

REPORT ON BOILERS.

THU MAY 27 1920
No. 27818

Date of writing Report

191

When handed in at Local Office

26 MAY 1920

Port of

SUNDERLAND

No. in Survey held at

Reg. Book.

SUNDERLAND

Lowestoft Date, First Survey

13 Feb 1920 Last Survey

191

on the Messrs G. Clark's Brier 110 1/2 S.S. "Wynstone"

(Number of Visits)

Gross
Tons
Net

Master

Built at Lowestoft By whom built John Chambers Ltd

When built 1920

Engines made at S. Shields

By whom made G. J. Gray No 606

When made 1920

Boilers made at Sunderland

By whom made G. Clark Ltd 110 1/2

When made 1920

Registered Horse Power

Owners Messrs Stone & Relf

Port belonging to Llanelly

MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel Spencer & Sons

(Letter for record S) Total Heating Surface of Boilers 1844 sq ft Is forced draft fitted No No. and Description of Boilers One Single Ended Working Pressure 150 lbs Tested by hydraulic pressure to 360 lbs Date of test 14.5.20

No. of Certificate 3685 Can each boiler be worked separately Area of fire grate in each boiler No. and Description of safety valves to each boiler 2 Spring Loaded Area of each valve 5.9 sq ft Pressure to which they are adjusted 185 lbs.

Are they fitted with easing gear Yes In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler No.

Smallest distance between boilers or uptakes and bunkers or woodwork 18 ins Ex Mean dia. of boilers 14.0 Length 10.6

Material of shell plates S Thickness 1 1/8 Range of tensile strength 28.32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams Lap Rivet long. seams A. H. Rivet Diameter of rivet holes in long. seams 1 3/16 Pitch of rivets 8 3/8

Pitch of plates or width of butt straps 18 Per centages of strength of longitudinal joint rivets 67 plate 86 Working pressure of shell by rules 182

Size of manhole in shell 12 x 16 Size of compensating ring 8 x 1 3/16 No. and Description of Furnaces in each boiler 3 Dighton Material S Outside diameter 3-7 Length of plain part top Thickness of plates crown 3 3/4 bottom 1 3/4

Description of longitudinal joint welded No. of strengthening rings Working pressure of furnace by the rules 182 Combustion chamber plates: Material S Thickness: Sides 23/32 Back 1/16 Top 23/32 Bottom 13/32 Pitch of stays to ditto: Sides 9 1/4 x 9 1/2 Back 9 3/4 x 8 7/8

Top 9 x 9 1/4 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 188 Material of stays S Area at smallest part 2.03 sq ft Area supported by each stay 88 sq ft Working pressure by rules 217 End plates in steam space: Material S Thickness 1 3/32

Pitch of stays 22 x 17 3/4 How are stays secured A. H. Rivet Working pressure by rules 184 Material of stays S Area at smallest part 6.49 sq ft

Area supported by each stay 370 sq ft Working pressure by rules 182 Material of Front plates at bottom S Thickness 1 3/16 Material of Lower back plate S Thickness 1 5/16 Greatest pitch of stays 14 3/4 Working pressure of plate by rules 194 Diameter of tubes 3 1/4

Pitch of tubes 4 1/2 x 4 3/8 Material of tube plates S Thickness: Front 13/16 Back 3/4 Mean pitch of stays 11 1/4 x 8 3/4 Pitch across wide water spaces 14 1/4 x 12 Working pressures by rules 262 Girders to Chamber tops: Material S Depth and thickness of

Girder at centre 7 3/8 x 1 3/4 Length as per rule 30 Distance apart 9 Number and pitch of Stays in each 2, 9 1/4

Working pressure by rules 181 Steam dome: description of joint to shell % 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 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 foregoing is a correct description,

FOR GEORGE CLARK LIMITED Manufacturer.

Dates During progress of work in shops 1920 Feb. 13, 26, Mar. 8, 23, Apr. 14, 22, May 6, 10, 14 Is the approved plan of boiler forwarded herewith Yes

During erection on board vessel Total No. of visits not returned from the

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

This boiler has been built under special survey. The materials and workmanship are sound and good. The boiler was built to the order of Messrs G. J. Gray, S. Shields engine No 606.

Survey Fee ... £ 6 : 3 :

When applied for, 26 MAY 1920

Travelling Expenses (if any) £ :

When received, as per order 191

FRI. 17 DEC. 1920

Committee's Minute

Assigned

G. A. Smith & Robert Rae
Engineer Surveyor to Lloyd's Register of Shipping.Lloyd's Register
Foundation

W491-0106