

REPORT ON BOILERS.

No. 6861

26 OCT 1925

Received at London Office

Date of writing Report

17th Oct 1925

When handed in at Local Office

19th October 1925

Port of

Trieste

No. in
Book.

Survey held at Wallsend on Tyne + Trieste

Date, First Survey 27 Jan 21. (Genoa)

Last Survey October 5th 1925

(Number of Visits 15 (Trieste))

Gross 8652

Net 5503

688 on the MOTOR VESSEL

"LEME"

Master

Built at

Trieste

By whom built

Stabilimento Serrin

Yard No. 743

When built 1925

Engines made at

Legnano

By whom made

Franco Lodi. S. A.

Engine No. *

When made *

Boilers made at Wallsend on Tyne + Trieste

By whom made

Wallsend Shipyard + Eng. Co. S.T.T.

Boiler No.

When made 1921-1924

Small boiler made at Amman

By whom made

Lochman & Co.

Nominal Horse Power (engines) 694

Owners

Navigazione Libera Adriatica

Port belonging to

Trieste

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

John Spencer & Sons.

(Letter for Record S.)

Total Heating Surface of Boilers

8652

Is forced draught fitted

No.

Coal or Oil fired

Oil

No. and Description of Boilers

1 single ended multitubular.

Working Pressure 180 lb./sq. in.

Tested by hydraulic pressure to

320 lb.

Date of test 15.12.24

No. of Certificate 282

Can each boiler be worked separately

Yes.

Area of Firegrate in each Boiler

✓

No. and Description of safety valves to each boiler

2 spring loaded

Area of each set of valves per boiler

{per Rule 180"

{as fitted 19.240"

Pressure to which they are adjusted

180 lb.

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

560 mm.

Is oil fuel carried in the double bottom under boilers

Yes.

Smallest distance between shell of boiler and tank top plating

560 mm.

Is the bottom of the boiler insulated

No.

Largest internal dia. of boilers

15'0"

Length

11'9"

Shell plates: Material

Steel

Tensile strength 28-32 tons.

Thickness

1 1/4"

Are the shell plates welded or flanged

No

Description of riveting: circ. seams

{end D & T.R.L.

long. seams

T.R.D.B.S.

Diameter of rivet holes in

{circ. seams

{long. seams 1 5/16"

Pitch of rivets

9/8"

Percentage of strength of circ. end seams

{plate

{rivets

Percentage of strength of circ. intermediate seam

{plate

{rivets

Percentage of strength of longitudinal joint

{plate

{rivets

{combined

Working pressure of shell by Rules 188 lb.

Thickness of butt straps

{outer

{inner

No. and Description of Furnaces in each Boiler

3 Morrison's.

Material

Steel

Tensile strength

Smallest outside diameter 47 1/2"

Length of plain part

{top

{bottom

Thickness of plates

{crown 9/16"

{bottom

Description of longitudinal joint

Welded.

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

✓

Working pressure of furnace by Rules

186 lb./sq. in.

End plates in steam space: Material

Steel

Tensile strength

Thickness 1 3/8"

Pitch of stays 23 x 21"

How are stays secured

Double nuts

Working pressure by Rules

180 lb.

Tube plates: Material

{front Steel

{back

Tensile strength

Thickness

3 3/32"

3 1/4"

Mean pitch of stay tubes in nests

10 1/8"

Pitch across wide water spaces

14"

Working pressure

{front 180 lb.

{back

Girders to combustion chamber tops: Material

Steel

Tensile strength

Depth and thickness of girder

at centre

9 1/4" x 1 1/2"

Length as per Rule

36 3/32"

Distance apart

8 1/2"

No. and pitch of stays

in each

8 x 8 5/8"

Working pressure by Rules

180 lb.

Combustion chamber plates: Material

Steel

Tensile strength

Thickness: Sides

2 1/32"

Back

2 1/32"

Top

2 1/32"

Bottom

2 1/32"

Pitch of stays to ditto: Sides

9 1/4" x 8 5/8"

Back

9 1/2" x 8 1/2"

Top

8 5/8" x 8 1/2"

Are stays fitted with nuts or riveted over

nuts

Working pressure by Rules

180 lb.

Front plate at bottom: Material

Steel

Tensile strength

Thickness

3/32"

Lower back plate: Material

Steel

Tensile strength

Thickness 7/8"

Pitch of stays at wide water space

14"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

185 lb.

Main stays: Material

Steel

Tensile strength

Diameter

{At body of stay,

{Over threads

No. of threads per inch

Area supported by each stay

4830"

Working pressure by Rules

182.5 lb.

Screw stays: Material

Steel

Tensile strength

Diameter

{At turned off part,

{Over threads

No. of threads per inch

Area supported by each stay

7960"

Working pressure by Rules 180 lb Are the stays drilled at the outer ends to Margin stays: Diameter { At turned off part, or Over threads

No. of threads per inch _____ Area supported by each stay _____ Working pressure by Rules _____

Tubes: Material _____ External diameter { Plain 3" Stay _____ Thickness { _____ No. of threads per inch _____

Pitch of tubes 4 1/2" x 4 1/4" Working pressure by Rules _____ Manhole compensation: Size of opening in _____

End plate 16 x 12 Section of compensating ring Flanged. No. of rivets and diameter of rivet holes _____

Outer row rivet pitch at ends _____ Depth of flange if manhole flanged _____ 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 { 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 Yes.

The foregoing is a correct description, _____

Manufacturer. _____

Dates of Survey { During progress of 1924 Mar 26, June 12, Nov 21, Dec 4, 15, Are the approved plans of boiler and superheater forwarded herewith _____

while building { work in shops - 1925 July 1, Sept 4, (If not state date of approval.)

board vessel - 1925 Dec 17, Mar 11, May 11, Aug 11,

Sep 3, 10, 17, Oct 5, Total No. of visits fifteen

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

This Boiler has been built under special Survey and in accordance with the Rules. The materials & workmanship are good. On completion it has been tested by hydraulic pressure with satisfactory results, efficiency secured in position on board, examined under steam found in order.

See Enquiry Report

Survey Fee ... : : When applied for, 192

Travelling Expenses (if any) £ : : When received, 192

Godfrey Munro & V. Lockney.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 30 OCT 1925 TUES. 26 JAN 1926

Assigned FRI. 25 JUN 1926 FRI. 16 JUL 1926