

Port of *Amsterdam*

Received at London Office

THU. JUN. 3-1915

No. in Survey held at *Amsterdam*Date, first Survey *16 Jan 1914*Last Survey *22 May*

1915

Reg. Book.

(Number of Visits *50*)48 in days on the *Motor vessel Lara*Master *H. J. van Keel*Built at *Bolnes*By whom built *Geb. Pot*Tons Gross *916.*Net *399.*When built *1915*Engines made at *Amsterdam*By whom made *Werkspoor*when made *1915*Boilers made at *Amsterdam*By whom made *Werkspoor*when made *1915*

Registered Horse Power

Owners *Med End Park Stoomboot Maatschappij*Port belonging to *J. G. van der Grinten*Nom. Horse Power as per Section 28 *98*Is Refrigerating Machinery fitted for cargo purposes *Yes*Is Electric Light fitted *Yes*ENGINES, &c.—Description of Engines *4 Cycle single acting Diesel* No. of Cylinders *4* No. of Cranks *4*Dia. of Cylinders *400 mm* Length of Stroke *279 mm* Revs. per minute *165* Dia. of Screw shaft as per rule *204 mm* Material of screw shaft *1. In steel*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 tightin the propeller boss *Yes* If the liner is in more than one length are the joints burned *Yes* If the liner does not fit tightly at the partbetween the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *Yes* If twoliners are fitted, is the shaft lapped or protected between the liners *Yes* Length of stern bush *1040 mm*Dia. of Tunnel shaft as per rule *193 mm* Dia. of Crank shaft journals as per rule *244 mm* Dia. of Crank pin *150 mm* Size of Crank webs *150 x 125 mm* Dia. of thrust shaft undercollars *210 mm* Dia. of screw *250 mm* Pitch of Screw *1800 mm* No. of Blades *4* State whether moveable *Yes* Total surface *1.44.16*No. of Feed pumps *2* Diameter of ditto *150 mm* Stroke *250 mm* Can one be overhauled while the other is at work *Yes*No. of Bilge pumps *two* Diameter of ditto *150 mm* Stroke *250 mm* Can one be overhauled while the other is at work *Yes*No. of Donkey Engines *One Centrifugal* Sizes of Pumps *60 mm and 90 mm* No. and size of Suctions connected to both Bilge and Donkey pumpsIn Engine Room *Three of 60 mm and one of 90 mm* In Holds, &c. *Yes*No. of Bilge Injections *One* sizes *60 mm* Connected to condenser, or to circulating pump *Yes* Is a separate Donkey Suction fitted in Engine room & size *Yes. 60 mm*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 *None*Are all connections with the sea direct on the skin of the ship *Yes* Are they Valves or Cocks *Valves*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 *Yes* How are they protected *Yes*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 *Yes* of Stern Tube *Yes* Screw shaft and Propeller *Yes*Is the Screw Shaft Tunnel watertight *None* Is it fitted with a watertight door *Yes* worked from *Yes*

BOILERS, &c.—(Letter for record) Manufacturers of Steel

Total Heating Surface of Boilers *Is Forced Draft fitted* No. and Description of BoilersWorking Pressure *Tested by hydraulic pressure to* Date of test *No. of Certificate*Can each boiler be worked separately *Area of fire grate in each boiler* No. and Description of Safety Valves toeach boiler *Area of each valve* Pressure to which they are adjusted *Are they fitted with easing gear*Smallest distance between boilers or uptakes and bunkers or woodwork *Mean dia. of boilers* Length *Material of shell plates*Thickness *Range of tensile strength* Are the shell plates welded or flanged *Descrip. of riveting: cir. seams*long. seams *Diameter of rivet holes in long. seams* Pitch of rivets *Lap of plates or width of butt straps*Per centages of strength of longitudinal joint *rivets. plate* Working pressure of shell by rules *Size of manhole in shell*Size of compensating ring *No. and Description of Furnaces in each boiler* Material *Outside diameter*Length of plain part *top* Thickness of plates *crown* Description of longitudinal joint *No. of strengthening rings*Working pressure of furnace by the rules *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 *End plates in steam space:*Material of stays *Diameter at smallest part* Area supported by each stay *Working pressure by rules* Material of staysMaterial *Thickness* Pitch of stays *How are stays secured* Working pressure by rules *Material of Front plates at bottom*Diameter at smallest part *Area supported by each stay* Working pressure by rules *Working pressure of plate by rules*Thickness *Material of Lower back plate* Thickness *Greatest pitch of stays* Working pressure of plate by rulesDiameter of tubes *Pitch of tubes* Material of tube plates *Thickness: Front* Back *Mean pitch of stays*Pitch across wide water spaces *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 *Superheater or Steam chest; how connected to boiler* Can the superheater be shut off and the boiler workedseparately *Diameter* Length *Thickness of shell plates* Material *Description of longitudinal joint* Diam. of rivetholes *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 *Yes*Working pressure of end plates *Area of safety valves to superheater* Are they fitted with easing gear *Yes*

