

# REPORT ON BOILERS.

No. 12735

Port of

West Hartlepool

Date, first Survey

7th March

Received at London Office

WED. 3 JAN 1906

No. in Reg. Book.

272 on the

Cable steamer "Electra"

Date, first Survey

Last Survey

31st July 1915

(Number of Visits 17)

Gross 1219 Tons

Net 656

Master

Engines made at

NEW Boilers made at

Registered Horse Power

Built at Glasgow

By whom built

R Napier & Sons

When built 1885.imo

Glasgow

By whom made

R Napier & Sons

when made 1885

Hartlepool

By whom made

Richardsons Westgarth & Co Ltd

when made 1905

220

Owners

Eastern Telegraph Co Ltd

Port belonging to

London

## MULTITUBULAR BOILERS—MAIN, AUXILIARY OR DONKEY.

Manufacturers of Steel John Spencer & Sons Limited

(Letter for record 0) Total Heating Surface of Boilers 3723 sq ft Is forced draft fitted No No. and Description of Boilers Two single ended Cyl. Mult. Working Pressure 90 lbs Tested by hydraulic pressure to 180 lbs Date of test 12.5.05

No. of Certificate 2988 Can each boiler be worked separately Yes Area of fire grate in each boiler 54.75 sq ft No. and Description of safety valves to each boiler Two Spring Loaded 3 3/4 dia. Area of each valve 11.04 sq in Pressure to which they are adjusted 92 lbs

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

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 13-5" Length 10-4"

Material of shell plates Steel Thickness 5/8" Range of tensile strength 28.2 to 32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams double long. seams double Diameter of rivet holes in long. seams 7/8" Pitch of rivets 4 7/8"

Lap of plates or width of butt straps 10" Per centages of strength of longitudinal joint rivets 88% plate 82.05% Working pressure of shell by rules 90.25 lbs

Size of manhole in shell 12" x 16" Size of compensating ring McNeil's No. and Description of Furnaces in each boiler 3 Morrison Material Steel Outside diameter 40 1/2" Length of plain part top 7 1/2" Thickness of plates crown 3/8" bottom 3/8"

Description of longitudinal joint Weld No. of strengthening rings Working pressure of furnace by the rules 119 lbs Combustion chamber plates: Material Steel Thickness: Sides 15/32" Back 15/32" Top 15/32" Bottom 1/2" Pitch of stays to ditto: Sides 8 1/2" Back 8 1/4"

Top 8 1/2" If stays are fitted with nuts or riveted heads Nuts Working pressure by rules 93.5 lbs Material of stays steel Diameter at smallest part 1 3/8" Area supported by each stay 72.2" Working pressure by rules 100 lbs End plates in steam space: Material Steel Thickness 1 1/16"

Pitch of stays 18 x 13 How are stays secured J.W. Working pressure by rules 90 lbs Material of stays iron Diameter at smallest part 2"

Area supported by each stay 235" Working pressure by rules 101 lbs Material of Front plates at bottom steel Thickness 5/8" Material of Lower back plate Steel Thickness 9/16" Greatest pitch of stays 13" Working pressure of plate by rules 92 lbs Diameter of tubes 3"

Pitch of tubes 4 3/8" Material of tube plates steel Thickness: Front 11/16" Back 5/8" Mean pitch of stays 8 1/4" Pitch across wide water spaces 14" Working pressures by rules 92.5 lbs Girders to Chamber tops: Material steel Depth and thickness of girder at centre 6" x 1 1/4" Length as per rule 28 1/2" Distance apart 8 1/2" Number and pitch of Stays in each Two 8 1/2"

Working pressure by rules 91.8 lbs Superheater or Steam chest: how connected to boiler Can the superheater be shut off and the boiler worked separately

Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

If stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

VERTICAL DONKEY BOILER— No. Description Manufacturers of steel

Made at By whom made When made Where fixed

Working pressure tested by hydraulic pressure to No. of Certificate Fire grate area Description of safety valves

No. of safety valves Area of each Pressure to which they are adjusted If fitted with easing gear If steam from main boilers can enter the donkey boiler

Dia. of donkey boiler Length Material of shell plates Thickness Range of tensile strength

Descrip. of riveting long. seams Dia. of rivet holes Whether punched or drilled Pitch of rivets

Lap of plating Per centage of strength of joint Rivets Plates Working pressure of shell by rules Thickness of shell crown plates

Radius of do. No. of Stays to do. Dia. of stays Diameter of furnace Top Bottom Length of furnace

Thickness of furnace plates Description of joint Working pressure of furnace by rules Thickness of furnace crown plates

Stayed by Diameter of uptake Thickness of uptake plates Thickness of water tubes

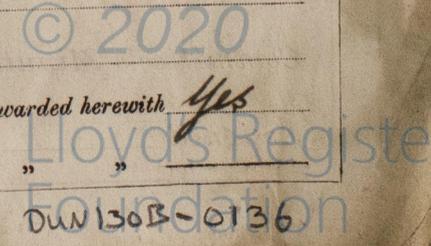
The foregoing is a correct description, of RICHARDSONS, WESTGARTH & CO., LIMITED. Manufacturer.

Dates of Survey while building

1905. Mar. 7. 8. 9. 13. 14. 15. 21. 22. 23. Apr. 4. 5. 10. 14. 28. May 12. June 20. July 3.

Is the approved plan of main boiler forwarded herewith Yes

" " " donkey " " " " "



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

These boilers have been constructed under special survey  
 accordance with the approved plan; the materials and  
 workmanship are good & in my opinion are eligible to be  
 record of \* NB with date in the Register Book

A J Graham  
 91

Certificate (if required) to be sent to  
 (The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee...	£	:	When applied for.
Special ... ..	£ 10	6 : 8	18. 10. 05
Donkey Boiler Fee ...	£	:	When received.
Travelling Expenses (if any) £			23/10/05

A J Graham  
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

FRL 5 JAN 1906

Committee's Minute

Assigned



© 2020

Lloyd's Register  
 Foundation