

REPORT ON OIL ENGINE MACHINERY.

Received at London Office

MAY -7 1940

Date of writing Report 16/4 1940 When handed in at Local Office 19 Port of Groningen

No. in Survey held at "Groningen" Date, First Survey 1/10 39 Last Survey 16/4 1940
Reg. Book. Number of Visits 9

Single
Twin
Triple
Quadruple

Screw vessel

M.V. "LOLA"

Tons { Gross 499
Net 120.

Built at Westerbroek By whom built E. J. Smit Yard No. 661 When built 1940

Engines made at Cologne By whom made Humboldt Deutz Motoren A.G. Engine No. 612549/56 When made 1939

Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓

Brake Horse Power 400 Owners N.V. E. J. Smit & Zoon's Scheepswerk Port belonging to Hoogerwaard

Nom. Horse Power as per Rule 94 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended steaming services

OIL ENGINES, &c.—Type of Engines Heavy oil engines 2 or 4 stroke cycle 4 Single or double acting single please see Dudding report No 548.

Maximum pressure in cylinders ✓ Diameter of cylinders ✓ Length of stroke ✓ No. of cylinders ✓ No. of cranks ✓

Mean Indicated Pressure ✓ Span of bearings, adjacent to the Crank, measured from inner edge to inner edge ✓ Is there a bearing between each crank ✓

Revolutions per minute 300 Flywheel dia. ✓ Weight ✓ Means of ignition compression Kind of fuel used Diesel oil

Crank Shaft, { Solid forged ✓ as per Rule ✓ Crank pin dia. ✓ Crank Webs Mid. length breadth ✓ Thickness parallel to axis ✓
Semi built dia. of journals ✓ as fitted ✓ Mid. length thickness ✓ shrunk Thickness around eye-hole ✓
All built ✓

Flywheel Shaft, diameter as per Rule ✓ Intermediate Shafts, diameter as per Rule ✓ Thrust Shaft, diameter at collars as per Rule ✓
as fitted ✓ as fitted 145 mm as fitted 160 mm

Tube Shaft, diameter as per Rule ✓ Screw Shaft, diameter as per Rule ✓ Is the { tube } shaft fitted with a continuous liner { no
as fitted ✓ as fitted 140/150 mm screw }

Bronze Liners, thickness in way of bushes as per Rule ✓ Thickness between bushes as per Rule ✓ Is the after end of the liner made watertight in the
as fitted ✓ as fitted ✓ propeller boss ✓

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

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 ✓ Is an approved Oil Gland or other appliance fitted at the after end of the tube
shaft no If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller 630 mm

Propeller, dia. 1790 mm Pitch 1070 mm No. of blades 4 Material bronze whether Moveable no Total Developed Surface 4575 sq feet

Method of reversing Engines by hand 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
non-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 to funnel

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

Bilge Pumps worked from the Main Engines, No. one Diameter 100 mm Stroke 100 mm Can one be overhauled while the other is at work ✓

Pumps connected to the Main Bilge Line { No. and Size one 100x100 mm } one 50 1/2 rotary } one 70 1/2 rotary
{ How driven main engine } elec. motor } 10 B.H.P. aux engine.

Is the cooling water led to the bilges. no If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping
arrangements ✓

Ballast Pumps, No. and size one 70 1/2 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 a 00 ltr/min.

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 2 a 2", 2 a 1 1/2" In Pump Room ✓

In Holds, &c. 4 a 2 1/2" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 a 1 1/2" one in plan

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

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 ✓

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 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 ✓ Is it fitted with a watertight door ✓ worked from ✓

If 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. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓

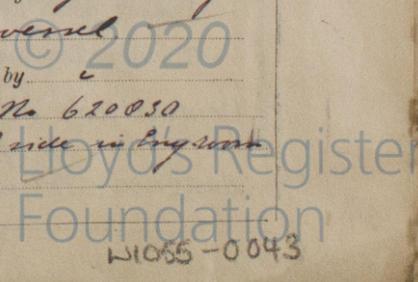
Small Auxiliary Air Compressors, No. one No. of stages 2 Diameters 125/110 mm Stroke 100 mm Driven by 2 cyl aux engine

What provision is made for first Charging the Air Receivers hand air compressor charging 30 l air vessel

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule ✓ No. 2, Eng No 631200/9 Eng No 620050
as fitted please see Dudding reports Nos 550 & 340 Position Portside 5 B side in Eng room

Have the Auxiliary Engines been constructed under special survey yes Is a report sent herewith yes.



