

List of

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY.

No. 19959

24 DEC 1930

Date of writing Report 12-12-1930 When handed in at Local Office 19 Port of Rotterdam

No. in Survey held at Rotterdam Date, First Survey 12.6.29 Last Survey 25.11.1930

Reg. Book. on the ^{Single} ~~Double~~ ~~Triple~~ ~~Quadruple~~ Screw vessel "TARAKAN" Tons { Gross 8183 Net 4914

Built at Rotterdam By whom built My Tyneyard Yard No. 518 When built 1930

Engines made at Rotterdam By whom made " " Engine No. 562 When made 1930

Donkey Boilers made at Boonhem By whom made W. V. West. Kubertina Boiler No. " " When made 1930

Indicated Horse Power 1450 Owners Hoorn N.V. Nederland Port belonging to Amsterdam

Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

Use for which vessel is intended General 32 5/16 56 1/16

ENGINES, &c. Type of Engines MAN Diesel Engine 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 55 1/2 lbs Diameter of cylinders 820 mds Length of stroke 1440 No. of cylinders 8 No. of cranks 8

Revolutions per minute 105 Flywheel dia. 1020 mds Weight 1700 kg Means of ignition Compression Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals as per Rule 580 mds as fitted 580 mds Crank pin dia. 580 mds Crank Webs Mid. length breadth 650 mds Thickness parallel to axis 56 1/16

Intermediate Shafts, diameter as per Rule 440 mds as fitted 440 mds Thrust Shaft, diameter at collars as per Rule 580 mds as fitted 580 mds

Screw Shaft, diameter as per Rule 490 mds as fitted 490 mds Is the shaft fitted with a continuous liner Yes

Size Liners, thickness in way of bushes as per Rule 23 mds as fitted 23 mds Thickness between bushes as per Rule 20 mds as fitted 20 mds

Is the after end of the liner made watertight in the stern tube Yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length

When 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

When two liners are fitted, is the shaft lapped or protected between the liners No Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft No

Length of Bearing in Stern Bush next to and supporting propeller 1930 mds

Propeller, dia. 19' 8" Pitch No. of blades 4 Material Bronze whether Moveable No Total Developed Surface 120 sq. feet

Method of reversing Engines Camshaft Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced

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

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine Tunnel

Drinking Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes

Ge Pumps worked from the Main Engines, No. 2 Diameter 150 mds Stroke 220 mds Can one be overhauled while the other is at work No

Pumps connected to the Main Bilge Line No. and Size 2 One at 150 mds stroke 1 at 220 mds stroke How driven Electrically

Lubricating Oil Pumps, including Spare Pump, No. and size 2 at 600 mds 1 at 400 mds

Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces 8 at 3 1/2" One in Rotterdam at 3 1/2" One in Tunnel well at 3 1/2"

Holds, &c. In all holds 2 at 3 1/2" 2 in Quarters 3 1/2"

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size One at 6" 1 at 3 1/2"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

Are all Sea Connections fitted direct on the skin of the ship Yes 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 Yes Are the Overboard Discharges 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

Do all pipes pass through the bunkers None How are they protected

Do all 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 Yes

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 Yes Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper platform

On 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 (2 x 9) Diameters 600 x 500 (600-500) Stroke 650 mds Driven by Main shaft

Auxiliary Air Compressors, No. 2 No. of stages 3 Diameters 382 x 312 x 274 Stroke 180 mds Driven by Electric Motor

Small Auxiliary Air Compressors, No. 1 No. of stages 3 Diameters 110/110-104/126 Stroke 80 mds Driven by Electric Motor

Reversing Air Pumps, No. One (double acting) Diameter 1650 mds Stroke Driven by Main shaft

Auxiliary Engines crank shafts, diameter as per Rule 170 mds as fitted 170 mds

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Covers

Is there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. 5 Cubic capacity of each 27.50 litres Internal diameter 540 mds thickness 20 mds

Are all Seamless, lap welded or riveted longitudinal joint Seamless Material S. M. Steel Range of tensile strength 51-55 kg Working pressure by Rules 10.65 lbs

Starting Air Receivers, No. Two (2) Total cubic capacity 10.00 each Internal diameter 1428 mds thickness 134 mds

Are all Seamless, lap welded or riveted longitudinal joint Riveted Material S. M. Steel Range of tensile strength 44-50 kg Working pressure by Rules 10.11 lbs

003401-003408-0102

IS A DONKEY BOILER FITTED?

