

REPORT ON BOILERS.

No. 19326

Received at London Office

10 JUN 1931

Date of writing Report

10.2.31

When handed in at Local Office

3rd JUNE 1931

Port of

Greenock

No. in
Reg. Book.

Survey held at

Greenock

Date, First Survey

21st

MARCH 1930

Last Survey

JUNE 1931

on the

S/S "Peruvian"

(Number of Visits

Tons

Gross 8954.42

Net 5444.34

Master

Built at

Greenock

By whom built

Scott & Son Ltd.

Yard No.

551

When built

1931

Engines made at

Greenock

By whom made

Societe d'Electricite de Mecanique

Engine No.

4196

When made

1931

Boilers made at

Greenock

By whom made

Scott & Son Ltd.

Boiler No.

623

When made

1931

Nominal Horse Power

✓

Owners

The Atlantic Oil Shipping Co. Ltd.

Port belonging to

Panama

MULTITUBULAR BOILERS ~~MAIN~~, AUXILIARY, ~~ENGINE~~.

Manufacturers of Steel

Scott & Son Ltd.

(Letter for Record

R

Total Heating Surface of Boilers

2243 #

Is forced draught fitted

Yes

Fuel or Oil fired

oil

No. and Description of Boilers

one single ended

Working Pressure

140

Tested by hydraulic pressure to

260

Date of test

8.9.30

No. of Certificate

1969

Can each boiler be worked separately

Yes

Area of Firegrate in each Boiler

oil fuel

No. and Description of safety valves to each boiler

(Double) Corliss's Improved High Lift

Area of each set of valves per boiler

per Rule

11.88

Pressure to which they are adjusted

140

Are they fitted with easing gear

Yes

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

2.0

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

8"

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

12.0"

Length

11.6"

Shell plates: Material

S

Tensile strength

29.33

Thickness

13/16"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

end

inter.

long. seams

DR + DBS

Diameter of rivet holes in

circ. seams

1"

Pitch of rivets

3.39

5 1/4"

Percentage of strength of circ. end seams

plate

40.5

rivets

45.1

Percentage of strength of circ. intermediate seam

plate

✓

Percentage of strength of longitudinal joint

plate

80.9

rivets

82.2

Working pressure of shell by Rules

142

Thickness of butt straps

outer

11/16"

inner

13/16"

No. and Description of Furnaces in each Boiler

2 Morrison

Material

S

Tensile strength

26.30

Smallest outside diameter

3.4 5/8"

Length of plain part

top

✓

bottom

Thickness of plates

crown

7/16"

bottom

Description of longitudinal joint

weld

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

✓

Working pressure of furnace by Rules

153

End plates in steam space: Material

S

Tensile strength

26.30

Thickness

15/16"

Pitch of stays

19 1/4 14 1/2"

How are stays secured

DN

Working pressure by Rules

141

Tube plates: Material

front

S

back

Tensile strength

26.30

Thickness

25/32"

29/32"

Mean pitch of stay tubes in nests

10.875

Pitch across wide water spaces

✓

Working pressure

front

140

back

142

Girders to combustion chamber tops: Material

S

Tensile strength

29.33

Depth and thickness of girder

at centre

8 1/2 x 3 1/4 (2)

Length as per Rule

2.10"

Distance apart

10"

No. and pitch of stays

in each

3 at 8"

Working pressure by Rules

145

Combustion chamber plates: Material

S

Tensile strength

26.30

Thickness: Sides

19/32"

Back

19/32"

Top

19/32"

Bottom

19/32"

Pitch of stays to ditto: Sides

8 1/4 1/2"

Back

9 x 9"

Top

8 1/2 10"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

148

Front plate at bottom: Material

S

Tensile strength

26.30

Thickness

25/32"

Lower back plate: Material

S

Tensile strength

26.30

Thickness

9/16"

Pitch of stays at wide water space

✓

Are stays fitted with nuts or riveted over

✓

Working Pressure

2 1/4"

Main stays: Material

S

Tensile strength

28-32

Diameter

At body of stay,

or

over threads

2 1/4"

No. of threads per inch

6

Area supported by each stay

275"

Working pressure by Rules

155

Screw stays: Material

Iron

Tensile strength

21 1/2 20 1/2

Diameter

At turned off part,

or

over threads

1 1/2"

No. of threads per inch

9

Area supported by each stay

81"

Working pressure by Rules 154 Are the stays drilled at the outer ends Yes Margin stays: Diameter 1 1/2"
No. of threads per inch 9 Area supported by each stay 76 sq" Working pressure by Rules 160
Tubes: Material S External diameter 2 1/2" Thickness 9/16" No. of threads per inch 9
Pitch of tubes 3 5/8" x 3 5/8" Working pressure by Rules 141 Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 28" x 36" x 13/16" No. of rivets and diameter of rivet holes 42 at 1"
Outer row rivet pitch at ends 6 Depth of flange if manhole flanged - Steam Dome: Material
Tensile strength 120,000 Thickness of shell 1/2" Description of longitudinal joint
Diameter of rivet holes 5/16" Pitch of rivets 2" Percentage of strength of joint 100%
Internal diameter 16" Working pressure by Rules 141 Thickness of crown 1/2" No. and diameter of
stays 12 Inner radius of crown 16" Working pressure by Rules 141
How connected to shell Direct Size of doubling plate under dome 16" x 12" Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell 5/16" x 2"

Type of Superheater

Number of elements 1 Material of tubes Steel Manufacturers of Scotts'
Material of headers Steel Tensile strength 120,000 Thickness 1/2" Can the superheater be shut off and
the boiler be worked separately Yes Is a safety valve fitted to every part of the superheater which can be shut off from the boiler
Area of each safety valve 1 sq. in. Are the safety valves fitted with easing gear Yes Working pressure as per
Rules 141 Pressure to which the safety valves are adjusted 154 Hydraulic test pressure:
tubes 160 castings 160 and after assembly in place 160 Are drain cocks or valves fitted
to free the superheater from water where necessary Yes

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

SCOTT'S BUILDING & ENGINEERING COMPANY, LIMITED.

The foregoing is a correct description.

Arch. Rennie

Chief Draughtsman

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

SEE MACHINERY REPORT

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

Total No. of visits 1

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

This boiler has been built under special survey in accordance with the approved plans & the workmanship & material are of good quality & it is now securely fitted on board.
This boiler is a duplicate of Run 90622 3/5 "Winkler" 4th Repl. 9019249.
This Report accompanies that of the Machinery.

Survey Fee

Charged on Machinery Rept

When applied for.

192

When received.

192

W. Gordon-Mitchell

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

GLASGOW 9 - JUN 1931

Assigned

SEE ACCOMPANYING MACHINERY REPORT.



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