

REPORT ON MACHINERY.

Port of Amsterdam

WED. 16 SEP 1903

Received at London Office

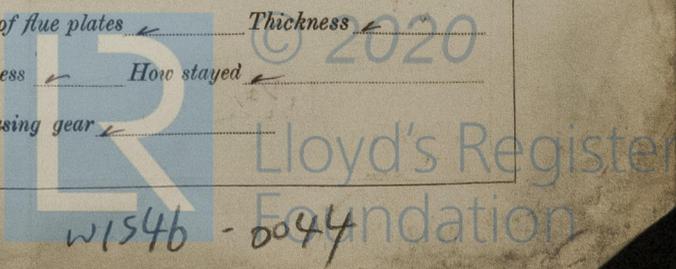
No. in Survey held at Zwolle Date, first Survey 14 Jan Last Survey 25 August 1903
No. of Book. (Number of Visits 12)

on the machinery of S. Ocean Queen, No. Meyer's N-116 Tons Gross
Master Built at Datt Rommel By whom built J. Meijer When built 1903
Engines made at Zwolle By whom made Zwolsche Machine fabriek when made 1903
Milers made at Zwolle By whom made Zwolsche Machine fabriek when made 1903

Registered Horse Power 72.5 Owners Shipping Investment Lin Port belonging to London
Nom. Horse Power as per Section 28 73.46 Is Refrigerating Machinery fitted No Is Electric Light fitted No

ENGINES, &c.—Description of Engines Horizontal triple expansion No. of Cylinders three No. of Cranks three
No. of Cylinders 18" x 21" x 34" Length of Stroke 24" Revs. per minute 120 Dia. of Screw shaft as per rule 4.9" Lgth. of stern bush 33 1/4"
Dia. of Tunnel shaft as per rule 4.6" Dia. of Crank shaft journals as per rule 6.5" Dia. of Crank pin 6 1/2" Size of Crank webs 12 1/2" Dia. of thrust shaft under
bars 6 1/8" Dia. of screw 8" x 6" Pitch of screw 9" x 6" No. of blades four State whether moveable No Total surface 26 sq ft
No. of Feed pumps One Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes
No. of Bilge pumps One Diameter of ditto 2 1/2" Stroke 12" Can one be overhauled while the other is at work Yes
No. of Donkey Engines Two Sizes of Pumps Washington duplex 4 1/2" x 2 1/4" x 4" No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room four 2" Ballast donkey 6 x 3 1/4" x 6" In Holds, &c. Mainhold three, afterhold two, well one, 2" diam
oil tank fore one Peak tank aft one Double bottom three, 3" diam, except afterpeak which is two and a half
No. of bilge injections one sizes 4" Connected to condenser, or to circulating pump Yes Is a separate donkey suction fitted in Engine room & size Yes 2 1/4"
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 Yes
Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Valves and Cocks
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
How are the pipes 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
Were stern tube, propeller, screw shaft, and all connections examined in dry dock While building Is the screw shaft tunnel watertight Yes
Is it fitted with a watertight door Yes worked from Deck platform

BOILERS, &c.— (Letter for record S) Total Heating Surface of Boilers 1500 sq ft Is forced draft fitted No
No. and Description of Boilers One multitubular Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs
Date of test 4 June Can each boiler be worked separately Yes Area of fire grate in each boiler 22 sq ft No. and Description of safety valves to
boiler Two direct spring Area of each valve 9.8 sq in Pressure to which they are adjusted 180 lbs Are they fitted with easing gear Yes
Least distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 12" x 0" Length 10' x 0" Material of shell plates Steel
Thickness 1 1/8" Range of tensile strength 27-52 tons Are they welded or flanged plain Descrip. of riveting: cir. seams double butt long. seams double butt straps
Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 6 1/4" Lap of plates or width of butt straps 10 1/4" x 1 1/8" and 1"
Percentages of strength of longitudinal joint rivets 84% Working pressure of shell by rules 195 lbs Size of manhole in shell 12" x 16"
No. of compensating ring 4" x 1 1/8" No. and Description of Furnaces in each boiler Two plain Material Steel Outside diameter 40 1/2"
Length of plain part 8' 2" Thickness of plates 9 1/4" Description of longitudinal joint welded No. of strengthening rings —
Working pressure of furnace by the rules 182 lbs Combustion chamber plates: Material Steel Thickness: Sides 9 1/16" Back 9 1/16" Top 9 1/16" Bottom 1"
No. of stays to ditto: Sides 7" x 6 1/2" Back 7" Top 6 1/2" x 9" If stays are fitted with nuts or riveted heads with nuts Working pressure by rules 223 lbs
Material of stays Steel Diameter at smallest part 1 1/4" Area supported by each stay 49 sq in Working pressure by rules 200 lbs End plates in steam space:
Material Steel Thickness 1 1/8" Pitch of stays 14 1/4" How are stays secured nuts Working pressure by rules 201 lbs Material of stays Steel
Diameter at smallest part 2 1/16" Area supported by each stay 29 x 5.6 sq in Working pressure by rules 190 lbs Material of Front plates at bottom Steel
Thickness 1 1/8" Material of Lower back plate Steel Thickness 1 1/8" Greatest pitch of stays 15 x 15 Working pressure of plate by rules 266 lbs
Diameter of tubes 3 1/4" Pitch of tubes 4 1/2" Material of tube plates Steel Thickness: Front 1 1/8" Back 3/4" Mean pitch of stays 8 1/4"
Distance across wide water spaces 14" Working pressures by rules 263 & 259 lbs Girders to Chamber tops: Material Steel Depth and
Thickness of girder at centre 10 1/4" x 1 1/4" Length as per rule 28 1/2" Distance apart 9" Number and pitch of Stays in each Three, 6 1/2"
Working pressure by rules 253 lbs Superheater or Steam chest; how connected to boiler — Can the superheater be shut off and the boiler worked
separately Yes Diameter — Length — Thickness of shell plates — Material — Description of longitudinal joint — Diam. of rivet
Pitch of rivets — Working pressure of shell by rules — Diameter of flue — Material of flue plates — Thickness —
Are they stayed 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 —



