

REPORT ON BOILERS.

No. 86253

27 SEP 1930

Received at London Office

NEWCASTLE-ON-TYNE

Date of writing Report

19

When handed in at Local Office

25/9/30

Port of

No. in Reg. Book.

Survey held at

Scotwood.

Date, First Survey

27 Dec 129

Last Survey

22 Sept

1930

81065. on the

M. V. "PEIK"

(Number of Visits

Gross

6099

Tons

Net

3592

Master

Built at

Walker.

By whom built

S. W. G. Armstrong Whitworth & Co. Ltd

Yard No. 1057.

When built 1930

Engines made at

Scotwood

By whom made

Messrs S. W. G. Armstrong Whitworth & Co. Ltd

Engine No. 90.

When made 1930

Boilers made at

Scotwood

By whom made

Messrs S. W. G. Armstrong Whitworth & Co. Ltd

Boiler No. 90.

When made 1930.

Nominal Horse Power

583.

Owners

J. W. Salvoen

Port belonging to

OSLO.

MANOEUVRING. AIR. RECEIVERS.

~~MULTITUBULAR BOILERS MAIN AUXILIARY OR DONKEY~~

Manufacturers of Steel

Messrs Gutehoffnungshutte

Oberhausen.

(Letter for Record

✓

CAPACITY OF AIR RECEIVERS

400 cuft.

Is forced draught fitted

✓

Coal or Oil fired

✓

No. and Description of Boilers

Two Riveted Air Receivers

Working Pressure

425 lb/sq in.

Tested by hydraulic pressure to

625 lb/sq in.

Date of test

3.7.30

No. of Certificate

4403 & 4404

Can each boiler be worked separately

✓

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 Spring loaded.

Area of each set of valves per boiler

per Rule

as fitted

Pressure to which they are adjusted

425 lb/sq in.

Are they fitted with easing gear

✓

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

✓

Smallest distance between boilers or uptakes and bunkers or woodwork

Is oil fuel carried in the double bottom under boilers

✓

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

✓

Largest internal dia. of

RECEIVERS

4'-6"

Length

11'-6"

Shell plates: Material

Steel

Tensile strength

29-33 tons

Thickness

1/8"

Are the shell plates welded or flanged

No.

Description of riveting: circ. seams

end

D.R. lap.

Pitch of seams

T.R. Double Butt Straps

Diameter of rivet holes in

circ. seams

1/8"

Pitch of rivets

3/4"

Percentage of strength of circ. end seams

plate

65.3%

rivets

55.7%

Percentage of strength of circ. intermediate seam

plate

85.6%

rivets

Percentage of strength of longitudinal joint

plate

85.6%

rivets

97.0%

combined

90.3%

Working pressure of shell by Rules

434.7 lb/sq in.

Thickness of butt straps

outer

11/16"

inner

13/16"

No. and Description of Furnaces in each Boiler

Tensile strength

Smallest outside diameter

Length of plain part

top

bottom

Thickness of plates

crown

bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

D plates in steam space: Material

Steel

Tensile strength

26 - 30 tons

Thickness

F 1/4" B. 1 3/8"

Radius

3'-7 1/2"

Are stays secured

Working pressure by Rules

430.3 lb/sq in.

D plates: Material

front

back

Tensile strength

Thickness

Pitch of stay tubes in nests

Pitch across wide water spaces

Working pressure

front

back

D plates to combustion chamber tops: Material

Tensile strength

Depth and thickness of girder

Centre

Length as per Rule

Distance apart

No. and pitch of stays

Each

Working pressure by Rules

Combustion chamber plates: Material

Tensile strength

Thickness: Sides

Back

Top

Bottom

Pitch of stays to ditto: Sides

Back

Top

Are stays fitted with nuts or riveted over

Working pressure by Rules

Front plate at bottom: Material

Tensile strength

Thickness

Lower back plate: Material

Tensile strength

Thickness

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

Pitch of stays at wide water space

Are stays fitted with nuts or riveted over

Working Pressure

Main stays: Material

Tensile strength

002970-002977-0210

© 2020

Lloyd's Register Foundation

Working pressure by Rules *225.58* Are the stays drilled at the outer ends *02 1/4"* Margin stays: Diameter *1 1/2"* { At turned off part, or Over threads

No. of threads per inch *12* Area supported by each stay *1.5* Working pressure by Rules *12*

Tubes: Material *02 1/4"* External diameter *1 1/2"* { Plain Stay Thickness *1/4"* No. of threads per inch *12*

Pitch of tubes *5 1/2"* Working pressure by Rules *12* Manhole compensation: Size of opening *12*

shell plate *5 1/2"* Section of compensating ring *12* No. of rivets and diameter of rivet holes *12*

Outer row rivet pitch at ends *5 1/2"* Depth of flange if manhole flanged *12* Steam Dome: Material *12*

Tensile strength *5 1/2"* Thickness of shell *12* Description of longitudinal joint *12*

Diameter of rivet holes *5 1/2"* Pitch of rivets *12* Percentage of strength of joint *12* { Plate Rivets

Internal diameter *5 1/2"* Working pressure by Rules *12* Thickness of crown *12* No. and diameter *12*

stays *5 1/2"* Inner radius of crown *12* Working pressure by Rules *12* Diameter of rivet holes and pitch *12*

How connected to shell *5 1/2"* Size of doubling plate under dome *12*

of rivets in outer row in dome connection to shell *5 1/2"*

Type of Superheater

Number of elements *12* Material of tubes *12* Manufacturers of *12* { Tubes Steel castings

Material of headers *12* Tensile strength *12* Thickness *12* Internal diameter and thickness of tubes *12*

the boiler be worked separately *12* Is a safety valve fitted to every part of the superheater which can be shut off from the boiler *12*

Area of each safety valve *12* Are the safety valves fitted with casing gear *12* Working pressure as total heating *12*

Rules *12* Pressure to which the safety valves are adjusted *12* Hydraulic test pressure *12*

tubes *12* castings *12* and after assembly in place *12* Are drain cocks or valves fitted by hydraulic *12*

to free the superheater from water where necessary *12*

Have all the requirements of Sections 14 to 22 inclusive for boilers been complied with *12*

FOR

W. G. ARMISTEAD WHITWORTH & COMPANY (ENGINEERS) LIMITED.

The foregoing is a correct description,

W. G. Armistead

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

Total No. of visits *12*

Dates of Survey *12* { During progress of work in shops - - - white building *12* { During erection on board vessel - - -

Is this Boiler a duplicate of a previous case *12*If so, state Vessel's name and Report No. *12*

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

The Receivers have been under Special Survey and in accordance with the Society's Rules approved plan. The materials & workmanship are sound & good. The safety valves were adjusted to the approved working pressure.

Survey Fee £ *See*When applied for, *19*Travelling Expenses (if any) *See*When received, *19*

For Fees

Lucky Report

L. Peck

Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute

TUE. 30 SEP 1930

Assigned

See other Sur. 76
Rpt. 86253



© 2020

Lloyd's Register Foundation