

Rpt. 5b.

27 SEP 1930

Bel 10,468

REPORT ON BOILERS.

No. 16880

22 APR 1930

Received at London Office

Date of writing Report 17.4.30 When handed in at Local Office 17.4.30 Port of Grimsby.

No. in Survey held at
Reg. Book

Lincoln.

Date, First Survey

18.12.29

Last Survey

15-4-

1930

86460 on the STEEL TWIN SC. SILVERSANDAL

(Number of Visits

9

Gross

Tons

Net

Built at BELFAST

By whom built

Harland & Wolff Ltd.

Yard No. 885

When built 1930

Engines made at BELFAST

By whom made

HARLAND & WOLFF LTD.

Engine No. 885

When made 1930

Boilers made at Lincoln

By whom made

Habeck & Belen Ltd.

Boiler No. 73/4608

When made 1930

Owners SILVER LINE LD. (STANLEY & JOHN THOMPSON LD. MGRS.)

Port belonging to LONDON.

VERTICAL DONKEY BOILER.

Made at Lincoln By whom made Habeck & Belen Ltd. Boiler No. 73/4608 When made 1930 Where fixed IN FUNNEL

Manufacturers of Steel

Total Heating Surface of Boiler

520 sq. ft.

Is forced draught fitted

Coal or Oil fired + Exhaust

No. and Description of Boilers

One Blakey Patent Water Heat Kettle

Working pressure

100 lb

Tested by hydraulic pressure to

200 lb

Date of test

15-4-30

No. of Certificate

290

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

No. double, Spring loaded

Area of each set of valves per boiler

per rule 6.78 sq. ft.

as fitted 9.81

Pressure to which they are adjusted

adjusted are they fitted with easing gear

yes

State whether steam from main boilers can enter the donkey boiler

N.R. VALVE FITTED

Smallest distance between boiler or uptake and bunkers

or woodwork

Is oil fuel carried in the double bottom under boiler

No

Smallest distance between base of boiler and tank top plating

Is the base of the boiler insulated

No

Largest internal dia. of boiler

6'-0"

Height

11'-9"

Shell plates: Material

S. L. steel

Tensile strength

28/32 Tons

Thickness

1/2"

Are the shell plates welded or flanged

no

Description of riveting: circ. seams

9 S. L. Lap

long. seams

D. R. D. B. Stays

Dia. of rivet holes in

circ. seams

7/8"

Pitch of rivets

2" 8 2 5/8"

3 5/8 2 3 3/4"

Percentage of strength of circ. seams

plate 58.5%

of Longitudinal joint

plate 72.5%

rivets 114

combined

Working pressure of shell by rules

143 lb.

Thickness of butt straps

outer

7/16"

inner

7/16"

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

Flat

Material

S. L. 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. L. steel

Tensile strength

26/30 Tons

Thickness

1 1/16"

External diameter

top 5'-2 5/8"

Length as per rule

8'-1 1/2"

Working pressure by rules

110 lb.

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.

Thickness of Ogee Ring

1"

Diameter as per rule

D 5'-11"

a 5'-2 5/8"

Working pressure by rule

214 lb.

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

plain

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 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 *S. K. steel* External diameter ☒ plain *3 1/4" 5 1/4"* Thickness ☒ *6 B. 9*

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 *1 1/16"*

Cross Tubes: No. ☒ External diameters ☒ Thickness of plates ☒

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

The foregoing is a correct description.

BABCOCK & WILCOX LTD

[Signature]

(Lincoln Branch)

Manufacturer.

Annual Survey Request.

Dates of Survey while building ☒ During progress of work in shops - *1929 Dec 18 1930 Jan 2. 9. 27. 31 Feb 18 Apr 7. 9.* Is the approved plan of boiler forwarded herewith (If not state date of approval.) ☒ *yes*

☒ During erection on board vessel - - - - - Total No. of visits *9*

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 Section letter 22/11/29. The materials and workmanship are good. This case is a duplicate of Gas. Rpt. No. 16832*

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 8 lbs.

R. Lee James
Belfast.

Survey Fee ... £ 4 : 4 : -

Travelling Expenses (if any) £ 2 : 8 : -

When applied for.

When received.

17. 4. 1930

18. 10. 1930

adm

W. G. H. Kinlay

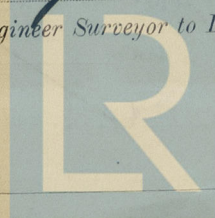
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

FRI. 3 OCT 1930

See F. E. Rpt.



Lloyd's Register Foundation