PLANS. Are approved plans forwarded herewith for Shafting *Yes* If so, is a report now forwarded? *Made at Amsterd.*
(If not, state date of approval) *30-1-29* Receivers *28-6-29* Separate Tanks *22-7-30*
 Donkey Boilers General Pumping Arrangements *8-10-29* Oil Fuel Burning Arrangements *15-5-30*

SPARE GEAR *One cylinder cover complete, with valves and casing spring, and one complete set of valves for one cylinder complete. A full set of ferrules. A piston with rod and rings complete. One set of telescopic pipes. One chain and wheels for camshaft drive. A set of studs and nuts complete for one cylinder. 2 Crosshead bolts, 2 bottom end bolts, 2 main bearing bolts and nuts. One set of bolts for crankshaft coupling, one set of bolts for one intermediate shaft coupling. One screw shaft. Furthermore a full owners specification in excess of the Society's requirements for main air compressors and pumps. One complete set of rings and valves, also for scavenging pumps.*

The foregoing is a correct description,

Maatschappij voor Scheeps- en Werktuigbouw
 ROTTERDAM

W. J. J. J. J. Manufacturer.

Dates of Survey while building	During progress of work in shops--	1929	12	24	15	4	8	10	26	1	8	21	1	25	10	1930	6	14	25	6	11	25	28	14	27	29	31	8	1	
	During erection on board vessel---	1930	5	11	14	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9
Total No. of visits		6																												

Dates of Examination of principal parts—Cylinders *13/8/29* Covers *Made* Pistons *at* Rods *Angoberg* Connecting rods *17/10/29*
 Crank shaft *Made in Germany* Flywheel shaft *Made in* Thrust shaft *Germany* Intermediate shafts *10-5-30* Tube shaft *1*
 Screw shaft *Made in Germany* Propeller *16/30* Stern tube *27-5-30* Engine seatings *10-6-30* Engines holding down bolts *20-26/29*
 Completion of fitting sea connections *4-7-30* Completion of pumping arrangements *19-11-30* Engines tried under working conditions *24-25/11*
 Crank shaft, Material *S.M. Steel* Identification Mark *LL04015* shaft, Material *V* Identification Mark *V*
 Thrust shaft, Material *S.M. Steel* Identification Mark *LL04015* Intermediate shafts, Material *S.M. Steel* Identification Marks *LL04015*
 Tube shaft, Material *S.M. Steel* Identification Mark *LL04015* Screw shaft, Material *S.M. Steel* Identification Mark *LL04015*

Is the flash point of the oil to be used over 150° F. *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 made in accordance with the requirements of the Society Rules. Approved plans and Secretary's letters, material tested as required and workmanship good, the whole was found in a good working and manoeuvring condition during a trial trip and of an opinion that this vessel is eligible to be recorded in the Society's Register Book with **LMC 12-30 OIL ENG. CL***

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

The amount of Entry Fee ... *£ 72.00*
 Part Special ... *£ 1033.50*
 Air receivers ... *£ 100.00*
 Donkey Boiler Fee ... *£ 126.00*
 Travelling Expenses (if any) ... *£ 126.00*

FRI. 16 JAN 1931

J. J. Ochoa
 Engineer Surveyor to Lloyd's Register of Shipping.

Assigned *+ Amb 11.30 oil Eng. Cl. S.B. 7/14*

