

# REPORT ON MACHINERY.

No. 1256A

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Date of writing Report 2-2-22 When handed in at Local Office 2-2-22 Port of Nantes  
 No. in Survey held at Nantes Date, First Survey 12-2-1920 Last Survey 16<sup>th</sup> March 1922  
 Reg. Book 36835 on the Single Screw Steamer "CAPITAINE WINCKLER" (Number of Voids) Gross 2017.54  
 Master                      Built at Nantes By whom built Mre. Ch. Dubigeon When built 1921  
 Engines made at Nantes By whom made A.C. de la Loire. No 431 when made 1921  
 Boilers made at do. By whom made do. when made do.  
 Registered Horse Power                      Owners French Government Port belonging to Nantes  
 Nom. Horse Power as per Section 28 193 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

**ENGINES, &c.**—Description of Engines Triple exp. surf. cond. No. of Cylinders 3 No. of Cranks 3  
 Dia. of Cylinders 460, 460, 1250 Length of Stroke 960 Revs. per minute 82 Dia. of Screw shaft 288 Material of screw shaft F.I.S.  
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight in the propeller boss Yes  
 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 good fit  
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 1m. 170  
 Dia. of Tunnel shaft 243 Dia. of Crank shaft journals 255 Dia. of Crank pin 256 Size of Crank webs 400 Dia. of thrust shaft under collars 256 Dia. of screw 4m. 26 Pitch of Screw 4m. 00 No. of Blades 4 State whether moveable no Total surface 5m<sup>2</sup>. 72  
 No. of Feed pumps 2 Diameter of ditto 65 Stroke 480 Can one be overhauled while the other is at work Yes  
 No. of Bilge pumps 2 Diameter of ditto 65 Stroke 480 Can one be overhauled while the other is at work Yes  
 No. of Donkey Engines 4 Sizes of Pumps Ans. feed 140x90x185 Ballast 150x240x240 No. and size of Suctions connected to both Bilge and Donkey pumps In Engine Room 3 2 70 & 1 direct to service pump 80 - In Holds, &c. fore 2 2 70 - after 2 2 65 - 4 one in well 2 70 -  
 No. of Bilge Injections 1 sizes 155 Connected to condenser, or to circulating pump pump Is a separate Donkey Suction fitted in Engine room & size Yes, 80  
 Are all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible Yes  
 Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks both  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line above  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Yes Are the Blow Off Valves fitted with a spigot and brass covering plate Yes  
 What pipes are carried through the bunkers air pipes to tank's How are they protected wood covered  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes  
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes  
 Dates of examination of completion of fitting of Sea Connections 19-8-21 of Stern Tube 19-8-21 Screw shaft and Propeller 19-8-21  
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Main deck

**BOILERS, &c.**—(Letter for record S) Manufacturers of Steel Supplied by the State, probably made in U.S.A.  
 Total Heating Surface of Boilers 30m<sup>2</sup>. 20 Is Forced Draft fitted no No. and Description of Boilers 2 single Scotch S P  
 Working Pressure 13 kilos. Tested by hydraulic pressure to 23 kilos. Date of test 16-9-21 No. of Certificate 59 & 60  
 Can each boiler be worked separately Yes Area of fire grate in each boiler 4m<sup>2</sup>. 40 = 47.4 No. and Description of Safety Valves to each boiler 2 Cookburn propen. Area of each valve 282 1/2 m<sup>2</sup> Pressure to which they are adjusted 13 kg Are they fitted with easing gear Yes  
 Smallest distance between boilers or uptakes and bunkers or woodwork 8" at strap Mean dia. of boilers 4m. 00 Length 3m. 175 Material of shell plates Steel  
 Thickness 31 Range of tensile strength 42-50 K. Are the shell plates welded or flanged no Descrip. of riveting: end seams double  
 long. seams keb. D.S. Diameter of rivet holes in long. seams 33 Pitch of rivets 216.25 Lap of plates or width of butt straps 454  
 Per centages of strength of longitudinal joint 94.87 Working pressure of shell by rules 14 1/2. 600 Size of manhole in shell 450 x 350  
 Size of compensating ring 854 x 754 No. and Description of Furnaces in each boiler 2 Morrison Material Steel Outside diameter 1250  
 Length of plain part                      Thickness of plates 16 Description of longitudinal joint welded No. of strengthening rings ✓  
 Working pressure of furnace by the rules 14 1/2. 500 Combustion chamber plates: Material Steel Thickness: Sides 15.5 Back 15.5 Top 15.5 Bottom 20  
 Pitch of stays to ditto: Sides 195 x 190 Back 191.5 x 184 Top 190 x 190 If stays are fitted with nuts or riveted heads nuts Working pressure by rules 15k. 750  
 Material of stays Steel Diameter at smallest part 34 Area supported by each stay 3 1/2 50 m<sup>2</sup> Working pressure by rules 13k. 75 End plates in steam space: Material Steel Thickness 24.5 Pitch of stays 380 x 470 How are stays secured DN & W. Working pressure by rules 13k. 75 Material of stays Steel  
 Diameter at smallest part 67 Area supported by each stay 178600 m<sup>2</sup> Working pressure by rules 14k. 4 Material of Front plates at bottom Steel  
 Thickness 25 Material of Lower back plate Steel Thickness 25 Greatest pitch of stays 380 x 365 Working pressure of plate by rules 14k. 2  
 Diameter of tubes 89 ext. Pitch of tubes 120 x 120 Material of tube plates Steel Thickness: Front 25 Back 20 Mean pitch of stays 240  
 Pitch across wide water spaces 360 Working pressures by rules 13k. 8 Girders to Chamber tops: Material Steel Depth and thickness of girder at centre 225 x 2 x 20 Length as per rule 24.5 Distance apart 190 Number and pitch of stays in each 3 2 190  
 Working pressure by rules 20k. 7 Superheater or Steam chest; how connected to boiler ✓ Can the superheater be shut off and the boiler worked separately ✓  
 Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet holes ✓ Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓  
 If stiffened with rings ✓ Distance between rings ✓ Working pressure by rules ✓ End plates: Thickness ✓ How stayed ✓  
 Working pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓

