

Capitaine Henri Baller

Rpt. 4

REPORT ON MACHINERY.

No. 10

Received at London Office

MON 20 FEB 1922

Date of writing Report 18/1 Jan. 1922 When handed in at Local Office 18/1 Jan 1922 Port of Paris

No. in Survey held at S^t Denis s/Seine Date, First Survey 24-5-21 Last Survey 10-2-1922
Reg. Book. on the BOILERS { Nos 1604 for the Colliers Nos 12 to 19 (Marie Louise Agronidic Type) Tons } Gross
✓ " 1605

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

Engines made at S^t Denis s/Seine By whom made Chantiers, Ateliers de la Loire when made 1922

Boilers made at S^t Denis s/Seine By whom made Chantiers, Ateliers de la Loire when made 1922

Registered Horse Power ✓ Owners French Government 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

Description of Engines			No. of Cylinders	No. of Cranks
Dia. of Cylinders	Length of Stroke	Revs. per minute	Dia. of Screw shaft as per rule as fitted	Material of screw shaft
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 burned				
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 insoluble 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 as fitted	Dia. of Crank shaft journals as per rule as fitted	Dia. of Crank pin	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 Holds, &c.				
No. of Bilge Injections	sizes	Connected to condenser, or to circulating 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 communication 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 it fitted with a watertight door				
worked from				

Please refer to machinery reports Nos 6, 7 and 8

BOILERS, &c.—(Letter for record ✓) Manufacturers of Steel plating and stays: Schneider, Lie. tubes: Water: Talbot Smoke: Stewart

Total Heating Surface of Boilers 405^{sqm} Is Forced Draft fitted No No. and Description of Boilers 2 Boilers Buchon Capus Type

Working Pressure 14 Kgs Tested by hydraulic pressure to 24 Kgs Date of test 10-2-22 No. of Certificate 1604-1605

Can each boiler be worked separately ✓ Area of fire grate in each boiler 3.795^{sqm} No. and Description of Safety Valves to each boiler / double. Lockburn 55^m Area of each valve 23.88^{sqm} 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 3.77^m Length 3.23^m 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 plate 85.1 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^m

Length of plain part top bottom Thickness of plates crown 16^m bottom 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^{sqm} Area supported by each stay 396^{sqm} Working pressure by rules ✓ Material of Front plates at bottom Steel

Thickness 24.5^m Material of Lower back plate Steel Thickness 24.5 Greatest pitch of stays See plan Working pressure of plate by rules ✓

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

Pitch across wide water spaces See plan 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 each is adjusted Is Easing Gear fitted

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 Pistons Rods 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 boilers have been approved on the 12th Dec 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 Coen, 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 boilers have been marked:

No 1604 (1605) Lloyd's Test 24 K W.P. 14 K. RW 10.2.22

The amount of Entry Fee £ : : When applied for, 19. When received, 19. will be charged when set of 3 boilers No 1604-1605-1606 travelling expenses (if any) £ : : is completed

A. H. Ward Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

TUE. 24 OCT. 1922

FRI. 23 FEB. 1923

Assigned

Certificate (if required) to be sent to... Copies of certificates annexed

The Surveyors are requested not to write on or below the space for Committee's Minute.