

REPORT ON OIL ENGINE MACHINERY.

No. 60955.

Date of writing Report 27/1/55 19 When handed in at Local Office 31 JAN 1955 19 Received at London Office 2-FEB 1955

No. in Survey held at HULL. Date, First Survey 21/10/54 Last Survey 12/1/55 19
Reg. Book. Number of Visits 9

Single on the ~~main~~ Screw vessel "MAGNOLIA" ex 'Birch' Tons Gross 452 Net
Built at Beverley. By whom built Cook, Welton & Gemmell, Ltd. Yard No. 652 When built 1940
Engines made at Amsterdam. By whom made Werkspoor, N.V. Engine No. 1107 When made 1949
Donkey Boilers made at Newark. By whom made Abbott & Co. (Newark) Ltd. Boiler No. 4217 When made 1949
Brake Horse Power { Maximum 750 Owners Vosper, Ltd. Port belonging to Portsmouth.
Service 150
M.N. as per Rule 150 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which vessel is intended Ocean - going trawler.

IL ENGINES, &c. - Type of Engines 2 or 4 stroke cycle Single or double acting
Maximum pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders No. of cranks
Mean Indicated Pressure Span of bearings (i.e., distance between inner edges of bearings in way of a crank) Is there a bearing between each crank Revolutions per minute { Maximum Service
Flywheel dia. Weight S E E AMSTERDAM Moment of inertia of flywheel (lbs in² or Kg.cm.²) Means of ignition Kind of fuel used
Crank shaft, { Solid forged
Semi built
All built dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Mid. length thickness shrunk Thickness parallel to axis Thickness around eyehole
Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted 235mm
Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted See Southampton Rpt. No. 22670 Is the { tube screw } shaft fitted with a continuous liner
Bronze Liners, thickness in way of bushes as per Rule as fitted Thickness between bushes as per Rule as fitted 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
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 fitted at the after end of stern tube If so, state type
Propeller, dia. 2385mm Pitch 1455/1196mm No. of blades 4 Material Bronze whether moveable No Total developed surface 21.5 sq. feet
Moment of inertia of propeller including entrained water (lbs in² or Kg.cm.²) Kind of damper, if fitted
Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine Yes Means of lubrication forced Thickness of cylinder liners 30mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled
Lagged with non-conducting material Lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
Cooling Water Pumps, No. and how driven 1 M.E. driven 1 spare electric Working F.W. -
W. One Spare F.W. - S.W. One (G.S. Pump) Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
Large Pumps worked from the Main Engines, No. and capacity One @ 36 tons/hr. Can one be overhauled while the other is at work -
Pumps connected to the Main Bilge Line (No. and capacity of each One @ 40 tons/hr. (G.S. PUMP); One @ 36 tons/hr.; One @ 25 tons/hr.
How driven Clutch on for 'd.P. Aux. Eng; M.E. Elect. Motor.
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 capacity None Power Driven Lubricating Oil Pumps, including spare pump, No. and size See Sou. Rpt. No. 22670
Are two independent means arranged for circulating water through the Oil Cooler Yes Branch Bilge Suctions
No. and size: - In machinery spaces One 2 1/2" In pump room -
Holds, &c. One 2 1/2" in each of for'd. store, fish room, slushwell.
Direct Bilge Suctions to the engine room bilges, No. and size Two 2 1/2"
Are all the bilge suction pipes in holds and machinery spaces fitted with strum-boxes Yes Are the bilge suction pipes 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 welded boxes are they fitted with valves or cocks Yes Are they fixed efficiently 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
At pipes pass through the bunks None How are they protected -
At pipes pass through the deep tanks - 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 E.R. Is it fitted with a watertight door - worked from -
If wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -
In Air Compressors, No. No. of stages diameters stroke driven by
Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
All Auxiliary Air Compressors, No. No. of stages diameters stroke driven by
Is provision made for first charging the air receivers (Crossley No. 129939-12K.W.- Ford. P. -
Enging Air Pumps or Blowers, No. - How driven - (Crossley No. 128091-28K.W.- Aft. P. -
Eng. Elec. No. 1.H.852-99K.W.- Ford. S. -
Russell Newbery No. 20L36-12K.W.- Aft. S. -
Auxiliary Engines Have they been made under survey One has, Three have not. Engine Nos. Lloyd's Register
Makers name Position of each in engine room Foundation
Report No. London 117485

