

# REPORT ON BOILERS.

WED. APR. 25 1923  
No. 73193  
THU. JUN. 10 1920

Received at London Office

Port of Newcastle on Tyne.

When handed in at Local Office 9 - JUN. 1920

No. in Survey held at Newcastle on Tyne. Date, First Survey 1<sup>st</sup> Jul. 1919 Last Survey 31<sup>st</sup> May 1920

eg. Book. Donkey Boiler, contract no. 2506 E. (Number of Visits 17) Tons 17 Gross 17 Net 17

on the Donkey Boiler, contract no. 2506 E. Built at Fateshead By whom built Messrs Clarke Chapman & Co. Ltd. When built 1920.

By whom made Messrs Clarke Chapman & Co. Ltd. When made 1920.

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Registered Horse Power 100 Owners Messrs Randolph & Skibs Port belonging to

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

etter for record 1. Horizontal Multitubular Total Heating Surface of Boilers 300 sq ft Is forced draft fitted No. No. and Description of 1. Double Spring Loaded

Working Pressure 100 lbs. Tested by hydraulic pressure to 200 lbs. Date of test 31/5/20

of Certificate 9410 Can each boiler be worked separately ✓ Area of fire grate in each boiler 12 sq ft No. and Description of 1. Double Spring Loaded

ety valves to each boiler 1. Double Spring Loaded Area of each valve 4.90" Pressure to which they are adjusted ✓ 100 lbs

e they fitted with easing gear ✓ In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ✓

allest distance between boilers or uptakes and bunkers or woodwork ✓ Mean dia. of boilers 7'-0" Length 7'-0"

aterial of shell plates Steel Thickness 1 1/32" Range of tensile strength 28/32 Are the shell plates welded or flanged ha

scrip. of riveting: cir. seams S.R.-L.J. long. seams DR.-L.J. Diameter of rivet holes in long. seams 1" Pitch of rivets 3 1/2"

p of plates or width of butt straps 4 7/8" Per centages of strength of longitudinal joint 71.8% Working pressure of shell by 71.4%

es 114 lbs Size of manhole in shell 15" x 12" Size of compensating ring 6" x 7 1/2" No. and Description of Furnaces in each 1. Plain

Material Steel Outside diameter 3'-1" Length of plain part 5'-0 1/2" Thickness of plates 1/2"

escription of longitudinal joint Lap Welded No. of strengthening rings hil Working pressure of furnace by the rules 129 lbs. Combustion chamber

es: Material Steel Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1/2" Pitch of stays to ditto: Sides 8 1/2" x 8" Back 8 3/4" x 8"

p 9 1/2" x 8" If stays are fitted with nuts or riveted heads huk Working pressure by rules 100 lbs. Material of stays Steel Area at

allest part 99 Area supported by each stay 70 sq in Working pressure by rules 113 End plates in steam space: Material Steel Thickness 1/16"

ch of stays 16" x 15" How are stays secured D. Nuts Working pressure by rules 100 lbs. Material of stays steel Area at smallest part 2.76 sq in

ea supported by each stay 225 sq in Working pressure by rules 127 lbs. Material of Front plates at bottom steel Thickness 1/16" Material of

eer back plate steel Thickness 1/16" Greatest pitch of stays 8 3/4" Working pressure of plate by rules 232 lbs. Diameter of tubes 3"

ch of tubes 4" x 4" Material of tube plates Steel Thickness: Front 1/16" Back 1/16" Mean pitch of stays 12" Pitch across wide

ter spaces 11" Working pressures by rules 140 lbs. 107 lbs. Girders to Chamber tops: Material Steel Depth and thickness of

der at centre 5" x 1/2" Length as per rule 1'-7" Distance apart 9 1/2" Number and pitch of Stays in each 4, 8"

orking pressure by rules 100 lbs. Steam dome: description of joint to shell ✓ % of strength of joint ✓

iameter ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet holes ✓

ch 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

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

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

The foregoing is a correct description, FOR CLARKE CHAPMAN & CO. LTD. Manufacturer.

Director W. W. W. W.

Is the approved plan of boiler forwarded herewith Yes.

During progress of work in shops - 1919 1920 Jul. 1. Aug. 2. Jan. 8. 15. 19. 30. Feb. 2. 5. 15. Mar. 2. 5. 15. 24. Apr. 17. 27. May 26. 31.

During erection on board vessel -

Total No. of visits 17

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This donkey boiler has been constructed under special survey, & the materials & workmanship are sound & good.

Survey Fee £ 2 : 2 : When applied for, Monthly 19

Travelling Expenses (if any) £ ✓ When received, 19

Committee's Minute FRI. 25 MAY. 1923

signed See Lia 2537

C. R. Stuart. Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation

W425-0107