

REPORT ON BOILERS.

No. 41162.

Received at London Office

3 SEP 1930

Writing Report

When handed in at Local Office

Port of HULL

Survey held at

Date, First Survey

Last Survey

(Number of Visits)

Gross

Tons

Net

on the

Steel S.S. "SANFRY"

Built at

By whom built

Yard No. 290

When built 1930

es made at

By whom made

Engine No. A277

When made 1930

s made at

By whom made

Boiler No. A277

When made 1930

3000 Horse Power

148

Owners

James Hargreaves Sons (Leeds) Ltd.

Belonging to

Goole

TITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Appley Iron & Co. Ld. Nottingham L.S. & Co. Ld.

(Letter for Record)

Heating Surface of Boilers

2500 sq. ft.

Is forced draught fitted

Coal or Oil fired

Coal

Description of Boilers

Two single ended return tube

Working Pressure

180 lbs.

by hydraulic pressure to

320 lbs.

Date of test

3.4.30

No. of Certificate

3440

Can each boiler be worked separately

Yes

of Firegrate in each Boiler

30 sq. ft.

No. and Description of safety valves to each boiler

Two spring loaded.

of each set of valves per boiler

per Rule

8.0 sq. ft.

Pressure to which they are adjusted

180 lbs.

Are they fitted with easing gear

Yes

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

Is oil fuel carried in the double bottom under boilers

st distance between boilers or uptakes and bunkers or woodwork

3' 6"

st distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

t internal dia. of boilers

145 1/2"

Length

10' 6"

Shell plates: Material

Steel

Tensile strength

29/33 Tons

ss

Are the shell plates welded or flanged

Description of riveting: circ. seams

end

B.R.

ams

T.R. S.S.

Diameter of rivet holes in

circ. seams

1 1/2"

long. seams

1"

Pitch of rivets

3 1/2"

tage of strength of circ. end seams

plate

68.5

rivets

43.0

Percentage of strength of circ. intermediate seam

plate

-

tage of strength of longitudinal joint

plate

85.8

rivets

85.8

Working pressure of shell by Rules

181 lbs.

ss of butt straps

outer

13/16"

inner

7/8"

No. and Description of Furnaces in each Boiler

Two brightons.

at

Steel

Tensile strength

26/30 Tons

Smallest outside diameter

42.56"

of plain part

top

10 1/2"

bottom

Thickness of plates

crown

1 1/2"

Description of longitudinal joint

welded

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

Working pressure of furnace by Rules

180 lbs.

lates in steam space: Material

Steel

Tensile strength

26/30 Tons.

Thickness

1 1/2"

Pitch of stays

14 1/4" x 16"

re stays secured

Double nuts.

Working pressure by Rules

189 lbs.

lates: Material

front

Steel

back

"

Tensile strength

26/30 Tons.

Thickness

2 1/2"

itch of stay tubes in nests

9.75"

Pitch across wide water spaces

14"

Working pressure

front

193

s to combustion chamber tops: Material

Steel

Tensile strength

28/32 Tons

Depth and thickness of girder

re

8 1/2" x 1 1/2"

Length as per Rule

30 1/4"

Distance apart

4"

No. and pitch of stays

strength

26/30 Tons

Thickness: Sides

1 1/2"

Back

5/8"

Top

5/8"

Bottom

1 1/2"

of stays to ditto: Sides

10" x 4 3/4"

Back

8 5/8" x 8 1/2"

Top

9" x 7 3/4"

Are stays fitted with nuts or riveted over

nuts

ing pressure by Rules

206

Front plate at bottom: Material

Steel

Tensile strength

26/30 Tons

ess

27/32"

Lower back plate: Material

Steel

Tensile strength

26/30 Tons

Thickness

1 3/16"

of stays at wide water space

14 1/4" x 8 5/8"

Are stays fitted with nuts or riveted over

nuts

ing pressure

198 lbs.

Main stays: Material

Steel

Tensile strength

28/32 Tons.

At body of stay,

2 3/4"

No. of threads per inch

6

Area supported by each stay

246 sq. in.

Over threads

198

Screw stays: Material

Steel

Tensile strength

26/30 Tons.

At turned off part,

1 3/4" x 1 5/8"

No. of threads per inch

9

Area supported by each stay

77.5

Over threads

004603-004611-0086

GEN

Working pressure by Rules *196 Lbs.* Are the stays drilled at the outer ends *20* Margin stays: Diameter { At turned off part, *1 7/8" - 1 3/4"* 13.
No. of threads per inch *9* Area supported by each stay *94.8* Working pressure by Rules *192*
Tubes: Material *Iron* External diameter { Plain *3 1/2"* Thickness { *5/16"* No. of threads per inch *9*
Pitch of tubes *5" x 4 3/4"* Working pressure by Rules *215 Lbs.* Manhole compensation: Size of op
END shell plate *16" x 12"* Section of compensating ring *✓* No. of rivets and diameter of rivet holes
Outer row rivet pitch at ends *✓* Depth of flange if manhole flanged *3 3/8* Steam Dome: Material
Tensile strength *UPC* Thickness of shell *5/16"* Description of longitudinal joint
Diameter of rivet holes *7/16"* Pitch of rivets *2"* Percentage of strength of joint { Plate *✓*
Internal diameter *27 3/4"* Working pressure by Rules *192* Thickness of crown *5/16"* No. and dia
stays *27 3/4"* Inner radius of crown *27 3/4"* Working pressure by Rules *192*
How connected to shell *1 1/2" (1 1/2")* Size of doubling plate under dome *8 x 11* Diameter of rivet holes at
of rivets in outer row in dome connection to shell

Type of Superheater
Number of elements *1* Material of tubes *Iron* Manufacturers of { Tubes
Material of headers *Iron* Tensile strength *UPC* Thickness *5/16"* Internal diameter and thickness of tubes
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 casing gear* Working pressure *192*
Rules *Pressure to which the safety valves are adjusted* Hydraulic test *192*
tubes *castings* and after assembly in place *Are drain cocks or cal*
to free the superheater from water where necessary

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

FOR EARLE'S
SHIPBUILDING & ENGINEERING CO. LIMITED.
The foregoing is a correct description,

Dates { During progress of work in shops - - } *See attached report* Are the approved plans of boiler and superheater forwarded herewith
while building { During erection on board vessel - - } *on Machy.* (If not state date of approval.)
Total No. of visits *✓*

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 materials & workmanship are sound & good. It has been satisfactorily fitted on board & run under steam & its safety valves adjusted as above.*

Charge on Engine Report
Survey Fee *£* *192* When applied for, *✓*
Travelling Expenses (if any) *£* *192* When received, *✓*

W. H. W. Aggott
Engineer Surveyor to Lloyd's Register of Shipping

Committee's Minute *TUE. 23 SEP 1930*
Assigned *Lee F. E. Rpl.*