

REPORT ON BOILERS.

No. 13063

Received at London Office

Date of writing Report

16.5.47

When handed in at Local Office

17.5.47

Port of

TRIESTE

No. in
Reg. Book.

Survey held at

Trieste

Date, First Survey

Last Survey

192

77594 on the

S.S. "LEE SANG"

(Number of Visits)

9

Gross 1655

Tons

Net 972

Master

Built at

Lubeck

By whom built

Hans Koch

Yard No. -

When built 1907

Engines made at

Altona

By whom made

J. & A. Green

Engine No. -

When made 1907

Boilers made at

By whom made

Boiler No. -

When made 1907

Nominal Horse Power

Owners

E. M. Trattles

Port belonging to

Hong Kong

MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

Not Known

(Letter for Record S)

Total Heating Surface of Boilers

3500 FT²

Is forced draught fitted

No

Coal or Oil fired

OIL

No. and Description of Boilers

2 CYL.

Working Pressure 180 LBS.

Tested by hydraulic pressure to

210 LB/IN²

Date of test 27/3/47

No. of Certificate -

Can each boiler be worked separately

YES

Area of Firegrate in each Boiler

No. and Description of safety valves to each boiler

2 SPRINGS LOADED 3" DIA

Area of each set of valves per boiler

per Rule

11.2"

as fitted

14"

Pressure to which they are adjusted

180 LBS

Are they fitted with easing gear

YES

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

AMPLE

Is oil fuel carried in the double bottom under boilers

No

Smallest distance between shell of boiler and tank top plating

Is the bottom of the boiler insulated

YES

Largest internal dia. of boilers

4000 MM

Length

3500 MM

Shell plates: Material

S

Tensile strength

Thickness

30 MM

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

end

D.R. LAP

inter.

T.R. LAP

long. seams

Q.R.D. BUTT STRAPS

Diameter of rivet holes in

circ. seams

31 MM

long. seams

31 MM

Pitch of rivets

110 MM

350 MM

Percentage of strength of circ. end seams

plate

72

rivets

37.5

Percentage of strength of circ. intermediate seam

plate

72

rivets

56

Percentage of strength of longitudinal joint

plate

91

rivets

99

combined

93

Working pressure of shell by Rules

198 LB/IN²

Thickness of butt straps

outer

25 MM

inner

25 MM

No. and Description of Furnaces in each Boiler

2 CORRUGATED

Material

Tensile strength

Smallest outside diameter

1218 MM

Length of plain part

top

-

bottom

-

Thickness of plates

crown

20 MM

bottom

-

Description of longitudinal joint

FIRE WELD

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

NONE

Working pressure of furnace by Rules

AS APP.

End plates in steam space: Material

S

Tensile strength

Thickness

25 MM

Pitch of stays

400x400 MM

How are stays secured

NUTS IN & OUT + milled washers outside

Working pressure by Rules

AS APP.

Tube plates: Material

front

S

back

S

Tensile strength

Thickness

25 MM

23 MM

Mean pitch of stay tubes in nests

235 MM

Pitch across wide water spaces

360 MM

Working pressure

front

AS APP.

back

Girders to combustion chamber tops: Material

S

Tensile strength

Depth and thickness of girder

at centre

210 MM

2x18 MM

Length as per Rule

726 MM

Distance apart

210 MM

No. and pitch of stays

in each

3 - 185 MM

Working pressure by Rules

AS APP.

Combustion chamber plates: Material

S

Tensile strength

Thickness: Sides

16 MM

Back

16 MM

Top

16 MM

Bottom

20 MM

Pitch of stays to ditto: Sides

185x195 MM

Back

194 MM x 190 MM

Top

185x210 MM

Are stays fitted with nuts or riveted over

NUTS

Working pressure by Rules

AS APP.

Front plate at bottom: Material

S

Tensile strength

Thickness

25 MM

Lower back plate: Material

S

Tensile strength

Thickness

25 MM

Pitch of stays at wide water space

310x190 MM

Are stays fitted with nuts or riveted over

NUTS

Working Pressure

AS APP.

Main stays: Material

Tensile strength

Diameter

At body of stay,

68 MM

or

Over threads

No. of threads per inch

6

Area supported by each stay

400x400 MM

Working pressure by Rules

AS APP.

Screw [stays: Material

Tensile strength

Diameter

At turned off part,

38 MM

or

Over threads

No. of threads per inch

9

Area supported by each stay

194x190 MM

Working pressure by Rules As App. Are the stays drilled at the outer ends No ✓ Margin stays: Diameter { At turned off part or Over threads 48 mm ✓

No. of threads per inch 9 Area supported by each stay 242 x 190 mm Working pressure by Rules As App.

Tubes; Material S External diameter { Plain 89 mm ✓ Stay 88 mm ✓ Thickness { 5.5 mm ✓ 8 mm ✓ No. of threads per inch _____

Pitch of tubes 115 x 120 mm Working pressure by Rules As App. Manhole compensation: Size of opening in shell plate 300 x 400 mm Section of compensating ring 336 x 30 mm No. of rivets and diameter of rivet holes 52 - 31 mm

Outer row rivet pitch at ends 110 mm Depth of flange if manhole flanged 30 mm ✓ 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 NONE ✓ 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 23 inclusive for boilers been complied with _____

The foregoing is a correct description,

Manufacturer, _____

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

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.)

These two boilers have been examined throughout drill tested for thickness, the plain tubes now renewed and other minor repairs effected. The original workmanship appears good and their present condition satisfactory. They were found tight under hydraulic test of 210 lb/sq. in.

In my opinion the boilers are in safe working condition for a pressure of 180 lb/sq. in.

Survey Fee Per letter :

When applied for, 192

Travelling Expenses (if any) £ :

When received, 192

John Walee

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI 13 JUN 1947

Assigned See F.E. mch. opt.



© 2020

Lloyd's Register Foundation