

REPORT ON OIL ENGINE MACHINERY.

No. 12010⁶

12 SEP 1930

Received at London Office

Date of writing Report 12 Aug 1930 When handed in at Local Office

Port of AMSTERDAM

No. in Survey held at AMSTERDAM

Date, First Survey 5 April 1929 Last Survey 19 August 1930

Reg. Book. 85744 on the ^{Single} ~~Triple~~ ~~Quadruple~~ Screw vessel

"TABINTA"

Number of Visits 49

Net Gross 4898
Gross 8156

Built at Amsterdam

By whom built Nederlandsche Scheepsbouw My. Yard No. 202 When built 1930

Engines made at Amsterdam

By whom made Werkspoor Engine No. When made 1930

Donkey Boilers made at Haarlem

By whom made N.V. Werf "Hubertina" Boiler No. 257 When made 1930

Brake Horse Power 4000

Owners Stoomvaart My. "Nederland" Port belonging to Amsterdam

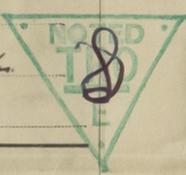
Nom. Horse Power as per Rule 2000

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

32 5/16 56 11/16



IL ENGINES, &c.—Type of Engines *Sulzer Diesel* 2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders 40 kg/cm² Diameter of cylinders 826 mm Length of stroke 1440 mm No. of cylinders 8 No. of cranks 8

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 1200 mm Is there a bearing between each crank

Revolutions per minute 100 Flywheel dia. 2828 mm Weight 4400 kg Means of ignition *Compressed air* Kind of fuel used *Diesel oil*

Crank Shaft, dia. of journals as per Rule *approved* 580 mm Crank pin dia. 580 mm Crank Webs Mid. length breadth 1200 mm Thickness parallel to axis 290 mm Mid. length thickness 390 mm Thickness around eye-hole *Solid*

Flywheel Shaft, diameter as per Rule *approved* 580 mm Intermediate Shafts, diameter as per Rule *approved* 440 mm Thrust Shaft, diameter at collars as per Rule *approved* 580 mm

Tube Shaft, diameter as per Rule *approved* 490 mm Screw Shaft, diameter as per Rule *approved* 490 mm Is the ^{tube} shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes as per Rule *approved* 15/15 mm Thickness between bushes as per Rule *approved* 10 mm Is the after end of the liner made watertight in the propeller boss

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *one length*

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 *tight fit*

If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft

Propeller, dia. 19' Pitch 16' No. of blades 4 Material *Brass* whether Moveable *Solid* Total Developed Surface 110 sq. feet

Method of reversing Engines *from the engine* a governor or other arrangement fitted to prevent racing of the engine when declutched Means of lubrication *forced*

Thickness of cylinder liners Are the cylinders fitted with safety valves Are the exhaust pipes and silencers water cooled or lagged with non-conducting material *lagged with asbestos*

Cooling Water Pumps, No. 2 *electrically driven* Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. *None* Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and Size 2 *electrically driven pumps 150 tons per hour* How driven *Electrically*

Ballast Pumps, No. and size *Electrically driven 220 tons* Lubricating Oil Pumps, including Spare Pump, No. and size 2 *5 1/2 ton Hobart, etc.*

Are two independent means arranged for circulating water through the Oil Cooler Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces 4 @ 3 1/2", 2 thrust rods @ 3 1/2", 1 in cofferdam of 3 1/2" In Pump Room

In Holds, &c. *or hold 2 @ 3 1/2", or hold 2 @ 3 1/2", or hold 2 @ 3 1/2", deep tank 2 @ 3 1/2", or hold 2 @ 3 1/2", or hold 2 @ 3 1/2"*

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 @ 5 1/2" and 1 @ 3 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Are the Bilge Suctions in the Machinery Spaces fitted from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks *Both*

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Are the Overboard Discharges above or below the deep water line

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

What pipes pass through the bunkers *None* How are they protected

What pipes pass through the deep tanks *None* Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one compartment to another

Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from *upper deck platform*

For a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. 2 No. of stages 2 Diameters 150 mm x 480 mm Stroke 540 mm Driven by *main engine*

Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 112/112-252/112 Stroke 180 mm Driven by *electrically*

Small Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 12 mm Stroke Driven by *Petten oil engine*

Scavenging Air Pumps, No. 2 Diameter 1860 mm Stroke 960 mm Driven by *main engine*

Auxiliary Engines crank shafts, diameter as per Rule *approved* 170 mm made of *mintubber* by *main Sulzer*

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule (made in *Flushing*).

