

REPORT ON BOILERS.

No. 40401

Received at London Office

-3 DEC 1929

Writing Report

29.11.1929

1929

When handed in at Local Office

29 Nov 1929

1929

Port of

HULL

Survey held at

Hull

Date, First Survey

4 July

Last Survey

27 Nov 1929

on the

Steam Trawler

"CASSIO"

(Number of Visits)

26

Tons

380.0

Net 142.85

Built at

Beverley

By whom built

Cook, Weldon & Emmott Ltd

Hull No. 530

When built 1929

s made at

Hull

By whom made

Amos & Smith Ltd

Engine No. 593

When made 1929

made at

Hull

By whom made

do

Boiler No. 593

When made 1929

Horse Power

111

Owners

Hull Northern Fishing Co Ltd

Port belonging to

Hull

TUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Apperby Iron Co Ltd

(Letter for Record (S))

Heating Surface of Boilers

1986 Sq. feet

Is forced draught fitted

No

Coal or Oil fired

Coal

Description of Boilers

One single ended return tube 15B

Working Pressure 210 lbs.

by hydraulic pressure to

365 lbs

Date of test

4.11.29

No. of Certificate

3743

Can each boiler be worked separately

Yes

of Firegrate in each Boiler

51.25 sq

No. and Description of safety valves to each boiler

2 Spring loaded

of each set of valves per boiler

per Rule 11.0

as fitted 11.88

Pressure to which they are adjusted

210 lbs

Are they fitted with easing gear

Yes

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

Yes

least distance between boilers or uptakes and bunkers or woodwork

8"

Is oil fuel carried in the double bottom under boilers

No

least distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

Yes

least internal dia. of boilers

145"

Length

129"

Shell plates: Material

Steel

Tensile strength

29/33 Tons

seams

1 1/2"

Are the shell plates welded or flanged

Yes

Description of riveting: circ. seams

end

inter.

seams

T.R. 5B.S.

Diameter of rivet holes in

circ. seams

1 3/8"

Pitch of rivets

4 1/2"

9 1/4"

percentage of strength of circ. end seams

plate

66.4

rivets

42.1

Percentage of strength of circ. intermediate seam

plate

85.1

rivets

percentage of strength of longitudinal joint

plate

87.0

rivets

87.0

Working pressure of shell by Rules

216 lbs.

thickness of butt straps

outer

1 1/2"

inner

1 1/2"

No. and Description of Furnaces in each Boiler

Three plain 3 p.f.

thickness of plate part

top

76 13/16"

bottom

71 13/16"

Tensile strength

26/30 Tons

Smallest outside diameter

42 9/8"

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

Working pressure of furnace by Rules

212 lbs.

plates in steam space: Material

Steel

Tensile strength

26/30 Tons

Thickness

1 1/8"

Pitch of stays

18"

are stays secured

double nuts & washers

Working pressure by Rules

210 lbs.

plates: Material

front Steel

back

Tensile strength

26/30 Tons

Thickness

1 1/8"

pitch of stay tubes in nests

11"

Pitch across wide water spaces

13 3/4"

Working pressure

front 238 lbs.

back 268 lbs.

plates to combustion chamber tops: Material

Steel

Tensile strength

29/33 Tons

Depth and thickness of girder

centre

9 3/4" x 1 3/4"

Length as per Rule

37"

Distance apart

9" max

No. and pitch of stays

ch

3 @ 8"

Working pressure by Rules

212 lbs.

Combustion chamber plates: Material

Steel

le strength

26/30 Tons

Thickness: Sides

23/32"

Back

23/32"

1 1/2"

Top

1 1/2"

Bottom

3/4"

of stays to ditto: Sides

9" x 8 1/2"

Back

10" x 8"

Top

9" x 8"

Are stays fitted with nuts or riveted over

nuts

ing pressure by Rules

214 lbs.

Front plate at bottom: Material

Steel

Tensile strength

26/30 Tons

ness

1 1/2"

Lower back plate: Material

Steel

Tensile strength

26/30 Tons

Thickness

7/8"

of stays at wide water space

13 3/4" x 8"

Are stays fitted with nuts or riveted over

nuts

ing Pressure

264 lbs.

Main stays: Material

Steel

Tensile strength

26/32 Tons

eter

At body of stay,

or

Over threads

3"

No. of threads per inch

6

Area supported by each stay

288 sq in

ing pressure by Rules

232 lbs.

Screw stays: Material

Steel

Tensile strength

26/30 Tons

eter

At turned off part,

or

Over threads

17 1/8" x 1 3/4"

No. of threads per inch

9

Area supported by each stay

80.0 sq in

003357-003368-0150

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Working pressure by Rules 228 Lbs Are the stays drilled at the outer ends ho Margin stays: Diameter 17/8 At turned off part, or Over threads
No. of threads per inch 9 Area supported by each stay 95.0 Working pressure by Rules 224 Lbs.
Tubes: Material Iron External diameter 3 1/4 Thickness 5/16 No. of threads per inch 9
Pitch of tubes 4 1/2 x 4 3/4 Working pressure by Rules 230 Lbs Manhole compensation: Size of opening in shell plate 16 x 12 Section of compensating ring 60 1/2 x 1 1/32 No. of rivets and diameter of rivet holes 16 @ 1 1/32
Outer row rivet pitch at ends 10 1/4 Depth of flange if manhole flanged ✓ Steam Dome: Material Steel
Tensile strength 76/30 Tons Thickness of shell 3/4 Description of longitudinal joint S. R. Lap
Diameter of rivet holes 1 1/32 Pitch of rivets 2 1/4 Percentage of strength of joint 54.0
Internal diameter 36 Working pressure by Rules 250 Lbs. Thickness of crown 1 No. and diameter of stays 2 @ 2 1/2 Inner radius of crown ✓ Working pressure by Rules ✓
How connected to shell Riveted Size of doubling plate under dome 60 1/2 x 1 1/32 Diameter of rivet holes and pitch of rivets in outer row in dome connection to shell 1 1/32 @ 10 1/4

Type of Superheater Manufacturers of Tubes
Number of elements Material 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: 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

For AMOS & SMITH LTD.

The foregoing is a correct description,

Manufacturer.

Dates of Survey During progress of work in shops - - See attached Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)
while building During erection on board vessel - - report 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, & the materials & workmanship are sound & good. It has been satisfactorily fitted on board, tried under steam, & its safety valves adjusted under steam as above.

Steel insulators were sent with the report as stated vessel S. T. "Domino".

Charges on engine report

Survey Fee £ 192 When applied for, ✓
Travelling Expenses (if any) £ 192 When received, ✓

Committee's Minute

FRI. 8 DEC 1929

Assigned

See rpt attached

Shut Shackley
Engineer Surveyor to Lloyd's Register of Shipping.



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