AIR RECEIVERS:—Have they been made under survey..... State No. of report or certificate.....
State full details of safety devices.....
Can the internal surfaces of the receivers be examined and cleaned..... Is a drain fitted at the lowest part of each receiver.....
Injection Air Receivers, No..... Cubic capacity of each..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....
Starting Air Receivers, No..... Total cubic capacity..... Internal diameter..... thickness.....
Seamless, welded or riveted longitudinal joint..... Material..... Range of tensile strength..... Working pressure.....
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 (If not, state date of approval) Receivers Separate fuel tanks
Donkey boilers General pumping arrangements Pumping arrangements in machinery space
Oil fuel burning arrangements See Southampton Report.
Have Torsional Vibration characteristics been approved See Amsterdam Report. Date and particulars of approval
SPARE GEAR.
Has the spare gear required by the Rules been supplied Yes State if for "short voyages" only
State the principal additional spare gear supplied No major items.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building During progress of work in shops - - -
During erection on board vessel - - - 21st Oct. '54; 3rd, 6th, 13th, 15th, 16th, 21st December, 1954; 11th & 12th Jan. 1955.
Total No. of visits Nine.
Dates of examination of principal parts—Cylinders See Amsterdam Report. Covers Pistons Rods Connecting rods
Crank shaft Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
Screw shaft Propeller Stern tube Engine seatings Engine holding down bolts
Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions 11/1/55
Crank shaft, material Identification mark Flywheel shaft, material Identification mark
Thrust shaft, material Identification mark Intermediate shafts, material Identification marks
Tube shaft, material SEE SOUTHAMPTON REPORT. Identification mark Screw shaft, material Identification mark
Identification marks on air receivers)
) SEE AMSTERDAM REPORT.
Welded receivers, state Makers' Name)
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
Full description of fire extinguishing apparatus fitted in machinery space 1-10g. Foam; 2-2g. Foam; 1 sandbox; 1 hose with spray nozzle
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 -
What is the special notation desired
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 Yes If so, state name of vessel "MA YTHORN"

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

The Main engine and shafting, the for'd. P. For'd. S. and Aft.S. auxiliary engines and the donkey boiler were installed on board the vessel in Portsmouth. The Aft.P. auxiliary engine (certificate attached) has been fitted in Hull. (See also Rpt.9 attached).

The completion of the machinery installation at Hull has been carried out under Special Survey in accordance with the Secretary's letters, approved plans and the Rules.

The material and workmanship are good. The Main and Auxiliary machinery and donkey boiler were examined under working conditions and found satisfactory.

The machinery is eligible in my opinion to have the Notation LMC 1,55 O.G. Oil Engines 4 S C S 6 cyls. 15 $\frac{3}{8}$ " - 26 $\frac{3}{4}$ " D.B. 25 lb.

(£24 due Southampton)

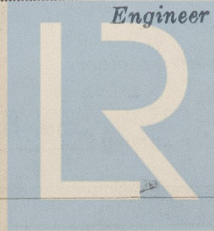
The amount of Entry Fee...	£ 32	0	0	When applied for...	19
Late attendance fee...	4	4	0		
Special ...	£			When received...	19
Early Attendance fee	4	4	0		
Donkey Boiler Fee...	£				
Travelling Expenses (if any) £					

Committee's Minute

FRIDAY 22 APR 1955

Assigned

See Rpt 9.



Lloyd's Register Foundation