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:— $\frac{1}{2}$ Crankshaft, 1 screwshaft, 1 cyl & cover, 2 sets of coupling bolts for shafting
2 sets of top & bottom Ends with bolts & nuts, 1 main bearing & 4 bolts for ditto, 3 pistons Compl., 12 top end bolts for
same, 9 sets of piston rings, 1 set of valves for Compressor, 6 in or outlet valves with seats, springs etc, 3 free
valves ditto, 1 set of valves for L P fuel pump, 2 valves for cooling pump & 2 ditto for bridge pump, 1 starting valve with
seat, springs etc, 3 atomizers, 1 belt for cargo pump, 1 set of spur wheels
for Camshaft. One propeller. Bolts and nuts assorted and
various sizes of plain sheet, packing etc.

Dates of Survey while building	During progress of work in shops -	16 th and 17 th March, 4-14 May, 6 June, 7, 20 & 22 July, 5, 8, 13 August, 9 & 28 Sept, 15, 19, 22, 26, 29, 31 October, 1, 2, 6, 20 November, 7, 8, 10, 19, 21, 29 December, 1914. January 2, 12, 18, 20, 27, February 5, 12, 20, 27, March 1, 4, 11, 18, 25, April 1, 8, 15, 22, May 5, 12, 19, 26, 1915.
	During erection on board vessel -	24, 26, March 4, 13, 18, 25, April 3, 14, 20, 25, May 7, 19, 22-1915.
	Total No. of visits	50 Visits.

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts—Cylinders $\frac{40}{5} \frac{14}{6} \frac{6.10-11.1}{8} \frac{2.18}{9} \frac{19-22-26}{10} \frac{22-20}{11} \frac{0.19-2.1}{12}$ 1914 s Pistons *ditto* CONNECTED Rods $\frac{14}{5} \frac{7.10.11}{4} \frac{6.10}{12}$
Connecting rods $\frac{11-22}{12} \frac{1914}{1}$ Crank shaft $\frac{10-22}{7} \frac{0.13}{8} \frac{2.8}{9} \frac{19-21}{10} \frac{6.20}{11} \frac{10.12}{12}$ 1914 Thrust shafts $\frac{2.11-40}{2}$ 1915 Screw shaft *ditto* Propeller $\frac{8-21}{12}$ 1914.
Stern tube $\frac{10}{12}$ 1914 $\frac{18}{1}$ 1915 Steam pipes tested ✓ Engine and boiler seatings ✓ Engines holding down bolts $\frac{24.26}{3} \frac{7-22}{5}$ 1915
Completion of pumping arrangements 7 May 1915 Boilers fixed ✓ Engines tried under steam 19 & 22 May 1915.
Main boiler safety valves adjusted ✓ Thickness of adjusting washers ✓
Material of Crank shaft *L. & Co. ing. steel* Identification Mark on Do. $\frac{4109810}{KH 6.14}$ Material of Thrust shaft *L. & Co. ing. steel* Identification Mark on Do. $\frac{9083}{KH 9.14}$
Material of Tunnel shafts *L. & Co. ing. steel* Identification Marks on Do. $\frac{9084}{KH 9.14}$ Material of Screw shafts *L. & Co. ing. steel* Identification Marks on Do. $\frac{9085-6}{KH 9.14}$
Material of Steam Pipes ✓ *✓ Kinolly See Rotterdam report No 9594, 6"* Test pressure ✓

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery of this vessel has been constructed according to the Society's rules and approved plans which are herewith returned to London Office. Materials used in the construction of good quality and duly tested as required. Workmanship throughout good.*

Air receivers, air & fuel bottles, cylinders, compressors, coolers & chests, water jackets and piping arrangement of main & auxiliary motors have been hydro tested as per rule requirements with satisfactory results. Steam heating apparatus tested to double its working pressure viz 5.5 lbs per sq inch. Working pressure 2.8 lbs. Main & auxiliary machinery during Sea trials worked very satisfactory without heating or hitches and Engines rigid on its seat, Reversing of motor almost instantly. pumps drawing from all Compartments. The injection air & floating air & fuel bottles of which have not been tested at the makers have been tested in my presence to 150 atm per sq inch. I am of opinion that this vessel will be eligible to be recorded in the Society's Log Book

LMC - 5.1915 Subject to two injection airbottles and one floating air & fuel
 The amount of Entry Fee.. \$ 12. - : When applied for, being replaced by bottles duly tested as required by
 Special \$ 146.40 : May 1915 Rules of this Society within six months say in November
 HEATING \$ 12. - : When received, *J. B. Bell*
 Boiler Fee \$ 12. - : May 1915 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.
 Travelling Expenses (if any) \$ 20.50 : May 1915

Committee's Minute

Assigned

TUE, JUN. 22, 1915

+ L. h. 5. 15.

Oil Engines