

REPORT ON BOILERS.

No. 40712

3 APR 1930

Received at London Office

Date of writing Report

21 April 1930

When handed in at Local Office

2 April 1930

Port of

HULL.

No. in Reg. Book

Survey held at

Hull

Date, First Survey

29 Aug/29.

Last Survey

27 March 1930.

(Number of Visits)

23

Gross

555.33

Net

440.49.

11010 on the

Steam Trawler

"FYLDEA"

Master

Built at

Selby

By whom built

Gibson & Sons Ltd

Yard No.

1072

When built

1930

Engines made at

Hull

By whom made

Amos & Smith Ltd

Engine No.

599

When made

1930

Boilers made at

Hull

By whom made

do

Boiler No.

599

When made

1930

Nominal Horse Power

94.

Owners

J. Mann & Sons Ltd

Port belonging to

Hutwood.

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Apperby & Sons Ltd & 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

12.2.30

No. of Certificate

3761

Can each boiler be worked separately

✓

Area of Firegrate in each Boiler

51 sq.

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.

Pressure to which they are adjusted

200 lbs.

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

7"

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 boilers

14'-6"

Length

10'-8"

Shell plates: Material

Steel

Tensile strength

29/33 Tons.

Thickness

1 3/32"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

end

8 R.

long. seams

T.R. D.B.S.

Diameter of rivet holes in

circ. seams

1 9/32"

Pitch of rivets

3.81"

Percentage of strength of circ. end seams

plate

68.0

Percentage of strength of circ. intermediate seam

plate

42.0

Percentage of strength of longitudinal joint

plate

88.1

Working pressure of shell by Rules

201 lbs.

Thickness of butt straps

outer

1 1/8"

No. and Description of Furnaces in each Boiler

One plain

Material

Steel

Tensile strength

28/30 Tons.

Smallest outside diameter

42 1/2"

Length of plain part

top

79"

Thickness of plates

crown

13/16"

Description of longitudinal joint

Welded.

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

28/30 Tons

Thickness

1 3/16"

Pitch of stays

20" x 18"

How are stays secured

Double nuts & washers

Working pressure by Rules

218 lbs.

Tube plates: Material

front

Steel

Tensile strength

28/30 Tons.

Thickness

7/8"

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

29/30 Tons.

Depth and thickness of girder

at centre

9 1/2" x 14"

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

28/30 Tons

Thickness: Sides

3/4"

Back

23/32"

Top

23/32"

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

28/30 Tons.

Thickness

1 5/16"

Lower back plate: Material

Steel

Tensile strength

28/30 Tons.

Thickness

29/32"

Pitch of stays at wide water space

14" x 9"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

209 lbs.

Main stays: Material

Steel

Tensile strength

28/32 Tons.

Diameter

At body of stay,

3 3/4"

No. of threads per inch

6

Area supported by each stay

360 sq.

Working pressure by Rules

222 lbs.

Screw stays: Material

Steel

Tensile strength

28/30 Tons.

Diameter

At turned off part,

17/8" + 1 3/4"

No. of threads per inch

9

Area supported by each stay

85.5 sq.

003742-003749-0091

Lloyd's Register
Foundation

Working pressure by Rules 212 Lbs. Are the stays drilled at the outer ends ho Margin stays: Diameter { At turned off part, or Over threads 2" x 17/8" No. of threads per inch 9 Area supported by each stay 103.5 sq. in. Working pressure by Rules 205 Lbs. Tubes: Material Lin External diameter { Plain 3 1/2" Stay 3 1/2" Thickness { 5/16" Stay 5/16" No. of threads per inch 9 Pitch of tubes 4 3/4" 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 34" 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 Thickness of shell Description of longitudinal joint Diameter of rivet holes Pitch of rivets Percentage of strength of joint { Plate Rivets Internal diameter 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 Manufacturers of { Tubes Steel castings Number of elements Material of tubes 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 22 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 --) See attached report Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) while building { During erection on board vessel --) on Machy. 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 plan, and the materials & workmanship are sound & good. It has been satisfactorily fitted on board, tried under steam, & its safety valves adjusted as above.

The steel evidence was sent with the report on the sister vessel - Singapore

Chapman engine report sent
Survey Fee £ : : When applied for, 192
Travelling Expenses (if any) £ : : When received, 192
J. H. Mackenzie
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 8 APR 1930
Assigned See pg. 1 attached