

Rpt. 5a.

REPORT ON BOILERS.

No. 40685.

Received at London Office

21 MAR 1930

Date of writing Report

20.3.30

When handed in at Local Office

20 March 1930

Port of

HULL.

No. in Reg. Book

Survey held at

Hull

Date, First Survey

29 Aug/29

Last Survey

15 March 1930

(Number of Visits)

24

Gross

355.84

Net

141.18

Master

Built at

Selby

By whom built

Cochrane & Sons Ltd.

Yard No.

1041

When built

1930

Engines made at

Hull

By whom made

Amos & Smith Ltd

Engine No.

598

When made

1930

Boilers made at

Hull

By whom made

do

Boiler No.

598

When made

1930

Nominal Horse Power

97

Owners

James S. Traveling Co Ltd

Port belonging to

Hutwood

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Appley Iron & Steel Co. Ltd.

(Letter for Record)

S

Total Heating Surface of Boilers

1425 sq. ft.

Is forced draught fitted

No

Coal or Oil fired

Coal

No. and Description of Boilers

One single ended, return tube

Working Pressure

200 lbs.

Tested by hydraulic pressure to

350 lbs.

Date of test

18.1.30

No. of Certificate

5454

Can each boiler be worked separately

Area of Firegrate in each Boiler

51 sq. ft.

No. and Description of safety valves to each boiler

2 Spring loaded

Area of each set of valves per boiler

per Rule

9.8 sq. ft.

as fitted

Pressure to which they are adjusted

200 lbs.

Are they fitted with easing gear

Yes

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

Yes

Smallest distance between boilers or uptakes and bunkers or woodwork

4"

Is oil fuel carried in the double bottom under boilers

Yes

Smallest distance between shell of boiler and tank top plating

Yes

Is the bottom of the boiler insulated

Yes

Largest internal dia. of boilers

14'-6"

Length

10'-8"

Shell plates: Material

Steel

Tensile strength

29/32 Tons

Thickness

1 1/32"

Are the shell plates welded or flanged

Yes

Description of riveting: circ. seams

end

3.81"

long. seams

T.R. 588

Diameter of rivet holes in

circ. seams

1 1/32"

Pitch of rivets

8 5/8"

Percentage of strength of circ. end seams

plate

68.0

rivets

40.2

Percentage of strength of circ. intermediate seam

plate

85.1

rivets

Percentage of strength of longitudinal joint

plate

86.3

rivets

combined

Working pressure of shell by Rules

201 lbs.

Thickness of butt straps

outer

1 1/2"

inner

1 1/8"

No. and Description of Furnaces in each Boiler

Three plain

Material

Steel

Tensile strength

26/32 Tons

Smallest outside diameter

42 1/2"

Length of plain part

top

79"

bottom

72"

Thickness of plates

crown

13/16"

bottom

1 1/2"

Description of longitudinal joint

butt

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

Working pressure of furnace by Rules

204 lbs.

End plates in steam space: Material

Steel

Tensile strength

26/32 Tons

Thickness

1 1/16"

Pitch of stays

20" x 18"

How are stays secured

Double nuts & washers

Working pressure by Rules

218 lbs.

Tube plates: Material

front

Steel

back

.

Tensile strength

26/32 Tons

Thickness

7/16"

Mean pitch of stay tubes in nests

10.4"

Pitch across wide water spaces

14"

Working pressure

front

209 lbs.

back

261

Girders to combustion chamber tops: Material

Steel

Tensile strength

29/32 Tons

Depth and thickness of girder

at centre

9 1/2" x 1 1/4"

Length as per Rule

36 3/32"

Distance apart

9"

No. and pitch of stays

in each

3 @ 8 3/4"

Working pressure by Rules

226 lbs.

Combustion chamber plates: Material

Steel

Tensile strength

26/32 Tons

Thickness: Sides

3/4"

Back

2 3/32"

Top

2 3/32"

Bottom

3/4"

Pitch of stays to ditto: Sides

9" x 8 3/4"

Back

9 1/2" x 9"

Top

9" x 8 3/4"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

212 lbs.

