

Rpt. 5a.

## REPORT ON BOILERS.

FRI. JUN. 15 1923

No. 5501

Received at London Office WED. 29 MAR. 1922

Date of writing Report 21/3/1922 When handed in at Local Office 25/3/1922 Port of Marseilles  
No. in Reg. Book. Survey held at Marseilles Date, First Survey Aug 29<sup>th</sup>/21 Last Survey 14/3/1922  
on the new boilers for type ss Loucheur (3 in 1<sup>st</sup> set) Number of Visits 10 Tons {Gross  
Net  
Master \_\_\_\_\_ Built at \_\_\_\_\_ By whom built \_\_\_\_\_ Yard No. \_\_\_\_\_ When built \_\_\_\_\_  
Engines made at \_\_\_\_\_ By whom made \_\_\_\_\_ Engine No. \_\_\_\_\_ When made \_\_\_\_\_  
Boilers made at Marseilles By whom made Chantiers Navals et Chaud<sup>re</sup> du Midi Boiler Nos 20-21 When made 1922  
Nominal Horse Power \_\_\_\_\_ Owners Le Ministre de la Reconstitution Industrielle Port belonging to \_\_\_\_\_

## MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel David Colville & Co. (Letter for Record (5))  
Total Heating Surface of Boilers 35.3 m sq per blr. Is forced draught fitted no Coal or Oil fired Coal  
No. and Description of Boilers 3 per set, Accelerated Circ<sup>le</sup> Tube type 3 SB. Working Pressure 14 K<sup>lb</sup> = 199 lb.  
Tested by hydraulic pressure to 24 K<sup>lb</sup>/cm<sup>2</sup> Date of test 14/3/22 Nos of Certificates 5-20/21/22 Can each boiler be worked separately yes  
Area of Firegrate in each Boiler 3.795 m<sup>2</sup> = 41 ft<sup>2</sup> No. and Description of safety valves to each boiler 2 Spring loaded  
Area of each set of valves per boiler {per Rule 5.9 sqm 8.48 ft<sup>2</sup> as fitted 4.35 each Pressure to which they are adjusted \_\_\_\_\_ Are they fitted with easing gear \_\_\_\_\_  
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 \_\_\_\_\_  
Smallest distance between shell of boiler and tank top plating \_\_\_\_\_ Is the bottom of the boiler insulated \_\_\_\_\_  
Largest internal dia. of boilers 3.700 m Length 3.230 (OVERALL) Shell plates: Material Steel Tensile strength 46 K  
Thickness 24.5 mm Are the shell plates welded or flanged no Description of riveting: circ. seams {end DR inter. \_\_\_\_\_  
long. seams T.R.D.B.S. Diameter of rivet holes in {circ. seams 31 mm long. seams 31 mm Pitch of rivets {CIRC<sup>le</sup> 108 mm LONG<sup>itudinal</sup> 208 mm  
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 85% rivets 91.5% combined \_\_\_\_\_ Working pressure of shell by Rules 203 lb<sup>0</sup>  
Thickness of butt straps {outer 22 mm inner 22 mm No. and Description of Furnaces in each Boiler 2 Morrison  
Material Steel Tensile strength 40 K Smallest outside diameter 1.132 (6mm corr<sup>ed</sup>)  
Length of plain part {top \_\_\_\_\_ bottom \_\_\_\_\_ Thickness of plates {crown 16 mm bottom \_\_\_\_\_ Description of longitudinal joint Welded  
Dimensions of stiffening rings on furnace or c.c. bottom 2 Working pressure of furnace by Rules 204 lb<sup>0</sup>  
End plates in steam space: Material Steel Tensile strength 44 K Thickness 24 mm Pitch of stays 440 mm  
How are stays secured DN & W (rivetted) Working pressure by Rules 230 lb<sup>0</sup>  
Tube plates: Material {front Steel back Steel Tensile strength {40 K Thickness {24.5 mm  
Mean pitch of stay tubes in nests 214 mm Pitch across wide water spaces 350 mm Working pressure {front \_\_\_\_\_ back \_\_\_\_\_  
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 Rules \_\_\_\_\_ Combustion chamber plates: Material \_\_\_\_\_  
Tensile strength \_\_\_\_\_ Thickness: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Bottom \_\_\_\_\_  
Pitch of stays to ditto: Sides \_\_\_\_\_ Back \_\_\_\_\_ Top \_\_\_\_\_ Are stays fitted with nuts or riveted over \_\_\_\_\_  
Working pressure by Rules \_\_\_\_\_ Front plate at bottom: Material Steel Tensile strength 40 K  
Thickness 24.5 mm Lower back plate: Material Steel Tensile strength 40 K Thickness 24.5 mm  
Pitch of stays at wide water space no c.c. Are stays fitted with nuts or riveted over \_\_\_\_\_  
Working Pressure \_\_\_\_\_ Main stays: Material Steel Tensile strength 40 K  
Diameter {At body of stay, 40 mm or over threads 46 mm No. of threads per inch 8 Area supported by each stay 245<sup>0</sup> 5th Space  
Working pressure by Rules (8 threads) 246 lb w.B. Screw stays: Material Steel (1 only) Tensile strength 40 K  
Diameter {At turned off part, \_\_\_\_\_ or over threads 40 mm No. of threads per inch 8 Area supported by each stay \_\_\_\_\_



Working pressure by Rules 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 Steel External diameter { Plain 80 7/8 Thickness { 4 7/8 PITCH No. of threads per inch 2.5 7/8

Pitch of tubes 10 1/2 x 10 1/2 Working pressure by Rules 2 1/2 Manhole compensation: Size of opening in shell plate 520 7/8 x 420 7/8 Section of compensating ring 24 5/8 x 240 7/8 No. of rivets and diameter of rivet holes 36 rivets - 31 7/8 holes

Outer row rivet pitch at ends 20 7/8 about Depth of flange if manhole flanged 60 7/8 FLANGE ON COMP. RING. 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

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

of rivets in outer row in dome connection to shell Size of doubling plate under dome Diameter of rivet holes and pitch

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

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 - - - 29/8/21 - 5/9/21 - 21/10/21 - 28/10/21 Are the approved plans of boiler and superheater forwarded herewith while building { During erection on board vessel - - - 11/11/21 - 2/2/22 (2) 6/3/22, 10/3/22 - 14/3/22 (If not state date of approval.)

Total No. of visits

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

The boilers originally intended for this class of vessel have been constructed under special survey, in accordance with Approved Plans (1576 Bis) and the rules of the Society.

The material and workmanship are good and in my opinion they are eligible, when properly fitted onboard, and s.v. adjusted to WP, for a record of +NB- 3.22.

Survey Fee F.E. ... £ 44.00. :  
Travelling Expenses (if any) £ 114.00. :  
Exp. £ 100.

When applied for, 25-3 1922  
When received, 10/11 1922

Herbert J. Luthers

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 29 JUN. 1923

Assigned



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