

REPORT ON BOILERS.

No. 10534

Received at London Office

25 AUG 1934

Date of writing Report

20/8/34

When handed in at Local Office

21/8/34

Port of

TRIESTE

No. in Survey held at
Reg. Book.

Manfalcane

Date, First Survey

Aug 7

Last Survey

Aug 12

192 34

72722 on the

Twin S.C. M.D. "BONZO"

(Number of Visits

3

Gross

8177

Tons

Net

4917

Master

Built at

Manfalcane

By whom built

Cant. Rinniti dell' Adriatico

Yard No.

241

When built

1931

Engines made at

Twin

By whom made

Fiat S.C. Grandi Motori

Engine No

L6849

When made

1931

Boilers made at

Glasgow

By whom made

D. Rowan

Boiler No.

377-378

When made

1931

Nominal Horse Power

Owners

Cantieri Rinniti dell' Adriatico

Port belonging to

Trieste

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel

(Letter for Record

S. ✓)

Total Heating Surface of Boilers

1350 π each

Is forced draught fitted

no

Coal or Oil fired

yes

No. and Description of Boilers

two single ended

Working Pressure

180 lbs

Tested by hydraulic pressure to

Date of test

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

two spring loaded

Area of each set of valves per boiler

per Rule

8'64 π

as fitted

11'86 π

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

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

12' 0"

Length

14' 0"

Shell plates: Material

S.M.S.

Tensile strength

29-33 Tons

Thickness

31/32"

Are the shell plates welded or flanged

✓

Description of riveting: circ. seams

end B.R. lap

long. seams

T.R - J.B.S.

Diameter of rivet holes in

circ. seams

1 1/16"

long. seams

1 1/16"

Pitch of rivets

7 1/16"

2 1/16"

Percentage of strength of circ. end seams

plate

61.5

rivets

52.8

Percentage of strength of circ. intermediate seam

plate

85.4

rivets

91.5

Percentage of strength of longitudinal joints

plate

85.4

rivets

91.5

combined

89.7

Working pressure of shell by Rules

183 lbs. p. π

Thickness of butt straps

outer

3/4"

inner

7/8"

No. and Description of Furnaces in each Boiler

two Dighton

Material

S.M.S.

Tensile strength

26-30 Tons

Smallest outside diameter

3' 9 1/16"

3' 6 1/16"

Length of plain part

top

9 3/4"

bottom

9 3/4"

Thickness of plates

crown

7/32"

bottom

Description of longitudinal joint

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

Working pressure of furnace by Rules

182.58 lbs. p. π

End plates in steam space: Material

S.M.S.

Tensile strength

26-30 Tons

Thickness

1 1/16"

Pitch of stays 2 1/8" x 14"

How are stays secured nuts inside riveted washers nuts outside thro end plates & washers

Working pressure by Rules

175 lbs. p. π

Tube plates: Material

front

S.M.S.

back

S.M.S.

Tensile strength

26-30 Tons

Thickness

1 1/16"

15 1/16"

Mean pitch of stay tubes in nests

11 7/8"

Pitch across wide water spaces

14 1/4"

Working pressure

front

302 lbs. p. π

back

233 lbs. p. π

Girders to combustion chamber tops: Material

S.M.S.

Tensile strength

28-32 Tons

Depth and thickness of girder

at centre

8 3/8" x 7/8"

Length as per Rule

2' - 7 3/4"

Distance apart

8 7/8"

No. and pitch of stays

in each

3 x 8 1/4"

Working pressure by Rules

220 lbs. p. π

Combustion chamber plates: Material

S.M.S.

Tensile strength

26-30 Tons

Thickness: Sides

13/16"

Back

3/4"

Top

13/16"

Bottom

13/16"

Pitch of stays to ditto: Sides

8 1/4" x 8 7/8"

Back

8 1/4" x 8 1/2"

Top

8 1/4" x 8 7/8"

Are stays fitted with nuts or riveted over nuts outside priv. inside

Working pressure by Rules

282 lbs. p. π

Front plate at bottom: Material

S.M.S.

Tensile strength

26-30 Tons

Thickness

1 1/16"

Lower back plate: Material

S.M.S.

Tensile strength

26-30 Tons

Thickness

1 1/16"

Pitch of stays at wide water space

one manhole stay 13 1/2"

Are stays fitted with nuts or riveted over

nuts

Working Pressure

Main stays: Material

S.M.S.

Tensile strength

28-32 Tons

Diameter

At body of stay,

3"

Over threads

No. of threads per inch

9

Area supported by each stay

358.75 π

Working pressure by Rules

179 lbs. p. π

Screw stays: Material

S.M.S.

Tensile strength

26-30 Tons

Diameter

At turned off part,

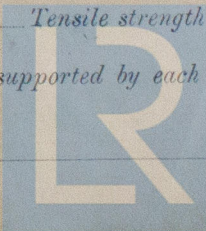
1 1/2"

Over threads

No. of threads per inch

9

Area supported by each stay

70 π 
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 W1044-0194
 Foundation

Working pressure by Rules 179 lbs. Are the stays drilled at the outer ends no Margin stays: Diameter { At turned off part, 1 5/8" or Over threads. 1 5/8"

No. of threads per inch 9 Area supported by each stay 70 sq Working pressure by Rules 216 lbs p.o.

Tubes: Material S.M.S. External diameter { Plain 3 1/4" Stay 3 1/4" Thickness { 9 W.G. No. of threads per inch 9

Pitch of tubes 14 1/4" x 8 3/4" Working pressure by Rules 215 lbs p.o. Manhole compensation: Size of opening in shell plate 19 1/2" x 15 1/2" Section of compensating ring 2'-8 1/2" x 2'-4 1/2" x 3/32" No. of rivets and diameter of rivet holes 36 x 1 1/8"

Outer row rivet pitch at ends 7 7/16" Depth of flange if manhole flanged 3" 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 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

Area of each safety valve Is a safety valve fitted to every part of the superheater which can be shut off from the boiler

Rules Are the safety valves fitted with easing gear Working pressure as per

tubes, castings and after assembly in place Hydraulic test pressure:

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 work in shops - - } Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.)

while building { During erection on board vessel - - } Total No. of visits 3.

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

Both boilers have been examined internally & externally together with their mountings, doors, fastenings and safety valves, and found in good condition. The workmanship is good and the boilers are satisfactorily fitted on board. The safety valves have been adjusted to blow off at 180 lbs p.o.

The scantling of the boilers were checked with the approved plan and found in accordance.

The steam oil fuel burning arrangements have been examined and tested and found satisfactory, and in accordance with the requirements of Section 20 of the Rules.

These boilers have been constructed at Glasgow by D. Rowan under the special Survey of the Harbours Committee.

One copy of the approved plan forwarded with our letter dated 13, 6, 34 has been retained in London.

Survey Fee ... £ 280:- When applied for, 21/8 1934

Travelling Expenses (if any) £ ✓ When received, 18.10.34

Wrenham
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FM. 19 OCT 1934 FRI. 28 JUN 1935

Assigned See other Enchy. Rpt FRI. 2 AUG 1935

Tri. 10534 WED 15 APR 1936

TUE. 4 FEB 1936

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