

REPORT ON OIL ENGINE MACHINERY.

No. 9686
14 JUN 1954

Received at London Office

Date of writing Report 26-5-1954 When handed in at Local Office ✓ 19 54 Port of GRONINGEN
 No. in Survey held at WATERHUIZEN Date, First Survey 15-12-52 Last Survey 22-5-1954
 Reg. Book. Single on the Twin Screw vessel M.V. "GRAMSBERGEN" Tons Gross 490.42
Triple Quadruple Net 317.31
 Built at WATERHUIZEN By whom built SCHEER & DIEPEN Yard No. 929 When built 1954
 Engines made at AMSTERDAM By whom made N.V. HERKSPOR Engine No. 1683 When made 1954
 Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓
 Brake Horse Power { Maximum 650 Owners N.V. Nidhollandsche Scheepwag Port belonging to ROTTERDAM
 { Service 130 Is Refrigerating Machinery fitted for cargo purposes NO Is Electric Light fitted YES
 M.N. as per Rule 130 Trade for which vessel is intended OCEAN TRADE

OIL 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 ✓ Moment of inertia of flywheel (lbs. in² or Kg. cm.²) ✓ Means of ignition ✓ Kind of fuel used ✓
 " " " " balance wts. (" " " ") ✓
 Crank Shaft, { Solid forged ✓ as per Rule ✓ Crank pin dia. ✓ Crank webs { Mid. length breadth ✓ Thickness parallel to axis ✓
 { Semi built ✓ as fitted ✓ { Mid. length thickness ✓ shrunk Thickness around eyehole ✓
 { 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 ✓ as fitted ✓
 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 ✓ as fitted ✓ REDUCED TO 179 AT COUPLING
 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
 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 YES If so, state type RUBBER PRESSING RING Length of bearing in Stern Bush next to and supporting propeller 740
 Propeller, dia. 1900 Pitch 1150 No. of blades 4 Material BRONZE whether moveable SOLID Total developed surface 487 sq. feet
 Moment of inertia of propeller including entrained water (lbs. in² or Kg. cm.²) 320 Kind of damper, if fitted ✓
 Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine ✓ Means of
 lubrication ✓ Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves ✓ Are the exhaust pipes and silencers water cooled
 or lagged with non-conducting material ✓ 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 2 ME Working F.W. 1 ME
 S.W. 1 ME Spare F.W. 1 FROM A.E.S.W. 1 BAAST 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. and capacity ✓ Can one be overhauled while the other is at work ✓
 Pumps connected to the Main Bilge Line { No. and capacity of each 2 @ 50 T/H ✓
 { How driven A.E. ✓
 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 2 @ 50 T/H ✓ Power Driven Lubricating Oil Pumps, including spare pump, No. and size SPARE 2 T/H
 Are two independent means arranged for circulating water through the Oil Cooler YES ✓ Branch Bilge Suctions
 No. and size:—In machinery spaces 1 @ 2 1/2" x 103" ✓ In pump room ✓
 In holds, &c. 4 @ 3" ✓
 Direct Bilge Suctions to the engine room bilges, No. and size 3 @ 4" ✓
 Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes YES ✓ 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 YES ✓
 Are all Sea Connections fitted direct on the skin of the Ship ✓ 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 ✓ 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 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 MADE A.T. 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 2 diameters 150/120 stroke 100 driven by ME
 Auxiliary Air Compressors, No. ✓ No. of stages 2 diameters 60/145 stroke 110 driven by A.E.
 Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ diameters ✓ stroke ✓ driven by ✓
 What provision is made for first charging the air receivers HAND STARTED AUX. ENGINE ✓
 Scavenging Air Pumps or Blowers, No. ✓ How driven ✓
 Auxiliary Engines { Have they been made under survey YES ✓ Engine Nos. 1204, 3701, 6712, 7013
 { Makers name LISTER ✓ Position of each in engine room 2 @ 3 ✓
 { BRISTOL CERT Report No. 501944 502246 RESR

AIR RECEIVERS:—Have they been made under survey ☒ YES 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 ☒ 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. 16-2-54 Receivers ☒ Separate fuel tanks ☒

Donkey boilers. ☒ General pumping arrangements. 15-5-53 Pumping arrangements in machinery space. 26-4-54

Oil fuel burning arrangements. 26-4-54

Have Torsional Vibration characteristics been approved. ☒ YES Date and particulars of approval. 8-2-54 for a Marine special

SPARE GEAR.

325 rpm.

Has the spare gear required by the Rules been supplied. ☒ YES State if for "short voyages" only. ☒

State the principal additional spare gear supplied. ☒

The foregoing is a correct description, and the particulars of the installation is fitted on as approved for torsional vibration characteristics. Manufacturer. N.V. Machinefabriek & Rep. Bedrijf D.E. GORTER

Dates of Survey while building During progress of work in shops - 8 visits See A' dam Rpt No 19405
During erection on board vessel - 1953 Dec. 15; 1954 Feb. 12-17; March 9-23-25-27 April 2-6-15-21-29
Total No. of visits 25.
May 12-14-17-21-22.

Dates of examination of principal parts—Cylinders ☒ Covers ☒ Pistons ☒ Rods ☒ Connecting rods ☒

Crank shaft ☒ Flywheel shaft ☒ Thrust shaft ☒ Intermediate shafts. 9-3-54 Tube shaft ☒

Screw shaft. 25-3-54 Propeller. 23-3-54 Stern tube. 25-3-54 Engine seatings. 21-4-54 Engine holding down bolts. 21-4-54

Completion of fitting sea connections. 24-3-54 Completion of pumping arrangements. 17-5-54 Engines tried under working conditions. 21-5-54

Crank shaft, material ☒ Identification mark ☒ Flywheel shaft, material ☒ Identification mark ☒

Thrust shaft, material ☒ Identification mark ☒ Intermediate shafts, material. S.M. STEEL Identification marks. 1.980.190-1

Tube shaft, material ☒ Identification mark ☒ Screw shaft, material. S.M. STEEL Identification mark. 1.980.239-1A

Identification marks on air receivers. ☒ LOOSE COUPLING - 1.980.5116 - 0114/CPM - 9-3-54

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 Rule 26 9 LTRS + 1 @ 45 LTRS

Full description of fire extinguishing apparatus fitted in machinery spaces. 4 FIREFOAMS @ 9 LTRS + 2 ER HOSE CONNECTIONS

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. EIBERSEN

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

This engine and auxiliaries have been constructed and fitted under special supervision in accordance with the approved plans, Society's Rules and Secretary's letters. The workmanship was found good. The machinery has been tested under full working conditions on a trial trip and found working satisfactorily. On this occasion the machinery of this vessel meets the approval of the Committee and be recorded in the Society's Register Book 7 LMC 5-54 - Oil Eng.

The amount of Entry Fee ... £ 308.-

Special ... £

Donkey Boiler Fee... £

Travelling Expenses (if any) £ 90.-

When applied for 5-6-1954

When received 19

Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned + LMC 5-54

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