

Capitaine Henri Rollier

Rpt. 4

# REPORT ON MACHINERY.

No. 11

Received at London Office

MAR. 1922

Date of writing Report 2nd Mar 1922 When handed in at Local Office 2nd Mar 1922 Port of Paris

No. in Survey held at S<sup>t</sup> Denis-sur-Seine Date, First Survey 4.7.21 Last Survey 22.2 1922

Reg. Book. on the Boiler 1606 for the Colliers Nos 12 to 19 (Mare-Aux-Agrandi Type) Tons } Gross ✓  
Net ✓

Master being Built at Caen By whom built Chantiers Navals Français when built ✓

Engines made at S<sup>t</sup> Denis s/ Seine By whom made Chantiers & Ateliers de la Loire when made 1922

Boilers made at S<sup>t</sup> Denis s/ Seine By whom made Chantiers & Ateliers de la Loire when made 1922

Registered Horse Power Owners Port belonging to ✓

Nom. Horse Power as per Section 28 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted ✓

## ENGINES, &c.—Description of Engines

Dia. of Cylinders Length of Stroke Revs. per minute No. of Cylinders No. of Cranks

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Is the after end of the liner made water tight

in the propeller boss If the liner is in more than one length are the joints bored If the liner does not fit tightly at the part

between the bearings in the stern tube, is the space charged with a plastic material soluble in water and non-corrosive If two

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush

Dia. of Tunnel shaft as per rule Dia. of Crank shaft journals as per rule Dia. of Crank pins Size of Crank webs Dia. of Thrust shaft under

collars Dia. of screw Pitch of Screw No. of Blades State whether moveable Total surface

No. of Feed pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Bilge pumps Diameter of ditto Stroke Can one be overhauled while the other is at work

No. of Donkey Engines Sizes of Pumps No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room In Hds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulation pump Is a separate Donkey Suction fitted in Engine room & size

Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible Are the sluices on Engine room bulkheads always accessible

Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes are carried through the bunkers How are they protected

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Is the Screw Shaft Tunnel watertight Is fitted with a watertight door worked from

## OILERS, &c.—(Letter for record) Manufacturers of Steel plating, stays: Schneider & Co. Tubes (water: Talbot Smoke: Stewarts)

Total Heating Surface of Boilers 405 m<sup>2</sup> Forced Draft fitted No No. and Description of Boilers Rudhon & Capus Type

Working Pressure 14 Kgs Tested by hydraulic pressure to 24 Kgs Date of test 22.2.22 No. of Certificate 1606

Can each boiler be worked separately Area of fire grate in each boiler 3.795 m<sup>2</sup> No. and Description of Safety Valves to

each boiler/double Rockburn. 55 m dia area of each valve 23.88 cm<sup>2</sup> Pressure to which they are adjusted Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers 3' 7" Length 3' 23" Material of shell plates Steel

Thickness 27.5 m Range of tensile strength 46 K Are the shell plates welded or flanged flanged Descrip. of riveting: cir. seams double riveting

Long. seams treble riveting Diameter of rivet holes in long. seams 31 m Pitch of rivets 208 m Lap of plates or width of butt straps 440 m

Per centages of strength of longitudinal joint rivets 96.7 Working pressure of shell by rules 14.05 Kgs Size of manhole in shell 400 x 300

Size of compensating ring 208 x 31 No. and Description of Furnaces in each boiler 2 Corrugated Material Steel Outside diameter 1' 2"

Length of plain part top Thickness of plates crown 16 m Description of longitudinal joint No. of strengthening rings

Working pressure of furnace by the rules 14.5 K combustion chamber plates: Material Thickness: Sides Back Top Bottom

Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules

Material of stays Area at smallest part Area supported by each stay Working pressure by rules End plates in steam space:

Material Steel Thickness 24 m Pitch of stays 440 How are stays secured screwed in places and bolted Working pressure by rules Material of stays Steel 40 Kgs

Area at smallest part 38.465 Area supported by each stay 396 Working pressure by rules Material of Front plates at bottom Steel

Thickness 24.5 Material of Lower back plate Steel Thickness 24.5 Greatest pitch of stays Steeplan Working pressure of plate by rules

Diameter of tubes 72/80 Pitch of tubes 107 m Material of tube plates Steel 44 Kgs Thickness: Front 24.5 Back 24.5 Mean pitch of stays 214 m

Pitch across wide water spaces Steeplan Working pressures by rules Girders to Chamber tops: Material Depth and

thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each

Working pressure by rules Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. of rivet holes

Pitch of rivets Working pressure of shell by rules Crown plates Thickness How stayed

## SUPERHEATER. Type Date of Approval of Plan Tested by Hydraulic Pressure to

Date of Test Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler

Diameter of Safety Valve Pressure to which is adjusted Is Easing Gear fitted

Please refer to Machinery Reports No 67 & 8.

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description, ✓

Manufacturer.

Dates of Survey while building { During progress of work in shops - - } { During erection on board vessel - - - } Total No. of visits

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders Slides Covers " donkey " " " Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller Stern tube Steam pipes tested Engine and boiler seatings Engines holding down bolts Completion of pumping arrangements Boilers fixed Engines tried under steam Completion of fitting sea connections Stern tube Screw shaft and propeller Main boiler safety valves adjusted Thickness of adjusting washers Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do. Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do. Material of Steam Pipes Test pressure Is an installation fitted for burning oil fuel Is the flash point of the oil to be used over 150°F. Have the requirements of Section 49 of the Rules been complied with Is this machinery duplicate of a previous case If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

The plan of the boiler has been approved on the 12th December 1919. The combustion chamber consists of a water tube boiler connected on the back of the cylindrical ordinary boiler in view of increasing the circulation of water.

The present report is to be completed by the Society's Surveyor at Caen, when these boilers are placed on board the Colliers building at that port under his survey.

The workmanship is satisfactory and the examination of the Boilers has proved that they are in good and efficient condition.

The amount of Entry Fee ... £ : : When applied for, Special { Boilers 1604 29-0-0 } 2-3-23 { 1605, 1606 } 6 Certificates (1601, 166) £ 2-0-0 When received, Travelling Expenses (if any) £ 15-0-0 23/3/22 606

R. L. Ward Engineer-Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 24 OCT. 1922

FRI. 23 FEB. 1923

Assigned

