

REPORT ON BOILERS.

No.

92373

Received at London Office 24 FEB 1928

Date of writing Report

Feb 23rd 1928

When handed in at Local Office

24 FEB 1928

Port of London

No. in
Reg. Book

Survey held at

Kitchin

Date, First Survey

9th DEC 1927

Last Survey

Feb 22nd 1928on the *Spencer Hopwood* No. 24 Standard for *Mr. Ellwood & Sons*

(Number of Visits 3)

Tons { Gross
Net

Built at Rotterdam

By whom built

Mr. Tyenvord

Yard No. 309

When built 1928

Engines made at Rotterdam

By whom made

Mr. Tyenvord

Engine No. 549

When made 1928

Boilers made at

By whom made

Boiler No.

When made

Owners

Rotterdamische Lloyd

Port belonging to

Rotterdam

VERTICAL DONKEY BOILER.

Made at Kitchin

By whom made

Mr. Spencer Hopwood

Boiler No. 7197

When made 1928

Where fixed In engine room

Manufacturers of Steel

Messrs. Stewart & Lloyd

Total Heating Surface of Boiler

464 sq ft

Is forced draught fitted

no

Coal or Oil fired

oil

Type and Description of Boilers

One Spencer-Hopwood No. 24 Standard

Working pressure

100 lb

Tested by hydraulic pressure to

200 lbs per sq in

Date of test

22-2-28

No. of Certificate

1325

Area of Firegrate in each Boiler

23 3/4 sq ft

No. and Description of safety valves to each boiler

2 Spring loaded

Area of each set of valves per boiler

per rule

as fitted 9.8 sq in

Pressure to which they are adjusted

100 lbs

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

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 ft

Height

14 ft 8 in (14' 8")

Shell plates: Material

Steel - Stewart & Lloyd

Tensile strength

28-32

Thickness

15/32

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

Int. S.R.
Ext. S.R.

long. seams

S.R. butt strap

Dia. of rivet holes in

circ. seams

long. seams

Pitch of rivets

25.8 in
32.2 in

Percentage of strength of circ. seams

plate 59.6%
rivets 49.7%

of Longitudinal joint

plate 21%
rivets 12%
combined

Working pressure of shell by rules

120

Thickness of butt straps

outer 3/4
inner 1/2

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat

Flat

Material

Steel

Tensile strength

28-32

Thickness

3/4

Radius

Working pressure by rules

100

Description of Furnace: Plain, spherical, or dished crown

Plain

Material

Steel

Tensile strength

26-30

Thickness

3/4

External diameter

top 4' 10" - 4' 3"
bottom 5' 6"

Length as per rule

5' 10"

Working pressure by rules

129

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

Working pressure by rule

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 Steel
back

Tensile strength

26-30

Thickness

3/4

Mean pitch of stay tubes in nests

10 7/16

comprising shell, Dia. as per rule

front
back

Pitch in outer vertical rows

Dia. of tube holes FRONT

stay
plain

BACK

stay
plain

each alternate tube in outer vertical rows a stay tube

Working pressure by rules

front
back

Orders 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



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Foundation

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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 Steel ✓ External diameter { plain 2 1/4 to 2 1/2 Thickness { 11/16 to 1/4

No. of threads per inch 11 ✓ Pitch of tubes 3 1/8 x 3 ✓ Working pressure by rules 100

Manhole Compensation: Size of opening in shell plate 16 x 12 ✓ Section of compensating ring 2 1/2 dia. 9/16 ✓ No. of rivets and diam _____

of rivet holes 24 - 7/8 ✓ Outer row rivet pitch at ends 5 1/2 ✓ Depth of flange if manhole flanged _____

Uptake: External diameter 27 ✓ Thickness of uptake plate 3/4 ✓

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,

W. Bradley
WORKS MANAGER,

Dates of Survey { During progress of work in shops - - 1927: Dec 9 1928: Jan 25 Feb 22

while building { During erection on board vessel - - _____

Is the approved plan of boiler forwarded herewith (If not state date of approval.) Yes ✓

Total No. of visits 3 (In Shops)

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 according to the Rules.

The workmanship is good.

Upon completion the boiler was tested by hydraulic pressure to 200 lbs and showed no signs of weakness or defect.

The boiler is stamped.

No. 1325

Hyd. test

200 lbs

wt. 100 lbs

22.2.28 H.P.C

This boiler has been properly fitted, safety valves adjusted under steam. Thickness of washers 11 mells 12 mells.

G. G. O'Brien

Survey Fee ... £ 4 : 4 : -

Travelling Expenses (if any) £ 2 : 11 : -

When applied for, 26 Feb 28

When received, 6. 6. 1928 HSW

Committee's Minute

TUE 16 OCT 1928

Assigned

See Rot. 17819



Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register Foundation