Front plate at bottom: Material

Steel

Tensile strength

26/32 Tons

Thickness

1 5/16"

Lower back plate: Material

Steel

Tensile strength

26/32 Tons

Thickness

2 1/32"

Pitch of stays at wide water space

14" x 9 1/2"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

209 lbs.

Main stays: Material

Steel

Tensile strength

26/32 Tons

Diameter

At body of stay,

or

3 1/4"

No. of threads per inch

6

Area supported by each stay

360 sq. in.

Working pressure by Rules

222 lbs.

Screw stays: Material

Steel

Tensile strength

26/32 Tons

Diameter

At turned off part,

or

1 7/8"

1 3/4"

No. of threads per inch

9

Area supported by each stay

85.5 sq. in.

002138 002150 00170

Lloyd's Register
Foundation

Working pressure by Rules 212 lbs Are the stays drilled at the outer ends h Margin stays: Diameter { At turned off part, 2" - 17/8"
No. of threads per inch 9 Area supported by each stay 103.5 Working pressure by Rules 205 lbs.
Tubes: Material Am External diameter { Plain 32" Thickness { 8 lbs. No. of threads per inch 9
Pitch of tubes 4 1/4" x 5 1/4" Working pressure by Rules 215 lbs. Manhole compensation: Size of opening in
shell plate 16" x 12" Section of compensating ring 24" x 27" x 1 1/2" No. of rivets and diameter of rivet holes 32 @ 1 1/2"
Outer row rivet pitch at ends 8 7/8" Depth of flange if manhole flanged / Steam Dome: Material /
Tensile strength 140 Thickness of shell 1/2" Description of longitudinal joint /
Diameter of rivet holes 3/8" Pitch of rivets 2" Percentage of strength of joint { Plate /
Internal diameter 30" Working pressure by Rules / Thickness of crown / No. and diameter of
stays / Inner radius of crown / Working pressure by Rules /
How connected to shell / Size of doubling plate under dome / Diameter of rivet holes and pitch
of rivets in outer row in dome connection to shell /

Type of Superheater

Number of elements / Material of tubes / Manufacture of { Tubes /
Steel castings / Internal diameter and thickness of tubes /
Material of headers / Tensile strength / Thickness / Can the superheater be shut off and
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 easing gear / Working pressure as per
Rules / Pressure to which the safety valves are adjusted / Hydraulic test pressure:
tubes / castings / and after assembly in place / Are drain cocks or valves fitted
to free the superheater from water where necessary /

Have all the requirements of Sections 14 to 23 inclusive for boilers been complied with /

The foregoing is a correct description,
For AMOS & SMITH LTD.

Manufacturer.

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

See attached report
on Machy.

Are the approved plans of boiler and superheater forwarded herewith
(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, tried under steam, and its safety valves adjusted under steam as above.

The plate injuries sent herewith refer also to Boilers 599 & 600 to be reported shortly.

Checked on engine report

Survey Fee £

Travelling Expenses (if any) £

When applied for, 192

When received, 192

Committee's Minute

TUE. 25 MAR 1930

Assigned

See other J.E. Rpt

John H. Mackenzie

Engineer Surveyor to Lloyd's Register of Shipping.

Rpt. 13.

REI

Date of writing

No. in Su
Reg. Book.

10810 on

Built at

Owners

Electric Li

Is the Vesse

System of

Pressure of

Direct or A

If alternatin

Has the Au

Generator

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Where more

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Are all term

short circu

Position

is the vent

if situated

are their

Earthing

their resp

Main Sv

a fuse on

Switch

are they

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Main

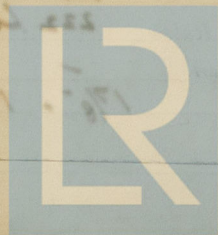
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Join



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