

# REPORT ON OIL ENGINE MACHINERY.

No. 329b.

Received at London Office 9-MAY 1949

Date of writing Report 15-4-19 49. When handed in at Local Office 19 Port of Groningen.  
 Date, First Survey 23-9-48 Last Survey 14-4-19 49.  
 Number of Visits 21.

on the ~~Triple~~ <sup>Single</sup> Screw vessel "HADA"  
 Tons { Gross 459.51  
 Net 270.91  
 Built at Martenshoek By whom built Bodewes' Scheepswerven. Yard No. 373 When built 1949.  
 Engines made at San Francisco By whom made Enterprise Engine & Foundry Co. Engine No. 48077 When made 1949.  
 Donkey Boilers made at - By whom made - Boiler No. - When made -  
 Brake Horse Power 400 Owners Mr. J. Sint. Port belonging to Dordrecht.  
 m. Horse Power as per Rule 112 MN = 118 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes  
 Made for which vessel is intended Ocean going.

ENGINES, &c. —Type of Engines Enterprise 2 or 4 stroke cycle 4 Single or double acting single  
 Maximum pressure in cylinders - Diameter of cylinders 12" Length of stroke 15" No. of cylinders 8 No. of cranks 8  
 Mean Indicated Pressure - Is there a bearing between each crank yes  
 Revolutions per minute 295 Flywheel dia. 33" Weight 1409 lbs app? Means of ignition compression Kind of fuel used diesel oil  
 Crankshaft, { Solid forged  
 { Semi built dia. of journals as per Rule - Crank pin dia. - Crank webs Mid. length breadth - Thickness parallel to axis -  
 { All built as fitted - Mid. length thickness - shrunk Thickness around eye-hole -  
 Flywheel Shaft, diameter as per Rule - Intermediate Shafts, diameter as per Rule appr. Thrust Shaft, diameter at collars as fitted -  
 as fitted - as fitted 185 mm. as per Rule -  
 Main Shaft, diameter as per Rule - Screw Shaft, diameter as fitted 175 mm. Is the { screw } shaft fitted with a continuous liner { -  
 as fitted - as fitted -  
 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  
 as fitted - as fitted -  
 Propeller boss - If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -  
 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 plan not submitted for approval Length of bearing in Stern Bush next to and supporting propeller 750 mm.  
 Propeller, dia. 1860 mm Pitch 1100 mm No. of blades 4 Material bronze whether moveable no Total developed surface 41.3 sq. ft.

Method of reversing Engines Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of  
 lubrication forced Thickness of cylinder liners - 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 funnel Cooling Water Pumps, No. 2 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. one Diameter - Stroke - Can one be overhauled while the other is at work -  
 Pumps connected to the Main Bilge Line { No. and size one à 30 T/H, one à 25 T/H and one à 45 T/H.  
 { How driven Main engine. Both aux. engine.  
 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 size one à 45 T/H Power Driven Lubricating Oil Pumps, including spare pump, No. and size one (driven by M.E.)  
 tested) one rotary 5 T/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 one à 3", two à 2½" In pump room -  
 In holds, &c. 2 à 2½" aft. , 2 à 2" forward (P + S)  
 Independent Power Pump Direct Suctions to the engine room bilges, No. and size one à 3" , one à 2½"  
 Are all the bilge suction pipes in holds and tunnel well 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 yes Are they fitted with valves or cocks cocks 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 -  
 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 -  
 Do any pipes pass through the bunkers none How are they protected -  
 Do any 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 Mohy. aft. 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. one No. of stages - diameters - stroke - driven by -  
 Auxiliary Air Compressors, No. - No. of stages - diameters - stroke - driven by -  
 Small Auxiliary Air Compressors, No. one No. of stages - diameters - stroke - driven by -  
 What provision is made for first charging the air receivers auxiliary engines hand started.  
 Scavenging Air Pumps, No. - diameter - stroke - driven by -  
 Auxiliary Engines crank shafts, diameter as per Rule appr. Pelapone. No. one Position Portside.  
 as fitted 31/8" and 31/2" Have the auxiliary engines been constructed under special survey yes Is a report sent herewith 33b Part of Leeds  
 dated 24-12-48.

AIR RECEIVERS:—Have they been made under survey...yes ✓ State No. of report or certificate...San Francisco dated 14-12-48

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 by Rules -  
Starting Air Receivers, No. 2 ✓ Total cubic capacity 1000 Litres Internal diameter 22" thickness -  
Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -  
Actual. 250 11

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...16-3-49 Receivers - Separate fuel tanks 9-3  
(If not, state date of approval)

Donkey boilers - General pumping arrangements 15-2-49 Pumping arrangements in machinery space 15-2-49

Oil fuel burning arrangements -

### SPARE GEAR.

Has the spare gear required by the Rules been supplied yes ✓

State the principal additional spare gear supplied -

BODEWES' SCHEEPSWERNEN

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

Dates of Survey while building  
During progress of work in shops - - unknown.  
During erection on board vessel - - 1948. Sep. 23; Nov. 16, 19, 25; Dec. 7; Jan. 20, 26, 28; Feb. 23; March 1, 8, 16, 16, 23, 29, 31, 31; April 5, 7, 14.  
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 28-3-49 Tube shaft -  
Screw shaft 7-1-49 Propeller 29-12-48 Stern tube 16-11-48 Engine seatings 25-11-48 Engine holding down bolts 31-3-49  
Completion of fitting sea connections 25-11-48 Completion of pumping arrangements 7-4-49 Engines tried under working conditions 14-4-49

Crank shaft, material - Identification mark - Flywheel shaft, material, - Identification mark -  
Thrust shaft, material S.M. Steel Identification mark 23-12-48 Intermediate shafts, material S.M. Steel Identification marks L.R. 7021/516 for  
Tube shaft, material - Identification mark - Screw shaft, material S.M. Steel Identification mark L.R. 458. A.Z.M. 7-1-49

Identification marks on air receivers. Lloyd's Test.

EM. 500 lbs.

1795-1796. 3-12-48.

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. ✓

Description of fire extinguishing apparatus fitted 3 à 2 gallons

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 no If so, state name of vessel -

General Remarks (State quality of workmanship, opinions as to class, &c. The Machinery of this vessel has been made in

accordance with the approved plans, Society's Rules and Secretary's letters. Materials have been tested as required by the Rules and the workmanship is good. The Machinery has been tested under full working conditions on a trial trip at sea and found to be good. The Machinery of this vessel is in our opinion eligible to be classed in the Society's Register Book with record of + LMC 4,49 Oil Engine.

The amount of Entry Fee ... £

Special ... £1.210.--

Donkey Boiler Fee... £

Travelling Expenses (if any) £1. 60.--

When applied for 27-4- 19 49.

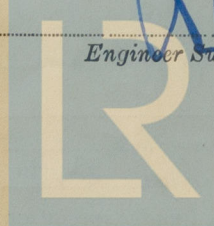
When received 19

(The Committee's Minute

FRI 3 JUN 1949

Assigned + LMC 4.49 Oil Eng.

Also for Mr A.C. Buryse:  
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register  
Foundation