

REPORT ON OIL ENGINE MACHINERY

No. 12696

Received at London Office 25 MAY 1956

Date of writing Report 4-4-1956 When handed in at Local Office 4-4-1956 Port of Groningen

No. in Survey held at Mardorhoek Date, First Survey 4-11-1955 Last Survey 16-3-1956
Reg. Book. Number of Visits 21

Single on the Twin Triple Quadruple Screw vessel MR. "HOLMGLEN" Tons Gross 484.62 Net 201.48

Built at Mardorhoek By whom built Bodrum Schiffsbauwesen Yard No. 415 When built 1956

Engines made at Kiel By whom made MAX-Maschinenbau Engine No. 15471 When made 1956

Donkey Boilers made at — By whom made Kiel A.G. Boiler No. — When made —

Brake Horse Power { Maximum — Service 480 Owners John Shipping Co. Ltd. Port belonging to Wellington

M.N. as per Rule 96 Is Refrigerating Machinery fitted for cargo purposes yes Is Electric Light fitted yes

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. cm²) Means of ignition Kind of fuel used

Cranks { Solid forged Semi built All built dia. of journals as per Rule as fitted Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis

Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collars as per Rule as fitted

Tube Shaft, diameter as per Rule as fitted Screw Shaft, diameter as per Rule as fitted 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

Propeller, dia. 1752 Pitch 1090 No. of blades 4 Material bronze whether moveable solid Total developed surface 46129 sq. feet

Moment of inertia of propeller including entrained water (lbs. in² or kg. cm²) 200 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 forced

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 Working F.W. 1 electric

S.W. 1 ME Spare F.W. — S.W. — Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No. and capacity 10 16 1/2 4 Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line No. and capacity of each 10 16 1/2 4, 20 40 4 How driven m.e. electric

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 capacity 20 40 4 Power Driven Lubricating Oil Pumps, including spare pump, No. and size spare 6 m.e.

Are two independent means arranged for circulating water through the Oil Cooler yes Branch Bilge Suctions In pump room

No. and size: — In machinery spaces 10 2 1/2 In holds, &c. 4 2 3

Direct Bilge Suctions to the engine room bilges, No. and size 2 2 3

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 sufficiently high on the ship's side to be seen without lifting the platform plates

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 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

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

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

M Air Compressors, No. 1 No. of stages 2 diameters 120/108 stroke 40 driven by m.e.

Auxiliary Air Compressors, No. 1 No. of stages 2 diameters 110/95 stroke 85 driven by electric

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. engines

Scavenging Air Pumps or Blowers, No. — How driven

Auxiliary Engines Have they been made under survey yes Engine Nos. 544370M4 | 37676M4 | 38676M4

Makers' name Pieter Position of each in engine room

Printed and Bound at Report No. 3394 | 3330 | 3337

004710-004717-0024

54/1924
54/1923
54/1496

AIR RECEIVERS:—Have they been made under survey yes State No. of report or certificate 54/1496
State full details of safety devices each receiver filled with safety valve.
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 —
Starting Air Receivers, No. 3 Total cubic capacity — Internal diameter — thickness —
Seamless, welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure 30 kg

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 11-11-54 Receivers — Separate fuel tanks 22/11
(If not, state date of approval)
Donkey boilers — General pumping arrangements 30-7-55 Pumping arrangements in machinery space 2-8-55
Oil fuel burning arrangements 2-8-55

Have Torsional Vibration characteristics been approved yes Date and particulars of approval 11-11-54 for a service speed of 340 rpm.

SPARE GEAR. speed of 340 rpm.

Has the spare gear required by the Rules been supplied yes, except those required for maneuvering. State if for "short voyages" only —
State the principal additional spare gear supplied spare screw shaft, cast iron propeller.

Note: Bronchose explosion relief valves fitted.

The foregoing is a correct description, and the particulars of the installation as fitted are as approved for torsional vibration characteristics Manufacturer.

Dates of Survey while building
During progress of work in shops - —
During erection on board vessel - 1955 Nov. 4-7-15-20 Dec. 6-20-27; 1956 Jan. 3-5-5-11-18 Feb. 6-16-21 March 5-9-13-16
Total No. of visits 21

Dates of examination of principal parts—Cylinders — Covers — Pistons — Rods — Connecting rods —
Crank shaft — Flywheel shaft — Thrust shaft — Intermediate shafts 1-11-55 Tube shaft —
Screw shaft 27/28-10-55 Propeller 21-2-55 Stern tube 4-11-55 Engine seatings 12-12-55 Engine holding down bolts 12-12-55
Completion of fitting sea connections 19-11-55 Completion of pumping arrangements 9-3-56 Engines tried under working conditions 16-3-56
Crank shaft, material — Identification mark — Flywheel shaft, material — Identification mark —
Thrust shaft, material — Identification mark — Intermediate shafts, material SM Steel Identification mark L. 990 235
Tube shaft, material — Identification mark — Screw shaft, material SM Steel Identification mark L. 990 235-571
Identification marks on air receivers — OPM-27-10-55
spare screw shaft: L. 990 234-EMD/OPM-28-10-55

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 spaces 2 firepans @ 45 lbs, 2 CO2, 2 hose mounted.
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 yes
Is this machinery duplicate of a previous case no If so, state name of vessel —

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, British Rules and Machinery's Rules. The workmanship was found good. The machinery has been tested under full working conditions on a trial trip and found working satisfactorily. On my opinion the machinery of this vessel merits the approval of the Committee and be recorded in the Society's Register Book & LMC 3-56. Oil Engines - O.G., subject to spare parts for thrust bearing being supplied at earliest opportunity.

The amount of Entry Fee ... £ 230
Special ... £ : : When applied for 23-5-1956
Donkey Boiler Fee... £ : : When received 19
Travelling Expenses (if any) £ 152-
FRIDAY 15 JUN 1956

[Signature]
Engineer Surveyor to Lloyd's Register of Shipping.



Committee's Minute
Assigned LMC 3-56 - Subject
OG. Str. for Nav. in Ice.

(The Surveyors are requested not to write on or below the space for Committee's Minute.)