

REPORT ON BOILERS.

No. 93968

Received at London Office 12 JUN 1929

Date of writing Report June 29 1929 When handed in at Local Office 12 JUN 1929 Port of London
 No. in Survey held at Stichee Date, First Survey 16 May 1929 Last Survey June 30 1929
 Reg. Book + Britol
 40154 on the Spencer-Hopwood Patent Boilers for the T.S. Motor vessel "ELKHOUND"
 (Number of Visits Four) Gross 684.07 Tons Net 201
 Built at Britol By whom built Chas. Fitch & Co. Yard No. 173 When built 1929
 Engines made at Augsburg By whom made M.A.N. Engine No. When made 1918
 Boilers made at Stichee By whom made Spencer Hopwood & Co. Boiler No. 9738 When made 1929
 Owners Channel Tankers Ltd Port belonging to London

VERTICAL DONKEY BOILER.

Made at Stichee By whom made Spencer-Hopwood Boiler No. 9738 When made 1929 Where fixed
 Manufacturers of Steel Messrs. Stewart & Lloyd
 Total Heating Surface of Boiler 112 sq. ft. Is forced draught fitted no Coal or Oil fired oil
 No. and Description of Boilers One No. 10 Squal Spencer-Hopwood Patent Working pressure 120 lb./sq. in.
 Tested by hydraulic pressure to 230 lb./sq. in. Date of test 3-6-29 No. of Certificate 1342
 Area of Firegrate in each Boiler 9.6 sq. ft. No. and Description of safety valves to each boiler Spring loaded (Two) ✓
 Area of each set of valves per boiler { per rule 1.331 as fitted 3.52 sq. ft. Pressure to which they are adjusted 120 lb. Are they fitted with easing gear Yes ✓
 State whether steam from main boilers can enter the donkey boiler ✓ 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 4'-0" Height 7'-3" ✓
 Shell plates: Material Steel Tensile strength 28-32 Thickness 3/4" ✓
 Are the shell plates welded or flanged ✓ Description of riveting: circ. seams { end SR inter. long. seams BR ✓
 Dia. of rivet holes in { circ. seams 13/16 Pitch of rivets { 2" 2 1/4 Percentage of strength of circ. seams { plate 59% rivets 55% of Longitudinal joint { plate 68.5% rivets 86% combined ✓
 Working pressure of shell by rules 120 lb./sq. in. Thickness of butt straps { outer inner ✓
 Shell Crown: Whether complete hemisphere, dished partial spherical, or flat Flat Material Steel
 Tensile strength 26-30 Thickness 9/16 Radius - Working pressure by rules 120
 Description of Furnace: Plain, spherical, or dished crown Material Tensile strength
 Thickness External diameter { top bottom Length as per rule Working pressure by rules
 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 Working pressure by rule
 Thickness of Ogee Ring Diameter as per rule { D a Working pressure by rule
 Combustion Chamber: Material Steel Tensile strength 26-30 Thickness of top plate 9/16
 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 back Steel Tensile strength { 26-30 Thickness { 1/2" Mean pitch of stay tubes in nests 10 lbs.
 If comprising shell, Dia. as per rule { front back Pitch in outer vertical rows { Dia. of tube holes FRONT { stay plain BACK { stay plain
 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 rules

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 Solid Drawn Steel External diameter { plain 2 1/4" stay 2 1/4" Thickness { 11 Lbs. 3/16"

No. of threads per inch 11 Pitch of tubes 3 1/4" x 2 23/32" Working pressure by rules 120

Manhole Compensation: Size of opening in shell plate 14 x 11 Section of compensating ring 6 1/2" x 1/2" No. of rivets and diameter of rivet holes 24 - 13/16 Outer row rivet pitch at ends 5 1/2" Depth of flange if manhole flanged _____

Uptake: External diameter 1' 2 7/8" Thickness of uptake plate 1/2"

Cross Tubes: No. _____ External diameters { _____ Thickness of plates _____

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with Yes

SPENCER-HOPWOOD, LTD.
The foregoing is a correct description,

J. Bradley Manufacturer.
WORKS MANAGER

Dates of Survey { During progress of work in shops - 1929 May 16, 23, 27, June 3 Is the approved plan of boiler forwarded herewith Yes
(If not state date of approval.)
while building { During erection on board vessel - 1929 Aug. 6, Sept. 19, Oct. 8, 15, Total No. of visits 4 (In Shops) 4 (On Board)

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

This boiler has been built under special survey in accordance with the plan & the Society's Rules. The steel used in its construction has been tested in accordance with the Rules. The workmanship is good.

Upon completion the boiler was tested by hydraulic pressure to 320 lbs per sq inch and showed no signs of weakness or defect.

The boiler is marked

No. 1342
Hyd. test
220 lb
WP 120 lb
3-6-29 H.P.C.

This boiler has now been fitted & secured on board the Motor vessel "Elkhound" according to the Rules. Under steam found satisfactory.

John W. Gwynne

Survey Fee ... £ 4 4 : When applied for, 1929
Travelling Expenses (if any) £ 1 - 5 - 6 When received, Aug 15th 1929
London.

H. P. Cornish
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE 12 NOV 1929
Assigned See Res. Sept. 1929 p. 12583