

REPORT ON OIL ENGINE MACHINERY.

No. 29042

17 SEP 1945

Received at London Office

Date of writing Report 26/9 1945 When handed in at Local Office

19

Port of Rotterdam

No. in Survey held at Hrimpen 2d April

Date, First Survey 1 Oct 1940 Last Survey Sept 5 1941

Reg. Book.

Number of Visits 16

Single
on the Twin
Triple
Quadruple

Screw Vessel

Tanker for the Dutch Navy

Tons Gross 5660
Net

Built at Hrimpen 2d April By whom built Messrs. C. & J. Green & Co. Yard No. 667 When built 1941

Engines made at Amsterdam By whom made N.V. "Werkspoor" Engine No. 705 When made 1941

Donkey Boiler made at Amsterdam By whom made N.V. "Werkspoor" Boiler No. 2903 When made 1941

Brake Horse Power 7000 Owners Port belonging to

Nom. Horse Power as per Rule 1 x 430 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

Trade for which vessel is intended

OIL ENGINES, &c.—Type of Engines 2 sets crankshaft type supercharged 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 700 lbs Diameter of cylinders 600 mm Length of stroke 1100 mm No. of cylinders 8 No. of cranks 8

Mean Indicated Pressure 130 lbs

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 800 mm Is there a bearing between each crank yes

Revolutions per minute 167 Flywheel dia. 1970 mm Weight 3600 kg Means of ignition compression Kind of fuel used Diesel oil

Crank Shaft, Solid forged as per Rule app. Crank pin dia. 410 mm Crank Webs Mid. length breadth 770 mm Thickness parallel to axis 255 mm
Semi built dia. of journals as fitted 410 mm Mid. length thickness 225 mm shrunk Thickness around eyehole 182 mm
All built

Flywheel Shaft, diameter as per Rule app. as fitted 400/510 mm Intermediate Shafts, diameter as per Rule app. as fitted 290 mm Thrust Shaft, diameter at collars as per Rule app. as fitted 310 mm

Tube Shaft, diameter as per Rule app. as fitted Screw Shaft, diameter as per Rule app. as fitted 330 mm Is the (tube) shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule app. as fitted 19 mm Thickness between bushes as per Rule app. as fitted 16 mm Is the after end of the liner made watertight in the

propeller boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner 2 lengths yes

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 yes 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 1323 mm

Propeller, dia. 3400 mm Pitch 3483 mm No. of blades 3 Material Cast iron whether Moveable no Total Developed Surface 58 sq. feet

Method of reversing Engines by air Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication

forced Thickness of cylinder liners 50/55 mm 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 funnel

Cooling Water Pumps, No. 2 fresh 2 seawater 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. none Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and size 2 rotary 55 1/2 each 1 duplex 200 x 120 x 250 mm, 100 1/2 How driven electrically steam driven

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 2 main pumps each 2 steam duplex cargo pumps 12 x 10 x 24"

Ballast Pumps, No. and size 2 100 1/2 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 2 250 1/2 each

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 3 2 1/2 90 mm In Pump Room 2 2 1/2 90 mm

In Holds, &c. fore hold 3 2 1/2 90 mm, fore peak tank 2 2 1/2 90 mm, after well 1 2 1/2 90 mm, cofferdam 1 152-152 1 2 1/2 90 mm

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 2 1/2 200 mm, 1 2 1/2 125 mm

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 fitted on steel deck 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

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 none 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. 1 No. of stages 1 Diameters 106/104 mm Stroke 160 mm Driven by on electrically

Auxiliary Air Compressors, No. 2 No. of stages 2 Diameters 106/104 mm Stroke 160 mm Driven by on electrically

Small Auxiliary Air Compressors, No. 1 No. of stages 1 Diameters 106/104 mm Stroke 160 mm Driven by on electrically

What provision is made for first Charging the Air Receivers air compressor driven by steam engine

Scavenging Air Pumps, No. 1 Diameter 106 mm Stroke 160 mm Driven by

Auxiliary Engines crank shafts, diameter as per Rule app. as fitted 220 mm No. 2 + one one cyl. scavenging engine (black) (one) Position 2nd hold in engine room

Have the Auxiliary Engines been constructed under special survey yes (except scavenging) Is a report sent herewith attached



AIR RECEIVERS:—Have they been made under survey yes State No. of Report or Certificate 7459/7460
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. ✓ 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 20.4 M³ Internal diameter 16.5 in thickness 1.2 in
Seamless, lap welded or riveted longitudinal joint ✓ Material Steel Range of tensile strength 41-47 Working pressure 15 kg
IS A DONKEY BOILER FITTED? yes If so, is a report forwarded? yes
Is the donkey boiler intended to be used for domestic purposes only no
PLANS. Are approved plans forwarded herewith for Shafting ✓ Receivers ✓ Separate Fuel Tanks 13/4'40
Donkey Boilers ✓ General Pumping Arrangements ✓ Pumping Arrangements in Machinery Space 13/4'40
Oil Fuel Burning Arrangements 13/4'40

SPARE GEAR.

Has the spare gear required by the Rules been supplied As per Rules
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 - -
Total No. of visits 16

Dates of Examination of principal parts—Cylinders ✓ Covers ✓ Pistons ✓ Rods ✓ Connecting rods ✓
Crank shaft ✓ Flywheel shaft ✓ Thrust shafts 10/6'41 Intermediate shafts 10/6'41 Tube shaft ✓
Screw shaft 24/12'40 Propellers 24/12'40 Stern tube 24/12'40 Engine seatings 20/5 Engines holding down bolts 10/6'41
Completion of fitting sea connections 24/12'40 Completion of pumping arrangements 19/41 Engines tried under working conditions 19/41
Crank shaft, Material ✓ Identification Mark ✓ Flywheel shaft, Material ✓ Identification Mark As per Rules
Thrust shaft, Material ✓ Identification Mark ✓ Intermediate shafts, Material ✓ Identification Marks ✓
Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material ✓ Identification Mark ✓

Identification Marks on Air Receivers
7459-7460
Staggs test 59 kg
W.P. 15 kg
H.R.B. 27-4-40

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 tanker 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 the vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery has been satisfactorily fitted on board in accordance with the approved plans Society's Rules and Surveyor's orders. Workmanship throughout good, and has been tried with satisfactory results and is in my opinion fitted for the service of 1 M.C. oil engines D.B. 100 lbs C.G. in the Society's Register.

The amount of Entry Fee .. £ 120 When applied for, 19
Special ... £ 733.20
Donkey Boiler Fee ... £ 64.- When received, 19
Travelling Expenses (if any) £ 64.-

Committee's Minute

FRI. 11 JAN 1946

Assigned

See minute on p. 51

W. Williams
Engineer Surveyor to Lloyd's Register of Shipping.



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