

# Rpt. 40 4 OCT 1950 Date of writing Report 10 Sept 1950 No. in Reg. Book. 103 Single on the Twin Triple Quadruple Screw vessel Built at Amsterdam Engines made at Amsterdam Donkey Boilers made at Amsterdam Brake Horse Power 500 M.N. Power as per Rule 103 Trade for which vessel is intended **RECEIVED REPORT ON OIL ENGINE MACHINERY** No. 17472 Received at London Office 12 OCT 1950 When handed in at Local Office 19 Port of Amsterdam Date, First Survey 8 May 1950 Last Survey 9 September 1950 Number of Visits 13 M.V. R.P.S. By whom built Haanlandsche Scheepswerf By whom made Werkspoor N.Y. By whom made Yard No. 454 When built Engine No. 1012 When made 1950 Boiler No. When made Port belonging to Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

IL ENGINES, &c. —Type of Engines T.M.A.S. 170 2 or 4 stroke cycle 4 Single or double acting Single  
 Maximum pressure in cylinders 50 kg/cm<sup>2</sup> Diameter of cylinders 240 mm Length of stroke 500 mm No. of cylinders 0 No. of cranks 0  
 Mean Indicated Pressure 7.5 kg/cm<sup>2</sup> Ahead Firing Order in Cylinders 1-4-7-6-0-5-2-3 Span of bearings, adjacent to the crank, measured from inner edge to inner edge 320 mm Is there a bearing between each crank Yes Revolutions per minute 325  
 Flywheel dia 1120 mm Weight 560 kg Moment of inertia of flywheel (lbs. in<sup>2</sup> or Kg.cm.<sup>2</sup>) 1129 Means of ignition Comp. Kind of fuel used Diesel Oil  
 Crank Shaft Solid forged dia. of journals 200 mm Crank pin dia 200 mm Crank webs Mid. length breadth 340 mm Thickness parallel to axis 20 mm Mid. length thickness 20 mm Thickness around eye hole 20 mm  
 Flywheel Shaft, diameter as per Rule as fitted Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as fitted as per Rule 215 mm  
 Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 196 mm Is the tube 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 or other appliance fitted at the after end of tube shaft If so, state type  
 Propeller, dia 1700 mm Pitch 1073/1098 No. of blades 4 Material Bronze whether moveable Total developed surface 509 sq. feet  
 Moment of inertia of propeller (lbs. in<sup>2</sup> or Kg.cm.<sup>2</sup>) 0.41 10<sup>6</sup> Kind of damper, if fitted  
 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 11 mm Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled  
 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  
 Cooling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel  
 Bilge Pumps worked from the Main Engines, No. 1 Diameter 130 mm Stroke 45 mm Can one be overhauled while the other is at work  
 Pumps connected to the Main Bilge Line No. and size How driven  
 Is the cooling water led to the bilges 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 Power Driven Lubricating Oil Pumps, including spare pump, No. and size 10 4.5 t.p.h.  
 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 In pump room  
 Holds, &c.  
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size  
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes Are the bilge suction 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  
 Are all Sea Connections fitted direct on the skin of the Ship Are they fitted with valves or cocks Are they fixed efficiently 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 bunks How are they protected  
 What 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  
 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  
 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. 1 No. of stages 1 diameters 120/100 mm stroke 90 mm driven by M. Engine  
 Auxiliary Air Compressors, No. No. of stages diameters stroke driven by  
 Small Auxiliary Air Compressors, No. No. of stages diameters stroke driven by  
 What provision is made for first charging the air receivers  
 Ventilating Air Pumps, No. diameter stroke driven by  
 Auxiliary Engines crank shafts, diameter as per Rule as fitted Position  
 Have the auxiliary engines been constructed under special survey Is a report sent herewith



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AIR RECEIVERS:—Have they been made under survey Yes State No. of report or certificate C 3701  
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, welded or riveted longitudinal joint .... Material .... Range of tensile strength .... Working pressure by Rules ....  
Starting Air Receivers, No. 2 Total cubic capacity 1240 liters Internal diameter 500 mm thickness 12 mm Actual ....  
Seamless, welded or riveted longitudinal joint Welded Material Sh. steel Range of tensile strength 4147 kg Working pressure by Rules ....  
Actual 30 kg

IS A DONKEY BOILER FITTED .... 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 19-0-50 Receivers 16-5-40 Separate fuel tanks 19-0-50  
(If not, state date of approval) ....  
Donkey boilers .... General pumping arrangements .... Pumping arrangements in machinery space ....  
Oil fuel burning arrangements ....  
Have Torsional Vibration characteristics been approved Yes Date of approval 21-7-50

SPARE GEAR.

Has the spare gear required by the Rules been supplied ....  
State the principal additional spare gear supplied ....  
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The foregoing is a correct description, WERKSPOR N.V. Manufacturer.  
W. J. J. J. J.  
Dates of Survey while building: During progress of work in shops - - 1950 May 0-9-11-12-13 June 6-0 July 10-15 Aug 1-4-10  
During erection on board vessel - - Sept 9  
Total No. of visits 13  
Dates of examination of principal parts—Cylinders 0-9-11/50 Covers 6-0/50 Pistons 12-5-50 Rods .... Connecting rods 12-5-50  
Crank shaft 4-5-50 Flywheel shaft .... Thrust shaft 13-6-50 Intermediate shafts 9-9-50 Tube shaft ....  
Screw shaft 9-9-50 Propeller 9-9-50 Stern tube 10-0-50 Engine seatings .... Engine holding down bolts ....  
Completion of fitting sea connections .... Completion of pumping arrangements .... Engines tried under working conditions 4-0-50  
Crank shaft, material Sh. steel Identification mark LLLOYDS No 10457 Flywheel shaft, material .... Identification mark LLLOYDS No 11  
Thrust shaft, material Sh. steel Identification mark LLLOYDS No 1116 Intermediate shafts, material Sh. steel Identification marks LLLOYDS No 11  
Tube shaft, material .... Identification mark .... Screw shaft, material Sh. steel Identification mark LLLOYDS No 11  
Identification marks on air receivers No 1073-1074 LLLOYDS TEST 60 kg/cm<sup>2</sup>  
W.P. 30 kg/cm<sup>2</sup> A.Y.B. 24-2-50  
Welded receivers, state Makers' Name De Staat smelterij of Telken.  
Is the flash point of the oil to be used over 150°F ....  
Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with ....  
Description of fire extinguishing apparatus fitted ....  
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo .... 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 .... If so, state name of vessel ....

General Remarks (State quality of workmanship, opinions as to class, &c. This Engine has been built under Special Survey in accordance with approved plans and Society's rules. Material tested as required and workmanship found good. The engine has been tested and full load condition on makers test bench and found in good working order. The engine has been shipped to Rotterdam (Rotterdam district). In my opinion the vessel for which this engine is intended will be eligible for the notation of + L.H.C. (with date) when the whole machinery has been fitted satisfactorily on board and tried under full working condition. Copy Certificate of crankshaft, thrustshaft, Int. shaft, screwshaft and Air receivers attached.

The amount of Entry Fee ... £ 304.50 When applied for a 21-9 19 50  
1/3 x 103 x £5.60 Special ... £ ...  
Donkey Boiler Fee... £ ...  
Travelling Expenses (if any) £ 10.00 When received ... 19 ...  
Engineer Surveyor to Lloyd's Register of Shipping W. J. J. J.  
(Committee's Minute FRI. 13 APR 1951  
Assigned See F.E. mch. rpt.