W1065-0043

AIR RECEIVERS:—Have they been made under survey *yes* State No. of Report or Certificate *Dundee April No 34*
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule *yes*
 Can the internal surfaces of the receivers be examined and cleaned *yes* Is a drain fitted at the lowest part of each receiver *yes*
Injection Air Receivers, No. *1* Cubic capacity of each *—* Internal diameter *—* thickness *—*
 Seamless, lap welded or riveted longitudinal joint *—* Material *—* Range of tensile strength *—* Working pressure *—*
Starting Air Receivers, No. *2* Total cubic capacity *2 x 500 L* Internal diameter *—* thickness *—*
 Seamless, lap welded or riveted longitudinal joint *welded* Material *S.M. steel* Range of tensile strength *—* Working pressure *—*

IS A DONKEY BOILER FITTED? *no* If so, is a report now forwarded? *—*
 Is the donkey boiler intended to be used for domestic purposes only *—*
PLANS. Are approved plans forwarded herewith for Shafting *13/2 '39* Receivers *—* Separate Fuel Tanks *—*
 (If not, state date of approval)
 Donkey Boilers *—* General Pumping Arrangements *8/4 '39* Pumping Arrangements in Machinery Space *9/8 '39*
 Oil Fuel Burning Arrangements *—*

SPARE GEAR.

Has the spare gear required by the Rules been supplied *yes*
 State the principal additional spare gear supplied *—*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
 During progress of work in shops *—*
 During erection on board vessel *11/10 '39, 13/11 '39, 16/11 '39, 24/11 '39, 1/12 '39, 19/3 '40, 29/3 '40, 8/4 '40, 16/4 '40.*
 Total No. of visits *9.*

Dates of Examination of principal parts—Cylinders *—* Covers *—* Pistons *—* Rods *—* Connecting rods *—*
 Crank shaft *—* Flywheel shaft *—* Thrust shaft *—* Intermediate shafts *—* Tube shaft *—*
 Screw shaft *24/11 '39, 1/12 '39* Propeller *1/12 '39* Stern tube *24/11 '39* Engine seatings *1/12 '39* Engines holding down bolts *19/3 '40*
 Completion of fitting sea connections *1/12 '39* Completion of pumping arrangements *16/4 '40* Engines tried under working conditions *16/4 '40*

Crank shaft, Material *—* Identification Mark *—* Flywheel shaft, Material *—* Identification Mark *—*
 Thrust shaft, Material *S.M. steel* Identification Mark *LLOYD'S No 14151* Intermediate shafts, Material *S.M. steel* Identification Marks *—*
 Tube shaft, Material *—* Identification Mark *JL/AB. 11-4-39* Screw shaft, Material *S.M. steel* Identification Mark *—*

Identification Marks on Air Receivers
 LLOYD'S TEST No. 3960/3974
 40.5 ATM
 WP 30. ATM
 HB 7-7-39
 No 3987
 LLOYD'S TEST
 56 ATM
 W.P. 35 A.T.M.
 H.B. 18-7-39

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 *yes*
 Is this machinery duplicate of a previous case *yes* If so, state name of vessel *U.S. BUC Groninger April No 70*

General Remarks (State quality of workmanship, opinions as to class, &c.)
The machinery has been made under special survey and has been satisfactorily fitted on board in accordance with the approved plans Society's Rules and Secretary's letters and has been tried under full working condition and was found in a good working and manoeuvring order and is in my opinion eligible for the record of + L.M.E. 4-40 oil engines in the Society's Registerbook

The amount of Entry Fee .. £ *—* : When applied for, .. £ *—*
 Special £ *194.* : .. £ *—*
 Donkey Boiler Fee £ *—* : When received, .. £ *—*
 Travelling Expenses (if any) .. £ *39.00.* : .. £ *—*
 Committee's Minute
 Assigned *Strengthened for Nav. in Dec*
 RT Inf.

F. Williams
 Engineer Surveyor to Lloyd's Register of Shipping.
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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.)