Rpt. 5a.

REPORT ON BOILERS.

No. 5691

15 DEC 1926

Received at London Office

Date of writing Report 13 dec 1926 When handed in at Local Office 192 Port of Havre

No. in Reg. Book. Survey held at Caen Date, First Survey 27 april 1925 Last Survey 30 nov 1925

on the s/s "Circé" (Number of Visits 8) Tons Gross Net

Master ∠ Built at Caen By whom built Chantiers Navals Français Yard No. 42 When built 1926

Engines made at St Denis By whom made Chantiers de la Loire Engine No. 2289 When made 1922

Boilers made at Indret By whom made Indret Boiler No. 37 & 38 When made 1920

Nominal Horse Power 193 Owners Société Navale Caennaise Port belonging to Caen

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MULTITUBULAR BOILERS—MAIN, AUXILIARY, OR DONKEY.

Manufacturers of Steel ∠ (Letter for Record ∠ (S)

Total Heating Surface of Boilers 301.m80 3247 ft² Is forced draught fitted no Coal or Oil fired Coal

No. and Description of Boilers 2 Multitubular boilers 2 SB **Working Pressure** 13 Kg 18575

Tested by hydraulic pressure to 23 K Date of test 27 march No. of Certificate ∠ Can each boiler be worked separately yes

Area of Firegrate in each Boiler 4.m40 47.5 ft² No. and Description of safety valves to each boiler 2 spring

Area of each set of valves per boiler { per Rule 6579 / as fitted 6630 } Pressure to which they are adjusted 13 Kg Are they fitted with easing gear yes

In case of donkey boilers, state whether steam from main boilers can enter the donkey boiler not fitted (no DB)

Smallest distance between boilers or uptakes and bunkers or woodwork 2m Is oil fuel carried in the double bottom under boilers no

Smallest distance between shell of boiler and tank top plating 500 m/m Is the bottom of the boiler insulated no

Largest internal dia. of boilers 4000 Length 3200 **Shell plates:** Material Steel Tensile strength 42 to 50

Thickness 31 Are the shell plates welded or flanged ∠ Description of riveting: circ. seams { end Double / inter. ∠ }

long. seams Butt Diameter of rivet holes in { circ. seams 33 / long. seams 33 } Pitch of rivets { 107.3 / 107.3 & 216.25 }

Percentage of strength of circ. end seams { plate 69.1 / rivets 70.09 } Percentage of strength of circ. intermediate seam { plate / rivets ∠ }

Percentage of strength of longitudinal joint { plate 84.7 / rivets 130 / combined 90.9 } Working pressure of shell by Rules 13.9

Thickness of butt straps { outer 31 / inner 29 } **No. and Description of Furnaces in each Boiler** 2 corrugated 2 Cf

Material Steel Tensile strength 38 to 46 Smallest outside diameter 1182

Length of plain part { top 205 / bottom 205 } Thickness of plates { crown 16 / bottom 16 } Description of longitudinal joint ∠

Dimensions of stiffening rings on furnace or c.c. bottom ∠ Working pressure of furnace by Rules 13.8

End plates in steam space: Material Steel Tensile strength 40 to 48 Thickness 27.5 Pitch of stays 470 x 380

How are stays secured Double nuts and ring outside and inside Working pressure by Rules 14.2

Tube plates: Material { front Steel / back steel } Tensile strength { 38 to 46 / } Thickness { 25 / 20 }

Mean pitch of stay tubes in nests 240 Pitch across wide water spaces 350 (360) Working pressure { front 26 / back 17.5 }

Girders to combustion chamber tops: Material Steel Tensile strength 42 to 50 Depth and thickness of girder at centre 225 x 12 x 20 Length as per Rule 724.5 Distance apart 190 No. and pitch of stays in each 3 - 190 Working pressure by Rules 22 Lbs

Combustion chamber plates: Material Steel Tensile strength 38 to 46 Thickness: Sides 15.5 (15.5) Back 16.5 Top 15.5 Bottom 20

Pitch of stays to ditto: Sides 190 x 190 Back 191.5 x 171.5 Top 190 x 190 Are stays fitted with nuts or riveted over rivetted outside nut inside

Working pressure by Rules 18.1 **Front plate at bottom:** Material Steel Tensile strength 40 to 48

Thickness 25 **Lower back plate:** Material Steel Tensile strength 40 to 48 Thickness 25

Pitch of stays at wide water space 3 stays x 600 x 240 (290) Are stays fitted with nuts or riveted over nuts inside and outside with rings

Working Pressure 29 K **Main stays:** Material Steel Tensile strength 40 to 48

Diameter { At body of stay, or Over threads 74 } No. of threads per inch 3.5 Area supported by each stay 178 600

Working pressure by Rules 13.9 **Screw stays:** Material steel Tensile strength 40 to 48

Diameter { At turned off part, or Over threads 46 } No. of threads per inch 3 Area supported by each stay 33896

If a Report also sent on the Hull of the Ship?

[2m,12,24.—Copyable Ink.]

Working pressure by Rules 26-7 Are the stays drilled at the outer ends no ✓ Margin stays: Diameter { At turned off part, 40 / Over threads

No. of threads per inch 3 ✓ Area supported by each stay 36100 Working pressure by Rules 18.6

Tubes: Material Iron ✓ External diameter { Plain 89 / Stay 89 ✓ Thickness { 4 ✓ / 8.5 ✓ No. of threads per inch 2.5

Pitch of tubes 120 × 120 ✓ Working pressure by Rules 15 **Manhole compensation:** Size of

shell plate 350 × 450 ✓ Section of compensating ring 754 × 854 ✓ No. of rivets and diameter of rivet holes 2 ranges of 18 rivet D = 33 ✓

Outer row rivet pitch at ends 120 ✓ Depth of flange if manhole flanged ~ **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 di

stays ~ Inner radius of crown ~ Working pressure by Rules ~

How connected to shell ~ Size of doubling plate under dome ~ Diameter of rivet holes

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 shu

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 pressur

Rules ~ Pressure to which the safety valves are adjusted ~ Hydraulic test p

tubes ~, castings ~ and after assembly in place ~ Are drain cocks or vale

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,

H Lebaudy

Manu

Dates of Survey { During progress of work in shops - - } ~ Are the approved plans of boiler and superheater forwarded herewith no

(If not state date of approval.) Paris 20 march 192

while building { During erection on board vessel - - - } 2 April 18 June 30 apt 2 May 2 August 10. 22 oct 30 nov Total No. of visits 8

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

These boilers have not been surveyed during construction. They have been examined nally and externally and found in good condition and in accordance with the approved the erection on board has been surveyed the workmanship is good.
In my opinion this boilers merit the favourable consideration of the Committee being classed to Lloyd's Register of Shipping.

Survey Fee On machinery report : : | When applied for, 192

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

L Chamelon

Engineer Surveyor to Lloyd's Register of Ship

Committee's Minute FRI. 7 JAN 1927.

Assigned See Ext. attached (Caen No 133)