

REPORT ON MACHINERY.

No. 11990

MON. OCT. 10 1921

pt. 4.

Date of writing Report 6 Oct 1921 When handed in at Local Office

Port of Rotterdam

To. in Survey held at Sukherwer Date, First Survey 9 Nov 1920 Last Survey 28 Sep 1921
Reg. Book. on the Steel Steamer ANJER ex MARISTO (Number of Visits 16) Gross 5103.95

Master J. J. Puking Built at Sukherwer By whom built N.V. Int. Scheepbouwbedrijf When built 1921
Engines made at Hengels By whom made G. B. Stok de Haas when made 1921

Boilers made at ditto By whom made ditto when made 1921

Registered Horse Power 200 Owners Rotterdamche Lloyd Port belonging to Rotterdam
Nom. Horse Power as per Section 28 200 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

GINES, &c.—Description of Engines See Amsterdam Rep No. 8380 No. of Cylinders No. of Cranks

Length of Stroke Revs. per minute 90 Dia. of Screw shaft as per rule as fitted Material of screw shaft

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
the propeller boss 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
bearings are fitted, is the shaft lapped or protected between the liners Length of stern bush

No. of Tunnel shaft as per rule as fitted Dia. of Crank shaft journals as per rule as fitted Dia. of Crank pin Size of Crank webs Dia. of thrust shaft under
No. of Blades 4 State whether moveable No Total surface 60 sq

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 4 Sizes of Pumps 8" x 10" x 10" No. and size of Suctions connected to both Bilge and Donkey pumps
Engine Room 4 x 3 1/2" Ruffled 2 x 3 1/2" 7" x 5" x 7" In Holds, &c. I 2 x 3 1/2" II 2 x 3 1/2" III 2 x 3 1/2"
Tunnel 1 x 2 3/4" 6" x 5" x 12"

No. of Bilge Injections 1 sizes 8" Connected to condenser or to circulating pump Is a separate Donkey Suction fitted in Engine room & size 1 x 3 1/2"

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 Both

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 above
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
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 it fitted with a watertight door worked from E.R. top platform
MANUFACTURERS, &c.—(Letter for record) Manufacturers of Steel See Amsterdam Rep No. 8381.

Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers See Amsterdam Rep No. 8381

Working 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 to
each boiler 2 Spring loaded Area of each valve 707.0" Pressure to which they are adjusted 105 lbs. Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork 20" 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

Working pressure of shell by rules Size of manhole in shell
Percentage of strength of longitudinal joint rivets Working pressure of shell by rules
plate

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
bottom

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 Area at smallest part Area supported by each stay Working pressure by rules Material of stays
Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of Front plates at bottom

Area at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom
Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules

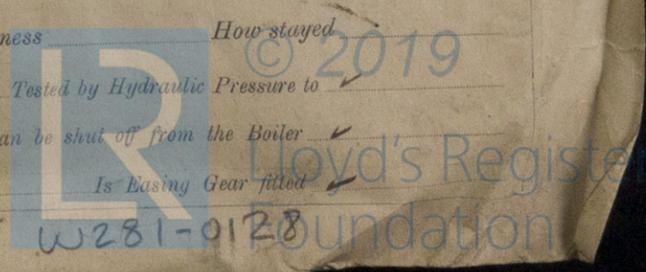
Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and

Thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each
Working pressure by rules 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

3 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
Is Easing Gear fitted

Diameter of Safety Valve Pressure to which each is adjusted



IS A DONKEY BOILER FITTED? *no*

If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:— 2 Top end bolts and nuts, 2 bottom end bolts and nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of piston rings, 1 set of feed and bilge pump valves, 2 quantity of painted bolts and nuts, iron of various sizes, 1 tail shaft with propeller, 1 set of bottom end plates, 1 set of top end braces, 1 slide valve spindle, 1 eccentric rod, 1 feed pump ram, 2 eccentric straps, 1 set of air pump valves air pump rod, 6 gunnery bolts, 6 condenser tubes, 100 ferrules, 26 plain + 4 stay tube

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- 9/11, 20/11, 13/12, 19/12, 20/12, 10/1, 19/1, 27/1, 2/2, 2/2, 26/2, 3/3, 10/3, 13/3, 20/3, 28/3, 19
During erection on board vessel ---
Total No. of visits 16

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 *✓* Propeller *✓*

Stern tube *✓* Steam pipes tested 5.7.21. Engine and boiler seatings 30.5.21 Engines holding down bolts 5.7.21.
Completion of pumping arrangements 13.9.21 Boilers fixed 5.7.21. Engines tried under steam 20.9.21.

Completion of fitting sea connections 30.5.21 Stern tube 30.5.21. Screw shaft and propeller 30.5.21
Main boiler safety valves adjusted 20.9.21. Thickness of adjusting washers S.B. 1 1/2" C 1 7/8" P 7/8" 1 5/16"

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 *See sketch* Test pressure *See sketch*

Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150°F. *Yes*
Have the requirements of Section 49 of the Rules been complied with *Yes*

Is this machinery duplicate of a previous case *no* If so, state name of vessel *—*

General Remarks (State quality of workmanship, opinions as to class, &c. *The machinery has been fitted in accordance with the Society's Rules, approved plans and Secretary's letters, it has run satisfactorily during a trial and may in my opinion be recorded in the Society's Register Book with + L.M.C. 9-21 fitted for burning oil fuel, Flash point above 150°F.*

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 9.21 FD.

Fitted for Oil Fuel 9.21 FP above 150°F

Reed *ARR*
25/10/21

The amount of Entry Fee ... £ 200.00
Special 1/5 ... £ 200.00
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ 60.00
When applied for, *the 1921*
When received, *11.10.21*

A. P. Pijls
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
Assigned
+ L.M.C. 9.21.
Fitted for oil fuel 9.21
F.P. above 150°F.



Certificate (if required) to be sent to Surveyors, Southampton.

The Surveyors are requested not to write on or below the space for Committee's Minute.

MACHINERY CERT. WRITTEN.