

REPORT ON BOILERS.

No. 84715

Received at London Office

12 SEP 1929

When handed in at Local Office

2-9-1029

Port of Newcastle-on-Tyne.

Newcastle

Date, First Survey

4 March

Last Survey

13 Sept.

1929

on the two Donkey boilers for the T. S. S. "VIKINGEN"

(Number of Visits)

Gross 12639

Net 8884

Built at Newcastle

By whom built

Luan Hunter, W R'sword No. 1344

When built 1929

By whom made

Luan Hunter, Wigham R Sn

Engine No. 1332

When made 1929

By whom made

in

do

Boiler No. 1332

When made 1929

Owners

Viking Whaling Co. Ltd. Port belonging to

—

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY. 2 Multitubular.

Manufacturers of Steel David Colville & Sons

Heating Surface of Boilers 4345 sq ft

Is forced draught fitted

Yes

(Letter for Record S.)

Coal or Oil fired Oil.

Description of Boilers Two S.E. Multi. Cyl. 2 D.B.

Working Pressure 100 lbs

Tested by hydraulic pressure to 200 lbs Date of test: 13.4.29 No. of Certificate 340

Can each boiler be worked separately Yes

No. and Description of safety valves to each boiler 1 Pair spring loaded P.H.L.

Pressure to which they are adjusted 100 lbs Are they fitted with easing gear Yes

of donkey boilers, state whether steam from main boilers can enter the donkey boiler Yes

Distance between boilers or uptakes and bunkers or woodwork 18"

Is oil fuel carried in the double bottom under boilers Yes

Distance between shell of boiler and tank top plating 18"

Is the bottom of the boiler insulated Yes

Internal dia. of boilers 14-4 1/2" Length 11-6" Shell plates: Material Steel Tensile strength 30/34 TONS

Are the shell plates welded or flanged No Description of riveting: circ. seams L.D.R.

Diameter of rivet holes in circ. seams 7/8" Pitch of rivets 2.958"

Percentage of strength of circ. intermediate seam 44.55"

Working pressure of shell by Rules 100 lbs

No. and Description of Furnaces in each Boiler Three Reigerion.

Tensile strength 26/30 TONS Smallest outside diameter 41 1/8"

Thickness of plates 3/8" Description of longitudinal joint Weld.

Working pressure of furnace by Rules 126 lbs

Material Steel Tensile strength 26/30 TONS Thickness 29/32" Pitch of stays 19 1/4 x 19"

Working pressure by Rules 106 lbs

Material Steel Tensile strength 26/30 TONS Thickness 3/4" Pitch of stay tubes in nests 10 1/2"

Pitch across wide water spaces 14" Working pressure 104 lbs

Material Steel Tensile strength 28/32 TONS Depth and thickness of girder 8" x 1 1/8"

Length as per Rule 34 1/8" Distance apart 9" No. and pitch of stays 3 @ 10"

Working pressure by Rules 103 lbs Combustion chamber plates: Material Steel

Strength 26/30 TONS Thickness: Sides 1/2" Back 1/2" Top 1/2" Bottom 1/2"

Stays to ditto: Sides 8 7/8 x 9 1/8 Back 9 1/2 x 8 Top 8 1/2 x 9 Are stays fitted with nuts or riveted over Yes.

Pressure by Rules 104 lbs Front plate at bottom: Material Steel Tensile strength 26/30 TONS

Lower back plate: Material Steel Tensile strength 26/30 TONS Thickness 23/32"

Stays at wide water space 14 x 8 1/8 Are stays fitted with nuts or riveted over Yes.

Main stays: Material Steel Tensile strength 28/32 TONS

No. of threads per inch 6 Area supported by each stay 342 sq"

Screw stays: Material Steel Tensile strength 26/30 TONS

No. of threads per inch 9 Area supported by each stay 44.8 sq"

Working pressure by Rules *102.25* Are the stays drilled at the outer ends *Yes* Margin stays: Diameter ^{At turned off part,} *1 1/2"* or ^{Over threads} *1 1/2"*

No. of threads per inch *9* Area supported by each stay *102.25* Working pressure by Rules *121.25*

Tubes: Material *9m* External diameter ^{Plain} *3"* ^{Stay} *3"* Thickness *10W.G.* No. of threads per inch *9*

Pitch of tubes *4 1/8" x 4 1/4"* Working pressure by Rules *148.25* Manhole compensation: Size of oppg. B *32 @ 1 1/8"*

shell plate *20 x 16"* Section of compensating ring *9 1/2" x 13 1/6"* No. of rivets and diameter of rivet holes *32 @ 1 1/8"*

Outer row rivet pitch at ends *5 3/4"* Depth of flange if manhole flanged *-* Steam Dome: Material *9m.*

Tensile strength *4481* Thickness of shell *-* Description of longitudinal joint *-*

Diameter of rivet holes *2 1/8"* Pitch of rivets *-* Percentage of strength of joint *-* Plate *-* Rivets *-*

Internal diameter *16"* Working pressure by Rules *-* Thickness of crown *-* No. and dia *-*

stays *8881* Inner radius of crown *-* Working pressure by Rules *-*

How connected to shell *-* Size of doubling plate under dome *-* Diameter of rivet holes *-*

of rivets in outer row in dome connection to shell *-*

Type of Superheater *-* Manufacturers of ^{Tubes} *-* ^{Steel castings} *-*

Number of elements *-* Material of tubes *-* Internal diameter and thickness of tubes *-*

Material of headers *-* Tensile strength *-* Thickness *-* Can the superheater be shut *-*

the boiler be worked separately *-* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *-*

Area of each safety valve *-* Are the safety valves fitted with easing gear *-* Working pressure *-*

Rules *-* Pressure to which the safety valves are adjusted *-* Hydraulic test *-*

tubes *-* castings *-* and after assembly in place *-* Are drain cocks or valves *-*

to free the superheater from water where necessary *-*

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

The foregoing is a correct description, *G. J. Hunter* Manager

Dates of Survey ^{During progress of work in shops - -} *-* Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) *-*

while building ^{During erection on board vessel - -} *-* Total No. of visits *-*

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) *The Boilers have been built under special survey in accordance with the approved plans & the Rules of the Society, have been securely fitted on board the vessel & their safety valves adjusted under steam to working pressure. The workmanship & materials are of good quality throughout.*


Survey Fee *£ 192* When applied for *-*

Travelling Expenses (if any) *£ 192* When received, *-*

Wm. A. Thompson
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *TU 17 SEP 1925*

Assigned *See P. 4 pt. attached*

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