

REPORT ON BOILERS

No. 61374

FRI. NOV. 24. 1911

Received at London Office

Date of writing Report

1911 When handed in at Local Office NOV 22 1911

Port of Newcastle on Tyne

No. in Survey held at Newcastle on Tyne
Reg. Book. on the S. S. Goldenfels

Date, First Survey 24th Apr. 1911 Last Survey 17th Nov. 1911
(Number of Visits) Gross 7429
Tons Net 4715

Master Built at Walker By whom built Swan Hunter & Wigham Richardson Ltd When built 1911
Engines made at Walker By whom made Swan Hunter & Wigham Richardson Ltd when made 1911
Boilers made at Walker By whom made Ditto when made 1911
Registered Horse Power Owners Hansa Deutsche Dampfschiff Gesellschaft Port belonging to Bremen

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

(Letter for record) Total Heating Surface of Boilers 1555 sq ft Is forced draft fitted No. and Description of Boilers one S.E. Cyl. Mult. Working Pressure 120 lbs. Tested by hydraulic pressure to 240 lbs. Date of test 27.9.11

No. of Certificate 8207 Can each boiler be worked separately Area of fire grate in each boiler 46 1/2 sq ft No. and Description of safety valves to each boiler 2 Spring Patent Area of each valve 7.07 sq ft Pressure to which they are adjusted 123 lbs.

Are they fitted with easing gear 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 27 1/2" Mean dia. of boilers 12' 10" Length 10' 6"

Material of shell plates steel 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.r. lap. long. seams L.r.d. r.s. Diameter of rivet holes in long. seams 7/8" Pitch of rivets 6"

Lap of plates or width of butt straps 13 1/2" Per centages of strength of longitudinal joint rivets 95.3 Working pressure of shell by rules 131 lbs Size of manhole in shell 16 x 12" Size of compensating ring flanged saddle 7/8" No. and Description of Furnaces in each boiler 3-plain Material steel Outside diameter 38 5/8" Length of plain part top 86" Thickness of plates crown 11/16" bottom 86"

Description of longitudinal joint d. r. s. No. of strengthening rings Working pressure of furnace by the rules 152 lbs Combustion chamber plates: Material steel Thickness: Sides 17/32 Back 17/32 Top 17/32 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" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 140 lbs Material of stays iron Diameter at smallest part 1.45" Area supported by each stay 62.01" Working pressure by rules 140 lbs End plates in steam space: Material steel Thickness 1"

Pitch of stays 16 1/2 x 16 3/4" How are stays secured d.n.w. Working pressure by rules 145 lbs Material of stays steel Diameter at smallest part 4.57"

Area supported by each stay 276.375" Working pressure by rules 147 lbs Material of Front plates at bottom steel Thickness 15/16" Material of Lower back plate steel Thickness 3/4" Greatest pitch of stays 13 3/8 x 7 7/8" Working pressure of plate by rules 145 lbs Diameter of tubes 3 1/4"

Pitch of tubes 4 1/2 x 4 3/8" Material of tube plates steel Thickness: Front 15/16" Back 3/4" Mean pitch of stays 9 x 8 3/4" Pitch across wide water spaces 14 1/4" Working pressures by rules 155 lbs Girders to Chamber tops: Material steel Depth and thickness of girder at centre 7 1/4 x 1 1/4" Length as per rule 29 3/4" Distance apart 7 7/8" Number and pitch of Stays in each 3-7"

Working pressure by rules 132 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

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

Dates of Survey: During progress of work in shops - - - See Machinery Report
while building: During erection on board vessel - - -
Is the approved plan of boiler forwarded herewith
Total No. of visits

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.

Survey Fee ... £ 2-2-0 When applied for, See Machinery Report
Travelling Expenses (if any) £ : : When received, 1911
R. W. Coomber & Wm. Lewis
Engineer Surveyor to Lloyd's Register of British and Foreign Shipping.