

with SS Conte di Savoia

REPORT ON BOILERS.

No. 6861

26 OCT 1925

Received at London Office

pt. 5a.

Date of writing Report 17th Oct 1925 When handed in at Local Office 19 October 1925 Port of Trieste

No. in Survey held at Wallend on Tyne + Trieste Date, First Survey 27 Jan 21 (Genoa) Last Survey October 5th 1925

No. in Book 688 on the MOTOR VESSEL "LEME" (Number of Visits 15 (Trieste)) Tons {Gross 8652 Net 5503

Master Stalmentis Dennis Built at Trieste By whom built Stalmentis Dennis Yard No. 743 When built 1925

Engines made at Legnano By whom made Franco Loi. S.A. Engine No. * When made *

Boilers made at Wallend on Tyne + Trieste By whom made Wallend Shipway + Eng. Co. & S.T.T. Lochman. & Co. Boiler No. 9291 When made 1921-1924

Small Cochran boiler at Ammann

Nominal Horse Power (engines) 694 Owners Navigazione Libera Triestina Port belonging to Trieste

MULTITUBULAR BOILERS MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel John Spence & Sons. (Letter for Record 5)

Total Heating Surface of Boilers 8000 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 1 5/16" Pitch of rivets { 9/8"

Percentage of strength of circ. end seams {plate rivets 85.5 Percentage of strength of circ. intermediate seam {plate rivets 88.5

Percentage of strength of longitudinal joint {plate rivets 85.5 Working pressure of shell by Rules 188 lb.

Thickness of butt straps {outer 3/16" inner 3/16" No. and Description of Furnaces in each Boiler 3 Morrison's.

Material Steel Tensile strength 36 3/32" Smallest outside diameter 47 1/2"

Length of plain part {top ✓ bottom ✓ Thickness of plates {crown 9/16" bottom 9/16" 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 13/8" 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 Steel Tensile strength { Thickness { 3/32" 3/4"

Mean pitch of stay tubes in nests 10 1/8" Pitch across wide water spaces 14" Working pressure {front 180 lb. back 180 lb.

Girders to combustion chamber tops: Material Steel Tensile strength 36 3/32" Distance apart 8 1/2" Depth and thickness of girder

at centre 9 1/4" x 1/2" Length as per Rule 36 3/32" 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 7/8"

Thickness 3/32" Lower back plate: Material Steel Tensile strength 7/8" 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 4830"

Diameter {At body of stay, or Over threads 1 1/2" No. of threads per inch 12 Area supported by each stay 4830"

Working pressure by Rules 182.5 lb. Screw stays: Material Steel Tensile strength 7950"

Diameter {At turned off part, or Over threads 1 1/2" No. of threads per inch 12 Area supported by each stay 7950"

Working pressure by Rules 180 lb Are the stays drilled at the outer ends no 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

How connected to shell Inner radius of crown Working pressure by Rules

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 _____

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 while building { During progress of work in shops - - 1924 Mar 26, June 12, Nov 21, Dec 4, 15, 1925 July 1, Sept 4, During erection on board vessel - - 1925 Dec 17, Mar 11, May 11, Aug 11, Sep 3, 10, 17, Oct 5,

Are the approved plans of boiler and superheater forwarded herewith (If not state date of approval.) _____
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 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

Joseph Munro & V. Lockrey.
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

