

# REPORT ON BOILERS.

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

Received at London Office

Port of Newcastle on Tyne.  
 Date, First Survey 1<sup>st</sup> Jul. 1919 Last Survey 31<sup>st</sup> May 1920  
 (Number of Visits 17)  
 on the Donkey Boiler, contract no. 2506 E.  
 Built at Fateshead By whom built Messrs Clarke Chapman & Co. L<sup>td</sup> When built 1920.  
 By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 By whom made \_\_\_\_\_ When made \_\_\_\_\_  
 Owners Messrs Randolph & Skibs Port belonging to \_\_\_\_\_

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.—Manufacturers of Steel J. Spencer & Sons L<sup>td</sup>

Total Heating Surface of Boilers 300 sq ft Is forced draft fitted ho. No. and Description of Boilers 1, Horizontal Multitubular  
 Working Pressure 100 lbs. Tested by hydraulic pressure to 200 lbs. Date of test 31/5/20

Area of fire grate in each boiler 12 sq ft No. and Description of Safety valves to each boiler 1, Double Spring loaded  
 Area of each valve 4.90" Pressure to which they are adjusted 100 lbs

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler ho.  
 Mean dia. of boilers 7'-0" Length 7'-0"

Material of shell plates Steel Thickness 17/32" Range of tensile strength 28/32 Are the shell plates welded or flanged ho.

Description 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"

Per centages of strength of longitudinal joint 71.8% Working pressure of shell by rules 114 lbs  
 Size of manhole in shell 15" x 12" Size of compensating ring 6" x 7/32"

Description of longitudinal joint Lap Welded No. of strengthening rings nil Working pressure of furnace by the rules 129 lbs.  
 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"

Working pressure by rules 100 lbs. Material of stays Steel Area at smallest part 99 sq in.  
 Area supported by each stay 70 sq in. Working pressure by rules 113. End plates in steam space: Material Steel Thickness 1/16"

How are stays secured D. Nuts Working pressure by rules 100 lbs. Material of stays steel Area at smallest part 276 sq in.  
 Area 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 Front plates at bottom steel Thickness 1/16" Material of rear 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"

Material of tube plates Steel Thickness: Front 1/16" Back 1/16" Mean pitch of stays 12" Pitch across wide  
 Working pressures by rules 140 lbs. 107 lbs. Girders to Chamber tops: Material Steel Depth and thickness of

Length as per rule 1'-7" Distance apart 9 1/2" Number and pitch of Stays in each 4, 8"  
 Working pressure by rules 100 lbs. Steam dome: description of joint to shell ho. % of strength of joint ho.

Thickness of shell plates ho. Material ho. Description of longitudinal joint ho. Diam. of rivet holes ho.  
 Working pressure of shell by rules ho. Crown plates ho. Thickness ho. How stayed ho.

Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler ho.  
 Pressure to which each is adjusted ho. Is Easing Gear fitted ho.

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

Is the approved plan of boiler forwarded herewith Yes.  
 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 : 0 When applied for, Monthly 19  
 Travelling Expenses (if any) £ ✓ : 0 : 0 When received, 19

Committee's Minute FRI. 25 MAY. 1923  
 signed See Lia 2537

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

Lloyd's Register Foundation

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