

REPORT ON BOILERS.

No. 51993.

4 MAY 1943

Received at London Office

5 MAY 1943

of writing Report 10-2.

1943. When handed in at Local Office

19

Port of HULL

in Survey held at HULL.

Date, First Survey 22. 9. 42.

Last Survey 18. 4. 19 43.

19 43.

on the

H.M.T. HERRING.

(Number of Visits 60.)

Gross 392

Tons Net 128

at SELBY.

By whom built Ascham & Son Ltd

Yard No. 1260 When built 1913

nes made at HULL.

By whom made Amos & Smith Ltd

Engine No. 718. When made .

rs made at HULL.

By whom made Amos & Smith Ltd

Boiler No. 718. When made .

ing Horse Power 125.

Owners THE ADMIRALTY.

Port belonging to

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Appleby, Frothingham, Steel & Co Ltd and Chilles.

(Letter for Record 5.)

Heating Surface of Boilers

1873.

Is forced draught fitted Yes.

Coal or Oil fired Coal

and Description of Boilers

One S.B.

Working Pressure 210 lb/sq

ed by hydraulic pressure to 365 lb/sq

Date of test 18. 1. 43.

No. of Certificate 4176.

Can each boiler be worked separately -

of Firegrate in each Boiler

50 sq.

No. and Description of safety valves to each boiler

2 Spring loaded

of each set of valves per boiler

per Rule 12.57.0"

as fitted 14.12.0"

Pressure to which they are adjusted 210 lb/sq

are they fitted with easing gear Yes.

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

Least distance between boilers or uptakes and bunkers or woodwork 9".

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 No

Least internal dia. of boilers 14'-3 1/2"

Length 10'-6"

Shell plates: Material Steel

Tensile strength 31-35 tons/sq

Thickness 1 1/4".

Are the shell plates welded or flanged No.

Description of riveting: circ. seams

end D.R. lap.

seams T.R., D.B.S.

Diameter of rivet holes in

circ. seams 1 5/16"

long. seams 1 1/32"

Pitch of rivets

3 3/4"

Percentage of strength of circ. end seams

plate 64.9%

rivets 42.8%

Percentage of strength of circ. intermediate seam

plate

Percentage of strength of longitudinal joint

plate 85.1%

rivets 85.8%

combined 87.66%

Thickness of butt straps

outer 3 1/32"

inner 1 3/32"

No. and Description of Furnaces in each Boiler

3 cf. Deighran Section.

Material Steel.

Tensile strength 26-30 tons/sq

Smallest outside diameter 3'-6 3/4"

Thickness of plain part

Thickness of plates

crown 3 5/8"

bottom

Description of longitudinal joint Weld.

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

NONE.

plates in steam space: Material Steel

Tensile strength 26-30 tons/sq

Thickness 1 3/32"

Pitch of stays 17" x 17 1/2"

are stays secured Nuts & Washers inside and out.

plates: Material

front Steel

back Steel

Tensile strength 26-30 tons/sq

26-30 tons/sq

Thickness

1 5/16"

Pitch of stay tubes in nests

9 1/4" x 9"

Pitch across wide water spaces

14" x 9" with 3/4" double

ers to combustion chamber tops: Material Steel.

Tensile strength 29-33 tons/sq

Depth and thickness of girder

entre 9" x 7 1/8" Double

Length as per Rule 2'-10 23/32"

Distance apart 8".

No. and pitch of stays

each 3 @ 8 1/4".

Combustion chamber plates: Material Steel

Tensile strength 26-30 tons/sq

Thickness: Sides 2 3/32"

Back 2 3/32"

Top 2 1/32"

Bottom 2 5/32"

Pitch of stays to ditto: Sides 8 1/2" x 9 3/4"

Back 9 1/4" x 9"

Top 8 1/4" x 8"

Are stays fitted with nuts or riveted over Nuts.

at plate at bottom: Material Steel.

Tensile strength 26-30 tons/sq

Thickness 1 5/16".

Lower back plate: Material Steel.

Tensile strength 26-30 tons/sq

Thickness 7/8"

Pitch of stays at wide water space

14" x 9".

Are stays fitted with nuts or riveted over Nuts.

Shipping stays: Material Steel

Tensile strength 28-32 tons/sq

Pitch of stays

At body of stay, 3"

Over threads

No. of threads per inch 6

Pitch of stays

Material Steel

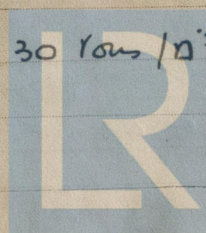
Tensile strength 26-30 tons/sq

Pitch of stays

At turned off part, 1 3/4"

Over threads

No. of threads per inch 9.



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W321-0114

Are the stays drilled at the outer ends No. Margin stays: Diameter At turned off part 1 3/4", 1 7/8", 2"
No. of threads per inch 9.
Tubes: Material L.W. Iron. External diameter Plain 3 1/2" Thickness 8.W.G. No. of threads per inch 9.
Pitch of tubes 4 1/2" x 4 7/8" Manhole compensation: Size of opening
shell plate 12" (x 16") Section of compensating ring 35 7/8" x 1 1/4" No. of rivets and diameter of rivet holes 122 @ 1 1/3"
Outer row rivet pitch at ends 10.45. Depth of flange Bottom 3 3/8" Steam Dome: Material None.
Tensile strength Thickness of shell Description of longitudinal joint
Diameter of rivet holes Pitch of rivets Percentage of strength of joint
Internal diameter Thickness of crown No. and diameter
stays Inner radius of crown
How connected to shell Size of doubling plate under dome Diameter of rivet holes and
of rivets in outer row in dome connection to shell
Type of Superheater None. Manufacturers of Tubes
Steel forgings
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
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
Pressure to which the safety valves are adjusted Hydraulic test press
tubes forgings and castings and after assembly in place Are drain cock
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 Yes.

For AMOS & SMITH LTD.
The foregoing is a correct description,
A. E. Kearney Manufact

Dates of Survey During progress of See machinery report. Are the approved plans of boiler and superheater forwarded herewith 13. 8.
while work in shops - - -
building During erection on 1943 Feb 26. MAR 11, 24. AP 12, 18. Total No. of visits 60.
board vessel - - -

Is this Boiler a duplicate of a previous case Yes. If so, state Vessel's name and Report No. BREAM.

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

This Boiler has been constructed under Special Survey in accordance with the approved Admiralty plans and the Rules.
The Workmanship and Materials are good and, when subjected to hydraulic test of 365 lb./sq. in. it was found satisfactory in every respect.
Boiler examined under working conditions, safety valves adjusted to 210 lb.
accumulation test made + furnaces, chambers and external surfaces examined after all trials.
W. S. Shields.

Survey Fee ... When applied for, 19
Travelling Expenses (if any) £ When received, 19

Engineer/Surveyor to Lloyd's Register of Shipping

Committee's Minute

TUES. 11 MAY 1943

Assigned

See fe. report



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