

M.S. 'EULIMA' (See Lr. from Rotterdam Surveyors dated 18.8.37)

Rpt. 4b.

# REPORT ON OIL ENGINE MACHINERY.

No. 19812  
10 AUG 1936

Date of writing Report 7th Aug 1936 When handed in at Local Office 7.8.36 Port of Grimsey  
No. in Survey held at Lincoln Date, First Survey 2nd March Last Survey 4th August 1936  
Reg. Book. Number of Visits 31

on the Single / Twin / Triple / Quadruple Screw vessel (Engine for Messrs Wilton, Rijnsford Schiedam, Holland) Tons Gross / Net

Built at \_\_\_\_\_ By whom built \_\_\_\_\_ Yard No. 659 When built \_\_\_\_\_  
Engines made at Lincoln By whom made Ruston & Hornsby, Ltd. Engine No. 178778 When made 1936  
Donkey Boilers made at ✓ By whom made ✓ Boiler No. ✓ When made ✓  
Brake Horse Power 60 Owners ✓ Port belonging to ✓  
Nom. Horse Power as per Rule 18.6 Is Refrigerating Machinery fitted for cargo purposes ✓ Is Electric Light fitted ✓  
Trade for which vessel is intended [One engine - Size 3V.C.R.2]

OIL ENGINES, &c. Type of Engines Airless injection, cold starting 2 or 4 stroke cycle 4 Single or double acting single  
Maximum pressure in cylinders 700 lbs. Diameter of cylinders 8" Length of stroke 10 3/4" No. of cylinders 3 No. of cranks 3  
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 9 1/2" Is there a bearing between each crank yes

Revolutions per minute 450 Flywheel dia. 3'-4" Weight 19 cwt Means of ignition Compression Kind of fuel used Crude oil  
Crank Shaft, dia. of journals as approved Crank pin dia. 4 3/4" Crank Webs Mid. length breadth 8" Thickness parallel to axis ✓  
as fitted 6" Mid. length thickness 2 1/2" Thickness around eyehole ✓

Flywheel Shaft, diameter as approved Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule  
as fitted 6" as fitted as fitted

Tube Shaft, diameter as per Rule Screw Shaft, diameter as per Rule Is the tube / 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 ✓

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 the tube  
shaft ✓ If so, state type ✓ Length of Bearing in Stern Bush next to and supporting propeller ✓

Propeller, dia. ✓ Pitch ✓ No. of blades ✓ Material ✓ whether Moveable ✓ Total Developed Surface ✓ sq. feet ✓  
Method of reversing Engines ✓ Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication  
sealed Thickness of cylinder liners 3/4" Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with  
non-conducting material water 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. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel ✓  
What special arrangements are made for dealing with cooling water if discharged into bilges ✓

Bilge Pumps worked from the Main Engines, No. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓  
Pumps connected to the Main Bilge Line No. and Size / How driven

Ballast Pumps, No. and size ✓ Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size one geared  
Are two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
Pumps, No. and size:—In Machinery Spaces ✓ In Pump Room ✓

In 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 Suctions in the Machinery Spaces  
fitted 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 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 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 ✓  
Main Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
Small Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

Auxiliary Engines crank shafts, diameter as per Rule No. ✓ Position ✓  
as fitted

AIR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule ✓  
Can the internal surfaces of the receivers be examined and cleaned ✓ Is a drain fitted at the lowest part of each receiver ✓

High Pressure 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 / Actual

Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓  
Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules / Actual



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 11.11.32. (If not, state date of approval)

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR.

Has the spare gear required by the Rules been supplied? Yes

State the principal additional spare gear supplied

WILTON & Hornsby, Limited

The foregoing is a correct description.

B. Lloyd

Manufacturer.

Dates of Survey while building: During progress of work in shops - 1936 Mar 2, 9, 12, 19, 23, 26, 30 Apr 16, 20, 23, 27, 30 May 4, 11, 14, 18, 21, 25, 28 Jun 3, 11, 15, 18, 22, 29 Jul 6, 9, 13, 16, 20 Aug 4. During erection on board vessel - Total No. of visits 31

Dates of Examination of principal parts - Cylinders 25.5.36 Covers 25.5.36 Pistons 3.6.36 Rods Connecting rods 16.4.36.

Crank shaft 25.5.36. Flywheel shaft 25.5.36. Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions 16.7.36.

Crank shaft, Material Sm. Steel. Identification Mark 3245A Flywheel shaft, Material Sm. Steel. Identification Mark 3245B

Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks

Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

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

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? Yes. If so, state name of vessel: M/V "ELUSA" Grimsby repat No 19568.

General Remarks (State quality of workmanship, opinions as to class, &c.) The workmanship + materials are good.

The engine has been built under Special Survey, in accordance with the Rules + Approved plans.

Trials were carried out at the maker's works under brake load + all found satisfactory.

The engine is being sent to Messrs Wilton Fijzenford, of Scheidam, Holland, + it is understood will be fitted on board a motor vessel.

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

93607/P/11.6082-36/11.171. - (Request form attached)

Table with columns for Fee Type (Special, Donkey Boiler Fee, Travelling Expenses), Amount (£), and When applied for/When received.

Charged in the annual of 1936

A.L. Silditch, Engineer Surveyor to Lloyd's Register of Shipping.



Committee's Minute

Assigned

See Rot 25273