

REPORT ON BOILERS.

No. 10625

FRI MAR 26 1920

Received at London Office

Writing Report 19 When handed in at Local Office 20. 3. 20 10 Port of Middlesbrough
 Survey held at Stockton-on-Tees Date, First Survey Included in Enquiry Last Survey. 15th March 1920
 on the Donkey Boiler for the S.S. TIBERTON (S.S. No. 679) Tons { Gross Net
 Built at Stockton By whom built Richardson Duck & Co When built 1920
 Made at Stockton By whom made Messrs Blair & Co Lim When made 1920
 Made at Stockton By whom made Messrs Blair & Co Lim (E 1070) When made 1920
 Indicated Horse Power Owners Messrs R. Chapman & Son Port belonging to Newcastle

TITUBULAR BOILERS — MAIN, AUXILIARY OR DONKEY. — Manufacturers of Steel Messrs John Spencer & Sons Ltd
 for record (S) Total Heating Surface of Boilers 1290 sq ft Is forced draft fitted no No. and Description of
 One single ended Working Pressure 100 Tested by hydraulic pressure to 200 Date of test 5.12.19
 Certificate 6062 Can each boiler be worked separately Area of fire grate in each boiler 33.7 sq ft No. and Description of
 valves to each boiler 2 direct spring Area of each valve 7.07 Pressure to which they are adjusted 105 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 On upper deck External dia. of boilers 12'-0" Length 10'-0"
 of shell plates steel Thickness $2\frac{1}{32}$ Range of tensile strength 28-32 Are the shell plates welded or flanged no
 of riveting: cir. seams 2 R-lap long. seams 2 B-2 Riv Diameter of rivet holes in long. seams $\frac{15}{16}$ Pitch of rivets $5\frac{1}{2}$
 plates or width of butt straps $10\frac{1}{4} \times \frac{5}{8}$ 3 Rivets per pitch Per centages of strength of longitudinal joint rivets 84.5 plate 83.09 Working pressure of shell by
 110 Size of manhole in shell 19×15 Size of compensating ring $4\frac{1}{2} \times 1$ No. and Description of Furnaces in each
 2 plain Material steel Outside diameter $41\frac{1}{2}$ Length of plain part top $67\frac{1}{2}$ Thickness of plates crown } $1\frac{1}{2}$
 bottom } $3\frac{1}{2}$
 of longitudinal joint Weld No. of strengthening rings none Working pressure of furnace by the rules 108 Combustion chamber
 Material steel Thickness: Sides $\frac{3}{16}$ Back $\frac{3}{16}$ Top $\frac{3}{16}$ Bottom $\frac{3}{16}$ Pitch of stays to ditto: Sides $9\frac{3}{4} \times 9\frac{3}{4}$ Back $9\frac{3}{4} \times 9\frac{3}{4}$
 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 114 Material of stays steel Area at
 1.41 Area supported by each stay 95.06 Working pressure by rules 118 End plates in steam space: Material steel Thickness $2\frac{1}{32}$
 of stays 19×16 How are stays secured nuts & washers Working pressure by rules 109 Material of stays steel Area at smallest part 3.26
 supported by each stay 323 Working pressure by rules 105 Material of Front plates at bottom steel Thickness $\frac{13}{16}$ Material of
 back plate steel Thickness $\frac{3}{4}$ Greatest pitch of stays $14 \times 9\frac{3}{4}$ Working pressure of plate by rules 134 Diameter of tubes $3\frac{1}{2}$
 of tubes $4\frac{1}{2} \times 4\frac{1}{2}$ Material of tube plates steel Thickness: Front $\frac{13}{16}$ Back $\frac{3}{4}$ Mean pitch of stays $10\frac{7}{8}$ Pitch across wide
 spaces $14\frac{1}{4}$ Working pressures by rules 116 Girders to Chamber tops: Material steel Depth and thickness of
 at centre $7\frac{1}{2} \times 1\frac{1}{2}$ Length as per rule $28\frac{1}{2}$ Distance apart $9\frac{3}{4}$ Number and pitch of Stays in each $20 \times 9\frac{1}{2}$
 Working pressure by rules 116 Steam dome: description of joint to shell none % 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
 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

For the foregoing is a correct description,
 Geo. Attisnup Manufacturer.

Is the approved plan of boiler forwarded herewith

Total No. of visits

During progress of work in shops -- See report on Engines.
 During erection on board vessel --

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. It has now been satisfactorily secured on board, examined under steam and safety valves adjusted.

Survey Fee ... £ ... When applied for, 19
 Travelling Expenses (if any) £ ... When received, 19

Committee's Minute

signed See Mr. J. E. y. attached

W433-0061

Wm Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
 Foundation