

REPORT ON MACHINERY.

No. 2634.

Port of Haarlem

Received at London Office MUN. 22 JUN 1908

No. in Survey held at Haarlem Date, first Survey July 1907 Last Survey 18th June 1908
 Reg. Book. 101. on the Stad Teew. Steamer "Moyenne" (Number of Visits 37.)
 Master J. Boju of 07-08 Built at Haarlem By whom built Forges & Chantiers Tons { Gross 2456.47
 Engines made at Haarlem By whom made Forges & Chantiers when made 1908. Net 1529.82
 Boilers made at Haarlem By whom made Forges & Chantiers when made 1908.
 Registered Horse Power 1350 Owners C^o d'Obigny & Paulin Capelle & C^o Managers. Port belonging to La Rochelle
 Nom. Horse Power as per Section 28 190. Is Refrigerating Machinery fitted for cargo purposes No. Is Electric Light fitted No.

ENGINES, &c.—Description of Engines Triple expansion vertical No. of Cylinders 3 three No. of Cranks 3
 Dia. of Cylinders 20. 7/8 - 23. 7/16 & 32" Length of Stroke 25. 7/16 Revs. per minute 85. Dia. of Screw shaft 11. 9/16 Material of Steel
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube Separate 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 Composition paint If two
 liners are fitted, is the shaft lapped or protected between the liners only Composition paint Length of stern bush 10. 1. 1/4
 Dia. of Tunnel shaft 9. 9/16 Dia. of Crank shaft journals 10. 1. 1/32 Dia. of Crank pin 10. 1. 1/32 Size of Crank webs 11. 7/8 x 7. 1/2 Dia. of thrust shaft under
 collars 10. 1. 1/32 Dia. of screw 15. 1. 9/16 Pitch of Screw 14 feet 6 inches. No. of Blades 4 State whether moveable No. Total surface 75 Square Feet
 No. of Feed pumps (2) two Diameter of ditto 3. 1/2 Stroke 10" Can one be overhauled while the other is at work yes.
 No. of Bilge pumps (2) two Diameter of ditto 3. 1/8 Stroke 17. 1/2 Can one be overhauled while the other is at work yes.
 No. of Donkey Engines (2) two Sizes of Pumps 8. 5/8 x 7. 1/2 x 6" - 8. 1/2 x 6" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room (3) three of 2. 3/4" diam & by turbine 6" In Holds, &c. forehead 4 of 2. 3/4" diam by collectors.
and aft (4) four of 2. 3/4" by collectors.
 No. of Bilge Injections 1. sizes 6" Connected to condenser, or to circulating pump yes. Is a separate Donkey Suction fitted in Engine room & size yes. 2. 3/4"
 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
 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 Cocks fitted with a spigot and brass covering plate yes.
 What pipes are carried through the bunkers None How are they protected —
 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 March 1908. of Stern Tube March 1908 Screw shaft and Propeller March 1908
 Is the Screw Shaft Tunnel watertight yes. Is it fitted with a watertight door yes. worked from top platform engine

BOILERS, &c.—(Letter for record (S)) Manufacturers of Steel Dennin-Auzin & Schulz-Knauff (BREMEN)
 Total Heating Surface of Boilers 3234. Is Forced Draft fitted No. No. and Description of Boilers (2) two Cylindrical horizontally
 Working Pressure 170. Tested by hydraulic pressure to 256. Date of test April 5-7, 1908 No. of Certificates 66-67.
 Can each boiler be worked separately yes. Area of fire grate in each boiler 53.8 Square Feet No. and Description of Safety Valves to
 each boiler (2) two with Spring. Area of each valve 3.14 Pressure to which they are adjusted 170. Are they fitted with easing gear yes.
 Smallest distance between boilers or uptakes and bunkers or woodwork 22." Mean dia. of boilers 13.2. 3/4 Length 11.6" Material of shell plates Steel
 Thickness 1. 9/16 Range of tensile strength 27-630. Are the shell plates welded or flanged flanged Descrip. of riveting: cir. seams double
 long. seams both zig-zag Diameter of rivet holes in long. seams 1. 19/64 Pitch of rivets 4. 1/8 none of plates width of butt straps 18. 3/8
 Per centages of strength of longitudinal joint rivets 75. Working pressure of shell by rules 195. Size of manhole in shell 11. 3/8 x 15. 3/8
 plate 80. Size of compensating ring 33" - 1. 1/8" thick No. and Description of Furnaces in each boiler (3) three ribbon Material Steel Outside diameter 39."
 Length of plain part 100." Thickness of plates 33/64 Description of longitudinal joint Welded. No. of strengthening rings —
 Working pressure of furnace by the rules 199. Combustion chamber plates: Material Steel Thickness: Sides 19/32 Back 19/32 Top 19/32 Bottom 19/32
 Pitch of stays to ditto: Sides 9. 1/8 & 7. 1/4 Back 8. 1/2 & 7. 1/2 Top 7. 3/8 If stays are fitted with nuts or riveted heads all nutted Working pressure by rules 190.
 Material of stays Steel Diameter at smallest part 1. 3/8 Area supported by each stay 62." Working pressure by rules 180. End plates in steam space:
 Material Steel Thickness 7/8" Pitch of stays 15." How are stays secured double nuts Working pressure by rules 175. Material of stays Steel
 Diameter at smallest part 2. 1/2" Area supported by each stay 96." Working pressure by rules 190. Material of Front plates at bottom Steel
 Thickness 7/8" Material of Lower back plate Steel Thickness 7/8" Greatest pitch of stays 53." Working pressure of plate by rules 180.
 Diameter of tubes 3. 1/2 Pitch of tubes 4. 5/8 Material of tube plates Steel Thickness: Front 7/8" Back 7/8" Mean pitch of stays 9. 1/2
 Pitch across wide water spaces 1. 1/8 Working pressures by rules 175. Girders to Chamber tops: Material Steel Depth and
 thickness of girder at centre 5. 1/2 x 1. 1/8 Length as per rule 25. 3/4 Distance apart 7. 3/8 Number and pitch of stays in each 3 - 6. 3/4
 Working pressure by rules — 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 easing 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		Stayed by		
Diameter of uptake	Thickness of uptake plates	Thickness of water tubes	Dates of survey		