**VERTICAL DONKEY BOILER—** Manufacturers of Steel.

No.	Description				
Made at	By whom made	When made	Where fixed		
Working pressure	tested by hydraulic pressure to	Date of test	No. of Certificate	Fire grate area	Description of Safety
Valves	No. of Safety Valves	Area of each	Pressure to which they are adjusted	Date of adjustment	
If fitted with casing gear	If steam from main boilers can enter the donkey boiler			Dia. of donkey boiler	Length
Material of shell plates	Thickness	Range of tensile strength	Descrip. of riveting long. seams		
Dia. of rivet holes	Whether punched or drilled	Pitch of rivets	Lap of plating	Per centage of strength of joint	Rivets Plates
Working pressure of shell by rules	Thickness of shell crown plates	Radius of do.	No. of stays to do.	Dia. of stays	
Diameter of furnace Top	Bottom	Length of furnace	Thickness of furnace plates	Description of joint	
Working pressure of furnace by rules	Thickness of furnace crown plates	Radius of do.	Stayed by		
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

**SPARE GEAR.** State the articles supplied:—propellor, HP, MP & LP piston rings, 1 bottom end with 2 bolts, 2 top end crasses with 2 bolts, 1 set (6) coupling bolts, 2 main bearing bolts  
*For completion of spare gear see his letter of 17/3/22.*

The foregoing is a correct description,

Manufacturer.

**DIRECTEUR**  
*Stany*



Dates of Survey while building	During progress of work in shops	1920. Feb. 12 - Mar. 29. Apr. 7-23-27. May 7-17-24. June 2-7-11-14-28-30. July 8-12-27-28. Sept. 20-29. Oct. 1-19. Nov. 5-16-25. Dec. 4-11-18.
	During erection on board vessel	1921. Jan. 5-17-25. Feb. 10-17-23. Mar. 11-17-21-25-29. Apr. 4-7-9-11-13-16-19-20-21-25. May 3-26. June 10-17. July 11-27. Aug. 6-19-20. Sept. 5-13-16.
	Total No. of visits	1921. Sept. 8-28. Oct. 11-19-26. Nov. 3-10-25. Dec. 7-9-22. 1922. Jan. 4-6

Is the approved plan of main boiler forwarded herewith **Yes**

Dates of Examination of principal parts—Cylinders	25-10-20	Slides	25-10-20	Covers	7-4-21	Pistons	17-3-21	Rods	17-3-21
Connecting rods	1-3-21	Crank shaft	4-12-20	Thrust shaft	5-1-21	Tunnel shafts	23-12-20	Screw shaft	2-3-21
Stern tube	19-8-21	Steam pipes tested	26-10-21	Engine and boiler seatings	19-8-21	Engines holding down bolts	9-12-21		
Completion of pumping arrangements	16-3-22	Boilers fixed	11-10-21	Engines tried under steam	16-3-22				
Main boiler safety valves adjusted	16-3-22	Thickness of adjusting washers	P. aft. 9.5 in P. for. 9.5 in S. aft. 8.2 S. for. 9.0						
Material of Crank shaft	F.I.S. Identification Mark on Do.	107	Material of Thrust shaft	F.I.S. Identification Mark on Do.	107				
Material of Tunnel shafts	F.I.S. Identification Marks on Do.	107	Material of Screw shafts	F.I.S. Identification Marks on Do.	107				
Material of Steam Pipes	Solid drawn steel		Test pressure	39 kilos.					

**General Remarks** (State quality of workmanship, opinions as to class, &c. These engines & boilers have been built in accordance with the approved plans, & in number, & otherwise with the Rules & the Secretary's Letters, of satisfactory workmanship and material. I am of the opinion that, having been surveyed specially during their construction, they will, upon completion, be eligible for the record + L.M.C. The engine is fitted with surface condenser, steam reversing gear, and with air circulating feed & bilge pumps worked from the HP crosshead; also with steam ash trist, auxiliary condenser, Watson's evaporator & pump, auxiliary feed pump, ballast pump & service pump.

This engine is a duplicate of nos. 421-3-536-32 Nantes Reports nos. 1167-1171-1180-1218-1221—*Capitaine Illiaquer*

Please see accompanying letter—

for self and E. le Seven  
**G. Demarest**  
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

The amount of Entry Fee	When applied for.
Special .. .. .	19.....
Donkey Boiler Fee .. .. .	When received
Travelling Expenses (if any)	19.....
Committee's Minute	See 26 letter 17/3/22
Assigned	+ L.M.C. 3.22

Nantes

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