

Swan Hunter & W Richardson Ltd S-S-796

Rpt. 5a.

REPORT ON BOILERS.

No. 55625.

Received at London Office **TUES. 27 OCT 1908**

Date of writing Report **19-10-1908** When handed in at Local Office **26 OCT 1908** Port of **Newcastle on Tyne**

No. in Survey held at **Newcastle** Date, First Survey **26 Oct 1908** Last Survey **26 Oct 1908**

Reg. Book. **87** on the **Steel S-S. "FANGTORN"** (Number of Visits **5/5 796**) Tons **Gross 500 1/4 Net 3170**

Master **Swan Hunter & W Richardson** Built at **Newcastle** By whom built **Swan Hunter & W Richardson** When built **1908**

Engines made at **Newcastle** By whom made **Swan Hunter & W Richardson Ltd** when made **1908**

Boiler made at **Newcastle** By whom made **D** when made **1908**

Registered Horse Power **475 470** Owners **Hansa Deutsche Dampfschiffahrt Ges** Port belonging to **Bremen**

MULTITUBULAR BOILERS ~~MAIN, AUXILIARY OR~~ DONKEY. — Manufacturers of Steel **J Spence & Co.**

Letter for record **R** Total Heating Surface of Boilers **1100 1118 1/4** Is forced draft fitted **No.** No. and Description of Boilers **One Cyl, Mult, S end** Working Pressure **120** Tested by hydraulic pressure to **240** Date of test **4-9-08**

No. of Certificate **7752** Can each boiler be worked separately **✓** Area of fire grate in each boiler **46-5** No. and Description of safety valves to each boiler **Two Spring** Area of each valve **7 1/2** Pressure to which they are adjusted **125**

Are they fitted with easing gear **Yes** 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 **24** Outside Mean dia. of boilers **12-1 1/2** Length **10-3**

Material of shell plates **S** Thickness **25/32** Range of tensile strength **28 3/4 + 32** Are the shell plates welded or flanged **No**

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

Cap of plates or width of butt straps **13 3/4** Per centages of strength of longitudinal joint rivets **83** plate **84** Working pressure of shell by rules **135** Size of manhole in shell **16 x 12** Size of compensating ring **7 1/2 x 25/32** No. and Description of Furnaces in each boiler **3 plain** Material **S** Outside diameter **38 5/8** Length of plain part top **79** bottom **86** Thickness of plates crown **2 1/32** bottom **2 1/32**

Description of longitudinal joint **d sharp** No. of strengthening rings **✓** Working pressure of furnace by the rules **140** Combustion chamber plates: Material **S** Thickness: Sides **1/2** Back **1/2** Top **1/2** Bottom **25/32** Pitch of stays to ditto: Sides **7 3/4 x 7 7/8** Back **7 3/4 x 7 3/4**

Top **7 5/8 x 7 7/8** If stays are fitted with nuts or riveted heads **Nut** Working pressure by rules **127** Material of stays **Iron** Diameter at smallest part **1-45** Area supported by each stay **61** Working pressure by rules **143** End plates in steam space: Material **S** Thickness **3 1/32**

Pitch of stays **19 x 16 1/2** How are stays secured **d h + w** Working pressure by rules **141** Material of stays **S** Diameter at smallest part **5-05**

Area supported by each stay **314** Working pressure by rules **167** Material of Front plates at bottom **S** Thickness **15/16** Material of Lower back plate **S** Thickness **3/4** Greatest pitch of stays **as per plan** Working pressure of plate by rules **120** Diameter of tubes **3 1/4**

Pitch of tubes **4 1/2 x 4 3/8** Material of tube plates **S** Thickness: Front **15/16** Back **11/16** Mean pitch of stays **10** Pitch across wide water spaces **14 1/4** Working pressures by rules **154** Girders to Chamber tops: Material **S** Depth and thickness of girder at centre **7 1/4 x 1 1/4** Length as per rule **27** Distance apart **7 7/8** Number and pitch of Stays in each **2- 7 5/8**

Working pressure by rules **170** 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 **✓**

FOR SV The foregoing is a correct description, **J F Tweedy** Manufacturer.

Dates of Survey **19-10-08** During progress of work in shops **✓** while building **✓** During erection on board vessel **✓**

Please see report on Machinery **✓** duplicate of S-S. Lowenburg Reg. 53291 Is the approved plan of boiler forwarded herewith **✓**

Total No. of visits **5**

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

The material & workmanship is good.
The boiler has been built & fitted under special Survey.

Survey Fee **£ 2 2** When applied for, **19**
Travelling Expenses (if any) **£** When received, **19**

John H Heck
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.

Committee's Minute
Assigned

TUES. 27 OCT 1908



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