

# REPORT ON MACHINERY.

No. 11

Received at London Office

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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. 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. Denis s/ Seine By whom made Chantiers, Ateliers de la Loire when made 1922

Boilers made at S. 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

No. of Cylinders No. of Cranks

Dia. of Cylinders Length of Stroke Revs. per minute Dia. of Screw shaft as per rule Material of }  
as fitted 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 between the bearings in the stern tube, is the space charged with a plastic material soluble in water and non-corrosive If the liner does not fit tightly at the part 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 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 Hds, &c.

No. of Bilge Injections sizes Connected to condenser, or to circulation pump Is a separate Donkey Suction fitted in Engine room &amp; 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, &amp;c.—(Letter for record 4359 #) Manufacturers of Steel plating, stays: Schneider &amp; 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 Rudon - 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 toeach boiler/double Rockburn 55 m<sup>2</sup> 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 plates and bolted Working pressure by rules Material of stays Steel 40 Kgs

Area at smallest part 38.465 cm<sup>2</sup> Area supported by each stay 396 cm<sup>2</sup> 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 56 cm 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 56 cm 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

003549-003555-0040



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
Stern tube	Steam pipes tested	Engine and boiler seatings	Engines holding down bolts	Propeller
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 12<sup>th</sup> 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 ... £  
Special { Boilers 1604 £ 29-0-0  
1605, 1606 £ 2-0-0  
6 Certificates (1601 to 1606) £ 2-0-0  
Travelling Expenses (if any) £ 15-0-0

When applied for,

When received,

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 24 OCT. 1922

Assigned

FRI. 23 FEB. 1923



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