

REPORT ON BOILERS.

28 JUL 1930
Bel 10424
No. 16831

Received at London Office 13 MAR 1930

pt. 5b.

Date of writing Report 26.2.30 When handed in at Local Office 11.3.30 Port of Grimsby
No. in Reg. Book 84465 on the TWIN SC. "SILVERWALNUT"
Survey held at Lincoln Date, First Survey 18.12.29 Last Survey 26.12.29
(Number of Visits 8) Gross Tons Net
Built at Beepast By whom built Harland & Wolff Ltd. Yard No. 883 When built 1930
Engines made at Beepast By whom made Harland & Wolff Ltd. Engine No. 883 When made 1930
Boilers made at Lincoln By whom made Babcock & Wilcox Ltd. Boiler No. 73/4606 When made 1930
Owners Silver Line (Stanley & John Thompson Ltd. mgs.) Port belonging to London

VERTICAL DONKEY BOILER.

Made at Lincoln By whom made Babcock & Wilcox Ltd. Boiler No. 73/4606 When made 1930 Where fixed upper deck of main room.
Manufacturers of Steel Parkgate Works Ltd. Appleby Works Ltd.
Total Heating Surface of Boiler 520 sq. ft. Is forced draught fitted - Coal or Oil fired oil
No. and Description of Boilers One, Clarkson Patent bent Heat Rate Working pressure 100 lb
Tested by hydraulic pressure to 200 lb. Date of test 5th Feb. 1930 No. of Certificate 283
Area of Firegrate in each Boiler - No. and Description of safety valves to each boiler one, double, spring loaded
Area of each set of valves per boiler { per rule 6.78 sq. ft. as fitted 9.81 sq. ft. Pressure to which they are adjusted 48 lb Are they fitted with easing gear yes
State whether steam from main boilers can enter the donkey boiler N.R. valve. Smallest distance between boiler or uptake and bunkers or woodwork -
Is oil fuel carried in the double bottom under boiler - Smallest distance between base of boiler and tank top plating -
Is the base of the boiler insulated - Largest internal dia. of boiler 6'-0" Height 11'-9"
Shell plates: Material S. G. steel Tensile strength 28/32 Tons Thickness 1/2"
Are the shell plates welded or flanged no Description of riveting: circ. seams 1/8" long, seams D. K. Lap
Dia. of rivet holes in { circ. seams 7/8" Pitch of rivets { 2" & 2 1/8" Percentage of strength of circ. seams { plate 56.2% rivets 49.5% of Longitudinal joint { rivets 114 combined.
Working pressure of shell by rules 143 lb sq. in. Thickness of butt straps { outer 7/16" inner 7/16"
Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Flat Material S. G. steel
Tensile strength 26/30 Tons Thickness 1/16" Radius - Working pressure by rules 690 lb.
Description of Furnace: Plain, spherical, or dished crown dished Material S. G. steel Tensile strength 26/30 Tons
Thickness 1 1/16" External diameter { top 5'-2 1/8" bottom 5'-2 1/8" Length as per rule 8'-1 1/2" Working pressure by rules 110 lb sq. in.
Pitch of support stays circumferentially - and vertically - Are stays fitted with nuts or riveted over -
Diameter of stays over thread - Radius of spherical or dished furnace crown 4'-6" Working pressure by rule 127 lb sq. in.
Thickness of Ogee Ring - Diameter as per rule { D 5'-11" a 5'-2 1/8" Working pressure by rule 214 lb sq. in.
Combustion Chamber: Material - Tensile strength - Thickness of top plate -
Radius if dished - Working pressure by rule - Thickness of back plate - Diameter if circular -
Length as per rule - Pitch of stays - Are stays fitted with nuts or riveted over -
Diameter of stays over thread - Working pressure of back plate by rules -
Tube Plates: Material { front - Tensile strength { Thickness { Mean pitch of stay tubes in nests
If comprising shell, Dia. as per rule { front - Pitch in outer vertical rows { Dia. of tube holes FRONT { stay - BACK { stay -
Is each alternate tube in outer vertical rows a stay tube Working pressure by rules { front - back -
Girders to combustion chamber tops: Material - Tensile strength -
Depth and thickness of girder at centre - Length as per rule -
Distance apart - No. and pitch of stays in each - Working pressure by rule -

Crown stays: Material ☒ Tensile strength ☒ Diameter ☒ at body of stay, or over threads. ☒
 No. of threads per inch ☒ Area supported by each stay ☒ Working pressure by rules ☒
Screw stays: Material ☒ Tensile strength ☒ Diameter ☒ at turned off part, or over threads. ☒ No. of threads per inch ☒
 Area supported by each stay ☒ Working pressure by rules ☒ Are the stays drilled at the outer ends ☒
Tubes: Material *1/2" steel* ☒ External diameter *3 1/4 to 2 1/4* ☒ Thickness *6 B.W.G.* ☒
 No. of threads per inch ☒ Pitch of tubes ☒ Working pressure by rules ☒
Manhole Compensation: Size of opening in shell plate ☒ Section of compensating ring ☒ No. of rivets and diameter ☒
 of rivet holes ☒ Outer row rivet pitch at ends ☒ Depth of flange if manhole flanged ☒
Uptake: External diameter *3' - 10 3/8"* ☒ Thickness of uptake plate *11/16"* ☒
Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *ye*

The foregoing is a correct description,

Annual Survey Request

BABCOCK & WILCOX LTD
J. Lewis (Lincoln Branch), Manufacturer

Dates of Survey ☒ During progress of work in shops - *1929 Dec 18 1930 Jan 2.9 17.27.31 Feb 5.26* Is the approved plan of boiler forwarded herewith ☒
 while building ☒ During erection on board vessel - - - - - (If not state date of approval.) *22/11/29*
 Total No. of visits *8*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *This boiler has been built under special survey and in accordance with the Rules and approved plan as per Lecty's letter 22/11/29. The materials and workmanship are good*

This boiler has been efficiently fastened on an upper deck platform in the funnel of the vessel. The safety valves have been adjusted under steam. The boiler is heated by oil fires or waste heat from the exhaust gases. The accumulation did not exceed 8lbs

R Lee Ames
Belfast

Survey Fee £ *4: 4 9* When applied for, *10/2/30*
 Travelling Expenses (if any) £ *1: 19 6* When received, *24/1/30*

WED. 6 AUG 1930

Committee's Minute
 Assigned

See Bel & E 10427

Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
 Foundation