Can the internal surfaces of the receivers be examined and cleaned Is a drain fitted at the lowest part of each receiver

High Pressure Air Receivers, No. 7 Cubic capacity of each 2 x 800 L Internal diameter 2 x 540 mm thickness 2 x 25 mm

Seamless, lap welded or riveted longitudinal joint *Seamless* Material *Steel* Range of tensile strength 55/60 kg/cm² Working pressure by Rules 1480/1090 lb Actual 2070/1040 lb

Starting Air Receivers, No. 2 Total cubic capacity 16 m³ Internal diameter 1448 mm thickness 24 mm

Seamless, lap welded or riveted longitudinal joint *welded* Material *Steel* Range of tensile strength 44/50 kg/cm² Working pressure by Rules 430/424 lb Actual 424 lb

IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? *Yes*

Is the donkey boiler intended to be used for domestic purposes only? *Yes*

PLANS. Are approved plans forwarded herewith for Shafting *Plans*

Plans

Receivers *London*

Separate Tanks *Office*

Donkey Boilers *Plans*

General Pumping Arrangements *London*

Oil Fuel Burning Arrangements *Office*

Secretary's Letters, d. 25.3.29; 15.4.29; 19.4.29; 21.5.29; 25.10.29; 15.11.29; 24.11.29; 1.8.30; 3.4.30.

SPARE GEAR.

Has the spare gear required by the Rules been supplied? *Yes*

State the principal additional spare gear supplied

1 Cylinder, complete with all valves, carriers, springs and other fittings. Fuel needles for all cylinders; piston with rings complete; rings for one piston; telescope pipes; 1 set of stress wheels; 1 set of studs and nuts for cylinders; 2 top end bolts and nuts; 2 bottom end bolts and nuts; 1 set of bolts for crankshaft and intermediate shaft coupling piston and rings for main air compressor; 1 set of suction and delivery valves; valves for scavenging pumps; 1 fuel pump; additional water circulating pumps for circulating deep water; 1 complete set of valves for one cylinder, with their springs and other fittings; fuel needles, studs and nuts for one cylinder cover; top end gudgeon pin, 2 bottom end, 2 main bearing bolts

The foregoing is a correct description,

1 set of piston rings of each size for compressor, 1 fuel pump suction and delivery valves for air compressor, 1 set of valves for scavenging pumps as per Rules.

WERSPOORING
W. J. Spier

Manufacturer.

Dates of Survey while building	During progress of work in shops--	5/4, 15/6, 24/7, 1/8, 11/8, 21/8, 29/8, 29/8, 4/9, 7/9, 14/9, 10/9, 11/9, 23/9, 26/9, 27/9, 3/10, 17/10, 31/10, 6/11, 19/12, 24/12, 19
	During erection on board vessel--	28/4, 5/5, 20/5, 24/5, 5/6, 24/6, 28/6, 10/7, 29/7, 4/8, 4/8, 14/8, 19/8
	Total No. of visits	49

Dates of Examination of principal parts—Cylinders	5/4 - 25/9, 29	Covers	5/4 - 15/9, 29	Pistons	3/4 - 24/12, 29	Rods	3/4 - 25/9, 29	Connecting rods	3/4 - 24/12, 29
Crank shaft	4/10 - 24/12, 29	Flywheel shaft	4/10 - 24/12, 29	Thrust shaft	14/8, 29 - 17/4, 30	Intermediate shafts	14/8, 29 - 17/4, 30	Tube shaft	—
Screw shaft	10/3 - 24/3, 30	Propeller	10/3 - 24/3, 30	Stern tube	11/2, 30	Engine seatings	11/2, 30	Engines holding down bolts	5/5 - 26/6, 30
Completion of fitting sea connections	24/3, 30	Completion of pumping arrangements	24/6, 30	Engines tried under working conditions	19.8.30				
Crank shaft, Material	Steel	Identification Mark	Lloyd's 588172 14829	Flywheel shaft, Material	Steel	Identification Mark	Lloyd's 5850. 6.2.29		
Thrust shaft, Material	Steel	Identification Mark	Lloyd's 24.4.29	Intermediate shafts, Material	Steel	Identification Mark	Lloyd's 5550 11.6.29		
Tube shaft, Material	—	Identification Mark	—	Screw shaft, Material	Steel	Identification Mark	Lloyd's 13924 KH. 31		

Is the flash point of the oil to be used over 150° F. *Yes*

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with? *Yes*

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo? *No* If so, have the requirements of the Rules been complied with? *—*

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with? *—*

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 engines have been constructed under Special Survey in accordance with the approved plans and Secretary's letters. All material tested as required, workmanship good by inspection under full working condition and good.

It is submitted that this vessel is eligible for THE RECORD + L.M.C. 8.30 C.L. Oil Engines 2 SCSA 80% 32 5/16 - 56 11/16 NHP 1450 DB. 142 lb.

P. N. Bennett
73/9/30

Engineer Surveyor to Lloyd's Register of Shipping.

The amount of Entry Fee	£ 42.-	When applied for,	19.
Special	£ 1800.-	When received,	229. 30/6
Donkey Boiler Fee	£		
Travelling Expenses (if any)	£ 42.-		

Committee's Minute

Assigned

+ L.M.C. 8.30 Oil Eng. C.L. DB. 142 lb.



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