

REPORT ON BOILERS.

No. 23428

Port of Sunderland

Received at London Office **THUR. 12 SEP 1907**

No. in Survey held at Sunderland
Book.

Date, first Survey 1st Nov 1906 Last Survey 2nd Aug 1907

(Number of Visits 84)

Tons { Gross 3813.54
Net 2433.34

on the

S.S. "Arnett"

er W. L. Newton Built at Sunderland By whom built Messrs J. L. Thompson & Sons When built 1907

nes made at Sunderland By whom made Messrs J. Dickinson & Sons when made 1907

ers made at Sunderland By whom made Messrs J. Dickinson & Sons when made 1907

Registered Horse Power _____ Owners W. R. Rea Port belonging to Sunderland

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

atter for record S Total Heating Surface of Boilers 735 Is forced draft fitted no No. and Description of

ilers one S.E. Cylindrical Mult Working Pressure 90 Tested by hydraulic pressure to 180 Date of test 25.4.07

of Certificate 2606 Can each boiler be worked separately Area of fire grate in each boiler 25 No. and Description of

ety valves to each boiler 2 spring Area of each valve 4.91 Pressure to which they are adjusted 95

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

allest distance between boilers or uptakes and bunkers or woodwork fitted on deck Mean dia. of boilers 10' 0" Length 9' 6"

aterial of shell plates steel Thickness 19/32 Range of tensile strength 28/32 Are the shell plates welded or flanged no

Descrip. of riveting: cir. seams L. r. lap long. seams L. r. lap Diameter of rivet holes in long. seams 15/16 Pitch of rivets 3 1/8

ap of plates or width of butt straps 6 1/2 Per centages of strength of longitudinal joint 74.58 Working pressure of shell by

ules 94.5 Size of manhole in shell 16 x 12 Size of compensating ring 7 1/8 x 19/32 No. and Description of Furnaces in each

oiler 2 plain Material steel Outside diameter 34 1/2 Length of plain part 6' 5 1/2 Thickness of plates 1 crown 2 bottom

Description of longitudinal joint single butt strap No. of strengthening rings Working pressure of furnace by the rules 101 Combustion chamber

plates: Material steel Thickness: Sides 7/8 Back 7/8 Top 7/8 Bottom 7/8 Pitch of stays to ditto: Sides 10 5/8 x 11 1/2 Back 10 x 12 1/2

Top 11 1/2 x 7 1/2 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 105 Material of stays steel Diameter at

smallest part 1.35 Area supported by each stay 125 Working pressure by rules 92.86 End plates in steam space: Material steel Thickness 23/32

Pitch of stays 15 x 14 1/2 How are stays secured d. n. + w. Working pressure by rules 94 Material of stays steel Diameter at smallest part 1.6

Area supported by each stay 217 1/2 Working pressure by rules 93.36 Material of Front plates at bottom steel Thickness 23/32 Material of

Lower back plate steel Thickness 21/32 Greatest pitch of stays 12 1/4 x 12 1/2 Working pressure of plate by rules 96.5 Diameter of tubes 5 1/4

Pitch of tubes 4 1/2 x 4 1/2 Material of tube plates steel Thickness: Front 23/32 Back 9/16 Mean pitch of stays 9 Pitch across wide

water spaces 13 1/4 Working pressures by rules 105 Girders to Chamber tops: Material steel Depth and thickness of

girder at centre 5 5/8 x 1 1/4 Length as per rule 2.1 23/32 Distance apart 7 1/2 Number and pitch of Stays in each 1-11 1/2

Working pressure by rules 95.16 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 _____ 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

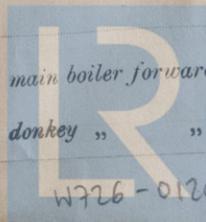
plates _____ Stayed by _____ Diameter of uptake _____ Thickness of uptake plates _____ Thickness of water tubes _____

The foregoing is a correct description,
J. Dickinson Manufacturer.

Dates { During progress of work in shops - - -
of Survey { During erection on board vessel - - -
while building { Total No. of visits _____

See First Entry Report.

Is the approved plan of main boiler forwarded herewith
" " " donkey " "



© 2020

Lloyd's Register Foundation

W726-0120

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This donkey boiler has been constructed under Special Survey, the workmanship and materials used are both of good quality, the boiler has been satisfactorily fitted on board, and the safety Valves adjusted under steam.*

The Surveyor is requested not to sign any of the bills (or copies for Committee's Minutes)

The amount of Entry Fee...	£	:	:	When applied for,
Special	£	:	:	19
Donkey Boiler Fee ...	£	:	:	When received,
Travelling Expenses (if any) £	:	:	:	19

R. W. Coomber.
 Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute **FRI. 13 SEP 1907**

Assigned *See minute on attached report*