

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 15 SEP 1953

Oct 12<sup>th</sup> 1953. When handed in at Local Office Oct 12<sup>th</sup> 1953. Port of London.

By whom built *CYGNUS* Tons { Gross / Net }  
By whom made *Lunnis S.B. Co. Ltd.* Yard No. *463* When built  
By whom made *W.H. ALLEN, SONS & CO. LTD.* Engine No. *R3/48876* When made *1953*  
By whom made Boiler No. When made

Separate Power *100 I.H.P. (EACH)* Owners. Port belonging to

Is Refrigerating Machinery fitted for cargo purposes  Is Electric Light fitted

Description of Engines *2 - 9" & 14" x 6 1/2" STROKE DRIVING 60 K.W ALLEN DYNAMOS.* Revs. per minute *500*

Length of Stroke *6 1/2"* No. of Cylinders *2* No. of Cranks *2*

Journal diameters *3.75 - 3.0* Crank pin dia. *3.5 - 3.0* Mid. length breadth *5 1/2"* Thickness parallel to axis

Journal diameters *3.875 - 3.0* Crank webs *2 1/8" & 2 3/8"* shrunk Thickness around eye-hole

Thrust shaft, diameter at collars as per Rule  as fitted

Screw Shaft, diameter as per Rule  as fitted  Is the tube screw shaft fitted with a continuous liner

Thickness in way of bushes as per Rule  as fitted  Is the after end of the liner made watertight in the

Thickness between bushes as per Rule  as fitted

If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

Is the space charged with a plastic material insoluble in water and non-corrosive

Is an approved Oil Gland or other appliance fitted at the after end of the tube

Length of Bearing in Stern Bush next to and supporting propeller

Pitch No. of Blades Material whether Moveable Total Developed Surface sq. feet

Can one be overhauled while the other is at work

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Pumps connected to the Main Bilge Line { No. and size / How driven }

Lubricating Oil Pumps, including Spare Pump, No. and size

Suctions, connected both to Main Bilge Pumps and Auxiliary

Oil Cooler

In Engine and Boiler Room

In Holds, &c.

Independent Power Pump Direct Suctions to the Engine and/or Boiler Room Bilges,

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are they fitted with Valves or Cocks

Are the Overboard Discharges above or below the deep water line

Are the Blow Off Cocks fitted with a spigot and brass covering plate

How are they protected

Have they been tested as per Rule

Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times

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

to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

Boilers, &c.—(Letter for record) Total Heating Surface of Boilers

Which Boilers are fitted with Superheaters

Working Pressure

REPORT ON MAIN BOILERS NOW FORWARDED?

DONKEY BOILER FITTED? If so, is a report now forwarded?

May boiler be used for other than domestic purposes

Are approved plans forwarded herewith for Shafting Main Boilers Auxiliary Boilers Donkey Boilers

(If not state date of approval)

General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR.

AS BELOW.

Principal additional spare gear supplied

1 PAIR CONNECTING ROD BRASSES, BOLTS, NUTS & SPLIT PINS.

1 PAIR CROSSHEAD BRASSES, " " " " " "

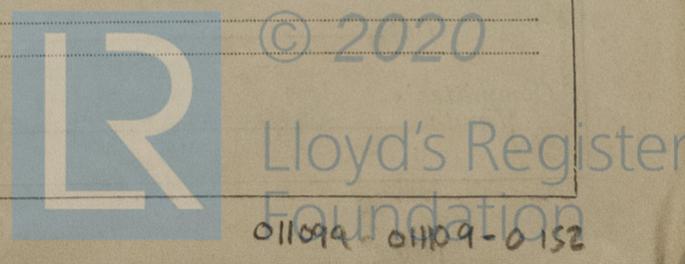
1 SET OF PISTON RINGS.

1 SET METALLIC PACKING FOR ALL RODS.

1 PAIR FLYWHEEL END MAIN BEARING BRASSES, BOLTS, NUTS & SPLIT PINS.

The foregoing is a correct description.

FOR W.H. ALLEN, SONS & CO. LTD Manufacturer.



Noted 9/11/53

1953  
Feb. 13-16, April 10 July 17 Aug. 21-24 Sept. 18, 24, 29

Dates of Survey while building  
During progress of work in shops - -  
During erection on board vessel - - -  
Total No. of visits

9. (in shops)

Dates of Examination of principal parts - Cylinders 17/7/53. 21/8/53. Slides ✓ Covers 17/7/53  
Pistons 15/8/53 + 24/8/53. Piston Rods 24/8/53 + 18/8/53. Connecting rods 18/9/53. 29/9/53  
Crank shaft 21/8/53. Thrust shaft ✓ Intermediate shafts ✓  
Tube shaft ✓ Screw shaft ✓ Propeller ✓  
Stern tube ✓ Engine and boiler seatings ✓ Engines holding down bolts ✓  
Completion of fitting sea connections ✓  
Completion of pumping arrangements ✓ Boilers fixed ✓ Engines tried under steam ✓  
Main boiler safety valves adjusted ✓  
Crank shaft material Cast Steel Identification Mark (1-2) LLOYDS J.D. 4629 P.F.C. 21/8/53. Thickness of adjusting washers ✓  
CONNECT RODS. LLOYDS 4648 J.D. Identification Mark (2) LLOYDS 4800 J.D. 849 Thrust shaft material ✓  
Intermediate shafts, material 21/8/53 P.F.C. Identification Marks 29/9/53 JLS 1854. Tube shaft, material ✓  
PISTON RODS. LLOYDS 52920. Identification Marks LLOYDS 62920. Steam Pipes, material ✓  
Screw shaft, material P.F.C. 24/8/53 Identification Mark P.F.C. 24/8/53. Test pressure ✓  
CYLINDERS. LLOYDS TEST 375 LBS 10/4/53 JLS 27/8/53. Is the flash point of the oil to be used over 150° F. ✓  
Is an installation fitted for burning oil fuel.

Have the requirements of the Rules for the use of oil as fuel 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. If so, state name of vessel ✓

General Remarks (State quality of workmanship, opinions as to class, &c.)  
The above engines have been built under special survey approved plans & from materials made at works approved by the Committee; the materials & workmanship are considered satisfactory. Shop trials were witnessed under full sea load conditions - governors tried & found to Rule Requirements.

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

The amount of Entry Fee	£ 10 : 0 :	When applied for, 14/10/53
Special	£ :	
Donkey Boiler Fee	£ :	When received, 19
Travelling Expenses (if any)	£ 2/0 :	

J. L. Smith  
Engineer Surveyor to Lloyd's Register of Steamships

Date FRIDAY 15 OCT 1954

Committee's Minute See Rpt. 48