

REPORT ON BOILERS.

No. 82814

31 MAY 1928

Received at London Office

Writing Report

192

When handed in at Local Office

30/5/28

Port of

NEWCASTLE-ON-TYNE

in Survey held at

Walker on Tyne

Date, First Survey

11 July 1927

Last Survey

23 May 1928

Book.

(Number of Visits)

on the *Steel Screw M.V. "JENNY"*Gross 4706
Tons Net 2682

er

Built at *Wallsend*

By whom built

S. Hunter & Co. Richardson

Yard No. 1325

When built 1928-5

nes made at

Walker on Tyne

By whom made

Swan Hunter & Co. Richardson Ltd

Engine No. 1252

When made 1928-5

rs made at

Walker on Tyne

By whom made

S. Hunter & Co. Richardson Ltd

Boiler No. 1252

When made 1928-5

inal Horse Power

Owners

A/S Ojefart

Port belonging to

*Oslo**An additional Scotch boiler fitted 1938
for h.p. 136th*MULTITUBULAR BOILERS—~~MAIN~~, ~~AUXILIARY~~, OR DONKEY.

Manufacturers of Steel

David Colville & Sons Ltd Dugtons Furnace(Letter for Record *S*)

al Heating Surface of Boilers

*1136 sq ft*Is forced draught fitted *yes*Coal or Oil fired *oil*

and Description of Boilers

*one S.E. cyl multitubular*Working Pressure *150 lb sq in*

ted by hydraulic pressure to

275 lb sq in

Date of test

20.3.28

No. of Certificate

249

Can each boiler be worked separately

yes

a of Firegrate in each Boiler

oil fuel

No. and Description of safety valves to each boiler

two, spring loaded, high lift

a of each set of valves per boiler

per Rule 5.16 sq in

as fitted

6.28

Pressure to which they are adjusted

155 lb

Are they fitted with easing gear

yes

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

no, main boilers

allest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

allest distance between shell of boiler and tank top plating

12 in

Is the bottom of the boiler insulated

no

rge internal dia. of boilers

10' 4 7/16

Length

11' 0 in

Shell plates: Material

Steel

Tensile strength

30/34 tons

ickness

25/32

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

end Double Riveted

g. seams

D.R. B.B.S

Diameter of rivet holes in

circ. seams 7/8 in

Pitch of rivets

2.73 in

Percentage of strength of circ. end seams

plate 67.94 %

rivets

Percentage of strength of circ. intermediate seam

plate

Percentage of strength of longitudinal joint

plate 75 %

rivets

76.76 %

Working pressure of shell by Rules

151 lb sq in

ickness of butt straps

outer 5/8 in

inner

5/8 in

No. and Description of Furnaces in each Boiler

two, Dugtons corrugated

aterial

Steel

Tensile strength

26/30 tons

Smallest outside diameter

2' 10 5/8 in

ngth of plain part

top

bottom

3/8 in

Thickness of plates

3/8 in

Description of longitudinal joint

weld

Dimensions of stiffening rings on furnace or c.c. bottom

Working pressure of furnace by Rules

152 lb sq in

nd plates in steam space: Material

Steel

Tensile strength

26-30 tons

Thickness

29/32 in

Pitch of stays

19" x 11 7/8"

ow are stays secured

Double nuts

Working pressure by Rules

151 lb sq in

ibe plates: Material

front Steel

back

Steel

Tensile strength

26/30 tons

Thickness

29/32 in

Pitch of stays

11 1/16 in

ean pitch of stay tubes in nests

8 1/4 in

Pitch across wide water spaces

13 1/2 in

Working pressure

front 176 lb

back

218 lb

rders to combustion chamber tops: Material

Steel

Tensile strength

28/32 tons

Depth and thickness of girder

centre

7 1/4" x 1 1/4"

Length as per Rule

30.59 in

Distance apart

8 in

No. and pitch of stays

each

2 x 9 1/2 in

Working pressure by Rules

151 lb sq in

Combustion chamber plates: Material

Steel

Tensile strength

26/30 tons

Thickness: Sides

5/8 in

Back

23/32 in

Top

5/8 in

Bottom

5/8 in

itch of stays to ditto: Sides

10 x 8 7/8 in

Back

9 1/4 x 8 1/4 in

Top

9 1/2 x 8 in

Are stays fitted with nuts or riveted over

other stay riveted over c.c. inside

Working pressure by Rules

151 lb sq in

Front plate at bottom: Material

Steel

Tensile strength

26/30 tons

ickness

29/32 in

Lower back plate: Material

Steel

Tensile strength

26/30 tons

Thickness

29/32 in

itch of stays at wide water space

13 1/2 in x 9 1/4 in

Are stays fitted with nuts or riveted over

nuts

Working Pressure

250 lb sq in

Main stays: Material

Steel

Tensile strength

28/32 tons

iameter

At body of stay, 2 1/4 in

Over threads

No. of threads per inch

6

Area supported by each stay

222 sq in

Working pressure by Rules

155 lb sq in

Screw stays: Material

Steel

Tensile strength

26/30 tons

iameter

At turned off part, 1 5/8 in

Over threads

No. of threads per inch

9

Area supported by each stay

87 sq in

Lloyd's Register

010478-010483-0070

Working pressure by Rules 167 lb Are the stays drilled at the outer ends no ✓ Margin stays: Diameter { At turned off part, 1 5/8 ✓
 No. of threads per inch 9 ✓ Area supported by each stay 99 sq in Working pressure by Rules 153 lb ✓
 Tubes: Material Iron ✓ External diameter { Plain 2 1/2 ✓ Stay 2 1/2 ✓ Thickness { 10 W G ✓ No. of threads per inch 9 ✓
 Pitch of tubes 3 1/2 x 3 1/2 ✓ Working pressure by Rules 210 lb ✓ Manhole compensation: Size of opening 13 3/8 ✓
 shell plate 20 x 16 ✓ Section of compensating ring 13 3/8 flanged x 25/32 ✓ No. of rivets and diameter of rivet holes 32 - 1 3/16 ✓
 Outer row rivet pitch at ends 6 ✓ Depth of flange if manhole flanged 2 1/2 ✓ Steam Dome: Material none
 Tensile strength _____ Thickness of shell _____ Description of longitudinal joint _____
 Diameter of rivet holes _____ Pitch of rivets _____ Percentage of strength of joint { Plate _____ Rivets _____
 Internal diameter _____ Working pressure by Rules _____ Thickness of crown _____ No. and diam _____
 stays _____ 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 none 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 pressure _____
 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 23 inclusive for boilers been complied with yes

The foregoing is a correct description,
 G. J. Tweedy
 DIRECTOR

Dates of Survey { During progress of work in shops - - -
 while building { During erection on board vessel - - -
 See Survey Report

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval) yes
 Total No. of visits _____

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)
The Boiler built under Special Survey the material and workmanship found good and efficient.
The Boiler satisfactorily fitted up on flat at aft end of the Engine Room
Tested under steam under working conditions and found satisfactory
The Boiler fitted up for burning oil fuel under forced draught - Wash point of oil used to above 160° F.

Fee entered on <u>Survey Report</u>			
Survey Fee £	:	:	When applied for, 192
Travelling Expenses (if any) £	:	:	When received, 192

L. G. Shallcross
 Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute FRI. 8 JUN 1928
 Assigned See Minute on Ave. Rpt
82814 attached