SPARE GEAR. State the articles supplied:— 1 propeller (cast-iron) & connecting - and top & bottom end bolts, with nuts, & Main-Casing Bolts, on set of coupling bolts, on set of feed & bilge pump valves, on set of piston rings for 3 cylinders, a quantity of bolts, & various materials.

The foregoing is a correct description,

Manufacturer.

Edouard Lavoisier

Dates of Survey while building	During progress of work in shops - -	1907. July 4-31. Aug. 9. 20. Sep. 24. Oct. 21. 30. 31. Nov. 18. 23. Dec. 13. 1908 Jan. 15. 21. 27. Feb. March. 6. 17. 23. April 1. 2.	Is the approved plan of main boiler forwarded herewith	Yes.
	During erection on board vessel - -	1908-April 3-16. 18. 25. 29. May. 2. 4. 6. 9. 12. 14. 15. 22. June 2. 9. 11. 18.		Yes.
	Total No. of visits	(37) thirty-seven.		Yes.

Dates of Examination of principal parts—Cylinders	June 08	Slides	June 08	Covers	June 08.	Pistons	June 08	Rods	June 08
Connecting rods	June 08.	Crank shaft	June 08.	Thrust shaft	June 08	Tunnel shafts	June 08	Screw shaft	March 08. Propeller March. 08
Stern tube	March. 08	Steam pipes tested	May 1908	Engine and boiler seatings	May 08	Engines holding down bolts	May 08.		
Completion of pumping arrangements	June 1908	Boilers fixed	May 1908	Engines tried under steam	June 08.				
Main boiler safety valves adjusted	15 May 1908	Thickness of adjusting washers	Post-side boiler 1 1/16 & 1 1/32. Starb-side 1 1/16						
Material of Crank shaft	Steel	Identification Mark on Do.	A.G. 206.	Material of Thrust shaft	Steel	Identification Mark on Do.	A.G. 207.		
Material of Tunnel shafts	Steel	Identification Marks on Do.	A.G. 208	Material of Screw shafts	Steel	Identification Marks on Do.	A.G. 209.		
Material of Steam Pipes	Copper and Steel	Test pressure	340 lbs per sq. inch						

General Remarks (State quality of workmanship, opinions as to class, &c. as Secretary Letters of 10th & 12th November 1906 - (E))
 The Machinery of this vessel has been built under special survey, as per approved plans, and in accordance with rules requirements. The materials tested at the works were in good and malleable quality. The cylinders, covers, casing valves, condenser, steam pipes, were tested by hydraulic pressure, and the workmanship was satisfactory.

The materials used in the construction of boilers, which is in Timms-Martin Steel, from Demain-Arquin & Schütz-Knaudt (Essen) were tested at the Works, and the marks verified certificates in hand.

The trials of engine made on the road of Havre, during (4) four hours have given satisfactory results. After trials the principal organs were examined in engine and the working of these organs, was found satisfactory.

The Machinery of this vessel being in good and safe working condition; In my opinion it is eligible for to be classed with notation *** L.M.C. 6.08** inserted in the Register Book.

The amount of Entry Fee	£ 50.00	When applied for	18. June 1908
Special	£ 712.50	When received	23. June 1908
Donkey Boiler Fee	£ . . .		
Travelling Expenses (if any)	£ 151.25		

A. Hartley
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
 It is submitted that this vessel is eligible for THE RECORD. L.M.C. 6.08.

Committee's Minute
 Assigned

TUES. 25 JULY 1908
 + L.M.C. 6.08

MACHINERY
 WRITTEN

Certificate (if required) to be sent to this Office.

Lloyd's Register Foundation