

## REPORT ON BOILERS

No. 28431  
OCT. 16 1922 18 1923

Received at London Office

SUNDERLAND.

Date of writing Report

19

When handed in at Local Office

- 5 OCT 1922

Port of

No. in Survey held at

SUNDERLAND.

Date, First Survey 22<sup>nd</sup> Oct 1920 Last Survey 22<sup>nd</sup> Sep 1922

Reg. Book.

80482 on the

J. S. Saffier

(Number of Visits 9)

Gross

Tons

Net

Master Built at Newcastle By whom built W. Dobson &amp; Co (45 No 220) When built 1922

Engines made at Newcastle By whom made North Eastern Marine Eng Co Ltd (No 2509) When made 1922

Boilers made at Sunderland By whom made North Eastern Marine Eng Co Ltd (No 2513) When made 1922

Registered Horse Power

Owners

Port belonging to

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel John Spencer &amp; Sons Ltd.

(Letter for record S) Total Heating Surface of Boilers 3570 sq ft Is forced draft fitted no No. and Description of

Boilers Two single ended marine Working Pressure 185 Tested by hydraulic pressure to 370 Date of test 22-9-22

No. of Certificate 3813 Can each boiler be worked separately No Area of fire grate in each boiler 48.5 No. and Description of

safety valves to each boiler 2 spring loaded Area of each valve 5.94 sq in Pressure to which they are adjusted 185 lbs

Are they fitted with easing gear No In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler none

Smallest distance between boilers or uptakes and bunkers or woodwork 15" Mean dia. of boilers 13'-0" Length 11'-6"

Material of shell plates steel Thickness 1 1/2" Range of tensile strength 29-33 tons Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams DR long. seams DBS. TR Diameter of rivet holes in long. seams 1 3/16" Pitch of rivets 9"

Lap of plates or width of butt straps 18" Per centages of strength of longitudinal joint rivets 88 plate 86.8 Working pressure of shell by

rules 186 Size of manhole in shell 16" x 12" Size of compensating ring flanged No. and Description of Furnaces in each

boiler 3 Morrison Material steel Outside diameter 3'-1" Length of plain part top Thickness of plates crown 1 1/2" bottom 3/2"

Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 187 Combustion chamber

plates: Material steel Thickness: Sides 2 5/8" Back 2 5/8" Top 2 5/8" Bottom 2 5/8" Pitch of stays to ditto: Sides 11 7/8" x 9 1/4" Back 10 5/8" x 10 9/16"

Top 11 7/8" x 9 1/4" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 185 Material of stays steel Area at

smallest part 2.360" Area supported by each stay 1120" Working pressure by rules 188 End plates in steam space: Material steel Thickness 1 1/2"

Pitch of stays 2 1/2" x 7" How are stays secured none Working pressure by rules 187 Material of stays steel Area at smallest part 6.49"

Area supported by each stay 3660" Working pressure by rules 185 Material of Front plates at bottom steel Thickness 1 3/8" Material of

Lower back plate steel Thickness 1 5/8" Greatest pitch of stays 14 1/2" x 10 9/16" Working pressure of plate by rules 189 Diameter of tubes 3/4"

Pitch of tubes 4 1/2" x 4 3/8" Material of tube plates steel Thickness: Front 1 3/8" Back 3/4" Mean pitch of stays 10" Pitch across wide

water spaces 14 1/4" (5/8" WP) Working pressures by rules 216 Girders to Chamber tops: Material steel Depth and thickness of

girder at centre 2 @ 8 3/8" x 1" Length as per rule 31" Distance apart 11 7/8" Number and pitch of Stays in each 2 @ 9 1/4"

Working pressure by rules 186 Steam dome: description of joint to shell none % of strength of joint

Diameter 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 none Date of Approval of Plan Tested by Hydraulic Pressure to

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

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

THE NORTH EASTERN MARINE ENGINEERING CO. LTD.

The foregoing is a true description,

Assistant Secretary.

Manufacturer.

Dates of Survey During progress of 1920. Oct. 22. Nov. 1. 22. Aug. 9. 17. Sep. 1. 13. Is the approved plan of boiler forwarded herewith Yes.

while work in shops - - -

building During erection on 21.22 board vessel - - -

Total No. of visits 9

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

The materials and workmanship are good.

The boilers have been constructed under special survey and have been sent to Wallenda to be fitted in the vessel.

Survey Fee ... £23 : 16 : When applied for, - 5 OCT 1922

Travelling Expenses (if any) £ : : When received, 31/10/1922

Advised from Lloyds Office L. J. Davis.

Committee's Minute FRI JAN. 19 1923

Assigned

Engineer Surveyor to Lloyd's Register of Shipping.

\* Please note grate surface - not obtainable at Sunderland

Lloyd's Register

Foundation

002127-002137-0165