

REPORT ON BOILERS.

No. 17417.

Received at London Office

28 MAR 1943

Date of writing Report

19

When handed in at Local Office

5th March, 1943. Port of MIDDLESBROUGH.No. in Survey held at
Reg. Book

Stockton-on-Tees.

Date, First Survey 14th October, 1941. Last Survey 24th February, 1943.

on the

MV. "SAMANCO"

(Number of Visits 11)

Gross 8335
Tons Net 4845.

Built at Belfast

By whom built Harland & Wolff Ltd

Yard No. 1156

When built 1943

Engines made at Belfast

By whom made Harland & Wolff.

Engine No. 1156

When made 1943

Boilers made at Stockton-on-Tees

By whom made Stockton Chem. Engineers & Riley Boilers Ltd.

Boiler No. 6581.

When made 1943.

Owners Pacific Steam Navigation Co Ltd.

Port belonging to Liverpool.

THIMBLE TUBE

VERTICAL DONKEY BOILER.

Made at Stockton

By whom made

Stockton Chem. Engs. & Riley Boilers Ltd.

Boiler No. 6581.

When made 1943.

Where fixed Long Room bottom plate

Manufacturers of Steel

Appley - Frodingham Steel Co. Ltd.

Total Heating Surface of Boiler

258 sq

Is forced draught fitted

yes

Coal or Oil fired ~~Steam~~ Electric

No. and Description of Boilers

1. "Helon" Thimble Tube

Working pressure 100 lbs/sq

Tested by hydraulic pressure to

200 lbs/sq

Date of test

24/2/43

No. of Certificate 7073.

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

1 1/2" C.I. Double Safety Valves.

Area of each set of valves per boiler

per rule 2.83 2.895
as fitted 3.4

Pressure to which they are adjusted

100 lbs/sq

Are they fitted with easing gear

yes

State whether steam from main boilers can enter the donkey boiler

Smallest distance between boiler or uptake and bunkers

or woodwork

Is oil fuel carried in the double bottom under boiler

Smallest distance between base of boiler and tank top plating

4'-0"

Is the base of the boiler insulated

Largest internal dia. of boiler

5'-9 3/4"

Height

19'-9"

Shell plates: Material

Steel

Tensile strength

28/32

Thickness

3/8"

Are the shell plates welded or flanged

no.

Description of riveting: circ. seams

end 8R.
inter. 5R.
Bottom. D.R.

long. seams DR. - DBS.

Dia. of rivet holes in

circ. seams 13/16"
long. seams 13/16"

Pitch of rivets

2.007 + 2.029
2.932 12.976

Percentage of strength of circ. seams

plate 59.6 + 59.7
rivets 51.6 151.5

of Longitudinal joint

plate 72.2 + 71.6
rivets 47.5 + 47.9
combined 106.7

Working pressure of shell by rules

104.7

Thickness of butt straps

outer 3/8"
inner 3/8"

Shell Crown: Whether complete hemisphere, dished partial spherical, or flat

Dished

Material

Steel

Tensile strength

26/30

Thickness

2 1/32"

Radius

5'-0"

Working pressure by rules

130

Description of Furnace: Plain, spherical, or dished crown

Plain

Material

Steel

Tensile strength

26/30

Thickness

3/4"

External diameter

top 5'-1 1/2"
bottom 5'-1 1/2"

Length as per rule

5'-8 1/2"

Working pressure by rules

Pitch of support stays circumferentially

and vertically

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Radius of spherical or dished furnace crown

Working pressure by rule

Thickness of Ogee Ring

2 3/32"

Diameter as per rule

D 5'-9 3/4"
a 3'-1 1/2"

Working pressure by rule

Combustion Chamber: Material

Tensile strength

Thickness of top plate

Radius if dished

Working pressure by rule

Thickness of back plate

Diameter if circular

Length as per rule

Pitch of stays

Are stays fitted with nuts or riveted over

Diameter of stays over thread

Working pressure of back plate by rules

Tube Plates: Material

front
back

Tensile strength

Thickness

Mean pitch of stay tubes in nests

If comprising shell, Dia. as per rule

front
back

Pitch in outer vertical rows

Dia. of tube holes FRONT

stay
plain

BACK

stay
plain

Is each alternate tube in outer vertical rows a stay tube

Working pressure by rules

Girders to combustion chamber tops: Material

Tensile strength

Depth and thickness of girder at centre

Length as per rule

Distance apart

No. and pitch of stays in each

Working pressure by rule

0036 59-0036 70-0068

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Crown stays: Material _____ Tensile strength _____ Diameter ^{at body of stay.} _____
_{or}
_{over threads.} _____
 No. of threads per inch _____ Area supported by each stay _____ Working pressure by rules _____
 Screw stays: Material _____ Tensile strength _____ Diameter ^{at turned off part.} _____
_{or}
_{over threads.} _____ No. of threads per inch _____
 Area supported by each stay _____ Working pressure by rules _____ Are the stays drilled at the outer ends _____
 Tubes: Material _____ External diameter ^{plain} _____ Thickness ^{stay} _____
 No. of threads per inch _____ Pitch of tubes _____ Working pressure by rules _____
 Manhole Compensation: Size of opening in ^{ann} ~~steel~~ plate 16 1/2" Section of compensating ring ✓ No. of rivets and diameter _____
 of rivet holes ✓ Outer row rivet pitch at ends ✓ Depth of flange if manhole flanged 2 7/8"
 Uptake: External diameter 1' - 9 1/4" Thickness of uptake plate 5/8"
 Cross Tubes: No. _____ External diameters _____ Thickness of plates _____

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

For and on behalf of
 STOCKPORT STEAM ENGINEERS & BOILER MAKERS LTD.
G. N. Riley Manufacturer.
 DIRECTOR.

Dates of Survey while building ^{During progress of} 1941 Oct. 14. 23. 1942 Jan. 4. 13. Feb. 6. Dec. 4. Is the approved plan of boiler forwarded herewith No. 19/5/41.
_{work in shops - -} 1943 Jan. 11. 20. Feb. 8. 13. 24. (If not state date of approval.)
^{During erection on} _{board vessel - -} Total No. of visits 11

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

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

This boiler has been constructed under Special Survey & in accordance with the Rule Requirements & approved plan.

The materials & workmanship are good & on completion the boiler was hydraulically tested to 200 lbs/sq. & found satisfactory.

This boiler has been forwarded to Messrs Harland & Wolff of Belfast for installation on their Colinet No 1156.

This boiler has now been satisfactorily fitted on board the vessel and examined under steam, the safety valves have been adjusted to 100 lbs/sq. and accumulation of pressure test carried out.

The oil burning installation has been examined under working conditions and found satisfactory.

L. Shaw.
12/8/43.

Survey Fee ... £ 4 : 4 : _____ When applied for, 5/3/1943.
 Travelling Expenses (if any) £ : : _____ When received, 19

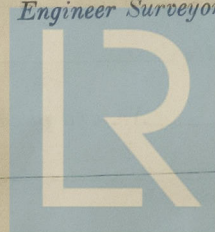
Committee's Minute

Assigned

FRI. 10 SEP 1943

see minute on
Ref. H. Rpt.

L. Inman Street
 Engineer Surveyor to Lloyd's Register of Shipping.



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