

# REPORT ON BOILERS.

MON. 13 AUG 1906

Port of Newcastle on Tyne

Received at London Office

No. in Survey held at Newcastle  
Reg. Book.

Date, first Survey

Last Survey 14 August 1906

on the Steel S.S. "Braunfels"

(Number of Visits)

Gross 5551  
Tons }  
Net 559

Master \_\_\_\_\_ Built at Newcastle By whom built Swan Hunter & W Richardson L<sup>d</sup> When built 1906

Engines made at Newcastle By whom made Swan Hunter & W Richardson L<sup>d</sup> when made 1906

Boilers made at D By whom made D when made 1906

Registered Horse Power \_\_\_\_\_ Owners Messrs The Hansa Co. Port belonging to Bremen

## MULTITUBULAR BOILERS ~~PLAIN, AUXILIARY OR DONKEY.~~ Manufacturers of Steel Spencer & Son

(Letter for record ) Total Heating Surface of Boilers 1045 sq ft Is forced draft fitted No No. and Description of

Boilers The Cyl<sup>d</sup> Steel Working Pressure 120 Tested by hydraulic pressure to 240 Date of test 18-6-06

No. of Certificate 7254 Can each boiler be worked separately  Area of fire grate in each boiler 460 No. and Description of

safety valves to each boiler 2 Spring Area of each valve 7-06 Pressure to which they are adjusted 125

Are they fitted with easing gear No 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 2-6 Mean dia. of boilers 12-0 Length 10-0

Material of shell plates S Thickness 25/32 Range of tensile strength 28/32 Are the shell plates welded or flanged No

Descrip. of riveting: cir. seams d lap long. seams d chop Diameter of rivet holes in long. seams 7/8 Pitch of rivets 5 1/2

Lap of plates or width of butt straps 13 3/4 Per centages of strength of longitudinal joint rivets 83 Working pressure of shell by

rules 132 Size of manhole in shell 16 x 12 Size of compensating ring 7 1/2 x 25/32 plate 84 No. and Description of Furnaces in each

boiler 3 Plain Material S Outside diameter 38 5/8 Length of plain part top 76 Thickness of plates crown 5/8

Description of longitudinal joint d chop No. of strengthening rings  Working pressure of furnace by the rules 133 Combustion chamber

plates: Material S Thickness: Sides 1/2 Back 1/2 Top 1/2 Bottom 3/4 Pitch of stays to ditto: Sides 7 3/4 x 7 3/4 Back 7 3/4 x 7 3/4

Top 7 3/4 x 7 3/4 If stays are fitted with nuts or riveted heads nut Working pressure by rules 128 Material of stays iron Diameter at

smallest part 1-19 Area supported by each stay 60 Working pressure by rules 120 End plates in steam space: Material S Thickness 3/4 x 13/16

Pitch of stays 14 7/8 x 14 7/8 How are stays secured d & w Working pressure by rules 141 Material of stays S Diameter at smallest part 3-26

Area supported by each stay 221 Working pressure by rules 147 Material of Front plates at bottom S Thickness 15/16 Material of

Lower back plate S Thickness 3/16 Greatest pitch of stays as per plan Working pressure of plate by rules 120 Diameter of tubes 3 1/2

Pitch of tubes 4 1/2 x 4 5/8 Material of tube plates S Thickness: Front 13 x 15/16 Back 11/16 Mean pitch of stays 10 1/2 Pitch across wide

water spaces 14 Working pressures by rules 120 Girders to Chamber tops: Material S Depth and thickness of

girder at centre 6 1/2 x 1 1/4 Length as per rule 27 1/2 Distance apart 7 Number and pitch of Stays in each 2-7 3/4

Working pressure by rules 140 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 \_\_\_\_\_

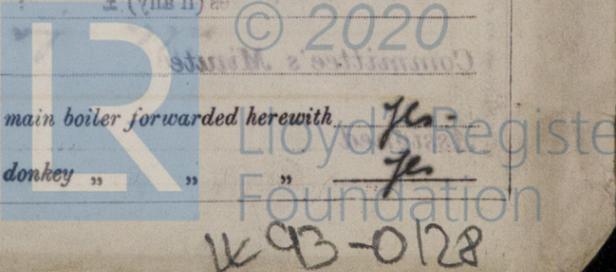
FOR The foregoing is a correct description,  
SWAN, HUNTER, & WIGHAM RICHARDSON, LTD. Manufacturer.

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

Wm Lumsden  
DIRECTOR  
Please see machinery report

Is the approved plan of main boiler forwarded herewith \_\_\_\_\_

" " " donkey " " \_\_\_\_\_



W 93-0128