DONKEY BOILER— No. 40 Description Vertical
 Made at Swallow By whom made Swallow Machine Works When made 1902 Where fixed in Stechel
 Working pressure 160 tested by hydraulic pressure to 160 lbs. No. of Certificate 40 Fire grate area 12.74 Description of safety valves Direct opening
 No. of safety valves two Area of each 1.92 Pressure to which they are adjusted 80 lbs. If fitted with easing gear Yes If steam from main boilers can enter the donkey boiler No Dia. of donkey boiler 5'-0" Length 9'-6" Material of shell plates Steel Thickness 1/4" Range of tensile strength 17, 12 Descrip. of riveting long. seams lap double riveted Dia. of rivet holes 1/4" Whether punched or drilled drilled Pitch of rivets 5"
 Lap of plating 4 1/2" Per centage of strength of joint Rivets 15.6 Thickness of shell crown plates 15/32 Radius of do. 45" No. of Stays to do. Five
 Dia. of stays. 1 1/2" Diameter of furnace Top 40" Bottom 49 1/2" Length of furnace 40" Thickness of furnace plates 1/4" Description of joint lap joint Thickness of furnace crown plates 1/2" Stayed by 5 stays 1 1/2" diam. Working pressure of shell by rules 19.2 lbs.
 Working pressure of furnace by rules 11 Diameter of uptake 11" Thickness of uptake plates 7/16" Thickness of water tubes 7/16"

SPARE GEAR. State the articles supplied:—
Two Connecting rod top and bottom ends bolts and nuts, two ditto main bearings, One set of Coupling bolts, One set of piston bolts, One set of piston rings, One set of feed and bilge pump valves, One set of air & circulating pump valves, One Escape valve spring for H.P. cyl and feed pump, One propeller, & The foregoing is a correct description, quantity of bolts and nuts assorted, iron copper etc etc.

J. J. Bakslag Manufacturer.

Dates of Survey while building { During progress of work in shops - - } From 14th of January till 15th of August 1903.
 { During erection on board vessel - - }
 Total No. of visits 11. Is the approved plan of main boiler forwarded herewith Yes
 " " " donkey " " " Yes.

General Remarks (State quality of workmanship, opinions as to class, &c.)

Material of screw shaft Steel Is the screw shaft fitted with a continuous liner the whole length of the stern tube No
 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 — If two liners are fitted, is the shaft lapped or protected between the liners Painted with anti-corrosive paint

The machinery of this vessel has been constructed in conformity with the Society's Rules, materials tested as required and workmanship throughout good. Castings of cylinders etc tested under hydraulic pressure. Condenser ditto, Steam and feed pipes tested under high pressure before connecting same in place.
Main boiler built according the approved plan & in conformity with the rules, the steel used in the construction tested as required & workmanship throughout good. Boiler tested to 360 lbs found tight and no settling whatever. Boiler mountings carefully fitted, safety valves adjusted and set to working pressure viz 100 lbs.
Engine & boiler attended under steam found working satisfactory, at the end of the trial trip (engine having already worked splendidly for nearly eight hours) by neglect the H.P. eccentric cam had bending rods and spindle same have been repaired at sea & voyage continued satisfactorily. The whole of the H.P. valve motion & valve have been in the works for readjusting.
The donkey boiler original intended for the S.S. Adlo (see report 2578 dated 8.02) has been retested to 160 lbs and the new date of test marked on boiler at the request of the Owners.
I am, of opinion that this vessel may be recorded in the Register Book.

The amount of Entry Fee.. £ 1 : 0 : 0 When applied for,
 Special .. £ 11 : 2 : 0 } Charged.....19.03
 Donkey Boiler Fee .. £ 1 : : : When received,
 Travelling Expenses (if any) £ 10 : 2 : 3 } Charged.....19.03.

LMC - 8.1903

J. J. Bakslag
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.

It is submitted that this vessel is eligible for THE RECORD **LMC - 8.03**

Committee's Minute

FRI. 18 SEP 1903

Assigned

+ LMC 8,03

Certificate (if required) to be sent to the Registrar of Shipping (The Surveyors are requested not to write on or below the space for Committee's Minute.)

