

REPORT ON MACHINERY.

No. 5977. 6.

MON. APR. 6-1914

Received at London Office

Date of writing Report 31 March 1914. When handed in at Local Office

Port of Amsterdam

No. in Survey held at Amsterdam

Date, First Survey 6 Jan 1913 Last Survey 30 March 1914

Reg. Book.

(Number of Visits 4)

1472 on the Steel twin screw motor vessel "ARTEMIS"

Master T. Reeder Built at Amsterdam

By whom built Nedel Schepb 14

Tons Gross 3803

Net 2312

When built 1914

Engines made at Amsterdam By whom made Werkspoor

when made 1914

Boilers made at Amsterdam By whom made Werkspoor

when made 1914

Registered Horse Power 2400

Owners

Nedel Ltd Tankers Port belonging to Gravenhage

Nom. Horse Power as per Section 28 400

Not for Reg. Bk.

Is Refrigerating Machinery fitted for cargo purposes no

Is Electric Light fitted yes

ENGINES, &c.—Description of Engines

four Cycle "Werkspoor" Diesel engine No. of Cylinders 12 No. of Cranks 12

Dia. of Cylinders 520 mm

Length of Stroke 350 mm

Revs. per minute 130

Dia. of Screw shaft as per rule

Material of S.M.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 no

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

Length of stern bush 1100 mm

Dia. of Tunnel shaft as per rule

Dia. of Crank shaft journals as per rule

Dia. of Crank pin 320 mm

Size of Crank webs 450 mm

Dia. of thrust shaft under

collars 250 mm

Dia. of screw 350 mm

Pitch of Screw 2600 mm

No. of Blades 3

State whether moveable no

Total surface 4.11 m²

No. of Feed pumps 1

Diameter of ditto 100 mm

Stroke 250 mm

Can one be overhauled while the other is at work yes

No. of Bilge pumps 2

Diameter of ditto 100 mm

Stroke 250 mm

Can one be overhauled while the other is at work yes

No. of Donkey Engines 1

Sizes of Pumps 8" x 8" x 10" duplex

No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 1 fuel

3 diam 80 mm

In Holds, &c. 2 diam 4" 2 diam 1 1/2" 1 diam 3"

No. of Bilge Injections 2

sizes 80 mm

Connected to condenser or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size yes 80 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 yes

Are all connections with the sea direct on the skin of the ship yes

Are they Valves or Cocks Valves & 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 yes

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

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 18 July 1913 of Stern Tube 16 July 1913

Screw shaft and Propeller 18 July 1913

Is the Screw Shaft Tunnel watertight no tunnel

Is it fitted with a watertight door

worked from

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

Total Heating Surface of Boilers

Is Forced Draft fitted

No. and Description of Boilers

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

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

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

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

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

End plates in steam space:

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of stays

Diameter 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

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

01466-01474-0144

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	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:— 2 cylinders complete; 3 pistons + 168 springs, one crankshaft & one tailshaft, 2 sets crossheads brasses, crank pin brasses, bearings with bolts, 2 sets of coupling bolts, 2 guide faces, H.P. & L.P. air pumps complete with 2 extra sets of valves, sets of valves for bilge & cool pumps, 2 air shorting valves complete; 16 in & outlet valves for cyl. 6 fuel inlet valves complete + 4 springs 3 shoes for thrust block.

The foregoing is a correct description,
Yunk Manufacturer.

Dates of Survey while building	During progress of work in shops	During erection on board vessel	Total No. of visits	Is the approved plan of main boiler forwarded herewith
	Jan 6, Feb 10, 24, 27, March 10, 20, 31, April 1, 2, 4, 5, 7, 9, 22, 23, May 5, 15, 19, 24, 29, 30, June 2, 10, 13, 24, July 16, 18	Jan 13, 19, 14, Jan 2, 10, 14, 22, 26, 29, Feb 23, 27, March 3, 6, 18, 19, 30	4	Yes

Dates of Examination of principal parts	Cylinders	Slides	Covers	Pistons	Rods
Connecting rods	Aug 14, Sept 10	Crank shaft	July 2, Aug 10	Thrust shaft	July 2, Aug 10
Stern tube	13 June & 16 July	Steam pipes tested	5 Sept 1913	Engine and boiler seatings	Aug 2, Feb 23, 27
Completion of pumping arrangements	6 March	Boilers fixed	Sept 21	Engines holding down bolts	March 6-19
Main boiler safety valves adjusted	6 March	Thickness of adjusting washers	3/16 in & 1/16		
Material of Crank shaft	SMS	Identification Mark on Do.	4730 H2 4-13	Material of Thrust shaft	SMS
Material of Tunnel shafts	SMS	Identification Marks on Do.	3100 MB 7-13	Material of Screw shafts	SMS
Material of Steam Pipes		Test pressure			

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

This Vessel's Machinery has been fitted in an efficient material used in the construction of good quality and tested as required. Workmanship throughout good. All cylinders & water jackets throughout good and tested under hydraulic pressure as per rules. Found sound & tight. Air pumps & coolers tested to twice the working pressure. Starting air receivers in accordance with approved plans & tested to 20 atm & safety valves adjusted to 10 atm. All injection air & floating air bottles tested as required with satisfactory results. Main & auxiliary pumping arrangements in good working order. Fuel pipe arrangements fitted & tested as required. Motors & auxiliary machinery on several trials found work satisfactory. Six fire extinguishers in different apartments fitted. We are of opinion that this vessel should be recorded in the Society's register book **LMC 3.14**.

The amount of Entry Fee	36. -	When applied for	19...
Special	528. -	When received	3/4/14
Donkey Boiler Fee			
Travelling Expenses (if any)	20.10		

Committee's Minute

Assigned

+ LMC 3.14

W. H. H. H.
W. H. H. H.
 Engineer Surveyor to Lloyd's Register of British & Foreign Shipping



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