

REPORT ON BOILERS.

No. 6637
WED. 8 FEB 1911

Survey Report 7.2.11 19 When handed in at Local Office 7th Feb 11 Port of 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 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 Messrs Riley Bros (No 4219) when made 1911
Horse Power Owners Mitani Kusan 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 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 3.98 sq ft 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 or uptakes and bunkers or woodwork 15" Inside dia. of boilers 11'-6" Length 10'-6"
of shell plates steel Thickness 15/16" 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"
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
180 lb Size of manhole in shell 16" x 12" Size of compensating ring 9 in. rivets 86.3
2 Plain Material steel Outside diameter 44" Length of plain part top 78 1/2" Thickness of plates crown 13/16
bottom 109" bottom 89 3/4 in
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 2 1/32 Top 2 1/32 Bottom 1" Pitch of stays to ditto: Sides 9 x 8 3/4 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 Working pressure by rules 184 Material of stays steel Diameter at smallest part 2.41
of stays 16 x 15 How are stays secured nuts & Working pressure by rules 198 Material of Front plates at bottom steel Thickness 3 1/32 Material of
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 25/32 Mean pitch of stays 10.78 Pitch across wide
Do. 766 spaces 13 1/2" Working pressures by rules 184 Girders to Chamber tops: Material steel Depth and thickness of
Do. 663 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 Bl
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 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.

Committee's Minute TUE JUL 18. 1911
Shipping
Lloyd's Register Foundation