pitch of rivets 7 1/4"
5 Rivets per pitch
 plates or width of butt straps 15 1/4 x 1 1/2 Per centages of strength of longitudinal joint rivets 91.5 Working pressure of shell by
 plate 86.3
180 lbs Size of manhole in shell 16" x 12" Size of compensating ring Mc Nails No. and Description of Furnaces in each
2 Plain Material steel Outside diameter 44" Length of plain part 78 1/2" Thickness of plates 13/16
 of longitudinal joint welded No. of strengthening rings none Working pressure of furnace by the rules 180 Combustion chamber
 Material steel Thickness: Sides 2 1/32" Back 3 1/32" Top 3 1/32" Bottom 1" Pitch of stays to ditto: Sides 9 x 8 1/4" Back 8 1/4 x 9 1/4"
2" x 8" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 190 Material of stays steel Diameter at
 part 1 1/2" Area supported by each stay 76.2 Working pressure by rules 209 End plates in steam space: Material steel Thickness 3 1/32"
8 x 5/8 loose washers
 of stays 16 x 15 How are stays secured nuts & washers Working pressure by rules 184 Material of stays steel Diameter at smallest part 2.41
 supported by each stay 240 Working pressure by rules 198 Material of Front plates at bottom steel Thickness 3 1/32 Material of
 back plate steel Thickness 3 1/32 Greatest pitch of stays 13 1/2" x 9 1/4" Working pressure of plate by rules 220 Diameter of tubes 3 1/2"
 of tubes 4 3/4" x 4 5/8" Material of tube plates steel Thickness: Front 3 1/32 Back 2 5/32 Mean pitch of stays 10.78 Pitch across wide
 spaces 13 1/2" Working pressures by rules 184 Girders to Chamber tops: Material steel Depth and thickness of
 at centre 8" x 1 1/2" Length as per rule 30" Distance apart 8" Number and pitch of Stays in each 2 @ 8"
 Working pressure by rules 194 Superheater or Steam chest; how connected to boiler none Can the superheater be shut off and the boiler worked
 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
 fitted 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 easing gear

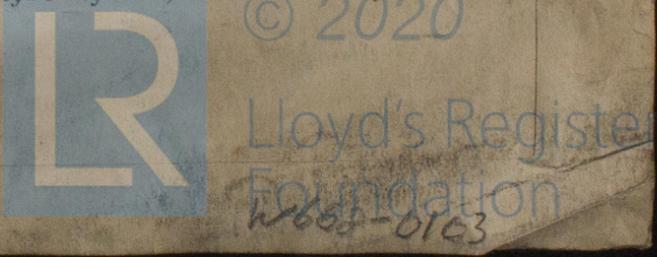
The foregoing is a correct description,
A. Reed Manufacturer.

During progress of work in shops -- 1910. Nov. 8. 11. 16. 18. 23. Dec. 2. 20. 23. 30. Is the approved plan of boiler forwarded herewith yes
 During erection on board vessel --- 1911. Jan. 9. 13. 17. 19. 23. 27. 31. Feb. 1. Total No. of visits 17 Return for duplicate Blk
June 16. 30. Jul 12

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) This boiler has been built under
Special Survey, is of good material and workmanship, and on completion was tested by
hydraulic pressure with satisfactory results
secured in place, mounted & tested under steam.

Survey Fee ... £ 4-5-0 When applied for, Monthly 1/0
 Travelling Expenses (if any) £ ... When received, ... 19...

Wm Morrison, E. J. Stoddart
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.



TUE. JUL 18. 1911

Shipping Committee's Minute
 Signed